Shaping Green IT through procurement

Supplementary materials

by

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1.1. Summary interviewee A1

The interviewee explains that sustainability within workplace IT remains a small concern in most organisations. As they put it, “Very honestly, sustainability remains a fairly marginal theme.” On the supply side, large vendors such as Dell and HP have begun offering more sustainable or circular products (like modular laptops) and there are growing tools to measure circularity. The refurbished market is “reasonably well developed,” but true recycling is “still far less developed.”

On the demand side, sustainability rarely drives workplace IT purchases. Organisations focus more on the energy use of data centres or cloud costs than on the sustainability of end-user devices. “If it’s discussed at all,” they note, “it’s often about the energy impact of infrastructure, not the workplace equipment.”

Procurement departments, they explain, mainly act as service providers responding to business requests: “The business says what it needs, and procurement arranges it, often with the focus on price.” As a result, procurement seldom helps shape ambitions or sustainability visions.

The interviewee believes procurement could contribute more if involved earlier: helping define needs and set KPIs that reflect sustainability goals. Sustainable procurement, they argue, “is more than setting requirements in a tender and checking whether suppliers meet them.” It should include monitoring suppliers during contract execution and using that insight for future tenders, which “happens sometimes, but still very sporadically.” Much value is lost because “the focus is mostly on the moment of contract signing.”

According to the interviewee, the workplace IT market is dominated by a few major players, mainly Dell and HP, which limits innovation. Smaller companies like the Dutch brand Fairphone offer important alternatives but remain niche. “Fairphone is a small, clever and creative company that manages to hold its own well,” they note. Supporting such innovators requires buyers willing to make concessions: “You have to be prepared to give up something on functionality, that’s the only way to help such companies gain market share in the long term.” This, however, requires vision at the strategic level, not just within procurement.

Workplace IT, they add, is a mature field with little transformative innovation. “This laptop I’m using is a fully developed piece of technology.” Mechanisms like competitive dialogue or innovation partnerships are seldom applied because they suit less mature technologies. Sustainability-related innovation now occurs more at the software level (such as “green coding”) than in standard hardware. In that area, they see more movement around digital sovereignty than sustainability. For instance, they mention a German federal state switching from Microsoft 365 to open-source solutions “out of the desire to be less dependent on Big Tech.”

They repeatedly stress that sustainability ambitions in IT are generally low because IT is “not a core process, but a support function.” As a result, sustainability is treated as an optimisation issue rather than a driver of transformation. In most organisations, ambitions translate into adding sustainability criteria to tenders “next to price and quality, also sustainability requirements.” Yet they also highlight more ambitious examples where sustainability goals lead to co-creation and experimentation, citing [a company] that adopted “an ecosystem approach… lots of co-creation, short pilots, not focused on rigid tenders.” Such practices show

higher ambition, where sustainability is operationalised through collaboration rather than paperwork.

Where ambition is higher, such as in sovereignty-driven innovation, "innovation requires trust… it's really a co-creation process." Early supplier involvement is key: "You need to involve suppliers earlier, not only when defining requirements… so they truly understand the use case."

The interviewee links procurement maturity directly to how organisations manage risk, engage suppliers, and enable innovation. Less mature procurement functions are "control-oriented" and "risk-averse," focusing on transactions and compliance. In such contexts, "there can be hardly any contact with suppliers, even about something harmless," and procurement is reactive.

More mature procurement functions are "much more integrally involved in the whole cycle." They collaborate with the business to define needs and align sustainability KPIs with organisational goals, enabling procurement to "make a real difference." Sustainable procurement, they stress, "is more than setting requirements, it's also about monitoring and contract management." Mature organisations show greater risk appetite and view suppliers as long-term partners requiring "organisational change." Sustainable procurement, they argue, demands "relational, not just transactional" collaboration. "These are marriages of reason, not always of love," they add, "but ultimately you want to move forward together, learn lessons, and create space for development." This shift from transactional to relational mechanisms is essential for innovation. In lower-maturity settings, by contrast, formal, requirement-driven interactions produce a "'check-the-box' approach," which "is not fertile ground for innovative solutions."

The interviewee also highlights deep structural differences between public and private sectors. In the public sector, strict procurement laws and accountability pressures support a culture of "transparency and risk aversion," leaving "less room for innovation." Public buyers must specify requirements "very precisely," limiting supplier interpretation or co-creation. In the private sector, long-term relationships play a larger role. They cite a Dutch tech company as an example of strategic supply chain management: "They are so dependent on their ecosystem that they actively engage not only with their first-tier suppliers but further down the chain." Such private models, they note, demonstrate "a well-understood self-interest" that aligns business continuity with ecosystem health.

Looking ahead, the interviewee expects sovereignty to be "the first major shift" in how organisations think about IT procurement. Sovereignty offers "the opportunity to truly do things differently," for example by choosing European suppliers and building local capacity. Ideally, such choices could align with sustainability, though this alignment is not automatic: "Sovereign solutions are not necessarily more sustainable, in fact, sometimes striving for sovereignty is not sustainable." For example, large hyperscalers have achieved high energy efficiency, while smaller sovereign alternatives may struggle to match it. Thus, sovereignty is "more an opportunity than a certainty" for sustainable IT. Still, it may open the door to more values-driven procurement, as people might be "more willing to accept slightly lower functionality or quality than when it's only about sustainability." In this sense, sovereignty can serve as a cultural and strategic catalyst for rethinking what constitutes sustainable, responsible IT.

1.2. Summary interviewee A2

The influence of buyers on innovation, A2 stresses, depends strongly on the sector and market structure. In markets with few suppliers, buyers have limited leverage. "If there is little choice in terms of market structure or resources, it becomes harder to influence suppliers' behaviour." In such cases, they recommend softer methods: engaging the market early, clarifying needs, and building trust. "If market parties know what the buyer wants, and vice versa, that promotes innovation." Even in concentrated markets, "there is value in building that bond, beyond just the hard specifications."

A recurring theme is risk aversion. A2 believes many public buyers underestimate what is legally possible: "You can do quite a lot, and buyers often underestimate that, thinking they must give everyone equal chances." The key, they emphasise, is transparency. "As far as I know, as long as you are transparent, you can still do a lot. For example, make better use of market consultations." One-on-one conversations with suppliers are legally permissible but often avoided out of fear. "Public buyers must be able to show why they make certain choices. They're afraid of doing something wrong, more than that it's truly not allowed."

This risk aversion, A2 adds, is linked to capacity and confidence: "It's also about whether public buyers feel they have the knowledge to shape a risky process properly." A2 notes that much information already exists. "In terms of best practices and guidelines at policy level, a lot is available, also in the academic literature." The issue lies less in missing knowledge than in applying it. Larger organisations "are actively

working on this; they develop their own tools and best practices," while smaller municipalities lack time and resources, since "the buyer is also responsible for, for example, spatial planning." Capacity, they explain, includes both "hard and soft factors. Hard: money and time. Soft: skills and training, the capabilities." Organisational maturity determines which interaction mechanisms can be used effectively. "If you have few capabilities or are a small, not very ambitious organisation, you can work with fewer of these tools." Simpler methods (such as "feedback… you can always just call suppliers," or regional joint procurement) suit organisations with limited capacity and align with standardised, low-risk products.

A2's research distinguishes three types of learning that can occur in such processes: learning about variation ("what are all the possibilities in the market and are there things we do not yet know?"), learning about feasibility ("are there things we want that are possible or too innovative?"), and learning about trust ("learning what you can expect from each other"). Their advice is to start by asking what kind of learning you want to achieve, and then design interactions accordingly. "Do not do that just because it is a best practice and you have read it on the PIANOo website, but make clear for yourself beforehand: given the market, what do we actually want to learn? What is the most important for us to know now?"

Beyond rules and resources, there is a cultural factor: "It's also about the attitude of civil servants, whether they have a more enterprising mindset, that the government may take risks and innovate." Another reason for caution is the litigiousness of suppliers: "Even if you're transparent and win that lawsuit, it still costs time and energy. So I understand that reluctance."

Discussing market engagement, A2 refers to their research distinguishing static and dynamic interactions. Static interactions are "one-way traffic of information," such as publishing a tender or sending a questionnaire, "that's not a real dialogue." Dynamic interactions, by contrast, involve two-way exchanges: "one-on-one with a party, or in groups, such as workshops." Many such interactions are fully possible within normal procurement procedures, as long as transparency is maintained.

They also distinguish between tactical and strategic engagement. Tactical engagement happens at project level, while strategic engagement builds long-term relationships and mutual understanding. "That interaction is crucial for innovation. Innovation never happens in a vacuum," A2 notes.

A2 observes that private firms often have more freedom to "choose a supplier they find promising and actively develop that one." Public buyers, however, face legal barriers if they try the same. Instead, they can support open dialogues or training sessions for broader groups of suppliers, for instance via PIANOo.

Yet pre-market engagement is not always beneficial. "In that study on pre-market engagement we found quite a few unexpected negative relationships between market engagement and learning or innovation. It's not always good." Tools like questionnaires can backfire if only established suppliers respond. "Who finds that questionnaire? The incumbents, the firms that always already participate, and they don't necessarily have the biggest incentives to innovate." Hence, "pre-market engagement has its complications, it's not always positive."

Asked what advice they would give to buyers who want to stimulate innovation, A2 repeats two core messages. First, think carefully about your learning goals before choosing an engagement method: "Think about what you want to learn in the interactions." Second, ensure your organisation can actually make use of what it learns: "You must as an organisation also be able to absorb that learning."

1.3. Summary interviewee S1

When asked about sustainability in workplace IT, they explain that the topic has become increasingly important: no longer a nice-to-have but often a strict requirement. "If you want to win that tender, you have to deliver sustainably," they say, noting that sustainability clauses are sometimes used as "knock-out criteria" in public procurement. The nature of IT purchases makes sustainability feel logical: "These are purchases you might do once, but that last for four years, or for networks even ten. So if you do that sustainably, that feels better. It's also the moment to make that choice.". They distinguish between companies with genuine sustainability ambitions and those driven by business needs. "I don't know exactly which part is business-driven and which is intrinsic. But in the end, that doesn't matter. The result counts."

They believe real change in product sustainability will come only when customers demand it: "The only one who can really change it is the customer. Their demand determines what we sell and what we purchase from suppliers." Manufacturers like HP or Dell, they add, respond accordingly: "Everything they deliver is based on changing customer demand. If they don't respond, the market can switch."

Public buyers, they say, are generally very good at formulating sustainability demands in tenders. Many reuse each other's wording: "A lot is copied from one to the other. So, if one party knows how to describe it well, that is taken over across the whole IT spectrum." Such tenders often ask for certifications like MVO Prestatieladder or EcoVadis "at the highest level," and increasingly include questions about the processing and end-of-life phase of equipment: "How do we process things, and what do we do when we no longer need something?"

When it comes to innovation, they find it hard to credit procurement with much creative power. "Procurement is actually the result of a process that has already taken place before," they explain. "If something has already been sold, the buyer has to purchase it at a certain price and as a certain product." The innovation, in their experience, happens earlier: in how the company designs solutions or logistics. They give concrete examples of sustainable innovations their company has implemented. One is a reusable multi-slot laptop box that replaces thousands of single packages: "We have therefore developed our own box with all compartments, in which we can transport the laptops at the same time. That saves an enormous number of boxes. That is substantial."

They prefer customers to describe needs functionally rather than technically. "I prefer that, because it gives us more freedom to choose the best solution between suppliers. The more specifically a customer prescribes something, the greater the chance they're already behind." Overly detailed prescriptions, they warn, can lock in outdated solutions. Clients should instead ask open questions, since intermediaries like their company have broader market insight.

Regarding supplier relations, they find "reverse sourcing" rarely works in practice. "We know the customer and must translate what the supplier offers into what the customer needs. It almost never goes the other way around." Still, they value suppliers who prepare for the future: "Many can supply the same product today, but we don't know tomorrow's product. I prefer to buy from the one I expect can deliver best tomorrow." They gauge this by how suppliers handle change: "When a supplier faces lay-offs or reorganisation, you know nothing new will come from there for a while."

Comparing public and private sectors, they note that while public organisations face formal tender rules, they often have more flexibility to run pilots. "Public organisations can more easily do a pilot. Because it's public money, they can reserve a budget for that. In commercial companies, one decision-maker decides where the money goes, and sustainability is rarely the top priority." Private firms, they add, often redirect funds to quicker returns: "Then someone says: let's hire two extra salespeople instead." Public bodies, by contrast, "just continue, because it's public, it continues."

Asked about funding, they say there's plenty for innovation in general, "but for innovation for sustainability there's less urgency. They observe a broader trend: as financial pressure increases, companies cut sustainability efforts. "The more prosperity there is, the more we think about sustainability. As soon as it starts to pinch, priority goes to keeping the company afloat and paying staff. Unless sustainability contributes to that, it usually drops lower on the list."

Procurement maturity and organisational scale also play a big role. Small or less mature organisations are focused on cost and growth, often with one buyer "who mainly has to save every cent." Mature organisations, with more people and structure, can step back, evaluate processes, and involve sustainability and IT departments in decision-making. "The more prosperity and stability there is, the more room arises to organise things sustainably or optimally," they say. Scale matters, too: "With ten laptops you don't use a special shipping box. But with ten thousand you do, then it pays off." Larger organisations can invest in optimisation roles and continuous improvement, while smaller ones benefit from "learning from others."

Looking ahead, they expect sustainability to regain attention. Certifications will become increasingly decisive: "Companies will, in the long term, only do business with certified suppliers." EcoVadis, for instance, "gives customers confidence." They also foresee greater focus on the end-of-life phase: "What we buy new is produced sustainably, but what happens with what we throw away? There will be much more attention for that," including secure data erasure and reuse of equipment.

1.4. Summary interviewee S2

According to S2, sustainability has gained a much stronger foothold in IT procurement compared to five years ago. Organisations increasingly include sustainability considerations in tenders and requests for proposals, and not only in relation to the products themselves. As S2 notes, "they look broader than just the product: also at the services around it, such as logistics, packaging and transport, up to and including dis-

posal." Despite this, two persistent gaps remain. The first is between ambition and the concrete formulation of requirements. Many buyers, S2 observes, still ask vaguely "How can you contribute to the sustainability of this tendering trajectory?" Such general questions elicit narratives from suppliers rather than specific, measurable commitments. The second gap lies between the tender phase and contract execution. Once the contract is awarded, "the attention is gone" and sustainability clauses often fade from sight during contract management.

A related problem is the tendency to reuse existing templates. "In three quarters of the cases they first look: what did we ask for last time? That becomes the template for the new model." According to S2, few organisations critically evaluate whether previous tenders have actually produced more sustainable outcomes, partly because acknowledging failure is politically and institutionally unattractive.

S2 stresses that procurement officers are competent professionals but cannot be experts in both IT and sustainability. Buyers depend heavily on internal sustainability managers whose focus is often on reporting rather than on strategic sourcing. "We actually ask from a buyer that he suddenly becomes a sustainable procurement expert. That is quite difficult." Nevertheless, buyers hold more influence than they realise. The procurement moment is a key "business moment" in which suppliers are motivated to differentiate themselves. "Purchasing with impact means you not only have impact with what you buy, say one hundred phones, but above all with the fact that you ask for sustainability."

The degree of influence depends on organisational scale. Small municipalities exert limited pressure, whereas large buyers, such as national governments, can shape markets more effectively. Still, since manufacturers operate globally, influence on product design remains indirect: channelled through supplier requirements, reward mechanisms, or certification systems such as EcoVadis. Public tenders that gradually tighten sustainability criteria across contract cycles illustrate a feasible, stepwise approach.

In discussing procurement mechanisms, S2 observes that traditional methods dominate IT hardware. Market consultations and framework agreements with mini-competitions are common. Innovative methods (like performance-based or pre-commercial procurement) are rare. The market's standardisation leads buyers to "compare apples with apples," leaving little room for product innovation. True innovation thus occurs more often in services and applications.

Most organisations remain in a compliance phase, "more focused on ticking boxes", where sustainability serves mainly to demonstrate policy adherence. Ambitions are often declarative rather than transformative: "There is still noise between saying you have sustainable ambitions and actually asking for them." By contrast, organisations with stronger ambitions adopt more sophisticated models and maintain ongoing supplier dialogue, "raising the bar step by step" while keeping feasibility in mind.

Across sectors, a recurring issue is the lack of mandate. Sustainability is often desirable but not financially supported. "It helps if the board or policy clearly states: 'We are fine with paying on average one percent more for demonstrably sustainable solutions.' Then you not only issue an ambition, but also a mandate." Without such support, buyers face a dilemma between sustainability goals and cost-based evaluations.

Procurement maturity, S2 argues, correlates with interaction depth and learning potential. At low maturity, processes are administrative and control-driven: "filling in a specification list and naming a price is a flat way of tendering." Sustainability becomes an afterthought captured in "the familiar A4 page where the supplier can tell their story." Higher maturity brings dialogue, experimentation, and strategic alignment.

Still, S2 distinguishes between maturity and capability: "An organisation can look very mature... but that does not mean they are competent." True maturity depends on the ability to translate ambition into coordinated, cross-functional practice, requiring time, mandate, and skill.

S2 also challenges the idea that public-sector buyers are constrained by procurement law. The legal framework offers ample room for sustainable contracting, including pilot mechanisms that allow direct awards with proper justification. Yet "courage is not always rewarded" due to time pressure and risk aversion. Private organisations enjoy greater procedural flexibility and can experiment more, provided there is a viable business case: "The real question is whether there is a business case for suppliers to offer more sustainable products and services."

Looking ahead, S2 expects growing focus on extending product lifetimes, defining refurbished and remarketed equipment, and expanding "as-a-service" models. Buyers will increasingly ask about repairability, software support, and spare-part availability. Sustainability will evolve toward full lifecycle responsibility and circularity, including transparency about post-collection recycling.

Finally, S2 criticises the narrow focus on local social return in Dutch tenders. For global products like laptops, domestic labour content is minimal. It is inconsistent, they argue, to demand social value "as if the rest of the world does not matter." Linking social impact to circular and sustainable service models across global supply chains would make procurement more meaningful: "the knife cuts both ways."

1.5. Summary interviewee S3

The interviewee begins by explaining that sustainability has become an increasingly important part of their work. For them, the concept is broad: it covers not only carbon emissions and energy use but also material impact, device lifespan, and resource consumption. Yet, as they put it, "there is really far too little happening." Most attention, they note, still goes to energy consumption, while other aspects of sustainable IT remain largely ignored. "There is still incredibly much to gain," they emphasise.

When asked about procurement, the interviewee describes a landscape of good intentions but poor follow-through. In many tenders, sustainability is "not even on the agenda" or only included superficially. Buyers might ask suppliers where laptop materials come from, but, as the interviewee says, "suppliers can't answer that, and then we don't follow through." Logically, the next step would be: "Then we won't do business with that supplier." But because almost no supplier can offer full transparency, "it stops there." Procurement, they argue, applies too little pressure to push suppliers toward openness and accountability.

A major problem, according to S3, is the lack of knowledge among buyers. They often don't grasp the technical side of sustainability and rely too heavily on standard norms such as energy labels. "Almost no one in companies thinks: what kind of device do we actually need?" the interviewee says. Apple's processors, for example, use about three times less energy than many standard laptops, but such insights rarely influence purchasing decisions. Organisations, they argue, should ask more fundamental questions: does everyone really need a new laptop, or would refurbished ones suffice? Should every employee get the same device, or is that just convenient for IT management? This "one-size-fits-all" approach persists partly because IT systems are built around standardisation. "Everyone just gets Windows, that's easy," they say. From a management perspective that makes sense, but it discourages more sustainable, tailored choices.

The way procurement departments are rewarded also matters. In many organisations, buyers are still judged mainly on price, their value lies in "getting the best financial deal." S3 argues this must change: procurement should be rewarded for sustainability achievements, not just cost savings. Otherwise, the pattern remains "buy new laptops and look for the cheapest one." At higher ambition levels, the interviewee envisions trust-based partnerships: "That requires a relationship with suppliers that's transparent and focused on continuous improvement." Such a model, they say, "could work very well," where buyer and supplier share accountability for progress. But this demands a willingness to "take risks" and "scale up when it's successful." Most organisations, however, are "not yet ready to really commit," still trapped in short-term cost logic.

Even so, the interviewee stresses that buyers can significantly influence suppliers, especially through large-volume purchasing. "The supplier simply wants to sell stuff," they say. For small buyers the impact is limited, but large organisations have real leverage. When major clients start asking critical sustainability questions, suppliers must respond. "Keeping suppliers sharp," S3 says, "is precisely a task for procurement." They note that supplier behaviour often shifts under buyer pressure: "It helps move the organisation to seriously think: how are we going to solve this problem?"

They share a practical example from a data centre client wanting to expand AI use but constrained by power limits per rack. Since grid operators couldn't supply more electricity, the question became how to achieve the same computing power within existing limits. "That's a great question," the interviewee says, "because then we can show that we can deliver the same power with much lower energy consumption." For them, that is sustainability in practice.

When the interviewer mentions mechanisms from the literature on how procurement can stimulate innovation, S3 responds enthusiastically to performance-based criteria: "That's exactly what I mean." The goal, they say, should be to define the problem and let suppliers propose the most sustainable solution. They also see promise in competitive dialogue but warn it's often cumbersome: "Suppliers provide a lot of free consultancy, you can't expect them to invest endlessly." Likewise, innovation partnerships and open innovation are interesting in theory but difficult in practice. Such approaches demand experimentation, risk-taking, and scaling up, and S3 is "not sure that really happens." Framework contracts, especially in the public sector, pose another obstacle: once a small group of suppliers is locked in for years, "they are hardly moved to do anything extra."

Asked about public versus private organisations, S3 sees little difference: both remain driven mainly by cost. They mention a public-sector tender using EcoVadis sustainability scores to justify slightly higher prices, up to 4% more for top-rated suppliers. Yet this applied to the company overall, not specific products, and the interviewee doubts whether such small percentages truly matter. In many tenders, sustainability weighs for only about 5% of the evaluation, which, they say, "immediately tells you what it's worth."

As for recommendations, the interviewee emphasises measurability and a lifecycle perspective. Buyers should make agreements not only on energy efficiency but also on lifespan, reuse, and repairability and verify that suppliers deliver. "If you agree laptops must last five years and after three years a quarter are broken, you have to act on that."

They see potential in as-a-service models, such as workplace-as-a-service, since they incentivise suppliers to make devices last longer. But they warn against the illusion that outsourcing means no responsibility: "The risk is: it's now with the supplier, so it's not my responsibility anymore."

1.6. Summary interviewee C1

Participant C1 described the current state of sustainability within workplace IT as evolving but still limited in scope. They explained that the most progress has been made in logistics and energy efficiency, rather than in the actual materials or design of hardware. Software, they noted, has long since transitioned from physical CDs to digital deployment, and many data centres are "becoming greener, using more sustainable energy". However, improvements in the sustainability of hardware materials are slower.

When asked about the role of purchasing organisations in driving sustainability, C1 observed significant variation. Larger organisations such as banks or government agencies often include sustainability in their policies and refer explicitly to the UN Sustainable Development Goals (SDGs). Smaller organisations, however, tend to find it difficult to translate sustainability ambitions into concrete purchasing requirements.

The interaction between purchasers and suppliers is, according to C1, relatively limited. Ongoing discussions are mostly operational, focusing on satisfaction or key performance indicators, but "sustainability is rarely among them". The interviewee explained that many organisations treat sustainability reports and certifications merely as checkboxes: "It becomes a checklist. If the box is ticked, they think it's done". Certifications such as EcoVadis or ISO, however, can make sustainability easier to verify: "They make it easier for purchasers, someone else has already done the audit".

C1 believes purchasers could have substantial influence, "but you have to want it as an organisation." Suppliers are often asked to deliver fixed models: "IT often works with very specific end standards… in nine out of ten cases, they even specify the brand and type." This leaves little room for experimentation or co-development. Even when structured dialogue takes place ("with some clients we organise partner meetings") it remains exceptional. Exploratory collaboration is rare because "the risk is too great" and buyers "don't want to invest time." Innovation, when it happens, arises from necessity rather than vision: "Innovation mostly emerges out of necessity… and in IT, that necessity is still very limited."

C1 also discussed the limited role of public procurement in promoting sustainability. While sustainability criteria are frequently mentioned, he described them as symbolic: "They do it because they must, because it's expected. But in practice, it means little". They called it "a paper reality", noting that sustainability questions in public tenders often count for only a few points out of the total score. As a result, suppliers also fail to prioritise sustainability: "The extent to which the contracting authority values sustainability determines how much effort the supplier puts into it".

Where procurement maturity is high, buyers engage in partnerships and think strategically. In less mature organisations, procurement remains administrative and cost-focused. Leadership is decisive: "If the board only looks at numbers, purchasing is mainly about saving money. With a long-term vision, you see more consultation and cooperation." A short-term focus leads to narrow cost-driven decisions, whereas a long-term orientation supports "more dialogue, collaboration, and partnerships."

Despite growing attention to sustainability, C1 sees IT sustainability as still underdeveloped. "IT is supportive," he explained, organisations prioritise functionality and performance over environmental concerns. For example, "If option two is more sustainable but option one works better, they still choose number one."

Public procurement rewards compliance rather than innovation. Buyers follow safe, standardised procedures, leaving little room "to really challenge suppliers." Dialogue-based or innovative approaches are rare

because “large public institutions often have only a few buyers who each handle sixty tenders a year.” Limited time and capacity make exploring new methods impossible.

Private organisations, by contrast, are more flexible. They are “results-oriented” and can balance cost and sustainability. When procurement maturity and managerial support are high, they develop long-term, trust-based partnerships: “Organisations that place procurement on the agenda… work more on partnerships and sustainability.”

1.7. Summary interviewee C2

C2’s experiences indicate that sustainable choices around workplace ICT often receive limited intrinsic priority from end-users, who “just want good, reliable equipment that is delivered quickly and have a good fit with the supplier; sustainability is often subordinate.”

They note that organisations frequently rely on generic certifications (e.g., ISO 14001 or the R-ladder) rather than creating concrete sustainability requirements. While the market contains suppliers focused on refurbished devices or circularity, the demand side still rarely gives sustainability enough weight. They observe that organisations often find it difficult to formulate sustainability criteria and that unfamiliarity, rather than technical limitations, creates the impression of tension between functional and sustainable requirements. A key example they give is the need to specify upfront that laptops must be powerful and future-proof so they do not “end up failing to meet requirements after three years.”

C2 also highlights that even with large brands dominating workplace ICT, buyers still have room to request specific sustainable features, such as expandability of components or energy-saving settings for monitors, but these options must be explicitly requested.

They describe the limited use of more advanced procurement mechanisms in the public sector, such as innovation partnerships, because workplace ICT is perceived as predictable and not requiring such extensive procedures (“a keyboard is just a keyboard”). Framework agreements, however, can allow organisations to adjust specifications or sustainability expectations in stages during the contract period.

Across organisations, C2 sees sustainability frequently overshadowed by user preferences and internal norms. They provide several concrete examples:

- Employees intentionally dropping laptops to qualify for newer models.
- Staff lining up for new phones as soon as they may replace them.
- Colleagues purchasing their old work phones cheaply after two years because it is financially attractive.

They characterise this as “a form of luxury” embedded in workplace culture and suggest that organisations generally have not yet implemented consistent rules. Refurbished devices are still rarely purchased by larger organisations, partly because of support lifecycles and partly due to employee expectations that new hires should receive new equipment.

The degree to which procurement can push sustainability depends heavily on organisational direction. C2 contrasts organisations where sustainability must be justified if not applied with others where it fades when the requesting department prioritises functionality or personal preference. C2 notes that sustainability criteria often end up weighted lightly (e.g., 5%), reducing their influence in decision-making.

C2 also observes that sustainability in logistics (e.g., requiring electric vehicles for deliveries) is more commonly addressed than product-level sustainability, partly because it is easier to influence. Yet even these commitments may remain symbolic: they describe contracts in which suppliers were required to use electric vehicles, but “over eight years of collaboration it is never checked.” Monitoring is often not embedded, which means there are few lessons to carry over into subsequent tenders.

A nuanced point C2 makes is that sustainability knowledge should not rest solely with buyers. Instead, sustainability expertise needs to be positioned higher in the organisation, similar to how IT expertise feeds into procurement. Without this, buyers (who already handle many responsibilities) lack the information needed to steer effectively.

C2 notes that public organisations must specify requirements upfront due to procurement rules, limiting flexibility during the contract period. Private organisations, in contrast, can adjust service delivery more easily. At the same time, public organisations can sometimes justify higher costs when aligned with societal goals, providing a different form of room for sustainability.

As for future developments, C2 expects more emphasis on extending the lifespan of devices by requiring them to be repairable or upgradable, given that the majority of environmental impact lies in production and disposal. However, fast technological change presses organisations toward more frequent replacement, illustrated by employees seeking the latest phone every few years.

Regarding as-a-service models, C2 describes [a client's] exploration of an as-a-service model for workplace hardware, which they did not adopt because they wished to remain owners and had an existing maintenance contract that could not be integrated. C2 characterises as-a-service as promising but notes it is not yet widely adopted for workplace ICT, partly because organisations want to maintain control over their device management.

1.8. Summary interviewee C3

C3 observes that many suppliers claim to be working on sustainability, but in practice, "I only see little real ambition at suppliers." While suppliers like to showcase plans and goals, such as making all packaging plastic-free by 2030, the interviewee finds these timelines far too slow. "I said then: that is not ambition. That was still eight years or so. If you say: at the end of the year, that is ambition." They experience that when buyers demand more urgency, suppliers quickly retreat behind what they call feasibility limits. "They really aren't willing to go for that." Commerce, they conclude, still tends to outweigh genuine green priorities.

The interviewee repeatedly stresses that the biggest environmental gains lie in using ICT equipment longer. Extending the lifetime of laptops or phones from three years to five or six has, in their words, "pure profit" for sustainability. High-quality, durable materials, make such longer use feasible, and the higher purchase price is quickly recovered. They note that energy efficiency of new devices continues to improve, but this seems "more a coincidence than a real ambition" from the industry.

In their view, procurement departments can exert real influence, especially regarding packaging and logistics. Through consistent demands over multiple years, buyers can push suppliers to reduce waste: "That is something we have been asking for for years." They cite successful changes such as collective packaging of laptops in cardboard boxes instead of plastic and styrofoam. This not only reduces environmental impact but also cuts transport and storage costs: "It helps on all sides."

However, when it comes to product design (such as modularity or easy repair) the interviewee feels buyers have little leverage. "I think little. Rather the opposite. It is becoming more and more integrated." Components like memory are increasingly soldered onto the motherboard, which prevents upgrades later. They attribute this to consumer demand for smaller and lighter devices, although they note that explicit buyer requests for upgradeable models still help keep such options on the market. Regarding smartphones, they highlight the tension between manageability, performance, and sustainability. Modular and repairable phones exist and are symbolically valuable, but they often lag in performance and ease of management.

When asked about Green IT initiatives or pilots, the interviewee admits that they are rare. Improvements tend to come through incremental adjustments, slightly more efficient chipsets or better packaging, rather than radical innovation. They remark half-jokingly, "As soon as someone comes with a laptop made of cork, we are quite willing to try that once, but so far little spectacular happens."

A recurring theme in the conversation is the tension between security and sustainability. Strict compliance and cybersecurity frameworks often require multiple segregated systems, separate servers, or even multiple devices per person. The interviewee summarises this as: "Compliance and security are by definition not sustainable." Yet, they accept it as necessary, given the real risks of hacking and espionage.

Public procurement rules and competitive tendering also complicate sustainability ambitions. Buyers must often balance sustainability goals against price pressure. The interviewee emphasises that being subject to public procurement law limits the ability to build long-term supplier relationships: "We are required to tender... This means we cannot really enter into a sustainable relationship with [suppliers], because we never know who the next supplier will be." This obligation keeps competition active but prevents continuous collaboration.

In drafting procurement specifications, the interviewee prefers a balance between functional and technical requirements. Functional descriptions offer flexibility, but overly functional tenders may lead to lower performance or unintended exclusions. For core components like processors, they prefer clear technical minimums (e.g., number of cores, speed) to avoid getting the cheapest, weakest models. They describe how market consultations help both sides align expectations. They stress the importance of fairness: if one supplier proposes a better formulation, this is shared with all others. Such openness prevents favouritism and ensures that sustainability criteria are applied consistently.

2

Proposition testing interview materials

2.1. Interview summaries

2.1.1. Organisation A

Interviewee A1

A1 explains that sustainability for IT sits within the broader operations ambition to reduce the ecological footprint. The formal target from operations is "to operate carbon-neutral in 2030," and A1 notes: "we also feel called to that." At the same time, A1 is not convinced that the organisation is pursuing the target with enough rigour. They expected more structure and annual reduction planning: "If we have three and a half or four years left, you would expect about 25% reduction per year." The ambition is seen as a useful direction, but the execution "could be stricter," though "It's not all bad."

The broader governance for sustainability is centralised. A1 describes the corporate Sustainability Office as a department that "give[s] direction and set[s] frameworks for how the more operational departments work," including procurement. There are also people within corporate procurement "who are more concerned with sustainability and make sure that, for example, we set sustainable criteria." A1 sees this evolution as gradual: "It's a growth path."

A key result of this development is the code of conduct that suppliers must sign, covering both environmental and social topics. Suppliers "declare that they adhere to sustainable practices… not only about carbon reduction, but also about doing business fairly, not discriminating, not excluding trade unions, etc."

The IT sustainability strategy (summarised in a single slide with objectives and key results) is described as mainly directional. A1 says it helps teams see that sustainability is part of the OKRs and [the company]'s strategic direction. It encourages people to begin working on the topic, even if some actions mainly create preconditions, such as sustainable procurement requirements.

How strongly sustainability is embedded varies per person: "Some people don't worry about it, others very much." A1 places themselves "a bit in between," but believes that "we have integrated sustainability quite well. It can always be better, but it's reasonably well embedded in our execution." In IT specifically, "through the work of a number of fanatics, including myself, we have now integrated sustainability well into our decision-making and execution".

A1 notes a cultural shift: "We see that many more people than five or ten years ago find sustainability important." Yet there is also a societal counter-movement suggesting "that we shouldn't worry so much," which A1 partly links to climate targets coming closer while likely not being met. Despite these dynamics, A1 sees increasing understanding of "which levers we need to pull." Compared to other organisations, A1 says: "I wouldn't say we are THE front-runner, but we are in the vanguard compared to other IT companies or IT departments."

A1 outlines a clear distinction between procurement and vendor management: procurement is "mainly transactional: we want a new product or a new service, and they negotiate with suppliers." While Vendor Management focuses "more on the long-term relationship with suppliers." These must be aligned: "It would be strange if Vendor Management builds a long-term relationship and procurement goes in a totally different direction," though in practice this sometimes happens. Procurement is centralised across the company but segmented per division; the IT procurement department is embedded within the IT division.

IT procurement itself is specialised by domain, such as development, operations, and distributed services. Buyers specialise because each maA1et "speaks its own language." When contracts expire or there are new needs, procurement and IT work together through RFI and RFP phases, workshops, deep dives, and reference visits. A1 mentions workplace services being retendered, with delegations even visiting suppliers on-site, to verify claims made by the potential supplier.

Suppliers are categorised as strategic partners, tactical suppliers, or commodity suppliers "of whom we say: they just deliver a service, as cheap as possible and with as little hassle as possible." Working with preferred suppliers is maintained only if they continue developing: "If a preferred supplier does not develop the way we want, they price themselves out of the market."

Suppliers in high-risk categories may be required to complete sustainability assessments like EcoVadis or CDP, but this is not required for all suppliers. Requiring carbon reporting from a supplier with almost no emissions "wouldn't make sense." A1 is sceptical about the value of "beautiful reports" from large tech companies, if it is unclear "what that specifically means for our services." Still, requiring reporting can create motivation for suppliers to demonstrate progress.

A1 is clear about where [the company] can and cannot influence sustainability. For end-user hardware, most emissions come from manufacturing, which [the company] cannot control: they cannot dictate how OEMs design devices. Influence lies more in logistics, warehousing, and lifecycle choices. They regard initiatives such as fewer delivery movements, consolidated shipments, and possibly electric transport. A1 contrasts this with consumer-style next-day delivery, which is "very convenient, but not sustainable."

A1 highlights initiatives where suppliers use monitoring and usage data to extend device lifetimes. Instead of replacing devices automatically after five years, they can be redeployed to lighter users and last six or seven years, which, across thousands of workstations, presents a meaningful alternative to the story that "after five years everyone simply gets a new one."

The strongest tension for sustainability, according to A1, is currently financial: [the company] "has a hard time financially. Costs are enormously important." Cybersecurity is another major concern. With a large IT budget, trade-offs are constant: "Do we do focus on better cybersecurity, or do we choose a sustainable approach?"

A1 looks for win-win pathways, especially in software optimisation: "There is still a lot to gain." Improvements can reduce costs, improve cybersecurity, and be more sustainable at the same time. A1 is pragmatic: "It doesn't matter to me what we call it, as long as we do it." Examples include optimising cloud usage and switching off non-production environments outside use times.

Sustainability also interacts with what employees want from workplace devices. Some want "the best laptop with the best specifications" regardless of sustainability, while others "want it to be as sustainable as possible, even if you can then do less in terms of performance." A1 sums up the diversity: "We are a village of 30,000 employees, so everything exists."

A1 follows regulatory developments such as the CSRD closely and sees compliance as a strong internal driver: "If something becomes legally mandatory, then lawyers at head office say: we have to do something with this." A1 chooses to use this force rather than push against it. Other drivers include:

- Talent attraction and retention: young people don't want "to work for a polluting company," so A1 frames the work as: "what is more beautiful than helping to reduce that pollution?"
- Investors: A1 assumes they are increasingly critical of polluting companies but cites examples showing that "the wind can turn."

Despite external uncertainties, A1 focuses on "what is possible."

A1 explains that the idea of "fieldlabs" emerged less as a formal innovation structure and more as a way to describe experimental, collaborative work. The term can easily be misunderstood: people assume "it is fully orchestrated", but, as A1 puts it, a fieldlab is "an area of attention on which you experiment." The organisation has in fact worked this way for decades: "We have been doing that for 106 years."

The ecosystem that supports the fieldlabs originated in the department where Vendor Management sits. A1 says it was important to prevent other departments from feeling excluded: "it could easily have happened that other departments thought: nice that you are doing this, but we do not recognise ourselves in it." To avoid that, each fieldlab was linked to a domain in the wider organisation. For example, the development organisation sees the fieldlab on green coding and thinks "that is for us."

A1 describes fieldlabs as "a testbed in which you discuss with suppliers which steps you can take. What are we going to try out? How do they look at it?" The main idea is joint exploration rather than prescription: "not dictating, but listening and giving direction: this is our need, how could you solve that?" A1 contrasts

this with "the old-fashioned way: we are the customer and dictate what the supplier must do," which still exists in parts of the organisation but "you do not get the best out of it." Suppliers often bring expertise and sustainability-driven ideas that the organisation did not know existed.

Fieldlabs have revealed unexpected opportunities. For example, during a session with workplace-management suppliers, A1 saw new tooling that analyses end-user behaviour in far more detail. This was something the organisation "didn't know existed," and once shown, "bells started ringing." Suppliers who demonstrated this were "1–0 ahead" in later selection. According to A1, fieldlabs work because they:

- surface unknown possibilities the organisation would never have asked for,
- create recognition across departments, and
- enable co-creation with suppliers who are themselves driven by sustainability.

But they also have limits. Some parts of the organisation still default to directive thinking, capacity constraints limit how many opportunities can be pursued and conflicting incentives remain (e.g., suppliers benefit from selling hardware, while the organisation wants lifetime extension). Fieldlabs rely heavily on sustained dialogue: suppliers bringing ideas and internal teams having time to act on them.

A1 describes an ongoing shift from detailed prescriptions toward outcome-based collaboration: "This is our need, you come with the solution. The supplier becomes more of a black box." This includes sustainability: the new Desktop Service base package sets principles and the code of conduct, but suppliers must "convince us that you are the best partner, also on sustainability." The details are then tested in defense sessions, where cybersecurity remains "not negotiable." Service models are also changing. Desktop-as-a-Service (DaaS) is increasing, partly because the organisation does not want to manage everything internally, and partly because cloud providers often have "much better energy efficiency than our own datacentre." Leasing constructions also support longer device lifetimes.

A1 ends with reflections on the limits of workplace IT's influence. As an end-user organisation, influence is "limited." More sustainable delivery and maintenance of devices address "only a few aspects" and "in the total they weigh only limitedly." Decisions depend heavily on how driven the involved managers are.

Collective initiatives, such as buyer groups, are seen as promising: "That is a win-win." The ecosystem includes suppliers and organisations like the Green Software Foundation, NCDD, TNO, and international counterparts. Capacity constraints, however, make participation challenging: "it's not that people have oceans of time."

A1's key insight is that sustainability does not start internally: "You have to look at what happens outside: that's where regulations and innovations come from." Buying power and ecosystem collaboration "moves the needle more than when you try to arrange everything internally." Once you work with suppliers, "you are in the middle of an ecosystem," and the challenge is to use that ecosystem for more sustainable IT.

Interviewee A1 and A2

The interview begins with A2 describing the structure of the joint IT procurement organisation. They explain that their team "sign[s] at least 95% of common contracts for [the company], and also for the group and all our affiliates," portraying a centralised and certified process landscape that they say is "at the state of the art." A2 emphasises that every procurement process includes predefined compliance, risk and sustainability checks, executed by specialised departments within the back office. This structure requires all new suppliers to sign a supplier code of conduct that contains "extensive wording about sustainability and social responsibility." In addition, A2 notes that vendors must undergo an EcoVadis sustainability assessment; those scoring below average are required to produce an action plan that is followed by the Sustainability & Compliance department. A2 explains that in practice, the organisation does not encounter sustainability risks with major IT suppliers, stating that companies such as [Big Tech examples] "are fully compliant with all sustainability requirements."

A2 describes how sustainability is embedded into tenders. Before launching a tender, procurement organises discussions between IT departments and the Compliance & Sustainability unit to determine which criteria should apply for that specific procurement. They describe working with a standard grid of sustainability criteria, adjusted depending on whether the tender concerns software, hardware or managed services. For hardware tenders, A2 highlights that they look specifically at "power consumption, green IT characteristics, and raw materials used." For managed services, they say sustainability relates more to social responsibility due to subcontracted staff, while for software (especially SaaS) sustainability is indirect and tied to data-centre operations. A2 notes that when conflicts arise between sustainability and other requirements, security takes precedence, explaining that the main priority within the company is "security: data security, people security, [business] security."

Hardware lifecycle management is explained in detail by A2, with several clarifications added by A1. A2 states that the organisation leases many devices, especially servers, "because we do not want to manage the second life of these assets." For hardware that is not leased, they attempt to organise second-life routes for employees or the second-hand market. A2 also highlights upcoming developments in device materials: future laptops will include casings made of refurbished plastic, which they describe as "very high-quality, and you would never know it's refurbished." A1 agrees and notes that repairability will become an increasingly important criterion. Both interviewees link these developments to supplier roadmaps, explaining that procurement shares its sustainability commitments and then waits for suppliers to propose ideas. A2 summarises this dynamic by saying: "We request sustainable solutions or products. Then it's up to them to propose a sustainability roadmap."

A substantial part of the discussion concerns extending device lifetime. A1 stresses the importance of lifecycle management, noting that "if you can use a device longer… it may be more expensive upfront, but cheaper long term." A2 confirms that laptop lifetimes have already increased from three or four years to four or five, and that the ambition is "five to six years." This is supported by predictive and preventive maintenance based on AI. A2 explains that AI tools running inside each PC will monitor memory behaviour, performance issues and other signals, so the service desk can intervene remotely, reducing the number of technicians "travelling by car" and allowing "many things [to] be done remotely or automatically." They expect this will extend device lifetime and reduce incidents. A2 describes a strict rule for deciding whether to repair or replace devices: "If repairs exceed 50% of the current value, we end the PC. Otherwise, we repair it."

Pricing and budgeting challenges in sustainable procurement are also described mainly by A2. They note that greener PCs appear to be "10–20% more expensive," although negotiations have not yet concluded. Because sustainability requires long-term thinking, A2 explains that contract durations have increased from three to five years to allow realistic assessments of hardware performance and lifecycle costs. They emphasise financial constraints, remarking that "we are not a rich company," which requires them to balance "budget, sustainability, security and future ambitions." A1 adds that extended lifetimes improve total cost of ownership, reinforcing the importance of lifecycle management.

Software sustainability, by contrast, is more difficult to assess. A2 explains that software relies heavily on data centres, and therefore sustainability must be evaluated indirectly. They mention providers stating that because these large companies must meet global compliance requirements, [the company] assesses their sustainability performance through external frameworks rather than through its own direct evaluations. A1 adds that they have conducted carbon disclosure programmes with providers through CDP, although this is not handled within the IT procurement team. A2 notes that the organisation is still learning how to provide accurate data for CDP, describing the capability as "very new" and saying they are "not very good at providing reliable information" yet. A1 contextualises this by stating that IT is a relatively small part of the company's footprint: "In absolute figures we are big, but in total footprint we are small," and that suppliers with larger impacts (such as engine manufacturers) are prioritised for deeper sustainability engagements.

Monitoring and vendor follow-up emerge as key challenges. A2 explains that sustainability criteria and contract clauses exist, but "the challenge is to monitor sustainability performance across all vendors." A1 elaborates on the structure of vendor management: they maintain long-term relationships, request updates on supplier roadmaps and sustainability actions, organise annual sustainability days, and hold yearly strategic committees with major vendors. A2 indicates that roughly ten strategic IT vendors are followed directly by IT top management. They emphasise that procurement supports but does not lead long-term vendor strategy, as this falls under vendor management and IT leadership.

Sovereignty and geopolitical constraints are discussed primarily by A1, with confirmation from A2. A1 states that sovereignty is "definitely" a concern, highlighting that all company data must be stored in European data centres due to geopolitical trends. A2 adds that for certain sensitive procurements, data must be stored in specific European countries. A1 explains that the company is subject to national security requirements, which impose rules on how certain IT services must operate, including restrictions mandating national providers or national-hosted environments. A2 notes that these constraints mean they cannot operate in or work with certain countries, requiring alternative solutions. They underline that while the organisation remains model-agnostic for AI and collaborates with European players, they cannot avoid working with global hyperscalers. To mitigate sovereignty concerns, A2 explains that they sign contracts only with the European legal entities of these companies: "We don't sign contracts with Microsoft US; we work with Microsoft [country A] or Microsoft [country B]."

Examples of concrete sustainability practices appear throughout the discussion. A2 mentions that they

are preparing a tender to renew printing contracts and are actively choosing refurbished printers for regular office use. They explain that this is accepted without any issues because "there is no difference at all" for users. They also mention logistics requirements: hardware deliveries should come by boat rather than by air whenever possible, and packaging is evaluated for second-life options such as reused cartons. A2 adds a personal behavioural example (switching off their PC nightly) illustrating that individual actions complement formal procurement policies.

Towards the end of the discussion, A1 explains their shared philosophy of supplier engagement: "We don't dictate to our suppliers how they should do things, but we make very clear that sustainability is important to us, and we let them show how they will meet expectations." A2 elaborates that the current workplace IT tender is deliberately framed as a "request for solution" rather than a standard tender, designed to encourage suppliers to propose innovative and sustainable ideas. They summarise the ongoing tension succinctly: "We want innovation and sustainable solutions. And of course for less and less money. That is my challenge." The interview closes with A2 reaffirming the centrality of sustainability in their work, saying: "We discuss sustainability every day. We don't forget it, believe me."

2.1.2. Organisation I

Interviewee I1

The interviewee explains that the procurement function at [the company] is organised around central coordination across multiple semi-autonomous companies. As I1 describes it, their work centres on enabling joint procurement "so that all those companies don't have to negotiate individually," because shared contracting both reduces inefficiencies and increases leverage. That leverage is also important for sustainability ambitions: collective purchasing gives "more influence to make sustainable choices," something I1 believes will become a distinctive advantage.

Procurement processes therefore sit at the intersection of internal stakeholders and the central procurement team. I1 works "as a spider in the web," collecting needs from different entities, supporting negotiations, and ensuring that sustainability is structurally embedded. I1 emphasises that sustainability is not an add-on but "a fixed part of my daily work," strengthened further by the decision to formalise I1's sustainability responsibilities in the function profile.

This organisation of procurement is closely tied to the broader sustainability strategy at [the company]. For scope 3 emissions, the sustainability team worked with I1 on setting the reduction target. They calculated emissions largely through spend-based data but now want to replace this with more accurate information, such as product-specific LCAs, because "spend-based is not the most accurate method." The strategy also focuses on engaging the most emission-intensive suppliers and asking them for more in-depth data. For software suppliers this is more challenging because providers often state that "the data centres run on green energy," making their emissions appear minimal, even when materiality is harder to assess.

This strategy translates directly into procurement by requiring sustainability to be consulted structurally in every new trajectory. Each tender passes security, legal and sustainability checks, and sustainability provides its views so the team knows "what we can do to make the trajectory more sustainable." KPI-setting is now standard: new contracts increasingly include commitments such as adherence to SBTi or equivalent goals. The interviewee links this directly to client expectations: if customers demand sustainable supply chains, [the company] must also require this from its own suppliers.

Although I1's role introduces more steps into procurement, I1 stresses the importance of avoiding excessive bureaucracy: "We are not the government; we want to keep working efficiently." Mandatory involvement of legal will remain, especially because of evolving regulations such as CSRD, but I1 notes the balance between compliance and pragmatism.

Decision-making always combines the perspectives of security, sustainability, legal, the contract manager's content expertise, and I1's own procurement advice. The final decision rests with the board or financial director, but in practice "nine out of ten times the joint advice is adopted." The evaluation approach has also broadened beyond price and quality to include a structural sustainability component. I1 describes this as a typical weighting like "40% price, 40% quality and 20% sustainability," though the exact percentages differ per tender.

I1's expertise in sustainability is strengthened by training from MVO Nederland on CS3D and value-chain due diligence. The training gave I1 "a basic understanding of where to begin," particularly on mapping supply chains and asking key suppliers about the origins of their materials or their scope 1 and 2 emissions. I1 recalls that suppliers often ask him "CS3D, what is that?", making conversations harder when the knowledge

is unbalanced. For him, the main lesson was the importance of simply starting by engaging the four or five most material suppliers.

Because legislation shifts frequently, I1 notes that many organisations "stand still or move backwards," but [the company] developed a plan early and continues following it, regardless of delays in EU timelines. I1 explains that it is better to move ahead now rather than being forced to adjust later: "You won't have to react to every change, because you will already comply."

When it comes to early market engagement, especially for larger projects, they begin with an RFI. This includes standard questions on security, sustainability and basic terms: "questions we ask every supplier." The RFI serves as the first filter: suppliers focused only on low prices fall out quickly, while those seeking long-term partnership proceed. After demos and deeper conversations, all insights from security, sustainability and procurement converge in the RFQ phase, after which the contract is detailed.

Throughout the interview, I1 contrasts suppliers who meaningfully engage with sustainability and those who dismiss it. Vendors who say "we all still drive diesel, we don't care" rarely progress in the process. Sustainably mature suppliers, by contrast, allow deeper technical discussions. Members of the sustainability team join these conversations to engage at that deeper level.

Certification is a recurring theme. [The company] asks suppliers which certifications they hold (EcoVadis ratings, SBTi commitments, and others) but also verifies the claims because "some say they have it but only work according to the norms." They also request data such as the CO_2 footprint of a laptop, whether an LCA is available, and whether packaging can be made more efficient. I1 finds certification broadly useful because "you don't have to ask everything again" and it sets expectations.

Yet some certifications are missing in areas like end-of-life standards. I1 notes that "it would be very useful" if standards existed to guide end-of-life reuse or recycling, because suppliers of workplace IT may know the emissions of delivery to the customer but not the full footprint across the lifecycle. I1 also points out that LCAs are difficult to compare because "they [suppliers] check themselves," making assumptions non-standardised.

Data quality and availability remain a major challenge. They send a 25-question sustainability questionnaire to large suppliers, but receive "only about 20% response." Contractual enforcement helps: suppliers that sign the Supplier Code of Conduct must respond to periodic questionnaires. But major companies refuse to sign customer-specific codes, they state: "Here is our own code; take from it what you need." In such cases, [the company] compares both codes, which usually "match in nine out of ten cases," though the explicit commitment to fill out questionnaires is then missing.

Internal policies include a Sustainable Procurement Policy covering the weighting of sustainability alongside price and quality, as well as the process design (security, legal, sustainability reviews). This is version 1.0 and used internally, not published externally. A Circular Procurement Policy adds depth using the 10R model, where higher-order circular strategies are considered better. I1 stresses that the most sustainable option is "to buy nothing."

Circularity, however, is less widely understood than sustainability within [the company]. Many people know the term but not how it applies in their daily work. I1 mentions examples such as the bicycle-lease scheme, where the circular bicycle receives a higher employer contribution to encourage uptake.

For workplace hardware, laptops are purchased from [brand]. Devices typically stay within [the company] for around five years, but are internally cascaded to extend their lifespan: someone with heavy requirements gets a new laptop, but a colleague who mainly uses e-mail or Teams can use the older one. After five years, devices are sent to [foundation name] to give them a second life. I1 is discussing further lifespan extension with [supplier], ideally to seven years. During the COVID-19 shortages, they already repaired laptops by combining parts from defective units: "From ten broken laptops we could make six good ones so to speak." [Brand] is open to exploring this structurally, but warranty loss when opening devices is a barrier, and there is also the commercial tension that selling fewer laptops reduces revenue.

The interviewee sees possibilities for new incentive models where suppliers are compensated differently if devices last longer, as long as the business case remains reasonable. But I1 also notes that "you won't pay twice as much for something that lasts only one year longer."

Looking ahead, I1 sees the biggest challenge in obtaining product-specific emissions data and mapping complex supply chains. Coffee is simple, laptops are not: "There are many more parties behind it." This complexity is the main obstacle in I1's view.

What I1 values about [the company] is the intrinsic motivation: sustainability is driven "from within." Not

every employee is fully engaged yet, but those working on it are genuinely committed, and management makes budget available for full-time sustainability roles.

There is also space to integrate sustainability early in procurement rather than being handed decisions after the fact. Many contracts are now up for renewal, which creates opportunities to redesign them with sustainability embedded from the start. Within IT, trade-offs remain: heavy-duty users cannot compromise functionality for sustainability, so pilots begin with willing participants. Their Fairphone pilot illustrates this: test group uses the devices for six months, answering periodic feedback surveys. If the pilot is successful, broader adoption will depend on the autonomous companies within [the company], except in cases where the board issues a directive. For Fairphone, change will likely be incremental.

Finally, [the company] will soon commit formally to the SBTi, which means suppliers will also be asked to commit. I1 frames this as a necessary next step: "If you commit to something yourself, you gain more direction and more leverage towards suppliers."

Interviewee I2 & I3

When asked about the sustainability of their workplace IT, both I2 and I3 emphasise that IT must be seen broadly: hardware, software, user behaviour, and knowledge. I2 explains that the organisation is well aware that IT contributes substantially to its footprint and has even developed "the first specific calculation of the emissions related to our IT landscape." Yet, in execution, they do consider themselves a front-runner. I3 supports this view by highlighting two parallel challenges: technical barriers such as data quality and supplier relationships, and the behavioural side of sustainability, since "we can build the most beautiful things, but it has to come from the people themselves."

As the conversation shifts to sustainability frameworks, I2 outlines how the field moved from broad concepts like People–Planet–Profit to SDGs, then to voluntary reporting standards like GRI, and now into binding frameworks such as CSRD. The CSRD will require the company to report formally on sustainability, including detailed environmental disclosures. Preparing for this is complex because regulations remain in flux, so they follow what I2 calls "the common-sense approach": staying informed, preparing, but not over-engineering details that may still change. I3 explains that their various existing emission-reduction targets (including those from the CO_2-Performance Ladder) will be integrated into a SBTi-validated target. Eventually, "integration will take place," because the frameworks themselves are converging.

The discussion then turns to how these abstract requirements translate into procurement practices. I2 describes two mechanisms. First, sustainability is explicitly embedded into the procurement policy: "a part of the selection criteria and weighting depends on the supplier's ESG-related performance." All larger tenders include this, and sustainability stands alongside privacy, security and legal assessments. Second, large portions of scope-3 emissions come from purchased goods and services, so the only pathway to reduction is better measurement and supplier collaboration. Their emissions model is still largely spend-based, which I2 calls a temporary necessity given that they have "thousands of suppliers" and lack product- or project-specific data for most of them. As data improves, they increasingly discuss reduction opportunities with suppliers they know well. Others remain beyond reach. For hyperscalers chosen by clients, influence is minimal: "We can call [cloud provider], but I don't think they will pick up."

Supplier compliance is handled through the Sustainability Supplier Code of Conduct. If a supplier refuses to sign, they assess whether the supplier's own policy aligns with their expectations. So far this comparison "is usually matching," though I2 warns that geopolitical developments in the US may soon create divergence. European alternatives to major US tech providers are under consideration, but customer choice continues to be a decisive factor. The possibility of technological lock-in is acknowledged, but I2 notes that if it ever materialises, "all of Europe will have that problem," not just them, so a European response is expected.

Procurement policy itself consists of a mandatory integrated policy and a circular procurement policy. The integrated policy enforces sustainability checks as a standard part of every procurement process, describing how suppliers are evaluated and which risk reviews must take place. Circular procurement, by contrast, is still in a formative phase. I2 explains that it is designed to encourage people to experiment and learn: "It is almost a tips-and-tricks approach." It guides teams on applying circular principles but is not yet binding. Facility management has begun using it, for example in furniture decisions, and the IT organisation applies it in pilots such as testing the Fairphone.

The Fairphone pilot becomes a central example in the conversation because it illustrates how procurement, policy, sustainability, security and employee expectations all collide in a single device. I3 recounts that security concerns emerged immediately due to the phone's modularity: "What if someone places an illegal microphone?" Financial considerations also weigh heavily; the device is roughly twice the cost of their current standard Samsung model. Even though Fairphones tend to last longer, internal norms still assume a

two-year depreciation period. Changing this mindset is difficult. I3 has built a full business case comparing CO_2 impact and costs (CAPEX, OPEX, everything equalised) but the colleague reviewing it continued to ask the same questions. Not because the analysis was unclear, but because "the mindset was not there." I2 adds that employees often see phone replacements almost as a right or a benefit: "People become unhappy if they do not get a new device every two years." In their words, hardware has become part of a bundle of expectations: "salary, car, good coffee… and hardware sometimes stands at the same level." Untangling devices from notions of reward is, I2 says, one of the biggest cultural barriers to sustainable IT.

A similar complexity appears in their engagement with [hardware brand]. The organisation has long circulated laptops internally and sent older devices to refurbishers, but never systematically monitored these flows. Now they want a detailed baseline: which devices they have, ages, lifespans, and the exact associated emissions. I2 summarises the challenge: they now have "laptops of all ages and types for 3500 people" without centralised historical data. I3 looked into [hardware brand]'s existing transparency and found it inconsistent: some products come with reasonable chain insight, others with almost none. Real progress requires detailed device inventories, production years, and material passports. This is data [hardware brand] can only provide once they know precisely what the organisation owns.

Uniform standards would help greatly, but the current landscape is fragmented. LCAs differ in method, assumptions and completeness, making comparison difficult. I3 argues not for more certifications but fewer: "more streamlining, more integration." Ultimately I3 values seeing emissions fall year-on-year and having suppliers willing to collaborate on reduction. Qualitative insight also matters: "Who is in our value chain, how is the collaboration, how do we create value together?" I3 emphasises that for companies like [hardware brand] it is easiest to sell new devices, but co-thinking about a shared sustainability end-point is "much more valuable."

I2 provides examples of partnerships with foundations that already embody the collaborative model they aim for. I2 believes such partnerships represent the future of sustainability work; the challenge is that their largest IT suppliers are too big to engage deeply with them, so they expect more opportunity with mid-sized suppliers for whom they may become a strategically significant client. If the Fairphone pilot succeeds, that could become such a mutually supportive relationship: "Then you can strengthen each other."

Although they participate occasionally in joint initiatives such as those facilitated by their investor's network, they do not naturally form buyer groups to exert collective purchasing power. I2 doubts whether adopting a strong negotiating stance fits their organisational character: "I don't know if we are that type of organisation." They contribute expertise to tenders or consultations when asked, but their approach is more relational than formal.

Asked where procurement challenges lie, I2 responds that they arise "on all playing fields at the same time." They try to make progress wherever possible: engaging key suppliers, creating internal pilots, and experimenting with technical and behavioural interventions. Yet internal engagement is unpredictable. Large, technically impressive initiatives may generate little interest, while small symbolic actions can generate unexpectedly strong enthusiasm.

Looking forward, I2 highlights sustainable IT, better IT-related emission footprints, and activity-based data as essential next steps. Customers increasingly ask what emissions are associated with the specific services delivered to them, not just the consolidated organisational footprint. Methods exist (I3 has developed them) but they have not yet been fully implemented. I3 notes the central difficulty: making these approaches scalable across clients without needing large amounts of manual work. Data remains imperfect and incomplete, so they must learn when to accept uncertainty and how to work with qualitative descriptions of their value chain, risks and dependencies.

I3 also reflects on systemic issues underlying many sustainability challenges. I3 suggests that sustainability, security and geopolitical risk often share root causes such as fragmented data, misaligned incentives and short-term organisational horizons. Many companies simply do not plan ten years ahead, the interviewee says, and therefore may not feel urgency to look deeply into their supply chains. But despite these realities, they still have to find ways to act within the constraints of regulation, uncertainty, and organisational psychology.

Interviewee I4

I4 explains that their engagement with sustainability started more than a decade ago, when the interviewee and a colleague "became more involved with sustainability when it was still simply called CO_2." They discovered that for most companies "the vehicle fleet actually caused the largest share of emissions, in some cases even three-quarters." Early attempts to reduce this centred on behavioural incentives, but gamified

systems had limited effect. They therefore introduced a stricter, individualised norm-consumption system where "the moment a driver performed better than the norm, they were rewarded for it," and more specifically, "they received half of the saving paid out net." This programme ran for twelve years until electrification gradually made such comparisons meaningless: "there will come a point at which everyone drives electric, and then you can't benchmark against a norm anymore, then it's done."

From that work, I4 increasingly became involved in procurement, often as "the critical factor" who challenges choices based on environmental impact. The interviewee describes how their team works with an internal delivery organisation to determine "which hardware and software our employees use daily" and to ensure companies across the ecosystem are fully relieved from procurement tasks. Employees receive a centrally prepared laptop on their first day: "they only need to log in and can start right away."

A central organising principle is standardisation. Historically, the company offered many laptop variants, from basic models suited for Office to heavy workstations for developers and designers. Over time, usage patterns revealed that actual needs converged, leading to a streamlined portfolio of three Windows models and two Mac models. The simplification reduces overhead and increases purchasing power: "If you buy 300 type-3 laptops, the discount per type is much better than if you buy small batches of five varieties." It also lowers inventory waste and carbon emissions because fewer form factors require stocking and handling.

Interactions with suppliers illustrate the practical limits of sustainable procurement. [A hardware brand], their main laptop supplier, was asked to reduce packaging waste by delivering laptops in bulk packaging: "We wanted type-3 laptops per four in one box because it saves a lot of cardboard." [The hardware brand] was willing to do this, but power adapters sourced from different production streams could not be synchronised with laptop shipments. That made the risk unacceptable: "If you receive 100 laptops but only 25 power adapters and have to wait three weeks for the rest, you're stuck." As a result, they had to continue with single-unit packaging despite wanting to reduce material use.

In another case, [the hardware supplier] agreed to ship monitors without stands. I4 describes that "hundreds of unused stands were lying in a warehouse," produced only to be discarded because workplaces use dual-screen arms. Convincing [the hardware supplier] required persistence: "They don't offer it proactively; they wait to see demand." Yet once implemented, he suspects [the hardware brand] now offers the same option to many more customers. The pattern repeats across suppliers: "They are not assertive or proactive enough," and meaningful change usually happens only when multiple clients ask the same questions.

I4 expresses interest in broader cooperation beyond the company's own subsidiaries. While they already leverage joint software contracts across the parent group ("that delivers significant cost savings") similar cooperation on hardware has not materialised. I4 believes that if companies "stop reinventing the wheel" and combine their demands, supplier responsiveness would improve.

When considering sustainability within hardware procurement, I4 is explicit about the difficulty: the CO_2 differences between brands are minimal. "If we switch from [the current hardware brand] to [another hardware brand], the difference is minimal, maybe not even percentages but within one percent." Therefore, real sustainability gains must come from circularity, repairability, lifespan extension and internal behavioural change rather than brand switching.

Lifespan extension is one of the most significant opportunities. Although the organisation depreciates laptops over five years, employees can receive a replacement after three. Many employees do not have strong hardware preferences ("as long as it turns on and they can read their email") but certain groups, such as developers or Mac-oriented teams, see hardware as a prestige item and push for frequent upgrades. I4 questions this dynamic and imagines incentive structures that reward longer use: "In the fourth year you would pay only half, because you no longer pay for depreciation but only for support and updates." Such models could motivate business units and managers to encourage employees to keep devices longer.

The internal refurbishing capability already enables a practical circular system. Returned devices are cleaned, tested, and repaired if needed, then reissued. High-performance laptops from departing power-users (type-5 models) can be cascaded to users whose mid-range devices (type 3) were running slowly. I4 explains: "That employee is then very satisfied, they suddenly get a much more powerful device." I4 sees potential in offering employees a choice: a new mid-range model or a refurbished high-end one. The latter could even feel like an upgrade, making sustainability attractive instead of restrictive.

Next to refurbishment, the organisation is actively exploring modular and repairable alternatives. With mobile phones, they run a Fairphone pilot: twenty employees acquired the device at a reduced rate, and satisfaction surveys are conducted quarterly. So far, "everyone is positive," except some comments on the camera quality, which I4 considers acceptable for a business-oriented device. The crucial question remains

whether the promised longevity proves true: “They say you can use it for a long time, but whether that plays out in practice?” If the pilot succeeds and costs remain reasonable through lifespan benefits, he believes that at some point “every new employee could get a Fairphone.”

Inspired by this positive experience, he also wants a pilot with Framework laptops, known for modularity and ease of repair. Two years ago, these devices were not yet mature enough, but now he thinks “we can find configurations that are just as good and perhaps in the same price class.” A pilot would test usability, performance, support, and whether these devices truly reduce environmental impact.

I4 also dives into the behavioural dimension of sustainable hardware choices. When asked the question: “How do you get someone not to choose the latest iPhone but the Fairphone?”, I4’s answer is to “seduce” employees with clear personal benefits, for example, by pricing the Fairphone so attractively that it costs employees nothing, or by bundling accessories like new noise-cancelling headsets. If repairs can be done quickly at the internal service desk “you walk in with a Fairphone, and 15 minutes later it is repaired” the choice becomes even more attractive.

The challenge is compounded by company culture. Employees view hardware as part of their employment package; in IT companies in particular, “beautiful hardware is almost part of your salary.” He stresses that this mindset must be broken, but only succeeds if employees see personal advantages, not just organisational goals. This mirrors the logic of the earlier vehicle programme, where personal reward drove energy-efficient behaviour.

Turning to cloud and software infrastructure, I4 explains that their dependency on [US brand] is profound: “everything sits in the cloud,” and around 95% of their environment runs on it. Alternatives exist (European cloud providers) but he notes that “the compatibility and level are nowhere near comparable.” Leaving [US brand] would require huge investments and significant operational risk. Functionality, especially integrated collaboration (shared documents, chatting), creates a lock-in: “That is something we have grown enormously accustomed to since COVID.” Employees also anchor themselves to applications for emotional reasons: “people are stuck to [application], to where the buttons are in [another application].”

I4 acknowledges sovereignty concerns, especially due to U.S. political developments, but stresses that meaningful influence over [US brand] requires collective action: “Only when the government sets requirements does [US brand] start talking.” I4 cites earlier cases where Dutch governmental pressure forced [US brand] to adjust privacy practices. For sustainability, however, such leverage is absent.

Internally, awareness is uneven. Employees in shared buildings see sustainability initiatives firsthand (reusable cups, the removal of printers) and “awareness grows much faster.” In contrast, small remote offices feel disconnected. The company tries to create cohesion through social events, shared facilities, and centralised office consolidation. That consolidation also reduces environmental impact: fewer buildings need heating, even if some commuting distances grow.

I4 emphasises that the organisation’s sustainability target (a 10% reduction in scope-3 emissions by 2029) has not yet translated into a concrete workplace-IT strategy. The main difficulty is that “hardware offers only small margins.” Large emission reductions, such as electrification of the vehicle fleet, are not possible for laptops. Therefore, internal influence is essential: “If you want to achieve something, you must look where you have influence, and that is internally.” Supplier change is uncertain; internal change is direct.

The financial dimension complicates matters. Although climate goals are tied to the company’s financing costs (“if we don’t meet the goals, the interest rate goes up”), most employees feel no connection to such mechanisms. Many see sustainability goals as distant from their daily work. I4 notes that people “mostly think: what do I need to do today?”

Finally, I4 discusses an often overlooked sustainability factor: data. Because cloud storage feels infinite, employees keep everything: “Some people save every version as ‘version 15.final’,” and mailbox sizes can run into hundreds of gigabytes. “Every gigabyte in the cloud emits CO_2,” yet few understand this. I4 team now provides data-use reports and tools to identify decades-old files that were never touched again. If employees still want to keep data, they offer offline storage so it “is not sitting there humming day and night.” [US brand] cold-storage options also help by moving archive data to slower, less energy-intensive systems.

2.1.3. Organisation T

T1 explains that workplace IT at [the company] has a limited portfolio with little diversity, and sustainability requirements are included in new tenders. [The company] has a long-running process for equipment reuse

and refurbishment, supported by reporting on how much equipment is reused or recycled after the first lifecycle. Company policy dictates that workplace devices stay in use for at least three years, because "not purchasing is more sustainable than purchasing," and extending lifetimes structurally reduces environmental footprint. Cloud consumption is a major focus area, including the question of which services run in [the company]'s own data centres versus public cloud, and how sustainable public cloud providers are.

T1 describes [the company]'s sustainability evolution: initially supply-chain labour conditions with other [sector companies], later shifting to energy consumption and internal emissions, and over the past seven years to circularity as a core topic. More recently the focus expanded toward climate and supplier engagement, working toward [the company]'s net-zero goals. T1 states that the goal is to integrate climate-driven supplier requirements into contracts and tenders: "We want to bring climate criteria into RFPs and contracts, that is the next big step."

Workplace IT procurement sits primarily with the business segment that delivers devices to corporate customers; product selection and specifications are decided there. Central procurement supports this, while sustainability staff advise, define criteria and join major tenders. Cloud procurement is more dynamic, for example when new services such as Microsoft Copilot create new sourcing needs. Net-zero 2040 applies to scope 1–2 and scope 3 with 10% residual offsetting, and supplier engagement has been ongoing for almost two years.

[The company] works with more than 25 [sector companies] in the [name of sector-specific umbrella organisation] to approach shared suppliers on climate action. T1 mentions that they cannot join forces to directly steer the market, but they can define joint criteria. The interviewee notes that the sector alliance helps to see where suppliers stand in the net-zero transition, what gaps exist, and where support or pressure can drive progress (especially for Scope 3). Suppliers are for example encouraged to submit CDP disclosures for transparency. The [name of sector-specific umbrella organisation] hosts workshops and webinars and requests life-cycle assessments (LCAs) from major suppliers. "There are about twenty product categories now with live LCAs," which help identify hotspots. For smartphones, LCAs are already commonly requested, and possibly for laptops as well. T1 describes the balance between the alliance's and their own goals as that "it is more effective to first jointly apply pressure to suppliers. In specific procurement processes, you can then emphasise your own needs and contracts."

Data quality varies, however: "If you compare two laptops, it depends heavily on assumptions, the lifetime, and which database for CO_2-factors is used. That makes everyone cautious." An ISO-certified and independently verified LCA or Environmental Product Declaration (EPD) is described by T1 as "better than a quick-and-dirty one." The [company] takes these standards into account in tenders to 'move towards standardisation' in the market, as homogeneity is important in demand according to the interviewee. T1 explains: "Otherwise, suppliers would be overwhelmed by various requirements." LCAs are primarily used for the company's own carbon accounting and dialogue with suppliers, not yet for competitive scoring. In contrast, energy consumption is a metric [the company] can more easily use in tenders because it is measurable at device-level.

The Supplier Code of Conduct of the company originates from a circularity manifesto signed with multiple suppliers representing 75% of [the company]'s hardware volume. This code is an intent-statement, which is translated into concrete RFP requirements depending on supplier type: "For cloud providers, reuse is of little importance; for refurbished laptop providers, it is a major concern." For refurbishment providers specifically, reporting obligations around reuse and recycling are built into contracts, with monthly discussions about improvements. "We steer on correct recycling and we stimulate reuse," T1 states. [The company] targets 86% reuse and recycling, with continuous evaluation per supplier context. For example, at refurbishment partners the company stimulates process improvements, whereas for mobile phones, design for recyclability is more the focus.

Supplier selection includes both new and existing parties, but the market is concentrated. For example, T1 mentions that switching cloud suppliers is difficult due to lock-in, and smartphones are dominated by Apple and Samsung, representing 80–90% of [the company]'s volume. The interviewee states that influencing these suppliers is difficult: "They're big players. How important is [the company] to them?"

Because [the company] is also a reseller, it has influence beyond that of a typical end-customer. "We are a sales channel, that gives us a stronger position." Sustainability visibility gives them access to supplier sustainability teams. But influence has limits: "[Brand] hardly moves, even with 25 [sector companies] together," and [other brand] is similar. Collaboration may yield improvements in cloud efficiency and greener configurations. In hardware categories such as laptops and monitors, more procurement steering is possible as

these are commoditised and more replaceable.

Still, [the company] carries Fairphone as a sustainable challenger brand. [The company] has had a relationship with Fairphone since the first model, and committed to purchasing volumes. Together they developed product passports, including one with Fairphone. T1 mentions that "we made a podcast about it," and encourage internal and external adoption of the Fairphone, though use remains niche externally due to security, standardisation and user preference. Workplace IT typically uses one device brand at a time, which can be switched periodically as it is less locked in than cloud.

Sustainability is formally weighted in procurement evaluation. Typical RFP scoring allocates 40–50% to price, around 10% to sustainability, and the rest to logistics, terms and other categories. Within the ESG-criteria, the [company] for example requires suppliers to answer multiple choice questions on product circularity (regarding e.g. longevity, detailed repairability and updateability), that are in line with the [name of sector-specific umbrella organisation]. The scoring in this way, makes suppliers comparable.

About communicating with suppliers beforehand about criteria, the interviewee explains: "When we introduced circularity at product level, we explained this through workshops and incorporated feedback." According to T1, currently, "suppliers therefore recognise that [the company] uses this standard."
EcoVadis is used for broad sustainability assessments and pre-qualification, with internal KPIs tracking supplier participation and average scores. CDP is used to drive climate transparency. ISO standards support comparability in LCAs. The company is evaluating the EcoVadis Carbon Management Module as an alternative for the CDP, as the CDP is sometimes too extensive for smaller suppliers that the company works with. The interviewee mentions that circularity standardisation is less developed: "a new ISO standard has just been launched, which we may start asking for". Product-specific certifications differ by category: TCO Certified could apply to workplace IT, but cloud is assessed more on emissions performance and climate commitment.

CSRD reporting now mostly influences which data the company requests from suppliers, especially for emissions factors and recycled content as these are "material themes". CSRD has aligned terminology with European requirement definitions. LCAs enable better scope-3 reporting, and recycled material data supports circularity accounting.

As circularity is important to [the company], they were working with product passports in the early phases. "When we made them then, it was custom work: suppliers had to provide material data, software parties linked that and in four months you had one product passport."

T1 mentions that with the CSRD, this needs to scale, but scaling this process is unrealistic and they therefore wait for digital product passports. However, T1 notes that suppliers still struggle with delivering this, as it is not mandatory yet and there is not enough demand and standardisation yet. Supply chain complexity adds to that struggle: electronic supply chains contain up to 5–10 tiers, making material origin and recycled content difficult to trace. "How much recycled material is in a printed circuit board, connector, or component? That's difficult to determine."

T1 describes the biggest monitoring challenge as knowing precisely what components enter the organisation. Workplace IT is traceable in their organisation due to limited variety, but servers and data centres are complex, with combined configurations and LCAs often based on different reference models. For CO_2, suppliers rely on modelled emission factors. Circularity data availability is even weaker.

Supplier influence happens mostly during selection according to T1: "Those who better align with our goals have a greater chance. Once the choice has been made, suppliers have little incentive to change it." During ongoing governance, with the monthly or quarterly review meetings the company organises with suppliers, progress and reporting quality are assessed and discussed.

T1 mentions that the influence they have on suppliers differs. Some suppliers are willing, others say "this is our policy, good luck." But T1 mentions that collective industry questioning over time may drive design changes. "We may be 1% of the trigger, but it still moves something," especially when done jointly with the [name of sector-specific umbrella organisation], representing more than half the market.

For workplace IT T1 believes the biggest influence is pre-selection, as incentives weaken after contract award. Being a reseller enables feedback from customers, which can push sustainable adjustments. Climate criteria integration in RFPs is described as the next milestone, with differentiation such as: "a supplier with a net-zero target for 2040 scores higher than one without."

T1 advises focusing on shared standards and high-impact topics, noting that some organisations "ask extremely deep questions" while overlooking actual hotspots. Packaging may be 5% and logistics 1–2%, so

missing manufacturing footprint means missing most of the impact: “If you ignore the other 93%, you miss a large part.” T1 believes the most powerful levers in procurement are asking for green energy in the value chain and extending product lifetime. “If you extend laptop life 30%, you reduce footprint significantly.” Refurbishment and design for reuse reinforce this.

[The company] itself extends device life through internal policy and redistributes used laptops when employees leave. First-purchase refurbished is rare, but secondary assignment is common. Work devices may be used privately within policy limits, with managed work/private profiles for phones. Looking forward, T1 expects the main challenge to be meeting net-zero through product-level data, LCA granularity, and circularity transparency. AI workloads could dramatically increase emissions, making cloud location, energy and CO_2 critical concerns. Data jurisdiction and cloud dependency raise security and privacy issues, especially given U.S. hyperscaler dominance. Questions arise about whether Copilot and similar services process data locally in Europe or globally.

2.1.4. Organisation O

The interviewee explains how sustainability is structurally embedded into policies and processes for workplace IT. Sustainability objectives are translated directly into procurement activities, supplier selection and the use of tools and certifications. Sustainability requirements have been added to RFPs, where suppliers are expected to provide information on their environmental impact, relevant certifications and broader due-diligence topics. Before onboarding new suppliers, the organisation performs checks on issues such as legal proceedings and labour practices, and suppliers are also asked to accept a sustainability statement.

The central sustainability department develops the overall policy, which spans clients and suppliers. This central guidance is translated into practical processes, tooling choices and decision criteria within IT. Tools and certifications are selected specifically because they can demonstrate sustainability performance independently and help avoid greenwashing. When exceptions to the policy are needed (for instance when alternatives in the market are limited) these are reviewed and documented through an established deviation process.

Supplier selection and monitoring incorporate sustainability as a recurring element. RFPs use an external questionnaire that asks for sustainability reports, acceptance of the sustainability statement, security and ISO-related assurance, and ratings or certifications from recognised schemes, including approved alternatives. Certifications such as EcoVadis are expected for higher-risk vendors, though alternatives are sometimes accepted when vendors argue that their own frameworks are better or more comprehensive. This leads to detailed comparisons by internal experts, who check whether supplier statements sufficiently cover the themes required. While most larger vendors comply, the interviewee explains that obtaining EcoVadis can take a lot of time because a huge amount of evidence must be delivered, yet suppliers generally respond positively because the certification benefits them across multiple clients. Responses are assessed through a matrix that weighs different criteria.

Supplier monitoring takes place in structured cycles: operational meetings occur monthly for major vendors, tactical meetings quarterly and strategic discussions twice a year. Evaluation frequency depends on the category and importance of the supplier. When suppliers do not meet minimum expectations, such as required thresholds in sustainability assessments, the organisation first discusses the underlying causes with them and identifies possible improvements. Support is offered where appropriate. Persistent non-compliance is uncommon and occurs mainly with single-source suppliers. Relationship management plays an important role, with ongoing knowledge sharing and open discussions about sustainability. With strategic suppliers, the organisation also exchanges best practices and identifies opportunities for improvement.

Sustainability is also reflected in the procurement and use of workplace IT. Employees are encouraged to extend the use of devices beyond their depreciation period if the equipment still functions well. New phones are issued only when the current device no longer meets requirements, regardless of managerial preference. Hardware performance and defects are monitored closely through IT systems. The organisation knows the CO_2 footprint of devices, including both production and usage phases, and reports highlight opportunities for financial and environmental savings. Product owners determine the portfolio of available devices, balancing user needs, role-specific requirements and sustainability criteria. At each new procurement cycle, teams review changes in technology, usage patterns and market offerings. Insights from incidents and defects are actively used to inform the next purchasing round. More detailed data would support better choices when comparing database technologies, hardware types and architectural options.

User needs shape workplace IT decisions. Product owners determine which hardware categories are

necessary and how much differentiation is useful, for example, offering specific brands only where specific roles require them. Sustainability is one of the parameters in these design choices, and the interviewee explains that the practice of extending device lifecycles originated partly from user demand.

The interviewee identifies several challenges and opportunities for improvement. The organisation is highly dependent on suppliers for achieving sustainability goals in workplace IT, as most technology is purchased externally. The sustainability performance of workplace hardware and services therefore depends heavily on market innovation. There is a need for more independent and product-focused sustainability certifications, comparable to security standards such as ISO, because existing schemes are not always fully independent and often focus mainly on organisational policies. More structured and detailed supplier evaluations are also an improvement area, as time constraints prevent all teams from conducting them with the same level of depth. Looking ahead, reducing the presence of heavy metals in hardware, carefully integrating new technologies such as AI without unnecessary increases in resource use, and further strengthening evaluation and collaboration processes with suppliers will be important themes.

Two points in the procurement cycle present the greatest sustainability leverage: early specification and later performance monitoring. Clear sustainability requirements in RFPs help shape vendor behaviour, while ongoing conversations about "how to make things better" ensure continuous improvement. The organisation also deliberately includes unknown "dark horse" vendors in selection processes to stimulate innovation and potentially discover challengers with stronger sustainability performance.

The interviewee also reflects on collaboration with both large and small suppliers. Large international vendors, especially cloud providers, often share knowledge proactively and are sometimes ahead of the organisation on emerging sustainability topics such as water consumption in data centres. These exchanges work best outside commercial negotiation phases, when specialists can speak openly. Smaller suppliers vary more in maturity: some respond positively to the sustainability statement, while others need more time to comply with expectations.

The influence of the sustainability statement and certification requirements is visible throughout the supplier base. When suppliers do not accept the sustainability statement, the organisation compares their own policies with internal requirements to determine whether they provide an adequate match. Experts conduct this assessment, and any deviations are formally recorded. If a vendor's sustainability score falls or they fail to meet expectations, this triggers a conversation rather than immediate disengagement. Only exclusion grounds (such as involvement in child labour) constitute a hard stop. For more general underperformance, the organisation seeks improvement plans, support opportunities or cross-supplier learning. Typically, large workplace IT suppliers, communicate that their progress is beyond the requirements of the sustainability statement.

2.1.5. Organisation B

Interviewee B1

B1 describes how their role emerged at a moment when [the company] realised that procurement needed its own dedicated sustainability capability. B1 had previously worked on human rights and the CSRD, and when it became clear that these regulatory requirements would directly affect suppliers, the Chief Procurement Officer approached them with the request: "We need to set up a sustainability department within Procurement. Would you want to do that?" Until May 2024 only two colleagues worked on sustainability "on the side," without structure or capacity. Since then, the function has become formalised, and the first year was about designing processes, guidelines, risk approaches and tools. According to B1, the coming period must focus on implementation because "next year we must ensure that people actually do it."

B1's work covers everything related to sustainability in procurement: CSRD implementation, due diligence, human-rights and environmental risk frameworks, and all supplier-related sustainability expectations. B1 emphasises that external commitments, such as the UN Guiding Principles and OECD guidelines, are not optional even if not legally binding. As B1 put it, "they are compelling." Sustainability risk also falls under their team, including creating policies, setting up a remedy mechanism and strengthening the supplier code of conduct. The remedy mechanism is intended for situations where for example a worker in the supply chain experiences harm. B1 explains that if someone working for a supplier suffers a rights violation (for example if someone was "structurally forced into overtime") there must be a way for that person to report this to [the company] so a resolution can be facilitated between worker, employer and [the company].

A major strand of B1's work has been the creation of sustainable procurement guidelines for each category.

B1 wanted buyers to have concrete, usable questions rather than abstract policy language. In their words, these questions can be "literally copy-pasted" into tenders and renewal negotiations. One example B1 uses is: "Do you have insight into your water consumption?" B1 introduces a tiered structure in which suppliers can be Basic, Advanced or Front-runner. A Basic supplier simply has the insight, an Advanced supplier also has reduction targets, a Front-runner has already delivered on those targets and is preparing the next steps. For B1, the purpose is not to exclude suppliers but to help buyers understand what is good, average or lagging in the market, and to enable conversations about improvement.

Procurement at [the company] is centrally organised and includes international entities. Most procurement work is not competitive tendering but renewal or renegotiation of existing contracts. Renewing is cheaper and faster, and in IT categories there are often only one or two feasible suppliers anyway, so returning to the market rarely changes the outcome. This means that sustainability improvements must be built into ongoing relationships and extension processes rather than new tenders. B1 frequently encounters friction here. One recent example involved a major IT supplier refusing to share sustainability data, arguing that it was not subject to CSRD and therefore unwilling to be obliged to provide such data. B1 made clear: "I cannot agree to an arrangement in which you refuse that, because if something happens, I must be able to question you." After further discussion the supplier adjusted its legal wording. With certain global vendors, such as [US IT company name], negotiation of specific conditions is not realistic: "They will never sign third-party conditions." But B1 also notes that the [US IT company] provides extraordinarily strong emissions data and detailed sustainability information that no other vendor currently matches.

At the other end of the spectrum are smaller IT suppliers who have no sustainability department, no human-rights policy and no idea which data are expected. These suppliers often ask basic questions about what they should measure. B1 explains that these situations require very different conversations and deeper guidance, because the underlying risks are often higher.

Workplace IT receives significant attention in the guidelines and in practical work. For hardware, the guidelines focus strongly on circularity and supply-chain issues. For software, where environmental and social impacts are less tangible, B1's team created new question sets covering digital waste, data minimisation, storage optimisation and the integration of circular principles. B1 describes how a Basic level might involve something like "5% annual reduction of digital waste," while a Front-runner would have "closed-loop software development" or data infrastructures that are "90% recyclable." These questions allow [the company] to identify where a supplier stands, especially when renewing contracts, and to ask whether they have plans to adopt elements that are still missing. B1 describes using this in renewal negotiations: a supplier may not yet have embedded circular principles, so B1 asks: "Do you have plans for this?" and if not, B1 explains its importance and explores possible steps.

B1's team also expanded and strengthened the sustainability questionnaire in Hellios, the IT risk tool [the company] already used. They chose not to introduce EcoVadis, partly to avoid burdens for suppliers who already complete complex security onboarding. Hellios now captures sustainability and security data together, and although it does not offer the sustainability benchmarking advantages of EcoVadis, it fits better with existing systems and avoids duplicate assessments.

B1 gives several examples of concrete sustainability initiatives involving IT suppliers. With large international IT development firms, [the company] holds joint sustainability calls every two or three months. These meetings include discussions on human rights, diversity and inclusion, and CSRD developments. When long-term contracts for IT development needed renewal, [the company] introduced a requirement that these suppliers report every six months on all expectations in the supplier code of conduct. B1 explains that the suppliers were receptive, saying they valued clarity because it helped them prepare for conversations with other European clients as well. After one group session explaining CSRD, an international supplier asked for a one-on-one conversation to learn more, which B1 describes as evidence that "things are really happening at these large IT companies."

B1 frequently stresses the importance of insight before demanding improvement. As B1 frames it, what matters most is whether a supplier can show understanding of what needs to improve and whether they can share that insight. If a supplier cannot yet provide transparency, B1 may say: "Let's talk again in six months and then I expect you to have this insight." B1 also uses this approach in completely different sectors, such as flowers from Africa, where suppliers sometimes admit they do not know the working conditions in parts of their chain.

The complexity of IT hardware supply chains is a major concern. B1 points to cobalt in laptop batteries as a key example. Even when suppliers like [hardware brand] present thorough documentation, B1 notes

that it remains a "paper reality." B1 had discussions with students about possible transparency solutions, including blockchain and shared audits. B1 explains that one approach B1 finds promising is commissioning audits jointly with other organisations, executed by local NGOs who can uncover issues without conflicts of interest. This idea is already applied in some collaborative arrangements within [the company]'s industry, and B1 sees opportunities to explore it in 2026 for hardware.

Biodiversity is part of the guidelines as well, although less directly applicable in software. B1 explains that biodiversity questions are still included to show the thought process and keep the topic on the agenda. Circularity, on the other hand, is deeply embedded and closely tied to [the company]'s long-term vision for IT. Circular targets for IT (50% by 2027, 80% by 2030 and full circularity by 2050) were integrated into the IT category guidelines. These targets then become discussion points in renewals and new contracts, enabling suppliers to see how [the company]'s expectations evolve over time.

B1 finds that buyers often struggle to recognise sustainability risks in categories that do not intuitively feel material. B1 regularly hears statements such as: "In my category this does not play." People think of animals or deforestation rather than datacentres or device manufacturing. B1 notes that concrete incidents help them understand why sustainability matters even in IT categories: "When something actually goes wrong, I can show: this happened, and because we had the code of conduct, we could act." Without such examples, people often underestimate the relevance.

Political debates also influence internal motivation. B1 finds it challenging when public narratives portray sustainability as unimportant, because colleagues then ask why they should prioritise it. Their role involves constant framing and explaining, helping colleagues see that sustainability is not optional and that risks and obligations continue regardless of political moods. B1 describes herself as someone "who inspires and brings ambition," but also accepts that for some colleagues the motivation remains purely risk-based, and B1 is satisfied if they simply take the requirements seriously.

Looking toward the near future, B1 explains that their team must repeat the human-rights risk assessment, which previously identified IT hardware as one of the highest-risk categories. They also need to conduct an environmental risk assessment to determine where the "biggest negative environmental impact" sits in the supply chain, and B1 expects hardware to appear prominently again. These assessments will lead to concrete action plans in 2026. At the same time, B1 stresses that the organisation must now truly embed the tools, guidelines, questionnaires and remedy mechanism in daily procurement practice. Many contracts are coming up for renewal, which creates opportunities to translate sustainability into practical improvements.

B1 ends by returning to the importance of clarity. For them, everything begins with knowing what matters most, being concrete in what you ask, and approaching suppliers as equals. As B1 has said in discussions and in a podcast B1 recently recorded: "Do your homework and come towards a supplier from a place of equality, we ourselves also do not have everything in order."

Interviewee B2

The interviewee describes how sustainability within workplace IT has become a concrete and increasingly structured topic, with several tangible changes already implemented. One of the developments is the extension of the standard usage period for laptops. This was first extended from three to four years, and more recently from four to five years. According to B2, this directly reduces the number of new devices purchased annually and therefore lowers material use and embodied emissions. Similar discussions are planned for other workplace devices, such as monitors. In addition, the upcoming move to a new headquarters will require renewed decisions about workplace standards, including the number, size, and type of devices used. This is seen as another moment to reassess sustainability impacts, both in terms of energy consumption and material use.

Within the Digital Workplace domain, B2 highlights a recently started circularity bootcamp as an important initiative. This bootcamp is organised together with an external party and focuses on experimenting with the Global Circularity Protocol (GCP). Together with a hardware supplier a specific device is analysed using this protocol to assess how circular it is. The aim is not only to evaluate the product itself, but also to learn what kind of data is needed, how circularity can be measured over time, and how these insights can be translated into dashboards and monitoring structures. The interviewee notes that this process also initiates a broader dialogue with the supply chain, particularly around resource use and circular design. The bootcamp is still ongoing, with data collection underway and results expected later, after which decisions will be made on how to proceed.

The interviewee explains that IT has developed its own sustainability ambitions that go beyond the organisation-wide climate targets. While the group-level target focuses on net zero by 2030 using scope 1, 2, and part of scope 3 emissions measured market-based, IT deliberately chose a different approach. IT includes full scope 3 emissions and measures them location-based, which leads to higher baseline emissions and a longer pathway. As a result, IT has set a formal net-zero ambition for 2050, which has been endorsed by senior sustainability leadership. The interviewee describes this as a more honest approach and explicitly rejects the idea of declaring success too early: "You could even move towards greenwashing if you limit the scope and only use market-based accounting. Then you could say in 2030: well, we are green. I don't believe that."

Energy consumption is another key focus area. The interviewee explains that electricity use across the digital workplace, on-premise environments, and cloud environments is monitored with the intention of limiting growth rather than allowing unrestricted increases. The goal is to reduce or at least cap energy consumption, even as digital activity grows. IT emissions are analysed across several categories, including SaaS, cloud infrastructure, on-premise datacentres, the digital workplace, and the operating model of IT itself, such as business travel and commuting. For most SaaS suppliers, emissions are currently calculated using spend-based methods. For cloud infrastructure, the interviewee expresses dissatisfaction with transparency. Conversion from reported data to actual kilowatt hours still requires internal workarounds, which the interviewee describes as "putting band-aids on it," while stressing that suppliers themselves have much better access to the underlying data.

The interviewee repeatedly emphasises the lack of detailed information from large cloud providers. While emissions are reported at an aggregated scope 3 level, they are not sufficiently specified. This makes it unclear whether emissions stem from datacentre construction, hardware supply chains, or other sources. Embodied carbon information is often incomplete or delivered too late to be actionable. The interviewee states a clear preference for direct access to raw data instead of proxies, noting that without this information, proper steering and accountability are impossible.

In response, the interviewee is actively engaging with suppliers and escalating the issue internally and externally. Discussions with [supplier] have been ongoing for years. At the same time, the interviewee is working with other Dutch [companies in their sector] to collectively demand better transparency from cloud providers. A first joint discussion with major [sector companies] has already taken place, and transparency around cloud infrastructure was identified as a shared priority.

Sovereignty is described as another important theme closely connected to sustainability and risk. The interviewee reflects critically on the organisation's strong dependence on a cloud provider and points to geopolitical and control risks. Maintaining on-premise datacentres is therefore seen as strategically important. B2 is involved in discussions around alternatives such as GPT-NL, which can run on-premise and allows more control over data and infrastructure. This approach is summarised as "bringing GenAI to the data instead of bringing the data to GenAI."

The interviewee also challenges the common narrative that hyperscalers are inherently more sustainable. While acknowledging that they may have better power usage effectiveness, the interviewee notes that hyperscalers also maintain large amounts of surplus capacity and rely heavily on green power contracts that are not transparently shared with customers. Even large clients do not receive proof of power purchase agreements, which creates assurance and control issues. According to the interviewee, inefficiencies in cloud usage can be comparable to on-premise environments, especially when applications are migrated without proper cloud-native redesign. Reserved capacity may be cheaper, but it is not necessarily more sustainable. As the interviewee states, "FinOps and GreenOps do not run in parallel. It is cheaper, but not more sustainable."

On the procurement side of workplace IT, the interviewee explains that concrete criteria already exist for hardware. Only devices that are TCO Certified are purchased, and the organisation participates in an e-waste compensation scheme to recover old devices. For hardware, detailed product carbon footprint data from suppliers is used. This data includes embodied carbon, manufacturing location, and expected annual energy consumption. Because all IT assets are registered in a central configuration management database, the organisation has precise insight into the number and type of devices in use. This allows supplier-specific footprint data to be scaled accurately across the device estate.

For software, cloud, and biodiversity, the situation is less mature. Biodiversity is not yet included in IT dashboards and is described as a future step, although it is part of broader corporate sustainability ambitions and reporting frameworks. Current IT dashboards focus on energy, carbon, and, in the future, material

flows through circularity metrics.

Looking ahead, the interviewee identifies real-time energy monitoring of workplace devices as a key next step. While tools exist, their accuracy is still debated. The interviewee explains that continuous, granular data is essential to steer effectively and to verify whether measures such as power-saving settings actually reduce overall consumption. "Within IT, if you cannot show hard data, it remains a nice discussion," the interviewee says. Data-driven evidence is described as important to create credibility and internal support.

Finally, the interviewee explicitly connects usage data to procurement decisions. By using embodied carbon data from suppliers, procurement criteria can gradually be tightened. For example, future laptop selections could be required to have a lower embodied carbon footprint than previous generations. In this way, sustainability targets are translated step by step into concrete purchasing requirements, reinforcing the long-term sustainability roadmap within workplace IT.

2.1.6. Organisation M

Interviewee M1

M1 emphasises that workplace IT is a foundational element of the [public organisation's] functioning: "Without a good workplace you cannot do your work." Sustainability is regarded as a significant theme within the [public organisation], yet its practical anchoring in IT is inconsistent. M1 gives a telling example: during a management meeting, colleagues remarked that although they had produced a comprehensive IT strategy, "sustainability was not in it," showing how easily sustainability ambitions disappear when translating overarching goals into operational plans.

Within M1's own directorate, sustainability is now structurally embedded: every management team member has a sustainability objective, and all decisions are explicitly tested for their sustainability impact. However, "the rest of the IT organisation is not there yet." M1 describes much of the sustainability momentum as "coming from the bottom up" rather than being systematically governed by top-down strategic direction.

Another structural gap relates to time horizons: organisation-wide climate ambitions often target 2040 or 2050, which M1 says makes it unclear what teams must do now. The organisation still needs "a roadmap" that defines concrete steps, intermediate goals, and responsible parties to operationalise sustainability in IT procurement and workplace management.

A key future vision is a one-device workplace, in which employees would work with only one multifunctional device (likely a phone), rather than both a laptop and a phone: "Our end goal is a one-device policy."

M1 has implemented a one-monitor policy in their directorate: "Everyone gets one screen unless you can demonstrate that you need two." This is intended to expand to the entire [public organisation]. It considerably reduces the number of screens, but the rollout revealed immediate internal resistance. M1 notes the organisational challenge: whenever something is removed, people respond strongly, even when the rationale is sustainability and cost savings.

The [public organisation] aims to become Fairphone-only: "For phones we want to go to Fairphone-only, with lifespan as the most important motive." They value Fairphone's long lifespan, modularity, and the fact that it is Dutch. In the [X] division, this has already been implemented:

"Everyone who joins or needs a new phone gets a Fairphone. No choice." M1 anticipates resistance similar to the monitor policy, but sees it as necessary for structural change.

M1 explains that employees often perceive work devices as personal entitlements: "People feel they have rights." This makes sustainability-driven standardisation difficult. In the public sector, leadership tends to avoid conflict to keep stakeholders satisfied, whereas in some other [public organisations] decisions are made more decisively. M1 gives the example of [another public organisation], where management simply imposed Fairphone-only: "They just decided: we are going to Fairphone."

For many years, different units of the [public organisation] managed their own IT. That legacy persists: employees or departments may still insist that they need particular brands or models, often without functional justification. M1 highlights the example of [brand] laptops: some teams insist they require [brand], even when not technically necessary. For M1, the cultural shift toward needs-based procurement ("what do you need to do your job?" instead of "what device do you want?") is still incomplete.

ICT procurement is organised through the "lead buyer ICT," which is not a single person but a coordinated procurement team. For large tenders, a multidisciplinary group is formed, including business representatives, technical experts, legal staff, and both general and ICT-specific sustainability advisors.

[The public organisation] increasingly uses a structured, repeatable method with nine sustainability KPIs (e.g., CO_2, energy use, circularity indicators). Suppliers must select relevant KPIs and submit improvement

plans: “The more KPIs they choose with a good plan, the higher the score.” Giving superficial or formalistic answers yields “zero points.” Suppliers are also required to submit ongoing data during the contract period, enabling monitoring. M1 says suppliers largely accept this method and increasingly understand what [the public organisation] expects: “Sustainability is always requested, and they know they will be evaluated on it.”

The [public organisation] has a policy preference to include SMEs, but high sustainability requirements can unintentionally exclude them. M1 explains that advisors sometimes need to “give in a bit” to avoid shutting SMEs out. Market consultations can help gauge what is feasible.

Although procurement integrates sustainability well, the contract phase does not consistently carry these requirements forward. M1 states: “Sustainability is not yet included in the SLAs. It is in the tender and in the evaluation, but it does not automatically end up in the standard contracts.” With roughly 1,200 ICT contracts, sustainability follow-through relies too heavily on individual contract managers, who are often not content-responsible. M1 repeatedly asks: “Who is content-wise responsible?” This responsibility ambiguity leads to inconsistent implementation and monitoring. A new SLA template tied to the new KPI method should help embed sustainability more systematically.

Learning from previous tenders is informal and person-dependent: “That learning is not well secured… the knowledge sits with individuals.” Contract-phase insights seldom feed back into new tenders except when specific incidents, like unintentional exclusion of SMEs, trigger reflection.

M1 is clear that ICT from a market perspective is far from circular: “Circular ICT does not really exist yet, despite claims.” Laptop design still prevents easy component replacement. M1’s experience with a modular [brand] laptop confirms this gap: it is promising but “not yet as far as Fairphone.” For M1, the real sustainability gains lie in product design, longevity, reusability, and materials recovery, not in detailed CO_2 calculations, since “the footprint lies mainly in the production phase.”

[The public organisation] participates in digital inclusion projects where organisation laptops are handed to often low-income households. This extends device life and supports digital needs. However, an unintended conflict arises: Someone in the project said: “If you start doing better yourselves, we will no longer get any laptops.” Better internal sustainability (longer use, fewer devices purchased) reduces the pool of laptops available for donation. M1 emphasises the [public organisation’s] broader responsibility: “You work for citizens, not only for the organisation.”

A [person with a leadership position] requested exploration of refurbished laptops for internal use, inspired by a successful model in Ireland. But M1 explains several complicating factors:

- The public organisation’s laptops tend to be old at end-of-use.
- With growing AI requirements, refurbished older laptops may not be adequate for staff needs.
- If refurbished laptops can only be used internally briefly and then are too old to donate, the total sustainability benefit declines rather than improves.

Interviewee M2

M2 sees the most visible progress in the area of hardware. The [public organisation] works actively to reduce the total number of devices in circulation and to extend the lifespan of existing equipment. Devices are reused as much as possible: when they are returned, they are refurbished and reissued unless they cannot be repaired or secured. Only when a device is beyond repair do they remove it from service, and even then it is passed on to another party that can still reuse it. They strive to “use what we have” for as long as possible, rather than replacing devices unnecessarily. Swap laptops (devices constantly cycled through users) are only retired when they cannot be fixed anymore. Security remains a non-negotiable requirement: devices that can no longer meet security standards must be taken out of use.

On the software side, M2 describes significant challenges. The [public organisation] is a [brand]-based organisation, and they feel they have very little influence over how data storage works within that ecosystem. Although the transition from shared drives to [brand-specific application] has advantages (such as reduced duplication of documents) it also raises concerns about autonomy and user habits. Major sustainability gains could be achieved if staff stored, shared, and especially deleted data more thoughtfully. However, they note that deleting data is one of the hardest things for people to do.

Artificial intelligence is a major concern for M2. They see AI as an enormous emerging energy consumer and says the [public organisation] has almost no influence over its broader impact. Current organisation policy is not to provide AI tools within the official workplace environment. However, in practice employees simply use external AI platforms. This, M2 argues, leads to a false sense of security: while the policy aims to protect data, employees circumvent it, leading to less oversight rather than more. Broader policy questions about AI sit with other departments, and by the time conclusions reach their team, decisions are usually already far along.

A distinctive idea that M2 strongly advocates is the move toward a "one-device" workplace: using a single smartphone that, when docked, becomes a full workstation. In their view, modern smartphones are powerful enough, and such a setup could significantly reduce the number of devices employees need. They personally use only one phone and believes that the ability to cleanly separate work and personal profiles (for example through separate SIMs or eSIMs) could support this vision.

However, M2 believes the market is not motivated to support such a direction. A shift to smartphone-as-workstation would reduce demand for laptops, and major suppliers have no incentive to accelerate that transition. M2 describes the current laptop as a "heavy brick" people must continue carrying because the market dictates it.

With [supplier], M2 explores what might already be technically possible, though her current device cannot yet be used with a docking station. To make real progress, they believe many organisations would need to ask the same thing simultaneously; widespread demand would push the market forward.

M2 describes public procurement as a process dominated by functional and content-related criteria, which typically make up 60 to 80% of the scoring in a European tender. Price follows, and sustainability or social return only account for a small number of points. While suppliers often prefer functional requirements that give them design freedom, M2 explains that the [public organisation] mainly steers on reducing data usage during the contract rather than imposing strict sustainability targets upfront.

They have become skeptical of hard KPIs and penalty-heavy contracts. Earlier in their career, M2 worked with contracts full of sanctions for non-performance, and they believe these only create conflict and do not motivate suppliers to go above and beyond. M2 now strongly prefers a collaboration-based model: a constructive relationship where parties reward each other's efforts and address problems together. M2 sees the contract as "marriage conditions" that remain in the cupboard unless things truly cannot be resolved.

The [public organisation] and [the supplier] work within a structured governance model that includes operational, tactical, and strategic meetings, supplemented by separate security and architecture discussions. Issues escalate upwards only if necessary. A dedicated sustainability meeting, chaired by the sustainability lead, tracks progress on all sustainability initiatives and involves both parties.

M2 sees the relationship with [the supplier] as a genuine partnership. They say: "If I fail, [the supplier] fails; if [the supplier] fails, I fail." They stress that blaming suppliers is poor management: success or failure is shared.

M2 strongly believes in "less is more." They have removed certain devices from standard issuance, such as tablets, which are now only granted when functionally necessary. They also nearly phased out [a brand] because they do not align with the [brand]-based workplace and create security complications. M2 aims to reduce device choice, arguing that more options encourage gadget-driven behaviour instead of functional decision-making.

M2 is piloting the use of Fairphones within their directorate, which may eventually allow phasing out other brands. M2 notes that Fairphone's true sustainability benefits are not yet fully proven, but the pilot would at least shrink the diversity of devices and allow for more consistent policies.

To avoid unnecessary purchases, the [public organisation] no longer hands out laptop bags by default. Instead, returning bags are reused for employees who genuinely need them. M2 sees such small actions as meaningful steps. On the digital side, there is an ongoing initiative to clean up data, but it has not yet been fully implemented due to limited capacity and challenges in reporting. Users are essential in this process, as they are the ones who need to delete and organise data. M2 compares digital clutter to a house full of unused objects: without user involvement, it continues to accumulate.

Finally, M2 describes how experience from past tenders is shared within their large procurement team and across the various digital services that fall under the same department. They emphasise that accumulated experience (knowing what works and what does not) shapes every new tender. Difficult confrontations with suppliers in the past have taught them that adversarial approaches rarely bring results, collaborative approaches do.

Interviewee M3

Because the contract for workplace IT is already tendered, the [public organisation] can make direct sustainability-driven choices within its boundaries. M3 provides a concrete example: "we can say directly: 'we want, for example, a Fairphone.'" This is allowed as long as it fits the scope of the contract.

M3 values long-term contracts because "you have time to find each other in the cooperation," and sup-

pliers can justify internal changes or product innovations due to longer payback periods. After award, the [public organisation] moves from detailed specifications to joint problem-solving. For instance, when starting the digital workplace migration, they immediately ask: "how do we do this as sustainably as possible?"

M3 stresses that commitments made during tendering must be delivered during the contract. For example, they mention that suppliers sometimes say afterward they didn't price certain activities. "We try to prevent that", by ensuring all offered solutions must be included in the bid price.

The [public organisation] has ambitious sustainability goals for 2030: scope 1 and 2 emissions must be zero and scope 3 must fall by 40% compared to 2019. However, M3 notes a major challenge: "we actually do not know exactly where we currently stand on scope 3," because existing estimations were done only at the level of total spending, not per contract.

Early versions of the sustainability framework described ideal data requirements for software, but the market could not yet provide such information. To address this, [the public organisation] incorporated KPIs directly into award criteria. They assess suppliers on:

1. How they will measure energy and CO_2 as accurately and transparently as possible
2. What improvements they will realise during the contract and how they will adjust if goals are not met.

This approach makes expectations concrete. M3 gives examples of suppliers stating: "we do not have real-time monitoring yet, but in three months we can provide real-time CO_2 footprint monitoring, using this method and this verification." The [public organisation] learns from these proposals. Some sustainability aspects are already minimum requirements. Concrete examples from the interview:

- Cloud services (by 2030): must operate on renewable Dutch wind and solar energy, supported by Guarantees of Origin; emergency power must use biofuels combined with battery buffering.
- User hardware deliveries: must be emissions-free (e.g., electric vans).
- Device lifecycle requirements: suppliers must offer repair services, refurbish or donate end-of-life devices, and demonstrate proper recycling.

M3 also explains earlier privacy concerns around Fairphones (e.g., Fairphone 1 and 2). At the time, national government also had concerns, but internally the [public organisation] now considers the current Fairphone security settings "sufficiently safe," enabling adoption.

Employee preferences can complicate sustainability improvements. Some departments expect both a laptop and a tablet. M3 gives a concrete example: for [team X], a tablet is indeed necessary. But in other roles, reducing devices may face resistance. Moving toward "one device" would require innovation from the market, but M3 states that [the public organisation] alone lacks the market power, for that, larger coalitions (e.g., national ICT buyer groups or EU collaborations) would be necessary.

The [public organisation] uses the principle "sustainable unless" as a decision-making guideline. This helps resolve dilemmas without escalation to leadership. M3 says escalation "almost never happens."

M3 views standards and norms as helpful because "you create a common language" and because external validation increases reliability. ISO norms are mainly used to anchor verification around the sustainability measures [the public organisation] wants, not as stand-alone requirements.

Though the CSRD does not legally apply to the [public organisation], M3 explains that they intentionally align with it. Large ICT hardware suppliers are subject to CSRD, so their data systems must follow it. M3 says: "we always stay close to the CSRD," and refers to the "Monitor" guidance by MVO Nederland (developed by CE Delft), which uses CSRD-based KPIs that [the public organisation] also adopts.

The CSRD is still quite general, so [the public organisation] specifies what it needs within procurement. For example: when asking suppliers to monitor CO_2, they translate the CSRD's broad instructions into concrete requests tailored to software, hardware, and supply chain responsibility. M3 explains that this is needed so suppliers "understand what we want to receive."

Contract management is a known bottleneck. ICT contract managers often handle around 40 large contracts, so sustainability is not always their first focus. To address this, M3 and their colleagues ensure that contract managers know "what the intention is from the contract, including sustainability" and remain available for support. M3's team often helps interpret sustainability requirements. They give an example: a software supplier committed in their bid to reaching CO_2 Performance Ladder level 4 in two years. They were six months late. The contract manager flagged non-compliance, and M3's team stepped in to assess what was reasonable. M3 argues that ideally, sustainability becomes part of normal contract management, supported by a flexible pool of CSR advisors who can assist when needed.

In terms of shaping the market, M3 gives several concrete examples:

- In a mini-competition for laptops, suppliers had to provide a full list of all materials, the weight, and the recycled content. Because many suppliers could not provide this, they included an "unknown" cat-

egory to allow them to still participate. [Supplier] scored well because it knew its casing contained a specific percentage of recycled material. Another supplier filed a complaint, but the procedure continued since it was a mini-competition under an existing contract.
- In a previous procurement for medical supplies, M3 set an ambitious circularity criterion. All suppliers scored very low because the market "did not understand it," but this was still useful because suppliers began to ask "how can we develop this?"
- M3 describes this as "planting a seed."
- The public organisation often extracts underlying sustainability criteria from labels rather than enforcing the label itself. They give the example of coffee procurement: instead of requiring Fairtrade, they examined the conditions behind Fairtrade and included those in the tender so that suppliers could differentiate. This avoided excluding suppliers while still pushing improvement: "you should not ask too much of them; they must already be doing it."

M3 summarises [the public organisations'] approach as: "we simply apply it and see what happens," indicating a willingness to experiment, evaluate supplier responses, and refine criteria as the market evolves.

2.1.7. Organisation H

Interviewee H1

From the outset, H1 emphasises that sustainability is an institutional priority. [The public organisation] has a [name of green team], and "sustainability is important policy within the [organisation]." At the same time, workplace IT must remain manageable at scale: [the public organisation] has thousands of workplace devices.

A key example of this interplay is the discussion around Fairphone. During preparation of the tender, someone from the [name of green team], asked: "Why don't we get a Fairphone?" H1 had to answer: "We cannot properly manage them." Device-management integration is essential because [the public organisation] must be able to lock or wipe devices remotely, even if they are employee-owned. H1 recalls the moment humorously: when the [name of green team], colleague took a call on her iPhone, he asked: "Then why do you buy an iPhone and not a Fairphone if this is so important to you?", which, H1 says, left her "speechless." For H1, it illustrated how sustainability ideals meet everyday habits.

Where phone use is concerned, [the public organisation] now allows employees to use private devices for work because it is "more sustainable than when we buy a phone." This is one example of a pragmatic initiative that reduces purchasing volume without requiring new technology. The tender for workplace hardware included several sustainability requirements. All devices must be recycled at end-of-life, and [the public organisation] can decide where 10% of the written-off hardware goes.

The team also explored more ambitious sustainability scenarios, such as modular or repair-friendly devices. H1 mentions the Framework laptop, which is theoretically ideal for sustainability, but in practice creates challenges for enterprise deployment. Users would need to assemble them, and [the public organisation] would need "more handy Harries" [more technicians] to build and maintain them for large cohorts. It also conflicts with [the public organisation's] need for configuration management and asset tracking: maintaining a CMDB for many modular machines would be "difficult."

When the tender team evaluated suppliers, one of the complexities was how to assess sustainable production. The selected supplier delivers HP devices because HP is, in H1's words, "as transparent as possible," especially around risks such as modern slavery, exploitation, cobalt sourcing, and battery production. But H1 stresses that suppliers can only provide partial certainty; visibility is limited in the last part of the chain. [The public organisation] will receive an annual sustainability report from the supplier, and H1 keeps reminding colleagues to ask targeted questions: "If you do not ask, you will not get an answer."

H1 also gives examples of how they tried to push suppliers during the tender. Suppliers were required to answer the open question: "How will you shape sustainability in this contract?" They also had to submit a SWOT analysis, which immediately revealed differences in understanding. One supplier delivered a proper SWOT; another "clearly did not know what a SWOT analysis was and began a marketing story." Other proposals exposed feasibility gaps. One supplier offered to clean all laptops annually, claiming this would extend lifespan. H1 responded internally: "How are you going to clean at least 3,500 laptops? How will you get people to have this done?" The winning supplier instead proposed evaluating each device individually for reuse potential, extending lifespan where possible, and then providing a second life outside the rental period.

According to H1, market consultations helped determine which sustainability demands were realistic. For consumer-like hardware such as laptops, sustainability requirements are more visible and manageable. For

network equipment, however, sustainability is harder to measure and is rarely discussed by vendors. H1 says that for devices like switches or routers, "a Cisco or Juniper is held less accountable for sustainability than a laptop," partly because so much of the energy impact lies in surrounding services that [the public organisation] cannot easily influence.

Regarding energy consumption, H1 notes that EU legislation already steers the market. New energy labels make previous A-labels drop to E as technology progresses. [The public organisation] considered demanding stricter energy profiles but realised that niche requirements would drastically increase cost. Instead, [the public organisation] relies on the general upward trend driven by regulation.

In software and cloud procurement, [the public organisation] depends largely on SURF. When procuring SaaS independently, [the public organisation] requires European datacentres because "if the datacentre is in Europe, stricter energy norms apply." At the same time, H1 emphasises that [the public organisation] cannot verify supplier sustainability claims: "If they say, 'We are very sustainable,' I cannot verify that." Certification requirements are used for quality and security, but sustainability certifications are avoided when they could discriminate against smaller providers.

Across the procurement phases, H1 describes several concrete buyer-supplier interaction points:

- Upstream / pre-tender: The team identifies scope, consults the [name of green team], analyses what sustainability means in practice, and tests feasibility through market consultations.
- Tendering phase: [The public organisation] formulates sustainability requirements and open questions. Suppliers must provide evidence, plans, and analyses. H1 highlights how answers vary in realism, from feasible lifecycle management to impractical proposals such as large-scale laptop cleaning.
- Award and onboarding: After selection, the implementation manager ensures that commitments are operationalised. Then responsibility shifts to the supplier's account manager and to [the public organisation's] team leader. H1 points out how important it is that [the public organisation] continues to ask: "This is what you promised, where is the follow-up?"
- Contract management: H1 sees this as the largest bottleneck for sustainability.

H1 explains that the biggest gains lie in consistently following up: "The most can be gained by following up on agreements." But in practice, sustainability receives less attention because operational performance dominates. Team leaders must ensure that all employees have functioning devices, and crises always take precedence over sustainability tasks. Sustainability therefore often becomes "of all of us, therefore of no one."

[The public organisation] receives value from resale and reuse, device lifetimes are extended, and sustainability is now embedded into tender documents. Questions from employees and students are increasing, which H1 sees as a positive shift. H1 encourages more visibility (such as posters explaining what happens to returned laptops) because people appreciate knowing the impact. H1 says, "I want more communication," and the interviewee is pleased that the [name of the green team] exists and brings energy into the process: "I am happy with that."

Other things do not go as well. [The public organisation] does not systematically measure sustainability outcomes. H1 notes that no one asks him: "Are the sustainability objectives of the contracts being achieved?" Therefore, [the public organisation] does not track CO_2 reductions or whether suppliers meet all sustainability promises, except in cases where they were explicitly contractually required. Sustainability requirements become less prioritised when budget cuts occur, as the current organisational climate is "focused on the money." Verification of supplier sustainability claims is also difficult, especially when [the public organisation] does not deal directly with manufacturers like HP.

Cost–sustainability tension is not always visible, but H1 acknowledges its boundaries. H1 gives the extreme example of a hypothetical €10,000 fully sustainable laptop: "We are not going to do it… then we will just pollute the planet a bit," noting that with reasonable effort, current laptops can already last five years. Standard equipment suffices for most staff; exceptions are granted only for legitimate research or educational needs.

Interviewee H2

The interviewee explains that workplace-IT sustainability efforts were completed "about two years ago," with the main improvement being that devices remain in use longer. Employees may now keep equipment past economic replacement cycles if still functional. H2 describes this approach as "practical, honestly also driven by budget cuts," while noting it is also beneficial in allowing continued use where possible. Sustainability is structurally included in tenders, though it "does not get priority" and must always remain secondary to architectural compatibility, management efficiency, and especially security. Hardware must meet safety and software requirements, and sustainability is "one of the components," not a deciding factor. If certain

hardware increases hours of IT management for example, “it is not convenient to manage,” and therefore cannot be chosen even if more sustainable. H2 recounts that Fairphone was explored, but did not suit their management system or intake-and-issue workflows. The lack of fit meant that the initiative faded. Pilots are rare unless ICT pushes them further, procurement often only hears of tests if they lead to purchase. Procurement can only advise internal parties and does not have authority to prioritise sustainability on its own. “We cannot say something must get higher priority. That must come from the Executive Board.” A few years ago, privacy and security were dominant, and sustainability received “little attention” during that period. H2 emphasises that too many requirements may drive vendors away, and choices must be balanced. Sustainable influence in tenders is often small according to the interviewee, because “we cannot influence the entire chain,” and broader issues such as mining conditions and child labour are difficult to meaningfully change.

Organisational sustainability goals for 2030 are known, but H2 sees them mostly active in facility management, not ICT. Procurement mentions the goals when advising, but “we cannot enforce.” Their impression is that many ICT staff focus primarily on “security, privacy, architecture and management,” with sustainability “after that.” When ICT submits requests such as screens or keyboards, they already know exactly what they need, and although sustainability is discussed, “often little comes from it.”

Budget constraints have unexpectedly reinforced sustainable behaviours: employees may keep devices longer if updates and security are maintained. However, without direction from higher management, sustainability rarely accelerates. During COVID, when funding was available, sustainability contracts were expected: “If there was no sustainability, we would not get a signature.” That momentum was brief before security and then budget cuts again took priority. H2 observes that reduced spending can indirectly reduce environmental impact because fewer devices are replaced, summarising it as “everything less” means less consumption.

On award methodology, H2 describes scoring as usually “50 points price and 50 points quality,” with sometimes “10 points for sustainability.” Sustainability therefore seldom determines the winner. Minimum criteria exist (e.g. responsible disposal, reduced packaging, proper waste separation) but almost all vendors meet them. Control after award is limited, and H2 is unsure whether sustainability practices are checked: “I suspect not.” Contract management is still developing and currently focuses more on security certifications than on sustainability verification.

H2 elaborates on certification, saying energy labels are “practical and direct” because one can see them on products, while certificates are “a sheet of paper” that require additional proof to verify relevance to a specific product. The meaning of certification depends on validation, and visibility is important for practical monitoring.

Market consultation varies. In hardware, competitive tension between two parties once made procurement cautious because transparency obligations risked conflict. The majority of bidders are resellers of the same brands offering similar information and limited insight into manufacturing chains. H2 mentioned that HP directly called them during a process to ask about progress, showing how deep supply chains influence resellers but leave limited traceability. Because most vendors supply identical brands, “everyone is with HP,” leaving differentiation mainly in service rather than product sustainability.

For suppliers, meaningful distinction arises from service models (deliveries, onsite support, unpacking, and remote assistance). Sustainability questions mostly concern waste handling, reuse, and lifecycle extensions. One example impressed the interviewee: mobile suppliers offering one or two annual campus support days to repair devices onsite, which reduced replacements and transport. H2 calls it “tangible, controllable and service oriented.” Yet many otherwise promising proposals require changes to internal processes or exceed budget limits and are therefore not adopted.

H2 confirms that major procedural changes are unlikely. Small adjustments are possible, but when testing a new laptop type required “a few hours extra per laptop,” it was rejected. Processes should function without heavy organisational change.

End-of-life handling has recently been centralised. Previously only own-brand equipment was taken back; now the contracted supplier must accept all devices. “All parties agreed,” and it simplified return cycles. Where returned devices go is not fully visible, but security wiping and ID removal are essential.

As-a-service or leasing models were discussed for phones but rejected for either cost or management reasons; H2 cannot recall which. Multifunction printers already use such a model successfully.

Regarding market developments, H2 sees change as limited. Resellers mainly adjust internal sustainabil-

ity measures (solar panels, electric vehicles), which H2 does not view as chain-impacting product change. Hardware evolves marginally with energy-control features; this is driven by manufacturers, not resellers.

In the final part of the interview, H2 broadens from sustainability to wider strategic themes. The interviewee states that in coming years the major focus will be "security, privacy and less dependence on big tech." European alternatives are becoming more attractive, with examples such as Mistral and using Signal instead of other AI and messaging platforms. Next to that, H2 says, "I see mainly changes driven by budget cuts and security," and that sustainability will need to "ride along." In procurement direction, "European purchasing could have influence," though supply chains still span global manufacturing routes. H2 notes that Fairphone theoretically fits sovereignty ambitions but failed in practical use for the organisation.

H2 reflects at the end on the wider landscape of sustainability initiatives in the Netherlands, saying there are many, but "little communication between them." Efforts sometimes duplicate previous work. H2 recalls hearing an organisation present something another organisation had already researched earlier, which made them "step out for a while." H2's closing view is that sustainability often advances when aligned with dominant themes rather than as an independent spearhead. "We let sustainability ride along where possible," depending on current priorities of the Executive Board and broader institutional conditions.

Interviewee H3

H3 explains that all regular equipment (laptops, desktops, monitors, all-in-one systems and standard headsets) "goes through the order office," is registered upon arrival, and is distributed internally. Bulk hardware orders take place four times per year, while smaller IT-related items from different departments also pass through their team.

H3 outlines the process that precedes ordering. The procurement department launches a tender with a programme of requirements, suppliers respond, one is selected, and sustainability is included in these tender documents, specifically around "sustainable disposal and transport." Once a contract is active, H3's role begins: existing equipment across the organisation must be evaluated, a replacement list is prepared together with a colleague from support, and bulk orders are placed. Deliveries arrive weekly.

All IT equipment must be ordered centrally through the order bureau and the standard supplier. H3 gives an example of categorisation challenges: batteries belong under office supplies, yet staff sometimes try to order them via IT. The organisation prefers wired mice to avoid battery use; exceptions are made for ergonomic reasons.

H3 works mainly with the procurement team and support, describing it as "a small team because we do not place that many orders." Collaboration functions smoothly day-to-day, although H3 feels involvement of the order bureau during the earliest tender stages could be better. Some expectations in contracts are unclear to them later on, especially when new conditions are introduced without the practical team being consulted. H3 says they do eventually join evaluation discussions, but early involvement would reduce misalignment, for example, when a feature is agreed in a contract but later still uncertain operationally.

On sustainability, H3 notes an initiative being explored in [city name] to deliver goods to city-edge logistics hubs to reduce traffic into the [location]. Their own logistics already operate similarly: equipment is delivered to the supplier's sub-partner, imaged and stored there, and then transported to campus only once per week. They also return materials through the same route. H3 considers this arrangement efficient: "not too much freight traffic back and forth."

Packaging is also handled with recycling in mind. Incoming packaging is separated and stored, then "returned when they deliver new goods," and reuse or recycling is arranged by the supplier. Used hardware returns to the supplier for reuse or refurbishment; hard drives are fully destroyed and remaining parts reused. This is captured in the tender and aligns with organisational intent to contribute actively to reuse.

The relationship with the supplier is described as good. Communication channels are short, responses arrive within a day, and both operational contacts and escalation pathways function well. Weekly contact covers orders, and monthly meetings involve multiple people from the supplier side. Sustainability appears occasionally: "there is also an agreement that for certain purchase quantities trees are planted," although H3 is unsure how thoroughly this is verified. Controlling whether promised sustainability measures occur in practice is still developing. H3 gives the example that for the nearby university a dedicated electric delivery van was purchased because they specifically required this.

H3 also mentions a monitoring tool included in the contract that signals failing laptop batteries early so replacements can be stocked. Although it is contractually established, "how it will be worked out is not yet clear," and questions already appear about implementation. H3 experiences that communication with large

companies can be slow.

Contracts generally last four years with optional extension, and the current supplier also held the previous contract period. Familiarity is convenient: H3 says it is easier when systems and people are already aligned, though the interviewee has experienced the transition between suppliers before and notes that large suppliers can still organise efficiently if collaboration is deliberate.

Collaboration with other institutions does not occur directly. H3 assumes deliveries are sometimes combined with the neighbouring organisation because this reduces transport, but "we do not work together with other organisations in this."

Asked where sustainability could be strengthened, H3 believes the organisation is already progressing, especially in returns and recycling. The interviewee mentions one future improvement: requiring electric delivery to campus if feasible, though practicality matters because "sometimes we receive multiple pallets at once and that does not fit in a small electric van."

Extending hardware lifespan is another development. Replacement cycles have recently changed at the organisation: laptops now run for five instead of four years, and screens for seven instead of five. H3 describes variation among users: some request replacements after three years, others would keep devices for six, but software and security limits determine when replacement is required. For mobile phones, Samsung provides four years of security updates, and once those end, devices must be returned, "hundreds of phones without updates is a security risk."

Lifecycle management is systematised. When equipment reaches end-of-life, users receive a notification email and exchange is organised for groups simultaneously. Hardware issues are handled through the supplier under a three-year on-site warranty, often repairing several devices at once. Meanwhile, temporarily broken laptops are replaced through internal loan stock.

Returned devices are wiped, re-imaged, and re-issued until fully depreciated. The interviewee clarifies that the "[organisation]-image" refers to the software package installed to secure and configure the device for the university network. Externally, devices carry CI-stickers and barcodes. A central database tracks user assignment, depreciation moments, and replacement lists. Registration is thorough though not error-proof, occasionally a device moves incorrectly or leaves with a departing employee, but HR offboarding triggers a system flag, after which IT follows up until equipment is returned.

2.1.8. Organisation U

U1 frames sustainability (especially CO_2 reduction) as a leading objective, linked to the [public organisation] ambition to be climate neutral by 2050. In their view, the biggest lever within workplace IT is not primarily recycling or repair, but simply using and issuing less hardware: "The most important thing we can do is buy less hardware and use less hardware." U1 explicitly relates this to the idea that avoiding purchases sits highest on the ladder of circular strategies: "If you don't buy anything, you don't need to recycle, extend lifespan, or take other measures."

A very concrete example of this "don't buy" approach is how their team used the Windows 10 to Windows 11 transition as a moment to rethink the entire workplace concept. U1 says they discovered they were working with "an outdated concept," because (especially after the COVID period) most end-users now work on their own laptop. According to U1, the end-users no longer need a [public organisation] desktop and screens: "they only need a desk with a power strip. And that's it." As a result, the [public organisation] did not replace about 1,000 Windows 10 desktops with Windows 11 desktops, but replaced them "with a desk with a power strip." U1 presents this as a high-impact sustainability measure compared to other interventions.

U1 also links their role directly to sustainable procurement through a concrete tender: U1 says they were project leader of the 2023 tender for a hardware supplier. In that tender, sustainability was given "an important role in the criteria and weighting," and the project was done together with procurement. U1 describes how, from that tender, they deliberately created a split between criteria used to evaluate the supplier and criteria used to evaluate the product itself. Product criteria include questions such as whether a device is certified and whether it is energy efficient. Those product criteria were turned into a practical checklist that is now used in what they are currently building up as a more professional "core assortment team." The purpose of that team is to determine the "core assortment": the preferred hardware portfolio that is also the most sustainable, so that "the most sustainable laptop becomes the standard laptop."

U1 explains the governance around those choices in concrete terms: the core assortment team is primarily made up of technical specialists who look at comparisons like "how does an HP compare to a Dell," and they judge "functionality and repairability," alongside sustainability and cost. The output is an advice on

which device best balances "functionality, sustainability and costs." That advice goes to a strategic workplace team which makes the final decision. After that decision, procurement's role is mainly to negotiate price, U1 describes that procurement is otherwise not deeply involved in that internal selection step.

In parallel to tendering and assortment decisions, U1 describes ongoing supplier and contract management as another concrete mechanism where procurement and sustainability meet. The [public organisation] buys hardware via a reseller, and they receive quarterly reporting on all purchased products. Those reports include performance on service and repairs, and delivery speed and whether deliveries match the contract. Together with procurement and the contract manager, U1 reviews the reseller's performance every quarter and they have a call about it. U1 notes that procurement tends to be involved particularly around operational aspects such as delivery speed, but U1 himself is pushing for sustainability-related reporting that can be used for steering. U1 describes the intended direction as partnership-oriented: "With supplier management we are building a kind of partnership". U1 also says they do not currently experience major supplier resistance against the [public organisation]'s sustainability direction: "I do not experience much obstruction from our hardware supplier regarding our objectives."

Most importantly for U1, the reseller is implementing a tool connected to their ERP system that should make it possible to report CO_2 impact per product. U1 states: "That is what I am waiting for," because this is meant to produce the CO_2 reporting he needs for KPI steering.

Within [the public organisation]'s internal sustainability governance, U1 describes working closely with the central sustainability program and the IT greenteam. Together they aligned on goals and developed the sustainability roadmap for workplace IT. A key piece of that roadmap, according to U1, was finding one overarching objective rather than a long list of separate indicators. That overarching objective became climate neutrality by 2050, which U1 defines explicitly as CO_2 neutrality. U1 explains that they want to be "CO_2-neutral in 2050 compared to 2025". At the time of the interview, U1 emphasises that detailed reduction pathways and subordinate indicators are not yet fully worked out: "We have not yet made that step. We are now only working on the main goal KPI."

To move from the high-level goal to practical action, U1 says they have started by making a brainstorm list of everything they could do to reduce emissions. U1 also shares that the organisation is moving from offering three types of phones (Fairphone (Android), Galaxy, and Apple) to only Fairphone. U1 links this to both sustainability and operational simplification: "When you start standardising… inventory management becomes much easier," because fewer different device types means fewer different stocks to manage. U1 adds that they still have "a lot to learn" specifically in inventory management, partly because reusing returned hardware has only become a structural decision in roughly the last year.

That reuse policy is described in practical rules. U1 states that when someone leaves [the public organisation], hardware that comes back is now reissued. A new employee therefore does not automatically get a new laptop; "if you come to work at [the public organisation], you do not get a new laptop, but a used laptop." They have set an expectation that laptops should last five years "or longer." If a laptop returns within four years, it is reissued as a normal staff device.
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A recurring challenge for U1 is not the lack of ideas, but understanding which measures are "big" and which are "small" in CO_2 impact. U1 gives an example of uncertainty: how much CO_2 reduction will phone standardisation actually deliver compared to decisions like giving one or two monitors per workplace. These relative magnitudes are not yet clear.

U1 also provides concrete detail on how tenders and requirements were made realistic through early market engagement. U1 explains that market consultations were used before the tender, as a procurement suggestion, because there are not many resellers and they needed to know what requirements were reasonable and what suppliers could meet. This helped them decide whether something should be a "wish" or a "requirement." When U1 speaks about trade-offs in tendering and workplace standards, they acknowledge that tension can exist between sustainability, functionality, and cost, including debates over weighting factors. At the same time, he says the "art" is not to seek conflict but to find "the sweet spot."

U1 also describes concrete organisational decision-making and policy change around reuse as a major culture shift. U1 mentions a directors' meeting as the forum for important decisions, and says they presented a proposal about reusing laptops and, more broadly, determining how long each type of hardware should last and be reused within that period. They asked for formal approval for this approach, and U1 calls it "really a culture change," because "in recent years everything was possible at [the public organisation]." U1 links this change to both budget cuts and sustainability thinking, and to the desire for [the public organisation] to be

a front-runner. In their roadmap, one of the core elements is explicitly steering toward the most sustainable hardware solution, which also requires communication and explaining what they are doing.

On user acceptance, U1 reports that resistance has been limited so far. U1 notes that delivering used hardware to new employees on day one reduces friction, because that is not a moment when people are immediately dissatisfied. U1 expects more resistance with further steps that restrict choice. The phone standardisation is their clearest example: they still have many iPhones and other Android phones in the field that will return and be reused, but when people want a new phone it will "by definition be a Fairphone," with the message: "No discussion, this is it." U1 underscores the rationale: "This is the most sustainable solution and this is what we choose now."

U1 sees a major barrier in workplace habits: many employees are used to a work environment where "you switch something on at work and it works," instead of downloading software on a laptop and taking it home. U1 says this is not yet the daily reality for many [the public organisation] employees, and because many staff have been there a long time, these habits are "deep in the culture" and will create resistance.

U1 also describes a procurement-policy enforcement challenge: while their team is responsible for the workplace, employees with budgets for computing capacity can order outside the standard route, and this still happens "quite a lot," which makes monitoring and steering harder.

Regarding end-of-life of hardware, the organisation sometimes donate remaining hardware: an architect has a foundation that deploys hardware in Zambia, and they occasionally donate surplus devices there. Only after internal reuse and internal repurpose do they move to donation; what remains then goes back to the reseller for recycling. For phones, they use Closing the Loop: "for every phone we hand in, we have one phone removed from the waste mountain in Africa."

U1 says vendor management around returns can be improved substantially to maximise value: they want to be sure they have done everything to get the maximum residual value back, and U1 gives practical examples such as removing the password from an iPhone and ensuring the power adapter is included; if not, "you get less back." U1 states plainly: "There we can really still improve a lot."

On lifespan policy, U1 explains that laptops are financially depreciated after three years, but operationally they use the rule: four years of normal redeployment, a special fifth-year redeployment category, and after five years recycling. U1 confirms that after five years there is no active replacement program anymore: "As long as it works, it works." After five years an employee has the right to a new laptop if they want, but replacement is not pushed proactively. U1 calls the five-year line something they chose because it seemed reasonable in terms of repair, technological development, and culture, but he also says they do not yet know whether four or five years is the best term. They still lack clarity on how old devices in the field are, what staff turnover is, and how much reusable equipment will return, and he notes these numbers have only recently appeared in their dashboard. This uncertainty affects how much stock they need to hold, while they aim to keep stock as small as possible, something he says will become easier if they standardise further.
U1 also names two additional initiatives as best practices. One is [the public organisation] recycle: employees can hand in private data carriers, which U1 says they process via the reseller instead of those items going to landfill, it costs nothing and yields nothing for the user, but ensures proper disposal. U1 says it is used "quite a lot". U1 stresses that promotion is important for this and other sustainability initiatives, "advertising for sustainability."

On the greenteam itself, U1 says he does not know how other divisions operate, but within their department it is a volunteer group of interested people. U1 describes the greenteam's role as keeping sustainability on the agenda and pushing, but he says it can be better: "Are they very good at it? No, that can really be better," and he explains that they have no mandate.

U1 also touches on the relationship between security and sustainability. The main conflict they experience is that older laptops become unsafe once security updates stop arriving, which becomes an additional reason to replace them. U1 frames it as a tension: security can push replacement, but also as a reality that end-of-life is end-of-life.

2.1.9. Organisation R

Interviewee R1

For workplace IT, [the organisation] has a category manager for IS/IT at corporate level, described by R1 as the "linking pin" between procurement and IT. Corporate IT controls the workplace environment itself, while R1's involvement comes mainly from the CSR perspective. Procurement is expected to help shape

CSR policy, yet R1 emphasises that this requires “clear frameworks” so category managers know how to steer decisions in practice and not only in principle.

From R1’s perspective, workplace IT procurement in terms of sustainability is “already doing quite well,” especially regarding “trading in equipment” and ensuring that discarded laptops and phones end up in the right place. Sustainability requirements are now included in contracts. Even so, R1 repeatedly highlights that the largest opportunity for improvement is not in selecting the most sustainable brand but in internal behaviour and usage conditions. For example, “How long are you allowed to use a laptop or phone?” R1 argues that the sustainability difference between major suppliers is limited: “You need a laptop, and within those possibilities there is not that much more to gain.” Meanwhile, many employees “find it pleasant to get a new phone every two or three years, while that is not necessary.” R1 suggests refurbished options should be used more often and says ideally “people should use a phone for four to five years.” The interviewee finds device failure patterns striking : “at certain moments many devices suddenly seem to break at the same time,” often when new generations appear. The interviewee sees potential in having a stricter, well-communicated replacement policy and “not giving in on that.” Yet such discussions are often sensitive because they directly concern employee experience and expectations.

R1 thinks procurement can surface these questions and “be the instigator of the discussion,” but not the architect of policy. Instead, policy should be written by IS/IT together with stakeholders like procurement and the CSR office, as the departments impacted should also shape the rules. Only strong “steering from above,” for example from the Executive Board, could change that. However, R1 notes this rarely happens because workplace IT is treated as a service and sometimes even as a secondary employment condition. As a result, discussions that affect device replacement cycles or user privileges “are preferably not held,” and urgency is low. This slows down progress on topics where sustainability and employee convenience intersect.

Procurement therefore has limited room to manoeuvre. IS/IT decides what will be purchased and how often devices are replaced: “If they say that every employee has to have a new laptop every four years, then those are the conditions that we work with in procurement.” Procurement participates in content discussions but is “not leading,” partly because procurement staff are not technical specialists and because IT purchasing is bound by safety and security requirements. In some cases, device lifetime is directly linked to security updates or support periods. R1 thinks a “good trade-off” between sustainability and security is still needed and that such trade-offs “do not yet always happen.”

Regarding broader sustainability ambitions, procurement has interpreted the organisation’s long-term climate strategy into scope-3 focused efforts. R1 says procurement plays “a pivotal role” and has developed a roadmap up to 2030 with key steps. One core pillar is insight: “We actually don’t know how our suppliers score and where they stand. You can only steer once you have insight.” A second pillar is to embed sustainability ambitions into category plans for all major procurement domains, drawn up together with internal stakeholders. IS/IT is explicitly “one of them,” with category managers responsible for defining ambitions for workplace IT, how to steer toward them through purchasing decisions, and how contract management can be used to enforce them.

Much of the current work is exploratory. Procurement is trying to understand supply chains more deeply and assess which ones are “mature” and which are not. “You cannot immediately impose the highest demands on an immature chain, because then you cannot purchase anything then.” Their current tendering questions about sustainability are intentionally non-binding: they ask them mainly “to get information and to have the conversation” rather than score them. In addition, they run pilots (interviews, surveys and market consultations) to understand supplier ambition and developments. They also try to reach CSR staff on the supplier side, to understand future trajectories and “what we can ask and what we may expect from the market.” This learning process is slow, R1 notes, because of the large number of suppliers and the need for continuous dialogue.

When translating organisational goals to workplace IT specifically, R1 wonders whether the full life cycle and influence points are clearly mapped: “where we have influence on that life cycle.” The interviewee stresses the need to avoid investing heavily in areas where the organisation has little leverage: “If we have no influence on it and it does not lead to results, that is a pity.” R1 is unsure whether this impact-versus-effort picture is sufficiently understood for workplace IT yet.

On the Supplier Code of Conduct, R1 says it covers the broad CSR domain but is mostly “a first step” to express expectations. It contains no audits and cannot yet be used to exclude suppliers, it is more a signal of future direction. Over time, the organisation may strengthen it and accompany it with due-diligence systems that compare suppliers, flag those “in the red” and support enforcement. Certifications might even-

tually be requested, but "[the organisation] cannot simply demand something" due to proportionality rules. If one certification (e.g. Ecovadis) were required, comparable alternatives would need to be accepted. Legal interpretations differ, resulting in caution when writing tenders with strong sustainability demands.

R1 confirms there is "sometimes a field of tension" between sustainability and functionality. Units prioritise performance: "If they need a Rolls-Royce, procurement cannot come with a Volkswagen." Still, the interviewee believes even high-end solutions must meet basic sustainability requirements: "Not the maximum, but you cannot allow that everything is permitted." R1 sees opportunities for IS/IT to steer more on total cost of ownership, including sustainability factors, because "a lot of data is available." A working group is already thinking about this. Yet progress relies heavily on individuals: "If you do not have people in the organisation who find this interesting and want to go for it, then nothing happens." Written policy alone is insufficient: "you need people who actually pick it up and fill it with enthusiasm."

In contract phases, R1 says contract managers and category managers jointly play a key role. Especially with strategic suppliers, contracts could set multi-year trajectories with stepwise sustainability goals. Actual follow-up is essential: ambitions in a contract mean nothing if not monitored. R1 prefers "pay- and gain-sharing" with KPIs so that success or failure is jointly felt: "If it goes wrong, both parties share the pain; if it goes well, both parties should profit." The interviewee notes the organisation is "a small player" in IT and should not assume it can reshape the market alone. Many suppliers already act on material scarcity and critical-material risk, even if not labelled as sustainability. R1 suggests aligning with those existing drivers.

R1 is positive about functional tendering: specifying goals rather than. Suppliers could then propose "the most sustainable and best concept" for workplace IT. However, the interviewee thinks the organisation must mature before doing this broadly: procurement must "grow into it" and learn how to guide, evaluate and contract around functional outcomes. He calls this a growth model and advises checking alignment with the IS/IT category manager.

Looking ahead, R1 hopes procurement will expand its value-adding role, especially through supplier management. The long-term target is supply-chain readiness, which "we do not have yet; we are far from it." Current procurement activity ensures compliant and efficient spending, "which is also important," but R1 believes the next development is for procurement to facilitate value creation, potentially even to "earn money for [the organisation]." Early steps have begun, supported by organisational strategy and CSR commitments. Procurement policy is being reconsidered, and although it does not always need to be labelled explicitly as "sustainability," the aim is to ensure operations remain resilient "now and in ten years", which may require new approaches.

Interviewee R2

When asked about sustainability of workplace IT, R2 says [the organisation] has made improvements and remains actively focused on the topic, yet compared to other procurement areas (such as cleaning, where product ingredients, cloth materials and labour practices are scrutinised in detail) "software and hardware are still behind in how sustainability is viewed." Within ICT, the interviewee describes the sustainability conversation as relatively new. R2 notes that for years software was assumed to have no environmental impact ("it runs somewhere in a data centre and that is all OK") and only recently awareness has emerged that digital infrastructure consumes large amounts of energy, especially with AI: "the CO_2 emissions of software and data centres are almost as big as aviation." R2 points out that only in the past 1–1.5 years has it become widely known that software architecture influences computation load and thus energy use, and that there are not yet sustainability labels for software.

For hardware, R2 observes that devices contain rare materials and have historically been optimised mainly for speed, size and weight. The interviewee describes a shift in awareness: "now comes the realisation, what are we actually doing?" After years of functionality innovation focus, recycling and materials reuse are only recently emerging as themes across the ICT chain.

[The organisation] translates their overarching CSR goals (including climate neutrality by 2040) into procurement requirements via "ambition webs" for each major category. R2 explains that these frameworks map ambitions along five axes: (1) energy, (2) climate, (3) diversity, (4) circularity (5) working conditions.

Each ambition web describes the current situation, where [the organisation] expects suppliers to be in future, and what progress is expected at two-year and four-year points within a typical contract cycle. R2 stresses that ambition is intentional, not an obligation: "you can say: I want it now, but that is not how it works," especially if a market is not yet mature. The ambition web aims to signal direction to tier-1 and tier-2 suppliers, not only for CO_2 neutrality but also inclusion, labour conditions and social themes. These

ambitions are translated into a code of conduct, which the interviewee describes as presently "mostly a wish toward suppliers," though R2 notes it is "becoming more pressing." Flexibility is sometimes needed if suppliers are not yet fully aligned with sustainability criteria. Ambition webs are already completed for hardware and telephony; they are currently being developed for software, where collected input still needs to be processed and incorporated into upcoming procurement rounds.

R2 expects that soon, software suppliers should be able to indicate sustainability performance, for example whether software has been assessed for energy efficiency, whether greener configurations exist, or whether a sustainability label (once available) is met. The interviewee also mentions that [the organisation] intends to request information about data centre sustainability (including renewable energy, water use and environmental measures) as part of future soft- and hardware procurement.

Procurement leads development of ambition webs. IS and CSR contribute input and early drafts will be shared with relevant stakeholders for refinement. The workplace-hardware tender was conducted jointly with [an ICT cooperation]. [The ICT cooperation] ran the tender, [the organisation] contributed content, and [the organisation] now works with [the ICT cooperation] to establish contract and supplier management structures. R2 explains that cooperative tendering increases procurement volume and increases their voice toward large suppliers: "we are not only ordering laptops for ourselves". Larger demand makes it easier to ask suppliers for chain insight and sustainability information.

R2 believes [the organisation] could potentially leverage purchasing power more strongly, noting that the combined spend was significant and that it would "be strange to leave that unused." Yet the interviewee recognises implementation challenges: stakeholders sometimes associate sustainability with higher cost, and initial contract rollout shows that keeping commitment alive over four years requires continuous reinforcement and follow-up.

R2 describes workplace-IT procurement as European-tender regulated. Market consultations are nearly always documented in writing, usually not fully public, and sent selectively to suppliers [the organisation] expects may tender, so responses are comparable and administratively manageable. They will conduct a similar consultation for software, asking questions such as whether vendors have EcoVadis, whether reporting capability exists, and how far they are in sustainability development.

The interviewee emphasises that ambition is defined first, market ability second. R2 states: "the market can say: we do nothing, but that does not mean my ambition becomes lower." However, the interviewee also notes that [the organisation] cannot yet terminate contracts based on lack of fulfilment of future sustainability goals, enforceability is still emerging. R2 recalls internal concern that hardware suppliers might fall short, yet tender submissions showed resellers "already do much more than we thought," and that major suppliers are aware of material scarcity and sustainability issues, even though chain responsibility remains incomplete. R2 notes mining of rare metals and associated human-rights concerns in supply origins.

Most workplace-ICT tenders use standard public or non-public procedures. Forms like competitive dialogue or innovation partnership are rarely appropriate because [the organisation] knows exactly what it needs: "we know very well which laptops, computer mice and keyboards we want." Sustainability is embedded across selection requirements (e.g., ISO 14001, EcoVadis), award requirements, and award criteria that provide extra points for suppliers who already meet ambition-web goals. Weighting could be increased, but currently cost and functionality weigh more heavily. Delivery reliability is another factor, especially regarding stock availability and shipping timeliness. It can overshadow or equal sustainability, though for hardware this matters less now that delivery systems are stable.

R2 notes that sustainability standards exist in some procurement areas (e.g., CO_2 performance ladders) and are helpful because they add measurability. In ICT, however, few hardware standards exist and none exist yet for software, which makes enforcement difficult. A CO_2 ladder for ICT would be "very difficult," because chain emissions cannot yet be reliably measured.

For laptops, [the organisation] collects and returns devices via Closing the Loop, which provides recycling statistics. The interviewee says recycling infrastructure is "not yet very mature." Laptop replacement typically occurs after four years, but employees may keep devices longer if still functioning. Replacement may be required for security-compliance reasons. Phone lifespan has also increased beyond historical norms. R2 estimates roughly 50% of employees use one device for work and private use, a pattern linked partly to age and entry date at [the organisation]. The interviewee expects two-phone usage will increase, as application restrictions may prevent certain consumer apps from running on corporate-managed phones.

Looking toward 2030, the interviewee hopes that hardware purchased is inherently more sustainable (includ-

ing materials like casing plastics and other components) and that sustainable alternatives will be selected more frequently by users. R2 wants a software sustainability label so that [the organisation] can assess sustainability of software products in addition to security, sovereignty and data governance. The interviewee expects that [the organisation] will eventually be able to tell users that a requested application "is not sustainable software," but notes this is not yet possible today.

Regarding large vendors, R2 believes influence lies in consistently asking questions and using public-sector purchasing coalitions: "we are not completely insignificant."

The main challenge R2 identifies is internal awareness and user behaviour: "Employees at [the organisation] also have choices to make." The interviewee notes that sustainability is not always visible day-to-day: "if you open our SharePoint page, sustainability is not on it today, apparently not important today." User preference plays a key role, and she mentions that the shift to sustainable office supplies succeeded because it happened quietly over time, whereas change in phones or catering generates more resistance unless mandated from board level. She gives examples of past employee resistance to sustainable pens and employee pushback when catering explored meat-free policies. Cultural adoption and consumption behaviour influence what IT procurement can shift in future.

2.1.10. Organisation D

Interviewee D1

The interviewee describes how sustainability within ICT is centred around two main topics: the increased use of AI and procurement. According to him, these are "the most important items in terms of sustainability". In procurement, sustainability has become more embedded: "Sustainability is clearly present, but you still have to do it properly," referring to the need for good scoring during the European tender procedures that govern ICT purchases.

When speaking about workplace IT (laptops, peripherals, software and cloud services) D1 considers the organisation "reasonably on track," mainly because "we have a good process to handle [end-of-life] well." End-of-life processing has, in D1's words, "been well-organised for years," referring to their long-standing cooperation with partners that extend the lifespan of the discarded hardware through reselling. Earlier, discarded laptops even generated revenue for [the public organisation] that "went to Africa," although the situation changed after more hardware categories were added to the processing contracts.

Circularity plays a growing role for workplace devices, much more so than CO_2-neutrality. Although refurbishment at the beginning of the lifecycle is not pursued internally, the organisation relies on three-year maintenance contracts: "If something happens within those three years, the supplier does it." What happens afterwards depends on external parties. The interviewee recently heard how the municipality of Amsterdam faces similar questions about donating used devices to less-resourced groups. D1 explains that their own laptops are relatively "clean," without stickers, though the interviewee notes that engraving has hindered refurbishment because it was introduced as an anti-theft measure.

The distribution of devices between departments is another friction point. Since devices are bought on department budgets, "there are many laptops per department that you cannot use across faculties." D1 attributes this entirely to financial structure: "Our financial structure is not flexible." Although procurement is done centrally by the ICT directorate, departments still receive and manage their own budgets for devices.

Procurement for ICT runs through European tendering and always involves ICT staff. Sustainability now weighs more heavily, but it must also be assessed seriously: everyone involved must make a meaningful evaluation rather than "just giving a six, because that gets you nowhere." One recent example was the contract with [current reseller], where sustainability evaluation was difficult to judge consistently. Later, the interviewee notes that the collaboration with [reseller] overall "is not good," stating that [the reseller] "did not fully comply with the contract," that order processing takes too long, and that the contract therefore will not be extended.

D1 observes that in recent years "there is much more focus on sustainability," whereas earlier the emphasis had been much more financial. Still, strict adherence to European tendering rules makes it hard to stimulate innovation in the workplace hardware market. Because new or alternative products typically lack scale or a track record inside the organisation, "you cannot just introduce something a bit new." D1 illustrates that this is "the reason we end up with almost everything at Big Tech." Even when more sustainable alternatives exist, such as Fairphone, "the uptake is virtually zero," both because staff prefer ecosystems they already use at home and because ICT management must support only a limited number of device types. For D1 personally too, "I'm not going to use three different types of devices and operating systems." The interviewee considers it unrealistic to mandate Fairphone exclusively, remarking that if the [public organisation] would

do so, “if you want to make it impossible for yourself, you should do that,” because staff would simply acquire devices outside the central system.

Avoiding vendor lock-in remains important to D1, which is why purchases go through resellers to retain flexibility for different brands. At the same time, the interviewee notes that procurement may be more expensive centrally, which encourages departments to buy hardware themselves. This decentralised purchasing leads to inefficiencies: “A lot of that self-purchased hardware is often doing nothing,” because it is used only by the owning group. Central clusters, in contrast, perform far better. Decentralised hardware also tends to be older, resulting in worse energy performance.

Tracking the lifecycle of workplace IT has improved in the past two years. With [the reseller], the procurement system now links directly to the central asset database, which “allows better lifecycle management and gives better insight into where everything is.” Historically, this visibility was lacking, and unused devices often remain with staff. The interviewee mentions that his own old laptop is “still at home” and was never collected. Although monitoring could now indicate how long devices are used, “that is not yet happening.” Repairs are limited: decentralised services “sometimes still tinker,” but modern laptops are harder to open and stocking spare parts is impractical. Replacement within three years falls under maintenance, after which it becomes more complicated.

Extending device lifetime is possible, but constrained by financial rules. Cultural factors also matter: “People already use their devices longer individually,” yet formal depreciation schedules are fixed by Finance & Control and “you cannot simply change them.” One department extended its device lifetime, but the interviewee stresses that book-keeping rules make this difficult. Maintenance contracts past three years become “extremely expensive,” making it economically unattractive to extend warranties. D1 believes four to five years of use is feasible, but the market makes longer maintenance difficult, particularly in fast-moving segments like GPUs.

When considering sustainability opportunities across the whole device cycle, D1 sees them mainly “at the front,” through better specifications and clearer cultural priorities. At the back end, the interviewee observes many users already prolong device use on their own. Still, some constraints (such as depreciation rules) limit structural extensions.

Finally, in assessing sustainability impact across ICT, D1 emphasises that workplace IT is relatively small compared to infrastructural systems such as cooling installations for advanced research equipment. D1 points out that some devices in their operations run with cooling systems that expend significant energy and heat. For ICT, D1 believes having more internal expertise is necessary to guide suppliers effectively; otherwise, “if the supplier lacks certain knowledge, you are stuck.”

Interviewee D2

D2 explains that workplace IT procurement at [the public organisation] is organised centrally under the ICT directorate, which provides “standard workplaces, facilities and setups.” When a department needs a workstation for a new employee, ICT supplies a fixed set of hardware and standard software. This setup creates a uniform baseline across the [public organisation], but also means that sustainability decisions for workplace IT largely depend on central ICT’s choices and priorities.

Procurement becomes formally involved when the value exceeds €75,000, as all such purchases must include the Procurement department “to guide the process and ensure that it is lawful.” Their involvement also guarantees that sustainability requirements are included. For workplace hardware (such as laptops and accessories) the process typically begins within ICT, which identifies needs and communicates them to Procurement. Procurement then helps determine how the market should be approached, whether previous contracts offer lessons, and which sustainability themes should receive priority. D2 emphasises that the Procurement role is advisory and facilitative: the ICT directorate remains contract owner and the director signs both the procurement plan and the final award decision.

D2 describes that IT-related procurement suffers from fragmented software acquisition. Certain groups and individual staff often purchase specialist software independently, producing a landscape where “there could be a hundred same packages within [the public organisation] without anyone knowing someone else already has it.” This causes inefficiency, higher costs, and hidden environmental impact because “all those SaaS environments running on data centres use energy,” even if users do not see it. Procurement and ICT therefore try to identify when distributed purchases should be consolidated, but autonomy traditions and varying specialised team needs make this challenging.

Steps in the procurement process, as described by D2, follow a recurring pattern: a need emerges within

ICT or a department, after which a project group is formed. This group includes the contract owner (ICT), procurement advisor, and (new in recent years) the Sustainability Coordinator (SC) of the directorate or department. "They must always be involved," D2 notes, although "they donn't even always know they have a SC" until recently. The project group determines the requirements and the appropriate procedure: checking the market, gathering insights from similar organisations, or conducting an informal exploration with current suppliers to understand what is feasible. D2 highlights that the extent to which sustainability is truly embedded depends strongly on the intrinsic motivation of the project-group members: some focus on simply completing the tender, while others seek deeper sustainability integration.

According to D2, informal market explorations often replace formal market consultations, provided no supplier gains an unfair advantage. Basic requirements are then defined to ensure suppliers meet essential technical, legal, and sustainability standards. Once the minimum threshold is set, open criteria are used to encourage suppliers to demonstrate added value, for instance in "optimisation, cooperation, or how they see collaboration with us as a [public organisation]." In some categories, this has led to discussions about repairability and component replacement, such as earlier contracts where devices needed to allow easy replacement of parts to avoid discarding entire units.

A major practical challenge is that many devices required by specialised teams are unique and available from only one supplier. "You can say the device is not sustainable enough, but the [work activity] must go on/take place." Another difficulty lies in lifecycle effects: more equipment means more cooling, more energy consumption and thus higher CO_2 emissions from buildings. ICT expansions inherently create sustainability tensions that procurement cannot resolve alone.

For standard laptops and desktops, D2 describes that the market is mature, which limits the usefulness of advanced procedures like innovation partnerships. Instead, [the public organisation] moves toward standardisation and SaaS solutions, reducing the need for bespoke systems. ICT is considering "fewer models and an online environment where the device becomes less important," although D2 warns that sustainability requires continued control over devices: "If you want to work more sustainably, you should not stop managing devices; you should keep grip on them."

Their biggest sustainability opportunity lies in lifetime extension. Earlier, laptops were replaced every three years because that aligned with expected performance needs. But with more applications running online, a laptop can "easily last five years or even ten years." This triggers new conversations with suppliers whose financial models depend on selling more units. D2 compares this with the waste contract in which they would prefer to pay the supplier "per ton of waste they do not dispose." They imagine similar "laptop-as-a-service" models where suppliers benefit from durable, repairable devices and long-term maintenance rather than replacements.

However, public-procurement rules limit contract duration to around four years, while meaningful lifespan extension might require eight-year or even more agreements. Annual budgeting further complicates multi-year commitments: "You want to plan multi-year maintenance, but the budget is set annually." D2 calls these obstacles challenges, not impossibilities.

Contract management plays a decisive role after the award. ICT, as contract owner, maintains contact with suppliers and periodically meets with Procurement's contract-management team. Sustainability is "a fixed agenda item," where KPIs, improvements and earlier promises are checked. D2 believes this phase has the most influence on outcome: suppliers may be willing, but "success often fails because the internal organisation is not ready or makes other decisions." They stress that contract management must also ensure that "we ourselves stick to what we agreed."

Monitoring sustainability impact across the IT landscape is still difficult, partly because the [public organisation] itself has not defined which data it wants. Colleagues say they need to report, "but when I ask what they need from me, they often don't know." Without clear internal definitions, suppliers cannot be instructed to deliver consistent metrics. D2 gives an example on how the definition and boundaries of the circularity objective differ in the organisation. Certification and standards may help streamline this, but D2 believes the [public organisation] should act proactively rather than wait until reporting becomes mandatory.

Finally, they underline the importance of internal communication. When they presented the new procurement policy in draft, many department secretaries were proud that it would form "the basis with which we go to the market." Whether these sentiments remain under budget cuts is unclear, but D2 returns to their central theme: everyone involved in buying, using or specifying workplace IT has influence, and sustainability depends on that shared awareness, behaviour and choices.

Interviewee D3

When reflecting on sustainability in workplace IT, D3 describes the landscape as one where "there are still many opportunities" and where developments such as AI are "going incredibly fast," requiring the organisation to adapt while keeping the CO_2 footprint in mind. D3 emphasises the need to "define it properly and deploy it as well as possible."

Sustainability, they note, is embedded in [the public organisation]'s procurement policy through socially responsible procurement. In each tender (hardware included) the team evaluates opportunities such as social return, material sourcing, CO_2 emissions, refurbishment options, and end-of-life processing. As they put it, "That is included in the contract. We have set KPIs… and we monitor them." The product owner for workplace IT plays a key role in daily monitoring of these aspects.

Translating [the public organisation]'s climate-neutral and circular 2030 goals into procurement practice is challenging because, as the interviewee says, "every small step helps and contributes," yet interests often collide. Employees may request equipment essential for their work, even if sustainability is not a priority for them. This creates "a playing field to figure out how we can ensure both interests are considered." They describe their preferred approach as "starting small and hoping it spreads further, like an oil slick."

Tenders originate for different reasons: new needs, expiring contracts, or market developments. The market is generally explored through public consultations, usually confirming existing expectations rather than introducing surprises. Reflecting on the sector, D3 explains that ICT sustainability is still evolving and that the market is struggling with fast-moving trends, especially AI. There is a shared challenge, summed up in their words: "The market is going incredibly fast… it remains a playing field: how do we solve this together?"

The interviewee identifies the core challenge as reducing CO_2 emissions: "How can we limit our CO_2 footprint as much as possible? And how are we going to arrange this together for the future?" Financial pressure complicates this, since [the public organisation] faces budget cuts. As they explain, "When there is no budget, sustainability is more quickly at risk." Internal demand adds another constraint; users often want specific models, making it difficult to enforce sustainable alternatives. As a result, for hardware, the focus increasingly shifts to end-of-life handling and refurbishment: "Can we give equipment new life? Or how is it processed?" For software, the sustainability challenge lies chiefly in energy consumption and electricity generation, which the interviewee describes as "less tangible" than hardware.

The interviewee sees the greatest opportunities in the tendering phase. Because "there is little room for negotiation" in public procurement, the organisation must articulate expectations clearly beforehand. They highlight the importance of asking suppliers to show additional value: "We state what we want and expect… and we let the market indicate what extra they can offer." Through KPIs and regular meetings (operational, tactical, and strategic) the partnership can mature. For workplace hardware, operational communication occurs daily, quarterly meetings focus on KPI evaluation, and strategic meetings happen twice a year. Sustainability is always present because, as they state, "Sustainability is a KPI in the contract, so it always comes up."

Supplier transparency varies widely. Software is "not tangible," and energy-related data is often absent unless specifically requested. [The public organisation] must therefore "explicitly ask for it." Whether sustainability should become a minimum requirement depends on the tender. Standardised products allow sustainability to weigh more heavily, but specialised products do not, since "the distinguishing quality can still be too large." The formal contracting authority, ICT for workplace hardware, ultimately decides, while procurement's role is advisory.

On central versus decentralised procurement, the interviewee acknowledges departmental autonomy but suggests improvements can be achieved without fully centralising: "If we communicate more sharply and monitor more, we can also gain there. You don't need to pull everything to yourself." For user hardware, the process is already centralised through an operational procurement team that handles internal requests via the framework supplier.

Looking toward the future, they identify chain responsibility and supplier management as key areas for progress. They see the need for public institutions, and commercial suppliers to sit together "to look at what we want, what we can do, and what influence we have," especially as emerging technologies such as AI continue reshaping the landscape.

2.1.11. Organisation E

E1 explains that their involvement with sustainable procurement grew naturally after being appointed as the MVOI lead for the department. As they put it, although they find MVOI "incredibly interesting," they also see "how difficult it is to implement it within procurement." For them, the value of the current phase lies in exploring the subject more deeply and maintaining contact with others inside and outside the organisation to understand "what we already do and what we can do better."

When reflecting on workplace IT, they stress that the [public organisation] has already reached a mature level of awareness, something they see confirmed in internal reports where sustainability appears consistently. A concrete example they give is the handling of laptops: after their use period, the devices are sold to a party that "reuses them at schools or recycles them properly." They view this as "a core element that you can easily apply to promote sustainability and CO_2 reduction." Even so, they would like policies to go further and encourage longer product lifespans: "I would like to see that our policy responds more to this. For example, that we use laptops and phones longer." Such a shift, they argue, requires behavioural change: "That is very important, and it really requires a change in how we look at products."

E1 describes how broad sustainability ambitions (such as CO_2-neutrality and circularity) must eventually be translated into tenders. They explain that the [public organisation] has an internal team of MVOI experts, each responsible for a theme such as circularity, climate or biodiversity. Procurement can consult these colleagues when formulating award criteria. But they also note the limits of influence, especially in software and cloud markets dominated by large suppliers: "We are aware that companies like Microsoft are much larger than a [public organisation]. We go along with the course they are already following." On the other hand, categories such as laptops offer more opportunities to embed sustainability, for example through return-and-recovery obligations at the end of the life cycle or criteria related to CO_2 reduction.

However, they emphasise a central difficulty: "We have trouble formulating an effective question, so that we get something measurable." Ensuring measurability during the contract period is equally challenging: "How do we keep it verifiable throughout the agreement? That is quite difficult." Because of this, the department will follow a sustainable procurement course to gain more practical tools.

E1 illustrates the challenge with supplier responses. When procurement asks what suppliers already do in sustainability, they often receive long lists of standard measures such as solar panels or waste separation. According to E1, "when you read it, it feels like a standard story," and not necessarily a reflection of what the [public organisation] should be asking for. They believe procurement could raise expectations and stimulate more ambitious contributions from suppliers.

Market consultations sometimes help, especially when the [public organisation] poses open questions about what suppliers can do. E1 hopes that in the future the [public organisation] will focus not only on what suppliers already undertake, but also on "how they can help us achieve our objectives." They consider this suitable both for consultations and tenders, particularly in hardware categories where suppliers can clearly distinguish themselves.

For software and cloud, E1 sees considerably more obstacles. These topics are described as "a difficult subject," and discussions often "strand on CO_2 reduction or energy savings in data centres." The environmental impact is "much less tangible," and the financial scale of data centre sustainability makes it unrealistic to enforce major changes through their organisation's tenders. They nonetheless underline that the organisation mostly evaluates tenders on the basis of best price–quality, with sustainability increasingly part of quality assessments.

Environmental standards such as ISO 14001 appear frequently as minimum requirements, and the national MVI criteria tool provides direction. E1 describes it as "a nice guide for what you can ask per product category," and procurement at least tries to implement the basic criteria before gradually increasing ambition. At the same time, they recognise that such standards create hurdles for SMEs. Many smaller organisations do not possess an ISO 14001 certificate simply because "it costs a lot of money and work to obtain." And when a certificate is required, procurement must also accept equivalent evidence, which they find difficult: "We struggle to formulate what we consider equivalent." They add that certification systems are extensive and that, with limited internal expertise, "it is difficult to determine which elements we need to request to ensure that a supplier functions sufficiently and has sufficient measures."

Contract management currently offers limited capability to follow up on sustainability commitments. E1 describes that contract managers mainly check whether sustainability topics were included in the tender

and whether required certificates remain valid. But they face capacity issues: “We have more contracts than are manageable for the contract managers.” For this reason, E1 would like the contract management system to be improved to generate more automatic reminders and allow sustainability KPIs to be tracked consistently. They explain that meaningful reporting is essential so that internal clients can see whether an approach “had an effect, or whether we need to do it differently.” They also observe that suppliers can be hesitant when asked for data, sometimes because they wonder “what will happen with that data” and whether they risk being judged or forced to adjust their processes.

On supplier relations, they describe the collaboration with the current reseller as good, with few issues so far. Still, they note that “trust is sometimes difficult,” and this is not necessarily due to the supplier alone; it is a mutual dynamic. Trust grows when there is time to maintain the relationship, but if time is scarce, “the relationship becomes subordinate to the objectives that must be achieved.”

Looking at the procurement process as a whole, E1 identifies two areas with the greatest potential for improvement. The first is criteria design: “How do you phrase a question so that you get the right answers and stimulate the market?” The second is monitoring: “Have we done the right things?” These elements depend on one another: asking better questions leads to better insight into what is possible, and monitoring makes it possible to refine procurement approaches later.

They also reflect on innovation-oriented procedures such as competitive dialogue and innovation partnerships. These methods, in their view, are “good ways to stimulate innovation and have real problems solved.” E1 believes that even in mature IT markets there is room for innovation, especially in topics such as CO_2 reduction in data centres. They regret that the [public organisation] does not apply such methods more actively and call this “a missed opportunity.” In terms of devices, they are enthusiastic about fairer and more repairable alternatives.

The conversation also touches on digital sovereignty. This is a topic that “plays among various people in the organisation,” but E1 points out that operational choices continue to reinforce dependence on large vendors. They describe how the organisation recently decided to purchase another Microsoft product, and while they understand the perception that it is a safe and reliable choice for a public organisation, they also question “to what extent we become more dependent.” Safety and compatibility, however, remain decisive for leadership.

E1 is candid about the limited formal power of procurement. All procurement consultants are purely advisory and have “no mandate.” If contract owners have different objectives, “that takes precedence.” This limited influence makes it difficult to push for sustainability when departments prefer familiar vendors. They believe procurement could strengthen its position by becoming more visible, for example by presenting strong case studies and demonstrating what procurement can contribute. They remark that many people still think, “Do we have to involve procurement again? It takes so long and there are so many rules,” and procurement needs to “dare to show our skills more often.”

Nevertheless, E1 is proud of certain developments. They highlight that procurement is now notified of MVOI themes at the very start of each trajectory: “We are immediately alerted to the MVO themes,” which helps incorporate sustainability systematically. They also value the motivation of their colleagues: “We really want it,” and are not discouraged by the scope of the topic.

Regarding frameworks, they explain that while CSRD does not apply to public organisations directly, suppliers are increasingly affected by it. For the [public organisation] itself, the MVOI Manifest remains the guiding framework and provides a “nice hold” because it is firmly embedded in political leadership. They also describe the importance of learning from others, mentioning sessions with PIANOo and masterclasses as “very valuable” for exchanging practical knowledge.

Looking forward, they describe how the procurement policy is being revised. Sustainability and The Natural Step will remain important pillars, and knowledge exchange between the three procurement organisations within the [public organisation] is expected to increase. In addition, an internal project has begun specifically to explore sustainability in IT and how it can be embedded in procurement practice. They expect steps to be taken in the coming months and describe these developments as “beautiful developments.”

2.2. Procurement maturity assessments per case

2.2.1. Organisation A

Innovation ambition

Organisation A's sustainability ambition for workplace IT procurement aligns most clearly with Horizon 2. Interviewees consistently describe ambitions that go beyond incremental optimisation, yet stop short of the radical system redesign associated with Horizon 3. Their ambition is exploratory and collaborative. It aims to reshape procurement practices while remaining within the boundaries of the existing market. Although Horizon-1 elements are present (such as embedding sustainability criteria in tenders, extending device lifetimes, and relying on established certifications) these are not framed as the end goal. Instead, they are described as a necessary foundation. As A2 notes, sustainability checks are already embedded through predefined grids and compliance assessments, but these are seen as routine rather than transformative. Even the daily prioritisation of sustainability ("We discuss sustainability every day. We don't forget it, believe me.") is positioned as groundwork rather than final ambition.

The organisation's ambition moves beyond Horizon 1 through its intent to evolve procurement into a more innovative and co-creative model. Across the interviews, there is a clear shift away from prescriptive tendering towards approaches that invite suppliers to contribute new ideas. A2 explains that the workplace IT tender was deliberately framed as a "request for solution" rather than a request for proposal, allowing suppliers to bring forward "innovative and sustainable ideas." This signals a willingness to explore adjacent possibilities and reconsider established procurement routines, which are core characteristics of Horizon 2. The same logic underpins the move towards outcome-based collaboration. As A1 describes: "This is our need, you come with the solution. The supplier becomes more of a black box." These statements reflect an ambition to experiment with new procurement relationships, rather than simply optimise existing ones.

Hardware lifecycle management further illustrates this Horizon-2 positioning. The ambition to extend device lifetimes from three or four years to "five to six years" reflects a strategic effort to rethink workplace IT consumption. A2 highlights the role of AI-enabled predictive and preventive maintenance to "extend device lifetime and reduce incidents." A1 explicitly links longer lifetimes to sustainability, noting that "if you can use a device longer… it may be more expensive upfront, but cheaper long term." These ambitions point to a transition towards new models of value creation and reduced material throughput, rather than a complete break from existing systems.

Co-creation is another strong indicator of Horizon-2 ambition. Through fieldlabs, the organisation has created structured spaces for experimentation with suppliers and internal teams. A1 describes these as "an area of attention on which you experiment," and stresses the importance of "not dictating, but listening and giving direction: this is our need, how could you solve that?" The fact that such sessions surface tools and solutions the organisation "didn't know existed" demonstrates how these initiatives enable adjacent innovation. This openness to learning from the ecosystem, and to letting suppliers shape future solutions, is central to Horizon 2.

At the same time, the interviews clarify why the ambition does not extend into Horizon 3. Participants are explicit about the limits of their influence. A1 states that they "cannot dictate how OEMs design devices," and that their leverage lies mainly in logistics and lifetime decisions. There is no expressed ambition to redesign the IT value chain, develop alternative hardware ecosystems, or fundamentally challenge dominant suppliers. Instead, interviewees emphasise dependency on existing suppliers and the constraints imposed by regulation and geopolitics. A2 observes that major IT companies are already "fully compliant with all sustainability requirements," suggesting that transformative change cannot be driven by procurement alone. A1 reinforces this point by noting: "You have to look at what happens outside: that's where regulations and innovations come from."

Together, these perspectives show a coherent and well-bounded ambition. Organisation A seeks to evolve how it procures, collaborates, and manages lifecycles, without aiming to disrupt or reconfigure the wider market. This balance (progressive, experimental, and future-oriented, yet grounded in current market realities) clearly positions the organisation's sustainability ambition within Horizon 2.

LCA-based ambition

Organisation A fits within the medium LCA-based sustainability ambition level for workplace IT procurement. Both the interviews and the reviewed documentation show that Organisation A understands the environmental sustainability of workplace IT as more than a narrow use-phase issue. Climate change potential and energy use form a central and clearly articulated ambition. This is reflected in the long-term objective of "Carbon neutral IT in 2030" and in the strong focus on reducing energy consumption in data centres and workplace IT. In procurement contexts, this translates into concrete attention to energy-related criteria. As A2 explains, for hardware tenders they explicitly consider "power consumption, green IT char-

acteristics," while sustainability in software and cloud services is assessed indirectly through data-centre performance and external reporting frameworks such as CDP. This demonstrates that climate and energy impacts are treated as structurally relevant dimensions in procurement ambition rather than as incidental considerations.

At the same time, Organisation A's ambition extends beyond climate and energy alone. The interviews show clear awareness that significant environmental impacts of workplace IT occur in the production and end-of-life phases. A2 explicitly notes that, for hardware, procurement also looks at "raw materials used," indicating recognition of material and resource-related impacts. This awareness is further reflected in the strong emphasis on lifecycle management, including repairability, lifetime extension, reuse, leasing models, and second-life pathways. As A1 stresses, "if you can use a device longer… it may be more expensive upfront, but cheaper long term," framing sustainability ambition in terms of reducing resource throughput over the lifecycle of devices. These elements overlap directly with LCA impact categories related to minerals and metals, fossil resource use embedded in manufacturing, and end-of-life impacts.

However, the interviews and documentation also reveal clear boundaries to Organisation A's LCA-based ambition. While environmental management systems, supplier codes of conduct, and EcoVadis assessments are required, these instruments function primarily as general safeguards rather than as vehicles for explicitly targeting the full range of LCA impact categories. There is no evidence that procurement ambition explicitly addresses freshwater eutrophication, freshwater ecotoxicity, or particulate matter formation as distinct environmental concerns. These impacts are implicitly covered through generic environmental management expectations, but they are not articulated as specific goals or steering dimensions for workplace IT procurement.

Together, the interviews and reviewed documentation show that Organisation A explicitly recognises and structures its sustainability ambition around several lifecycle-related environmental impacts, particularly climate change, energy use, resource consumption, and device lifecycle extension. These ambitions are coordinated across functions and embedded in procurement processes, with suppliers invited to contribute solutions. At the same time, the ambition does not yet span the full set of LCA impact categories associated with workplace IT. Sustainability is framed as a multi-dimensional but still selective lifecycle concern rather than a fully holistic LCA-based steering framework. For these reasons, Organisation A aligns with the medium LCA-based sustainability ambition level for workplace IT procurement.

Processes

On the process dimension, Organisation A demonstrates a high level of maturity in how requirements are **specified**. Sustainability is embedded early in the procurement process through structured internal coordination. A2 explains that "before launching a tender, procurement organises discussions between IT departments and the Compliance & Sustainability unit to determine which criteria should apply." This shows that requirements are not fixed in advance, but deliberately shaped to fit each procurement context. Specifications are clearly differentiated by category. For hardware, the focus is on "power consumption, green IT characteristics, and raw materials used." For managed services and software, sustainability relates more to social responsibility or data-centre operations. This approach reflects outcome-oriented specifying rather than technical prescription. Suppliers are explicitly encouraged to shape solutions themselves. As A2 states: "We request sustainable solutions or products. Then it's up to them to propose a sustainability roadmap". The current workplace IT tender is even framed as a "request for solution," deliberately creating space for supplier interpretation and innovation. Although security forms a clear boundary ("the main priority within the company is security" (A2)) this does not undermine maturity. Instead, it shows that sustainability is integrated within well-defined organisational constraints. Overall, Organisation A operates at a high maturity level in specifying, combining functional and capability-oriented requirements with structured early engagement.

Supplier **selection** practices position the organisation between medium and high maturity. Selection is not driven by price alone and is supported by formal sustainability controls, such as the supplier code of conduct and EcoVadis assessments. A2 explains that suppliers scoring below average must produce an action plan that is followed up by the Sustainability & Compliance department. At the same time, selection clearly rewards future-oriented capability. A1 describes how suppliers that bring new insights during fieldlabs are "1-0 ahead" later in the selection process. This indicates that innovation and sustainability knowledge directly influence outcomes. Preferred supplier status is conditional on continued development: "If a preferred supplier does not develop the way we want, they price themselves out of the market" (A1). However, selection practices remain differentiated by supplier type. For commodity suppliers, the emphasis is still on delivering "as cheap as possible and with as little hassle as possible" (A1). This demonstrates that while high-maturity selection logic exists, it is not applied consistently across all categories.

In **contracting**, Organisation A clearly reaches a high level of maturity. Contracts are deliberately struc-

tured to support sustainability and lifecycle thinking, rather than short-term control. A2 explains that contract durations have been extended from three to five years "to allow realistic assessments of hardware performance and lifecycle costs." This directly links contract design to sustainability outcomes. Leasing models are chosen strategically, as the organisation "does not want to manage the second life of these assets" itself. A1 describes a broader shift away from detailed prescriptions towards outcome-based collaboration: "This is our need, you come with the solution. The supplier becomes more of a black box". Sustainability is framed as a clear expectation, while responsibility for delivery sits with suppliers. As A1 puts it: "We don't dictate to our suppliers how they should do things, but we make very clear that sustainability is important to us, and we let them show how they will meet expectations." The combination of long-term contracts, shared responsibility, and room for supplier development strongly aligns with high-maturity contracting.

Ordering practices are best characterised as medium maturity. Procurement is highly centralised and standardised. A2 states that the procurement organisation signs "at least 95% of common contracts" for the company and its affiliates, describing the process landscape as "state of the art". This points to strong control and functional integration. However, there is no indication of fully automated, end-to-end digital ordering integrated with supplier systems or predictive demand management. Ordering is therefore well organised and controlled, but not yet strategically orchestrated.

Monitoring shows advanced but uneven maturity. For strategic suppliers, monitoring is relational, recurring, and embedded in long-term governance structures. A1 refers to annual sustainability days, yearly strategic committees, and ongoing discussions on supplier roadmaps and actions. Around ten strategic IT vendors are followed directly by IT top management, indicating a high level of attention. At the same time, A2 explicitly recognises the limits of this approach, stating that "the challenge is to monitor sustainability performance across all vendors." While sustainability clauses are included in contracts, systematic follow-up across the full supplier base remains difficult. Monitoring therefore operates at a high level for key suppliers, but only at a medium level overall.

Control

Sustainability clearly features in daily work and strategic direction, but procurement performance itself is not measured against explicit sustainability or innovation outcomes. A1 expresses concern about the lack of rigour in execution. Given the 2030 ambitions, "you would expect about 25% reduction per year," yet in practice "the execution could be stricter". This indicates that sustainability is valued and discussed, but not yet embedded in formal performance measurement or reward structures within procurement.

Supplier performance measurement is somewhat more advanced and sits between medium and high maturity. Tools such as EcoVadis and CDP are used selectively, and corrective actions are required when suppliers fall short. At the same time, A1 is sceptical about the practical value of supplier reporting, referring to "beautiful reports" that do not always translate clearly into impact on delivered services. Measurement therefore informs dialogue and oversight, but does not yet function consistently as a joint capability development mechanism.

Organisation

Looking at the organisational dimension, procurement at Organisation A operates at the upper end of medium maturity. Formally, A1 describes procurement as "mainly transactional," with long-term supplier relationships owned by vendor management. In practice, however, a more nuanced picture emerges. Procurement is deeply embedded within IT, specialised by domain, and centrally involved in designing tenders as requests for solution. It plays a key role in setting sustainability criteria and shaping lifecycle models. Procurement works closely with IT, sustainability, and compliance functions and has a decisive influence on how sustainability is operationalised.

Leadership support is present, but bounded. There is a clear corporate ambition to be CO_2-neutral by 2030, and sustainability frameworks are defined centrally. At the same time, financial pressure and cybersecurity frequently dominate trade-offs. As A1 notes, "Costs are enormously important," and decisions often come down to "better cybersecurity, or a sustainable approach." Leadership enables sustainability, but does not consistently mandate it when tensions arise.

2.2.2. Organisation I

Innovation ambition

Organisation I's sustainability ambition for workplace-IT procurement sit in Horizon 2. The organisation consistently looks beyond incremental optimisation, without aiming for the fully transformative system redesign associated with Horizon 3. Across interviews, participants express a desire to make procurement

more collaborative, more circular, and more culturally embedded. This signals a forward-looking ambition that builds toward a different future model, but not a radical reinvention of procurement.

Although Horizon-1 elements are present (such as improving emissions accuracy, embedding sustainability in daily procurement, and extending device lifetimes) interviewees frame these as inadequate. I1's statement that "spend-based is not the most accurate method" reflects dissatisfaction with optimisation alone. They seek product-specific data, more reliable LCAs, and sustainability criteria that move beyond "40% price, 40% quality and 20% sustainability." This critique already points beyond the current model.

A central feature of Organisation I's ambition is to influence suppliers and market behaviour. Collective procurement is seen as a way to gain "more influence to make sustainable choices," while SBTi commitments create "more leverage towards suppliers." I2 envisions collaboration where organisation and supplier "strengthen each other," and I4 argues that if companies would "stop reinventing the wheel and combine their demands, supplier responsiveness would improve." These ambitions go beyond internal optimisation, yet remain within the existing system, placing them in Horizon 2.

Interviewees also describe emerging procurement models that challenge current logic. I3 calls for "more streamlining, more integration" across certifications, while I4 promotes pricing structures that incentivise longer device use. Circularity is treated as a new organising principle. I1 notes that "the most sustainable option is to buy nothing," and I2 frames circular procurement as a space to "experiment and learn." These are exploratory, adjacent models rather than disruptive ones. Pilots with Fairphone and Framework further illustrate this Horizon-2 ambition. They are framed as gradual steps, not system change. I1 states that "If the pilot is successful, broader adoption will depend on the autonomous companies within [the company]," while I4 believes "we can find configurations that are just as good" as those of mainstream suppliers.

There is no evidence of Horizon-3 thinking. Interviewees do not aim to redesign the IT procurement system or supply chains. Instead, they acknowledge limits to their influence. I4 notes that leverage only arises "when the government sets requirements," and I2 observes of a major cloud provider: "We can call [them], but I don't think they will pick up." The ambition remains focused on improving procurement as it exists.

Overall, Organisation I pursues a more sustainable, collaborative, and data-driven procurement approach that meaningfully departs from current practice. However, it does not seek radical transformation. The ambition is progressive and future-oriented, but not disruptive. This places Organisation I's workplace-IT procurement ambition clearly in Horizon 2.

LCA-based ambition

Organisation I fits within the medium LCA-based sustainability ambition level for workplace IT procurement. Across both interviews and documentation, climate change potential clearly forms the core of Organisation I's sustainability ambition. The organisation has set explicit scope 3 reduction targets that include "all purchased goods and services," and procurement is directly positioned as a lever to achieve these goals. As one interviewee explains, sustainability is "a fixed part of my daily work," and every procurement trajectory structurally involves sustainability alongside security and legal checks. This climate focus is operationalised through supplier requirements and KPIs, with new contracts increasingly including commitments such as adherence to SBTi targets. The interviewee explicitly links this to client expectations, stating that "if customers demand sustainable supply chains, we must also require this from our own suppliers." This shows that climate ambition is not treated as symbolic, but as a meaningful procurement objective.

Although fossil resource depletion is not named explicitly, energy use and energy sourcing are consistently discussed as part of sustainability ambition, particularly in relation to IT services and cloud suppliers. Suppliers are questioned about whether "the data centres run on green energy," and the CO_2-Performance Ladder is described as a management system not only for emissions reduction but also for energy savings. This framing shows a clear overlap with fossil resource impacts as understood in lifecycle assessment, even if the terminology remains focused on CO_2 and energy.

In addition, the interviews show a strong ambition related to material use, hardware throughput, and lifecycle extension, which closely overlaps with LCA impact categories related to minerals and metals. Organisation I repeatedly frames sustainable workplace IT procurement in terms of reducing the need for new devices. As the interviewee states, "the most sustainable option is to buy nothing." This ambition is reflected in procurement policies aimed at reuse, refurbishment, and internal cascading of laptops, as well as in active exploration of longer device lifespans.

End-of-life impacts are also clearly part of Organisation I's sustainability ambition, although they are addressed in a general and qualitative way rather than through specific environmental impact categories. The circular procurement policy aims to reduce waste and extend product life, and the organisation explicitly recognises the absence of good standards for end-of-life impacts. As the interviewee notes, "it would be very useful" if clearer standards existed, because suppliers often know emissions related to delivery but

"not the full footprint across the lifecycle." This statement reflects awareness of downstream environmental impacts, even if these are not yet articulated in terms of specific LCA indicators such as freshwater ecotoxicity or particulate matter.

Together, the interviews and documentation show that Organisation I's sustainability ambition for workplace IT procurement goes beyond a narrow climate-only focus. The organisation explicitly integrates climate change mitigation into procurement, addresses energy use, actively seeks to reduce material throughput through reuse and lifespan extension, and recognises end-of-life impacts as a relevant sustainability concern. These themes strongly overlap with multiple LCA impact categories, even when they are not named in formal LCA terminology. However, the ambition does not extend to a fully holistic lifecycle framing that would explicitly encompass water-related impacts, particulate matter, or toxicity. For these reasons, Organisation I aligns with the medium LCA-based sustainability ambition level for workplace IT procurement.

Processes

The process dimension presents a mixed picture, combining high-maturity elements with areas that remain at a medium level. The way **specifications** are developed clearly reflects high maturity. Sustainability is not added at a later stage, but built into procurement trajectories from the outset. As I1 puts it, sustainability is "not an add-on but a fixed part of my daily work." Every new tender structurally passes sustainability, security and legal checks. These checks are not treated as formalities, but are used to actively explore "what we can do to make the trajectory more sustainable." Early market engagement plays a clear role in shaping requirements. RFIs are used as an initial filter, with standard sustainability questions that quickly distinguish between suppliers focused purely on low price and those willing to engage more seriously. As a result, specifications are neither purely technical nor brand-driven. They combine functional, technical and sustainability considerations, informed by interaction with the market. This closely aligns with the high-maturity description, in which requirements are shaped by organisational goals and supplier capabilities rather than fixed prescriptions.

Supplier **selection** reinforces this positioning. Selection decisions are based on explicit and formalised criteria, in which sustainability plays a visible role. I1 refers to typical weightings such as "40% price, 40% quality and 20% sustainability," making clear that sustainability is not symbolic but materially affects outcomes. Suppliers who dismiss sustainability are filtered out early, while those who engage meaningfully progress further. I2 confirms that sustainability performance is "part of the selection criteria and weighting" in all larger tenders. Importantly, selection is forward-looking. Suppliers are assessed not only on current performance, but also on their ability to contribute to future sustainability ambitions, for example through SBTi commitments or credible ESG practices. This goes beyond functional integration and reflects a strategic orientation towards supplier capability and long-term alignment.

Contracting presents a more mixed picture. Organisation I clearly uses framework and long-term contracts and includes sustainability clauses and supplier codes of conduct as standard practice. Commitments such as adherence to SBTi or equivalent goals are increasingly embedded in contracts, and sustainability expectations are formalised rather than informal. However, the interviews also reveal limits to how far contracts function as instruments for innovation and shared improvement. Large suppliers often refuse to sign customer-specific codes of conduct, responding instead with "here is our own code; take from it what you need," as I1 explains. While these codes usually align "in nine out of ten cases," this refusal weakens enforceability and ongoing data obligations. Circular ambitions, such as extending device lifespans or redesigning incentive structures, are actively discussed. Yet they are not consistently anchored in contractual risk-sharing or performance-based governance. Contracting therefore sits at the boundary between medium and high maturity. It clearly goes beyond transactional contracting, but does not yet function as a fully orchestrating mechanism for continuous improvement.

Ordering practices, by contrast, strongly support a high-maturity classification. Workplace IT ordering is highly centralised and standardised. Employees do not choose devices freely. Instead, they receive centrally prepared equipment and can "log in and start right away," as I4 describes. Over time, the organisation has deliberately reduced the number of laptop models to a small, standardised portfolio based on actual usage patterns. This simplification increases purchasing power, reduces waste and lowers emissions. Ordering is therefore not only operationally efficient. It is actively used to steer consumption behaviour and sustainability outcomes, which is characteristic of high maturity.

Monitoring is the clearest area in which Organisation I has not yet fully reached high maturity. Monitoring of sustainability performance is recognised as important, and concrete steps are being taken, but practices remain uneven and incomplete. Supplier questionnaires are sent out, but response rates are low. I1 notes that only "about 20%" respond. Historical data on devices, lifespans and emissions is fragmented, leading I2 to observe that they "never systematically monitored these flows" in the past. Pilots such as Fairphone or refurbishment initiatives do include feedback surveys and learning moments. However, these

insights are not yet consistently translated into a continuous, organisation-wide performance feedback loop that systematically informs future procurement decisions. Monitoring therefore reflects learning-oriented functional integration rather than fully continuous, joint performance governance.

Control

The control dimension shows a similar pattern. Internal performance measurement has clearly moved beyond cost savings and compliance. Organisation I has calculated IT-related emissions and explicitly links procurement to scope-3 targets and upcoming CSRD requirements. I2 refers to "the first specific calculation of the emissions related to our IT landscape," which already goes far beyond low-maturity practices. However, workplace IT procurement performance is not yet governed through stable, strategic KPIs that consistently link procurement outcomes to long-term value creation or that are embedded in leadership evaluation.

Supplier performance measurement also extends beyond basic logistics to include ESG performance, certifications and data requests. Yet it remains asymmetrical and fragmented. As I1 notes, LCAs are difficult to compare because suppliers "check themselves," and meaningful performance dialogue mainly takes place with a limited group of suppliers rather than structurally across the entire supplier base.

Organisation

The organisational dimension strongly supports a high-maturity classification. The procurement function acts as a central integrator across semi-autonomous companies, sustainability, legal, security and IT. I1 describes their role as "a spider in the web," coordinating joint procurement so that individual entities do not all negotiate separately. This joint approach increases leverage and is explicitly seen as a way to "make sustainable choices" more effectively. Procurement therefore functions not as a supporting role, but as an enabling and steering one.

Leadership support further reinforces this position. Management allocates budget for dedicated sustainability roles, sustainability targets shape procurement priorities, and procurement advice is taken seriously. As I1 states, "nine out of ten times the joint advice is adopted." Although final decisions formally rest with the board or financial director, procurement clearly has the mandate to weigh sustainability alongside price and quality. This is a defining feature of high maturity.

2.2.3. Organisation T

Innovation ambition

Organisation T's sustainability ambition for workplace-IT procurement fits most clearly within Horizon 2. The organisation consistently articulates ambitions that go beyond incremental optimisation, without pursuing the disruptive, system-redefining orientation of Horizon 3. Throughout the interview, Organisation T describes a forward-leaning ambition to shift procurement practices, influence supplier behaviour, and strengthen sector-wide standards. These ambitions extend beyond maintaining today's model, yet remain anchored in the existing market and technological landscape.

Organisation T shows several Horizon-1 characteristics, including extending device lifetimes and embedding reuse and refurbishment as structural principles. Their three-year minimum device-use policy, grounded in the view that "not purchasing is more sustainable than purchasing," reflects incremental optimisation. However, the interview makes clear that this is not the organisation's end point. Organisation T aims to integrate climate considerations directly into sourcing decisions, stating that "we want to bring climate criteria into RFPs and contracts, that is the next big step." This frames procurement as a driver of change rather than compliance, aligning with Horizon 2.

A central reason for Organisation T's Horizon-2 positioning is its ambition to influence suppliers and the wider market through collective action. Participation in a sector-wide alliance of more than 25 companies reflects the belief that "it is more effective to first jointly apply pressure to suppliers." This approach moves beyond internal optimisation while remaining within the existing supplier ecosystem. The use of shared standards, LCAs, and ISO-aligned expectations, alongside the intention to "move towards standardisation," demonstrates a clear Horizon-2 effort to evolve system practices rather than replace them.

Organisation T's approach to data and transparency further reflects this transitional ambition. The organisation relies on LCAs while recognising that current data quality "makes everyone cautious." Its interest in independently verified LCAs and digital product passports shows an ambition to strengthen information quality. At the same time, Organisation T waits for standards and demand to mature, noting that suppliers "still struggle with delivering this." This reflects adaptation within the system, not disruptive leadership.

The relationship with Fairphone reinforces this positioning. Long-term collaboration and joint development of product passports indicate openness to alternative models. Yet adoption remains "niche externally

due to security, standardisation and user preference." Fairphone is therefore positioned as an adjacent innovation rather than a replacement for the dominant ecosystem.

Finally, Organisation T does not express a Horizon-3 ambition to redesign the IT value chain. The organisation explicitly acknowledges its limited influence over dominant suppliers, who account for 80–90% of procurement volume, prompting the question, "How important is [the company] to them?" Some suppliers "hardly move, even with 25 [sector companies] together." Their strategies focus on improving scoring systems, supplier transparency, sector alignment, and climate criteria within the current procurement model.

Overall, Organisation T seeks to shift workplace-IT procurement towards more circular, data-driven and climate-aligned practices. Its ambition is progressive and influential, yet grounded in existing market structures. The organisation aims to reshape norms and expectations without reinventing the system. For these reasons, Organisation T's sustainability ambition sits within Horizon 2.

LCA-based ambition

Organisation T fits within the medium LCA-based sustainability ambition level for workplace IT procurement.

Across the interviews and reviewed documentation, climate change potential emerges as a central and explicit sustainability ambition for workplace IT procurement. T1 describes climate as "the next big step" in procurement. This ambition is anchored in the organisation's wider net-zero commitment, which applies not only to scope 1 and 2 emissions but also to scope 3, with supplier engagement described as ongoing for almost two years. The use of LCAs is closely connected to this climate ambition. T1 explains that LCAs are mainly used "for the company's own carbon accounting and dialogue with suppliers," and that ISO-certified and independently verified LCAs or EPDs are preferred because they support comparability and credibility. This shows that climate change potential is not treated as a symbolic add-on, but as a concrete lifecycle impact that T aims to integrate into procurement decision-making.

Organisation T's sustainability ambition clearly extends beyond climate and energy. Circularity is described as a long-standing and core theme within the organisation. T1 explains that after an initial focus on labour conditions and later on energy and internal emissions, the organisation shifted "over the past seven years to circularity as a core topic." This focus directly links workplace IT procurement to impacts related to minerals and metals, resource use, and end-of-life treatment. The organisation's internal policy of keeping workplace devices in use for at least three years is explicitly motivated by lifecycle reasoning: "not purchasing is more sustainable than purchasing."

In addition, Organisation T shows explicit awareness of environmental impacts related to hazardous substances and material composition, which overlap with LCA impact categories such as freshwater ecotoxicity. T1 describes early work on product passports, where "suppliers had to provide material data," and explains that tracing recycled content and substances at component level remains difficult. The Supplier Code of Conduct reinforces this ambition by requiring suppliers to identify and manage hazardous chemicals and substances of very high concern and to avoid unsustainable mined minerals. Although these issues are not framed in formal LCA terminology, they clearly reflect an understanding that chemical content and material composition have downstream environmental impacts beyond carbon emissions.

At the same time, the interview also makes clear that Organisation T's LCA-based ambition is not fully comprehensive. While LCAs are requested and discussed, T1 notes that they are "not yet used for competitive scoring" and that data quality issues make comparison difficult. Freshwater eutrophication is not explicitly mentioned as a procurement ambition, and particulate matter appears only indirectly at organisational level rather than as a specific target for workplace IT procurement.

Together, the interview and documentation show that Organisation T explicitly recognises and sets ambition across several lifecycle-related environmental impacts, most notably climate change, energy and fossil resource use, minerals and metals through circularity, and hazardous substances linked to material composition. Sustainability ambition in workplace IT procurement is clearly broader than a single-indicator focus and is coordinated across procurement, sustainability, and supplier engagement. However, this ambition does not yet explicitly span all six LCA impact dimensions, nor does LCA function as a fully holistic strategic steering mechanism. For these reasons, Organisation T aligns most clearly with the medium LCA-based sustainability ambition level for workplace IT procurement.

Processes

Looking at processes, T's maturity is most evident in how sustainability is specified, contracted, and monitored. Specifications extend beyond technical or brand-based requirements. They are deliberately differentiated by supplier category and capability. As T1 explains, "For cloud providers, reuse is of little importance; for refurbished laptop providers, it is a major concern." This demonstrates that requirements are not generic checklists. Instead, they are aligned with where sustainability leverage sits within the value chain.

T also actively works towards standardisation to influence the market. As noted, "otherwise, suppliers would be overwhelmed by various requirements." The use of ISO-verified LCAs, early experimentation with product passports, and long-standing circularity policies further show that sustainability is embedded structurally rather than applied ad hoc. Even though LCAs are "primarily used for the company's own carbon accounting and dialogue with suppliers, not yet for competitive scoring," they still function as strategic tools for learning and governance. Taken together, this places **specification** clearly at a high maturity level.

Supplier **selection** reflects a solid but more bounded level of maturity. Sustainability is formally weighted in tenders. T1 states that "typical RFP scoring allocates 40-50% to price, around 10% to sustainability." This moves well beyond cost-only decision-making and fits squarely within functional integration. However, selection remains largely evaluative rather than relational or capability-building. As T1 explicitly notes, "once the choice has been made, suppliers have little incentive to change it." In addition, supplier concentration in cloud services and smartphones limits strategic choice. These elements indicate that selection is structured and sustainability-aware, but not yet a fully strategic lever.

Contracting is more advanced. Sustainability obligations are translated into concrete contractual requirements, particularly for refurbishment partners. Here, "reporting obligations around reuse and recycling are built into contracts, with monthly discussions about improvements." Contracts are used to steer supplier performance over time. Targets, such as 86% reuse and recycling, are adapted to supplier context. This goes beyond compliance-focused contracting and reflects high-maturity use of contracts as governance instruments for continuous improvement, even where supplier power varies by category.

Ordering practices sit more clearly at medium maturity. Workplace IT ordering is standardised, policy-driven, and traceable. This is supported by a limited portfolio and clear lifecycle rules. As T1 notes, "workplace IT is traceable in their organisation due to limited variety." However, there is no indication that ordering systems are used to dynamically optimise sustainability outcomes or to integrate directly with suppliers for strategic steering. Ordering primarily supports consistency and control rather than innovation or orchestration.

Monitoring is again a strong area. T organises monthly or quarterly supplier governance meetings in which "progress and reporting quality are assessed and discussed." Monitoring focuses not only on outcomes, but also on improvement trajectories, particularly in relation to circularity and reuse. This continuous, dialogue-based approach aligns closely with high-maturity definitions, even though T recognises that influence weakens after contract award.

Control

Turning to control, internal performance measurement reflects medium maturity. T systematically tracks supplier participation in EcoVadis, average scores, reuse and recycling rates, and Scope 3 emissions data driven by CSRD requirements. These measurements are comprehensive and increasingly structured. However, they are not described as being directly linked to strategic rewards or procurement success metrics beyond compliance and reporting. Internal control therefore supports learning and accountability, but does not yet fully anchor procurement performance in strategic sustainability outcomes.

Supplier performance measurement is more advanced. T combines EcoVadis, CDP, LCAs, and category-specific KPIs. These metrics are actively used in recurring discussions with suppliers. As T1 puts it, "we steer on correct recycling and we stimulate reuse." Performance data is shared, discussed, and used to drive improvement, rather than remaining an internal control mechanism. This places supplier performance measurement firmly at a high maturity level.

Organisation

The organisational dimension explains why T's overall maturity does not fully consolidate at the high end. Procurement works cross-functionally with sustainability staff and business units. It clearly operates beyond an administrative role. As T1 explains, "Central procurement supports this, while sustainability staff advise, define criteria and join major tenders." However, key decisions on product selection and portfolio composition largely remain with the business. Procurement's role is therefore more enabling than orchestrating.

Leadership support follows a similar pattern. Net-zero targets, CSRD alignment, and supplier engagement are clearly legitimised. At the same time, sustainability competes with functionality, convenience, and market constraints. The interview does not indicate that procurement holds a broad mandate to override these trade-offs or to independently define the workplace IT offering.

2.2.4. Organisation O

Innovation ambition

Organisation O's innovation ambition for workplace-IT procurement aligns most clearly with Horizon 1. The organisation aims to strengthen and refine its existing procurement system, rather than explore adjacent models or imagine a fundamentally different future. Its ambition focuses on embedding sustainability more firmly into current policies, decision criteria and supplier interactions. There is no indication of a shift towards new procurement logics. Sustainability is operationalised through structured tools, certifications, due-diligence procedures and monitored thresholds. These mechanisms define how procurement is expected to function. This points to an ambition to optimise what already exists by improving compliance, tightening oversight and keeping workplace-IT choices within established routines.

Throughout the interview, priorities remain centred on measurable and operational improvements. These include extending device lifetimes, selecting more sustainable tools and certifications, and refining supplier assessments. Together, these ambitions reinforce a model in which the organisation seeks to become more accurate, more consistent and more accountable within its existing procurement structures. Even when looking ahead, the organisation remains within Horizon-1 logic. The focus on better product-focused certifications and more detailed supplier evaluations reflects a desire to strengthen the current system, not to move beyond it. Likewise, recognising the importance of supplier maturity does not lead to ambitions to reshape relationships or develop alternative models. Instead, it reinforces the need to work more effectively within existing supplier dynamics.

The interview does not point to aspirations associated with Horizon 2. There is no emphasis on experimenting with new procurement models, testing circular delivery approaches or exploring service-based alternatives. Nor does the organisation articulate Horizon-3 ambitions, such as reimagining the value chain, developing new hardware paradigms or altering its position in the global IT ecosystem. Instead, the focus remains on improving the current model through better monitoring cycles, sharper requirements and stronger encouragement for suppliers to meet established expectations.

Together, these perspectives indicate an ambition that is steady and improvement-oriented, and firmly grounded in current procurement logic. Organisation O seeks to improve the sustainability performance of its workplace IT through optimisation, compliance and more structured engagement. It does not pursue adjacent or transformative innovation. For these reasons, its ambition fits within Horizon 1.

LCA-based ambition

Organisation O fits within the low LCA-based sustainability ambition level for workplace IT procurement. The documentation shows that sustainability is structurally included in procurement expectations, but largely through minimum requirements and supplier-level qualification mechanisms. The Supplier Code of Conduct states that for every sourcing project a defined set of baseline requirements applies and that sustainability forms part of how suppliers are evaluated during selection. This framing demonstrates that sustainability is treated as an important procurement condition, but it does not translate those themes into explicit lifecycle impact categories for workplace IT. The Sustainability Statement reinforces this compliance framing by positioning sustainability through adherence to policies and exclusion/acceptance requirements, stating that by contractually incorporating the statement the supplier confirms compliance with the specified exclusion and acceptance criteria.

When looking at LCA-based impact awareness, climate change potential is the clearest and most explicitly recognised environmental dimension. The Sustainability Statement includes a dedicated Climate theme, requiring that a supplier provides information on its climate-related performance when this is applicable. The interview aligns with this by describing that the organisation knows the CO_2 footprint of devices and distinguishes between production and usage phases, and that reporting highlights opportunities for environmental savings. Taken together, this indicates that Organisation O's ambition explicitly covers climate-related impacts and also reflects a lifecycle awareness in the sense that impacts are not treated as purely use-phase.

Beyond climate, the documentation does include some environment-related exclusions that touch on hazardous substances, such as the explicit statement that the organisation does not accept activities involving PCBs, POPs, or ozone-depleting substances. This shows that certain substance-related risks are taken seriously at policy level. The interview summary adds that future themes include reducing the presence of heavy metals in hardware and paying attention to resource use impacts of new technologies. Even so, these points appear as emerging or directional considerations rather than as a set of explicit procurement ambitions spanning several LCA categories at the same time. Critically, neither the documentation nor the interviewee articulates explicit ambition for freshwater eutrophication, particulate matter formation, or freshwater ecotoxicity as lifecycle impact categories for workplace IT procurement, and the procurement

requirements that are documented remain largely structured around supplier-wide ratings, policy adherence and minimum thresholds rather than targeted lifecycle impact steering.

Overall, the combined evidence shows an organisation whose sustainability ambition is clearly present in procurement and supplier engagement, with explicit attention to climate-related performance and some safeguards related to hazardous substances. At the same time, it does not explicitly broaden its procurement ambition to cover three or four, let alone five or six, distinct LCA impact categories for workplace IT. Because the ambition that is clearly articulated remains focused on a narrow set of environmental dimensions (most consistently climate-related impacts) Organisation O aligns best with the low LCA-based sustainability ambition level.

Processes

Across the procurement processes, maturity sits largely at a medium level. **Specifications** go beyond purely technical requirements because sustainability, certifications and due-diligence topics are structurally included. Sustainability requirements have been added to RFPs, where suppliers are expected to provide information on their environmental impact, relevant certifications and broader due-diligence topics. At the same time, specification decisions are strongly shaped by end-users and product owners, not procurement. This user-driven approach aligns with medium maturity: procurement incorporates sustainability but does not define the functional or strategic direction of workplace IT.

Supplier **selection** shows similar characteristics. The organisation uses structured questionnaires, checks certifications such as EcoVadis, and compares responses through a weighted matrix. For example, responses are assessed through a matrix that weighs different criteria and suppliers are asked to provide sustainability reports and ratings or certifications from recognised schemes. These practices indicate a level of formalisation associated with medium maturity, but the overall selection approach still depends heavily on what the market can offer. This reliance suggests that procurement is not yet selecting suppliers based on strategic fit or long-term innovation potential in a high-maturity sense.

Contracting and **ordering** remain at the medium or even low end of maturity. While suppliers are expected to accept a sustainability statement, the interview does not indicate the presence of long-term performance or innovation commitments in contracts. Instead, contracting seems focused on compliance and documentation, as exceptions are reviewed and documented through an established deviation process. Ordering also does not show signs of advanced integration or central control: it is described mainly in terms of rules around device replacement such as new phones are issued only when the current device no longer meets requirements. This suggests policy-driven decisions rather than a fully integrated, procurement-led ordering system typical of higher maturity.

Monitoring shows more systematic practice, but it too remains within medium maturity. The organisation has structured review cycles, with operational meetings monthly, tactical meetings quarterly and strategic discussions twice a year, and suppliers who fall short of expectations are engaged in improvement discussions. However, these processes do not appear to feed directly into strategic sourcing decisions or long-term capability development. Instead, they focus on performance correction and maintaining relationships. As the interviewee notes, when performance drops, the organisation first discusses the underlying causes with them and identifies possible improvements, which is characteristic of medium maturity rather than a high-maturity model where monitoring drives proactive, future-oriented procurement strategies.

Control

Control mechanisms also reflect a low-medium maturity level. Device-level data is used to monitor CO_2 emissions and identify optimisation opportunities, and hardware performance and defects are monitored closely through IT systems. Yet the interviewee repeatedly highlights limitations in data depth and structure, noting that more detailed data would support better choices across technologies and hardware types.

Supplier performance is measured, but this remains mostly one-directional and focused on meeting minimum requirements rather than jointly developing capabilities. For example, suppliers who fail to meet sustainability thresholds are asked to explain and improve, but exclusion is rare unless strict criteria such as child labour are breached. This shows a controlled but not strategically integrated performance system and is therefore assessed as low maturity.

Organisation

Finally, from an organisational perspective, procurement in Organisation O is mostly an administrative function. Sustainability policy is developed centrally and translated into IT procurement processes, tools, and decision criteria. The interviewee acknowledges limitations, noting that more structured and detailed supplier evaluations are also an improvement area, as time constraints prevent all teams from conducting them with the same level of depth. This uneven embedding suggests that procurement has not yet fully become a strategically embedded function across the organisation.

Leadership support appears sufficient to mandate sustainability compliance and enforce policy, but not explicitly oriented towards using procurement as a strategic innovation lever. The organisation remains "highly dependent on suppliers for achieving sustainability goals in workplace IT," indicating that procurement largely responds to market offerings rather than actively reshaping them. This points to leadership support for functional integration rather than strategic orchestration.

2.2.5. Organisation B

Innovation ambition

Organisation B's innovation ambition for sustainable workplace IT procurement fits within Horizon 3, because the organisation consistently articulates a long-term, system-level vision that goes beyond improving existing practices and instead challenges how workplace IT is organised, governed, and made sustainable. Horizon 3 allows for ambitions that are aspirational and not yet fully achievable under current market conditions. What matters here is the future state the organisation is aiming for, not whether that state can already be delivered today.

This Horizon 3 ambition is most clearly visible in how Organisation B frames circularity as an end state rather than an incremental improvement. B1 explains that "circular targets for IT (50% by 2027, 80% by 2030 and full circularity by 2050) were integrated into the IT category guidelines." The ambition of "full circularity by 2050" implies a fundamentally different workplace IT system. In a mature and highly standardised IT market, such an ambition cannot be achieved through optimisation alone. It points toward a future in which hardware design, material flows, supplier responsibility, and procurement logic are structurally reconfigured, which is characteristic of Horizon 3.

Organisation B's Horizon 3 ambition is also reflected in how it defines responsibility across the IT value chain. B1 stresses that external frameworks such as the UN Guiding Principles and OECD guidelines are not optional, stating that "they are compelling." Responsibility is framed as extending beyond first-tier suppliers, even when this creates tension with dominant vendors. When a supplier refuses to share sustainability data, B1 responds: "I cannot agree to an arrangement in which you refuse that, because if something happens, I must be able to question you." At the same time, B1 openly acknowledges that current transparency mechanisms are insufficient, describing hardware supply-chain documentation as a "paper reality." Rather than accepting these limits, B1 expresses an ambition to explore fundamentally different assurance models, which indicates a desire to move beyond existing system boundaries.

B2 reinforces this Horizon 3 positioning by explicitly rejecting narrow or convenient sustainability definitions. Reflecting on climate accounting choices, B2 states: "You could even move towards greenwashing if you limit the scope and only use market-based accounting. Then you could say in 2030: well, we are green. I personally don't believe that." Instead, IT adopts a longer-term net-zero ambition for 2050, signalling that sustainability success should be defined by long-term systemic integrity rather than short-term achievement.

The ambition to rethink the underlying structure of workplace IT is further evident in B2's discussion of digital sovereignty. Dependence on hyperscalers is treated as a structural risk rather than a given. Alternatives such as on-premise solutions and GPT-NL are framed as ways of "bringing GenAI to the data instead of bringing the data to GenAI." This reflects an ambition to reshape digital infrastructures themselves, not merely to improve their efficiency. B2 also challenges dominant assumptions about cloud sustainability, noting that "FinOps and GreenOps do not always run in parallel. It can be cheaper, but not more sustainable." Such statements show a willingness to question prevailing IT paradigms, which aligns closely with Horizon 3 thinking.

Both interviews recognise that these ambitions are constrained by current market power and technological lock-ins. B1 notes that some global vendors "will never sign third-party conditions," while B2 describes current data practices as "putting band-aids on it." However, this gap between ambition and feasibility is precisely what defines Horizon 3 in the context of workplace IT. Organisation B articulates a future that existing systems cannot yet fully support, while still treating that future as the direction of travel.

Overall, Organisation B's innovation ambition is not centred on incremental optimisation or adjacent experimentation. Instead, it defines a long-term vision for workplace IT procurement that aims for full circularity, deep supply-chain accountability, and sovereign digital infrastructures. This clear focus on systemic transformation places Organisation B within Horizon 3 for sustainability innovation ambition.

LCA-based ambition

Organisation B fits within the high LCA-based sustainability ambition level for workplace IT procurement. Climate change potential is a central and clearly articulated ambition, but it is not treated in isolation. At organisational level, sustainability efforts are said to focus on climate, and nature, encompassing topics

of biodiversity, pollution and circular economy, with concrete targets such as aligning operations with a net-zero trajectory and reducing emissions across scopes. Within IT, this ambition is deliberately extended. As B2 explains, IT chose to include "full scope 3 emissions and measure them location-based," explicitly rejecting a narrower approach that would allow early claims of success. This reflects a clear awareness of value-chain emissions and lifecycle climate impacts, and positions climate ambition as a substantive steering theme for IT and procurement.

At the same time, Organisation B's ambition clearly extends beyond climate and energy. Both interviews emphasise that the largest environmental impacts of workplace IT are located upstream, particularly in hardware production and supply chains. B1 explicitly identifies IT hardware as a high-risk category and refers to the complexity of material sourcing, pointing for example to "cobalt in laptop batteries" and describing supply-chain transparency as a persistent challenge. This focus is reflected in the way circularity is embedded in procurement ambition. Circular targets for IT are explicitly defined and time-bound, with "50% by 2027, 80% by 2030 and full circularity by 2050" integrated into IT category guidelines. These targets are not presented as abstract aspirations, but as reference points that "become discussion points in renewals and new contracts," enabling suppliers to understand how expectations evolve over time.

Water use, pollution, and biodiversity impacts are also explicitly recognised as relevant, although the interviews are nuanced about their current level of maturity within IT. B1 describes how procurement guidelines include concrete questions such as "Do you have insight into your water consumption?" and explains that biodiversity questions are deliberately included even where they are less directly applicable, "to show the thought process and keep the topic on the agenda." At organisational level, suppliers are expected to disclose data on "greenhouse gas emissions, energy consumption, water usage, and waste generation," and to identify and mitigate negative impacts related to pollution and ecosystems. While freshwater eutrophication, particulate matter, and freshwater ecotoxicity are not named explicitly, these themes clearly overlap with the organisation's stated focus on pollution, biodiversity, and environmental risk across supply chains.

Together, the interviews and documentation show that Organisation B explicitly recognises and sets ambition across a wide range of lifecycle-related environmental impacts relevant to workplace IT, including climate change, energy and fossil resource use, materials and circularity, water use, pollution, and biodiversity-related supply-chain effects. Although these impacts are not always expressed in strict LCA terms, the overlap with LCA impact categories is substantial and intentional. For these reasons, Organisation B aligns with the high LCA-based sustainability ambition level.

Processes

Evaluating processes, Organisation B's approach to **specifying** workplace IT requirements clearly exceeds functional integration and aligns with high maturity. Sustainability requirements are not framed as fixed technical prescriptions but as capability-oriented expectations that differentiate between levels of supplier performance. B1 describes how category-specific sustainable procurement guidelines were developed to give buyers "concrete, usable questions rather than abstract policy language," explicitly designed so they can be "literally copy-pasted" into tenders and renewal negotiations. The use of a tiered structure (Basic, Advanced, and Front-runner) shows that specifications are meant to structure learning and improvement rather than simple compliance. As B1 explains, "The purpose is not to exclude suppliers but to help buyers understand what is good, average or lagging in the market, and to enable conversations about improvement." This reflects a high-maturity logic in which specifications integrate technical, functional, and supplier capability criteria and are informed by ongoing market interaction rather than static templates.

Supplier **selection**, by contrast, remains closer to medium maturity, largely due to structural market conditions rather than organisational intent. Both interviews make clear that workplace IT procurement often involves renewals with a very limited supplier base, meaning that competitive selection plays a smaller role. Sustainability criteria are applied, but selection is not consistently used as a lever to choose between competing innovation trajectories. This does not undermine the overall maturity positioning, but it does indicate that selection is not the primary strategic instrument in this context.

Contracting, however, strongly supports a high-maturity classification. Sustainability is embedded in long-term IT contracts through explicit reporting obligations and ongoing governance during contract execution. B1 describes how suppliers are required to report every six months on the expectations set out in the supplier code of conduct and how sustainability requirements are actively negotiated during renewals. When suppliers resist, procurement does not retreat to formal compliance but asserts its governance role. B1 gives a concrete example: "I cannot agree to an arrangement in which you refuse that, because if something happens, I must be able to question you." This shows that contracts are used as living instruments to manage risk, ensure transparency, and support improvement, rather than as static legal safeguards.

Ordering practices are more procedural and therefore align with medium maturity. Ordering is centralised and standardised, and eligibility rules such as purchasing only TCO Certified devices are firmly in

place. However, the interviews do not indicate fully integrated digital ordering systems that link forecasting, automation, and supplier systems in real time. Ordering is controlled and consistent, but not a strategic innovation lever in itself.

Monitoring is one of the clearest indicators of high maturity in Organisation B. Monitoring is continuous, data-driven, and explicitly linked to future procurement decisions. Supplier sustainability data is structurally captured through Hellios, and hardware footprint data is scaled across the entire device estate using detailed supplier-specific information. B1 describes joint sustainability calls with large IT suppliers every two to three months, covering topics such as human rights, diversity, and CSRD developments. B2 further explains how embodied carbon data is used to gradually tighten procurement criteria over time: "By using embodied carbon data from suppliers, procurement criteria can gradually be tightened." Monitoring is therefore not reactive or symbolic, but an active steering mechanism that feeds directly back into specifying and contracting.

Control

The control dimension reinforces this high-maturity positioning. Internal performance measurement goes beyond price or compliance and is closely tied to sustainability outcomes in the IT domain. B2 explains that IT deliberately chose to go beyond corporate climate targets by including full scope 3 emissions and adopting a location-based approach, even though this leads to higher reported emissions and a longer pathway. This choice is explicitly framed as a way to avoid superficial success: "You could even move towards greenwashing if you limit the scope… Then you could say in 2030: well, we are green. I personally don't believe that." Performance data on energy use, carbon, and circularity is used to steer decisions and build internal credibility, reflecting a strategic linkage between measurement and organisational goals.

Supplier performance measurement also operates at a high-maturity level. Suppliers are assessed against predefined sustainability expectations, but evaluation is embedded in ongoing dialogue rather than one-sided scoring. B1 repeatedly stresses the importance of insight and learning, explaining that if a supplier lacks transparency, the response is not immediate sanction but a clear expectation for progress: "Let's talk again in six months and then I expect you to have this insight." This approach supports mutual capability development and reflects relational governance rather than transactional control.

Organisation

Finally, the organisational dimension strongly supports a high-maturity classification. Procurement at Organisation B is centrally organised and has a dedicated sustainability function embedded within it. This function owns due diligence, risk frameworks, supplier expectations, and remedy mechanisms, and is not positioned as an external advisory role. Its creation was directly initiated by the Chief Procurement Officer, who explicitly recognised that sustainability needed to be structurally anchored in procurement. As B1 recounts, the CPO stated: "We need to set up a sustainability department within Procurement."

Leadership support extends beyond formal approval. IT sustainability ambitions that go beyond corporate targets have been endorsed by senior sustainability leadership, and long-term circularity targets are integrated into category strategies. Even when internal motivation fluctuates due to political or societal debates, the mandate remains clear. As B1 puts it, sustainability is "not optional," and procurement is expected to act accordingly.

2.2.6. Organisation M

Innovation ambition

Organisation M's sustainability ambition for workplace-IT procurement aligns most clearly with Horizon 3, because they reveal aspirations that go far beyond improving, or even gradually evolving, the current model. The interviewees consistently describe futures in which the very foundations of workplace IT are reorganised: the types of devices employees use, the structure of supplier ecosystems, the expectations placed on vendors, and even the cultural norms within the organisation. Their remarks do not gesture towards adjacent innovations or transitional models. Instead, they articulate ambitions that would require a fundamental redesign of the system in which workplace IT procurement operates.

M1 explains that "our end goal is a one-device policy," a vision echoed and further elaborated by M2, who imagines a workplace in which modern smartphones are powerful enough to replace laptops entirely and describes the laptop as a heavy brick people carry only because the market dictates it. M3 acknowledges that achieving such a model would demand innovation from the supplier landscape and even coalitions at national or European scale, noting that "larger coalitions… would be necessary" to move the market. Together, these statements illustrate an ambition to restructure (not just optimise) the dominant device paradigm. Rather than refining current laptop-centric provisioning, M imagines a future in which the core building block of workplace IT changes altogether. This kind of paradigm shift belongs in Horizon 3 thinking.

Their approach to market shaping reinforces this Horizon-3 orientation. Rather than adapting procurement to what suppliers can currently deliver, Organisation M repeatedly sets expectations that exceed today's market capabilities. M3 describes how the organisation demanded full material transparency during a laptop mini-competition, even though "the market could not yet provide such information," and how circularity criteria were included even when "all suppliers scored very low." These efforts are not framed as mistakes or overreach but as purposeful attempts to trigger development, with M3 explaining that such criteria help "plant a seed." M1 similarly observes that "circular ICT does not really exist yet, despite claims," yet the organisation continues to press suppliers to move in that direction. These examples illustrate an ambition to reshape the underlying conditions of the market: to push suppliers into entirely new practices rather than incentivise incremental improvement. This is a defining feature of Horizon 3, where organisations aspire not to adjust the system but to transform it.

Together, the interviews outline a coherent and forward-looking ambition that reaches well beyond transitional or adjacent innovations. Organisation M imagines a fundamentally different workplace-IT system: one in which laptops may disappear, modular and repairable devices become the norm, suppliers operate with radically higher transparency, and internal cultures shift toward minimalist, need-driven device use. Their statements consistently point toward system-level redesign rather than improvement of the current model. For these reasons, Organisation M's sustainability ambition for workplace-IT procurement fits most clearly within Horizon 3.

LCA-based ambition

Organisation M fits within the high LCA-based sustainability ambition level for workplace IT procurement. Both the interviews and the documentation show that M consistently understands the environmental impact of workplace IT as a lifecycle issue rather than a narrow use-phase problem. Climate change potential is a central and clearly articulated ambition. M3 states that "scope 1 and 2 emissions must be zero and scope 3 must fall by 40% compared to 2019," indicating that the organisation explicitly includes value-chain impacts in its sustainability goals. This ambition is reflected in procurement thinking, where sustainability is treated as a substantive steering theme. As M1 explains, "The more KPIs they choose with a good plan, the higher the score," while superficial answers "give zero points." This shows that climate ambition is positioned as a meaningful driver rather than a symbolic requirement. At the same time, M's ambition clearly extends beyond climate and energy. Both interviews and reviewed documentation emphasise that the largest environmental impacts of workplace IT sit in the production phase. M1 explicitly states that "the footprint lies mainly in the production phase," and adds that "the real sustainability gains lie in product design, longevity, reusability, and materials recovery." This framing demonstrates awareness of impacts related to minerals, materials, and manufacturing processes. The ambition to move towards Fairphone-only devices, where "lifespan is the most important motive," and broader goals such as reducing device numbers and working towards a one-device workplace, further reflect this lifecycle-oriented, resource-focused perspective. The reviewed documentation reinforces this broad ambition by explicitly addressing critical raw materials, water use, harmful substances, and biodiversity impacts in the supply chain. These themes show that M's sustainability ambition spans much more than carbon emissions alone. Although these topics are not always framed using formal LCA terminology, they clearly overlap with LCA impact categories related to minerals and metals, freshwater impacts, particulate matter, and ecotoxicity. The inclusion of biodiversity impacts further underlines that M's ambition extends to upstream and supply-chain effects of IT production.

The interviews also show that M is realistic and critical about current market limitations. M1 notes that "circular ICT does not really exist yet, despite claims," and describes modular laptops as "promising but not yet as far as Fairphone." These statements do not signal low ambition, but rather an informed understanding of the gap between desired lifecycle outcomes and current market realities. This critical awareness supports the interpretation that M's ambition is systemic and value-chain oriented, even if full alignment with all lifecycle impacts is not yet achievable.

Together, the interviews and reviewed documentation show that Organisation M explicitly recognises and sets ambition across a wide range of lifecycle-related environmental impacts, including climate change, energy and fossil resource use, critical raw materials, water and harmful substances, and broader supply-chain effects such as biodiversity. While these impacts are not always expressed in strict LCA terms, the overlap is substantial and intentional. Sustainability ambition is framed as a lifecycle-spanning, strategic concern that should guide workplace IT procurement and supplier engagement. For these reasons, Organisation M aligns with the high LCA-based sustainability ambition level.

Processes

Looking at procurement processes, Organisation M operates well beyond administrative or purely functional procurement. In the way requirements are **specified**, sustainability is not treated as a checklist or a fixed technical demand. Instead, suppliers are explicitly asked to translate sustainability ambitions into measurable and improvable performance. M1 explains that suppliers must choose relevant sustainability KPIs and submit improvement plans, noting that "the more KPIs they choose with a good plan, the higher the score," while superficial answers receive "zero points." This approach encourages suppliers to apply their own knowledge and capabilities. It also creates room for learning during the tender process itself. M3 confirms this learning orientation by explaining that suppliers are assessed on "how they will measure energy and CO_2 as accurately and transparently as possible" and on the improvements they will realise during the contract. This includes how they will adjust if goals are not met. These practices show that specification is used as a strategic instrument to mobilise market knowledge. This clearly aligns with high procurement maturity rather than functional integration alone.

Supplier **selection** follows the same forward-looking logic. Although price and functional criteria remain part of formal tender structures, interviewees consistently describe selection as driven by future capability and improvement potential. It is not driven by lowest cost or simple compliance. M2 captures this clearly by stating, "I prefer to buy from the one I expect can deliver best tomorrow." This orientation is reinforced by the way sustainability commitments are evaluated during the award phase. Attention is paid to whether suppliers can realistically develop new monitoring systems or improve performance over time. Selection decisions therefore integrate strategic fit and learning capacity. This corresponds to high maturity procurement behaviour.

Contracting at M also reflects a strategic and relational orientation. Long-term contracts are explicitly valued because they create time and stability for cooperation and innovation. As M3 explains, long-term contracts matter because "you have time to find each other in the cooperation," and suppliers can justify internal changes due to longer payback periods. M2 reinforces this view by describing contracts as "marriage conditions" that stay in the cupboard unless problems truly cannot be resolved. This signals that contracts function primarily as a governance framework rather than a sanctioning tool. While M1 notes that sustainability requirements are not yet consistently embedded in standard SLAs, this does not result in passive contract management. Instead, sustainability commitments made during tendering are actively guarded during execution. M3 describes how the team intervenes when commitments are delayed, emphasising that "we try to assess what was reasonable," rather than defaulting to penalties. This combination of long-term contracting, relational governance, and active stewardship is characteristic of high maturity procurement.

Ordering practices are more standardised than orchestrated, but they still demonstrate clear procurement control. Within existing contracts, M can make direct sustainability-driven choices, such as limiting device options or specifying Fairphones. M3 explains that "we can say directly: 'we want, for example, a Fairphone,'" as long as it fits within the contract scope. While there is no evidence of fully integrated digital ordering systems or advanced automation, ordering is clearly not ad hoc. It remains under procurement oversight. This places ordering at a solid medium maturity level within an otherwise high-maturity process landscape.

Monitoring is one of the strongest indicators of high maturity at M. Sustainability performance is not only requested upfront but also followed throughout the contract. M1 notes that suppliers must submit ongoing data during the contract period. M2 describes a governance structure with operational, tactical, and strategic meetings, complemented by a dedicated sustainability meeting chaired by the sustainability lead. In these settings, progress is tracked jointly and issues are addressed collaboratively. The relational nature of this monitoring is well captured by M2's statement: "If I fail, [the supplier] fails; if [the supplier] fails, I fail." This shows that monitoring is not reactive or punitive. Instead, it is embedded in continuous improvement and shared responsibility, which clearly aligns with high maturity.

Control

Evaluating the control dimension, internal performance measurement shows a more mixed picture. M has defined sustainability goals and KPIs, and sustainability objectives are increasingly visible within procurement practice. At the same time, interviewees acknowledge limitations in consolidated insight and strategic linkage, particularly regarding scope-3 emissions. M3 states explicitly that "we actually do not know exactly where we currently stand on scope 3," because earlier estimations were too aggregated. M1 also notes that sustainability momentum remains partly bottom-up and uneven across the IT organisation. Internal performance measurement therefore fits a medium maturity level. Importantly, it supports high-maturity procurement behaviour rather than constraining it.

Supplier performance measurement, by contrast, clearly operates at a high maturity level. Performance

is assessed jointly, with an emphasis on improvement potential and realism rather than rigid compliance. When suppliers fall behind, the focus is on understanding causes and supporting delivery. It is not on assigning blame. This is evident when M3 describes stepping in to interpret sustainability commitments together with contract managers. It is also reflected in M2's view that blaming suppliers is "poor management." These practices align closely with high maturity supplier performance governance.

Organisation

From an organisational perspective, procurement at M functions as a strategic and cross-functional actor. Large tenders are handled by multidisciplinary teams that include business, technical, legal, and sustainability expertise. M1 explains that sustainability advisors are structurally involved. M3 describes how procurement actively shapes markets by translating broad standards such as CSRD into concrete, tailored requirements that suppliers can respond to. This demonstrates that procurement is not merely processing orders. Instead, it actively designs and steers value creation, which is characteristic of high maturity.

Leadership support, however, remains uneven. While sustainability ambitions exist at organisational level and procurement is enabled to act in many cases, gaps remain. M1 recalls that during a management meeting, colleagues realised that "sustainability was not in" the IT strategy, and adds that "the rest of the IT organisation is not there yet." This indicates that procurement's high-maturity practice is not always matched by consistent top-down alignment. Leadership support therefore aligns more closely with medium maturity. Even so, it does not prevent procurement from operating strategically in practice.

2.2.7. Organisation H

Innovation ambition

Organisation H's sustainability ambition for workplace-IT procurement aligns with Horizon 1. Across all interviews, participants describe an ambition centred on optimising existing practices rather than reshaping future models or experimenting with fundamentally different approaches. Sustainability is expected to fit within current management systems, operational routines, and technical requirements. Feasibility, stability, and manageability consistently outweigh exploratory or transformative goals. More ambitious ideas are mentioned only to be ruled out as beyond what the organisation aims or feels able to pursue.

Interviewees repeatedly stress that sustainability cannot outweigh other criteria. H2 states that sustainability "does not get priority" and remains secondary to "security, privacy, architecture and management." Hardware that increases management effort "cannot be chosen even if more sustainable," and procurement "cannot say something must get higher priority." Alternatives are quickly discarded if they do not align with existing processes. As H2 explains, the Fairphone option "did not suit their management system or intake-and-issue workflows," and therefore disappeared.

Further evidence of Horizon-1 ambition appears in the strong focus on logistical efficiency, lifetime extension, and recycling. These measures improve current operations without altering procurement logic. H2 notes that devices now "remain in use longer," describing this as "practical, honestly also driven by budget cuts." H3 highlights packaging reuse, consolidated weekly deliveries, and efficient return flows to ensure "not too much freight traffic back and forth." These ambitions reduce waste and improve efficiency, but do not explore alternative delivery models or new supplier relationships.

When more radical possibilities are mentioned, they are immediately framed as unrealistic. H1 jokes that the organisation would never buy "a €10,000 fully sustainable laptop," concluding, "we are not going to do it… then we will just pollute the planet a bit." H2 sees future developments driven by "budget cuts and security," with sustainability needing to "ride along." The reliance on established compliance mechanisms further reinforces this Horizon-1 positioning. H1 points out that EU energy labels already steer the market and that stricter requirements would "drastically increase cost." H2 explains that sustainability typically receives "10 points" in award criteria, that most vendors meet minimum standards, and that verification after award is limited. Certifications are described as "a sheet of paper," reinforcing sustainability as a standardised, manageable requirement rather than an innovation domain.

Overall, the interviews present a consistent picture. Organisation H values sustainability only within the boundaries of what is known, controllable, and operationally safe. Its ambition focuses on optimising logistics, extending device lifespans, and embedding basic sustainability criteria in tenders. Ideas requiring new capabilities, partnerships, or shifts in procurement logic are considered unworkable or out of scope. There is no evidence of Horizon-2 ambitions or Horizon-3 transformation. Organisation H's sustainability ambition for workplace-IT procurement therefore clearly fits within Horizon 1.

LCA-based ambition

Organisation H fits within the low LCA-based sustainability ambition level for workplace IT procurement. Across the interviews, climate change and energy use emerge as the most visible and consistently artic-

ulated environmental concerns. Organisation-wide ambitions such as becoming CO_2-neutral and "Paris Proof" by 2030 form an important backdrop, and these ambitions shape how sustainability is discussed in procurement. Energy efficiency is treated as a given market requirement rather than as an area for active differentiation. As H1 explains, "EU legislation already steers the market," noting that new energy labels continuously raise the baseline, so the organisation largely follows regulatory standards instead of setting its own more expansive energy-related goals. In software and cloud procurement, this logic is echoed when H1 states that European data centres are required because "if the datacentre is in Europe, stricter energy norms apply." These statements show clear awareness of climate change potential and energy use as relevant impact categories, but they also illustrate that ambition is framed in terms of meeting established norms rather than pushing beyond them.

Beyond climate and energy, the organisation's sustainability ambition touches on end-of-life handling and device lifespan, but without explicitly framing these issues as part of a broader lifecycle or resource-impact perspective. Several interviewees emphasise that devices are kept in use longer and that recycling is mandatory. H2 describes the extension of replacement cycles as "practical, honestly also driven by budget cuts," while acknowledging that it is "also beneficial" from a sustainability perspective.

There is some awareness of upstream production issues, particularly in relation to ethical and social risks in supply chains, but these concerns are not translated into explicit environmental LCA ambitions. H1 values supplier transparency around issues such as "modern slavery, exploitation, cobalt sourcing, and battery production," and describes HP as "as transparent as possible" in these areas. At the same time, the interviews consistently stress the limits of influence. This framing positions upstream impacts as risks to be acknowledged rather than as environmental impact categories that procurement actively seeks to address or steer.

Notably absent from the interviews and documents is any explicit recognition of other LCA-based impact categories such as freshwater eutrophication, freshwater ecotoxicity, or particulate matter emissions from mining and manufacturing. Sustainability requirements in tenders are described mainly in terms of "sustainable disposal and transport" (H3), reduced packaging, and waste separation (H2). These aspects align with basic lifecycle endpoints but do not reflect awareness of the broader environmental burdens associated with production processes. The absence of these impact categories indicates that the organisation does not conceptualise workplace IT sustainability as a multi-dimensional lifecycle challenge, but rather as a set of manageable, visible issues.

In summary, the interviews and documentation show that Organisation H's sustainability ambition for workplace IT procurement is concentrated on one or two lifecycle dimensions, most notably climate change and energy use, supplemented by basic end-of-life and reuse considerations. Other lifecycle impact categories are not explicitly recognised, and sustainability is framed as a pragmatic, compliance-oriented concern rather than as a holistic lifecycle ambition. For these reasons, Organisation H aligns most clearly with the low LCA-based sustainability ambition level.

Processes

For procurement processes, Organisation H shows varying maturity levels across the different phases. In the **specifying** phase, maturity can be described as medium. Sustainability is structurally included, which moves the organisation beyond purely administrative procurement. Sustainability requirements and open questions are embedded in tenders, and market consultations are used to test feasibility. H1 explains that suppliers were explicitly asked: "How will you shape sustainability in this contract?", and were required to submit analyses such as a SWOT. This immediately revealed differences in suppliers' understanding and approach. These practices show that specifications go beyond technical checklists. At the same time, sustainability ambitions are clearly constrained by operational manageability and risk. Fairphone and modular devices were considered, but ultimately rejected because "we cannot properly manage them" (H1). Such devices would require "more handy Harries" and would complicate configuration management. H2 reinforces this boundary by stating that if hardware is "not convenient to manage, it cannot be chosen." Sustainability is therefore included, but always subordinated to control, security, and scalability. This combination places the specifying phase at a medium procurement maturity level.

The **selection** phase reflects a clear low maturity level. Although formal scoring models are applied, sustainability has little influence on outcomes. H2 explains that tenders are often scored "50 points price and 50 points quality, sometimes 10 points for sustainability," and adds that "almost all vendors meet the minimum criteria." Sustainability therefore rarely differentiates suppliers in practice and functions largely as a checkbox requirement. Even when suppliers show more advanced sustainability thinking, this does not structurally steer award decisions. Selection remains transactional and risk-averse, which is characteristic of administrative procurement.

The **contracting** phase sits between low and medium maturity. Organisation H uses multi-year con-

tracts, typically four years with optional extensions. Sustainability clauses related to reuse, recycling, and transport are included. This goes beyond ad hoc or purely transactional purchasing. However, contracts are not used as tools for continuous improvement or innovation. H2 openly doubts whether sustainability commitments are followed up after contract award, stating: "I suspect not." H3 similarly indicates that some contractually agreed tools and sustainability measures remain unclear in practice. Contracts provide structure and predictability, but they do not actively govern sustainability performance. Maturity therefore remains medium, but fragile.

A very different picture emerges in the **ordering** phase, which operates at high maturity, primarily from an operational perspective. All workplace IT equipment must be ordered centrally through the order office and a standard supplier. H3 explains that "all regular equipment goes through the order office" and is registered upon arrival. A central database tracks user assignment, depreciation, and replacement cycles. Lifecycle management is systematised, standardised, and digitally supported. Although this maturity is not driven by sustainability objectives, it nevertheless represents a highly developed procurement process.

This strength contrasts sharply with **monitoring**, where maturity is clearly low. All interviewees identify follow-up as a weak point. H1 explicitly states: "The most can be gained by following up on agreements," but also notes that in practice "no one asks me: are the sustainability objectives of the contracts being achieved?" Operational performance and incident response consistently take precedence, while sustainability monitoring receives little attention. H3 confirms uncertainty about whether promised sustainability actions, such as tree planting or electric delivery, are actually verified. Monitoring therefore remains reactive and person-dependent, rather than systematic or learning-oriented.

Control

When looking at control, both internal performance measurement and supplier performance measurement reflect low procurement maturity. Internally, procurement success is not measured against sustainability outcomes. There are no indicators for CO_2 reduction, lifecycle extension impact, or supplier sustainability delivery. H1 notes that sustainability achievements are neither requested nor reviewed by management. H2 reinforces this by stating that sustainability "does not get priority" and must remain secondary to security, architecture, and budget. This aligns with low-maturity procurement, where success is defined primarily by continuity, risk control, and cost management.

Supplier performance measurement shows the same pattern. Annual sustainability reports are sometimes received, but they are weakly interrogated. As H1 puts it: "If you do not ask, you will not get an answer." H2 again doubts whether sustainability practices are actively checked, while H3 expresses uncertainty about verification. There is no evidence of joint evaluation, structured feedback, or supplier development focused on sustainability. Control therefore remains basic and compliance-oriented.

Organisation

The organisational dimension confirms the overall low-to-medium maturity positioning. The procurement function operates beyond a purely administrative role. It works cross-functionally with ICT, support teams, and sustainability actors such as the green team. H1 describes upstream consultation and joint preparation of tenders. However, procurement lacks decision authority. As H2 clearly states: "Procurement can only advise internal parties. We cannot say something must get higher priority. That must come from the Executive Board." Procurement is therefore integrated into processes but not empowered as a strategic actor. This places the procurement function at a medium maturity level.

Leadership support is the weakest organisational element and clearly reflects low maturity. Attention to sustainability fluctuates with shifting organisational priorities. H2 describes how privacy, security, COVID funding, and later budget cuts successively dominated decision-making. Sustainability gained temporary attention, as "If there was no sustainability, we would not get a signature," but this momentum quickly disappeared. At present, sustainability must "ride along," and H1 notes that the organisation is again "focused on the money." Leadership does not provide a stable mandate for procurement to prioritise sustainability or to make trade-offs beyond cost and risk.

2.2.8. Organisation U

Innovation ambition

Organisation U's sustainability ambition for workplace-IT procurement aligns most clearly with Horizon 2. Throughout the interview, U1 presents an organisation that is not merely optimising existing processes. Instead, it is actively rethinking what workplace IT should provide. The ambition goes beyond the incremental improvements associated with Horizon 1, but it does not reach the radical system redesign typical of Horizon 3. Rather, U's orientation is transitional. It seeks to reshape the core logic of workplace-IT provision

by questioning established assumptions, reducing reliance on hardware, and embedding sustainability as a guiding principle.

This transitional ambition is particularly evident in U1's discussion of the organisation's changing understanding of its needs. A key example is the move away from traditional student desktops. As U1 explains, the transition from Windows 10 to Windows 11 triggered a fundamental reassessment of what students actually require: "they no longer need a desktop and screens from the university... they only need a desk with a power strip. And that's it." This represents a reframing of the value proposition of workplace IT, rather than an incremental adjustment. The decision not to replace 1,000 desktops (described by U1 as having "so much more impact than all the other steps on the ladder") demonstrates an ambition to redesign practices, not simply optimise them. Such adjacent innovation fits clearly within Horizon 2.

Organisation U's procurement ambition further reflects a shift towards a future-oriented model. The statement "the most sustainable laptop becomes the standard laptop" signals that sustainability is treated as a core selection criterion. It is not positioned as an additional consideration. This approach changes how procurement decisions are made and aims to normalise new standards. A similar logic applies to the decision to reduce mobile phone diversity to "only the Fairphone." This is framed as part of a broader strategy to reduce the organisation's hardware footprint and reflect circularity, rather than as a cost or efficiency measure. The willingness to pursue such standardisation indicates an ambition to evolve the procurement model beyond established patterns.

At the same time, U's ambitions do not extend into the radical system-level change associated with Horizon 3. U1's remarks on refurbishment illustrate long-term openness ("it is certainly something we will do in the coming 25 years") but not an intention to pioneer new technological ecosystems or disrupt market structures. Collaboration with suppliers also remains within existing procurement frameworks. U1 notes that deeper collaboration is only now becoming possible as internal processes stabilise. The immediate focus is on obtaining complete CO_2 reporting to support more informed decisions. This emphasis on improved data, stronger partnerships, and deliberate choice-making aligns with transitional innovation rather than transformative change.

Overall, the interview depicts an organisation that is actively reshaping its workplace-IT and procurement philosophy. This effort is driven by the belief that sustainability requires reducing hardware, extending lifetimes, and questioning default device provision. The ambition consistently exceeds Horizon-1 optimisation, yet remains grounded in existing institutional and market structures. For these reasons, Organisation U's sustainability ambition for workplace-IT procurement is best characterised as Horizon 2: deliberately transitional, neither incremental nor radical.

LCA-based ambition

Organisation U fits within the low LCA-based sustainability ambition level for workplace IT procurement. Across both the interview with U1 and the reviewed organisational documents, sustainability ambition for workplace IT is overwhelmingly defined in terms of climate change and CO_2 reduction. U1 explicitly explains that the organisation made a conscious choice to avoid working with multiple impact indicators and instead to focus on one dominant goal. As U1 states, "a key piece of that roadmap was finding one overarching objective rather than a long list of separate indicators," and that objective became "climate neutrality by 2050," which U1 defines very clearly as "CO_2 neutrality." This framing is not incidental but intentional, and it sets the boundary of how sustainability ambition is understood within workplace IT procurement.

This narrow focus is formalised in the organisation's roadmap for circularity in workplace IT wardware, where the Key Performance Indicator is explicitly defined as the CO_2 footprint of workplace IT hardware. While the roadmap includes many circular strategies such as refuse, reduce, reuse, repair, and refurbish, these are consistently positioned as means to achieve CO_2 reduction rather than as goals connected to distinct lifecycle impact categories. Sustainability ambition is therefore structured around climate change potential, not around a broader set of LCA-based impacts.

U1's interview further reinforces this climate-centred ambition. When describing where the organisation believes it can make the biggest difference, U1 states very plainly: "The most important thing we can do is buy less hardware and use less hardware." He adds that this sits at the top of the circularity ladder, explaining, "If you don't buy anything, you don't need to recycle, extend lifespan, or take other measures." This logic again ties sustainability impact primarily to avoided emissions, rather than to explicit concerns about mineral scarcity, fossil resource depletion beyond emissions, freshwater impacts, particulate matter, or ecotoxicity. These other lifecycle impacts are not denied, but they are not articulated as separate areas of ambition or as procurement objectives in their own right.

Importantly, U1 also makes clear that the organisation is currently not working with a broader set of environmental indicators. He explicitly acknowledges that further differentiation has not yet been developed: "We have not yet made that step. We are now only working on the main goal KPI." While these practices

clearly relate to resource use and end-of-life impacts, they are not framed as addressing specific LCA dimensions such as minerals and metals, freshwater ecotoxicity, or particulate matter. Instead, they are consistently linked back to climate impact and volume reduction.

Together, the interview and documents show that Organisation U is clearly aware of the environmental footprint of workplace IT and deliberately prioritises action. However, this ambition is intentionally concentrated on one LCA impact category, namely climate change potential. Other lifecycle impacts are neither explicitly named nor formulated as separate goals for procurement. Sustainability ambition is therefore compliance- and KPI-oriented around CO_2, rather than structured as a holistic, multi-impact lifecycle perspective. For these reasons, Organisation U aligns with the low LCA-based sustainability ambition level for workplace IT procurement.

Processes

For the process dimension, U's approach to **specifying** workplace IT clearly exceeds low-maturity, purely technical or brand-driven procurement. Sustainability is explicitly positioned as a leading objective, with a strong focus on CO_2 reduction. U1 expresses this clearly: "The most important thing we can do is buy less hardware and use less hardware." This logic is directly linked to circularity thinking. As U1 explains, avoiding purchases sits highest on the circularity ladder: "If you don't buy anything, you don't need to recycle, extend lifespan, or take other measures." This perspective is not abstract. It is operationalised in concrete procurement decisions, such as the choice not to replace around 1,000 Windows 10 desktops during the Windows 11 transition. Instead, desktops were removed altogether and replaced with "a desk with a power strip." This demonstrates that specifying is no longer about reproducing existing technical standards, but about fundamentally rethinking the underlying need. Specification is further professionalised through the 2023 hardware tender, in which sustainability played "an important role in the criteria and weighting" and was developed together with procurement. U1 explains that criteria for evaluating suppliers were deliberately separated from criteria for evaluating products. The latter were translated into a practical checklist. This checklist supports what U1 refers to as a more professional "core assortment team," whose task is to ensure that "the most sustainable laptop becomes the standard laptop." Early market engagement also plays an important role. U1 notes that market consultations were organised before the tender "because there are not many resellers and we needed to know what requirements were reasonable." These consultations helped determine whether criteria should be formulated as a "wish" or a "requirement." This combination of outcome-oriented thinking, structured internal governance, and bounded market input is characteristic of medium maturity. It goes beyond compliance, but does not yet reflect early supplier involvement aimed at jointly developing long-term performance targets.

Supplier **selection** follows the same pattern. Decisions are based on structured criteria that explicitly balance sustainability, functionality, and cost. U1 describes this internal comparison work in concrete terms, such as assessing "how does an HP compare to a Dell," while weighing "functionality and repairability" alongside sustainability and cost. The objective is not to optimise a single criterion, but to find what U1 calls "the sweet spot." This shows that selection is no longer driven by price alone or by established habits. Instead, it is based on formalised, multi-criteria evaluation. At the same time, suppliers are not primarily selected for their future innovation capacity or long-term improvement potential. The focus remains on identifying the best current fit within a controlled framework. This again places Organisation U at medium maturity rather than high.

Contracting and supplier management show some of the clearest signs of advancement, but also highlight why Organisation U does not yet reach high maturity. Hardware is purchased through a reseller, and U receives quarterly reports on service performance, repairs, delivery speed, and contract compliance. U1 explains: "Together with procurement and the contract manager, we review the reseller's performance every quarter and we have a call about it." This approach is systematic and clearly exceeds reactive or ad hoc monitoring. U1 also describes the intended direction as relational: "With supplier management we are building a kind of partnership." However, sustainability-related performance steering is still developing. U1 repeatedly emphasises that meaningful CO_2 steering depends on data that is not yet fully available. Referring to a tool being implemented by the reseller, U1 states: "That is what I am waiting for," as it should make CO_2 impact per product visible for KPI steering. Until this data is structurally used to guide decisions and improvement targets, contracting remains at a medium maturity level, characterised by clear ambitions rather than fully realised strategic governance.

Ordering and compliance further support this assessment. On the one hand, Organisation U works with preferred suppliers, a core assortment, and centralised reseller contracts. This enables standardisation and sustainability steering. On the other hand, enforcement is not yet complete. U1 openly acknowledges that employees with their own budgets can still order outside the standard route, and that this happens "quite a lot." This limits procurement's control over volumes, monitoring, and impact. It also prevents the

organisation from achieving the transparency and automation associated with high maturity.

Monitoring practices again reflect functional integration rather than full strategic maturity. Organisation U systematically reviews operational supplier performance and is actively developing sustainability indicators. At the same time, U1 is explicit about the current limits of insight. There is still uncertainty about which measures deliver "big" versus "small" CO_2 reductions, and how different interventions compare in terms of impact. U1 also notes that inventory data, device age, and return flows have only recently become visible in dashboards. As U1 states, "There we can really still improve a lot," particularly with regard to residual value and return handling. Monitoring is therefore intentional and structured, but not yet continuous, predictive, or fully embedded in learning cycles across tenders.

Control

The control dimension reinforces this medium maturity position. Internally, Organisation U has a clear overarching sustainability objective: climate neutrality by 2050, defined explicitly in terms of CO_2 reduction. Workplace IT hardware is clearly positioned as part of this ambition. U1 emphasises that the organisation is now working towards being "CO_2-neutral in 2050 compared to 2025." At the same time, detailed reduction pathways and subordinate indicators have not yet been developed. As U1 states: "We have not yet made that step. We are now only working on the main goal KPI." Procurement performance is therefore not yet systematically measured against strategic sustainability outcomes, nor is it clearly linked to incentives or organisational rewards. This aligns with medium maturity, where measurement exists but remains under development.

Supplier performance measurement follows a similar logic. Quarterly evaluations are in place and operational indicators are monitored. However, sustainability performance is not yet jointly assessed with suppliers in a way that supports mutual capability development. U1 notes that there is little resistance from the reseller: "I do not experience much obstruction from our hardware supplier regarding our objectives." Even so, the relationship has not yet evolved into a two-way, innovation-oriented performance dialogue supported by shared data and structured improvement trajectories.

Organisation

The organisational dimension further supports the overall conclusion. Procurement at Organisation U is clearly more than an administrative function. It operates cross-functionally with IT, sustainability programmes, and contract managers, and it plays a formal role in tenders and contract governance. However, procurement does not fully orchestrate strategic decisions related to workplace IT sustainability. U1 explains that the core assortment is determined by technical specialists and a strategic workplace team, after which "procurement's role is mainly to negotiate price." This reflects functional integration rather than full strategic embedding.

Leadership support for sustainability is visible and significant. Major decisions, such as formalising reuse policies and restricting choice, were explicitly approved at director level. U1 describes these decisions as "really a culture change." At the same time, not all sustainability initiatives have a strong mandate. The greenteam, for example, is described as lacking formal authority: "Are they very good at it? No, that can really be better," and "they have no mandate." This uneven distribution of mandate is again consistent with a medium maturity profile.

2.2.9. Organisation R

Innovation ambition

Organisation R's sustainability ambition for workplace-IT procurement aligns most clearly with Horizon 2. The interviews describe an organisation that has moved beyond incremental optimisation, but is not pursuing the radical, system-level redesign associated with Horizon 3. Instead, Organisation R aims to evolve procurement practices through exploration, learning and the development of new approaches that may grow into a future core.

Horizon-1 elements are present, such as extending device lifetimes, improving recycling flows and ensuring compliance with certifications. However, these are not framed as the end state. Both interviewees stress that the current model does not meet the organisation's longer-term intentions. R2 observes that, compared with areas such as cleaning, "software and hardware are still behind in how sustainability is viewed," and describes sustainability in ICT as "relatively new." R1 similarly notes that workplace IT is "already doing quite well" in areas such as equipment trade-in, but emphasises that deeper questions around usage, lifetime norms and behavioural change remain unresolved. Incremental improvements alone are therefore insufficient for their ambition.

What most clearly places Organisation R in Horizon 2 is the forward-looking and exploratory nature of its ambition. Both interviewees describe a trajectory in which procurement develops new frameworks,

builds new tools and experiments with new ways of steering sustainability, even when markets are not yet fully mature. R2 explains that ambition webs define "where [the organisation] expects suppliers to be in future" and specify expected progress after two and four years of a contract period. These ambitions are deliberately stretching. As R2 notes, "you can say: I want it now, but that is not how it works." The webs are designed to signal long-term direction rather than immediate compliance. R1 reinforces this by describing current work as "much of the current work is exploratory." Procurement engages in interviews, surveys, pilots and market consultations "to get information and to have the conversation," instead of imposing fixed requirements. This learning-oriented approach is framed as necessary groundwork for future procurement models with deeper sustainability integration.

This transitional ambition is also evident in how Organisation R engages with suppliers. R1 highlights the need for greater supply-chain insight, stating that "you can only steer once you have insight." R2 argues that purchasing coalitions should be used more actively, noting that "it would be strange to leave that unused." Both interviewees describe an approach focused on shaping supplier behaviour through dialogue, long-term expectations and stepwise improvement. At the same time, they acknowledge clear limits to enforcement. The Supplier Code of Conduct is characterised as "mostly a wish toward suppliers," and R2 states that the organisation "cannot yet terminate contracts" when future sustainability ambitions are not met. This reflects an organisation pushing the boundaries of the current system while building adjacent capabilities, rather than attempting a full system redesign.

Importantly, the interviews do not indicate Horizon-3 levels of ambition. R1 explicitly describes Organisation R as "a small player" and cautions against assuming it can "reshape the market alone." This realism contrasts with the transformative intent typical of Horizon 3. R2 similarly frames ambition in terms of influencing suppliers through persistent questioning and collective purchasing power, not through reconfiguring the ICT ecosystem itself. The ambition remains within the existing system: stretching it, preparing it and gradually extending its possibilities.

Together, the interviews portray an organisation deliberately preparing for a more sustainable, insight-driven and future-oriented procurement model. Organisation R recognises constraints related to market maturity, internal capability and regulatory context. It is laying the foundations for new ways of engaging suppliers, defining ambition and steering sustainability. This is done through exploration and incremental capability building rather than revolutionary change. For these reasons, Organisation R's sustainability ambition for workplace-IT procurement fits firmly within Horizon 2.

LCA-based ambition

Organisation R fits within the medium LCA-based sustainability ambition level for workplace IT procurement. Across the interviews, workplace IT is consistently discussed as having environmental impacts across multiple lifecycle stages. Climate change potential is a central and clearly articulated ambition, embedded in the organisation's broader goal of climate neutrality by 2040 and explicitly translated into procurement through scope-3 oriented efforts. R1 explains that procurement has interpreted the long-term climate strategy into a roadmap up to 2030. This shows that climate impacts are not treated as a symbolic concern but as an ambition that procurement is expected to actively support through information gathering and category planning.

The interviews make clear that Organisation R's ambition is not limited to climate and energy. Both R1 and R2 explicitly acknowledge that the largest environmental impacts of workplace IT are linked to hardware production, materials, and device lifetimes. R2 reflects on a shift in awareness within ICT, noting that hardware contains "rare materials" and that for a long time devices were optimised mainly for speed, size, and weight, followed by the question: "now comes the realisation, what are we actually doing?" This framing indicates explicit recognition of impacts related to minerals and metals, even if these are discussed primarily through the lens of circularity rather than formal LCA terminology.

Circularity and end-of-life impacts are a recurring theme in both interviews and documents. R1 describes workplace IT procurement as "already doing quite well," particularly in relation to "trading in equipment" and ensuring that discarded laptops and phones "end up in the right place." The interviewee repeatedly stresses that the biggest sustainability gains are not in choosing a slightly greener brand but in how long devices are used: "How long are you allowed to use a laptop or phone?" and "people should use a phone for four to five years." This shows clear ambition related to lifecycle extension, reuse, and waste reduction, which aligns with LCA dimensions connected to resource use and end-of-life impacts.

R2 further reinforces this broader ambition by explaining how overarching CSR goals are translated into procurement through so-called ambition webs. These frameworks explicitly cover multiple axes, including "energy," "climate," and "circularity," and are used to describe the current situation, future expectations, and intended progress over a typical contract cycle. R2 emphasises that these ambitions are intentional rather than immediately enforceable, stating: "you can say: I want it now, but that is not how it works," especially

in less mature markets. At the same time, the interviews also show that Organisation R does not yet articulate a fully holistic LCA ambition that explicitly spans all major impact categories. LCA dimensions such as freshwater eutrophication, freshwater ecotoxicity, and particulate matter are not explicitly named as procurement ambitions.

Together, the interviews and documents show that Organisation R's sustainability ambition for workplace IT procurement clearly extends beyond a narrow focus on energy efficiency or carbon emissions alone. The organisation explicitly recognises multiple lifecycle-related impact dimensions, including climate change potential, fossil energy use, resource use linked to rare materials, and end-of-life and circularity. However, the ambition does not yet explicitly cover the full set of five to six LCA impact categories in a holistic way, nor is LCA used as a comprehensive strategic steering mechanism. For these reasons, Organisation R aligns most clearly with the medium LCA-based sustainability ambition level for workplace IT procurement.

Processes

For processes, the interviews indicate that **specification** in workplace IT procurement is no longer purely technical or brand-driven. At the same time, it is not yet fully functional or outcome-based. IS/IT largely determines what is purchased and under which conditions, while procurement operates within these boundaries. As R1 explains, "If they say that every employee has to have a new laptop every four years, then those are the conditions that we work with in procurement." Sustainability requirements are included, but they are typically framed as ambitions rather than hard demands. R1 emphasises that tender questions are currently asked "mainly to get information and to have the conversation," rather than to score or exclude suppliers. There is, however, a clear awareness that more functional tendering could add value. R1 is "positive about functional tendering" and sees opportunities for suppliers to propose "the most sustainable and best concept," while also acknowledging that procurement must "grow into it" first. Specification therefore reflects a medium maturity level. It is more open and reflective than low-maturity practice, but not yet shaped by early supplier involvement or supplier capability criteria.

Supplier **selection** shows a similar level of development. The selection process is structured and formalised, with sustainability embedded through tools such as ambition webs, ISO standards, and EcoVadis scores. R2 explains that sustainability is incorporated across selection requirements, award requirements, and award criteria, including "extra points for suppliers who already meet ambition-web goals." Nevertheless, cost, functionality, and delivery reliability continue to carry more weight. Sustainability rarely becomes the decisive factor. This is reinforced by R1's observation that "you cannot immediately impose the highest demands on an immature chain." Suppliers are therefore selected based on a balanced set of criteria, but not primarily for their innovation potential or long-term strategic fit. This again aligns with a medium maturity level.

In **contracting**, the organisation shows clear signs of progress, alongside clear limitations. Contracts increasingly include sustainability ambitions and are viewed as potential instruments for long-term change. R1 notes that contracts "could set multi-year trajectories with stepwise sustainability goals," and expresses a preference for "pay- and gain-sharing" mechanisms linked to KPIs. However, these approaches are not yet standard practice. The Supplier Code of Conduct is described as "mostly a first step" and "a signal of future direction," without audits or exclusion mechanisms. R2 confirms that contracts cannot currently be terminated based on failure to meet future sustainability ambitions. Contracting therefore reflects experimentation and learning rather than strategic governance, which is characteristic of medium maturity.

The **ordering** process is clearly standardised and centrally controlled, primarily through Corporate IT. Ordering is not ad hoc, and procurement oversight exists. However, procurement's influence is limited by IT-defined frameworks and security requirements. There is no evidence of fully digital, end-to-end integration with suppliers that would enable advanced forecasting or automated sustainability control. Ordering therefore sits above low maturity, but below the level of strategic integration associated with high maturity.

Monitoring further reinforces the medium-maturity classification. Both interviewees stress that monitoring is essential, while also acknowledging that current practices are insufficiently developed. R1 states explicitly that "ambitions in a contract mean nothing if not monitored." Some monitoring does take place, for example through recycling data provided by partners such as Closing the Loop, which R2 mentions in relation to returned devices. However, systematic follow-up over the full contract lifecycle is still lacking. Lessons learned are not consistently fed back into future tenders. R1 openly acknowledges that supply-chain readiness "we do not have yet; we are far from it." Monitoring is therefore intentional but incomplete, aligning with functional integration rather than strategic maturity.

Control

Regarding control, internal performance measurement has clearly moved beyond a narrow focus on cost savings. Procurement has developed roadmaps towards 2030, translates organisational climate goals into category plans, and positions itself as playing "a pivotal role" in scope-3 emissions reduction. However, success still depends heavily on individual motivation rather than embedded performance systems. As R1 puts it, "If you do not have people in the organisation who find this interesting and want to go for it, then nothing happens." There is no indication that sustainability performance in workplace IT procurement is structurally rewarded or linked to strategic management evaluation. This again points to medium maturity.

Supplier performance measurement follows a similar pattern. Sustainability performance is increasingly assessed using predefined criteria and external tools, and feedback to suppliers is becoming more structured. However, enforcement remains limited and largely future-oriented. R2 describes the Code of Conduct as "mostly a wish toward suppliers," although one that is "becoming more pressing." R1 refers to potential future due-diligence systems that could flag suppliers "in the red," but these are not yet operational. Supplier performance measurement therefore supports learning and signalling rather than joint capability development, which is typical of medium maturity.

Organisation

The organisational dimension confirms this overall positioning. Procurement is clearly no longer an administrative function. It leads the development of ambition webs, works cross-functionally with IS/IT and CSR, and contributes to shaping category strategies. At the same time, procurement is not the strategic owner of workplace IT decisions. R1 emphasises that procurement "participates in content discussions but is not leading," and that IT ultimately decides what is purchased and how frequently devices are replaced.

Leadership support for sustainability exists at a strategic level, reflected in ambitious climate goals. However, this support does not consistently translate into strong steering in workplace IT. According to R1, only "strong steering from above" could change sensitive issues such as replacement cycles, yet "this rarely happens," because workplace IT is treated as a service or secondary employment condition. Sustainability discussions that affect employee convenience are therefore "preferably not held."

2.2.10. Organisation D

Innovation ambition

Organisation D's sustainability ambition for workplace-IT procurement is best described as located in Horizon 1. Interview participants consistently emphasise optimisation of existing practices, stronger control, and more systematic embedding of sustainability within the current procurement and IT landscape. There is no intention to fundamentally rethink this landscape. Sustainability is framed as part of "how we already work," not as a driver for redefining workplace IT or its market structures.

This Horizon-1 orientation is clear in how sustainability is defined, embedded, and monitored within existing contracts and procedures. Interviewee D3 stresses that sustainability is structurally included: "That is included in the contract. We have set KPIs… and we monitor them". It is treated as a fixed procurement requirement rather than an exploratory ambition: "Sustainability is a KPI in the contract, so it always comes up" (D3). The core ambition is therefore not to develop new procurement logics, but to ensure that existing ones function more effectively, transparently, and consistently.

The same pattern appears in discussions of circularity and environmental impact. The strongest ambitions focus on end-of-life processing, refurbishment, and lifecycle control. These are long-established levers in workplace IT. Participant D1 notes that the organisation is "reasonably on track," because "we have a good process to handle [end-of-life] well" and because this has "been well-organised for years". Another interviewee describes the issue pragmatically: "Can we give equipment new life? Or how is it processed?" (D3). These ambitions align closely with Horizon-1 sustainability, which aims to reduce waste and increase reuse without challenging the underlying system.

The interviews also show a strong acceptance of structural constraints in the workplace-IT market and public procurement. European tendering rules, vendor dominance, and market maturity are repeatedly cited as limiting innovation. As one participant explains, "you cannot just introduce something a bit new," which is why "we end up with almost everything at Big Tech" (D1). Rather than questioning these conditions, the organisation positions its sustainability goals as something to be achieved within them. This acceptance of the status quo, combined with incremental improvement, is characteristic of Horizon 1.

There are limited signals of Horizon-2 thinking, but these remain clearly secondary. Some participants reflect on extending device lifetimes or adjusting supplier incentives. One interviewee observes that, as more applications move online, "a laptop can easily last five years or even ten years" (D2), and considers service-oriented arrangements that reward durability rather than volume. These ideas indicate awareness

that sustainability may eventually require different business models. However, they are consistently framed as exploratory and immediately constrained by budget cycles, contract durations, and procurement rules. Importantly, none of the interviewees express ambitions associated with Horizon 3. There is no intent to redesign the workplace-IT value chain, move away from dominant vendors for sustainability reasons, or invest in radically alternative or sovereign IT ecosystems. Interviewees explicitly distance themselves from such approaches. One participant remarks that pursuing more radical alternatives would mean "if you want to make it impossible for yourself, you should do that" (D1). This clearly places transformative, system-disrupting change outside the organisation's ambition horizon.

Overall, the interviews present a coherent ambition profile. Organisation D aims to professionalise and optimise sustainable workplace-IT procurement by embedding sustainability in contracts, strengthening KPI-based monitoring, extending device lifetimes where feasible, and ensuring responsible end-of-life handling. While there is some openness to adjacent ideas, these remain bounded by existing structures. The organisation's innovation ambition therefore aligns most clearly with Horizon 1: focused on incremental improvement and operational optimisation within a stable and largely accepted system, rather than on transitional or transformative change.

LCA-based ambition

Organisation D fits within the low LCA-based sustainability ambition level for workplace IT procurement. Across the interviews and reviewed documentation, climate change potential emerges as the dominant and most clearly defined environmental ambition. Sustainability in workplace IT is repeatedly discussed in terms of CO_2 emissions and energy consumption. D3 formulates the core challenge very directly as: "How can we limit our CO_2 footprint as much as possible?" and links this to broader organisational goals by referring to "climate-neutral and circular 2030 goals." Climate considerations are therefore explicitly present in procurement thinking and are treated as an important steering theme.

Closely related to this, energy use is acknowledged as an environmental issue, particularly in relation to software and SaaS solutions. D2 points out that fragmented software procurement leads to inefficiencies because "all those SaaS environments running on data centres use energy," even if this impact is largely invisible to users. D3 also frames software sustainability mainly in terms of "energy consumption and electricity generation." However, in all cases, energy use is discussed primarily as a contributor to CO_2 emissions, rather than as a separate LCA dimension linked to fossil resource depletion or broader upstream impacts. This indicates that energy and fossil resources are present in the organisation's ambition, but largely through a climate lens rather than as independently articulated lifecycle concerns. In addition to climate and energy, circularity and end-of-life handling form a second, more limited pillar of sustainability ambition. D1 states that the organisation is "reasonably on track" for workplace IT mainly because "we have a good process to handle [end-of-life] well," and emphasises that end-of-life processing "has been well-organised for years." These statements show a clear awareness of lifecycle stages beyond use, but the focus remains firmly on refurbishment, resale, and disposal, rather than on upstream material extraction or production impacts.

What is notably absent from the interviews and documents is any explicit articulation of ambition related to other LCA-based impact categories. There is no discussion of minerals and metals, critical raw materials, or the material composition of devices, despite their relevance for IT hardware. Impacts related to freshwater eutrophication, freshwater ecotoxicity, or particulate matter emissions from mining and manufacturing are also not mentioned.

In summary, the interviews and documentation show that Organisation D's LCA-based sustainability ambition for workplace IT procurement is concentrated on one to two core dimensions: climate change potential, closely linked to energy use, and a narrower, downstream interpretation of circularity focused on end-of-life handling. Sustainability is framed as important and increasingly embedded, yet primarily through compliance-oriented criteria and familiar themes. For these reasons, Organisation D aligns with the low LCA-based sustainability ambition level for workplace IT procurement.

Processes

Looking first at processes, Organisation D demonstrates partial functional integration, while several core activities still operate at low maturity. In the **specification** phase, sustainability considerations are formally included, and requirements are no longer purely technical. D2 explains that procurement processes combine minimum requirements with open criteria, allowing suppliers to demonstrate added value in areas such as optimisation and cooperation. D3 similarly notes that "we state what we want and expect… and we let the market indicate what extra they can offer." This reflects a move away from rigid technical prescriptions and places the organisation above a purely administrative level. At the same time, specification remains tightly bounded. Market consultations tend to confirm existing expectations rather than challenge them. Eu-

ropean tendering rules further restrict experimentation. As D1 puts it, "you cannot just introduce something a bit new." As a result, supplier knowledge is not used to fundamentally shape requirements. Specifications therefore prioritise comparability and compliance over learning or innovation.

Supplier **selection** follows a similar pattern. Sustainability is explicitly scored and treated seriously. D1 warns against symbolic evaluation, stating that "you still have to do it properly… not just giving a six, because that gets you nowhere." Selection is structured, criteria-based and legally robust, supported by procurement advisors who ensure compliance with procurement law. However, decisions remain dominated by functional necessity and risk avoidance. D2 notes that in some cases "you can say the device is not sustainable enough, but the work must go on." Sustainability therefore cannot outweigh operational demands. There is no indication that suppliers are selected for long-term innovation potential or strategic fit. Selection remains comparative and compliance-driven, which aligns with medium rather than high procurement maturity.

Contracting practices show more advanced elements, but still fall short of high maturity. Sustainability KPIs are embedded in contracts. D3 states clearly: "that is included in the contract. We have set KPIs… and we monitor them." Regular operational, tactical and strategic meetings are organised. Sustainability is a fixed agenda item because "sustainability is a KPI in the contract, so it always comes up." These practices go beyond short-term purchasing and indicate functional integration. However, contracts are structurally constrained by public procurement rules and budgeting cycles. D2 explains that meaningful sustainability improvements, such as lifetime extension or laptop-as-a-service models, would require much longer agreements. At the same time, "public-procurement rules limit contract duration to around four years." As a result, contracts mainly function as control instruments. They do not support shared risk-taking or innovation. This is further illustrated by D1's experience with a reseller that "did not fully comply with the contract" and whose contract will not be extended. Contracting issues are resolved through termination rather than adaptive improvement.

The weakest parts of the process are ordering and monitoring, which reflect low maturity. **Ordering** is fragmented and partly decentralised, despite the existence of central ICT frameworks. D2 describes a situation in which "there could be a hundred same packages within [the organisation] without anyone knowing someone else already has it," particularly for software. D1 similarly points to decentralised hardware purchases driven by departmental budgets. This results in unused devices, as "a lot of that self-purchased hardware is often doing nothing." These practices closely resemble ad hoc ordering outside procurement oversight and indicate limited control over sustainability impacts.

Monitoring shows similar weaknesses. Although lifecycle data has improved through system links with the reseller, this information is not yet actively used. D1 explicitly states that "although monitoring could now indicate how long devices are used, that is not yet happening." Devices are not consistently collected after use, and older equipment may remain with staff for extended periods. D2 further explains that internal uncertainty undermines monitoring, noting that colleagues say they need to report but "often don't know what they need." Monitoring therefore remains incomplete and reactive, rather than a systematic input for future tenders or supplier development.

Control

Turning to control, internal performance measurement is clearly underdeveloped. Sustainability goals exist at organisational level, but there is no evidence that procurement performance is structurally evaluated against these goals or rewarded accordingly. Sustainability remains vulnerable to financial pressure. D3 states plainly that "when there is no budget, sustainability is more quickly at risk." This shows that procurement success is still framed primarily in terms of compliance and budget control, rather than long-term value creation or sustainability performance.

Supplier performance measurement is somewhat stronger, but still limited. Suppliers are assessed against predefined KPIs and discussed in regular meetings, as D3 describes. However, transparency depends largely on buyer initiative, since "you must explicitly ask for it." There is no indication of joint performance definition or shared learning agendas. Supplier evaluation therefore supports control and correction, but not mutual capability development.

Organisation

From an organisational perspective, procurement at Organisation D operates beyond a purely administrative role, but lacks a strategic mandate. Procurement advisors are involved in all major ICT tenders. They guide the process and work cross-functionally with ICT and Sustainability Coordinators. D2 describes procurement as advisory and facilitative, ensuring lawful procedures and the inclusion of sustainability requirements. At the same time, procurement does not own contracts and does not lead strategic decisions. "The director signs both the procurement plan and the final award decision," D2 explains. Authority therefore

remains elsewhere. Procurement supports sustainability, but does not orchestrate it.

Leadership support reinforces this positioning near the low-medium boundary. Sustainability ambitions are present, and draft procurement policies were received positively. Department secretaries were proud that these would form "the basis with which we go to the market" (D2). However, this support is conditional. Budget cuts, operational convenience and functional demands frequently override sustainability considerations. As D1 and D3 both indicate, rigid financial structures, depreciation rules and annual budgeting cycles limit what procurement can realistically achieve. Sustainability therefore depends more on individual motivation within project groups than on a stable organisational mandate.

2.2.11. Organisation E

Innovation ambition

Organisation E's sustainability ambition for workplace IT procurement clearly fits Horizon 1. Sustainability is consistently framed as improving and strengthening existing procurement practices, not as pursuing transitional or transformative change. The focus lies on embedding sustainability more firmly in current routines, making it more measurable, and aligning it with established frameworks and market realities. The ambition is serious, but explicitly incremental.

This Horizon-1 orientation is evident from the start of the interview. E1 explains that the focus is on understanding and refining existing practices by exploring "what we already do and what we can do better." Sustainability is described as "incredibly interesting," yet also as "difficult to implement within procurement." This frames the ambition as optimisation rather than experimentation. In workplace IT, E1 notes that the organisation has reached "a mature level of awareness," supported by internal reports. This maturity is used to consolidate current practices, not to move beyond the existing system.

Concrete ambitions for workplace IT further reinforce this positioning. E1 highlights improving current end-of-life practices for laptops, which are sold to a party that "reuses them at schools or recycles them properly." This is described as "a core element that you can easily apply to promote sustainability and CO_2 reduction." Future ambition focuses on strengthening policies so that "we use laptops and phones longer." This is framed as a behavioural change within the existing setup: "That is very important, and it really requires a change in how we look at products." Sustainability improvement is thus achieved through longer lifetimes and reduced waste, characteristic of Horizon-1 thinking.

Acceptance of prevailing market structures further anchors the ambition in Horizon 1. In software and cloud procurement, E1 notes that "companies like Microsoft are much larger than a [public organisation]," concluding: "We go along with the course they are already following." Sustainability is therefore aligned with supplier strategies and incorporated into existing best price-quality assessments, rather than used to challenge vendor dominance or procurement logics. The reliance on established standards and tools reinforces this approach. ISO 14001 appears "frequently as minimum requirements," and the MVI criteria tool is valued as "a nice guide for what you can ask per product category." E1 explains that procurement "at least tries to implement the basic criteria before gradually increasing ambition." This language of minimum requirements and gradual improvement fits squarely within Horizon 1. The challenges described relate to making existing instruments work better, not replacing them.

Innovation-oriented procedures like competitive dialogue and innovation partnerships are mentioned, but only as underused options. Although E1 calls this "a missed opportunity" and expresses interest in fairer and more repairable devices, there is no stated ambition to shift procurement into a transitional or experimental mode.

Finally, potential Horizon-3 themes such as digital sovereignty are explicitly constrained. While it "plays among various people in the organisation," decisions continue to reinforce dependence on large vendors. E1 questions "to what extent we become more dependent," but notes that "safety and compatibility remain decisive." Sustainability ambitions therefore remain bounded by existing risk and reliability logics.

Overall, Organisation E seeks to improve sustainability within workplace IT procurement by extending product lifetimes, reducing CO_2 emissions, and embedding sustainability more consistently in existing processes. Established standards, tools, and market structures are accepted as given. This system-conforming ambition places Organisation E clearly in Horizon 1, focused on optimising what already exists rather than transitioning to new procurement models.

LCA-based ambition

Organisation E fits within the low LCA-based sustainability ambition level for workplace IT procurement. Across the interview and reviewed documentation, climate change potential emerges as the most dominant environmental reference point. When reflecting on workplace IT, E1 consistently links sustainability to CO_2 reduction. A concrete example is the handling of laptops after their use period, which are sold to a party

that "reuses them at schools or recycles them properly," something E1 describes as "a core element that you can easily apply to promote sustainability and CO_2 reduction." This framing shows a clear awareness of climate impacts, but it also illustrates how sustainability ambition is narrowed to outcomes that are relatively tangible and easy to communicate. Climate change and energy use thus function as the primary lenses through which environmental impact is understood.

In addition to climate, circularity is mentioned as an important theme, but again in a limited and mainly end-of-life-oriented way. E1 highlights reuse and recycling of devices as positive practices and expresses a desire to extend product lifespans, stating: "I would like to see that our policy responds more to this. For example, that we use laptops and phones longer." While extending lifespans and proper recycling can relate indirectly to impacts on materials and resources, these connections are not made explicit. There is no reference to critical raw materials, mineral scarcity, mining impacts, or the environmental consequences of production processes. Circularity is therefore framed as a practical and accessible sustainability measure, not as part of a broader lifecycle impact strategy.

Importantly, the interview shows no explicit awareness of several key LCA-based impact dimensions. Impacts related to minerals and metals, fossil resource depletion beyond energy use, freshwater eutrophication, particulate matter formation, or freshwater ecotoxicity are not mentioned in relation to workplace IT procurement. Even when lifecycle language is used, it is primarily framed in economic terms. For example, organisational policy refers to "the total costs of the lifecycle or estimated period of use," which reflects a focus on lifecycle costing rather than on lifecycle environmental impacts.

E1's reflections are nuanced and self-critical, particularly when discussing the difficulty of formulating measurable sustainability questions and the challenge of moving beyond "standard stories" from suppliers. Statements such as "we have trouble formulating an effective question, so that we get something measurable," and the observation that supplier responses often feel like "a standard story," show an awareness of current limitations. However, this critical stance does not translate into an explicit ambition to broaden the environmental scope of procurement beyond climate and basic circularity. Instead, it highlights that the organisation is still in an exploratory phase, trying to deepen its understanding of sustainability within existing frames.

Together, the interview and organisational documents show that Organisation E clearly values sustainability and increasingly integrates it into procurement processes, but does so with a narrow environmental focus. Sustainability ambition for workplace IT procurement is primarily oriented towards climate change potential, energy use, and end-of-life practices, supported by compliance-based criteria and general policy frameworks. Other LCA-based impact categories remain outside the organisation's stated ambition and awareness. For these reasons, Organisation E aligns with the low LCA-based sustainability ambition level.

Processes

Regarding processes, Organisation E shows some movement beyond purely technical **specification**, but these practices remain fragile. Sustainability ambitions such as circularity and CO_2 reduction are translated into tenders with support from internal MVOI experts. Market consultations are sometimes used to ask more open questions. However, E1 repeatedly stresses that procurement struggles with its core task: formulating requirements that drive concrete outcomes. As they explain, "we have trouble formulating an effective question, so that we get something measurable," and ensuring that requirements remain verifiable during the contract period is "quite difficult". This suggests that, although intentions resemble medium maturity, the practical ability to specify outcome-oriented and enforceable sustainability requirements remains limited. As a result, procurement practice remains closer to low maturity.

In supplier **selection**, Organisation E no longer relies purely on price. Tenders are assessed on best price-quality, with sustainability increasingly included in the quality component. E1 explains that "the organisation mostly evaluates tenders on the basis of best price-quality, with sustainability increasingly part of quality assessments". However, this inclusion does not yet result in differentiated or strategic supplier choices. Suppliers often respond with generic sustainability narratives, which E1 describes as "a standard story", rather than tailored contributions to organisational goals. In software and cloud markets in particular, procurement largely accepts the direction set by dominant vendors, noting, "we go along with the course they are already following". This reflects a low-to-medium maturity pattern: selection criteria are formalised, but they are not used to actively steer innovation or supplier capability development.

Contracting practices further anchor Organisation E at a low maturity level. Sustainability requirements are included, but mainly as minimum standards or certificates. Contract management focuses on whether sustainability topics were included in the tender and whether certificates such as ISO 14001 remain valid. As E1 explains, "contract managers mainly check whether sustainability topics were included in the tender and whether required certificates remain valid". There is no evidence of performance-based contracting, improvement targets, or mechanisms that stimulate learning or innovation over time. Although E1 recognises

that instruments such as competitive dialogue and innovation partnerships could encourage innovation and describes their limited use as “a missed opportunity”, these tools are not structurally applied.

Ordering processes appear somewhat more structured. Procurement is involved early, and sustainability themes are flagged at the start of procurement trajectories. E1 notes, “we are immediately alerted to the MVO themes,” which helps ensure that sustainability is at least considered from the outset. However, there is no indication that ordering is digitally integrated in a way that enables control, forecasting, or automated sustainability checks. Ordering therefore remains functional rather than strategic.

Monitoring is one of the clearest indicators of low procurement maturity. E1 explicitly identifies it as a weak point, asking, “have we done the right things?” and explaining that this question is difficult to answer without better follow-up. Capacity constraints play a central role: “we have more contracts than are manageable for the contract managers,” which limits the ability to monitor sustainability commitments during contract execution. Monitoring is therefore largely reactive and compliance-focused, rather than systematic or learning-oriented.

Control

The control dimension reinforces this low-maturity positioning. Internal performance measurement of procurement outcomes is not yet systematic. While sustainability features in internal reporting and is recognised as important, E1 emphasises that improved reporting remains a future requirement. Insight is needed to determine whether an approach “had an effect, or whether we need to do it differently”. This demonstrates awareness of the gap, rather than evidence that it has been closed.

Supplier performance measurement is similarly limited. Suppliers are sometimes reluctant to share data, partly because they are unsure “what will happen with that data” and whether it will be used against them. There is no indication of joint performance reviews or structured feedback loops that support continuous improvement.

Organisation

The organisational dimension explains why low maturity persists despite motivated individuals. Procurement is more than purely administrative. It collaborates with internal experts, participates in learning networks, and is involved early in procurement trajectories. Nevertheless, its role remains strictly advisory. As E1 states, “all procurement consultants are purely advisory and have no mandate,” and when contract owners have different priorities, “that takes precedence”.

Leadership support for sustainability exists at a policy level, anchored in frameworks such as the MVOI Manifest. However, operational decisions continue to prioritise safety, compatibility, and familiar vendors. This is reflected in continued reliance on large suppliers such as Microsoft, even while concerns about digital sovereignty are acknowledged.

2.3. Interaction mechanism use per case

2.3.1. Organisation A

Table 2.1: Overview of buyer-supplier mechanisms used by Organisation A.

Group	Mechanisms mentioned
Group A	**Precise specification demands:** Despite the shift to outcome-based approaches, strict technical and compliance specifications remain, particularly regarding codes of conduct, security, and specific sustainability criteria.
	Blanket contracts (framework contracts): The organisation uses long-term contracts to create stability: contract durations have increased from three to five years to allow realistic assessments of hardware performance and life-cycle costs.
Group B	**Structured market dialogue:** The process involves “RFI and RFP phases, workshops, deep dives, and reference visits” (A1).
	Early criteria articulation: The interviewees describe processes where requirements are discussed and shaped with suppliers early on. This interaction allows the organisation to define “this is our need, how could you solve that?” (A1) rather than dictating terms immediately.
	Outcome-based demand articulation: The interviews explicitly mention a shift from detailed technical prescriptions towards asking suppliers for solutions and results, particularly regarding sustainability: the current workplace tender is framed as a “request for solution” (A2) designed to “encourage suppliers to propose innovative and sustainable ideas” (A2).
Group C	**Market scanning and open engagement:** The interviewees emphasise the necessity of looking outside the organisation to the wider ecosystem to identify innovations and regulations that drive sustainability.

Group	Mechanisms mentioned
	Reverse sourcing: The organisation encourages suppliers to initiate ideas and propose roadmaps: in fieldlabs, suppliers “often bring expertise and sustainability-driven ideas that the organisation did not know existed” (A1).
Group D	**Supplier selection based on knowledge contribution:** Suppliers are selected not only on cost but also on their ability to contribute innovative ideas. Suppliers who demonstrated unexpected analytical capabilities were “‘1–0 ahead’ in later selection” (A1).
	Innovation partnerships: “Fieldlabs” enable “co-creation with suppliers who are themselves driven by sustainability” (A1).
	Bilateral communication: “There is a strong emphasis on continuous, reciprocal exchange through regular meetings, committees, and day-to-day discussions.

2.3.2. Organisation I

Table 2.2: Overview of buyer-supplier mechanisms used by Organisation I.

Group	Mechanisms mentioned
Group A	**Precise specification demands:** Organisation I imposes detailed technical or packaging requirements to enforce sustainability standards. I4 describes demanding specific packaging configurations from their main laptop supplier: "We wanted type-3 laptops per four in one box because it saves a lot of cardboard".
	Monitoring & assessment: They use tools like a "25-question sustainability questionnaire" and the "Sustainability Supplier Code of Conduct" to enforce compliance (I1).
Group B	**Structured market dialogue:** The interviews describe a formalised exchange prior to contracting to clarify needs and filter suppliers through a RFI. This process allows the buyer to ask "exploratory" questions regarding sustainability, such as asking suppliers to research production locations.
Group C	**None identified**
Group D	**Supplier selection based on knowledge contribution:** I1 highlights a preference for suppliers who show willingness to learn, selecting a partner "willing to research the answer over the coming years".
	Bilateral communication: I2 notes that they increasingly discuss reduction opportunities with suppliers they know well.

2.3.3. Organisation T

Table 2.3: Overview of buyer-supplier mechanisms used by Organisation T.

Group	Mechanisms mentioned
Group A	**Precise specification demands:** T1 emphasises the importance of standards: “An ISO-certified and independently verified LCA or Environmental Product Declaration (EPD) is described by T1 as ‘better than a quick-and-dirty one’.”
	Monitoring & assessment: The company employs continuous evaluation systems to track supplier performance and ensure accountability for sustainability commitments. Suppliers are encouraged to “submit CDP disclosures for transparency”, and progress is reviewed during “ongoing governance” (T1).
	Blanket contracts: The documentation describes multi-year agreements and volume commitments that create a stable relationship, though they can also reduce supplier incentives to innovate post-award. The company “committed to purchasing volumes” with Fairphone.
Group B	**Structured market dialogue:** The company engages in workshops to explain new criteria and gather feedback from suppliers.
	Early criteria articulation: The company defines strategic intent and requirements through the Supplier Code of Conduct before formalising them into strict contracts. This helps align supplier direction with the buyer’s evolving sustainability needs.
Group C	**Market scanning and open engagement:** The sector alliance helps the company “see where suppliers stand in the net-zero transition, what gaps exist, and where support or pressure can drive progress”. Tools such as EcoVadis are used for “broad sustainability assessments and pre-qualification” to identify market capabilities (T1).
	Pilot collaborations: The company engages in limited-duration projects to test innovative solutions, such as digital product passports, before they are scalable or standardised. T1 describes an early-phase trial where “suppliers had to provide material data, software parties linked that and in four months you had one product passport”.
Group D	**Innovation partnership:** The partnership with Fairphone moves beyond simple purchasing; “Together they developed product passports, including one with Fairphone”, facilitating joint problem-solving and innovation.
	Supplier development: direct involvement: The buyer actively supports suppliers in improving their processes, particularly in refurbishment and reuse contexts. This involves active steering: “We steer on correct recycling and we stimulate reuse”.

Group	Mechanisms mentioned
	Supplier development: incentives: The company uses non-financial benefits, such as public recognition, to motivate suppliers and promote shared innovations. Regarding the product passport developed with Fairphone, T1 mentions that "we made a podcast about it," offering visibility and encouraging adoption.
	Bilateral communication: There is a strong emphasis on ongoing, reciprocal exchange of information after contract award to track progress and identify improvements. For refurbishment providers, there are "monthly discussions about improvements" built into contracts.

2.3.4. Organisation O

Table 2.4: Overview of buyer-supplier mechanisms used by Organisation O.

Group	Mechanisms mentioned
Group A	**Precise specification demands:** The organisation uses precise specification demands by incorporating detailed sustainability criteria directly into their Request for Proposals (RFPs). They require specific items such as sustainability reports, security assurances, and certifications.
	Monitoring & assessment: Hardware performance and defects are monitored closely through IT systems.
Group B	**None identified**
Group C	**Market scanning and open engagement:** The organisation deliberately includes unknown "dark horse" vendors in selection processes to stimulate innovation and potentially discover challengers with stronger sustainability performance than current suppliers.
Group D	**Supplier development: direct involvement:** When suppliers do not meet minimum expectations, the organisation first discusses the underlying causes with them and identifies possible improvements.

2.3.5. Organisation B

Table 2.5: Overview of buyer-supplier mechanisms used by Organisation B.

Group	Mechanisms mentioned
Group A	**Precise specification demands:** Organisation B sets clear, non-negotiable supplier requirements, illustrated by rules such as "only devices that are TCO Certified are purchased" (B2).
	Monitoring & assessment: Organisation B institutionalises monitoring through systematic data collection and evaluation, illustrated by "supplier-specific footprint data [being] scaled accurately across the device estate."
Group B	**Outcome-based demand articulation:** Organisation B articulates its requirements through desired performance outcomes rather than prescribed technical solutions, as shown by targets such as a "5% annual reduction of digital waste" and laptops with a "lower embodied carbon footprint than previous generations" (B1).
Group C	**Market scanning and open engagement:** Organisation B systematically explores market capabilities by engaging multiple suppliers and peers, illustrated by efforts "to understand what is good, average or lagging in the market" (B1).
	Pilot collaborations/short-term trials: Organisation B engages in experimental pilot collaborations to test innovative approaches, illustrated by a trial where "together with a hardware supplier a specific device is analysed" to "learn what kind of data is needed."
Group D	**Supplier selection based on knowledge contribution:** Organisation B values suppliers for their insight and learning capacity rather than delivery alone, illustrated by the emphasis on whether a supplier can "show understanding of what needs to improve" (B1).
	Supplier development (direct involvement): Organisation B directly supports supplier development through hands-on, iterative engagement, illustrated by cases where "after one group session… an international supplier asked for a one-on-one conversation to learn more" (B1).
	Bilateral communication: Organisation B maintains ongoing, reciprocal engagement with suppliers, illustrated by iterative interactions such as "let's talk again in six months and then I expect you to have this insight" (B1).

2.3.6. Organisation M

Table 2.6: Overview of buyer-supplier mechanisms used by Organisation M.

Group	Mechanisms mentioned
Group A	**Precise specification demands:** Organisation M imposes detailed, prescriptive sustainability requirements on suppliers, illustrated by rules such as cloud services that "must operate on renewable Dutch wind and solar energy" (M3).

Group	Mechanisms mentioned
	Monitoring & assessment: Organisation M systematically evaluates supplier performance through ongoing reporting and follow-up, illustrated by requirements for “ongoing data during the contract period, enabling monitoring” (M1).
	Blanket contracts/framework contracts: Organisation M uses long-term framework contracts to enable learning and adaptation, illustrated by the view that “you have time to find each other in the cooperation” (M3).
Group B	**Structured market dialogue:** Organisation M engages in early, two-way market consultations to test feasibility and stimulate learning, illustrated by how “market consultations can help gauge what is feasible” (M1).
	Early criteria articulation: Organisation M defines sustainability and functional requirements early to guide supplier responses despite uncertainty, illustrated by efforts to “specify what it means in procurement” so suppliers “understand what we want to receive" (M3).
	Outcome-based demand articulation: Organisation M frames requirements around desired sustainability outcomes rather than prescribed methods, illustrated by expectations for “what improvements they will realise during the contract and how they will adjust if goals are not met” (M3).
Group C	**Market scanning and open engagement:** Organisation M actively explores technological possibilities with suppliers before fixing demand, illustrated by how with [supplier], M2 explores what might already be technically possible for their one-device vision.
Group D	**Supplier development (direct involvement):** Organisation M actively supports supplier improvement, illustrated by accepting that a supplier “does not have real-time monitoring yet, but in three months we can provide” it (M3).
	Bilateral communication: Organisation M maintains ongoing, reciprocal interaction with suppliers throughout the contract, illustrated by operational, tactical, and strategic meetings supplemented by specialised discussions (M2).

2.3.7. Organisation H

Table 2.7: Overview of buyer-supplier mechanisms used by Organisation H.

Group	Mechanisms mentioned
Group A	**Precise specification demands:** H1 explains that the tender included specific requirements.
	Monitoring & assessment: H1 states that the organisation "will receive an annual sustainability report from the supplier", while H3 highlights a "monitoring tool included in the contract that signals failing laptop batteries early".
	Blanket contracts: The interviewees explain that the organisation relies on multi-year agreements that allow for repeated ordering without renegotiating terms every time, creating stability.
Group B	**Structured market dialogue:** H1 states that the team "tests feasibility through market consultations" during the upstream phase and states that "market consultations helped determine which sustainability demands were realistic".
Group C	**None identified**
Group D	**None identified**

2.3.8. Organisation U

Table 2.8: Overview of buyer-supplier mechanisms used by Organisation U.

Group	Mechanisms mentioned
Group A	**Precise specification demands:** The organisation uses strict, detailed parameters to drive sustainability, rather than leaving choices open. This is evident in their move toward standardisation of devices to meet their specific sustainability criteria.
	Monitoring & assessment: The organisation receives "quarterly reports on delivery performance, repairs, and other contractual KPIs".
	Blanket contracts: The organisation has a long-term procurement arrangement where the specific hardware "assortment" is not fixed indefinitely at the start but is updated and decided upon over time by a specialised team.
Group B	**None identified**
Group C	**None identified**
Group D	**Bilateral communication:** Beyond simple transactional exchanges, the organisation and the supplier engage in regular, structured evaluations and are moving toward deeper strategic discussions regarding sustainability objectives.

2.3.9. Organisation R

Table 2.9: Overview of buyer-supplier mechanisms used by Organisation R.

Group	Mechanisms mentioned
Group A	**Precise specification demands:** R2 indicates that standard procedures with detailed parameters are used because "[the organisation] knows exactly what it needs," citing that "we know very well which laptops, computer mice and keyboards we want".
	Blanket contracts: The procurement strategy relies on multi-year agreements that allow for processing progress over time. R2 refers to a "typical contract cycle" where progress is expected at "two-year and four-year points".
Group B	**Structured market diaglogue:** Both interviewees describe the use of formalised exchanges to clarify market capabilities before tendering. R2 details a specific process where market consultations are "sent selectively to suppliers" that the organisation expects may tender, ensuring responses are "comparable and administratively manageable".
	Early criteria articulation: The organisation uses "ambition webs" for sustainability. This mechanism serves to "signal direction to tier-1 and tier-2 suppliers" regarding expectations at "two-year and four-year points within a typical contract cycle" (R2).
Group C	**Market scanning & open engagement:** This involves efforts to "reach CSR staff on the supplier side" to understand future trajectories and determine "what we can ask and what we may expect from the market" (R1).
Group D	**None identified**

2.3.10. Organisation D

Table 2.10: Overview of buyer-supplier mechanisms used by Organisation D.

Group	Mechanisms mentioned
Group A	**Precise specification demands:** D2 notes that ICT supplies a “fixed set of hardware and standard software”.
	Monitoring & assessment: D3 states, “We have set KPIs… and we monitor them” , and notes that “Sustainability is a KPI in the contract, so it always comes up”.
	Blanket contracts: D1 discusses reliance on “three-year maintenance contracts” and D2 notes that public-procurement rules “limit contract duration to around four years”.
Group B	**Structured market dialogue:** Formal consultations are used to clarify needs and align with market capabilities, "usually confirming existing expectations rather than introducing surprises” (D3).
	Outcome-based demand articulation: D2 explains that “open criteria are used to encourage suppliers to demonstrate added value, for instance in ‘optimisation, cooperation, or how they see collaboration with us...’”
Group C	**Market scanning & open engagement:** D2 describes the process where a project group determines the procedure, which includes “checking the market, gathering insights from similar organisations, or conducting an informal exploration with current suppliers to understand what is feasible”.
Group D	**Bilateral communication:** D3 details that “Through KPIs and regular meetings (operational, tactical, and strategic) the partnership can mature” , with operational communication occurring “daily”.

2.3.11. Organisation E

Table 2.11: Overview of buyer-supplier mechanisms used by Organisation E.

Group	Mechanisms mentioned
Group A	**Precise specification demands:** E1 indicates that precise specification demands remain a dominant mechanism, particularly through the use of minimum requirements and certificates.
	Monitoring & assessment: E1 notes that contract managers "mainly check whether sustainability topics were included in the tender and whether required certificates remain valid" .
Group B	**Structured market dialogue:** E1 states that "Market consultations sometimes help, especially when the [public organisation] poses open questions about what suppliers can do".
Group C	**None identified**
Group D	**None identified**

2.4. Proposition testing per organisation

2.4.1. Proposition assessment for Organisation A

For Organisation A, the medium procurement maturity proposition is partially confirmed. The core pattern described in the proposition is clearly visible, but the case also reveals important nuances. Organisation A demonstrates a strong combination of Group B and Group C mechanisms, which aligns well with expectations for medium procurement maturity. At the same time, Group D mechanisms are more prominent

than the proposition suggests, and Group A mechanisms remain an important and deliberate part of the interaction mix rather than being marginalised.

Group B as a central steering logic

The strongest confirmation of the proposition lies in Organisation A's use of Group B mechanisms. Procurement is explicitly framed as a "request for solution," which signals a move away from detailed prescriptive specifications toward outcome-oriented problem framing. Structured market dialogue plays a central role in this approach. Organisation A engages suppliers through RFIs, RFPs, workshops, deep dives, and reference visits, using these interactions to explore what suppliers can offer and how sustainability and innovation ambitions can realistically be achieved. This is reinforced by early criteria articulation, captured in the statement "this is our need, how could you solve that?" Rather than dictating solutions, Organisation A sets clear expectations while allowing suppliers to interpret and respond creatively. This combination of structure and flexibility closely aligns with Group B's interaction logic and strongly supports the proposition's claim that medium-maturity organisations use procurement as a tool for learning and problem-solving rather than pure cost control.

Active use of Group C mechanisms for exploration

Organisation A also clearly confirms the proposition through its use of Group C mechanisms. Market scanning and open engagement are described as necessary because important sustainability developments occur outside the organisation, particularly through regulation and technological innovation. This outward orientation is complemented by reverse sourcing practices, especially within fieldlabs. In these settings, suppliers bring forward ideas and sustainability-driven solutions that the organisation "did not know existed." Fieldlabs are explicitly described as spaces for experimentation and co-creation, where attention areas are explored and tested before being formalised in procurement processes. These practices reflect the exploratory collaboration logic of Group C and confirm that Organisation A uses pre-competitive and semi-formal interaction to reduce uncertainty and discover new possibilities, in line with the proposition.

Group D mechanisms: emerging, but more substantial than expected

While the proposition anticipates only selective and emerging use of Group D mechanisms at medium maturity, Organisation A shows a more developed application of these mechanisms. Supplier selection is influenced by knowledge contribution, with suppliers who demonstrate strong analytical or sustainability capabilities being described as "1-0 ahead" in later selection stages. Fieldlabs also function as innovation partnerships, involving co-creation with suppliers that are themselves motivated by sustainability ambitions. In addition, bilateral communication is described as continuous and structured, involving regular meetings, committees, and daily discussions. These practices go beyond ad-hoc collaboration and indicate relational governance and capability-building. At the same time, the proposition is not entirely contradicted. These Group D mechanisms are clearly applied selectively, primarily to a limited group of strategic IT suppliers, rather than across the full supplier base. This shows that Group D has emerged, but remains targeted rather than dominant.

The continued relevance of Group A mechanisms

A further nuance concerns the role of Group A mechanisms. Although the proposition implicitly suggests a reduced reliance on strict control-oriented mechanisms at medium maturity, Organisation A continues to use them in a deliberate way. Precise specification demands remain important, particularly for non-negotiable issues such as security, compliance, and certain sustainability requirements. Security is explicitly described as the main priority within the organisation, which necessitates clear and enforceable specifications. Blanket or framework contracts are also used strategically, with longer contract durations introduced to allow realistic assessment of hardware performance and lifecycle costs. Rather than hindering innovation, these Group A mechanisms provide stability and governance that support longer-term learning and sustainability assessment.

What the interaction mix reveals

Together, Organisation A's interaction mix reflects a hybrid form of medium procurement maturity. Group B mechanisms form the core steering logic by enabling structured learning and solution-oriented dialogue within competitive processes. Group C mechanisms extend this approach by creating exploratory spaces for experimentation and discovery, particularly through fieldlabs and open engagement. Group D mechanisms are clearly present and meaningful, but applied selectively to strategically important suppliers. Group A mechanisms continue to function as a governance backbone, ensuring security, compliance, and contractual stability.

Bottom line: does Organisation A confirm the proposition?

Overall, the proposition is supported for Organisation A in its central claim. Medium procurement maturity is visible in the strong combination of Group B and Group C mechanisms and in the emergence of Group D mechanisms for strategic suppliers. However, the case also shows that Group D can already be relatively substantial at this maturity level, and that Group A mechanisms may remain important rather than being phased out. Organisation A therefore confirms the proposition in direction, but with important nuances regarding the strength of relational mechanisms and the continued role of control-oriented governance in sustainable workplace IT procurement.

2.4.2. Proposition assessment for Organisation I

For Organisation I, the medium procurement maturity proposition is not confirmed. The overall direction described in the proposition is visible, but the case also shows clear deviations. The organisation clearly moves beyond purely transactional procurement and increasingly uses procurement to steer sustainability and supplier behaviour. However, this shift is not anchored in a strong use of exploratory collaboration. Instead, the observed interaction mix is characterised by a continued reliance on Group A mechanisms, limited but meaningful use of Group B mechanisms, selective Group D engagement, and an almost complete absence of Group C mechanisms.

Group B as an emerging but limited steering logic

Organisation I's use of Group B mechanisms provides partial confirmation of the proposition. Structured market dialogue is used through RFIs prior to contracting to clarify sustainability expectations and to filter suppliers. These interactions allow the organisation to ask exploratory questions, such as requesting suppliers to research production locations, and to distinguish between suppliers focused purely on price and those willing to engage more seriously on sustainability. This reflects the Group B logic of structured, time-limited interaction that allows learning while preserving competition. At the same time, the document does not show broader use of Group B mechanisms such as outcome-based demand articulation or competitive dialogue. Structured interaction therefore functions mainly as a screening and clarification tool, rather than as a dominant steering logic for co-shaping solutions. Group B is present, but it does not yet form the core of Organisation I's procurement approach.

Selective but cautious use of Group D mechanisms

Organisation I's use of Group D mechanisms aligns more closely with the proposition, though with clear limits. Relational mechanisms are applied selectively and mainly with strategically important suppliers. Supplier selection increasingly takes future knowledge contribution into account, as illustrated by the preference for a supplier "willing to research the answer over the coming years." This indicates a shift away from evaluating suppliers solely on current performance towards considering their future capabilities. In addition, bilateral communication is becoming more common with suppliers the organisation knows well, particularly when discussing opportunities for emission reduction or circular improvements. These practices reflect Group D logic, but they remain narrowly focused and pragmatic. There is no evidence of deeper forms of collaboration such as innovation partnerships or incentive-based supplier development. Relational approaches are clearly emerging, but they do not dominate procurement practice, which is consistent with the proposition's expectation for medium procurement maturity.

Limited development of exploratory Group C mechanisms

The clearest deviation from the proposition concerns Group C mechanisms. While Organisation I's ambition clearly sits in Horizon 2 and includes experimentation, learning, and circular procurement, these ambitions are not translated into formal exploratory collaboration mechanisms. Section A of the document does not identify any Group C mechanisms in use. Although pilots with Fairphone and Framework are mentioned elsewhere, they are framed as cautious and incremental steps rather than as structured pilot collaborations or pre-commercial procurement trajectories. Exploration remains fragmented and informal, rather than organised as a deliberate pre-competitive learning infrastructure. Given that the proposition explicitly expects Group C mechanisms to play a central role at medium procurement maturity, their absence is a significant deviation.

The continued strategic role of Group A mechanisms

A second important deviation from the proposition is the continued importance of Group A mechanisms. Organisation I relies heavily on precise specification demands and monitoring and assessment tools. Detailed requirements, such as specific packaging configurations to reduce cardboard use, illustrate a strong

preference for prescriptive steering. Monitoring is reinforced through instruments like a 25-question sustainability questionnaire and a Sustainability Supplier Code of Conduct. These mechanisms reflect a control-oriented interaction logic aimed at standardisation and compliance. Rather than being phased out, Group A mechanisms function as a stable backbone for sustainability procurement. The document suggests that this reliance is partly driven by practical constraints, such as low supplier response rates and difficulties in comparing LCAs, which make strict specifications and monitoring necessary to maintain control and comparability.

What the interaction mix reveals

Organisation I exhibits a form of medium procurement maturity that is more control-anchored than the proposition anticipates. The organisation is clearly moving beyond cost-focused procurement and increasingly uses structured interaction and selective relational engagement to support sustainability goals. However, learning and innovation are still largely organised within predefined and controlled boundaries. Group B mechanisms support clarification and filtering rather than solution co-development, Group D mechanisms are applied selectively and pragmatically, and Group C mechanisms remain underdeveloped.

Bottom line: does Organisation I confirm the proposition?

Overall, the proposition is not confirmed for Organisation I. Organisation I does combine Group B mechanisms with selective Group D mechanisms, reflecting a shift toward more strategic and sustainability-oriented procurement. However, the limited presence of Group C mechanisms and the continued centrality of Group A mechanisms mean that the proposition overestimates the extent to which exploratory collaboration has developed at this stage. Medium procurement maturity in Organisation I is best characterised as a cautious transition, where learning and relational elements are emerging, but remain firmly embedded within a strong framework of specification, monitoring, and control.

2.4.3. Proposition assessment for Organisation T

For Organisation T, the medium procurement maturity proposition is confirmed. The central pattern described in the proposition is clearly visible in the organisation's procurement practice. The proposition assumes that procurement is increasingly used for problem-solving and innovation, while remaining guided by commercial considerations. Organisation T fits this pattern closely. The organisation clearly moves beyond cost-only procurement by integrating sustainability into structured dialogue, experimentation, and supplier engagement. At the same time, interaction remains bounded by business-case logic, supplier concentration, and standardisation needs. This is reflected in the documented interaction mix, which includes mechanisms from all four groups, with Group B and Group C forming the core and Group D applied selectively.

Group B as a central steering logic

Group B mechanisms play a central role in Organisation T's approach to sustainable workplace IT procurement and provide the strongest confirmation of the proposition. Structured market dialogue is actively used through workshops in which new criteria are explained and feedback from suppliers is gathered. These interactions are used to align expectations and assess feasibility before requirements are fixed, rather than merely to collect information. Early criteria articulation further supports this approach. Organisation T defines strategic intentions through the Supplier Code of Conduct before translating them into strict contractual requirements, which helps suppliers understand the organisation's sustainability direction while retaining some flexibility in how to respond. Sustainability is also formally integrated into tendering, but within clear commercial boundaries. As T1 explains, typical RFP scoring allocates "40–50% to price, around 10% to sustainability." This shows that sustainability is taken seriously, yet remains balanced against cost and functionality. Together, these practices reflect a structured but flexible interaction logic that aligns closely with Group B and supports the proposition's expectations for medium procurement maturity in a private context.

Active but bounded use of Group C mechanisms

Organisation T also demonstrates a clear and substantive use of Group C mechanisms, which strongly supports the proposition. Market scanning and open engagement are institutionalised through participation in a sector-wide alliance of more than 25 companies. This alliance is explicitly used to understand "where suppliers stand in the net-zero transition, what gaps exist, and where support or pressure can drive progress." Tools such as EcoVadis are used not only for assessment but also for broad sustainability scanning and pre-qualification, helping the organisation map supplier capabilities before formal procurement decisions

are made. In addition, Organisation T engages in pilot collaborations and short-term trials to explore innovations that are not yet standardised or scalable. A clear example is the early experimentation with digital product passports, where "suppliers had to provide material data, software parties linked that and in four months you had one product passport." These initiatives reflect exploratory collaboration aimed at learning and uncertainty reduction, while remaining limited in scope and risk. This aligns closely with the proposition's reasoning that Group C mechanisms are used selectively and strategically at medium procurement maturity.

Selective emergence of Group D mechanisms

Group D mechanisms are present in Organisation T's procurement practice, but their use is clearly selective and focused on strategically important suppliers. The collaboration with Fairphone illustrates this most clearly. Organisation T describes how "together they developed product passports," indicating joint problem-solving and innovation beyond transactional buying. Supplier development through direct involvement is particularly visible in refurbishment and reuse contexts, where T1 states, "we steer on correct recycling and we stimulate reuse." Incentives are also used in non-financial ways, such as offering public visibility for innovations; after developing a product passport with Fairphone, "we made a podcast about it." Bilateral communication is embedded in ongoing governance, with refurbishment providers engaging in "monthly discussions about improvements." At the same time, the document makes clear that this level of relational engagement is not widespread. Fairphone is described as "niche externally," and Organisation T explicitly acknowledges its limited influence over dominant suppliers, who account for 80–90% of procurement volume and "hardly move, even with 25 [sector companies] together." This confirms the proposition's expectation that Group D mechanisms begin to emerge at medium maturity but remain focused on critical relationships rather than becoming dominant.

The continued role of Group A mechanisms

While the proposition focuses on Group B, C, and selective D mechanisms, Organisation T's continued reliance on Group A mechanisms adds an important nuance. Precise specification demands remain central, particularly around data quality and comparability. T1 emphasises that "an ISO-certified and independently verified LCA or Environmental Product Declaration is better than a quick-and-dirty one." Monitoring and assessment are systematic, with suppliers encouraged to submit CDP disclosures and progress reviewed during "ongoing governance." Blanket contracts and volume commitments are also used, for example in the relationship with Fairphone, creating stability but potentially reducing incentives to innovate post-award. Importantly, these mechanisms are not used purely for control. Instead, they provide a stable governance backbone that enables the use of more flexible and exploratory mechanisms. Standardisation and monitoring support credibility and accountability, which in turn make Group B dialogue, Group C experimentation, and selective Group D collaboration feasible within a commercial procurement environment.

Bottom line: does Organisation T confirm the proposition?

Overall, Organisation T confirms the medium procurement maturity proposition. The organisation primarily combines Group B and Group C mechanisms, using structured dialogue and exploratory collaboration to address sustainability challenges in workplace IT procurement. Group D mechanisms are present but remain selective and strategically targeted, rather than dominant. Group A mechanisms continue to play a foundational role, anchoring the system in control and standardisation. Organisation T therefore illustrates how medium procurement maturity in a private organisation manifests as a balanced mix of structured competition, experimentation, and selective relational governance, firmly grounded in existing market structures and business-case logic.

2.4.4. Proposition assessment for Organisation O

For Organisation O, the low procurement maturity proposition is clearly confirmed. The interaction pattern described in the proposition aligns closely with the organisation's documented procurement maturity and its actual use of buyer-supplier interaction mechanisms. Organisation O shows a strong reliance on Group A mechanisms, with only limited and instrumental use of more collaborative mechanisms. Where Group C and Group D mechanisms appear, they are applied in a narrow, corrective or opportunistic manner rather than as part of a systematic learning-oriented approach.

Group A as the dominant interaction logic

The strongest confirmation of the proposition lies in Organisation O's extensive use of Group A mechanisms. Sustainability is embedded through precise specification demands, where detailed sustainability

criteria are incorporated directly into Requests for Proposals. Suppliers are required to provide sustainability reports, certifications, and security assurances, indicating a strong reliance on predefined criteria and formal documentation. Monitoring and assessment further reinforce this control-oriented approach, as hardware performance and defects are monitored closely through IT systems.

This interaction logic is consistent with Organisation O's broader procurement ambition. Sustainability is operationalised through compliance with policies, minimum requirements, certifications, and monitored thresholds. The organisation explicitly aims to optimise its existing procurement system by improving consistency, accountability, and oversight, rather than by reshaping supplier relationships or procurement models. Group A mechanisms therefore form the core governance backbone of procurement, ensuring comparability, control, and risk reduction. This dominance of Group A mechanisms aligns directly with the proposition's expectation for low procurement maturity.

Absence of structured Group B interaction

Notably, Organisation O shows no evidence of Group B mechanisms. There is no indication of structured market dialogue, early criteria articulation in a functional or outcome-based sense, or competitive dialogue that would allow for structured two-way learning. Instead, specification decisions are largely shaped by end-users and product owners, with procurement acting as an administrative function that translates these decisions into formal requirements.

This absence is significant for assessing the proposition. While the proposition allows for occasional opportunistic use of Group B mechanisms at low maturity, Organisation O does not even reach that level. Interaction with suppliers remains transactional and evaluative, focused on comparing suppliers against predefined criteria rather than refining needs or learning jointly with the market. This further reinforces the conclusion that Organisation O fits the low procurement maturity pattern described in the proposition.

Limited and instrumental use of Group C mechanisms

Organisation O does demonstrate a single Group C mechanism through market scanning and open engagement. The organisation deliberately includes unknown "dark horse" vendors in selection processes to stimulate innovation and potentially identify suppliers with stronger sustainability performance. While this reflects exploratory intent, its scope remains limited. This mechanism is embedded within existing selection routines and serves primarily to widen the pool of comparable suppliers, rather than to support joint experimentation or early-stage learning. There is no evidence of pilot collaborations, short-term trials, reverse sourcing, or pre-commercial procurement. This limited use of Group C mechanisms is consistent with Organisation O's Horizon-1 ambition and its focus on improving existing procurement practices rather than exploring alternative models. As such, Group C is used opportunistically, exactly as the proposition predicts for organisations with low procurement maturity.

Corrective rather than relational use of Group D mechanisms

Organisation O also applies a Group D mechanism in the form of supplier development through direct involvement. When suppliers fail to meet minimum expectations, the organisation first discusses the underlying causes with them and identifies possible improvements. While this reflects engagement beyond strict enforcement, it remains corrective in nature. Supplier involvement is triggered by underperformance and aimed at restoring compliance with established thresholds, not at co-developing new capabilities or jointly shaping future solutions. Performance control remains largely one-directional, and suppliers are rarely excluded unless strict criteria, such as child labour, are breached. This confirms that Group D mechanisms are not used as part of a broader relational governance model, but rather as a pragmatic tool to maintain acceptable performance levels. This instrumental use aligns with the proposition's reasoning that, at low maturity, interaction remains focused on performance correction rather than mutual learning.

What the interaction mix reveals

Together, Organisation O's interaction mix reflects a classic low-maturity procurement model. Group A mechanisms dominate and define how sustainability is translated into procurement practice. Group C and Group D mechanisms appear only at the margins and are applied in a narrow, performance-oriented way. There is no evidence of structured learning, functional problem framing, or collaborative innovation. Procurement remains largely an administrative and compliance-driven function, closely aligned with cost control, risk management, and policy enforcement.

Bottom line: does Organisation O confirm the proposition?

Overall, Organisation O clearly confirms the low procurement maturity proposition. The organisation relies predominantly on Group A mechanisms, with limited and instrumental use of Group C and Group D mechanisms, and no evidence of Group B mechanisms. The C and D mechanisms are unexpected, but their use

is not relational. Their application in interaction with suppliers is focused on specification, monitoring, and compliance rather than learning or co-development. This pattern closely matches both the proposition's core claim and its underlying reasoning about cost-focused, efficiency-driven procurement at low maturity levels in private organisations.

2.4.5. Proposition assessment for Organisation B

For Organisation B, the high procurement maturity proposition is clearly confirmed. The proposition suggests that private organisations with high procurement maturity will primarily rely on relational and learning-oriented interaction mechanisms. Organisation B fits this pattern closely. The documented interaction mix shows a clear emphasis on Group D and Group C mechanisms, combined with limited but purposeful use of Group B and Group A mechanisms. This balance reflects a procurement approach that prioritises long-term supplier relationships, joint learning, and capability development, while still maintaining clear baselines and accountability.

Group D as the dominant interaction logic

The strongest confirmation of the proposition lies in Organisation B's extensive use of Group D mechanisms. Supplier relationships are clearly framed around learning, insight, and shared responsibility rather than narrow compliance. Supplier selection is explicitly based on knowledge contribution, with Organisation B emphasising whether a supplier can "show understanding of what needs to improve" (B1). This indicates that suppliers are valued for their ability to contribute to ongoing development, not just for delivering predefined outputs.

Supplier development through direct involvement further reinforces this relational logic. Organisation B engages suppliers in iterative and hands-on learning processes, illustrated by cases where, after a group session, "an international supplier asked for a one-on-one conversation to learn more" (B1). This shows an active investment in supplier capability building rather than arm's-length monitoring.

Bilateral communication is also continuous and expectation-driven. Instead of imposing immediate sanctions when insight is lacking, Organisation B sets clear learning expectations over time, for example by stating: "let's talk again in six months and then I expect you to have this insight" (B1). This quote captures the essence of Group D interaction: long-term orientation, mutual learning, and relational governance. Together, these mechanisms confirm that Group D forms the core of Organisation B's procurement approach, exactly as the proposition predicts for high procurement maturity in private organisations.

Group C as a complementary learning and experimentation layer

Group C mechanisms play a substantial and clearly articulated supporting role in Organisation B's interaction mix. Organisation B actively engages in market scanning and open engagement to explore what is feasible and where suppliers stand relative to one another. This is illustrated by the aim "to understand what is good, average or lagging in the market" (B1). Such engagement is exploratory rather than transactional and is used to inform learning and future expectations.

Pilot collaborations and short-term trials further strengthen this exploratory layer. Organisation B conducts experiments together with suppliers, for example by analysing "together with a hardware supplier a specific device" in order to "learn what kind of data is needed." This shows that experimentation is used to reduce uncertainty and build shared understanding before scaling requirements. These Group C mechanisms align closely with the proposition's reasoning that high procurement maturity involves structured experimentation and learning, while also recognising that supplier effort is not unlimited.

Group B as a structuring and legitimising mechanism

Group B mechanisms are present but clearly secondary to Group D and Group C. Organisation B uses outcome-based demand articulation to translate long-term sustainability ambitions into concrete performance directions. Examples include targets such as a "5% annual reduction of digital waste" and laptops with a "lower embodied carbon footprint than previous generations" (B1). These mechanisms provide structure and clarity while leaving room for supplier interpretation and innovation.

At the same time, the document does not show Group B mechanisms as the primary arena for learning or interaction. Instead, they function as gateways that frame expectations and support internal legitimacy, while deeper learning and capability development occur through Group C and Group D interactions. This positioning aligns well with the proposition's view of Group B as a supporting rather than dominant mechanism at high maturity levels.

Group A as a governance backbone

Group A mechanisms remain present in Organisation B but do not dominate the interaction logic. Precise specification demands are used to set clear baselines, such as the rule that "only devices that are TCO Certified are purchased" (B2). Monitoring and assessment are institutionalised through systematic data collection, with "supplier-specific footprint data [being] scaled accurately across the device estate." These mechanisms ensure comparability, accountability, and stability.

Importantly, these Group A mechanisms are not used primarily as policing tools. Instead, they function as a governance backbone that stabilises outcomes and enables more relational and exploratory interactions elsewhere. Monitoring data feeds back into learning and future tightening of criteria, rather than serving as an endpoint in itself. This confirms the proposition's assumption that Group A mechanisms persist at high maturity but in a supporting and institutionalising role.

What the interaction mix reveals

Together, Organisation B demonstrates a coherent high-maturity interaction model. Group D mechanisms form the core, enabling relational governance, joint learning, and long-term supplier development. Group C mechanisms provide structured spaces for exploration and experimentation, supporting learning under uncertainty. Group B mechanisms translate ambition into directional performance expectations, while Group A mechanisms ensure clear baselines and accountability. Rather than crowding each other out, these mechanisms are clearly differentiated and mutually reinforcing.

Bottom line: does Organisation B confirm the proposition?

Yes, Organisation B clearly confirms the high procurement maturity proposition. The organisation predominantly relies on Group D and Group C mechanisms, reflecting a procurement system centred on collaboration, learning, and capability building. Group B and Group A mechanisms play well-defined supporting roles, providing structure, legitimacy, and governance without undermining relational engagement. As such, Organisation B represents a strong empirical confirmation of the proposition for private organisations procuring sustainable workplace IT.

2.4.6. Proposition assessment for Organisation M

For Organisation M, the high procurement maturity proposition is partially confirmed. The central pattern described in the proposition is clearly visible, but the case also reveals important deviations. The proposition suggests that public organisations with high procurement maturity will predominantly rely on advanced Group B mechanisms, complemented by selective Group D mechanisms and supported by pre-competitive Group C mechanisms. It also implicitly assumes a reduced reliance on Group A mechanisms. Organisation M largely fits this pattern but does not fully conform to it. The organisation clearly demonstrates strong Group B mechanisms and selective but meaningful Group D mechanisms. However, Group C engagement is limited, and Group A mechanisms continue to play a central role.

Group B as the dominant steering logic

The strongest confirmation of the proposition lies in Organisation M's use of Group B mechanisms, which form the dominant steering logic for sustainability procurement. Structured market dialogue is actively used for learning, as illustrated by the statement that "market consultations can help gauge what is feasible" (M1). This interaction is used to test boundaries rather than merely to gather information. Early criteria articulation further supports this approach. Organisation M defines expectations early so suppliers "understand what we want to receive" (M3), while still leaving room for supplier interpretation. Outcome-based demand articulation strengthens this learning orientation. Suppliers are expected to explain "what improvements they will realise during the contract and how they will adjust if goals are not met" (M3). This clearly embeds improvement and learning into procurement while remaining compatible with transparency and equal-treatment requirements. In this respect, Organisation M closely matches the proposition's expectation that advanced Group B mechanisms dominate in high-maturity public procurement.

Selective but substantive use of Group D mechanisms

Organisation M's use of Group D mechanisms also broadly confirms the proposition, though with important nuance. As expected in a public procurement context, these mechanisms are selective and mainly applied during contract execution. Within these limits, however, their use is substantial. Supplier development through direct involvement is evident where suppliers can state that they "do not have real-time monitoring yet, but in three months we can provide it" (M3). This reflects a capability-building approach rather than strict compliance enforcement. Bilateral communication is structurally embedded through ongoing operational, tactical, and strategic meetings, supported by specialised discussions (M2). The relational mindset

underpinning this approach is captured clearly in the statement, "If I fail, [the supplier] fails; if [the supplier] fails, I fail" (M2). This shows shared responsibility and interdependence, which are central to Group D logic. At the same time, these mechanisms remain concentrated post-award and do not replace competitive tendering, which aligns with the proposition's reasoning about public procurement constraints.

Limited development of pre-competitive Group C mechanisms

The clearest deviation from the proposition concerns Group C mechanisms. The proposition assumes that high-maturity public organisations will retain Group C mechanisms as pre-competitive learning infrastructure. In Organisation M's case, only one Group C mechanism is evident: market scanning and open engagement. This is illustrated by M2 exploring with a supplier what might already be technically possible for the one-device vision. The document shows no evidence of reverse sourcing, pilot collaborations or short-term trials, or pre-commercial procurement. This is notable given Organisation M's ambitious goals, such as "our end goal is a one-device policy" (M1) and the recognition that achieving this would require broader coalitions "at national or European scale" (M3). Despite these ambitions, exploratory engagement remains lightweight and informal. This indicates that high procurement maturity does not automatically translate into extensive Group C usage in this case.

The continued strategic role of Group A mechanisms

A second important deviation relates to Group A mechanisms. While the proposition implicitly downplays Group A at higher maturity levels, Organisation M continues to rely on them heavily. Precise specification demands remain central, for example where cloud services "must operate on renewable Dutch wind and solar energy" (M3). Monitoring and assessment are systematic, with suppliers providing "ongoing data during the contract period, enabling monitoring" (M1). Blanket or framework contracts are also used and valued because "you have time to find each other in the cooperation" (M3). Importantly, these mechanisms are not used purely for policing. Instead, they are repurposed to support learning-oriented procurement. Framework contracts provide stability for cooperation and improvement, while monitoring creates an ongoing basis for steering and adjustment. In this way, Group A mechanisms function as a governance backbone that enables Group B flexibility and selective Group D relationality within public accountability requirements.

What the interaction mix reveals

Together, Organisation M reflects a hybrid form of high procurement maturity. Group B and Group A form the core operating system. Group B provides structured openness through dialogue, early articulation, and outcome-based framing, while Group A ensures auditability, stability, and enforceability through clear specifications, monitoring, and framework contracts. On top of this core, Group D mechanisms act as an execution-phase complement, introducing relational governance and shared responsibility during contract implementation. Group C remains limited, despite high ambitions.

Bottom line: does Organisation M confirm the proposition?

Overall, the proposition is supported for Organisation M in its central claim. High procurement maturity is visible in the dominant use of Group B mechanisms and the selective use of Group D mechanisms. However, the case also shows that high maturity in public workplace IT procurement can involve persistent and strategically repurposed Group A mechanisms, alongside limited Group C engagement. The proposition therefore holds for Organisation M, but requires refinement to account for the continued importance of Group A mechanisms and the more limited role of Group C in this context.

2.4.7. Proposition assessment for Organisation H

For Organisation H, the low procurement maturity proposition is largely confirmed. The core pattern described in the proposition is clearly visible in the organisation's procurement practices and interaction mechanisms. Organisation H relies predominantly on Group A mechanisms and only makes limited, tightly controlled use of Group B mechanisms. There is no evidence of Group C or Group D mechanisms. This interaction mix reflects a procurement approach that is strongly compliance-driven, risk-avoiding, and focused on manageability rather than learning or innovation. Sustainability requirements are formally included, but follow-up and learning appear weak. Market interaction exists, but it is carefully bounded and primarily serves to assess feasibility and reduce uncertainty rather than to stimulate innovation.

Group A as the dominant steering logic

The strongest confirmation of the proposition lies in Organisation H's reliance on Group A mechanisms, which clearly form the dominant steering logic of its procurement approach. Tenders include precise specification demands, and sustainability is embedded through clearly defined requirements rather than through

functional or outcome-based framing. Multi-year agreements are used to create stability and efficiency, allowing repeated ordering without renegotiating terms. This reflects a strong preference for predictability and control. Monitoring and assessment mechanisms are also formally present. Organisation H receives annual sustainability reports from suppliers and has included monitoring tools in contracts, such as systems that signal failing laptop batteries early. However, the way these mechanisms are used aligns with the proposition's reasoning about low maturity. Monitoring remains largely passive and underutilised. One interviewee notes that "no one asks me: are the sustainability objectives of the contracts being achieved?" Another states, "if you do not ask, you will not get an answer." This indicates that sustainability monitoring functions more as a formal requirement than as an active steering or learning instrument, reinforcing the idea of a "paper reality" rather than a dynamic sustainability process.

Limited and bounded use of Group B mechanisms

Organisation H does make use of structured market dialogue, which falls within Group B. Market consultations are used to test feasibility and to determine which sustainability demands are realistic. Suppliers are asked how they would shape sustainability within the contract, and these consultations reveal differences in supplier understanding and ambition. This shows that some degree of two-way interaction and learning does take place.

At the same time, the function of these Group B mechanisms is clearly constrained. Market consultations are primarily used to filter out options that are considered too complex or difficult to manage. The emphasis remains on what can be realistically implemented within existing systems and capacities. As a result, these interactions do not fundamentally shift the procurement logic away from control and risk avoidance. Instead, Group B mechanisms operate in support of Group A, helping Organisation H refine and legitimise its specifications rather than opening space for innovation or co-development.

Absence of Group C and Group D mechanisms

A further confirmation of the proposition lies in what is missing from Organisation H's interaction portfolio. There is no evidence of Group C mechanisms such as pilot collaborations, short-term trials, reverse sourcing, or pre-commercial procurement. Likewise, there is no use of Group D mechanisms aimed at supplier development, bilateral capability-building, or relational governance. This absence is consistent with the organisation's low innovation and LCA ambitions, limited internal and supplier control, and weak leadership support for sustainability. Interviewees indicate that organisational attention has shifted back toward cost concerns, further reducing space for exploratory or relational approaches.

What the interaction mix reveals

Together, Organisation H's interaction mix reveals a procurement approach centred on control, stability, and procedural defensibility. Group A mechanisms form the core operating system, ensuring that procurement decisions are manageable, auditable, and aligned with existing organisational priorities. Group B mechanisms are present but play a secondary, supportive role by helping to assess feasibility and reduce uncertainty before decisions are made. Sustainability is integrated into this system, but primarily as a set of requirements that must be included rather than as a driver of learning or innovation.

Bottom line: does Organisation H confirm the proposition?

Overall, Organisation H clearly confirms the low procurement maturity proposition. Its practices align closely with a Horizon 1 ambition level, where sustainability is addressed incrementally and within existing operational constraints. The dominance of Group A mechanisms, the limited and instrumental use of Group B mechanisms, and the complete absence of Group C and Group D mechanisms together illustrate a procurement approach that prioritises compliance and risk avoidance over learning and innovation. In this sense, Organisation H provides a strong empirical example of how low procurement maturity in public workplace IT procurement translates into a predominantly control-oriented interaction logic.

2.4.8. Proposition assessment for Organisation U

For Organisation U, the medium procurement maturity proposition is not confirmed. While the organisation shows some movement away from purely rigid procurement and demonstrates elements associated with medium maturity, its interaction pattern remains strongly anchored in control-oriented mechanisms. Group A mechanisms dominate the procurement approach, Group B mechanisms play a secondary and supporting role, and Group C mechanisms are not evident in the documented practice. At the same time, Organisation U shows early signs of relational thinking during contract execution, which adds an important nuance to the assessment.

Group A as the dominant steering logic

The clearest feature of Organisation U's procurement approach is the central role of Group A mechanisms. Sustainability is primarily pursued through strict control, standardisation, and monitoring. The organisation explicitly relies on "strict, detailed parameters" and is moving toward "standardisation of devices" to ensure sustainability objectives are met. This logic is also reflected in the use of blanket or long-term contracts, where a specialised internal team determines and updates the hardware assortment over time. Rather than opening up solution space for suppliers, Organisation U retains strong buyer-side control over what is procured.

Monitoring and assessment further reinforce this Group A orientation. Suppliers are required to provide quarterly reports on delivery performance, repairs, and other contractual KPIs, and these are discussed in regular review calls. These practices emphasise accountability, comparability, and compliance, and they anchor sustainability firmly within auditable procurement routines. In this sense, Group A mechanisms are not merely supportive safeguards but the primary means through which sustainability is governed.

Group B as a secondary, feasibility-oriented layer

Organisation U does demonstrate elements of Group B interaction, but these are used cautiously and in a clearly bounded way. Structured market consultations are organised before tenders, specifically because "there are not many resellers" and the organisation needs to understand "what requirements were reasonable." These consultations are used to determine whether sustainability criteria should be framed as a "wish" or a formal "requirement." This reflects structured, time-limited dialogue aimed at calibrating expectations rather than co-developing solutions.

There are also signs of functional or outcome-oriented thinking, for example when Organisation U reframes workplace needs by stating that employees "no longer need a desktop and screens" but only "a desk with a power strip." This indicates a shift away from prescribing specific products toward articulating underlying needs. However, this shift mainly informs internal decision-making and standardisation choices, rather than forming the basis of an open, outcome-based competitive dialogue with suppliers. As a result, Group B mechanisms remain supportive to the dominant Group A logic, rather than replacing it as the main steering approach.

Absence of Group C mechanisms

A notable deviation from the proposition concerns Group C mechanisms. The medium maturity proposition assumes that public organisations at this level will begin to use pilots, experiments, or other forms of controlled exploration. In Organisation U's case, no such mechanisms are evidenced. The document does not describe pilot collaborations, short-term trials, reverse sourcing, or pre-commercial procurement. Instead, sustainability learning is expected to come from better data, improved tools, and incremental optimisation within existing contracts. This absence suggests that Organisation U is not yet engaging in exploratory collaboration and prefers to manage uncertainty through standardisation and control rather than experimentation.

Emerging relational elements during execution

Although Group A dominates and Group B plays a limited role, Organisation U does show early signs of Group D logic during contract execution. Regular evaluations and performance discussions are described, and the organisation notes that through supplier management it is "building a kind of partnership." There is also an expressed intention to move toward "deeper strategic discussions regarding sustainability objectives." These practices indicate a growing recognition of the value of ongoing dialogue and relational governance. However, these elements remain embedded within a strongly controlled contractual framework and do not extend to supplier selection or pre-competitive collaboration.

What the interaction mix reveals

Together, Organisation U reflects a control-led form of medium procurement maturity. The organisation's Horizon 2 ambition focuses on improving sustainability performance within existing systems. Group A mechanisms provide the core governance structure, ensuring predictability, compliance, and accountability. Group B mechanisms are used selectively to test feasibility and refine criteria, helping Organisation U avoid unrealistic demands while maintaining procedural legitimacy. Group C mechanisms are absent, and exploratory learning is not a prominent feature of the procurement approach. Relational practices associated with Group D are emerging during contract execution, but they complement rather than transform the dominant control-oriented model.

Bottom line: does Organisation U confirm the proposition?

Overall, the medium procurement maturity proposition is not supported for Organisation U. The organisation does exhibit some characteristics associated with medium maturity, such as limited structured dialogue and early movement toward functional thinking. However, it does not mainly rely on Group B mechanisms, and it does not show evidence of even tightly bounded Group C experimentation. Instead, sustainability procurement is primarily driven by Group A mechanisms, with Group B used instrumentally and Group D emerging cautiously during execution. Organisation U therefore challenges the proposition's assumption that medium procurement maturity necessarily implies a Group B-led interaction model in the context of public workplace IT procurement.

2.4.9. Proposition assessment for Organisation R

For Organisation R, the medium procurement maturity proposition is partially confirmed. The general pattern described in the proposition is visible, but the case also shows important nuances that complicate a straightforward confirmation. Organisation R clearly combines Group B mechanisms with Group A mechanisms and uses Group C mechanisms in a limited and carefully bounded way, which broadly aligns with expectations for medium procurement maturity. At the same time, Group B does not clearly dominate as the main steering logic. Instead, Group A and Group B coexist as equally important approaches. The observed interaction mix reflects this balance, showing that Organisation R has not shifted decisively away from specification-based procurement but has layered structured learning mechanisms on top of it.

Group B as an emerging, but not dominant, steering logic

Organisation R's use of Group B mechanisms provides the clearest alignment with the proposition, though their role is more complementary than dominant. Structured market dialogue is used in a selective and controlled manner. Market consultations are sent to specific suppliers and designed to remain comparable and administratively manageable. This indicates that interaction is intentionally structured to allow learning while maintaining transparency and procedural control. Early criteria articulation further supports this approach. Organisation R uses ambition webs to signal direction to tier-1 and tier-2 suppliers, explicitly indicating where suppliers are expected to be at different points in a typical contract cycle, such as after two or four years. This reflects a clear Group B logic: expectations are articulated early and framed as a trajectory, allowing suppliers to interpret how they will meet these expectations over time. At the same time, these mechanisms do not replace detailed specifications. Instead, they function alongside them, suggesting that Group B is an important but not dominant steering logic.

Limited development of pre-competitive Group C mechanisms

The proposition's expectation of limited Group C use at medium procurement maturity is well reflected in Organisation R's case. Group C mechanisms appear mainly as tools for exploration and information gathering rather than as vehicles for joint experimentation or co-creation. Organisation R engages in market scanning and open engagement to understand what can reasonably be expected from the market and to reach relevant actors, such as CSR staff on the supplier side. In addition, interviews, surveys, pilots, and market consultations are used to "get information and to have the conversation." These activities are framed as preparatory and exploratory, supporting internal understanding and future requirement-setting. They are not described as open-ended collaborations or as processes where solutions are jointly developed. This bounded use of Group C mechanisms aligns closely with the proposition's reasoning about public organisations being cautious and capacity-constrained at this maturity level.

The continued central role of Group A mechanisms

A key nuance in Organisation R's case is the continued centrality of Group A mechanisms. While the proposition assumes that Group A will mainly play a supporting role at medium maturity, Organisation R continues to rely heavily on precise specification demands and blanket or long-term contracts. The organisation explicitly states that it "knows exactly what it needs" and "knows very well which laptops, computer mice and keyboards we want." This confidence in predefined needs justifies a strong reliance on detailed specifications. Long-term contracts structure procurement into predictable cycles, providing stability and control. Importantly, these Group A mechanisms are not portrayed as temporary or transitional. They remain a core part of Organisation R's procurement approach, particularly for standard workplace IT. At the same time, they also create a stable framework within which ambition webs and stepwise sustainability expectations can be applied, showing how Group A mechanisms enable, rather than block, the use of Group B mechanisms.

What the interaction mix reveals

Together, Organisation R reflects a medium ambition horizon and a hybrid interaction model. Sustainability ambitions are clearly present and increasingly structured, but they are incremental and embedded in existing procurement routines rather than transformative. The use of ambition webs and staged expectations over the contract cycle indicates a forward-looking orientation, but one that remains firmly grounded in known technologies and standardised products. Group A and Group B form a dual core: Group A provides control, standardisation, and predictability, while Group B introduces structured learning and directional steering. Group C mechanisms sit at the edges of this system, supporting bounded exploration and internal learning without challenging established procurement practices. There is no evidence of Group D mechanisms, which is consistent with a medium ambition horizon and a cautious public procurement context.

Bottom line: does Organisation R confirm the proposition?

Overall, the proposition is partially supported in Organisation R's case. The organisation fits the proposition's structural logic, combining Group B mechanisms with Group A mechanisms and using Group C mechanisms in a limited and controlled way. However, the proposition overstates the extent to which Group B becomes the main steering logic at medium procurement maturity. For Organisation R, Group A mechanisms remain just as central as Group B mechanisms, particularly where requirements are seen as well known. Organisation R therefore confirms the proposition in broad terms, but also shows that medium procurement maturity in public workplace IT procurement can be characterised by a stable coexistence of specification-based control and structured learning, rather than a clear shift toward Group B dominance.

2.4.10. Proposition assessment for Organisation D

For Organisation D, the low procurement maturity proposition is clearly confirmed. Procurement is expected to focus on procedural correctness, risk reduction, and auditability, with limited learning-oriented or collaborative interaction. Organisation D fits this expected pattern very closely. The organisation's interaction mix is clearly anchored in Group A mechanisms, supported by selective and cautious use of Group B mechanisms, a very thin layer of Group C activity, and limited Group D interaction confined to contract execution. The overall mix reflects a procurement approach that prioritises control and stability over exploration or innovation.

Group A as the dominant interaction logic

The strongest confirmation of the proposition lies in Organisation D's extensive and central use of Group A mechanisms. Workplace IT procurement is framed as a stable and mature domain in which uncertainty should be minimised upfront. This is evident in the use of precise specification demands, where ICT is described as a "fixed set of hardware and standard software" (D2). Such specifications leave little room for supplier interpretation and clearly position procurement as an exercise in defining and enforcing predefined requirements.

Monitoring and assessment further reinforce this control-oriented logic. Sustainability is embedded through contractual KPIs that are systematically tracked. As D3 explains, "we have set KPIs… and we monitor them," and because "sustainability is a KPI in the contract, it always comes up." Sustainability is therefore governed through measurable criteria that can be documented, audited, and defended, rather than through iterative learning with suppliers. Blanket and framework contracts add to this logic of control and predictability. Three-year maintenance contracts and public procurement rules that limit contract duration to around four years (D1, D2) stabilise relationships but also constrain experimentation and longer-term collaboration. Together, these Group A mechanisms clearly form the backbone of Organisation D's interaction with suppliers.

Constrained and confirmatory use of Group B mechanisms

Organisation D does make use of Group B mechanisms, but their role remains limited and does not undermine the proposition. Structured market dialogue is formally organised, yet its purpose is mainly to confirm existing assumptions. Consultations are used to clarify needs and align with market capabilities, but they are described as "usually confirming existing expectations rather than introducing surprises" (D3). This indicates that interaction with the market is not used to challenge requirements or explore alternative solutions, but rather to validate predefined choices.

Outcome-based demand articulation shows a similar pattern. While open criteria are used to encourage suppliers to demonstrate added value in areas such as optimisation or cooperation (D2), this openness is tightly bounded. Suppliers can propose additions, but only within a fixed structure of requirements that is not fundamentally open to change. As a result, Group B mechanisms function more as controlled extensions of Group A than as genuine learning-oriented interaction.

Thin and precautionary Group C engagement

Exploratory interaction through Group C mechanisms is present only to a very limited extent. Organisation D engages in market scanning and informal exploration, such as checking the market, learning from similar organisations, or informally exploring feasibility with current suppliers (D2). This activity remains lightweight and precautionary. It is used to reduce the risk of infeasible tenders rather than to jointly explore emerging technologies or new procurement approaches. There is no evidence of pilot collaborations, reverse sourcing, or pre-commercial procurement. This thin use of Group C mechanisms aligns closely with the proposition's expectation that low-maturity organisations will not invest heavily in structured pre-competitive learning.

Limited and control-oriented Group D interaction

Group D mechanisms are present only at the margins and are confined to the execution phase of contracts. Bilateral communication takes place through regular operational, tactical, and strategic meetings, and operational contact can occur daily (D3). While this suggests frequent interaction, its content remains strongly shaped by KPIs and contractual control. Communication primarily supports monitoring and issue resolution rather than shared capability development or co-creation. Suppliers are not engaged as strategic partners for innovation, and relational interaction does not replace competitive or control-based governance.

What the interaction mix reveals

Together, Organisation D's interaction mix reflects a clear low procurement maturity profile. Group A mechanisms dominate and define what is legitimate and manageable within procurement. Group B mechanisms are used cautiously and mainly to confirm expectations. Group C engagement is thin and informal, and Group D interaction is limited to KPI-driven contract management. Sustainability is consistently present, but it is embedded as a requirement to be specified, monitored, and controlled rather than as a process of learning or transformation.

Bottom line: does Organisation D confirm the proposition?

Overall, Organisation D clearly confirms the low procurement maturity proposition. The organisation's procurement of sustainable workplace IT is structured around control, compliance, and risk avoidance, with Group A mechanisms as the dominant interaction logic. While elements from other groups are visible, they do not alter this core pattern. Instead, they reinforce a procurement approach in which sustainability is operationalised through predefined criteria and contractual monitoring, fully in line with the proposition's reasoning.

2.4.11. Proposition assessment for Organisation E

For Organisation E, the low procurement maturity proposition is largely confirmed. The overall interaction pattern described in the proposition is clearly visible, with Group A mechanisms forming the dominant logic through which sustainability is addressed and governed. At the same time, the case shows a meaningful nuance: Organisation E does employ a limited Group B mechanism in the form of structured market dialogue. However, this openness remains fragile and does not fundamentally reshape how sustainability requirements are specified, contracted, or monitored. This results in an interaction mix consisting of two Group A mechanisms and one Group B mechanism, with no exploratory or relational mechanisms beyond that. Both the composition of this mix and the way the mechanisms are used align closely with the proposition.

Group A as the dominant steering logic

The strongest confirmation of the proposition lies in Organisation E's use of Group A mechanisms as the core way of managing sustainability. Precise specification demands are central. The document explicitly notes that "precise specification demands remain a dominant mechanism," implemented through minimum requirements and certificates. Sustainability is therefore framed in terms of standardised inputs that can be clearly documented and defended, rather than as negotiated outcomes or evolving performance goals.

Monitoring and assessment further reinforce this control-oriented logic. Contract management is described as mainly checking whether sustainability topics were included in the tender and whether required certificates remain valid. Monitoring thus functions primarily as formal verification of compliance, not as a tool for learning or improvement. Even where Organisation E expresses uncertainty about whether it is "doing the right things," this question is not translated into systematic feedback loops or outcome-based steering. Instead, the focus remains on whether procedural requirements have been met. This aligns very closely with the proposition's expectation that low-maturity organisations manage uncertainty by relying on defensible, auditable mechanisms.

Limited and non-transformative use of Group B mechanisms

Organisation E does show some openness through the use of structured market dialogue, which constitutes a Group B mechanism. Market consultations are described as sometimes helping, particularly when the organisation asks open questions about what suppliers can do. In form, this introduces a space for two-way interaction and learning.

However, the document also makes clear that this dialogue does not fundamentally alter the dominant procurement logic. Organisation E repeatedly struggles to translate sustainability ambitions into measurable and verifiable requirements. It notes difficulties in formulating effective questions that yield measurable answers, challenges in verifying sustainability during contract execution, and the perception that supplier responses often amount to a "standard story." These observations suggest that while dialogue exists, it does not consistently feed into outcome-oriented specifications or monitoring practices. As a result, Group B remains an auxiliary mechanism that occasionally supports procurement but does not displace the Group A backbone of minimum requirements and certificate-based control.

Absence of Group C and Group D mechanisms

The Organisation E document contains no evidence of Group C mechanisms such as pilots, reverse sourcing, or pre-commercial procurement, nor of Group D mechanisms such as supplier development, bilateral governance, or incentive-based collaboration. This absence is fully consistent with the low-maturity proposition. Without strong capacity to define, monitor, and steer sustainability outcomes, deeper forms of exploration and relational governance are difficult to justify and operationalise. Although the document refers to innovation-oriented procedures as a missed opportunity, these are not presented as mechanisms that Organisation E is actively applying. This reinforces the interpretation that the organisation's interaction logic remains primarily focused on compliance and control, with limited structured openness and no sustained exploratory or relational engagement.

What the interaction mix reveals

Together, Organisation E can be characterised as operating with a Group A core and a small Group B edge. Sustainability is anchored in minimum requirements and certificates, and contract management focuses on checking whether these requirements were formally included and remain valid. This makes sustainability manageable under accountability pressures and capacity constraints, but it also narrows sustainability to what is easiest to prove.

The limited Group B element provides some support, particularly in clarifying what suppliers can offer, but the organisation's difficulty in producing measurable questions and verifiable outcomes means that learning from dialogue is not consistently converted into enforceable procurement logic. Organisational conditions further reinforce this pattern. Capacity constraints, expressed in having more contracts than contract managers can manage, favour checklist-style monitoring. In addition, the advisory role of procurement consultants, who lack a formal mandate, makes enforceable minimum requirements and certificates the most feasible tools for embedding sustainability.

Bottom line: does Organisation E confirm the proposition?

Overall, Organisation E confirms the low procurement maturity proposition in its central claim. Given its low maturity score and the documented interaction mechanisms, the organisation predominantly relies on Group A mechanisms to manage sustainability, using precise specification demands and monitoring as formal verification.

The main nuance is that Organisation E is not exclusively Group A. It does employ structured market dialogue as a Group B mechanism, and this sometimes helps in understanding supplier possibilities. However, the evidence shows that this dialogue does not fundamentally change the dominant control-oriented model. Measurability, verifiability, monitoring capacity, and mandate remain limiting factors. As a result, the proposition holds for Organisation E, with the refinement that low-maturity organisations may exhibit small pockets of Group B interaction that remain supportive rather than transformative unless they can be systematically translated into measurable, enforceable, and monitored sustainability performance.

3

Intervention interview materials

3.1. Interview summaries per participant

3.1.1. Summary interviewee IE1

According to IE1, the main immediate value of Digital Product Passports (DPPs) for workplace IT procurement lies in moving from unstructured sustainability evidence to structured product data. He explains that organisations already request proof that products are sustainable, but this often results in "a PDF with the CO_2 emissions of products", which he calls "incredibly impractical", because "you can't really do much with that". A DPP-style approach would request the same information in a machine-readable, reusable form that works at scale for procurement, contract management and reporting.

IE1 links this need partly to scope 3 pressure: if organisations must map scope 3 emissions, they will need to request supplier data in some form. He suggests allowing suppliers to provide information either as legacy documents or as DPPs, so they can "deliver [it] with less administrative hassle", while buyers avoid managing large volumes of PDFs. This could be rewarded in tenders: "You could even award bonus points for that in a tender," reducing internal workload.

Connecting this to workplace IT, the interviewee describes discussions with public buyers who want to procure more sustainably but then run into the issue that they must also ask for the information that demonstrates sustainability. The interviewee explains that, depending on how you define it, this starts to look "very much like a product passport". At the same time, he stresses a key public-procurement constraint: requirements cannot be so strict that "only Fairphone remains", as buyers must avoid supplier lock-in and discrimination.

On DPP content, IE1 emphasises that EU legislation is still evolving and that for "virtually no product category" is it final. Much current debate is therefore "speculative". He notes that while DPPs originated in carbon footprinting, the focus is shifting: "Nowadays the emphasis is more on economic sustainability, strategic autonomy and critical raw materials." Carbon data will remain, but critical materials are becoming central, for example: "how many kilos of lithium are in your battery has basically become more important than what the CO_2 emissions of that battery are."

IE1 cautions therefore against expecting a single comparable carbon number to emerge. Carbon footprinting is "quite vague" and "extremely complicated", since "every sector and every product category uses different calculation methods," and results are not easily comparable. He adds that the Commission aims to mandate "as little as possible" to limit regulatory burden, making it unlikely that EU rules will "fully nail down" allocation questions relevant to buyers.

Despite this, he sees a practical path for workplace IT procurement: buyers can request a "reasonable split per laptop" and attach tender points. Precision is less important than comparability: "In this context it's not about knowing emissions to the gram. It's about being able to say: this Dell laptop is clearly less polluting than that Lenovo laptop." Because methods are not standardised, buyers may need to select or constrain acceptable approaches, which he expects to be "a bit of a free-for-all" initially. A pragmatic compromise is to accept a defined set of methods ("if you use one of these methods, we accept the number you provide").

IE1 also highlights that DPP design depends on the data level: model, batch or individual product. Batch-level

data matters once transport and production variation are included, individual-level data matters for repairs and refurbished devices. He links this to reuse and reporting, stating: “Repairing is in principle better than buying new, but then you do need to be able to follow those products individually.”

On timing, IE1 refers to the Ecodesign for Sustainable Products Regulation and its workplan, but cautions that for IT, some listed measures relate to energy labels rather than DPPs. Energy labels focus on use-phase consumption and “say nothing about how a product was made.” While these streams are converging, buyers should not confuse them. Today, procurement can specify “I want energy-efficient monitors,” but not yet “I want monitors that were produced in an energy-efficient way”; that upstream transparency comes “later”.

Because legal detail remains unsettled, IE1 argues that procurement must decide what is a “meaningful level to keep track of” based on ambition. He contrasts compliance-focused use (model-level data) with engagement-focused use, such as showing employees the impact of their IT starter package. He links this to behavioural effects, noting that DPP transparency could influence choices.

When discussing system requirements, IE1 emphasises scalable, trusted data sharing. Transparency is lacking not only because firms hesitate to share, but because doing so “in a structured way” currently requires large teams. A DPP system must provide controlled access, data integrity and supplier confidence that data is only seen by intended customers. He summarises this as: “The DPP system is really nothing more than a set of standards, agreements and IT tools.”

IE1 warns of the “checkbox risk”, where passports are mandated before meaningful thresholds exist. He advocates a staged procurement approach: first request insight (“tell us how it is”), then analyse impacts, and only later define “reasonable limits”. He illustrates this with offshore wind tenders where overly strict circularity rules led to no bids, underlining the need for data before norms.

For what buyers can request now, IE1 gives practical guidance. First, require data that is “structured and machine-readable,” explicitly “no photos of PDFs,” for example CSV. Second, align requirements with emerging European DPP standardisation, even though “the formal standard does not exist today yet,” and is expected around March. Third, reference existing initiatives such as the European CIRPASS2 (a DPP system architecture) and the UN Transparency Protocol and ask for machine-readable data aligned with “common international standards,” giving suppliers flexibility while avoiding unusable formats.

He adds a more speculative but growing consideration: whether to require DPP data to be hosted on a “sovereign data platform” in Europe. He links this to digital sovereignty and strategic autonomy, warning that geopolitical tension could mean “the plug can simply be pulled.” Larger national buyers may therefore require European hosting or direct data delivery, even if smaller municipalities cannot.

IE1 also describes market developments that procurement teams should watch, and he frames them as risks and choices that will shape buyer-supplier relationships. The interviewee says more commercial companies are offering DPP solutions, and some even claim they “guarantee legal compliance.” The interviewee calls that “complicated” because much legislation and the referenced standards are not final yet, meaning it is unclear what such a promise actually commits to. The interviewee expects, however, that more providers will progressively align with law and standards. This creates a procurement pathway where the buyer chooses a DPP platform and then tells suppliers: “we don’t care how, as long as the product data ends up in our DPP platform.” In his view, that shifts the challenge: you may need fewer DPP-specific requirements on each hardware supplier, but it becomes “extra important that you choose the right platform,” and that it follows European standards and interoperability principles.

The interviewee explicitly advises buyers to treat that platform choice as a considered decision, because if you “just buy some random software package,” you can “do it wrong” and become stuck. The interviewee suggests that external support can be useful here and points to TNO’s Center of Excellence for Digital Product Passport as a place to ask questions. The interviewee frames this as realistic because, for an average buyer, it is “almost impossible” to keep up with everything happening in regulation and the market, so it can be sensible to “hire a few hours of support” to procure a DPP platform properly.

Finally, IE1 describes how DPPs may change relationships between end-use buyers and suppliers in workplace IT procurement. In his account, the relationship shifts from exchanging static documents towards managing ongoing access to verified product data, where suppliers maintain data and grant controlled access, and buyers evaluate not only product attributes but also the supplier’s ability to provide interoperable, trustworthy data without bespoke effort. At the same time, he emphasises ecosystem dynamics that can slow adoption: he calls it a “common action problem,” where each individual actor would prefer to be a late adopter and still receive the benefits. The interviewee argues that if a single organisation moves first, “you get little out of it,” which is why, in his view, public institutions may need to take early steps even when it is

uncomfortable. The interviewee also links national early movement to industrial opportunity, noting that the Netherlands is relatively far ahead and that this can support the growth of DPP-related IT firms, while also acknowledging that this benefit is not necessarily reflected in how procurement functions are assessed internally.

3.1.2. Summary interviewee IE2

IE2 explains that the environmental impact of electronics and product use is less readily recognised, even though it matters greatly when you look at total impact. They link this partly to long-running government communication that focused on waste and energy rather than on using products for longer. At the same time, IE2 observes that awareness is starting to shift: the circular economy is becoming "more top of mind" for the general public, especially through the broader raw materials discussion and changing geopolitical relationships. In IE2's view, organisations can build on that by communicating not only the sustainability case, but also a sovereignty and self-sufficiency angle: an organisation can say, "we also want to be more self-sufficient", and that sovereignty aspect sits alongside environmental impact.

When it comes to behaviour change around workplace IT, IE2 keeps returning to the importance of informing people, but doing it in a way that does not overwhelm them. They explicitly warn against overloading employees with technical sustainability detail such as LCAs: "you shouldn't even start with all those LCAs." Instead, they suggest keeping it accessible and simple, for example by communicating at organisational level what has been saved (they mention savings expressed as kilograms), or even by not using numbers at all if that is clearer: "It can also be: we want to do our best as an organisation and this is part of that. Maybe that is enough already." IE2 also notes that different groups respond to different motivations, so it can help to tailor the story to target audiences. They give examples of distinct 'hooks': people who care deeply about the environment may want different insights, people reasoning from sovereignty want something else, and another group may be motivated by public responsibility and cost: "we are a government institution and we have to handle taxpayers' money properly. Financially that is also a reason. Using products for longer is clearly cheaper."

IE2 recognises how workplace devices can function as status symbols, which can make refurbished or longer-use policies feel like a downgrade for some people. Their suggestion is to treat this as a framing challenge. A refurbished device is not "the newest of the newest", so it does not naturally connect to pride in novelty, but IE2 argues that modularity can become a new source of pride: a modular device is "special", and if someone can upgrade parts of a Framework laptop, that can become "a reason to be proud of it." IE2 adds that there is also a group for whom pride comes specifically from contributing to their organisation doing the right thing: they can feel proud that "their organisation is doing well with this", and that they personally contribute through the laptop they use. IE2 also points to recruitment realities: in their study they saw organisations wanting to be attractive to people just entering the labour market, who are more aware of environmental issues and "actually want an organisation to actively engage with this." They acknowledge, however, that for people who strongly want the newest devices, this will remain difficult, and they do not assume you can satisfy everyone, though modular options might partly accommodate that group.

On extending device lifetimes in practice, IE2 is cautious about approaches that rely on employees building personal attachment to a work laptop. They argue this is difficult precisely because the device is not truly the employee's own: it resembles a lease car, where people relate differently than to something privately owned. They also point out that visible personalisation (for example stickers) is constrained by the professional context. Instead, IE2 emphasises that many employees primarily want reliability: "a lot of people just want their laptop to work." They suggest that if you can satisfy around eighty per cent of people with a laptop that works well and is fixed quickly when something goes wrong, an organisation should consider whether it needs to centre the smaller group who insist on the newest device. IE2's line is that some may simply need to get used to not always having the newest model. In a professional context, they recommend leaning heavily on service and trust: "we guarantee that it just works… you can trust that it will just work for the coming years, and if there is something, then we fix that very quickly."

IE2 also stresses that refurbished and re-used equipment has to meet a clear standard of appearance and condition if you want acceptance. Based on their laptop-focused research, they say people were willing to accept a refurbished laptop "if it works well, is clean and looks good." They note that people were sensitive to scratches: the device "really had to look good and neat", otherwise employees felt less comfortable. They also suspect that status dynamics may be stronger for phones than for laptops, calling phones "more of a

status symbol."

For procurement policy decisions (especially where organisations need more courage) IE2 repeatedly frames the issue as changing what is and is not possible, rather than trying to persuade people with optional choices. They describe this as a push approach: "Ultimately you are always changing the system... push-like measures, where you just don't make things possible." They acknowledge this is a matter of habituation and people having to go through an adjustment period. IE2 is sceptical about purely 'tempting' people into keeping phones longer, because "people ultimately just get happy from a new device." Their answer is to remove part of that incentive structure, for example by not issuing the newest models by default, and by building policies where replacement does not automatically mean an upgrade.

IE2 also gives concrete examples of organisational rules that could normalise longer lifetimes. They suggest a straightforward policy decision: "we think that from now on we will use our phones for five years." IE2's point is that making this the standard resets expectations: if five years is normal, someone with a two-year-old phone might still notice a new model release, but the norm nudges them back towards keeping what they have. They add that social norms can support this: peer pressure or comparison can reinforce that a device is "not done yet." IE2 is explicit that organisations, in a corporate setting, often have significant freedom to enforce such standards: "In a company context you ultimately have quite a lot of freedom to also just force people."

Similarly, IE2 is nuanced about 'choice architectures' that offer employees a menu of devices. They observe that if people can choose between a Fairphone and a new Apple device, the Apple option will usually look more attractive because "the Fairphone is not yet at that same level." IE2 does not dismiss Fairphone (calling it well repairable and nice to work with) but they treat this performance/status gap as a real barrier to adoption when it is positioned as one option among many.

IE2 connects the need for organisational courage directly to leadership behaviour. They argue that this is "especially where it goes wrong": if leadership themselves value status around IT, policy will not be carried well. IE2 says you want people at the top who show real commitment to more environmentally friendly behaviour, otherwise policies are worded cautiously because leaders also find restrictions unpleasant. However, IE2 also sees a case for going further and being decisive: "There is always something to be said for just implementing it rigorously," but only if management is truly on board. In that more rigorous route, IE2 says you need an ambassador high in the organisation who brings people along, and the policy needs to be firmly fixed rather than "a watered-down version", because "a watered-down version ultimately doesn't bring anything about."

For life extension of workplace laptops specifically, IE2's most concrete recommendation is to treat repair and maintenance as planned, routine service rather than an ad-hoc response to failure. They would "really encourage organisations to look at repair," but framed as "planned maintenance": after three or four years, you take the laptop in, fully check it, and if necessary replace the battery, so it can continue without employees becoming irritated by performance decline. IE2 compares this directly to how cars are maintained: you replace tyres or do servicing because of age, whereas with laptops organisations often wait until people are "completely frustrated" and want a new one. IE2's aim is to prevent the frustration point that triggers replacement thinking. They describe a device becoming partially defective as especially risky: when something is partly broken, people are less inclined to think about repair than when it is completely broken, partial faults are "mainly irritating", frustration accumulates, and then people would rather get a new product. IE2's proposed direction is therefore "more of a service-like APK" that avoids the irritation spiral and supports longer use. IE2 also discusses internal cascading and reallocation of devices across roles, but again ties success to process quality. They accept that you can reason from job needs (some roles genuinely need high performance, others do not) and they note that many staff "ultimately don't need an extremely fast computer." However, if laptops are passed on internally, IE2 warns that it can quickly feel like someone is being given a cast-off. Their recommendation is to insert a clear service step: with a good refurbishing process you clean the device properly and it "really feels new again", and that difference in perceived quality matters. Where organisations worry that maintenance and repair are difficult to organise or expensive, IE2 frames the challenge as one of short-term versus long-term thinking, and certainty versus uncertainty: you cannot know outcomes "one hundred per cent sure", which makes decisions harder. They suggest that guarantees or service contracts might help reduce that uncertainty. IE2 also points towards external actors who may have practical experience communicating and operationalising refurbished and service models.

3.1.3. Summary interviewee IE3 and IE4

Interviewee IE3 explains that the underlying rationale for the Buyers Module is not primarily the absolute size of environmental impact reductions, but the difficulty buyers experience in accessing comparable information. From their perspective, buyers and resellers routinely ask for ESG-related values, yet the differentiation between workplace IT products such as laptops, desktops or monitors can vary significantly depending on the device. However, the real obstacle is that accessing this information "takes too much time." According to Interviewee R, if impact data is immediately available at product level, "with one click on the product," sustainability becomes worth considering alongside cost, even when the difference is relatively small. They stress that decision-making is not purely rational, noting that "even if it is only 50 kilograms of CO_2, or 100, what really matters is how easy or difficult it is to get the information."

Interviewee IE3 describes the Buyers Module as deliberately aligned with existing procurement behaviour. Buyers are already used to comparing technical specifications between devices, and the module applies the same logic to environmental indicators. As they put it, "It is the same as when you buy a laptop from a supplier and compare two models." The goal is to allow buyers to compare references directly and see relative values without additional effort. At present, Interviewee IE3 clarifies, the Buyers Module functions as a database that provides estimated, average impacts per device. It does not monitor real-life use or actual consumption over time. For example, it does not track whether a laptop consumes 10 or 12 watts after one year. If organisations possess more precise usage data, they can adjust the estimations themselves, but this is not built into the application. The module therefore supports estimation and comparison, not operational monitoring.

Interviewee IE3 repeatedly emphasises that the Buyers Module is most effective when procurement is involved early. In their experience, for large workplace IT purchases, IT departments rarely specify a single model. Instead, they shortlist several options. Sustainability tools become meaningful at the evaluation stage, when those options are compared and narrowed down. They explain that "the IT team does not select just one model, but usually three or four," and that this is the moment when tools such as the Buyers Module can influence the final choice. Influence can also occur earlier, when organisations build their internal device catalogues. By using impact data at catalogue level, organisations can steer employee choice before individual requests are made. In Interviewee R's view, the ideal moment to use the Buyers Module is before a tender is launched. From the perspective of a Green IT lead, this is when new hardware catalogues are defined and before suppliers are formally approached. At that stage, organisations can signal that sustainability will be part of the evaluation. Interviewee IE3 describes this as the phase "before you contact the vendors, when you open the market, start the selection process, ask for quotes, and request information and additional data." Interviewee IE3 also makes clear that the Buyers Module is not intended to replace functional evaluation. Functional requirements are defined first. Only once the configuration of components is known does the Buyers Module come into play. Sustainability assessment is therefore a subsequent step, not an integrated functional comparison tool.

IE4 explains that the Buyers Module has been designed specifically for non-expert buyers. They state that "buyers are not experts and want a quick overview that is easy to use." The interface therefore focuses on simplicity and comparability. Users can compare two models or hundreds, using vendor-agnostic figures presented in a consistent format.

According to Interviewee T, the parametric modelling approach allows impacts to be estimated based on configuration details when exact product references are not available. IE4 stresses that the Buyers Module deliberately avoids manufacturer branding and restricted data. All information is provider-agnostic. Devices can also be compared across categories, such as laptops and tablets, even though this can be challenging. The intention is to give buyers a simple first view that highlights the lowest-impact options, while allowing access to more detailed information if required.

Interviewee IE3 highlights the potential of the Buyers Module to improve supplier conversations. They explain that buyers often focus on packaging because they believe they can influence it, even though packaging usually has little impact from an LCA perspective. By contrast, insight into production phases and key components shows where impacts occur. Interviewee IE3 gives examples such as printed circuit boards or wafer production and notes that this information "already gives buyers information about what matters," even if it does not prescribe exact follow-up questions. IE4 adds nuance by explaining that transport impacts are often small for lightweight workplace IT devices such as laptops, even when transported by plane. However, they caution that transport can become significant when volumes are large or devices are heavy. They suggest that comparing scenarios, such as air versus rail transport, could be valuable, although it is not yet clear whether this fits within the current Buyers Module.

On certifications, Interviewee IE3 explains that buyers naturally rely on labels such as TCO where they exist, but that certifications alone are often insufficient to differentiate between products. When multiple

devices meet the same standard, buyers need additional data to go further. The Buyers Module enables deeper comparison and makes it possible to compare different device types, such as laptops and desktops, where labels cannot easily be applied.

Trust and risk are addressed explicitly by both interviewees. IE4 explains that one of the main reasons for creating the [company] database was the lack of comparability between vendor-provided LCAs and product carbon footprints. They note that similar laptops can be reported with footprints of 100, 200 or 300, depending on the provider, creating confusion. The Buyers Module uses a provider-agnostic modelling approach, applying the same methodology across manufacturers. Interviewee IE3 adds that relying on this methodology does not pose greater risk than relying on vendor data. In some cases, the data may be less precise, but this is offset by transparency and auditability. They emphasise that [the company] has no commercial interest in favouring specific manufacturers and that "everything is auditable." This is presented as particularly important for large organisations that cannot rely on unverified vendor claims when making sustainability statements.

Finally, IE4 discusses how sustainability data should be communicated to procurement professionals who are not experts. They describe providing documentation that is "as clear and as complete as possible" and being transparent about assumptions and limitations. IE4 notes that while experts understand that LCA involves modelling choices, less experienced users may distrust the results. In those cases, the emphasis is on transparency and comparability. As they state, "We use the same methodology for all devices. That is why we believe it is relevant."

3.1.4. Summary interviewee IE5

IE5 describes RePlanIT as a completed project aimed at helping procurers and IT asset owners make better decisions about workplace IT by focusing on lifetime extension rather than replacement. The project developed a demonstrator based on up-to-date data on materials and product composition, intended to show the concrete effects of alternative procurement choices. As he explains, "we had the goal of making a demo, a kind of demonstrator, to help procurers and asset owners make different decisions." Although the original demonstrator did not fully go live, simplified calculators derived from it are now publicly available.

A central insight from RePlanIT is that extending the lifetime of laptops delivers very large environmental and financial benefits. The calculators show, for example, what happens if a laptop is kept in use for six years instead of four. According to IE5, "the impact on costs and on the environment is gigantic, just by using your laptop one year longer." Based on these results, he argues that lifespan extension should be the primary strategy for workplace IT, rather than focusing narrowly on product-level circular features.

IE5 points out that existing circularity metrics are poorly suited to this reality. Circularity is often measured per device, for instance through recycled content in materials, but this overlooks the system-level effect of buying fewer devices over time. He states that "there is no good metric for circularity" and suggests that the circularity of a laptop fleet should instead be understood in terms of how long devices are kept in use on average. Extending replacement cycles reduces the total number of laptops purchased over a decade, even though individual devices will still fail before reaching the maximum lifetime.

A recurring theme in the interview is the misconception that laptops must be replaced after a few years for security reasons. IE5 explicitly rejects this idea: "that is not true." He explains that as long as devices continue to receive patches, older laptops are not less secure than new ones. Manufacturers such as HP already support hardware well beyond six years, and only in specific cases (such as unpatchable chipset-level bugs) does replacement become unavoidable. "As long as everything is patched, it is not worse than a new laptop," he says.

According to IE5, the real barriers to longer lifetimes are procurement choices and underlying business models. If organisations ask for the cheapest devices, suppliers will not guarantee long-term usability. When hardware is procured together with services, however, longer lifetimes can be contractually required. Models such as Device as a Service make it possible to specify that laptops must remain safe and operational for six years. While this can increase costs per device, overall costs decline because fewer laptops are needed. As IE5 puts it, "per laptop it is more expensive, but you use it longer."

He stresses that this requires coordinated changes across procurement categories. Hardware, helpdesk services, maintenance, and support are often procured separately and on different cycles, which makes alignment difficult. "Those procurement cycles almost never run in parallel," he explains. To make lifetime extension work, these elements must be designed together around a longer use period. This shifts costs from purchasing new devices towards repair and logistics, and makes outcomes less predictable, requiring

spare devices and different helpdesk arrangements.
Repairability is relevant but not decisive. IE5 notes that many business laptops are still reasonably maintainable, while others (particularly Apple devices) are "notoriously hard to repair." He highlights the importance of Right to Repair legislation, pointing out that in France such rules have already forced manufacturers to make spare parts available. Still, he underlines that "repair is not even the biggest point," because "more than half of laptops survive six years even without repair." Simply allowing devices to stay in use longer already delivers major gains.

User acceptance, according to IE5, is often less problematic than assumed. Resistance tends to come from IT departments rather than employees. He gives the example of laptops that could not be reissued because they had stickers on them. This, he argues, is unnecessary: "just put a sticker on it saying: reusing this laptop saves this much CO_2 per year." When the reason is visible, "people suddenly find it fine."

IE5 also frames cloud services and server infrastructure as an integral part of workplace IT. As computing increasingly moves to the cloud, laptops themselves become less demanding. RePlanIT's analysis of server data showed that servers are heavily underutilised, rarely exceeding 50% capacity. This is largely due to overdimensioning driven by software vendors' recommendations. "They say: to run Outlook you need ten cores," he explains, even though measurements show that far fewer are actually used.

Because organisations fear performance complaints, they accept this overdimensioning. IE5 describes this as a systemic issue: "the whole system is designed to prevent hourglasses from appearing." As a result, new servers continue to be purchased while existing capacity is not fully used. He argues that if organisations were willing to accept occasional minor delays, "you could switch off half of the servers" and effectively double capacity without new hardware.

He also highlights an immediately actionable measure: switching servers from High Performance Mode to Balanced Mode. This reduces energy use by around 10% without affecting performance. "Everyone can look at their server park today and set it to Balanced," he says, yet this is rarely done because no one has incentives or KPIs to take responsibility.

From a procurement perspective, IE5 explains that these optimisations must be demanded from service providers. Sustainability teams often support this, but procurement is constrained by long-running contracts that did not include such requirements. As a result, discussions take place without action. For future contracts, IE5 argues that procurers should explicitly require rightsizing, energy-efficient configurations, and longer hardware lifetimes, even if this goes against standard vendor advice.

IE5 also connects lifespan extension and circularity to strategic and geopolitical risks. He warns that Europe is highly dependent on global supply chains for chips and hardware, particularly China and Taiwan. "You think you can keep buying laptops," he says, "but next week maybe not anymore." From this perspective, keeping devices and materials in use longer is not only a sustainability measure but also a matter of business continuity and strategic autonomy. He therefore argues that responsibility should not lie only with sustainability managers, but also with those responsible for continuity and risk management.

Mobile phones were not a focus of RePlanIT, but IE5 notes that they present even greater challenges due to shorter support periods and faster obsolescence. Only a few devices, such as Fairphone, guarantee long-term updates. He describes the situation for low-end smartphones as "really very short," with lifetimes of two years or less and no security support afterward. He emphasises that vulnerabilities are publicly known and can be monitored, but this requires explicit procurement of monitoring and patching services.

Lastly, IE5 is highly critical of the current, widespread use of AI, especially general-purpose generative AI. In his view, AI is increasingly used by default rather than by necessity, without sufficient consideration of environmental limits. He argues that "you should use as little AI as possible," and only in cases where the societal value clearly justifies the impact. He explicitly links generative AI to planetary boundaries. According to IE5, once generative AI is used at scale, "we immediately go beyond planetary boundaries." Each AI query, he argues, consumes scarce resources: "It goes at the expense of drinking water in Mexico, carbon emissions, global warming, and materials that we need elsewhere." Using generative AI therefore means, in his words, that "you directly take something away from someone else the moment you ask a question."

IE5 makes a clear distinction between targeted AI applications and generic generative AI. For narrowly defined, high-impact uses (such as medical diagnostics or security-related applications) AI can be justified. In contrast, he sees little justification for everyday generative uses, such as creating images or texts, which he dismisses as low-value: "What does it really do? Making vague pictures." He is also sceptical about claims that AI automatically increases productivity. He observes that AI is being embedded everywhere, encouraging people to stop writing or thinking themselves: "You no longer write texts yourself, then you throw them into AI again to summarise them." This creates a loop of increasing computation without clear

benefits.

According to IE5, this uncritical embrace of AI directly undermines circular IT strategies. Organisations argue that they need newer, more powerful devices because of AI, which shortens hardware lifetimes and drives additional resource use. He challenges this logic: if AI were used sparingly and purposefully, "you wouldn't have that hardware problem at all." From a sufficiency perspective, limiting AI use is therefore a prerequisite for extending device lifetimes and staying within environmental limits.

3.1.5. Summary interviewee IE6

For IE6, organisational transformation goes far beyond optimising existing processes. She explains that transformation starts with questioning 'purpose' or 'raison d'être': "You start thinking about what the goal is. Why do we exist as an organisation?" This includes reflecting on the organisation's role in society and its stance towards technology. She contrasts a critical, value-driven approach with a purely instrumental one, asking whether technology is seen as "the future bubble we need to invest in to keep growing" or whether organisations are able to engage with it more thoughtfully. For her, sustainability and digital transformation belong at the level of purpose and mission: "Who are we as an organisation and how do we relate to the world around us?" She explicitly distinguishes this from incremental efficiency measures, saying that this is fundamentally different from "we are now going to use AI to make our planning more efficient".

IE6 observes that sustainability is often perceived as something distant, associated with nature or environmental damage, rather than as something closely connected to everyday work and digital systems. She notes that sustainability issues are complex, layered, and often invisible, while at the same time organisations are locked into digital infrastructures: "We cannot do without digital anymore." Because the term sustainability has become heavily charged, she increasingly speaks about "future-proofing", explaining that this helps people grasp the core message: "What we are doing now is not viable." She stresses that this applies not only to natural resources and ecosystems, but also to social systems, pointing out global inequalities and their consequences. She illustrates this by stating that societies exploit countries while at the same time wanting "no refugees and no wars", and then asks, "How do you think that is going to work?"

Within organisations, IE6 highlights the difficulty of engaging employees with sustainability, particularly when it comes to IT and digital workplaces. She argues that sustainability goals often remain abstract, while daily decisions are framed as someone else's responsibility. According to her, communication is key, but it must be targeted and translated: "You have to consciously keep translating the message into something that connects with your target group." She emphasises that there is no single narrative that works for everyone: "We cannot get by with one story." People are motivated by different things, such as children, cost savings, or strategic opportunities, and organisations need to recognise this diversity. She states that "for everyone there is some kind of hook as to why you would want to do something with this".

IE6 believes marketing knowledge and persona-based approaches can play a major role in making sustainability relevant. She suggests that AI can support this process by helping translate an existing narrative to different audiences, noting that "if you have a story and you say: now translate this for a target group that is motivated by this, then I think we can actually achieve quite a lot that way". At the same time, she stresses that tools are secondary to intent. Everything starts with willingness: "It all starts with the will of people to do this." She expresses confidence that such motivation exists, saying, "I think there are people in every organisation who want to take on this role." However, she also observes that many of these individuals feel constrained. She describes them as "hidden activists" who think, "I would like to do this differently", but feel they lack the space. From her perspective, an important organisational intervention is for management to consciously create that space and say: "I am going to give people room to commit to this."

IE6 explains that sustainability initiatives often depend on a small group of committed individuals because the subject matter is extremely complex and future-oriented. She refers to the tendency of people to learn only after crises occur, noting that humans are better at "shock learning" than at anticipating problems. As a result, sustainability communication often focuses on warnings and restrictions, which can cause people to disengage. She observes that narratives tend to be about "what is no longer allowed", rather than highlighting concrete examples of what people have been able to achieve. This is why, in her view, storytelling is essential.

When discussing workplace IT, IE6 recognises that devices such as laptops are often perceived as status symbol s. Measures like extending device lifespans can therefore feel as if something is being taken away. IE6 mentions that an alternative explanation is that we are not connected to our devices at all. It is just an en-

try point to the cloud which can be accessed through any device. 'I just want a computer that works properly'. She suggests reframing this by moving towards modular devices, explaining that "we should move much more towards modularity, so that you can add things". This not only supports adaptability as roles change, but also encourages users to take better care of equipment that feels personal. She also emphasises the value of making collective impact visible, for example by showing CO_2 savings and targets in dashboards. According to her, this helps reinforce a sense of shared achievement: "This is what we can achieve together."

On decision-making, IE6 argues that organisations ultimately need to combine engagement with decisiveness. If sustainability is truly embedded in purpose and lived internally, leaders should dare to act: "Sometimes you just have to do it." She acknowledges that this may attract some employees and alienate others, stating, "Maybe you also lose people, but that is not always a bad thing." At the same time, she stresses the importance of small, visible actions that are well explained, as these can support pride and a sense of identification with the organisation.

Leadership, in IE6's view, is important in setting the tone. She explains that when leaders talk about sustainability, "it becomes a topic that is allowed to be talked about". Leaders do not need to do everything themselves, but opposing the topic sends a powerful negative signal. She places particular emphasis on recognising bottom-up initiatives, noting that people in roles such as procurement often have to put in enormous effort to get sustainability on the agenda. A simple signal from leadership can make a decisive difference, such as saying: "I see that you are working on this. This is important. Go on, make the business case." She describes this act of legitimisation as "essential".

IE6 identifies middle management as a structurally difficult layer in transformation processes. She explains that middle managers are tasked with maintaining stability, translating strategy, and safeguarding KPIs, which makes them focused on continuity rather than change. She stresses that "it is not that they are against change by definition, this is what they are hired for". While adjusting KPIs may help, she argues that the challenge runs deeper. Organisations are built around an assumption of stability, while reality is characterised by constant change. According to her, "those stable, sluggish organisations no longer fit this time".

To prepare for this reality, IE6 outlines several concrete actions. She stresses the importance of interdisciplinary collaboration, stating that "IT, business, procurement, sustainability and account management really need to work together much more". She also highlights the need to invest in training and re-skilling for everyone, not just specific roles. In addition, she strongly advocates creating genuine space for bottom-up initiatives, arguing that new insights arise "with people who have expertise, customer contact and work together".

In practical terms, she suggests relatively simple steps, such as regularly bringing different teams together, but emphasises that real progress comes from working together on concrete assignments. She states explicitly that "just talking and informing is not enough". People need "a shared task" to avoid getting stuck in heavy, slow organisational structures.

Finally, IE6 reflects on the changing role of traditional staff functions such as procurement, IT, and HR. She notes that these roles are becoming increasingly strategic and that this requires a redefinition of mandate and recognition by others. She describes this as "an exciting process". Her advice to professionals in these roles is to seek allies across disciplines, work together, and develop a strong, shared narrative. By doing so, they can demonstrate their added value and show leadership that "if you put us at the table, we can really take action".

3.1.6. Summary interviewee IE7

IE7 describes the certification and standards landscape as inherently complex and difficult to oversee, particularly from a procurement perspective. While comparisons between labels can be made at the level of criteria, IE7 notes that this only captures part of the picture. According to them, "when you go into the effectiveness of different certifications and labels, what they actually accomplish, it becomes very complicated". They point out that even well-funded initiatives (e.g. the German Siegelklarheit) that attempt to assess certifications at system and effectiveness level struggle to keep their evaluations up to date, because "after two years, the landscape has changed". This constant evolution makes it unrealistic for individual procurers to fully assess certifications on their own. Instead, IE7 suggests that staying engaged in professional or policy-oriented communities is one of the few viable ways to remain informed over time, as this allows organisations to follow ongoing developments collectively rather than in isolation.

A central theme in the interview is trust. IE7 is explicit about the risks associated with labels or certifications that are created by companies themselves. They state that "a label coming from a company itself is almost greenwashing from the start". While they acknowledge that suppliers may want to communicate sustainability features of their products, IE7 stresses that such claims require far more scrutiny from a purchaser's side. Even when dealing with independent labels, they argue that purchasers must still investigate how independence is organised and safeguarded. IE7 also highlights that industry-led certifications, developed within sector associations, are not automatically credible, noting that these are "usually not more trustworthy than if a company did it themselves". From IE7's perspective, procurers cannot avoid doing at least some due diligence: "at a minimum, you need to look behind the curtain and see what is actually there".

IE7 draws a clear distinction between product certifications and company-level assessments, explaining that these tools address different questions in procurement. Their organisation certifies products, not companies, and therefore focuses on the sustainability performance of specific IT devices rather than on corporate policies or management systems. Company ratings and assessments, in their view, can still play a role, particularly as qualification criteria early in procurement processes. They describe this as a staged approach: first determining which suppliers are allowed to participate at all, and only then assessing the sustainability of the products offered. In their words, "once you pass that step, you can start looking at the products or services they sell". IE7 cautions that an exclusive focus on resellers or vendors can obscure sustainability risks further up the supply chain, especially in manufacturing.

To illustrate this, IE7 refers to social sustainability criteria, such as requirements to comply with ILO (International Labour organisation) core conventions. They explain that such requirements are often applied to European sellers, even though "in the EU, that requirement doesn't really make sense", because labour standards are already stricter than the ILO baseline. The real relevance of these conventions lies in manufacturing factories, which are frequently located outside Europe and may not be owned by the brand itself. IE7 emphasises that procurers need to understand "where in the supply chain the criteria are actually relevant", otherwise sustainability requirements risk missing their intended target.

Regarding the role of certification in procurement practice, IE7 presents certification as a way to support, but not replace, internal expertise. By requiring a recognised product certification, procurers gain access to a predefined set of environmental and social criteria and to independent verification. As IE7 puts it, "the verification of criteria fulfilment is also included in the certification, so you don't have to spend your own resources on verification". At the same time, they underline that this only works if purchasers trust the certifying organisation, and that establishing that trust is a prerequisite: "that homework they still have to do". Certification, in this sense, is framed as an instrument that reduces complexity, but does not remove responsibility from the purchasing organisation.

IE7 highlights a recurring limitation of certifications when they are not embedded in broader procurement and asset management practices. They stress that extending the lifetime of IT products is "the absolute best thing you can do from a sustainability perspective", yet observe that many organisations continue to work with three-year replacement cycles out of habit. Although the certification requires manufacturers to make support available for five years, IE7 is clear about the boundary of their influence: "we cannot require purchasers to actually use the products for five years". This decision lies entirely with the organisation itself. The example illustrates that certifications can enable more sustainable choices, but cannot enforce them once contractual or organisational routines take over.

IE7 also discusses how certifications should be handled over time, particularly in long-running contracts. Because IT products are continuously replaced by newer models, they advise purchasers to ensure that successor products are also certified, so that sustainability requirements remain consistent. In this arrangement, certification bodies take responsibility for verifying compliance, meaning that "if the purchasing organisation checks that a product is certified, they can rely on our verification".

The interviewee explains that certification criteria are periodically updated, with a new generation released every three years. Each new generation introduces stricter requirements, reflecting technological and regulatory progress. IE7 recommends that purchasers ask for the latest generation whenever possible, as "we always push the industry to become more sustainable". Although certificates remain valid for a limited overlap period, they note that consistently asking for the newest generation simplifies procurement and sends a clear signal to the market. IE7 frames this as a strategic choice: procurement can be used either "only for our own sustainability reporting" or to "support a movement across the whole industry".

On inclusivity and market access, IE7 acknowledges that strict certification requirements can be challeng-

ing for smaller manufacturers, particularly because of factory-level social criteria. Smaller brands often lack the leverage to influence manufacturing partners. However, IE7 frames this as an ethical dilemma rather than a technical one, questioning whether inclusivity should justify accepting forced labour or poor recruitment practices. They note that smaller companies that do succeed in meeting the criteria usually have sustainability "as part of their core business model", rather than treating it as an add-on. Another option for SMEs, is that they can piggyback on the work of big IT brands, and for instance use the same factories that already fulfil strict certification criteria.

IE7 also provides a nuanced view on the relationship between certification and innovation. Certification is not designed to single out the most advanced products, but to work within market dynamics. Each new generation of criteria is calibrated so that a substantial share of professional-market products can realistically comply. Over time, this gradually raises the baseline across the industry. IE7 explains that "within that range, there are enough certified products for purchasers to actually use it as a requirement, while we still push the market to improve". Products that go significantly further may be relevant for specific buyers, but IE7 stresses that this is "a different tool" and not the primary purpose of certification.

Finally, IE7 discusses the development of a certification for cloud resources, responding to the shift from owning IT hardware to purchasing IT capacity as a service. Instead of focusing on software or applications, the certification targets underlying cloud resources such as virtual servers, storage, and network traffic, because this is "where we currently see the biggest impact". IE7 describes the complexity of fragmented ownership structures, where cloud providers, data centre operators, and real estate owners each control different parts of the infrastructure. Drawing on experience from product certification, IE7 outlines plans to introduce approved lists and verification systems for data centres. In this context, they emphasise that their role is not limited to defining criteria: "we don't just define criteria, we implement them". Certification is thus positioned as a practical mechanism to translate sustainability ambitions into verifiable requirements within an increasingly service-based IT landscape.

3.1.7. Summary interviewee IE8

IE8 explains that working toward more sustainable workplace IT requires insight into environmental impacts, but that gaining this insight is inherently difficult. He emphasises that most ICT-related impacts occur in scope 3 and that transparency across the value chain is limited. According to him, suppliers "either do not share data, or if they do share data, it is not harmonized or transparent," which makes it hard for organisations to rely on supplier-reported figures and increases the risk of greenwashing. He presents LCA as a way to support better decision-making under this very uncertainty, rather than a tool for producing precise or definitive numbers, but as. He frames the challenge as finding the right balance between insight and action, noting that the current situation in sustainable ICT is characterised by "more actions without insights," rather than organisations being stuck in analysis.

Against this background, IE8 describes how LCA can be used to build a baseline for workplace IT and to guide procurement, while also being clear about its limitations. He distinguishes between top-down and bottom-up approaches, but stresses that neither should be used in isolation. A top-down, expenditure-based approach (where spending is multiplied by average emission factors) can be useful to get a first overall picture, but he sees it as too coarse for procurement. ICT expenditure is often aggregated, and sector-average data mean that this approach "will never show differences between devices." As a result, it cannot support decisions such as choosing between different types of laptops or smartphones.

Bottom-up, process-based LCA, by contrast, allows organisations to assess specific products and services and compare alternatives. IE8 describes this approach as more demanding but also as providing "much more insight," particularly for procurement decisions. It makes it possible to compare mitigation options and to understand the consequences of choices such as extending device lifetimes or selecting one model over another. He stresses that differences between devices can be substantial, noting that "there are large differences between an iPhone and a Fairphone." However, he does not argue for applying bottom-up LCA everywhere. In his view, organisations should not "spend that much time before getting to actual actions," and therefore he consistently argues for a hybrid approach.

In practice, IE8 suggests focusing bottom-up LCA on those elements of workplace IT where procurement decisions have the greatest impact and where granular data is most readily available, while covering the rest with top-down estimates. He identifies end-user hardware as the most logical starting point, because it represents a large share of impacts and because organisations already have much of the necessary data. IT departments typically know how many devices they have, how long they are used, and for what purpose.

When this information is linked to established LCA databases, he sees bottom-up modelling as relatively scalable. He also stresses that procurement-oriented LCA does not require extreme detail. Very fine-grained energy monitoring is, from his perspective, unnecessary, and "a yearly resolution is sufficient" for evaluating procurement strategies and interventions. Similarly, he suggests that working with representative device categories or archetypes can be adequate, at least initially.

IE8 furthermore repeatedly returns to the idea that LCA should build on existing organisational data rather than creating new monitoring burdens. He points to IT asset management systems and service dashboards that already provide information on device inventories and usage of services such as email, storage, and video conferencing. Introducing new real-time monitoring systems, he argues, would likely be "overkill," because it would require additional software, hardware, and organisational processes. The main challenge, in his view, is not collecting more data, but connecting existing data sources and linking them consistently to emission factors and LCA models.

When discussing data quality and trust, IE8 is cautious about relying on supplier-provided LCA results or environmental claims. He explains that his own work largely relies on secondary datasets rather than primary supplier data, because these datasets apply uniform assumptions and are perceived as more independent. This comes at the cost of specificity, but it allows for consistent comparisons across products and suppliers. He emphasises that LCA should not be presented as highly accurate or exact.

IE8 also highlights several risks in applying LCA to workplace IT. One is that organisations may invest significant effort only to confirm insights that are already well known, such as the fact that "keeping hardware longer" generally reduces environmental impacts. Another risk lies in misinterpreting results. He stresses that impacts should be assessed in relation to a functional unit, such as providing workplace IT services over a year, rather than per individual device. When impacts are distributed over time, devices with longer lifetimes can perform better, even if their per-device footprint appears higher. Uncertainty, he notes, is unavoidable, and interpreting results responsibly requires expertise.

Beyond carbon impacts, IE8 discusses circularity and resource use as important but difficult topics. He is explicit that "circularity is a means to an end, not a goal in itself," and that circularity only makes sense insofar as it contributes to sustainability. Standard LCA, he argues, does not adequately capture circular practices such as repair, reuse, or the use of secondary materials, and there is no single robust indicator that translates circularity into something comparable to a carbon footprint. He refers to extended frameworks that combine circular strategies with environmental impacts, but makes clear that he does not see a straightforward way to operationalise circularity as a single procurement KPI.

In this context, IE8 introduces material flow analysis as a complementary approach. While LCA focuses on environmental impacts, MFA tracks physical material flows and can provide clearer insights into issues such as resource criticality, supply chain risks, and circularity. He presents MFA as a "third method," alongside top-down and bottom-up LCA, that can help organisations better understand dependencies on materials and long-term risks. Although he notes that MFA, due to the larger geographical scales typically modelled, is less immediately applicable to an organisational context and is rather relevant to the national one.

IE8 also reflects on the role of standards, certifications, and ecolabels in procurement. He notes that certifications for IT hardware already go further than many organisations assume and can be useful as a first screening tool. At the same time, he implies that certifications can be too coarse to support detailed procurement decisions, because they are typically threshold-based and do not allow for nuanced comparison between alternatives. For organisations that need to choose between options and understand how those choices affect their overall sustainability trajectory, LCA offers more flexibility and depth than certifications alone.

Overall, IE8 positions LCA as a strategic instrument to help organisations build a baseline, identify hotspots, and explore mitigation strategies in workplace IT . He does not present it as a definitive measurement tool, nor does he claim to have clear answers on how LCA results should be fully embedded in procurement procedures or tenders. He does suggest, however, that asking suppliers for impact information can still be useful as a reference. Over time, he argues, applying LCA and related methods across many organisations can reveal common patterns, recurring hotspots, and shared lessons that support more informed and effective procurement of sustainable workplace IT.

3.1.8. Summary interviewee IE9

The interviewee describes long-standing involvement in public-sector organisations with a focus on innovation, process improvement, and sustainability. Over time, sustainability has increasingly been embedded in organisational processes, particularly in procurement, where it is now approached as "procurement with impact." The developed an updated guidance on sustainable procurement of IT, including workplace IT. It was updated now to reflect changes in policy frameworks, European regulations, and government-wide agreements. New elements such as diversity and inclusion have been incorporated, and recent European legislation, including rules that require suppliers to make repair possible, has been explicitly addressed. According to the interviewee, this regulation "helps enormously with circularity."

The updated guidance builds on earlier work rather than replacing it. Previous analyses had already clearly identified where the main environmental impacts of IT lie. For workplace hardware such as laptops, the guidance emphasises that extending the lifespan has the greatest positive effect. As stated in the interview, "for laptops, the longer you use it, the better." Because these fundamentals have not changed, the update focuses primarily on alignment with current legislation and policy rather than recalculating impacts.

This approach has been translated into concrete organisational measures. One key solution has been the systematic extension of the standard lifespan of laptops. Devices that were previously written off after three years are now depreciated over five years. In addition, the replacement process has been redesigned. After five years, employees are informed that they are eligible for a new laptop, but if the device still works well and meets security requirements, it can continue to be used. As described in the interview, "now it is the other way around, and you have to say if you do want a new one." This change lowers replacement rates while maintaining security standards.

The interviewee highlights that this solution works particularly well because most employees use relatively basic applications. For such use cases, performance improvements from newer devices are limited, while security remains the primary reason for eventual replacement. This distinction supports longer use without negatively affecting productivity.

Practical measures are also used to support longer device lifespans. Employees can request protective backpacks for laptops, but these are no longer issued by default. This avoids unnecessary distribution of items that may not be used, while still offering protection where needed. The interviewee notes that sustainability measures are most effective when they avoid overconsumption, even when intentions are positive.

Communication and awareness are treated as supportive tools rather than enforcement mechanisms. The interviewee refers to examples where organisations provide information at the moment a laptop or phone is issued, explaining the resources used to produce it and encouraging careful use. They describe this as a desirable approach, stating, "that is something I would like for us as well," as it links awareness directly to daily practice and reinforces the idea of using devices for as long as possible.

To improve usability, the updated guidance has been transformed into an interactive tool rather than a static document. Earlier feedback showed that lengthy documents discouraged use, even when content was clearly structured by category. The new tool allows users to focus only on the relevant part, such as workplace IT, without needing to read unrelated sections. It is designed to function in a similar way to existing procurement tools, while also covering areas that fall outside standard national criteria.

The tool supports buyers and contract managers by making sustainability requirements easier to integrate into everyday procurement practice. It complements national framework agreements, under which laptops and phones are already procured with strong sustainability requirements. These framework agreements ensure that core sustainability criteria are addressed at supplier level, while leaving room for organisations to add further requirements if desired.

A key solution emphasised throughout the interview is early integration of sustainability into commissioning. When sustainability is included from the start, it becomes part of defining what is needed, rather than an additional constraint at the end. This enables choices such as procuring more robust laptops that may have a higher initial price but allow for longer use. Over time, this can be implemented in a budget-neutral way. The interviewee expresses a clear preference for this approach, noting, "what is nicer than spending your organisation's money in a sustainable way?"

3.2. Case-organisation best practices

3.2.1. Organisation A

1. **Structured cross-functional tender preparation**: Before launching tenders, A2 explains how "procurement organises discussions between IT departments and the Compliance & Sustainability unit to determine which criteria should apply for that specific procurement." This early and structured coordination ensures that sustainability expertise directly informs tender requirements, rather than being added later in the process. According to A1, this approach reflects a "growth path" in organisational maturity, as sustainability becomes embedded in standard procurement practice.
2. **Domain-linked fieldlab structure to avoid silo perception**: A1 highlights the risk that fieldlabs could be perceived as isolated initiatives: "it could easily have happened that other departments thought: nice that you are doing this, but we do not recognise ourselves in it." To prevent this, "each fieldlab was linked to a domain in the wider organisation," allowing different teams to see their own role and interests reflected. For example, "the development organisation sees the fieldlab on green coding and thinks 'that is for us.'"
3. **Domain-specific procurement specialisation**: A1 explains that IT procurement is "specialised by domain, such as development, operations, and distributed services," because each market "speaks its own language." This structure allows buyers to build deep, domain-specific understanding of sustainability challenges, instead of relying on generic procurement knowledge that may not fit all technology areas.
4. **Ecosystem learning through external engagement**: A1 stresses that "sustainability does not start internally: 'You have to look at what happens outside: that's where regulations and innovations come from'." Based on this view, the organisation actively engages with "suppliers and organisations like the Green Software Foundation, NCDD, TNO, and international counterparts" to stay informed about emerging regulations, best practices, and innovations beyond its own boundaries.
5. **Extended contract durations for lifecycle and ROI assessment**: A2 explains that "because sustainability requires long-term thinking, contract durations have increased from three to five years to allow realistic assessments of hardware performance and lifecycle costs." Extending contracts to five years makes it possible to evaluate whether higher upfront investments in more sustainable hardware lead to lower costs and impacts over the full lifecycle.
6. **Win-win framing of efficiency, cybersecurity, and sustainability**: A1 actively "looks for win-win pathways, especially in software optimisation: 'There is still a lot to gain.'" The focus is on measures that "reduce costs, improve cybersecurity, and be more sustainable at the same time," such as "optimising cloud usage and switching off non-production environments outside use times." A1 takes a pragmatic stance: "It doesn't matter to me what we call it, as long as we do it," indicating flexibility in framing sustainability initiatives as efficiency or cost improvements when that helps secure organisational support.
7. **Product-category-specific sustainability criteria grids**: A2 describes "working with a standard grid of sustainability criteria, adjusted depending on whether the tender concerns software, hardware or managed services." This approach recognises that sustainability differs by IT category. For hardware, they "look specifically at power consumption, green IT characteristics, and raw materials used." For managed services, "sustainability relates more to social responsibility due to subcontracted staff," while for software, particularly SaaS, "sustainability is indirect and tied to data-centre operations." This avoids applying unsuitable one-size-fits-all requirements.
8. **Request-for-solution tender design to stimulate innovation**: A2 explains that "the current workplace IT tender is deliberately framed as a 'request for solution' rather than a standard tender," encouraging suppliers to propose innovative and sustainable ideas. Instead of prescribing detailed technical requirements, the organisation invites suppliers to define their own approach: "Then it's up to them to propose a sustainability roadmap." As A1 adds, "We don't dictate to our suppliers how they should do things, but we make very clear that sustainability is important to us, and we let them show how they will meet expectations."
9. **EcoVadis assessment combined with action plan follow-up**: A2 notes that "vendors must undergo an EcoVadis sustainability assessment; those scoring below average are required to produce an action plan that is followed by the Sustainability & Compliance department." This combination of assessment, remediation, and follow-up supports continuous improvement rather than a simple pass-or-fail evaluation.
10. **Annual sustainability engagement events and strategic committees**: A1 explains that the organisation "organises annual sustainability days" with vendors, creating structured opportunities for sus-

tainability dialogue. Together with "yearly strategic committees with major vendors," these recurring touchpoints provide dedicated space to discuss sustainability separately from daily operational or commercial issues, enabling more strategic and collaborative discussions.

11. **Fieldlab approach for experimental collaboration with suppliers**: A1 describes fieldlabs as "a testbed in which you discuss with suppliers which steps you can take. What are we going to try out? How do they look at it?" The approach emphasises joint exploration: "not dictating, but listening and giving direction: this is our need, how could you solve that?" Fieldlabs have "revealed unexpected opportunities," with suppliers presenting solutions the organisation "didn't know existed." These sessions depend on sustained dialogue, where suppliers bring ideas and internal teams have time to develop and test them.
12. **Extended device lifetimes with clear targets**: A2 confirms that "laptop lifetimes have already increased from three or four years to four or five, and that the ambition is five to six years." A1 explains the underlying rationale: "if you can use a device longer... it may be more expensive upfront, but cheaper long term." Setting explicit targets demonstrates a deliberate strategy to reduce replacement rates as a key sustainability measure.
13. **AI-enabled predictive and preventive maintenance**: A2 explains that longer device lifetimes are supported by predictive and preventive maintenance "based on AI." The tools "running inside each PC will monitor memory behaviour, performance issues and other signals," allowing the service desk to intervene remotely. This reduces "the number of technicians travelling by car" and enables "many things [to] be done remotely or automatically," lowering operational emissions while keeping devices in use longer.
14. **Clear repair-or-replace decision rule**: A2 describes a strict and transparent rule for lifecycle decisions: "If repairs exceed 50% of the current value, we end the PC. Otherwise, we repair it." This clear threshold ensures consistent decision-making, balancing sustainability goals with economic rationality and avoiding both premature disposal and inefficient repairs.
15. **Leasing strategy and second-life routes for owned assets**: A2 explains that the organisation "leases many devices, especially servers, because we do not want to manage the second life of these assets." For equipment that is owned, "they attempt to organise second-life routes for employees or the second-hand market." This approach ensures reuse while limiting the need for in-house refurbishment expertise.
16. **Use of refurbished equipment where functionally appropriate**: A2 mentions "preparing a tender to renew printing contracts and are actively choosing refurbished printers for regular office use." This choice is accepted "because there is no difference at all for users." It demonstrates a practical application of circularity, using refurbished equipment where performance requirements allow.
17. **European data centre requirements for data sovereignty**: A1 states that "all company data must be stored in European data centres due to geopolitical trends," while A2 adds that "for certain sensitive procurements, data must be stored in specific European countries." Beyond sovereignty concerns, this requirement has indirect sustainability benefits. A1 notes that for SaaS procurement, European data centres are subject to "stricter energy norms," leading to lower environmental impact through regulatory compliance.

3.2.2. Organisation I

1. **Formal integration of sustainability in procurement roles**: I1 explains that sustainability responsibilities are formally embedded in the procurement function profile, making them "a fixed part of my daily work" rather than an optional add-on. This formalisation ensures that sustainability receives continuous attention, regardless of shifting priorities. Acting as "a spider in the web," procurement is positioned to coordinate sustainability across multiple stakeholders and semi-autonomous companies in a structured way.
2. **Proactive preparation for regulation despite uncertainty**: I1 notes that although legislation timelines often change and many organisations "stand still or move backwards," Organisation I developed an early plan and continues to follow it despite EU delays. The rationale is clear: "You won't have to react to every change, because you will already comply." This approach turns regulatory uncertainty into a reason for early action rather than inaction.
3. **Mandatory cross-functional consultation in tenders**: I1 describes how "each tender passes security, legal and sustainability checks," ensuring that sustainability input is structural rather than optional. I2 confirms that sustainability "stands alongside privacy, security and legal assessments" in all larger tenders. This positioning makes sustainability a peer consideration, not a secondary or subordinate one.

4. **Short communication pathways between strategy and operations**: The organisation maintains direct links between strategic and operational levels. I1 can involve sustainability team members directly in supplier discussions when technical depth is required. This prevents sustainability from becoming abstract policy and keeps it closely connected to day-to-day procurement practice.
5. **Formal training on emerging sustainability regulation**: I1 describes training received from MVO Nederland on CS3D and value-chain due diligence, which provided "a basic understanding of where to begin." The training focused on mapping supply chains and engaging key suppliers about material origins and emissions. I1 summarises the key lesson as "the importance of simply starting by engaging the four or five most material suppliers," translating complex regulation into practical first steps.
6. **Evidence-based learning through pilot programmes**: The Fairphone pilot is structured with test groups, a six-month duration, and quarterly surveys, creating systematic evidence generation. I4 reports current satisfaction levels and specific concerns, such as camera quality, while emphasising the key question of "whether that plays out in practice" regarding longevity claims. This approach avoids decisions based solely on supplier promises.
7. **Linking climate goals to financing conditions**: I4 explains that climate goals are tied to financing through investor loans: "if we don't meet the goals, the interest rate goes up." This creates direct financial consequences for sustainability performance, even though I4 acknowledges that most employees do not feel personally connected to this mechanism.
8. **Product-specific sustainability data requests**: I1 describes requesting detailed product-level information, including "the CO_2 footprint of a laptop, whether an LCA is available, and whether packaging can be made more efficient." This shifts the focus from generic corporate claims to concrete product performance, enabling more accurate impact assessment.
9. **Documented market impact of persistent sustainability requests**: I4 explains that repeatedly requesting monitors without stands not only worked for Organisation I but likely influenced the wider market: "I suspect [the supplier] now offers the same option to many more customers." This shows how sustained buyer pressure can lead to broader market-level sustainability improvements.
10. **Structural weighting of sustainability in tender evaluation**: I1 describes a typical tender structure with "40% price, 40% quality and 20% sustainability," with exact weights varying by case. This ensures sustainability has real influence in decision-making rather than acting as a minor tiebreaker. The approach expands procurement evaluation "beyond price and quality to include a structural sustainability component."
11. **Early market engagement through structured RFI processes**: For larger projects, I1 explains that procurement begins with RFIs containing "questions we ask every supplier" on sustainability, security, and basic conditions. This early filtering means suppliers "focused only on low prices fall out quickly," while those interested in long-term collaboration proceed, saving evaluation effort later.
12. **Relationship-based approach to supplier engagement**: I2 questions whether a highly adversarial negotiation style fits the organisation, stating: "I don't know if we are that type of organisation." Instead, Organisation I focuses on relational partnerships and contributes expertise when asked. Collaborations with foundations are seen as models, prioritising co-creation over enforcement.
13. **Mutual learning partnerships with mid-sized suppliers**: I2 notes greater collaboration potential with mid-sized suppliers "for whom they may become a strategically significant client." With very large suppliers offering limited engagement depth, Organisation I focuses on partnerships where both sides benefit. The Fairphone pilot illustrates this logic: if successful, "then you can strengthen each other."
14. **Verification of sustainability certifications**: I1 explains that while suppliers are asked about certifications such as EcoVadis or SBTi, claims are verified because "some say they have it but only work according to the norms." This prevents greenwashing while still valuing certified suppliers as efficiency mechanisms where "you don't have to ask everything again."
15. **Circular procurement policy as an experimental framework**: I2 describes the circular procurement policy as "almost a tips-and-tricks approach" intended to "encourage people to experiment and learn." While not yet binding, it provides guidance for teams, with facilities management applying it to furniture and IT using it for pilots like Fairphone. This supports learning without forcing premature standardisation.
16. **Explicit sustainability KPI setting in new contracts**: I1 explains that "KPI-setting is now standard," with new contracts increasingly including commitments such as adherence to SBTi or equivalent goals. This moves supplier sustainability from general intentions to measurable obligations and reflects client expectations that sustainability requirements extend through the supply chain.
17. **Strategic pilot programmes for alternative devices**: Both I1 and I4 describe Fairphone pilots in which selected users test devices for six months with periodic surveys. This structured experimentation supports evidence-based decisions rather than theoretical debate. I4 reports that "everyone is positive"

so far, aside from camera quality, which is considered "acceptable for a business-oriented device."

18. **Active exploration of modular and repairable devices**: I4 expresses interest in piloting Framework laptops, believing that "we can find configurations that are just as good and perhaps in the same price class." While earlier versions were not mature enough, I4 now sees an opportunity to test "usability, performance, support, and whether these devices truly reduce environmental impact."
19. **Incremental adoption strategy following pilot success**: I1 explains that wider adoption after pilots "will depend on the autonomous companies within [Organisation I]," unless the board mandates otherwise. For Fairphone, "change will likely be incremental." Pilots start with willing participants, acknowledging that heavy IT users cannot compromise functionality, and allowing successful cases to build momentum organically.
20. **Internal device cascading to extend useful life**: I1 explains that laptops are typically used internally for five years but are "internally cascaded to extend their lifespan." High-performance users receive new devices, while lighter users take over older ones. I4 adds that returned devices are "cleaned, tested, and repaired if needed, then reissued." Offering employees a choice between "a new mid-range model or a refurbished high-end one" reframes sustainability as an upgrade rather than a compromise.
21. **Creative repair practices during component shortages**: I1 recalls that during COVID-19 shortages, devices were repaired by combining parts from broken laptops: "From ten broken laptops we could make six good ones so to speak." While warranty and commercial constraints remain, suppliers are open to exploring this approach more structurally.
22. **Targeted negotiations to further extend device lifespans**: I1 is actively discussing extending laptop lifespans with suppliers "ideally to seven years." This demonstrates ongoing improvement rather than acceptance of current norms, even while acknowledging challenges such as warranty loss and reduced hardware sales.
23. **Monitor customisation to eliminate unnecessary waste**: I4 successfully negotiated monitor delivery without stands, avoiding "hundreds of unused stands lying in a warehouse" because workstations use screen arms. Although persistence was required, this practical intervention directly reduces material waste at scale.

3.2.3. Organisation T

1. **Strategic integration through sector alliance leadership**: T1 explains how the company collaborates with "more than 25 [sector companies] in the [name of sector-specific umbrella organisation]" to collectively engage shared suppliers on climate action. This sector-level coordination creates governance and leverage that individual organisations cannot achieve alone. Through joint workshops, webinars, LCA requests, and shared criteria, the alliance enables collective pressure while leaving room for customisation: "it is more effective to first jointly apply pressure to suppliers. In specific procurement processes, you can then emphasise your own needs and contracts."
2. **Sector alliance as a collective supplier engagement platform**: The [name of sector-specific umbrella organisation] functions as a shared engagement space beyond individual procurement processes. T1 describes how the alliance "hosts workshops and webinars and requests life-cycle assessments (LCAs) from major suppliers." This allows sustained dialogue focused on learning and progress, helping participants "see where suppliers stand in the net-zero transition, what gaps exist, and where support or pressure can drive progress."
3. **Formal net-zero target with structured timelines**: T1 states that "Net-zero 2040 applies to scope 1–2 and scope 3 with 10% residual offsetting, and supplier engagement has been ongoing for almost two years." These clearly defined targets and timelines provide strategic direction and demonstrate that supplier engagement is continuous rather than episodic.
4. **Differentiated sustainability requirements by product category**: T1 explains that the Supplier Code of Conduct is "translated into concrete RFP requirements depending on supplier type." As noted, "'For cloud providers, reuse is of little importance; for refurbished laptop providers, it is a major concern.'" This differentiation reflects an understanding that sustainability levers vary by product category and that uniform requirements would be ineffective.
5. **Structured assessment of product circularity**: T1 describes how "the [company] for example requires suppliers to answer multiple choice questions on product circularity (regarding e.g. longevity, detailed repairability and updateability), that are in line with the [name of sector-specific umbrella organisation]. The scoring in this way, makes suppliers comparable." Using sector-aligned questions enables consistent comparison while avoiding fragmented, organisation-specific criteria.
6. **Sector-aligned standardisation to reduce supplier burden**: T1 emphasises the importance of aligning tender requirements with sector standards to "move towards standardisation," noting that "Other-

wise, suppliers would be overwhelmed by various requirements." The alliance has already developed "about twenty product categories now with live LCAs," supporting rigorous yet manageable assessment across the market.

7. **Strategic focus on high-impact sustainability topics**: T1 reflects on lessons learned, observing that some organisations "ask extremely deep questions" while missing key impact areas. Since "Packaging may be 5% and logistics 1–2%," focusing only on these means that "If you ignore the other 93%, you miss a large part." As a result, procurement concentrates on major levers such as manufacturing footprint, green energy use in the value chain, and extending product lifetime.
8. **CSRD-aligned supplier data requirements**: T1 explains that "CSRD reporting now mostly influences which data the company requests from suppliers," particularly for emissions factors and recycled content, identified as "material themes." CSRD provides a clear regulatory basis for these requests and aligns terminology with "European requirement definitions," reducing ambiguity and supporting shared understanding between buyers and suppliers.
9. **Circularity manifesto as a contractual foundation**: T1 describes how "The Supplier Code of Conduct of the company originates from a circularity manifesto signed with multiple suppliers representing 75% of [the company]'s hardware volume." This shared intent-statement establishes common principles that are later translated into concrete contractual obligations.
10. **Monitoring and adoption of emerging circularity standards**: T1 notes that "a new ISO standard has just been launched, which we may start asking for" in relation to circularity. Actively tracking emerging standards allows the company to adopt credible requirements early while contributing to broader market development.
11. **Pre-engagement communication with suppliers on new requirements**: T1 explains that when circularity was introduced at product level, "we explained this through workshops and incorporated feedback." As a result, "suppliers therefore recognise that [the company] uses this standard." This early communication helps suppliers prepare and reduces confusion during formal procurement processes.
12. **Regular review meetings for continuous governance**: T1 describes "monthly or quarterly review meetings the company organises with suppliers" where "progress and reporting quality are assessed and discussed." For refurbishment providers, there are even "monthly discussions about improvements." These regular touchpoints support accountability, learning, and relationship quality beyond contract award.
13. **Transparency-based access to supplier sustainability expertise**: T1 notes that "Sustainability visibility gives them access to supplier sustainability teams." This access enables direct engagement with specialists and decision-makers, moving discussions beyond commercial sales contacts to more substantive sustainability dialogue.
14. **Collaborative product development with challenger brands**: T1 describes the long-term collaboration with Fairphone: "[The company] has had a relationship with Fairphone since the first model, and committed to purchasing volumes." Together, they developed product passports, "including one with Fairphone." Public engagement, such as "we made a podcast about it," further supports shared learning and reputational value.
15. **Comprehensive reuse and refurbishment processes**: T1 describes "a long-running process for equipment reuse and refurbishment," supported by reporting on how much equipment is reused or recycled after its first lifecycle. The company's reseller status enables internal refurbishment capabilities, ensuring that devices do not become waste prematurely.
16. **Cloud sustainability as a strategic priority**: T1 identifies cloud consumption as a major focus area, including decisions about which workloads run in the company's own data centres versus public cloud, and how sustainable public cloud providers are. This reflects a strategic understanding that sustainability impacts are shaped not only by procurement choices but also by architectural decisions.

3.2.4. Organisation O

1. **Product owner-led curation of device portfolios**: O1 explains that product owners determine the portfolio of available devices, balancing user needs, role-specific requirements and sustainability criteria. This role-based approach avoids both excessive standardisation, which can limit legitimate specialised needs, and unrestricted choice, which increases sustainability and management complexity. Product owners determine which hardware categories are necessary and how much differentiation is useful, such as limiting specific brands to roles that genuinely require them.
2. **Formal deviation management for sustainability exceptions**: O1 describes a formal process for handling exceptions: when exceptions to the policy are needed (for instance when alternatives in the market are limited) these are reviewed and documented through an established deviation process.

This ensures deviations are intentional, transparent, and traceable, allowing flexibility without undermining sustainability standards.

3. **Standardised external sustainability assessment questionnaires**: O1 describes the use of an external questionnaire that asks for sustainability reports, acceptance of the sustainability statement, security and ISO-related assurance, and ratings or certifications from recognised schemes, including approved alternatives. This creates a consistent basis for supplier evaluation while allowing flexibility through the inclusion of approved alternative certifications.
4. **Strategic inclusion of innovative challenger vendors**: O1 explains that the organisation also deliberately includes unknown 'dark horse' vendors in selection processes to stimulate innovation and potentially discover challengers with stronger sustainability performance. This approach prevents overreliance on incumbents and encourages market innovation by giving new or lesser-known suppliers the opportunity to compete.
5. **Leveraging certifications across multiple clients**: O1 notes that suppliers generally respond positively because the certification benefits them across multiple clients. By requiring certifications such as EcoVadis, the organisation contributes to broader market adoption, as suppliers can reuse these certifications across contracts rather than treating them as one-off compliance efforts.
6. **Improvement-oriented response to supplier underperformance**: When suppliers fall short, O1 explains that the organisation first discusses the underlying causes with them and identifies possible improvements. Support is offered where appropriate. As clarified, if a vendor's sustainability score falls or they fail to meet expectations, this triggers a conversation rather than immediate disengagement. This positions sustainability as a shared improvement journey rather than a punitive process.
7. **Visibility of product-level CO_2 footprints**: O1 states that the organisation knows the CO_2 footprint of devices, including both production and usage phases, and reports highlight opportunities for financial and environmental savings. This visibility supports data-driven decisions, helping identify which devices or usage patterns offer the greatest potential for impact reduction.
8. **Multi-level structure for supplier sustainability engagement**: The organisation has formalised sustainability dialogue through layered engagement: operational meetings occur monthly for major vendors, tactical meetings quarterly and strategic discussions twice a year. This structure ensures sustainability is addressed at appropriate levels, with evaluation frequency adjusted based on "the category and importance of the supplier.
9. **Knowledge exchange with strategic suppliers**: O1 describes that with strategic suppliers, the organisation also exchanges best practices and identifies opportunities for improvement. This two-way learning is especially valuable when "large international vendors, especially cloud providers, often share knowledge proactively" and may be ahead on emerging issues such as water consumption in data centres.
10. **Lifecycle extension as a standard device management practice**: Organisation O encourages employees to extend device use beyond their depreciation period if the equipment still functions well. This principle is enforced in practice: new phones are issued only when the current device no longer meets requirements, regardless of managerial preference. This removes status-driven replacement and prioritises functional need and sustainability.

3.2.5. Organisation B

1. **Using major organisational transitions as sustainability intervention points**: B2 explains that "the upcoming move to a new headquarters will require renewed decisions about workplace standards, including the number, size, and type of devices used." This transition is deliberately framed as "another moment to reassess sustainability impacts, both in terms of energy consumption and material use." Major organisational changes are treated as opportunities to introduce sustainability measures that would be harder to implement through incremental change.
2. **Dedicated and formalised sustainability function within procurement**: B1 describes how sustainability within procurement evolved from an informal activity into an institutionalised function. Until May 2024, sustainability work was done "on the side" by two colleagues without structure or capacity. This changed when the Chief Procurement Officer stated: "We need to set up a sustainability department within Procurement. Would you want to do that?" Embedding sustainability directly within procurement positions it as an operational capability rather than external advice.
3. **Inspirational yet pragmatic leadership approach**: B1 describes a leadership style that "inspires and brings ambition," while also accepting that for some colleagues motivation remains risk-based. B1 is satisfied if colleagues "simply take the requirements seriously." This balanced approach enables progress across diverse organisational cultures without requiring universal enthusiasm for sustain-

ability.

4. **Equality-based framing in supplier relationships**: B1 emphasises "approaching suppliers as equals" and openly acknowledging that "we ourselves also do not have everything in order." This humble stance supports a collaborative culture focused on shared improvement rather than top-down enforcement of sustainability requirements.
5. **Non-exclusionary approach to market development**: B1 makes clear that the goal is "not to exclude suppliers" but to "help buyers understand what is good, average or lagging in the market, and to enable conversations about improvement." This framing positions sustainability as a developmental process rather than a punitive one.
6. **Clear executive sponsorship for procurement sustainability**: The sustainability role emerged from explicit executive recognition that "procurement needed its own dedicated sustainability capability." The Chief Procurement Officer's direct involvement provides legitimacy, authority, and clarity, distinguishing this approach from advisory-only sustainability initiatives.
7. **Integrated scope covering regulatory and voluntary frameworks**: B1's mandate includes "everything related to sustainability in procurement," such as CSRD, due diligence, human rights, environmental risks, and supplier expectations. External frameworks like the UN Guiding Principles and OECD guidelines are described as "compelling" even when not legally binding, demonstrating integrated governance that combines compliance with voluntary leadership.
8. **Collaboration with students for innovation exploration**: B1 mentions "discussions with students about possible transparency solutions, including blockchain and shared audits." Engaging with academic perspectives introduces ideas that may not arise from internal teams or supplier relationships alone.
9. **Learning from concrete sustainability incidents**: B1 explains that "concrete incidents help them understand why sustainability matters even in IT categories." When problems occur, B1 can point to real examples: "this happened, and because we had the code of conduct, we could act." This evidence-based approach is more persuasive than abstract arguments.
10. **Collective transparency demands across organisations**: B2 describes "working with other Dutch [companies in their sector] to collectively demand better transparency from cloud providers." A joint discussion identified transparency around cloud infrastructure as a shared priority. This collective approach acknowledges that individual customers lack leverage, while coordinated demands can influence dominant suppliers.
11. **Industry collaboration on joint auditing models**: B1 describes existing collaboration within the industry around joint auditing and sees opportunities to expand this in 2026 for hardware. A promising model involves "commissioning audits jointly with other organisations, executed by local NGOs who can uncover issues without conflicts of interest." This approach pools resources while enhancing audit credibility.
12. **Systematic risk assessment to drive prioritisation**: B1 explains that structured risk assessments identify priority areas. A previous human-rights assessment identified IT hardware as "one of the highest-risk categories." An upcoming environmental assessment will identify where the "biggest negative environmental impact" occurs, translating into "concrete action plans in 2026." This ensures analysis leads to action.
13. **IT-specific sustainability ambitions exceeding corporate targets**: B2 explains that IT set ambitions beyond organisation-wide targets. While the group focuses on net zero by 2030 using partial scope 3 and market-based accounting, IT includes "full scope 3 emissions" measured location-based. This leads to "a formal net-zero ambition for 2050," endorsed by senior leadership. B2 describes this as "a more honest approach" and warns that limited scopes risk greenwashing: "Then you could say in 2030: well, we are green. I don't believe that."
14. **Long-term circular economy vision with staged milestones**: B1 describes "circular targets for IT (50% by 2027, 80% by 2030 and full circularity by 2050)" integrated into IT category guidelines. These milestones guide supplier discussions during renewals and new contracts, providing both short-term accountability and long-term direction.
15. **Regulatory compliance treated as a baseline**: B1 emphasises that frameworks like the UN Guiding Principles and OECD guidelines are "compelling" even when not legally binding. CSRD requirements drive systematic processes, positioning compliance as a minimum rather than an endpoint.
16. **Category-specific sustainability guidelines with actionable questions**: B1 translated policy into category-specific guidelines containing concrete questions that can be "literally copy-pasted" into tenders. An example is: "Do you have insight into your water consumption?" This enables buyers without sustainability expertise to apply meaningful requirements.
17. **Supplier receptivity to clear and structured expectations**: When six-month reporting requirements were introduced, suppliers "were receptive," noting that clarity helped them prepare for discussions

with other European clients. This shows that structured requirements can support suppliers facing multiple client demands.

18. **Use of data requirements to progressively tighten procurement criteria**: B2 explains that "By using embodied carbon data from suppliers, procurement criteria can gradually be tightened." For example, future laptops may need lower embodied carbon than previous generations. Measurement enables continuous improvement rather than static thresholds.
19. **Tiered supplier maturity assessment framework**: B1 describes a Basic–Advanced–Front-runner model. For water consumption, a Basic supplier "simply has the insight," an Advanced supplier "also has reduction targets," and a Front-runner "has already delivered on those targets." This avoids binary judgements and supports developmental conversations.
20. **Use of existing systems instead of new assessment platforms**: Rather than adopting EcoVadis, the team expanded the sustainability questionnaire in Hellios, the existing IT risk tool. This choice avoided additional supplier burden and allows "sustainability and security data together," prioritising adoption and integration over theoretical benchmarking advantages.
21. **Certification-based gatekeeping in hardware procurement**: B2 explains that "only devices that are TCO Certified are purchased." This hard requirement filters products early and ensures baseline sustainability performance without detailed assessment for every device.
22. **Experimental circularity protocols with suppliers**: B2 describes a "recently started circularity bootcamp" focused on experimenting with the Global Circularity Protocol. Together with suppliers, they assess devices to understand "what kind of data is needed, how circularity can be measured over time, and how these insights can be translated into dashboards and monitoring structures."
23. **Integration of sustainability into contract renewals**: Recognising that most procurement involves renewals rather than tenders, B1 embeds sustainability into "ongoing relationships and extension processes." This pragmatic approach reflects market realities where competition is limited.
24. **Six-month sustainability reporting in contract renewals**: When long-term IT contracts were renewed, the organisation "introduced a requirement that these suppliers report every six months on all expectations in the supplier code of conduct." This maintains visibility and momentum after contract award.
25. **Capacity-building engagement with suppliers**: B1 describes group sessions explaining CSRD requirements, followed by one-on-one supplier requests for deeper discussion. This is seen as evidence that "things are really happening at these large IT companies," positioning the organisation as a partner in capability-building.
26. **Transparency prioritised over immediate perfection**: B1 stresses the importance of insight before improvement. The key question is whether suppliers understand what must improve and can share that insight. If not, expectations are staged: "Let's talk again in six months and then I expect you to have this insight."
27. **Integration of product carbon footprint data in hardware procurement**: B2 explains the use of "detailed product carbon footprint data from suppliers," including embodied carbon, manufacturing location, and energy use. Because all IT assets are centrally registered, supplier data can be scaled accurately across the device estate.
28. **Regular sustainability governance meetings with strategic suppliers**: With large IT development firms, the organisation holds joint sustainability calls every two or three months, covering topics such as "human rights, diversity and inclusion, and CSRD developments." These meetings embed sustainability in strategic relationships.
29. **Experimental learning through bootcamps and pilots**: The circularity bootcamp is explicitly designed to build understanding before scaling. The focus is on learning how circularity can be measured, monitored, and translated into governance tools.
30. **Workplace device lifecycle extension strategy**: B2 describes extending laptop lifetimes from three to four years and then to five years. This "directly reduces the number of new devices purchased annually and therefore lowers material use and embodied emissions." Similar discussions are underway for monitors.
31. **Participation in e-waste compensation schemes**: The organisation participates in "an e-waste compensation scheme to recover old devices," supporting responsible end-of-life handling beyond basic compliance.
32. **Critical evaluation of hyperscaler sustainability claims**: B2 challenges the idea that hyperscalers are inherently more sustainable. While power efficiency may be higher, surplus capacity and limited transparency undermine claims. As B2 notes: "FinOps and GreenOps do not run in parallel. It is cheaper, but not more sustainable." This prevents conflating cost savings with environmental benefit.
33. **Strategic retention of on-premise capacity**: B2 describes maintaining on-premise data centres as "strategically important" for sovereignty and sustainability. Alternatives such as GPT-NL that can "run

on-premise" allow "bringing GenAI to the data instead of bringing the data to GenAI," preserving control over infrastructure and impacts.

3.2.6. Organisation M

1. **Using a "sustainable unless" decision-making principle:** The organisation applies "sustainable unless" as a practical decision-making guideline. This helps teams resolve sustainability dilemmas without regularly escalating issues to senior leadership. As noted, escalation "almost never happens," which shows that this principle gives operational teams confidence and authority to act.
2. **Voluntary alignment with CSRD:** Although CSRD does not legally apply, the organisation chooses to align with it. Many large ICT hardware suppliers are subject to CSRD, meaning their data systems already follow its requirements. As stated, "we always stay close to the CSRD." This approach allows the organisation to use existing reporting structures, reduce administrative burden, and improve data quality.
3. **Integrated governance model with suppliers:** The organisation uses a structured governance model with suppliers that includes operational, tactical, and strategic meetings, alongside separate security and architecture discussions. A dedicated sustainability meeting, chaired by the sustainability lead, tracks progress on sustainability initiatives with active involvement from both parties.
4. **Cross-functional sustainability support:** A central sustainability team provides ongoing support to contract managers. This includes helping interpret sustainability requirements and assess supplier compliance. As a result, contract managers do not need to become sustainability experts, while sustainability expectations remain consistent and well understood.
5. **Multidisciplinary procurement teams:** For large tenders, the organisation forms multidisciplinary teams that include business representatives, technical experts, legal staff, and both general and ICT-specific sustainability advisors. This ensures procurement decisions are informed by a wide range of expertise.
6. **Using standards as a "common language":** Standards and norms are used to create alignment and clarity between the organisation and suppliers. As described, "you create a common language," and external validation increases trust and reliability. ISO norms help structure discussions around sustainability expectations.
7. **Using ISO norms for verification:** ISO norms are used to support verification of sustainability measures rather than as stand-alone requirements. They provide external validation while avoiding overly rigid or prescriptive approaches.
8. **Structured nine-KPI sustainability framework:** The organisation applies a repeatable framework based on nine sustainability KPIs, including CO_2, energy use, and circularity indicators. Suppliers select relevant KPIs and submit improvement plans. As stated, "The more KPIs they choose with a good plan, the higher the score," while superficial answers receive "zero points." This creates meaningful differentiation while allowing supplier flexibility.
9. **Award criteria focused on measurement and improvement:** Suppliers are assessed on how accurately and transparently they will measure energy use and CO_2, and on what improvements they will deliver during the contract. They are also evaluated on how they adjust if targets are not met. This shifts the focus from static promises to continuous improvement.
10. **"Planting seeds" for future market development:** Even when suppliers score low on ambitious criteria, the organisation sees value in signalling future expectations. Suppliers begin asking "how can we develop this?" This approach is described as "planting a seed," accepting current limitations while encouraging long-term progress.
11. **Allowing "unknown" data categories:** When suppliers are unable to provide complete material information, an "unknown" category is allowed. This enables wider participation while still rewarding suppliers that can provide detailed data, balancing market development with fair competition.
12. **Iterative market engagement:** The organisation applies sustainability criteria, observes supplier responses, and refines its approach over time. This is summarised as "we simply apply it and see what happens," reflecting a willingness to experiment and adapt as the market evolves.
13. **Exploring technical possibilities with suppliers:** The organisation actively explores with suppliers what may already be technically possible, even if current products do not yet support it. This helps identify technical readiness and signals future demand.
14. **Ongoing data requirements during the contract period:** Suppliers are required to submit sustainability data throughout the contract period. This enables ongoing monitoring and accountability. Suppliers increasingly accept this approach and understand expectations, as "Sustainability is always requested, and they know they will be evaluate".

15. **Partnership-based collaboration model:** The organisation emphasises collaboration rather than adversarial supplier relationships. As stated, "If I fail, [the supplier] fails; if [the supplier] fails, I fail." Contracts are seen as "marriage conditions" that remain unused unless issues cannot be resolved. Sustainability challenges are addressed jointly, with shared ownership of outcomes.
16. **Learning from supplier proposals:** Supplier proposals are treated as learning opportunities. Suppliers may state, for example, "we do not have real-time monitoring yet, but in three months we can provide real-time CO_2 footprint monitoring, using this method and this verification." This supports mutual learning instead of one-sided demands.
17. **Valuing long-term contracts:** Long-term contracts are valued because they allow time to build effective cooperation. As noted, "you have time to find each other in the cooperation," and suppliers can justify investments in sustainability due to longer payback periods.
18. **Ensuring bid commitments are priced:** All solutions offered by suppliers must be included in the bid price. This prevents disputes later in the contract and ensures clarity and transparency from the start.
19. **Extending device lifespan through reuse and refurbishment:** Devices are reused for as long as possible. Returned devices are refurbished and reissued unless they cannot be repaired or secured. Only devices beyond repair are removed from service, and even then passed on for reuse. The guiding principle is to "use what we have" for as long as possible.
20. **Strategic reduction of devices:** The organisation reduces device numbers by limiting standard issuance. Tablets are only provided when functionally necessary, and certain brands are phased out to support a unified workplace ecosystem. A one-monitor policy applies: "Everyone gets one screen unless you can demonstrate that you need two." This supports a shift from entitlement-based to needs-based procurement, asking "what do you need to do your job?" rather than "what device do you want?"
21. **Example-based supplier guidance:** Suppliers are guided through concrete examples, such as stating, "we do not have real-time monitoring yet, but in three months we can provide real-time CO_2 footprint monitoring, using this method and this verification." This sets realistic expectations while encouraging improvement.

3.2.7. Organisation H

1. **Standardised equipment with justified exceptions:** Standard equipment is sufficient for most staff. Exceptions are granted "only for legitimate research or educational needs." This approach limits unnecessary growth in the number of devices while still supporting genuine functional requirements.
2. **Dedicated sustainability team providing specialist input:** A dedicated sustainability team actively supports procurement processes. During the early, upstream phase, "The team identifies scope, consults the [name of green team], analyses what sustainability means in practice." This specialist input strengthens sustainability integration, and the interviewee is "happy that the [name of the green team] exists and brings energy into the process."
3. **Structural integration of sustainability in tender documentation:** Sustainability is "structurally included in tenders," meaning it is a standard part of procurement rather than an ad-hoc addition. This includes requirements "specifically around sustainable disposal and transport," ensuring sustainability is consistently addressed in tender documents.
4. **Transparency as a supplier selection criterion:** Supplier selection prioritises transparency. The chosen supplier delivers HP devices because HP is "as transparent as possible," particularly regarding risks such as modern slavery, exploitation, cobalt sourcing, and battery production. This values openness even when full supply chain control is not possible.
5. **Long-term supplier relationships:** Supplier contracts typically last four years, with the option to extend. In some cases, the same supplier holds consecutive contract periods. This continuity is seen as beneficial, as "it is easier when systems and people are already aligned."
6. **Extended device retention policies:** Employees may keep devices beyond standard replacement cycles if they remain functional. This approach is described as "practical, honestly also driven by budget cuts," while also supporting longer use. Replacement cycles have changed, with "laptops now run for five instead of four years, and screens for seven instead of five."
7. **Private device integration for sustainability:** Employees are allowed to use private devices for work because this is considered "more sustainable than when we buy a phone." This pragmatic approach reduces the need for new purchases without requiring additional technical investments.
8. **Service-level sustainability differentiation:** In a reseller-dominated market where product sustainability is hard to differentiate, sustainability impact is found in service delivery. Focus areas include deliveries, onsite support, unpacking, reuse, and waste handling. One example includes "mobile suppliers offering one or two annual campus support days to repair devices onsite, which reduced replacements

and transport." This approach is described as "tangible, controllable and service oriented," enabling effective monitoring.

9. **Centralised lifecycle management through a single supplier:** End-of-life device handling has been centralised under one supplier. Previously, only own-brand equipment was returned, but now "the contracted supplier must accept all devices." This simplifies processes, improves accountability, and supports more efficient return and recycling cycles.
10. **Using wired peripherals to reduce battery waste:** The organisation prefers wired peripherals to limit battery use. As stated, "the organisation prefers wired mice to avoid battery use; exceptions are made for ergonomic reasons." This shows attention to secondary sustainability impacts beyond core devices.

3.2.8. Organisation U

1. **Standardisation to Fairphone:** The organisation is transitioning from offering three types of phones to "only Fairphone." This product choice is directly linked to both sustainability goals and operational efficiency, as "inventory management becomes much easier." Standardisation supports reduced complexity while strengthening sustainability outcomes.
2. **Specialised core assortment team:** A dedicated "core assortment team," mainly composed of technical specialists, determines the preferred hardware portfolio. The team evaluates "functionality and repairability" alongside sustainability and cost, ensuring that "the most sustainable laptop becomes the standard laptop." This embeds sustainability directly into hardware selection decisions.
3. **Alignment with central sustainability programmes:** The organisation works closely with the central sustainability programme of the [public organisation]. Together, they "aligned on goals and developed the sustainability roadmap for workplace IT." This ensures that IT decisions contribute to the wider ambition to be climate neutral by 2050.
4. **Separation of supplier and product evaluation criteria:** The tender process "deliberately created a split" between criteria used to assess suppliers and criteria used to assess products. This separation allows organisational capability and hardware performance to be evaluated independently and more transparently.
5. **Practical checklist for product criteria:** Product requirements, such as energy efficiency and certifications, are translated into a "practical checklist." This checklist is actively used by the core assortment team to support consistent and standardised sustainable product choices.
6. **"Buy less" as the primary sustainability strategy:** Avoiding purchases is positioned as the most effective circular strategy. As stated, "If you don't buy anything, you don't need to recycle." This approach prioritises reducing volumes over downstream measures such as recycling or repair.
7. **Radical rethink of the workplace concept:** The migration to Windows 11 was used to "rethink the entire workplace concept." The organisation concluded that desktops were no longer necessary for end-users. Instead of replacing 1,000 desktops with new computers, they were replaced "with a desk with a power strip," significantly reducing hardware volumes.

3.2.9. Organisation R

1. **Linking procurement and IT through a dedicated category manager:** The organisation has a dedicated corporate-level category manager for IS/IT who acts as a "linking pin" between procurement and IT. Sustainability ambitions are embedded in category plans across major procurement areas. Category managers define these ambitions and steer purchasing decisions towards them.
2. **Collaborative creation of policy:** Policy development is moving towards a collaborative model in which IS/IT works together with procurement and the CSR office. This ensures that departments affected by the policy actively contribute to shaping the rules, improving relevance and acceptance.
3. **Using the "ambition web" framework:** The organisation applies "ambition webs" to structure sustainability goals across five dimensions: energy, climate, diversity, circularity, and working conditions. The framework maps the current situation, future expectations, and progress milestones at two and four years, providing clear direction and accountability.
4. **Network-based collaboration in procurement:** The workplace hardware tender was conducted jointly with an ICT cooperation. By pooling demand, the organisations increase their influence with large suppliers and make it easier to request transparency and insight into supply chains.
5. **Strategic multi-year sustainability trajectories:** For strategic suppliers, contracts define multi-year trajectories with stepwise sustainability goals. This approach provides clear expectations over time and supports gradual but measurable progress.

3.2.10. Organisation D

1. **Standardisation to strengthen sustainability leverage:** Standardised products make it easier for sustainability to play a decisive role in decision-making. For specialised products, "the distinguishing quality can still be too large" to prioritise sustainability. Moving towards standardisation and SaaS reduces bespoke systems and enables ICT to provide "standard workplaces, facilities and setups." This creates a consistent baseline and gives the organisation greater control over the sustainability profile of most devices.
2. **Internal communication of procurement policy:** Clear communication of new procurement policies helps build internal support. When the updated policy was introduced, department secretaries expressed pride that it would form the "basis with which we go to the market." This shows that explaining the purpose and rationale behind policy changes strengthens internal buy-in.
3. **Structured meeting and monitoring cadence:** The organisation applies a structured rhythm for governance and monitoring. This includes daily operational communication, quarterly evaluations of KPIs, and bi-annual strategic meetings. This cadence ensures continuous oversight while maintaining alignment at strategic level.
4. **Value-driven approach in tenders:** Suppliers are encouraged to demonstrate added value beyond minimum requirements. As described, "We state what we want and expect… and we let the market indicate what extra they can offer." Open criteria invite suppliers to show "optimization, cooperation, or how they see collaboration," supporting innovation and stronger partnerships.
5. **Linking procurement systems to central asset management:** The procurement system is directly connected to the central asset database. This linkage "allows better lifecycle management and gives better insight into where everything is." As a result, asset tracking and sustainability management are more accurate and effective.
6. **Supplier-led responsibility for end-of-life processing:** End-of-life processing has been "well-organised for years" through partnerships with suppliers that resell discarded hardware. This approach extends product lifespans and embeds circularity into supplier responsibilities.
7. **Focus on refurbishment and end-of-life value:** Attention increasingly shifts towards extending the life of hardware. The key questions are: "Can we give equipment new life? Or how is it processed?" The organisation considers itself "reasonably on track" due to established processes for responsible end-of-life handling.
8. **Using waste contract models as inspiration:** The organisation draws inspiration from waste contracts where providers are paid "per ton of waste they do not dispose." Similar incentive structures are seen as a potential way to reward longevity and reduced waste within IT contracts.

3.2.11. Organisation E

1. **Politically anchored sustainability governance frameworks:** Embedded sustainability governance frameworks are in place and supported at political level. The MVOI Manifest functions as a stable guiding framework and is firmly anchored in political leadership. This helps protect sustainability ambitions from short-term operational pressures.
2. **Early signalling of MVOI themes in procurement trajectories:** Relevant MVOI themes are flagged "immediately" at the start of each procurement trajectory. This early signalling supports consistent integration of sustainability considerations, rather than treating them as late-stage additions.
3. **Using the national MVI criteria tool as a baseline:** The national MVI criteria tool is used as a structured starting point for procurement. It serves as a practical guide per product category, where procurement "at least tries to implement the basic criteria before gradually increasing ambition." This supports consistency and learning through practice.
4. **Established circular end-of-life route for laptops:** A circular end-of-life pathway for laptops is in place and described as a "core element." Laptops are sold to a party that reuses them in schools or recycles them responsibly. This approach is directly linked to CO_2 reduction and represents an existing, concrete lifecycle practice.
5. **Institutionalised learning through external knowledge exchange:** Learning is actively supported through participation in external knowledge-sharing activities. PIANOo sessions and masterclasses are valued as opportunities to exchange practical experience, indicating a focus on building procurement practice capability rather than only setting policy.
6. **Procurement policy revision supported by an internal IT sustainability project:** Sustainability learning is reinforced through both procurement policy revision and a dedicated internal IT sustainability project. This project explores how sustainability can be embedded in IT and procurement, alongside policy updates that include The Natural Step as a pillar. Together, these actions form a deliberate

learning loop rather than ad-hoc improvement.

4

Validation interview materials

4.1. Interview summaries per participant

4.1.1. Summary interviewee A1

Several barriers identified barriers were discussed. One is the lack of transparency from the market. Suppliers differ in the type and depth of data they provide about devices and supply chains. Not all suppliers are able to offer detailed insight into their chains or provide structured sustainability reporting. This challenge is described as particularly pronounced for software and cloud services, where impacts are more indirect and harder to measure than for hardware.

Internally, the interviewee notes that it is difficult to track progress accurately. While suppliers provide general sustainability reports, translating those into insights specific to the organisation's IT impact is challenging. There is also limited capacity within contract management to fully evaluate each supplier against sustainability KPIs. Time and resources are not always sufficient to monitor whether all agreements are met and how performance evolves.

Product certifications are seen as potentially useful, particularly in the short term. The interviewee views certifications mainly as a way to encourage suppliers to improve and as a marketing instrument for them. Certifications can help standardise demands towards the market and simplify verification. However, the interviewee emphasises that there are many certifications, not all of which are equally reliable or independent. Some certifications are considered more meaningful than others.

Two certifications for workplace IT are mentioned positively: Blue Angel and TCO. The interviewer notes that TCO is more comprehensive because it includes social sustainability aspects. TCO is also described as having a workable balance between strictness and feasibility, as it covers many products while still enforcing meaningful requirements. The interviewee finds it relevant that TCO regularly tightens its criteria and reassesses products. "A laptop that complies now must also comply the year after."

Despite this, the interviewee states that certifications will not be enforced as strict procurement requirements. They are considered supportive rather than decisive. "We will not be very strict in saying: these are the certification requirements and you must comply." Sustainability is one factor among many, alongside cost and functionality. A certified solution that is significantly more expensive would not automatically be selected over a cheaper alternative.

The interviewee is familiar with the concept of the digital product passport and associates it mainly with European-level developments and future legislation. They expect that adoption will be driven primarily by compliance requirements. "I think we will mainly take this up from compliance." The interviewee does not expect the organisation to be a frontrunner in imposing digital product passports on suppliers. At present, it would not be a decisive selection criterion.

Caution is expressed about moving too early. The interviewee notes that digital product passports have been discussed for many years and repeatedly delayed. Advancing too far ahead of regulation could lead to investments in systems or platforms that later prove unsuitable. There is concern about platform lock-in and the immaturity of current solutions. The interviewee emphasises that the broader ecosystem is not yet ready.

Reflecting on earlier experiences, the interviewee describes previous attempts to develop internal tooling for carbon footprint measurement. These initiatives were eventually stopped by senior management. In

retrospect, the interviewee felt that building such tools internally was unrealistic. Instead, the organisation focused on working with suppliers that already understood sustainability data and reporting. Despite the passage of time, the interviewee observes that development in this area has been limited.

Device-as-a-service models are described as helpful in aligning incentives for lifespan extension. Hardware allocation is based on job requirements, with heavier devices provided only where necessary. The interviewee notes that performance expectations differ by role, particularly for developers, but that for most employees functionality is the primary concern.

Support structures such as on-site tech cafés are described as well established. Employees can walk in without appointments and receive immediate assistance. Many performance issues are resolved through maintenance rather than replacement. When a device becomes genuinely unmanageable, replacement is initiated quickly. The interviewee does not recognise the idea that proactive, periodic servicing would significantly improve user satisfaction. Given the scale of the organisation, with around forty thousand laptops in use, such an approach is seen as impractical and costly. “If you wait until people come themselves, as it is organised now, it is much cheaper.”

On security, the interviewee explains that cybersecurity risks are primarily linked to applications rather than the device itself. From a technical standpoint, laptops could be used for six to eight years, but in practice devices are replaced earlier due to declining performance and increasing repair needs. Security considerations are therefore not the main limiting factor for device lifespan.

Finally, the interviewee reflects on supplier selection processes and notes that they are often less rational than theoretical models suggest. In a recent procurement process, one supplier was favoured because they listened carefully and responded directly to the organisation’s questions. Other suppliers, despite offering technically strong devices, failed to address those questions and effectively disqualified themselves. The interviewee also describes frustration with an incumbent supplier who appeared complacent. This relational dynamic became decisive. “Whatever happened, with this party we were not going to continue.”

Tools and databases such as Resilio are viewed as interesting and have been included as reference sources in internal sustainability knowledge bases. However, the interviewee is unsure whether they are actively used in practice. Such tools are not currently decisive in procurement decisions. The interviewee expects that if a database becomes a recognised standard or authority, it will naturally gain traction among sustainability specialists within the organisation.

4.1.2. Summary interviewee O1

On sustainability requirements and how they translate into workplace IT procurement, the interviewee responds positively to the discussion about using more product-specific sustainability certifications, but immediately frames a practical constraint: they are trying to apply one consistent standard across their full product portfolio, while many certifications are narrowly defined. As they put it, “We try to maintain one standard across all products, and these certificates are very specific.” They see a clear operational barrier if they would have to manage many different niche standards at once: “If you have to manage many different specific standards, that becomes a serious challenge.” At the same time, they indicate they could become more likely to include certain strong, specific standards if those standards broaden in coverage and become easier to apply across categories: “But if some of those good, specific standards get broader coverage, then the chance increases that we can start weighing them in over time.”

When the topic touches on verification and ensuring that certified products remain compliant, the interviewee underscores why ongoing checks matter in their view, using concrete examples: “Or that they have moved anyway. Or that after that, some heavy metals were added.” This reflects a preference for mechanisms that reduce reliance on one-off assurances and instead maintain continuous oversight.

Regarding sustainability and cloud services, the interviewee highlights scalability as both the defining feature and the complication from an impact perspective. They explain that with laptops there are physical limits, but with cloud services an expansion in capacity can increase impact immediately, which in their view makes assessment and certification harder: “The big goal of cloud is of course scalability. A laptop has limits, but if tomorrow you expand your capacity, the impact increases immediately. That makes it more scalable, but also the impact more scalable.” They conclude that this characteristic likely makes cloud certification more difficult and they explicitly express curiosity about how that will be handled: “That makes certification harder, I think. So I’m curious how they are going to approach that.”

On the proposed idea of Digital Product Passports for IT hardware and materials transparency, the intervie-

wee immediately connects it to a familiar concept from software procurement and governance, describing it as analogous to a software bill of materials: “Yes, that is basically comparable to an S-BOM for software. You then know in detail what is in it and where it comes from.” They emphasise the operational value of having standardised, detailed material information inside the organisation, especially for steering on extending the lifespan of devices and managing assets more systematically. In their words, “So it gives a lot of insight into what materials we have within the organisation and what is in them, so that, for example, you can steer on extending lifespan.” They stress that standardisation is the key to making this workable at scale across the chain, contrasting it with fragmented, ad-hoc reporting.

At the same time, they raise a significant concern about the underlying platforms and the broader question of sovereignty in cloud solutions. They describe the situation as “double” because efforts to adopt such systems can revive debates about sovereign cloud while many major vendors remain connected to the US: “Then you get those discussions about sovereign cloud solutions again. It turns out that parties like Microsoft and Oracle keep a connection with America, and you cannot completely rule out that that sovereignty is still breached via the parent company.” They give a specific example of why they find assurances difficult to evaluate and say explicitly that they find it complicated: “Oracle says, for example, that they have agreements with people who get such large amounts of money that, if necessary, they will speak freely. I find that complicated.” This feeds into a broader uncertainty they express about whether sufficiently mature European alternatives will exist, noting a trade-off they see between functional maturity and other requirements: “So I am curious how that develops and whether there are European platforms that are sufficiently mature to do this well. Functionally they often lag behind, and that makes it complicated.”

In parallel to materials transparency, the interviewee describes an active internal challenge around sustainability screening focused on human rights, saying they had discussions the previous week specifically about sustainability and the expansion of human-rights requirements, and that they are “running into it again” and revisiting how they organise it. They point to a practical dilemma when evaluating vendors: large US companies can end up categorised as “incompetent or non-compliant” because they do business in countries that are classified in a certain way, and they find the implication odd because it would apply broadly to many global firms. They describe that reaction plainly: “Then I think: that of course applies to all internationally operating companies. To disqualify those parties now on the basis of such a statement feels strange.” They state that they are currently looking at how to organise this better and are waiting to see what comes out of that effort: “We are now going to look at that to organise it better. I’m curious what comes out of it.” Still, they acknowledge that instruments like the ones discussed can help as an additional reference point in decision-making: “But these kinds of instruments do help to put it next to it.”

They also add nuance about how vendor presence in a country is interpreted, noting what they see as an important ambiguity: a company may be active in a country, but the ethical meaning can differ depending on whether they work with the responsible government or with groups opposing it (such as NGOs). They observe that current assessments can appear indifferent to that distinction: “Now it seems not to matter who they do business with there. If they are active there, it could just as well be with the government.” They characterise this as closely related to the broader sustainability evaluation challenge, “similar, but the other way around.”

When asked (and responding) about whether Digital Product Passports would be worth exploring for their organisation, the interviewee describes their current procurement posture as still centred on standard vendors and positions Digital Product Passports as something that could become useful as more detailed data becomes available. They describe a phased view: “I think that for now we are still strongly focused on standard suppliers, for example Dell in combination with the TCO situation.” But they also state they can see it helping over time and picture themselves working with such a platform at some point: “In the longer term I do see that this can help, because you get more and more detail. I can imagine that at a certain point we will indeed work with such a platform.”

They then illustrate what they see as the gap between sustainability ambition and current workplace IT reality using smartphones as a concrete example. They say they still deliver iPhones rather than “smartphones in a broader sense,” and that moving to a strict policy like “only Fairphones” is not something they see happening soon in their own organisation. They add: “And before we take such a step, that we, for example, will only supply Fairphones, we still have quite a way to go.” They mention having seen that Radboud University decided to issue only Fairphones, but they explicitly distance their own organisation from making that same decision in the near term.

As the conversation turns to a comparison database for environmental impact of devices and infrastructure, the interviewee reacts enthusiastically and in a very practical, hands-on way. They ask a clarifying question about which version is being discussed (“the generic or a specific one?”), and when they understand the capability they respond: “Oh, that is pretty cool.” They immediately start checking whether their

own system hardware appears in it: “Nice, thank you. I am immediately looking to see if my system hardware is in it.” They also describe checking Oracle Exadata systems: “And I was also checking my Oracle Exadatas. That can even be done at region level, so that is indeed very nice.”

They then provide a concrete example of a recurring barrier they experience in sustainability-related data gathering: it can take a long time to obtain clear answers directly from vendors, and they contrast that with the ease of seeing information displayed in front of them now. They put it bluntly: “You don’t want to know how long I worked on it to get this answer. What I now just see on my screen of Oracle, out in the open.” They express cautious scepticism about whether that vendor-provided data quality is better than modelled and say they intend to verify it: “You hope so. You hope so, but I’m going to verify that later.” Closing the conversation, the interviewee describes the discussion as engaging and practically valuable, explicitly saying it contains things they can continue with: “Okay, thank you for that. I found it fascinating and interesting. There really are things in it that we can continue with.”

4.1.3. Summary interviewee H2

When the Life Cycle Assessment (LCA)-based approach to sustainability in workplace IT procurement is discussed, the interviewee reacts positively to the idea of translating sustainability into measurable and concrete effects. They explain that sustainability discussions within the organisation often remain abstract and belief-based, which makes it difficult to justify decisions internally. They describe the value of an LCA approach as making sustainability tangible: “You get practical tools and suddenly it becomes concrete.” Without such quantification, sustainability arguments remain vague: “Otherwise it stays like: if we do this, it will be better, but without substantiation.”

They explain that being able to express impact numerically would help in internal communication and decision-making. Instead of generic claims, it would allow procurement to specify outcomes: “Then it’s no longer just: if we use it one year longer, that’s better for sustainability. Then you can also say: this is what it means concretely.” They indicate that this concreteness would help explain choices to others in the organisation and would support discussions where sustainability needs to compete with other priorities.

At the same time, they reflect on the practical feasibility of applying an LCA-based approach. They emphasise that it depends on whether the required information can realistically be obtained and processed within existing capacity. They note that such data collection would likely fall under contract management rather than purchasing, and that a colleague who is more closely involved with ICT execution would need to be involved. They explicitly state: “He definitely has to have an opinion about it.” They also mention that the current year is relatively quiet in terms of purchasing, which could make it more feasible to focus on this kind of work, but only if it fits within available time and roles.

When the solution of a Digital Product Passport (DPP) is introduced, the interviewee initially places it within their broader experience of dealing with standards and labels in procurement. They explain that they frequently encounter proposals to include certain labels or standards without fully knowing what they entail. They describe a recurring situation where someone suggests including something, and they then feel responsible for verifying it: “Then someone says: maybe we should include this. And then I think: wait, what actually is that?” They characterise this as a structural knowledge gap, stating plainly: “That is sometimes just very difficult. You sometimes just miss the knowledge. That’s what it comes down to.”

They respond to the DPP concept by asking practical questions about its content and usefulness. They want to know what information it would actually contain (whether it describes the type of product, its characteristics, or its age) and whether it effectively explains what is being purchased. As the concept becomes clearer, they express appreciation for its concreteness and operational relevance. They describe this as one of the strengths of the solution: “These are nice things. It’s very concrete.” From a procurement perspective, they see direct applicability: “As a buyer you can really ask about it in a targeted way and you can do something with it. I like it.”

They also reflect on what problem a DPP could help solve internally. They connect it to asset management and lifecycle decisions, explaining that clearer product information would support decisions about depreciation and replacement: “Then you can better see which one you depreciate first.” This reflects their view that the value of a DPP lies not in abstract sustainability goals, but in its ability to support day-to-day operational decisions.

When discussing the organisational barrier for sustainable hardware alternatives, such as Fairphone, the interviewee agrees with the solution of starting with small-scale pilots. Interviewee H2 expresses frustration that their own organisation does not experiment more with such alternatives. They state explicitly: “I actually think that’s a shame.” They see testing as both feasible and valuable, especially because some ICT administrators are naturally inclined to experiment. They propose a very practical approach to evaluating

sustainable devices: “Just give someone a Fairphone and let them use it for a while. See how it goes.” They frame this not as a technical limitation, but as an organisational choice about whether or not to create space for experimentation.

When reflecting on why such sustainable solutions are not adopted more structurally, the interviewee agrees with the conclusion of the interviewer on organisational constraints, particularly IT management capacity. They explain that procurement decisions are primarily guided by what IT can manage with existing resources. They describe this approach clearly: “We work from the management capacity. This is what we have, this is the number of hours available. If we buy something, it has to fit within that.” They contrast this with an alternative approach (choosing the most sustainable solution first and then arranging management around it) but state that this is not how their organisation currently operates.

They emphasise that this capacity-first approach limits the feasibility of more innovative or sustainable solutions, even if they are desirable. They acknowledge that this is not unique to their organisation, noting that IT management capacity is scarce everywhere, but they still identify it as “really an organisational point.”

Leadership is described as a decisive factor in whether sustainable solutions become viable. The interviewee agrees that organisational priorities closely follow the direction set by the executive board. When sustainability is prioritised at that level, they say, “everyone will obediently join in, because the highest body wants it.” Conversely, when cost reduction is prioritised, sustainability quickly loses importance: “Then sustainability just drops away.” They stress that visible leadership is especially powerful. If a director personally chooses a sustainable solution, the organisation will make it work: “If the director says: I want this, then it will be arranged.” They add that once it works at the top, it becomes normalised: “And if it works for the director, then it apparently works.”

Regarding procurement process design as a solution, particularly flexible tendering approaches based on a best practice of another public organisation presented by the interviewer, the interviewee responds positively based on past experience. They describe having previously used tenders where suppliers were allowed to define their own KPIs above a minimum requirement and indicate where they could exceed expectations. They see this as valuable because suppliers often understand the market better than buyers. However, they note that such approaches are used less frequently now due to increasing standardisation of technical requirements, covenants, and KPI lists.

They reflect critically on this trend, questioning whether it is beneficial. They state openly: “I honestly think we might be shooting ourselves in the foot a little bit with that.” They argue that strict standardisation reduces room for suppliers to contribute innovative or more sustainable solutions. As an alternative, they express support for evaluating suppliers on the quality and transparency of their sustainability monitoring and their plans for improvement over time. In their view, this would not necessarily require perfect data immediately, but would stimulate better data availability and transparency in the long run.

4.1.4. Summary interviewee U1

When the Life Cycle Assessment approach is discussed, the interviewee explains that they are not familiar with the method itself, although the terminology sounds recognisable to them. After hearing how it works, they immediately see its relevance and usefulness. They explain that such an approach would make sustainability impacts much more concrete for the organisation, saying that “then it becomes much more tangible.” They emphasise that even without immediately acting on the results, having a clear overview already has value in itself, stating that it would be useful “just to get a concrete picture again.”

The interviewee explains that their organisation is currently working on CO_2 reporting related to workplace IT procurement, but that this process has been delayed. They describe how they are now actively pressuring their reseller, to deliver a baseline report covering all hardware purchased over the past year and the associated CO_2 impact. They express strong anticipation about this report, saying that they are “really waiting with suspense” to see what it contains, how detailed it is, and whether it meets what they are looking for. They indicate that the Life Cycle Assessment approach resembles this effort closely and explicitly state that “it cannot hurt to do that in parallel.”

They further explain that running both approaches at the same time could be useful, especially to compare outcomes. They mention that the organisation is “still very much searching for definitions and measurement methods” and that comparing different reports could help with that. The interviewee therefore reacts positively to the idea of sharing internal data, such as a list of devices, and states that if the report arrives soon, they would be willing to share that as well.

When discussing the concept of a baseline more broadly, the interviewee refers to the organisation’s internal roadmap. They explain that 2025 has been defined as the baseline year, in which CO_2 emissions

will be measured and set at 100%. The ambition is to reach 0% by 2050. They explain that this means an average reduction of around 4% per year, but stress that this should be understood as a general trend rather than a strict yearly target, saying that "some years we are below that and some above it, as long as the trend is right." In this context, they acknowledge that extending the lifespan of devices is relevant, but clearly state that the main focus is on reducing purchases altogether, explaining that "less buying delivers the biggest contribution."

On the topic of Digital Product Passports, the interviewee explains that they heard about this concept a few months earlier at a sustainability conference. They describe it as something that is coming from Europe but is "not there yet" and still requires further development. Their reaction is positive but cautious. They explain that this would be the next step after receiving the CO_2 reporting from Dustin and state that it "could make the picture complete," while also noting that "it is not yet entirely clear."

At the same time, the interviewee expresses the view that the organisation should already start asking for this type of information. They state that they believe suppliers should be willing to provide it, saying, "I cannot imagine that [the reseller] would not want that, because this is their core business." This reflects their expectation that suppliers can support the organisation in preparing for future requirements.

When discussing behavioural aspects and device lifespan, the interviewee responds with interest to the idea of proactive maintenance moments. They acknowledge that the organisation currently does not have such an approach in place, saying, "we actually don't have anything for that." They immediately add that this is "certainly something to think about," and later in the conversation they return to this idea, stating that "the APK approach in particular is good to think about."

Regarding leadership and example-setting within the organisation, the interviewee expresses irritation when sustainability principles are not applied consistently. They describe a situation in which a member of the executive board wants "the newest, most modern iPhone of, what was it, 1600 euros," and state clearly that "that is not really the right example." They explain that this creates irritation, even if it does not yet extend throughout the entire organisation.

When talking about reuse and circularity practices, the interviewee explains that several practical measures are already well organised. They mention that devices are cleaned, stickers are removed, and attention is paid to how reused devices look. They also state that providing sleeves and backpacks is already common practice. They summarise this by saying, "we have that fairly well under control."

In relation to sustainability certifications, the interviewee explains that their organisation's sustainability thinking originally started a few years ago with certifications such as Blauer Engel and TCO. They indicate that they are familiar with these certifications, but acknowledge that the organisation does not yet steer procurement in a highly structured way based on them, stating that "to say that we steer on it very structured, no, we can still make steps there."

Towards the end of the conversation, the interviewee reflects on the discussion as a whole and expresses that it was useful. They state that there are "a lot of useful things in there" and that the ideas provide good points of reference. They emphasise the importance of working with reports and analyses and not approaching sustainability only theoretically. They explain that it is important to be able to say, "this laptop costs this and this is the CO_2 impact, are we going to do it or not?" At the same time, they explicitly state that "we are not there yet." They conclude by identifying the pursuit of uniform measurement methods and uniform criteria as the next step for the organisation.

4.1.5. Summary interviewee R1 and R2

When the Life Cycle Assessment (LCA) approach is discussed, R1 initially indicates that they were not familiar with the term itself. After the explanation, they immediately see its relevance and express clear interest. They describe the approach as useful because it makes sustainability impacts concrete and comparable, stating that "then it becomes much more tangible." They emphasise that repeating such measurements over time would help show whether the organisation is improving and whether it is moving fast enough toward its goals. They also stress that even having a baseline overview would already be valuable, saying it would be useful "just to get a concrete picture again." R2 confirms that this fits well with ongoing work on sustainable digitalisation and that such an approach could be "very handy for us," especially to better understand what actions can realistically reduce CO_2 emissions.

Digital Product Passports are discussed primarily as a long-term development. R1 reacts positively but

immediately places the concept in a future-oriented perspective. They describe it as “very interesting” and link it directly to existing needs around asset management. At the same time, R2 questions whether the concept is currently mature enough to be operationalised and whether it is already feasible to integrate into tenders or asset management systems. They state that they do not yet have a clear picture of whether Digital Product Passports are on the radar in current procurement processes and suggest that the topic is “still in its infancy.” They expect that serious implementation will only become realistic around 2027 or 2028, but also emphasise that this makes it important to start thinking about the implications now.

Despite this cautious timeline, the interviewees do see immediate potential in using elements of Digital Product Passports in procurement, particularly in award criteria. They describe this insight-generating potential as “very valuable” and comparable to the added value of LCA. They also express some regret that this topic is not currently included in their AmbitieWeb for hardware, stating that it “should definitely be included” in future versions and upcoming tenders, such as those planned for datacentre hardware.

Regarding sustainability certifications, the interviewees express a generally open but cautious attitude. One interviewee explains that they recognise certifications such as TCO when they look them up, but are unsure whether these are currently used in a very deliberate way. They state that it would be worth considering which certifications to require or at least use as comparison points. They emphasise a preference for certifications that are clearly product-specific, stating that “if it is really tailored to the product, I always think that is better,” because broader certifications can be unclear in what they actually say about the product being procured. At the same time, they note that certifications can be confusing and that it is not always immediately clear what their scope is.

For cloud and software, one interviewee explicitly states that there are currently no clear certifications available and that this is something they are actively waiting for. They describe this area as unclear and explain that they are monitoring developments and discussing possibilities internally, including with colleagues in relevant working groups. They also mention that ISO standards are sometimes used, mainly as an indication that an organisation takes environmental issues seriously.

The interviewees also reflect on the balance between ambition and market feasibility. They indicate that while sustainability ambitions are high, they cannot be pushed indefinitely if the market is not yet able to meet them, as this could make procurement impossible. Certifications are seen as potentially helpful in creating clarity and reducing assessment burden, but only if they do not exclude smaller or less mature suppliers by default.

User behaviour and organisational culture are described as important factors influencing the sustainability of workplace IT. The interviewees respond positively to ideas focused on incentives rather than enforcement. One interviewee finds it particularly interesting to remove incentives for early replacement and instead reward employees who use their devices for longer periods. They suggest that it could be motivating if people are recognised for using a device for four, five, or even six years. They stress, however, that this must remain compatible with security policies, sharing a personal example of having to replace a laptop for security reasons even though it was still functionally adequate. They conclude that rewarding longer use is preferable to creating incentives that encourage people to want something new.

The interviewees also respond positively to examples of procurement approaches used by other public organisations. They express interest in approaches that give suppliers flexibility while still steering them toward sustainability objectives, reacting with comments such as “yes, exactly” and “that is really good.” They also show interest in approaches that emphasise transparency and monitoring, asking how such monitoring is assessed and organised in practice.

Service-based approaches, such as involving resellers in repair and maintenance to extend device lifespans, are described as aligning well with organisational goals around circularity and prioritising repair over recycling. One interviewee explicitly states that this approach fits very well with their ambitions. At the same time, they mention practical barriers, explaining that having external parties physically work on devices within the organisation feels vulnerable. Because of this, such approaches have been considered but ultimately not implemented.

Toward the end of the interview, both interviewees express appreciation for the discussion. One states that they found it “really nice” and that it provided “very useful insights” that they can work with in practice. The other agrees, describing the conversation as “very educational” and noting that it offered insights that can be applied both in the short and the longer term. They explain that the organisation is currently working on defining its strategy within IT and IS, and that the topics discussed will “certainly be given a place,” even if some elements remain less concrete for now.

4.1.6. Summary interviewee E1

When the Life Cycle Assessment approach is discussed, the interviewee explains that they are not familiar with the method itself, although they recognise the terminology. After hearing how it works, they immediately see its relevance and express clear interest. They state that such an approach would make sustainability impacts much more concrete and measurable for the organisation. As they put it, "then it becomes much more tangible." They emphasise that repeating such monitoring over time would allow the organisation to see whether it is achieving its goals at the desired pace. They describe the idea as "very interesting" and note that it directly connects to current internal work on sustainable digitalisation. The interviewee stresses that gaining a concrete overview is valuable in itself, saying that it would already be useful "just to get a concrete picture again." They indicate that this type of assessment could be "very handy for us," particularly because the organisation is keen to understand what practical actions can be taken to lower CO_2 emissions.

In relation to collaboration with external parties, the interviewee confirms that they are working with colleagues on the project Sustainable Digitalisation and are actively exploring ways to reduce environmental impact. They acknowledge that external tools or analyses could support this work and state clearly that they would like to look into this further, describing it as something worth deepening.
When the topic of Digital Product Passports is raised, the interviewee responds positively but places it firmly in a long-term perspective. They explain that concrete implementation would be more of a future objective rather than something that can be fully realised in the short term. However, they do see immediate potential in using elements of this concept in procurement processes, particularly in award criteria. They explain that this would allow suppliers to demonstrate how they can support the organisation, rather than requiring the organisation to develop all the necessary knowledge itself. They describe this as "very valuable," especially because of the insight it could generate, drawing a parallel with the added value of Life Cycle Assessments. They also note that upcoming EU legislation strengthens the case for starting to think about this now, as it provides a broader and more robust basis for action.

Regarding sustainability certifications, the interviewee expresses a generally positive attitude, particularly when certifications are clearly linked to specific products rather than to organisations as a whole. They explicitly state that they prefer certifications that are product-specific, saying that "if it is really tailored to the product, I always think that is better." They explain that this is important because some certifications or standards can be very broad, making it unclear what they actually say about the product being procured. At the same time, they acknowledge that certifications can also be confusing and that it is not always immediately clear what their exact scope is.

When certifications for cloud services are mentioned, the interviewee admits that this area still feels unclear to them. They describe it as "still a bit vague" and explain that, while they see potential value, they would need to look into it further before forming a well-founded opinion. This reflects a cautious but open attitude: they do not reject the idea, but they do not yet feel sufficiently informed to fully embrace it.

The interviewee responds positively to examples of procurement approaches used by other public organisations, particularly those that balance structure with flexibility. They agree with the idea of giving suppliers room to build on their own strengths while still steering them towards sustainability objectives, responding succinctly with "yes, exactly" and "yes, good." They also show interest in approaches that place strong emphasis on transparency and monitoring, asking how such transparency is assessed and whether dedicated people are involved in evaluating it. This indicates that they see monitoring and measurability as important aspects of sustainable procurement.

Finally, when discussing examples involving resellers and service-based requirements, such as on-site repairs to extend the lifespan of devices, the interviewee strongly agrees with this approach. They confirm that this aligns closely with their own organisational goals, particularly around circularity. They explicitly state that their organisation, like the example discussed, has strong objectives focused on circularity and prioritising repair over recycling. They describe this approach as "really good" and say that it fits very well with their ambitions. They conclude the conversation by expressing appreciation for the insights gained, stating that they found the discussion "interesting" and that it provided them with valuable new perspectives.

4.2. Validation per case organisation

4.2.1. LCA: baseline

Organisation H

- **Desirability:** H2 responds very positively to the idea of using LCA to translate sustainability into something tangible and communicable: "You get practical tools and suddenly it becomes concrete." This concreteness is contrasted with the current situation, where sustainability arguments are experienced as abstract and belief-based: "Otherwise it stays like: if we do this, it will be better, but without substantiation." For Organisation H, the value of LCA lies less in producing precise measurements and more in enabling stronger internal justification when sustainability competes with other priorities. Being able to express impacts numerically is seen as a way to move beyond generic statements: "Then it's no longer just: if we use it one year longer, that's better for sustainability. Then you can also say: this is what it means concretely." LCA is therefore strongly desirable as a mechanism to make sustainability credible and defensible within procurement discussions.
- **Feasibility:** Feasibility is viewed as possible but conditional. H2 emphasises that it depends on whether the necessary information can realistically be obtained and processed, and who would take responsibility for this work. They explicitly note that LCA-related activities would not sit with purchasing alone, but require involvement from ICT operations or contract management: "He definitely has to have an opinion about it." While a relatively quiet purchasing year is mentioned as a potential enabler, this is framed as opportunistic rather than structural. Overall, Organisation H sees LCA baselining as feasible only if it can build on existing data and be supported by colleagues closer to ICT execution.
- **Viability:** H2 does not discuss long-term costs directly, but implies that viability depends on whether LCA produces outputs that are actually used. If LCA remains an additional analytical exercise, its continuation is uncertain. If, however, it consistently supports concrete choices and internal justification, it is more likely to endure. Viability is therefore tied to organisational embedding rather than to the method itself.

Organisation U

- **Desirability:** Although U1 is not familiar with LCA as a formal method, they immediately recognise the value of the type of insights it provides once it is explained. The appeal lies in making sustainability impacts tangible: "then it becomes much more tangible." LCA-type information is seen as a way to move from general intentions to a clearer understanding of what workplace IT actually contributes to the organisation's footprint. Importantly, Organisation U values baselining even when it does not immediately lead to action. U1 explains that having an overview in itself is useful: "just to get a concrete picture again." This suggests that LCA is desirable not only as a decision-support tool, but also as a sense-making device that helps structure internal understanding. This desirability is reinforced by strong interest in baseline CO_2 reporting for workplace IT. U1 describes being "really waiting with suspense" for a reseller's report and sees LCA as closely aligned with this effort, adding that it "cannot hurt to do that in parallel." Overall, Organisation U perceives LCA as highly desirable because it contributes to clarity, transparency, and a factual basis for sustainability discussions.
- **Feasibility:** Organisation U's feasibility assessment is more cautious. On the positive side, they are already working on CO_2 reporting, which indicates partial readiness and relevant organisational momentum. U1 also shows a willingness to experiment by sharing internal device lists and comparing different reports. At the same time, progress is slow and heavily dependent on reseller data, highlighting a key constraint. U1 notes that the organisation is "still very much searching for definitions and measurement methods," which complicates implementation. This reflects not resistance, but uncertainty about how to do LCA "properly" and how to interpret different sources. As a result, LCA baselining is seen as moderately feasible: something the organisation is capable of exploring, but not yet able to implement in a streamlined or standardised way.
- **Viability:** In contrast to feasibility, viability is clearly articulated. Organisation U has embedded baseline measurement into its long-term roadmap, with 2025 defined as a 100% baseline year and an ambition to reach 0% by 2050. Reductions are framed as a trend rather than strict year-on-year targets: "some years we are below that and some above it, as long as the trend is right." U1 also stresses that working with reports and analyses is essential for ongoing decision-making, indicating that measurement is not seen as a one-off exercise but as a permanent management practice. Within this context, an LCA baseline fits naturally as part of the foundation for sustained sustainability management.

Organisation R

- **Desirability:** R1 explicitly mirrors a pattern seen in other organisations: LCA-type insights are attractive because they make sustainability more concrete. They note that with LCA "then it becomes much more tangible," signalling appreciation for moving beyond abstract commitments toward visible and comparable impacts. Interviewees also stress the importance of having an overview or starting point. Even a first snapshot is considered worthwhile: "just to get a concrete picture again." This indicates that desirability does not depend on methodological perfection; value is already seen in gaining a baseline understanding of where the organisation stands. Beyond a static baseline, Organisation R emphasises the usefulness of repeated measurements. Tracking results over time is seen as a way to judge whether the organisation is moving quickly enough toward its sustainability goals. R2 reinforces this alignment with current initiatives on sustainable digitalisation and describes the approach as "very handy for us," particularly for understanding which actions realistically reduce CO_2 emissions.
- **Feasibility:** No major feasibility concerns are raised by Organisation R. The quick shift from unfamiliarity to enthusiasm suggests low conceptual barriers. Rather than questioning whether LCA can be implemented, interviewees focus on how its results could be used, which implicitly signals perceived practicality. The idea of starting with a baseline, rather than designing a fully detailed system from the outset, also indicates a stepwise and achievable approach. Feasibility is therefore taken largely for granted: LCA baselining is seen as something the organisation could start exploring without extensive preconditions.
- **Viability:** Organisation R views LCA baselining as valuable precisely because it can be repeated over time to show trends and improvement. This recurring function underpins its perceived viability. The intervention also fits well with existing strategic work on sustainable digitalisation, suggesting that organisational embedding is plausible rather than forced. Although interviewees do not explicitly discuss costs or resource implications, long-term viability appears to be assumed on the basis of usefulness: as long as LCA continues to inform decisions and monitor progress, it is expected to remain relevant.

Organisation E

- **Desirability:** Once LCA is explained, Organisation E immediately recognises its relevance. The core appeal is, again, the move from abstract ambition to something concrete: with LCA "then it becomes much more tangible." The idea is described as "very interesting" and directly linked to their internal sustainability agenda. E1 stresses that value already exists in obtaining an overview. Even a first baseline is worthwhile "just to get a concrete picture again." This indicates that perfection or high precision is not a prerequisite for desirability; rather, LCA is valued as a learning tool that helps the organisation understand where it stands. Organisation E also sees clear benefit in repetition over time. Repeated assessments could show whether the organisation is achieving its sustainability goals "at the desired pace." This connects LCA to a broader concern about direction and momentum, not just static measurement. Their particular interest lies in understanding which practical actions can lower CO_2 emissions, positioning LCA as a way to support prioritisation and learning.
- **Feasibility:** Feasibility is approached more cautiously. Organisation E has no prior experience with LCA, which points to a knowledge gap. At the same time, interviewees express openness to exploring the method and see potential value in external tools or analyses to support them. They explicitly state that they would like to look into this further, framing LCA as something worth deepening. Overall, LCA baselining is seen as feasible, but only with some initial capacity-building and guidance.
- **Viability:** Organisation E views repetition over time as meaningful, implying that LCA could become a recurring practice rather than a one-off exercise. Its long-term relevance is tied to whether it continues to inform decisions and guide action. No explicit concerns about costs or resource burden are raised, but viability is implicitly conditional: LCA must remain actionable to justify its place in organisational routines.

4.2.2. LCA: buyer module

Organisation A

- **Desirability:** A1 sees LCA databases and buyer tools as interesting and potentially useful, particularly for employees who already engage with sustainability topics. This is reflected in their decision to include such tools as background material. However, A1 is explicit that these tools do not currently function as decisive inputs: "Such tools are not currently decisive in procurement decisions." This indicates that Organisation A values LCA primarily as a knowledge-support instrument rather than a mechanism that reshapes purchasing priorities. Sustainability information is welcomed, but it re-

mains secondary to established criteria such as cost, risk, and technical fit. Overall, desirability is moderate: positive in principle, but limited by an expectation that LCA will inform rather than determine choices.

- **Feasibility:** From a practical standpoint, Organisation A considers it straightforward to make LCA tools available as internal references. This aligns with their existing practice of maintaining sustainability knowledge bases and does not require major organisational change. Yet A1 raises an important uncertainty about everyday use, noting that they are unsure whether such tools are actually consulted in practice. This suggests that while providing access is feasible, embedding the tool into daily procurement routines is less certain. The feasibility challenge is therefore behavioural rather than technical. Overall, feasibility is high for hosting and referencing, but uncertain for active uptake.
- **Viability:** Organisation A frames long-term viability as dependent on external legitimacy. According to A1, "If a database becomes a recognised standard or authority, it will naturally gain traction among sustainability specialists within the organisation." Without such recognition, the tool is likely to remain peripheral. This indicates that Organisation A is reluctant to invest sustained attention in tools that lack a widely accepted methodological or institutional status. Viability is therefore conditional, hinging on standardisation and broader market acceptance.

Organisation U

- **Desirability:** U1 strongly emphasises the value of having tangible impact information available at the moment a decision is made: "this laptop costs this and this is the CO_2 impact, are we going to do it or not?" This quote captures Organisation U's core expectation of such a tool: it should support direct trade-offs between price and environmental impact in a way that is quick and intelligible. A database-based buyer module fits well with this orientation, as it enables rapid look-up and side-by-side comparison of devices. Unlike more abstract sustainability frameworks, this approach resonates with U1's preference for working with concrete data rather than high-level ambitions. At the same time, Organisation U implicitly positions this intervention as secondary to establishing solid reporting and baselines. Before fine-grained comparisons become fully meaningful, they see a need for reliable organisational-level insight into emissions and impacts. Overall, desirability is high: the tool is viewed as genuinely useful for procurement decisions, but not as the first step in the organisation's sustainability journey.
- **Feasibility:** Organisation U considers this type of comparison tool more feasible than conducting LCA-style assessments internally, because it relies primarily on accessing existing datasets rather than building modelling capacity. The practical appeal lies in simplicity: users look up information instead of generating it. However, feasibility is contingent on the availability and consistency of device-level data. Current uncertainty about uniform definitions and measurement approaches creates a risk that comparisons may be questioned or seen as unreliable. As a result, while the concept is feasible, its immediate effectiveness depends on improvements in supplier data quality and standardisation. Overall, feasibility is moderate: promising, but dependent on external data maturity.
- **Viability:** Organisation U sees strong potential for long-term viability if the tool is embedded into normal procurement workflows as a standard comparison function. Once implemented, organisational burden is low, since buyers would simply consult the database as part of routine work. At the same time, U1 implicitly acknowledges that viability depends on continued maintenance of underlying datasets and standards. Without sustained updating and governance, the tool would quickly lose credibility and usefulness. Overall, viability is potentially strong, provided that data infrastructures and standards continue to develop.

4.2.3. Digital product passports

Organisation A

- **Desirability:** DPPs are not framed as something Organisation A actively wants to adopt. Instead, their desirability is largely derivative of expected regulation. As A1 states: "I think we will mainly take this up from compliance." This indicates that DPPs are not seen as adding intrinsic value to current procurement practice, nor as a means to differentiate Organisation A from peers. At the same time, A1 recognises that DPPs conceptually align with persistent transparency problems. The organisation struggles with inconsistent supplier data and limited insight into upstream supply chains, and DPPs are understood as one possible response to these issues. However, this alignment remains abstract. DPPs are not perceived as solving these challenges in a decisive or immediate way, which dampens their practical attractiveness. Organisation A therefore positions itself as a follower rather than a frontrunner: it does not intend to push suppliers to provide DPPs ahead of regulatory obligation. Overall,

DPPs are viewed as mildly desirable: sensible in theory, but insufficiently compelling to drive voluntary adoption.

- **Feasibility:** Feasibility concerns dominate Organisation A's assessment. A1 repeatedly stresses that DPPs are still uncertain and underdeveloped, noting that they have "been discussed for many years and repeatedly delayed." This history makes the organisation cautious about committing resources to an intervention whose contours are still shifting. A central concern is the risk of investing in the wrong platform or approach. Implementing DPPs would require new systems and integrations, and A1 worries about lock-in to solutions that may not align with future standards. These concerns are reinforced by past experiences with unsuccessful internal sustainability tooling, which have made the organisation sceptical of complex, data-heavy implementations. As a result, Organisation A does not see DPPs as realistically implementable at present. Feasibility is conditional: DPPs may become feasible once standards stabilise and market solutions mature, but not before.
- **Viability:** Organisation A does not consider early adoption of DPPs to be viable as a long-term organisational investment. The risk of sunk costs and rework outweighs any perceived benefits. Viability is instead projected onto a future scenario in which DPPs are embedded in regulation and widely adopted across the market. In such a context, DPPs would become part of routine compliance processes rather than a bespoke sustainability initiative. This perspective again reflects A1's compliance-oriented framing: DPPs become viable when they are unavoidable and standardised, not when they rely on voluntary organisational initiative.

Organisation O

- **Desirability:** O1 immediately connects DPPs to an existing and valued practice in software governance: "Yes, that is basically comparable to an S-BOM for software. You then know in detail what is in it and where it comes from." This analogy indicates that DPPs fit well with Organisation O's way of thinking about transparency and composition. O1 also links DPPs to concrete sustainability and asset-management benefits, particularly around lifetime extension: "So it gives a lot of insight into what materials we have within the organisation and what is in them, so that, for example, you can steer on extending lifespan." Compared with Organisation A, Organisation O thus articulates a clearer internal value proposition. However, DPPs are not an immediate priority. Current procurement remains centred on established vendors and existing certification schemes: "I think that for now we are still strongly focused on standard suppliers, for example Dell in combination with the TCO situation." DPPs are therefore framed as a future enhancement rather than a present necessity: "In the longer term I do see that this can help… I can imagine that at a certain point we will indeed work with such a platform." Overall, DPPs are clearly desirable in principle, but exert limited short-term pull.
- **Feasibility:** Feasibility concerns focus on the infrastructure behind DPPs rather than on the concept itself. O1 highlights persistent doubts about cloud sovereignty and dependence on large US vendors: "Then you get those discussions about sovereign cloud solutions again… you cannot completely rule out that that sovereignty is still breached via the parent company." Vendor assurances about safeguards are seen as difficult to assess: "Oracle says, for example, that they have agreements with people who get such large amounts of money that, if necessary, they will speak freely. I find that complicated." While European platforms are seen as a potential alternative, their maturity is questioned: "Functionally they often lag behind, and that makes it complicated." Feasibility is therefore not rejected, but explicitly conditional on the emergence of mature, trustworthy platforms.
- **Viability:** Organisation O can imagine DPPs becoming viable once they are standardised and embedded into routine procurement and asset management, supported by increasingly detailed data: "In the longer term I do see that this can help, because you get more and more detail." However, current uncertainties around platform governance and maturity make DPPs an unstable basis for long-term investment today.

Organisation H

- **Desirability:** H2 appreciates the tangibility of DPPs: "These are nice things. It's very concrete." Unlike abstract sustainability claims, DPPs are valued because they offer information that buyers can directly work with. From a procurement perspective, this enables more focused engagement with suppliers: "As a buyer you can really ask about it in a targeted way and you can do something with it. I like it." The main appeal lies in operational benefits, particularly for asset management and lifecycle decisions: "Then you can better see which one you depreciate first." However, past experiences with unclear labels temper enthusiasm. When new instruments are proposed, H2 often wonders: "Wait, what actually is that?" DPPs are therefore desirable only if they are transparent and easy to interpret. Overall, DPPs are clearly desirable in principle, but their attractiveness depends on clarity and usability.

- **Feasibility:** H2 does not point to major technical barriers, but questions whether the organisation has sufficient expertise: "You sometimes just miss the knowledge." Using DPPs would likely require involvement beyond buyers, such as ICT execution or contract management. Feasibility is thus conditional on having the time and skills to interpret and apply the data.
- **Viability:** Long-term viability hinges on whether DPPs consistently support daily processes like asset management and depreciation. If they do, they could become part of routine workflows; if they resemble other complex standards with little practical payoff, sustained use is unlikely.

Organisation U

- **Desirability:** U1 is generally positive about the idea of DPPs, but emphasises that they are "not there yet" and still emerging from a European policy context. DPPs are not framed as a standalone solution, but rather as a possible extension of existing sustainability efforts: they could be something that "could make the picture complete" after basic CO_2 reporting is in place. Their main perceived value lies in increasing transparency and making sustainability impacts more concrete. At the same time, U1 stresses that "it is not yet entirely clear" what DPPs would look like in practice or how much additional value they would deliver. As a result, DPPs are moderately desirable in principle, but they do not generate a sense of urgency.
- **Feasibility:** Organisation U does not see DPPs as feasible in the short term. The concept is considered too immature, and internal attention is currently directed towards getting foundational CO_2 reporting right. Feasibility is expected to depend more on suppliers than on internal systems. U1 expresses confidence that key suppliers should, in principle, be able to provide such information: "I cannot imagine that [the reseller] would not want that, because this is their core business." Nevertheless, this remains an expectation rather than a present reality. Short-term feasibility is therefore low, with future feasibility conditional on supplier readiness.
- **Viability:** Organisation U does not view DPPs as viable as a sustained organisational practice at this stage. Viability is projected onto a future in which DPPs become part of standardised supplier reporting with uniform measurement methods. Until such standardisation exists, DPPs are not seen as a stable basis for long-term investment.

Organisation R

- **Desirability:** Interviewees describe the DPP concept in explicitly positive terms. R1 refers to DPPs as "very interesting," and both interviewees link their value to the transparency and product insight they could provide, comparable to LCA-type information. Elements of DPP information in procurement are considered "very valuable," particularly for understanding products beyond surface-level specifications. There is also a sense that DPP-related aspects are missing from current tools. R2 notes that this type of information "should definitely be included" in future versions of AmbitieWeb and in upcoming tenders. At the same time, this is framed as an aspiration rather than a pressing necessity. DPPs are desirable as an improvement to future procurement practice, not as a solution to an acute problem today. Overall, desirability is high in principle, but largely oriented towards the medium to long term.
- **Feasibility:** Organisation R does not consider full DPP implementation realistic at present. R2 explicitly questions maturity, stating that DPPs are "still in its infancy." Interviewees do not yet see DPPs as something that could be integrated into existing procurement or asset management processes in a comprehensive way. However, feasibility is not framed in binary terms. While full implementation is postponed, partial use (such as incorporating DPP-related elements into award criteria or tender requirements) is seen as more achievable in the near term. More serious or complete implementation is expected only around 2027-2028, reflecting a staged view of feasibility.
- **Viability:** Organisation R anticipates that DPPs could become viable in the long run, provided that standards and ecosystems mature. The intention to embed DPP-related requirements in future procurement frameworks suggests that sustained use is conceivable. At the same time, no explicit cost considerations or internal business case are articulated. Viability is therefore largely assumed rather than demonstrated, and depends mainly on external developments rather than strong internal economic justification today.

Organisation E

- **Desirability:** Organisation E sees strong value in the insight and transparency that DPPs could provide, particularly for making sustainability impacts more concrete and understandable. Interviewees describe this potential as "very valuable," especially because DPPs could enable suppliers to demonstrate their sustainability contributions directly, reducing the need for Organisation E to build all expertise in-house. DPPs are also compared to Life Cycle Assessments in their ability to translate complex

impacts into more actionable information, reinforcing their conceptual attractiveness. Importantly, Organisation E does not view desirability in binary terms. Even if full DPPs are not yet in place, using elements of the DPP logic (such as structured sustainability information in award criteria) is already seen as desirable. EU legislation further increases relevance, as it "strengthens the case for starting to think about this now." Nevertheless, DPPs are not framed as an urgent organisational need. Their desirability is strategic rather than operationally pressing.

- **Feasibility:** Organisation E does not consider full DPP implementation feasible in the short term and explicitly frames it as a future objective. However, partial or indirect application (such as requesting more structured supplier information during procurement) is perceived as feasible now. This staged perspective reflects an expectation of technical and organisational complexity, but also indicates that Organisation E sees itself as having a supportive foundation, given its existing focus on monitoring and transparency. Overall, feasibility is low for full DPPs in the short term, but moderate for incremental adoption.
- **Viability:** Long-term viability is primarily tied to regulatory embedding and standardisation at EU level. DPPs are seen as most viable if they become part of normal compliance and routine supplier practice. Viability also improves if suppliers provide the majority of the required data, limiting internal resource burdens. No explicit internal business case is articulated at this stage. Viability is therefore conditional rather than established.

4.2.4. Certifications and standards

Organisation A

- **Desirability:** Certifications are clearly valued for their ability to standardise sustainability expectations and reduce reliance on individual supplier claims. Organisation A sees them as a way to encourage suppliers to improve and to communicate sustainability performance in a recognisable way. The positive perception of specific schemes illustrates this. TCO, in particular, is appreciated for its breadth and dynamism: "A laptop that complies now must also comply the year after." This continuous tightening makes certification attractive as a mechanism that can raise the sustainability baseline without Organisation A having to constantly revise its own criteria. At the same time, Organisation A is explicit that certifications should remain supportive rather than determinative. As the interviewee states, "We will not be very strict in saying: these are the certification requirements and you must comply." This reflects a boundary around how far certification is allowed to shape procurement outcomes. Sustainability signals are welcome, but they do not override core decision factors. Desirability is therefore high in an enabling sense, but limited when certification is framed as a strict gatekeeper.
- **Feasibility:** Organisation A considers certification highly feasible because schemes already exist and are externally maintained. Using them avoids the need to build internal assessment frameworks and reduces verification effort. In this sense, certification fits well with existing procurement processes. However, feasibility is conditional. The abundance and uneven quality of labels means Organisation A still needs to exercise judgement about which certifications to trust. Certification reduces workload, but does not eliminate the need for internal expertise.
- **Viability:** Certifications are seen as viable over time because credible schemes are maintained and periodically updated, again illustrated by the appreciation of TCO's tightening criteria. Their role as a supporting instrument also aligns with Organisation A's procurement logic, making continued use likely. Yet Organisation A does not view certification as sufficient on its own to drive long-term sustainability performance. Because certifications are not enforced as hard requirements, their impact remains incremental. Viability, therefore, lies in their function as a durable complement to other considerations, not as a cornerstone of sustainable procurement.

Organisation O

- **Desirability:** O1 acknowledges the value of strong, credible standards as inputs into procurement decisions, but stresses that Organisation O prefers to work with a small number of consistent reference points: "We try to maintain one standard across all products, and these certificates are very specific." The proliferation of narrow, product-level certifications therefore reduces their attractiveness. Manageability is central here: "If you have to manage many different specific standards, that becomes a serious challenge." Rather than functioning as decisive criteria, certifications are seen as contextual signals that can sit alongside other considerations: "But these kinds of instruments do help to put it next to it." Desirability increases when standards become broader and more widely applicable: "If some of those good, specific standards get broader coverage, then the chance increases that we can start weighing them in over time."

- **Feasibility:** Feasibility is constrained by the operational burden of handling many parallel schemes. O1 also questions whether certifications provide sufficient ongoing assurance, noting that conditions may change after initial certification: "Or that they have moved anyway. Or that after that, some heavy metals were added." Certifications are therefore feasible only in a limited, selective way.
- **Viability:** Long-term viability depends on convergence towards fewer, broader, and more widely accepted standards. Certifications are viewed as one instrument among many rather than a standalone solution, and Organisation O is still exploring how to organise this: "I'm curious what comes out of it."

Organisation R

- **Desirability:** Interviewees acknowledge certifications such as TCO and see them as possible reference points that could help create clarity and support comparison between products. There is a clear preference for product-specific schemes, which are perceived as more meaningful for concrete purchasing decisions: "If it is really tailored to the product, I always think that is better," because broader certifications can be vague in what they actually say about a specific device. At the same time, certifications are often experienced as confusing, with uncertainty about what different labels cover and how they should be interpreted. This ambiguity limits their attractiveness and helps explain why certifications are not yet used in a very deliberate or systematic way. Desirability is therefore moderate: Organisation R sees potential value, but lacks confidence in the current landscape.
- **Feasibility:** Using certifications is considered feasible, but interviewees are unsure whether they are meaningfully embedded in existing procurement processes. For some categories, such as cloud and software, one interviewee explicitly notes that clear certifications are not yet available and that Organisation R is waiting for developments in this area. In the meantime, ISO standards are sometimes used pragmatically as a proxy to signal that suppliers take environmental issues seriously, rather than as precise sustainability instruments.
- **Viability:** Certifications are seen as potentially valuable over time because they could reduce assessment effort and make procurement more manageable. However, interviewees emphasise the need to balance ambition with what the market can realistically deliver. Sustainability requirements cannot be pushed indefinitely if suppliers are unable to comply, and there is concern that heavy reliance on certifications could exclude smaller or less mature suppliers. Long-term viability therefore depends on careful selection of certifications and alignment with market readiness.

Organisation E

- **Desirability:** Organisation E clearly prefers product-specific certifications over organisation-level or very broad schemes. As one interviewee states, "If it is really tailored to the product, I always think that is better." Certifications are attractive insofar as they provide a clear indication of how sustainable a particular product is. At the same time, some certifications are experienced as confusing or overly generic, making it difficult to understand what they actually say about a product. This ambiguity limits their attractiveness. For cloud services, the attitude is even more tentative: certifications are described as "still a bit vague," reflecting uncertainty about their scope and relevance. Overall, Organisation E sees potential value, but remains unconvinced due to limited understanding. Desirability is therefore moderate and highly conditional: certifications are appealing when they are specific, interpretable, and clearly linked to products.
- **Feasibility:** Using certifications is considered feasible in principle, as the organisation is already familiar with the concept. However, practical feasibility is constrained by knowledge gaps about what certain certifications cover and how their results should be interpreted. Cloud-related certifications are again highlighted as particularly difficult to apply with confidence. Organisation E would require further exploration or guidance before integrating certifications more systematically into procurement.
- **Viability:** Long-term viability is tied less to cost considerations and more to whether certifications remain credible, clear, and meaningful for product-level decisions. Product-specific schemes are seen as more likely to endure, while broad or ambiguous certifications risk losing usefulness over time and therefore falling out of practice.

4.2.5. Lifetime extension

Organisation O

- **Desirability:** Lifetime extension is implicitly legitimised by A1's reframing of cybersecurity risk. Rather than viewing the physical device as the primary source of vulnerability, A1 states that "cybersecurity risks are primarily linked to applications rather than the device itself." This challenges a key justification for early replacement and creates conceptual space for sustainability-oriented arguments such

as longer lifespans. In this sense, the intervention is perceived as reasonable and defensible. At the same time, desirability is tempered by the organisation's strong emphasis on user experience and functional performance. Devices are often replaced earlier than technically necessary because of declining performance or accumulating repair needs, not because of sustainability considerations. A1's comments suggest a pragmatic balancing of concerns rather than an explicit reordering of priorities. Lifetime extension is therefore not rejected, but neither is it framed as something the organisation actively seeks to optimise.

- **Feasibility:** From a technical perspective, A1 sees clear scope for longer lifetimes, noting that laptops could last "six to eight years." This supports the feasibility of the intervention and aligns with the idea that current replacement cycles are often conservative. Organisation A also already operates support-oriented practices, such as maintenance-based fixes and accessible support channels, which help keep devices in use before replacement becomes unavoidable. These existing arrangements lower the barrier to extending lifetimes in practice. However, feasibility becomes more uncertain when considering formalisation. A1 does not describe any structured approach to embedding lifetime extension into procurement rules or replacement policies. Instead, decisions appear to remain case-by-case and operationally driven. While it is feasible to question security as the dominant constraint, it is less clear that Organisation A is ready to implement more systemic changes to procurement cycles or governance structures.
- **Viability:** Viability is closely tied to cost-efficiency and operational stability. A1's emphasis on economical support and timely replacement indicates that the current model is viewed as financially rational and dependable. Sustainability-oriented reframing is acceptable only if it does not increase costs or complexity. Lifetime extension is therefore viable for Organisation A only when it fits within existing practices (repair first, replace when necessary) and does not require additional investment or ongoing coordination effort. If longer lifetimes were to lead to higher support costs, increased user dissatisfaction, or more complex procurement arrangements, their long-term sustainability would be questioned.

Organisation U

- **Desirability:** Lifetime extension is desirable for Organisation U insofar as it supports a broader shift towards accepting "good enough" solutions. U1's reasoning implies that procurement choices do not always need to be justified by the most stringent technical or security specifications, and that organisations can consciously select more sustainable options when these adequately meet functional needs. This resonates strongly with the logic of lifetime extension, which challenges the assumption that newer or higher-spec devices are inherently necessary. Rather than framing sustainability as competing with security, Organisation U implicitly questions whether perceived security requirements always represent genuine necessities or whether they sometimes function as defaults. This positions lifetime extension as a way to keep sustainability in play during procurement discussions, instead of allowing assumed security imperatives to close off the conversation prematurely.
- **Feasibility:** Feasibility is more conditional. Organisation U recognises that extending lifetimes in a defensible way depends on knowing what minimum levels of security and performance are actually required for different categories of users. At present, Organisation U does not appear to have explicit, role-based security or performance baselines in place, which limits their ability to systematically justify longer use periods. Nevertheless, U1 indicates that sustainability considerations could realistically be integrated into existing security and procurement conversations. Rather than requiring entirely new structures, lifetime extension could be introduced as an additional criterion within ongoing discussions about risk, performance, and suitability.
- **Viability:** Organisation U sees potential for lifetime extension to become a stable procurement principle once minimum baselines are defined. If clear thresholds for acceptable security and performance exist, procurement decisions can consistently favour devices that meet these requirements without defaulting to the highest available specification. Viability therefore hinges less on financial concerns and more on consistency of application. The risk is not that lifetime extension would be too costly, but that, over time, decision-makers revert to conservative, highest-spec choices. Embedding baseline requirements into policy and routine practice is seen as important for sustaining the approach.

4.2.6. Organisational transformation

Only one organisation, so analysis is fully in the main document.

4.2.7. Adjusting employee behaviour

Organisation A

- **Desirability:** A1 acknowledges that extending device lifetimes through maintenance is logical, implicitly supporting the core idea that replacement is often avoidable. However, they do not see strong added value in proactively shaping employee behaviour or introducing preventative servicing as a means to improve user satisfaction. The organisation's existing walk-in support model is viewed as sufficient: employees bring devices when they experience issues, and these are resolved at that point. This suggests that, from Organisation A's perspective, there is no pressing behavioural problem that needs to be addressed through additional framing, norm-setting, or structured programmes. In effect, while the outcome of the intervention (fewer replacements through better upkeep) is considered sensible, the intervention form (explicit behaviour adjustment) is not perceived as particularly useful. Desirability is therefore limited: maintenance is valued, but behaviour-focused measures are not seen as a meaningful upgrade over current practice.
- **Feasibility:** Feasibility concerns are strongly tied to organisational scale. A1 stresses that the organisation has "around forty thousand laptops in use," a figure that immediately frames proactive or periodic servicing as unrealistic. Behaviour-focused preventative maintenance programmes are seen as difficult to organise, resource-intensive, and operationally heavy at this scale. Rather than questioning whether preventative approaches could work in theory, A1 focuses on whether they can work here. Their answer is essentially no: coordinating proactive checks or scheduled interventions across such a large fleet is viewed as impractical compared to waiting for employees to initiate support when needed.
- **Viability:** Organisation A also evaluates behaviour adjustment negatively in terms of long-term viability. A1 explicitly contrasts proactive interventions with the current reactive model, arguing that the latter is more economically sustainable: "If you wait until people come themselves, as it is organised now, it is much cheaper." This quote encapsulates the organisation's viability logic. Proactive behaviour-oriented programmes are assumed to entail ongoing costs and organisational effort, while the existing model minimises expenditure by intervening only when necessary. Because cost-efficiency is closely tied to what the organisation considers sustainable over time, behaviour-focused preventative approaches are seen as difficult to justify and unlikely to be maintained.

Organisation U

- **Desirability:** U1 notes that proactive or preventative maintenance moments are currently absent, stating: "we actually don't have anything for that," but immediately adds that this is "certainly something to think about." This acknowledgement signals that behaviour adjustment is not merely acceptable but addresses a missing element in current practice. U1 later reinforces this by saying that "the APK approach in particular is good to think about," indicating that routine check-ups are seen as a sensible and attractive way to prevent performance decline and avoid unnecessary replacement. Desirability is further strengthened by U1's emphasis on leadership example-setting. Their frustration with a board member wanting "the newest, most modern iPhone of, what was it, 1600 euros" and their judgement that "that is not really the right example" shows that U1 views behaviour as socially shaped and believes sustainability-oriented norms must be modelled from the top. Together, these comments point to a clear perception that influencing behaviour (through both maintenance practices and cultural signals) is valuable.
- **Feasibility:** U1 does not describe major technical barriers to introducing maintenance moments or reinforcing behavioural norms. The main challenge is that Organisation U currently lacks a structured approach, meaning new routines would need to be established. Encouraging leaders to act consistently with sustainability goals is feasible in principle, but dependent on managerial willingness rather than infrastructure. Overall, feasibility is moderate: behaviour adjustment is seen as doable, but not automatic.
- **Viability:** Behaviour adjustment is implicitly framed as a low-burden, long-term measure. Once preventative maintenance is integrated into routine IT processes, and once leadership consistently models desired behaviour, these practices can persist without substantial ongoing cost or programme overhead.

Organisation R

- **Desirability:** R1 and R2 express interest in removing incentives for early replacement and instead recognising longer device use. One interviewee suggests it could be motivating if people are acknowledged for using a device for "four, five, or even six years." This reflects a view that positive reinforcement may normalise longer lifetimes without framing sustainability as loss. At the same time, their

enthusiasm is tempered. In discussions around examples such as Fairphones, R1 and R2 point to tensions between encouraging sustainable choices and respecting usability expectations and organisational standards. Behaviour adjustment is therefore seen as valuable, but not as a standalone solution.

- **Feasibility:** Behavioural interventions are implicitly seen as more feasible than large technical changes, as they can be implemented through policy adjustments and incentives. However, feasibility is strongly bounded by existing IT and security requirements. One interviewee illustrates this with a personal example of having to replace a laptop for security reasons even though it was still functionally adequate. This highlights a hard constraint: behaviour steering cannot prevent replacement when devices no longer meet organisational standards. Feasibility is therefore moderate and conditional.
- **Viability:** Incentive-based approaches are implicitly viewed as low-burden and thus sustainable over time. No explicit cost concerns are raised. Long-term viability depends on maintaining a balance between encouraging longer use and avoiding frustration among employees who feel overly constrained.

4.2.8. Setting the right criteria

Only one organisation, so analysis is fully in the main document.