–Field notes - Informal interviews

21-09-22

Coded name:	Employee A
Date:	21-09-22
Time:	12.30
Duration of interaction:	20 mins
Spontaneous or planned:	Planned
Location:	Company office
Themes, subjects, concepts, ideas:	The current state of ERM, ERM as it relates to IC and PRM, ERM frameworks, connecting to strategy
Summary:	

- We have 3 fields: ERM, IC and project.
- For ERM there are 17 domains. The BRF from IC has been developed. We have developed a project RM. There is a connection, but there is no synergy between the three fields of ERM at the moment: ERM, IC and PRM
- the honest answer is that you see that they are all growing domains, growing areas. But at some point that synergy has to emerge and it isn't there yet.
- So we all know what those areas are for, but they are still being developed quite separately from each other and one of my tasks in the coming period will be to find more integrality in them.
- An ERM framework is a formal conceptualization of enterprise risk.
- So it's more: do we pay enough attention to the different elements in such a framework and an ERM framework at [constr org] can be completely different than at another corporate.
- I think it is especially important that you say as an organization: I think this is important. I find it important to think strategically about my market strategy. Well, in general that is the case with every corporate. The way you fill this in or which topics you pay more or less attention to is simply tailor-made. That is exactly what you as an organization may or may not be concerned about. One of my first conversations with the board members was also, what are they concerned about?
- Yes, so for me risk management at a strategic level is also just making choices, but on the basis of which information do you make that choice and the latter, I am now working very hard to get structure into that. That people understand when we talk about problems surrounding human resources, what are we talking about? Are we talking about people who walked away or vacancies not being filled or even more specifically, certain key officials walked away and we cannot get them filled again. And what is the solution? Then offer you a solution: I bring in relatively expensive people from outside who will fill it temporarily and then your CTC value will increase. Of course they're communicating vessels, right? And I hope to be able to bring that intelligence.

21-09-22

Coded name:	Employee B
Date:	21-09-22
Time:	afternoon
Duration of interaction:	30 min
Spontaneous or planned:	Spontaneous
Location:	Company office
Themes, subjects, concepts, ideas:	ERM drivers in bouwbedrijven, disconnect corporate and operational level RM, Financiele Directeur NL
Summary:	

AG: We talked about why ERM has become increasingly important for construction companies. B mentioned the successive external factors such as war in Ukraine, scarcity of building materials, pandemic, etc. that have contributed to this. I remarked that in many conversations it is clear that there is a disconnect between management and layers below it. B agreed with this, said that this could be due to management wanting to be increasingly informed, while project team members just want to run projects. B called the resulting lack of information problematic.

This was also mentioned by the Financial Director of NL during his talk during the department meeting that took place today: problems sometimes come to light much too late and that is often too late to take adequate action.

28-09-22

Coded name:	Emp_C
Date:-	28-9-22
Time:	14.00
Duration of interaction:	30 min
Spontaneous or planned:	planned
Location:	office
Themes, subjects, concepts, ideas:	Aspects of project risk management that are reported to higher levels
Summary:	

- Projects report on top 10 risks
- When there are issues concerning risks, discussion on how to handle this first takes place within the project team.
- The project controller is the responsible person for communicating risk issues to higher levels within the company
- Reporting on risks takes place on quarterly basis
- Projects make distinction between project uncertainties (variations in projected costs and scheduling) and identified risks and opportunities

21-11-22

Coded name:	Emp_D
Date:	21-11-22
Time:	11.00
Duration of interaction:	60 minutes
Spontaneous or planned:	planned
Location:	Via MS Teams
Themes, subjects, concepts, ideas:	Dutch Corporate Governance Code, regulations , compliance; relationship between RM and IC; responsibilities within Risk & Control Team; interconnectivity and synergy as critical success factor in risk and control processes
Summary:	

AG: With regard to SOX or the Tabaksblat code, to what extent is [constr org] affected by it?

D: Yes, if you are Sox compliant that means that you have a very clear control structure that you have to adhere to, so then you are simply obliged to adhere to a certain kind of framework. The SOX framework. This means that you are, well, regulated to the core.

AG: Are there any aspects of foreign legislation where [constr org] should do something with it?

D: We are mainly concerned with the corporate governance code from the Netherlands. It is often referred to as the Tabaksblat code . Here, listed companies in the Netherlands are legally obliged to comply with the code, they should do so in accordance with the comply or explain rule, and that is indeed something I also worked on at the time [former employer] was involved. This means that you have to use ERM, you have to do something with it, and if you don't do it, you have to explain it. The corporate governance code is actually a kind of ERM in disguise, isn't it? And it also describes how you deal with risks and the like. But Principle 1.2 (from the governance code) is about risk management.

Enterprise Risk management is what you do to identify and manage your enterprise risks and to manage your enterprise risks you need internal control measures and that is your internal control. That's actually how it is and that sometimes within [constr org] maybe not everyone knows that. For example, if manager X finds a huge risk in the supply chain, that means in my internal control framework that something needs to be added to get that managed. These are the instruments you have to do your enterprise risk management and you can also transfer that, you can also outsource that risk, right? As a rule, you usually have to choose, either I accept the risk or I mitigate it by devising a measure and then with internal control, or internal control, it may go a little further, sometimes because you also have certain non- critical ERM or risk things are also included in your framework, because that is also important, but it is not important in a business-threatening way. But yes, so far IC has ensured that you control the risks you have.

ERM is enterprise risk, in other words, what threatens my continuity and right to exist in the market or whatever you do and internal control means: what control measures are in place, so what are the risks, how do I deal with them?

AG: What is the difference between RM and IC in [constr org]?

D: IC inside [constr org] also does risk management, because at IC these are identified and repetitive risks that we have. We have management options for that. If you do risk management, you carry out risk management in your specific area, which you know. I have these 5 things, which are risky things and with internal control I have done things for them and I have to check whether the organization adheres to them, because then I control that risk or I run less risk, an acceptable risk. When you now look at the risk management that you see at [A] and the business unit risk manager, that is a much more active role of risk management, in which you also identify what kind of risks there are. So the ERM process in its small version of risk management also means: what threats do we have, what is coming my way and what do I do with it and what adequate measures can I take to ensure that I manage those risks.

An example: We are going to build in the Noordoostpolder and it is so swampy there, everything is sinking. But we have to build something very heavy, so how do we deal with that risk? So you can take measures for that. Okay, then we make sure we use extra long pilings, we make sure we drive the pilings closer together or something like that, I'm not a construction person, but there are measures for that. Then it may be that from your risk measure, from risk management, you have covered risk. Would you say, yes, but wait a minute, we live in the Netherlands, right? This is the case everywhere. That analysis has to be done everywhere, then you can say, okay, but then it becomes an internal control measure, so you always look, okay, but what are we building on? Are we building on sand, what are we building on? Then your risk management becomes, let's say, more of a predictable process than an ad hoc one, because risk management is of course also ad hoc. Many things happen that are resolved ad hoc, for example if there is a fatal accident at a construction site. That is an incident and it falls under risk management, which is then looked at to determine what we should do with it [in the future to limit this risk]. If something comes out of this structurally, you include it in your IC, because then you simply have to manage it continuously.

AG: How have responsibilities changed since you moved to the risk and control team at division level?

D: That's in the Operating Model.

AG: IC seems to have a different relationship with the controllers within the organization than the risk managers, can you say something about that?

D: We are more a monitoring body, so we ensure that there are control measures that must be adhered to and people must also self - assess, so let's say something imaginary: you are required to always have two cups on top of each other on your desk at all times. We then ask: do you always have this on the desk? And then we ask, okay, so you say that you have that but can you also prove it, show us a photo of those cups. That's what we do.

In risk management, risk managers are much more actively involved. We are really second line, we watch from a distance, ask: how do you do that? And that is a gray area with [constr org], because we are still working things out. But ideally it will be soon, we are

the second line, we have an opinion about it and try to ensure that it gets better. With the risk managers, they are active in the process and they indicate where they help and they share this and ask critical questions.

We ask critical questions about what has already been decided how it should be done.

RMs ask critical questions about what has been decided and how could it be improved?

And so I also expect input from the risk managers that they say, oh, internal control measures A, they do cover that issue, but I think that a new one should be added, or that it should be expanded, because this and this risk is important. So they are our input to ensure that we know what is going on, because we cannot be aware of everything going on because that is the [A] team's domain.

It should be a hybrid system in which you have broad risk management together with IC. So then you actually have the ERM framework, which includes risk management and internal control. Internal control and risk management are indeed two very interwoven systems in which we must indeed indicate from internal control: your risk managers must pay attention to this, because they have to do this anyway and we expect risk management to say, oh, listen, we have to do this here. pay attention that it could just be that they say: you always ask us to check whether those two cups are on top of each other and that is super important, but we have already seen it 35 times that this was not the case and the world has not perished. So perhaps, that one control measure... maybe not necessary?

And that is a huge synergy that is <u>not there yet</u>, but that is actively addressed by my team towards the risk managers: I want to know from you, what feedback are you getting back? I would like to have the feedback that you collect in the projects, because we need that feedback. We want to be able to capture that and make a choice, whether yes, okay , do we want to do something with this now or whether we do nothing with it. So that's how I see it and how those teams are going to evolve within [constr org].

Look, the critical success factors are just very important, right? This is important for the value and I see that one of those critical success factors is the interconnectivity between internal control and risk management.

Internal Control and risk management together form ERM. As part of risk management, project risk management is a specific part. So you have you have your ERM, so how do you manage enterprise risks . Well that means looking at the external factors, right? Market threat, diversification, you name it, but you have also affected the continuity of your existence in the projects, because if you all fail in your project, then you also have a problem, because then you are also out of the market. So that is risk management in the broadest sense. Risk management, classic ERM, but also risk management applied in your projects, how do you manage a project. How do you ensure that your product-market combinations are correct? That is project risk management, that is what [A] has to do.

30-11-22

Coded name:	Employee E
Date:	30/11/22
Time:	2 p.m
Duration of interaction:	45 mins
Spontaneous or planned:	Planned
Location:	Company office
Themes, subjects, concepts, ideas:	Different cultures per segment within the company; transition from old contractor thinking to product and customer leadership ; culture change; change in small steps; centralization battle
Summary:	

I am also happy that we have now made the transition to the NL Division, where you also speak to other segments where there is a somewhat different culture. Yes, then you see a huge difference between those segments. I started at Infra with [A]'s team.

So [constr org] represents a transition, we have to move from that old contractor thinking , which is very cost -oriented , to product and customer leadership , so a completely different way of positioning yourself in the market, a completely different way of working. And that change… yes, then you take certain risks, then threats or opportunities come your way and it's about finding that balance,

so what do you accept and what do you not accept? And if something falls outside the acceptance limits, what measures will you formulate or what improvement program will you propose?

And that requires quite a bit of explanation about the how and why, right, like why? Why are we doing this? And then you also see a lot of difference in the type of person you speak to. Some people are quite receptive to this and understand the how and why and can also think about it at a certain level of abstraction. But the other person has quite a bit of difficulty with it, because it requires a completely different way of thinking, that change. [constr org] is currently very busy changing its culture. Very busy positioning itself completely differently and that requires a completely different way of thinking. And there is a bit of a clash at the moment and that is very interesting to see.

AG: And the technical aspects?

It's not there. To be honest, I don't have a technical background. I don't have much affinity with it either, but I do have much more affinity with: how do you change behavior? And I think if you look at the root causes of certain risks, why they occur or not, or why you can take advantage of certain opportunities or not, then you always rely on attitude and behavior, knowledge and skills. That is not in the technology. Yes, it is in the application of the technology and in the application of that technology that you need expertise, but you also have to be able to sell that. You know, so it's a lot more on that side than in solving... or in a tool or a certain technique. That is not the solution, because it often already exists. You often see that the technology and innovations, in fact, already exist, you can already take that on. The point is, do you have insight into those innovations? Do you have insight into these new techniques, do you have insight into new market parties and can you then apply that to your own business operations and that is much more important and you can indeed make that of value to the customer, so you can activate your customer to be able to sell your new technology or your new product.

AG: It's about a different mindset so…

E: Yes, exactly. If you relate that to ERM and we are trying to have that conversation now, the question is: how do you find the right balance in this? Because ultimately, you have your financial results that you have to achieve, but at the same time you have to invest in that new way of doing things. We are also learning from that at the moment. That dot on the horizon may be quite big and ambitious, but you actually have to reverse engineer it and then see it very small, what are those small steps? Because yes, you have to make that world manageable and small. But you also see that translation within the department, and you actually see it in almost every function that is positioned from Infrastructure to the NL Division, is currently still trying to understand that world. And there you also see a certain unrest, that people feel uncomfortable. Because yes, it is all unknown. That makes perfect sense. Only then can it be explained very clearly, okay, what are those small steps?
What are we going to do in 2024, what are we going to do in the first quarter and then have an answer in 5 years' time? Yes, I wonder, I have only been here 2.5 years, but [constr org] is very decentralized, so it all happens in those projects and there is now a kind of centralization and we have to do something with that.

R: So that is very uncomfortable for all business units in all segments?

E: Yes. But the fact that there is a transformation manager in a supporting role in the organization, not so much from a content perspective, but very much from the perspective of: how do you organize a certain change? That actually says enough, because there are currently [number] change programs, about sustainability or digitalization, for example... they are all led by a change manager, but there is also an overarching manager who maintains an overview and indeed controls the organization also takes into account these types of changes. Process-wise then.

R: Is ERM included in this?

E: What we are doing at the moment is, because we are doing this for the first time and our first objective is actually purely to retrieve that information from the organization. We do this by identifying 17 domains at group level, strategic domains such as innovation, certain market positioning, operational domains such as HR, Procurement , conflict management, and safety... and there are compliance-related matters and financial-related matters. . Well, that's a total of 17 domains and what we do is organize a risk session per domain, where we also look at them from their point of view, from the domain experts, because an expert has been appointed for each domain, at Division NL level, right? To talk to them and the segments about what are the most important risks? Roughly speaking, name 3 or 4 and then have the conversation. OK, so what are the sweet spots? What are, what is acceptable and what is not acceptable?

R: So you're trying to make it a bit more concrete?

E: Yes, you try to make it a bit more concrete and with some this is possible, but with some numbers it requires a bit more effort, but in any case to create awareness of okay, you do not have to mitigate every risk to zero, no. because if you want to make that change, you have to be willing to take certain risks. And that conversation is now taking place for the first time within the NL Division.

R: So I think this is about the concept of risk appetite , without calling it that because people don't understand the concept?

E: Yes, and it's about finding balance. People don't understand risk appetite .
I think [constr org] to become the most sustainable builder. That was just yesterday on LinkedIn, said the CEO of [constr org]. If that's what you want, and I totally support it, I think that's strategically smart, but also… I think it also makes you very attractive to new employees, especially younger employees. Currently [constr org] not very 'sexy' or that people think, gee, this is a progressive company where you want to work. So I think it is a very good positioning, also of course for your license to operate , but also I think for attracting…

R: of new talent?

E: yes, exactly, but that does mean something, that transition indeed, yes, then you have to make choices and then you have to accept that you are at risk. Because it costs an investment now, but: You have to have vision and belief that it will pay off later. And that is also the balance between finance in that sense and… or between the CFO and the CEO. That's where it actually starts.

R: So it's not just about profit anymore.

Cobouw article [in which the CEO speaks out about this] was discussed . A response [to that post] was from an executive who said: Nice strategy, but we are also here to make a profit. Well, that hits the spot. Because you have to turn it around.

R: Some kind of cognitive bias you're dealing with?

E: Yes, and that is exactly the culture of cost-driven, delivering certain work with as little cost as possible versus no, just invest... What does sustainable development mean and what does that customer actually want and then respond to that. Because that customer does not yet understand enough what they want, so you actually have to stimulate that question. So that is much more proactive and much more anticipatory of a trend than being reactive to costs. That's nice. I am very curious to see how that goes, but I spoke to that domain expert of sustainability this morning and he says, yes, it is very nice, what you say is correct, it is very nice, but we are at the beginning and this will still cost something. time and effort. This takes 5 years.

R: Regarding that change, are you seeing a change in mindset among subcontractors?

What you notice at Infra for example , as I understand it, is that the intention is there from management to do it? But you also have to deal with a client and he has to be willing to pay, he also has to invest. If you use the old-fashioned way of tendering with the old-fashioned client, such as with Rijkswaterstaat, which is still focused on costs everywhere, that also applies to other types of groups, from municipalities and provinces, I think, so they must also be prepared to invest in sustainability . .
But it cuts both ways. I also think that infrastructure can become better at explaining to the client why this is a good investment for the long term. That they can explain and sell that . But yes, I think the current market also makes that a bit more difficult. I do think that being able to communicate to the customer, convey the importance to the customers, there is also profit in that. Of course you are always dependent on how large the budget of those customers is at that moment. But in other segments where you create your own demand much more, that you are one to one with the other, you can control that a little more. And at the moment you can only control that demand at Infra to a limited extent. But I still think that, and that is a gut feeling, there is still more to be achieved. Yes, because I occasionally think that the attitude within Infra, and certainly at the asset clubs where I am, could also change something. Then you hear:] Yes, the client is not responding... The client has no money after all... but have you really actively taken him with you? Did you really take the hand with you? It's a bit resigned at times.
But that is also a difference between being that old-fashioned contractor between quotation marks and being reactive, so the client comes up with a question and we pivot. Or are you going to turn it around and say no, formulate that question yourself for that customer and then come up with an answer. That is something else entirely.

Organizing everything into processes and frameworks , yes, that step is only now being taken.

We [as the new R&C dept] want to put ourselves on the map, we want to explain what is important to work predictably and achieve those objectives. And you create a certain structure by informing [the COO of Div NI] and [Fin Dir Div NL], organizing a kick-off and proposing a process, activating the domain experts. Then you are actually influencing that structure. This then reinforces each other, because you still have some progress and that is still recorded in a Divisional Leadership Team (DLT). That is the Management Team at Division NL level. You have to address them, you have to activate them. I am very sure in this organization that you have to organize this from the top down. Something like risk management and ERM is fun to pilot and get a taste of, what is it like in the organization? But if you haven't activated that management, you're nowhere, you're not effective. The process must be started from the will and necessity expressed by that management team.

What is actually the ambition level of management? So what does the [FD NL], what does the COO of NL and those segment directors actually want? What is their ambition level with regard to RM? Look, we can decide that we want a Ferrari from ERM. But is that also the wish of the Board, is that the wish of, how do they see that? You have to facilitate in a conversation, and our maturity scan can start a conversation, but ultimately we do not determine how 'luxury' that car will be. It is a push to be able to sell that Ferrari, so of course we have to show what is the value of that super deluxe ERM implementation? You want to work predictably? Then you need this for that. This is how we should be able to sell it. And indeed if they say yes, that is a good one, then we can also advise and propose these steps over time. That's the logic.

07-12-22

Coded name:	Emp_D
Date:	7-12-22
Time:	4:30 p.m
Duration of interaction:	30 minutes
Spontaneous or planned:	Planned
Location:	Via MS Teams
Themes, subjects, concepts, ideas:	ERM maturity scan, creating awareness, role of professional judgment, differences between RM and IC
Summary:	

ERM maturity scan 2021
ERM maturity scan was discussed. Researcher states that another R&C team member was sceptical of the scores and did not believe it was a correct representation of the actual maturity of ERM at the organization, that the scores in general were too favorable. Researcher asked D to give their own assessment of the accuracy of the scores contained in the tables. D did not agree with many of the scores either, thought they were generally too favorable. D bases this on that fact that D does not see the stated level of maturity reflected in the organization on divisional, segment or business unit level and there was no assessment done at the divisional level. D suggested that that the scan contains some accuracies but that the ERM scan is mostly a showpiece for the board, to prove that they are making progress in ERM implementation.

About awareness:
Emp_D: Awareness is key, it must be raised within the organization. I continue to spread the word about Risk and Control. I expect that [Emp_A] does the same in terms of project risk. I can only make progress on accountability and ownership if people embrace the IC requirements framework and understand why it is there . That is also what I do at the division for a whole year , is mission work to explain what the requirements framework is , what to do with it . And if you don't know what it is and you feel it is a compliance thing and you have to fill in a requirement , that 's fine ... [but] it only comes to life if you understand the underlying idea : why do it? And that is culture, because it is only incorporated into your culture when it is part of your daily work.
And if I have achieved that? And then I already notice that this is happening much more, that people also come back with questions , that the requirements framework or risk and control that simply has more body and impact , yes then I am in the culture is making

mega strides, right? Because that 's what I need. I can only start making progress if people also understand what it is. So it's [mainly] about awareness.

There is different ways of seeing in the four segments. That really depends on the personal background you're dealing with . The one segment focuses more on this and he thinks it is more important while the other says, yes, but I have already had so many audit hours, you are just a burden on my organization. And my approach is then okay , then I want to show that I am not adding additional pressure, but I am going to help, that is what I try to do and if people don't understand that, I haven't done my job properly.
but what is also very important , because [the 4 segments are] the primary process , but you also have the supporting process : HR , IT, you name it all, you also need to have movement there and that really lies within the division. I also need to gain awareness there, because if the finance column ... that is mainly at the division and they of course have their tentacles in the organization below , they at division level must understand what they are doing and what they are doing, why the risks exist . They are the process owners, that is simply key . It is not so much in the segments, but the process owners are in charge of the primaries, often in the business units and the segments. They must understand and take ownership there and do what is necessary . This rolls up to the division and the division has supporting processes where they are also supported in the segments, but they must also be aware and understand that it is a whole . And that is what needs to be done. Creating awareness is both down and bottom up.

16-02-23

Coded name:	Emp_A
Date:	16-2-23
Time:	
Duration of interaction:	30 min
Spontaneous or planned:	planned
Location:	Teams
Themes, subjects, concepts, ideas:	Importance of right side of risk Bowtie
Summary:	

Bowtie model:

The left side is very much about your control environment, the threats you have, the barriers you place in it to keep the risks as limited as possible. It is about governance design, your data collection, actually setting up your entire system to keep your risks as limited as possible. The way in which you must organize the organization in order to function as a means to achieve your objectives.
The real intelligence is on the right side of the bowtie, so how do you actually manage your system, how do you manage your risks. During my time at [firm], I have also seen this in few organizations, it can be a utopia. Really controlling it and making clear choices and therefore making risk part of your decision-making... that is what I really want. But I haven't seen it before with other companies. I'm still working very hard on the right side of the bowtie.

12-04-23

Coded name:	Emp_J
Date:-	12-4-23
Time:	13.00
Duration of interaction:	20 min
Spontaneous or planned:	spontaneous
Location:	office
Themes, subjects, concepts, ideas:	ERM maturity scan, interaction between RM levels
Summary:	

ERM maturity scan
- Scan is a good representation of current ERM maturity

In response to my question about possible differences of opinion among other colleagues about the accuracy of the individual scores of the different parts of the scan:
- This may be due to the fact that the self-assessment mainly focuses on whether processes have been designed and set up are at corporate level. The extent to which these plans have or have not been implemented / operationalized is not included in the score.

Interaction/relationship between levels (E)RM
- There are no formal responsibilities for ERM tasks at the project level.
- Risks cascaded from top to bottom (ERM risk becomes PRM risk) - risks from the top 5 ERM risk areas can be added to the list of project risks by, for example, the segment risk manager (from above). Example: supply chain risks.
- Risks that can be aggregated to a higher RM level or to ERM level from the projects - Example: Nitrogen in projects. There is a risk that projects will be halted due to nitrogen regulations. It has then been decided at management level that more nitrogen experts will be hired to make nitrogen calculations (control measure).

Summary interview transcript – ANONYMIZED
English version

Date of interview: April 2023
Respondent: Emp_D

Background respondent	
function course work experience number of years working at [company]	[senior internal control manager] at the [construction org.], [division] Netherlands. I did a Master of Science in Information Sciences, so business informatics. Then I started working at [accounting firm] as an IT auditor, then I also did my part-time postmaster IT auditing course there, I also completed it. After that I worked at [employment firm], also as an IT auditor but more broadly in risk and control. I also did a lot of work at [accounting firm], still in data analytics and IT advisory and I've been working at [construction org.] for almost two years now, as [risk and control manager] first at the [parent company] e n now on the [division] .

1	Expertise	
1.1 / 1.2	Description of Role, Responsibilities & Reporting structure in (E)RM	1.1/D - At the moment not so much to do with risk management, but more with ERM. I have a shared responsibility with [head of RM at Risk & Control Dept] who has to do a little more at this point, but we have an equal, partial responsibility formally for the ERM in progress for [division] Netherlands.
1.3	Perception of own readiness for role	yes
1.4	Perception of RM in construction projects	1.4/D - I don't have to do with the projects in my role at the moment. I am more concerned with supporting the business processes.
1.5	Perception of own and/or organizational use of lessons learned	1.5/D - You put everything in your "backpack," so you take what was useful and leave what was not useful. So actually for me that is a no brainer to say, you only use the knowledge that you consider necessary, useful and you do gain a lot and also some things that didn't work well, you also take that with you, that didn't work so well, we shouldn't do that anymore and other things more often in fact… so basically like that.

2	Implementation of (E)RM in practice	
2.1	Descr RM cycle used in work	2.1/D - The ERM cycle and how we apply it: we have a quarterly cycle in which we describe and analyze 17 risks, informed by incidents and events from inside and outside that have an impact on the various areas that we have. This happens once every two quarters in detail and in the meantime there is an update. We mainly work with a top 5 key risks on which we also report.
2.2	Perception of RM processes in own work, achievments and points for improvement	2.2/D - I think the current processes are still a bit vague , but a lot of progress is being made there. What has been achieved? A lot I think. It used to be an ExCo exercise in which there was some discussion at the top of [construction org.], eg what kind of risks do we have now? These are now better informed the other [sub. clusters]. So it is actually informed from the bottom up and also top down and we are also working on integrating that better with the internal control framework and internal control, which is my thing. To then make my connection to that, asking, what risks are Enterprise risks? And then we have set up the adequate management processes for this, so that is what can be improved. But we are also working on that, so there is always room for improvement. And, that is a continuously evolving whole, so that can always be improved or at least better adapted to what is currently happening in the market and in the world. So I think it's going well. What has been achieved? In particular I think that awareness in this area has improved compared to how it was before and that we are now also implementing tooling to facilitate this, I think it's good what we have achieved.
2.3	Descr of difference between ERM and RM other levels	2.3/D - Risk management at other levels are of course concerned with specific risks. What is or is not safe on the specific construction site or what is or is not good in this specific process, eh? That is at that level are you really clear on this kind of risk and how do you combat that risk. In terms of ERM, Enterprise Risk, these are of course somewhat higher situated risks in which you therefore think of the existence of your organization that will be jeopardized if I do not control this risk and so I will have to do something about it and that can be a combination of different risk management topics or risks at lower levels or external factors that you have to deal with. RM at other levels won't necessarily directly endanger the survival of the organization, but that's what you're doing with Enterprise risk Of course you're really busy making sure that big things don't go wrong in a big way.
2.4	Perception of where RM cycle goes wrong, challenges	2.4/D - I think that in the execution the identification is not always correct, so you can't make a good plan either, so you can't actually do all the following steps very well either. And that is In the new cycle I think that has been thought out a bit better so that we are making clearer action plans there based on proper identification where previously this was determined at ExCo level. It is not necessarily the case that a certain topic eg, HR is an ERM company-wide problem, but that can be a problem that is different within the [subsidary clusters] , within the [division] , within the [subsidiaries] . That can be different everywhere. I believe that progress is being made on that. So that's where it actually goes wrong that we're trying to work with an aggregated whole when you really should be looking at the shared parts, if you want to do it right. Because what helps one person and what works for one does not necessarily have to be the case or work for another. I think that deepening is something we're working on and that's going better now or in any case that's a step we're taking.
2.5	Perception of where RM (steps) can be improved	2.5/D - The connection of the 17 risk areas to our internal control framework can be improved, so that there is a clear mapping of, these risks we manage through these measures and things which we do. We are currently working on improving the framework for this. The cycle should be better known and better executed, also periodically, but that is because we have also just started. I think the cycle, the aggregation of From lower risks, to higher risks, to top risks...There's still some connection to be made there. I

		don't really know how yet, but that is something that is useful. SoThat's something we need to improve I think so more the overall picture.
2.6	How ERM adds value to company processes and existing RM	2.6/D - I think that with a better controlled process, you can work more efficiently, more effectively, better, so that you have fewer losses, fewer accidents. But also, a controlled business process also makes you an attractive market partner. So I think that RM and ERM, it is logical that it has existing added value there. For business processes, I think better decisions can be made through more understanding of RM to not do things or to do things. I think that is a very big plus point, because you can already make a decision in advance on which you save money or, on the contrary, make a big win.

3	Interaction between ERM and RM within company	
3.1	Perception of "tone from the top" and ERM policy, the positive aspects and points for improvement	3.1/D - I think it's very important, it should be clear. But sometimes there's too little consideration for how the 17 risk areas connect to the business. And also how the requirements framework can contribute to that and also how it is communicated from tone at the top, eh? So better communication from top to bottom and vice versa also listening from bottom to top that you can link PRM and ERM together. You also get that by just making the connection, of course. If you link the two then you can also see the connections and you can speak the same language I think, so that's good.
3.2	Perception of added value of ERM to company,	3.2/D -The added value of ERM at [construction org.] for me is that it answers the question: are we doing the right things and are we doing those things well? For me, that is the connection to my domain, internal control. ERM, that indicates risks and I can have an opinion about that with internal control, like, are we managing that well? And the added value for [construction org.] is, are we making the right business decision? Are we entering the right markets, are we leaving of the right markets, are we investing in the right things. Are we doing the right tenders, I think that is really the added value. You can control and adjust better.
3.3	Description of how risk are cascaded / aggregated betweeen ERM & PRM	3.3/D - I think that is very different depending on the risk area that we have. For some I can explain that pretty easily, for safety, it's pretty easy to figure out how that works. But the right indicators and tolerances have not been determined everywhere that allow us to do that, so it is not always possible, so then it will be done a bit more haphazardly. And it kind of depends on where it is possible. Projects are started that consciously try to attack or mitigate risks.To give an example… for me an external risk is our accountant commenting on certain items within the annual audit and that is a risk for me, because that is associated with the reputational risk. And so then programs are launched to fix that, that's a pretty simple example for me.That's one of them and the same goes for certain projects or programs are no longer accepted or done, adopted, tendered based on the risks we see in the market.That is also a clear example of Why certain things are no longer done. So I can say escalated at the project level or program is escalated there that we're not going to do that anymore, I think, soThat's also an example of that. The risk owners are often also the owners of the process. So in the safety area, the person responsible for safety is also the owner there, so he communicates that. But of course it makes no sense to communicate all 17, because not every risk affects what someone does within a company. So Only when it's necessary would you come into contact with that and as you climb up the organization, of course the 17 beome better known. I am familiar with all 17, because I have all 17 in my portfolio to deal with internal control. But I can well imagine that at the level of a construction site person or construction worker that they do not think about the Record to Report of the Financial risks thatThere are in the field of annual audit. So I think that's going well. There is always room for improvement and that is also what Internal Control is working on. We really try to educate people there. Okay, what's a risk? How about that?Then why do you have a control, what does that mean? We try to create more understanding for that.
3.4	Description of communication between stakeholders re ERM	3.4/D - I think communication is going very well. Within the cross country risk group we have a functional triangle within the [parent company] with the UK and with the Netherlands and the associated stakeholders.Then there are the finance directors, executive directors and so on.There are now reasonably good discussions of how everything runs and is optimized and that is especially the case within the triangle, because that is where we come up with the process, right? And how we organize and optimize it. And that's where we take the feedback we get from our stakeholders, right? So in terms o IT, finance, HR… all stakeholders, all domains have their ideas of what works well and what does not work well and that is always taken into account. And then we optimize and improve the process where possible, so that is actually going well, better than it went because they are now also involved, the stakeholders. That used to be less.
3.5	Perception of barriers in execution of RM in construction	3.5/D - ERM on construction projects is very simple as far as I'm concerned.There is only an obstacle to this if it is already an ongoing project. So you can't always make adjustments when something happens in the market. And also the aggregation level of a construction project is, aside from The mega construction projects can influence Enterprise Risk technically, they can be more difficult and so we have to deal with that within that project. But on a somewhat smaller scale, we also have a lot of smaller projects within [construction org.] , then you can only manage that in control processes and how you do things, so that is more on the front end. So we will benefit more from this in future projects. It doesn't happen very often that RM processes in the current projects are refined, unless they are gigantic or take a very long time. Because then, for example, a twenty-five-year current maintenance contract, you can do something with that.That happens sometimes when necessary. But it is an obstacle, because it is different. Because yes, we always did it this way, why do we have to do it differently now? So the established order is often a tricky thing. And,That's actually the same for risk management, so the obstacle we see for risk management of construction projects, there is like this: 'we are used to doing it this way', so if something changes, they think we should actually annoying. So change is difficult and that is an obstacle, because quite a lot is

		changing.

4	Behavior and culture	
4.1	Perception of influence of behavior on RM at company, points for improvement	4.1/D - I think that risk management is getting more and more awareness and attention, so in terms of behaviour, I notice that we are getting more and more questions and requests for help to help and improve. So I think that's actually really good. There is always room for improvement, because some people may need to think a little more and become control aware or become risk aware. But I do see progress being made there from a behavioral and cultural point of view. In which we were first an ExCo level process in which occasionally the ExCo had to answer some things and that was all good, wasn't it? There where there is now much more awareness within [construction org.] as a whole, so also the behavior in it is steering. Where certain questions come in and there are certain ideas about, from 'but there is a risk to this, what should we do with it'? What are we going to do about this? So I see a really good improvement in behavior there. So that work is more risk-based. Or at least, that it is part of the work. Look improvement, yes, that's just continuing what we are doing now and ensuring that people are increasingly throwing that within the 'standard way of working'. And that it is no longer seen as a must, but as something that can yield you something, even if you don't always see it in money immediately.
4.2	Perception of barriers to change in behavior in RM in at company	4.2/D - I think at construction organization.], they don't really like changes, because "we've always done it that way." And, I think that's really a hindrance that sometimes to be successful, you have to change. And sometimes I do notice that that is difficult and also in order to manage risks properly, you sometimes have to change some behavior and I notice that is not always something that goes very well at [construction org.]
4.3	Description of current risk culture within the company	4.3/D - It is diverse. In the field of safety and finance, for example, I think so, we are very aware of that and the risk culture is clear and good and we all understand that. It is also clearly present in the primary process, the culture. The associated working method, so how do you deal with risks and what do you do about them, that is not always good. You hear something like: 'we are aware of it and we are taking care of it," but it is not really substantiated and Of course that's where I'm from. It has to be substantiated and I still miss that. So the culture will, we are aware of that and we are also growing in it and in some areas we are already quite far in that, because Of course that is also required by law and regulations, isn't it that you have that. In the areas where it is not yet necessary, was or never necessary yes, it is clearly still being developed there and we still need some attention for that. For instance in procurement, and of course there are a lot of financial risks involved, but yes, never really on the radar, so yes, then we don't really have to look at it, and that is sometimes a bit difficult, so it is still not a 'daily job' here in [construction org.] , that can still be improved.
4.4	Perception of how the current risk culture can be improved	4.4/D - Where there is room for improvement is for People to understand they are part of a bigger picture. I also think that the added value is not yet entirely clear so People are not so concerned with that and indeed, that willingness to change in the current risk culture. You will have to change to do things differently. If you do what you always did, you will get what you got, is a well-known saying. That's how it is and sometimes you have to change to get more out of it or to survive at all in the current market. Aspects that are currently missing from the risk culture at [construction org] are: - we're not very adaptive. We cannot very easily change ourselves based on the wish that comes. - Awareness is still an aspect that is missing, I think. And also a cultural thing, a 'what's in it for me' mentality or 'what's in it for us?'. What the farmer doesn't know, he doesn't eat, if If it doesn't do anything for me, Yes, you know, then Maybe further down the chain it does something, But it's still a bit of the 'far from my bed show' story Those are aspects that are currently missing, I think. And we are working very hard on that within our team.
4.5	Perception of barriers in changing culture within the company	4.5/D - - Resources at the moment, so do we have enough People who want to do something with it. - Competencies in terms of risk management. We have intelligent People in all kinds of areas, but not everyone is equally versed in the field of risk management. - And we have an unbending organization that doesn't really like change. What the farmer does not know, he does not eat, I do notice a bit of that mentality. On the other hand, I've been doing it for two years now, I notice that if you appraoch people the right way, you make progress. But don't pin me down on it completely, I know it's a challenge in some areas.
4.6	Perception of how culture influences ERM and RM execution and implementation	4.6/D - A culture of inclusiveness that we now claim to have or want to have means that you also have to be able to make mistakes. RM and ERM also means baring yourself every now and then so If you have a culture of, you are allowed to make mistakes and You have to map out your risks, so It's okay if you have a view of your risks. Even if you don't like it and you don't know the answer very well yet? See, that would greatly improve implementation, wouldn't it? If you don't dare to talk about the difficult things or the skeletons in your closet, then it's very simple, you can't do very much. Because then I'm going to ask you, what is your risk? And then you say, I don't really have any risks, everything's fine. And If people dare to say, okay this is what I'm concerned about so this culture of openness and inclusiveness and ownership and things that we have now at [construction org.] that would be very very helpful in the implementation of risk management and you notice that already, don't you? If people dare to say, yes, this is a risk, but I think this is an even greater risk, that would help enormously, and I think that is a cultural thing to be able to speak openly and freely.

<mark>Summary</mark> - Interview transcript – <mark>ANONIMIZED</mark>
English version

Interview date: May 2023
Respondent: Emp_E

Background respondent	
function course work experience number of years working at [CONSTRUCTION ORG.]	Worked for 3 years at [construction org.]. Since last summer at [construction org.] NL level. [division] NL level we organize Enterprise Risk management. Prior to that, I worked on a number of projects at [subsidiary cluster specialized in infrastructure] for two years,. Before [CONSTRUCTION ORG.], I worked at [power company 01] where the focus was ERM. I was with a consultancy agency in the field of all kinds of social themes. I have a socio-geographical background and I later specialized in the economic side of it, which is called economic geography. That is about Well, what is the impact of the company on the region, In the chain and vice versa. So what is the success story of Silicon Valley, for example? How do innovations actually come about in that kind of context? So a socio-economic background and not so much a technical background. That's why I also consider myself much more of a generalist who tries to discover the pattern in which the different specialists actually put on the agenda? And I think that's a good, useful, additional skill in an organization that consists mainly of technical people.

1	Expertise	
1.1	How do you deal with risk management in your work? Do you have any formal risk management responsibilities?	1.1/E - That is in many different ways. In any case, I have a role in organizing risk management at [division] NL level. Then it is mainly about obtaining the current risk profile of the 17 risk areas that have been determined by the [parent company]. And to what extent is that risk profile, is it within the risk appetite within our willingness that we established. Well, we try to monitor that on a quarterly basis and facilitate that process. We have that at least once a year that this is also done thoroughly through a risk assessment. We, through ERM are facilitating and supporting. Ultimately, the business and the supporting functions have the responsibility and we facilitate that process. What is also going on now, is we are looking at how can we embed that ERM process in the [internal GRC tool]. Also some smaller things like data management and dashboarding here and there.
1.3	Are you adequately prepared for your tasks related to RM and ERM?	1.3/E - Speaking for myself, yes. Aside from that, I'd like to know a more from top management in terms of what direction we're headed and what ambition are we [striving] for? But if I just translate it into daily practice, then I am well prepared for the tasks within ERM.
1.4	How do you view risks and risk management in construction/construction projects?	1.4/E - Based on my experience on projects, and then I'm talking about risk management, I see risk management especially in projects in progress as a means of communication, a means of accountability towards the customer, towards the client. I think that it does not take place intrinsically enough and that it is not used enough in decision-making in projects in progress, in a proactive way. PMs and MDs mainly make decisions based on their own insights, experience and perception. As far as I am concerned, risk management can play a more prominent role in this. Currently, I think that decision-making is mainly based on professional judgment and less based on, for example, the risk register. And what naturally plays a role in this is that your information in your risk management must also be of sufficient quality to be able to contribute to decision-making. So I sometimes think yes, the management sometimes thinks that too, but I've known that for a long time, because it says there, you know, that's old information for me. Hey, so there is also a task or an assignment to increase the quality of the process, the quality of the data, and then contribute to that decision-making. Well, 'in the end, well… But it is very driven, especially from the point of view of the [subsidiary cluster specialized in infrastructure] , I see that risk management is mainly organized initially for accountability or documentation towards the client, like a tick the box exercise?
1.5	How do you use the knowledge you have gained about risks and RM from previous projects and/or work situations in new projects and/or work situations?	1.5/E - In many different ways. Yes, because you have also been on those projects, you also know the dynamics and you also know the speed and culture that takes place in such a project. we've got a mile stone to hit and, how we do it, it doesn't really matter, as long as we make it, huh? So it's incredibly hectic. I work at a higher level of abstraction and it's important to recognize the hectic nature of projects. When there are safety incidents, which seem to keep happening, we ask, why is that? That has a bit to do with what I just outlined: it's hectic, the deadlines or schedule is tight, budget is tight and speed is high, so security risks are taken. So how can you take that to a higher level and organize that dialogue? So not only on project X, but within our entire portfolio and there is a difference per [subsidiary cluster], per [subsidiary] and based on that you try to have a dialogue there and discover patterns and say something about the overall risk profile in terms of safety. At a previous job, at an organization transitioning from being a public entity to a commercial organization, I saw how that impacts how you are organized as a company. And how you organize ERM or IC. Whereas in the beginning RM at [power company 01] was 'nice to have' but not really at the top of the agenda but because we had that necessity, the company had to be sold and for a decent amount, RM became more important at the top. And then you see how important 'tone at the top' is. If the top, the board really thinks it's important, then you will see that things really take off, and that's also something I got from my previous work experience is that that tone at the top is really crucial. Crucial in determining that ambition and where we are going. And they must be enablers. I have seen there that when you get the wind in your back, then a lot of things are possible.

2	2 - Implementation of (E)RM in practice	
2.1	Can you describe the risk management cycle/process you apply in your work? (techniques and method)	2.1/E - We started that process there last year, at [division] and every level. So briefly, at [parent company] level, 17 risk domains are defined in strategic, operational, financial, and compliance domains. Risk appetites for those domains have also been set by [parent company]. We indicate broadly the acceptable risk profile that we are pursuing within that domain. That's actually the framework we're working with. What did last year and this year we went to see for each domain whether we can appoint domain experts or domain owners for the [division] NL. Are there people who can say something about the risk profile

		of HR or of transformation or of supply chain. We entered into discussions with those people, and there you see different levels of maturity when it comes to knowledge of risk management. We encountered some realism, a bit of skepticism, but also enthusiasm where people saw the value of it. We started a dialogue with them, discussing what it means, what it will entail and expectations. The process runs per quarter, so it shows the risk profile per quarter. We are still in the early days so we have mainly been focussed on examining the contexts people operate in. You talk about governance, objectives on this theme and then indeed, the identification and assessment of risks and how they relate to the risk appetite. What additional mitigation is required or what improvement is requested in relation to the current mitigation? It's still in its infancy, but in general, that process, that PDCA of identifying, assessing, mitigating, that is a quarterly process. And now that requires some investment, some depth and then it will become I hope more automatic and it will then just be an update every quarter, based on incidents, changes in the environment, external, internal environment. And then it just goes very broadly about when do we accept a risk, when do we not. As an expert, what are you asking the MT of [construction org.] NL? That's a step that we want to take this quarter: we've got the risks, we've got the analysis from the experts. And to then have a dialogue with the management, asking how they see that, whether they validate that. Then what is the follow-up action and what is management's position on that? Because in the end they are the owners. That's broadly what the cycle looks like, with the side note that we're still working on it, spreading the gospel and also involving the right experts. Because the domain owners also need to connect to the right experts, so they can say something about certain risks within that domain. So we're pretty much talking about awareness and culture and spreading the gospel. If I compare this quarter to the last quarter of 2022, I see we're progressing in that sense.
2.2	What do you think of the current RM processes you deal with in your work? What has been achieved in this area? What can be done better?	2.2/E - At the moment, I think it is mainly about making RM manageable considering all that is going on within [division] NL. We're not coming up with any new information at this point. People know what's going on. People know more or less what is coming their way, but you mainly help them to make it manageable by applying RM. So helping to prioritize. It is really not the case that if we draw up a risk report that something new comes out. That would be surprising to me. Of course you want to take that step at a certain point that you are more predictive and that can be done, for example, by using data analysis, we are exploring that. That also makes me happy personally, because that makes the process smarter. What we actually do now is mainly based on professional judgement. We arrive at a risk profile based on expertise, which is of course quite arbitrary. The main thing is that you know how to substantiate that with certain indicators, certain data and that you can objectify it a bit more. And then it also becomes smart and I think also enjoyable. And then it also adds some value in addition to that professional judgment.
2.3	What are the main differences between risk management at ERM and RM at other levels?	2.3/E - I think ERM is all-encompassing, 17 domains, regardless of whether it's complete or perfect right now, but attempting to be complete. Project RM is part of that. Concerning project RM, especially at [subsidiary cluster specialized in infrastructure] branch, it's a requirement from the client. That client expects you to be able to demonstrate that you manage your risks, so one client is a bit stricter or expects a bit more than the other. Naturally, this is how risk management has traditionally been set up, especially projects in progress. And there's tendering, where there's also a requirement to demonstrate with your risk register, how is it going? It ultimately translates to the risk provision, so that is a requirement. Those are just a few parts of what is required within ERM. For example, we have a risk domain which concerns this, project development and tendering. So that is about, do we have a RM process, how are we able to reliably estimate risks and opportunities in that tender phase? But that's one of the 17 domains.
2.4	Which steps/parts go wrong in the execution of the RM cycle and what is the reason for this? Can you give an example?	2.4/E - ERM is simply the entire risk process within the Enterprise. What you see is that People pick out one domain and then start talking about it. The contexts of the different risk domains vary. That also has to do with that transition we're in as company. Everyone is currently still figuring out where their responsibility begins, where it stops. So governance is really important concerning RM and is not always clear. So that differs per domain, but basically your policy, your objectives, changes in the playing field, certain incidents, insights, those determine your starting point to reassess your risks or perhaps also identify new risks. An example: Last week we discussed one of the domains, sustainability. There we defined a number of KPIs for the outside world around those social development goals. And one of those KPIs is under pressure. So we look which KPI it is, why is it under pressure and what is proposed to still achieve that target. Because if we fail to achieve them, then we have an extremely high reputational risk. Well, that's the starting point. So what ambitions, what objectives do we have and what can jeopardize that. A challenge lies in how you bring that analysis and what we have put down on paper into practice. And what we see, we have a lot of processes worked out on paper, only we find it difficult as an organization to adhere and conform to them. Because that has quite an impact. And yes, what does that mean? So how do we take the analysis from paper to reality. There are several challenges in that of providing insight into what these measures mean in terms of time and money. And is it at the expense of something else? So to take that sustainability example, you must of course first make it clear what efforts this requires to still achieve that KPI, for example. Well that has a considerable financial impact, but does it weigh up against the

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		reputational risk that we prevent? And, that is a consideration that you also have to make transparently. Well, that's what risk management is mainly intended for and then management can make a well-considered decision. And then there is still an implementation, then it must actually happen.
2.5	In which areas should the RM cycle be improved?	2.5/E - It's kind of like, I have ideas for what should be improved and the question is, what does the organization think is good enough? What is the standard that we strive for as an organization? I also talked about breaking through the silos, so now the experts have their say, but how do we bring that into a management team. That could be improved. And, how can we indeed make that transition from professional judgment to more data-driven substantiation.
2.6	How or where can (E)RM add value to existing RM and business processes?	2.6/E - I think it is mainly about making the world a bit more manageable and prioritizing certain agenda items. It's just modest value that we can add at this point, I think, such as contributing to improved predictability and things like that. That is ultimately the goal.

3	Interaction between ERM and RM within [CONSTRUCTION ORG.]	
3.1	How is the "tone from the top" regarding RM and ERM? Can you indicate what you think is good and where there is room for improvement with regard to the policy on RM and ERM?	3.1/E - What I notice is that the top mainly asks what our proposals or ideas are, what we recommend. And we try to develop a strategy based on that. I personally think that there is still little mission and vision in the board about how to organize ERM. But again with the caveat, it starts with a shared idea of where we are now, what our maturity is now and what our desired situation is. At the moment, I don't have a clear picture of that, and if I did, I could also judge better how far we still have to go. But as it is now, the board is mainly asking for advice on how to do it. And also the 'what'. Also a bit of the 'why' by the way, but especially in the 'what' and In the 'how'. [head of RM at Risk & Control Dept] talks to [executive director finance] more than me, but that's kind of how it comes through to me.
3.2	What is or can the added value of ERM be for [CONSTRUCTION ORG.] ? What does [CONSTRUCTION ORG.] want to achieve by implementing ERM?	3.2/E - I'm not exactly sure what [CONSTRUCTION ORG.] wants to achieve by implementing ERM. What I just mentioned in my answer to the previous question is based on what I believe. But what the company wants to achieve is a question mark.
3.3	Can you indicate how risks are cascaded from ERM to program or project level and escalated/aggregated the other way around? Can you give examples of this?	3.3/E - Two of the risk domains relate to the project level: 1) Project Development and Tendering and 2) Project and Contract Execution. And in the projects RM play a role in this, together with quality assurance employees, contract managers, but in principle the risk managers have an expertise role in assessing what the risk profile is, within the domain of tendering and within the domain of project execution. ERM is overarching. And then you have all kinds of risk management processes in the different layers. And ultimately it's about, if the status of certain risks, if they're beyond the thresholds, then that's addressed and the question is asked of okay, what's an adequate strategy? Well, there we are really on the eve of organizing that. We did a risk identification in Q4 of last year, we talked to experts in all 17 domains, we sat around the table and asked, what do those domains in fact mean? and what risks do you see from your professional judgment? And, we tried to assess that in a risk matrix and also to discuss, to what extent is that at the desired level? And we try to continue that conversation and indeed also take that step towards when is control required or which strategy do you actually propose as an expert and then also take that to the Management Team. So as an expert you're opinion is this and this, but what does that mean? What specific questions do you actually ask management to manage that risk? This is now only taking place at [division] NL and at [subsidiary cluster] level.
3.4	Can you indicate how communication is progressing with regard to setting up and/or optimizing ERM processes between stakeholders?	-
3.5	What barriers are there to performing RM and ERM on construction projects?	3.5/E - What I notice is that this organization, which is in the middle of a transformation, so the pressure on the management is, I think, quite high at the moment. They have a lot coming at them. There was a reorganization, we moved up to [division] NL last year, they have a lot on their plate and at the same time you have a strategic ambition to become the most sustainable builder. The transformation pressure is quite substantial on the organization and therefore also the time and capacity to reflect on what ERM actually means and how can you organize it properly? Yes, that is currently an obstacle. The pressure on the organization is just quite high at the moment, at least it is perceived as quite high. If you then connect that to what I said about the tone at the top, it takes a huge amount of effort to move forward.

4	Behavior and culture	
4.1	How does behavior affect RM at [CONSTRUCTION ORG.] ? Can you name examples? Where is there room for improvement?	4.1/E - ERM is quite new to a lot of people. And for that you see that you are quite dependent on personal and intrinsic motivation. For example, when people dare to be vulnerable or transparent and they see the value of talking about it, in other words, if that behavior is there, then you see that the process goes easily, then you see that it is more effective, but that you can also more effectively get to the essence of, what is really being asked? And if that's missing, if there's some sort of resistance in that, then you see that you have to put more effort into that and that can be process-related, because it can also concern the content.
4.2	What barriers are there to	4.2/E - In itself there are no obstacles to influencing behavior, I think. However, I think that with change it is also very

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English version

	changing RM behavior within [CONSTRUCTION ORG.] ?	important that it is directed from the top and from management. So the tone at the top is super important. Well, of course it all starts with that. And I think we can use that a little more.
4.3	Can you describe the current risk culture within [CONSTRUCTION ORG.]? Can you name examples of this? What are the top 3 most dominant aspects in a positive and negative sense?	4.3/E - Risk culture within [CONSTRUCTION ORG.] is still pretty sketchy, I think. And I'm really talking about the broadest sense of the word. What you see is that [construction org.] is still quite reactive in its actions, it is very incident-driven. Well, of course it starts with that, so, how often do things go wrong? And you would want to turn that into a more proactive, forward-looking approach. We are in that transition, gradually moving from being reactive to being more proactive. And moving from mostly using professional judgment towards an objective substantiation with clear frameworks, with clear governance. It is still a journey of discovery to bring about that change. We're in the middle of that journey. I do see a certain will, but people are still a bit confused, what does this actually mean for me and how do I apply it? And it's actually no different from your other work. No, It is actually just an integral part of what you do every day and is actually intertwined with your operational work and in your strategic work. You see now that it is still a separate thing, oh right, we're going to do some risk management now. That is of course something you continuously do, it's not something isolated. That is also a change and how do you organize that?
4.4	Where is there room for improvement in the current risk culture? What are the 3 most important aspects that are currently missing from the risk culture at [CONSTRUCTION ORG.] ?	4.4/E - I mentioned tone at the top. More substantiation, clearer governance. There is a general development, within [construction org.] where we are striving to be even more customer-oriented, more innovative. That is a different way of doing business than simply as a contractor. Because then you just get a project, to put it bluntly. And get as much margin as possible from that project, so to speak, and win as many projects as possible. And now you have to be a forerunner, now we're saying we want to be the most sustainable builder. Well tha's asking a lot. That also requires progressiveness, taking calculated risks, commercial thinking. And not just focus on costs, but also on other things, right? Wanting to be the best for the client and that requires a different mindset. And, I think that also requires a slightly different application or a different risk appetite with regard to risk management.
4.5	What barriers are there to changing the culture within [CONSTRUCTION ORG.] ?	4.5/E - One obstacle is time. If you want to change culture, you can't do it alone. Let me put it this way, we are a means to change that culture. So it naturally starts with the transition that the organization wants, and RM plays a part in that. To what extent are we actually on track in bringing about that transformation in culture? I think the obstacle in the broadest sense is, we are a decentralized project organization with many parts with moving towards more centralization. We have defined company values. And we have defined a strategy. But it is quite difficult, how we do we embed those values to all those projects, all those employees up to the subcontractor and supplier yes? And we are not there yet, it takes quite a lot of time and effort and it's difficult, I think for a traditionally decentralized organization because you have so many different parts, so many different blood types. You can actually see it already, a few years ago we were still at at different department and location. Then you were in [branche location 01] and when you enter the office you already have a completely different culture. When I entered [project 02], a totally different culture. And now I'm at the head office in [branche location 02]. Totally different culture. So it is really very difficult to change that culture. It happens incrementally and takes quite an effort.
4.6	How does culture affect RM/ERM implementation?	4.6/E - It goes hand in hand. So I think risk management is a means of influencing your culture. It works both ways. I think it's mainly about how intrinsically motivated you are… as a person, also as a department, as a project. Yes, so that definitely has an impact. How willing am I to take certain risks, or how mature am I in my process, or how deep do I want to go. That depends a bit, so which part of the company you're in. Because the way of working is different everywhere. So what you're doing then is you're trying to look like okay, how risk mature are people, huh? So how does that way of working fit… Is it already aligned with the intentions of risk management? I think that tone from the top indeed and the strategy, they are the most important. And in some parts you see, for example, that people are much more data-driven. Then you can already take that step towards more objective substantiation and a more objective way of risk management. And with the other, they are still far from it, so it mainly affects maturity. It is not so much about the process because in principle you can always organize a process. Except, is the quality of the process different and to what extent is that quality sufficient? That is the question.

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English version

Interview date: May 2023
Respondent: Emp_F

Background respondent	
function course work experience number of years working at [CONSTRUCTION ORG.]	My position: [segment risk manager]. Meanwhile, around 12 years of specific risk management experience at various companies. So [oil & gas production company], [energy & petrochemical company] , [other construction org.] and [construction org.]. Education HBO business economics. I'm doing part of a university education. Work experience, risk management 12 years, but generally 28, something like that yes. And number of years working at [CONSTRUCTION ORG.], going on 2.5 now.

1	Expertise	
1.1	How do you deal with risk management in your work? Do you have any formal risk management responsibilities?	Before the reorganization, our department fell under [subsidiary cluster specialized in infrastructure] where we served tenders and projects by setting up a risk file and making risk calculations. Now we have moved to [parent company] level and are serving all four [subsidiary cluster]s for which we have appointed segment risk managers and that we are currently discovering what that entails. We said in advance, we want to be involved in the bigger tenders, do peer reviews and [phased tendering process] reviews and we want to be seen as the point of contact for risk management within the [subsidiary cluster]. That's it broadly. I am currently segment manager for [subsidiary cluster specialized in general construction]. I have no official RM responsibilities, as RM is embedded in the line functions. The observation is that the level of maturity in the line is still far from sufficient at management level. Also at site level and certainly at contract level that is still far from where it should be, so people really need to be trained in what is expected of them, what tools and resources they have, in language use, in how we communicate and deal with each other. That's what I spend a large part of my time doing now. Of course I do have my own responsibilities in terms of my own work. This year I must show that projects and contracts that should have a risk dossier in all branches, that they indeed have them and that they are of sufficient quality. Also that there is a proactive management of risks and control measures and that they have simply made progress in the culture there. Will that be done in one year? No, I don't think so, I'm also discussing that with the financial director of [subsidiary cluster specialized in general construction]. That is a transition that goes further than rolling out some tools and software. It is the whole attitude and behavior of conscious risk taking and control. That's a 2, 3 year haul I think.
1.2	How do you deal with ERM in your work? Do you have any formal responsibilities related to ERM?	My responsibility for risk management is really specific to projects and contracts, so I call that more the bottom-up approach. While ERM is more of a top-down approach and we have to come together and are increasingly coming together. So ultimately you just want to know at the site or [subsidiary cluster] level what your top risks are and how they are managed. And we are now building that content from the projects and contracts. And the latter, that's my responsibility.
1.3	Are you adequately prepared for your tasks related to RM and ERM?	Yes, but I am specifically doing training at the University […] to know more about the relationship between project RISK, ERM, Enterprise Risk, well, things like that. So meanwhile I think, yes.
1.4	How do you view risks and risk management in construction/construction projects?	I think the level is lower than what I was used to in the oil and gas industry. But there is a lot of progress being made. And there are still steps to take, so it's not yet where we need to be. This can seen, for example, by the fact that most fatal accidents are work-related and they are in construction, in the infrastructure sector. This also has to do with the nature of the work. But you also see that in the last 5 to 10 years that the large construction companies have run into serious problems, partly due to the procurement of DBFM projects that have been far too risky. So it's clear that in various ways, progress must still be made.
1.5	How do you use the knowledge you have gained about risks and RM from previous projects and/or work situations in new projects and/or work situations?	My work experience from other projects and work situations, I use that every day. I've been working on risk management full-time for 12 years now, much longer before that. Of course with projects and stuff like that, so I was more unconsciously and not unconsciously competent, sometimes also unconsciously incompetent with risk management. Yes, the more frame of reference you build up, the easier it becomes, I think. In terms of our own RM department, I think we could make better use of that during work meetings. By also sharing with each other what you run into, and how you approach things. What the specific risks are in the [subsidiary cluster], how they relate to other [subsidiary clusters], we need to talk much more about that. I think so.

2	2 - Implementation of (E)RM in practice	
2.1	Can you describe the risk management cycle/process you apply in your work? (techniques and method)	I think that within [subsidiary cluster specialized in general construction] we are working hard on the first steps of the risk management cycle. So in particular identifying, then classifying, quantifying and then controlling. Evaluating the risks and the entire PDCA, Plan Do Check Act, that needs to improve significantly during the course of the year. So I am now mainly working within [subsidiary] on the long-term maintenance contracts, in particular to get the identification done as well as possible.

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English version

2.2	What do you think of the current RM processes you deal with in your work? What has been achieved in this area? What can be done better?	I think if you look at the second question, I think the risk management processes are clearly described but the implementation of them. Yes, that we are now taking steps in that direction and giving them training, reviewing, making connections visible, right? So what exactly does a risk dossier say and what does that mean for risk reserve and at project, site and national level? Yes, I do that every day.
2.3	What are the main differences between risk management at ERM and RM at other levels?	I think what you often see is that people at the top of the organization who set the strategy and the goals, they obviously have an information head start over the people in the organization, so the knowledge of the actual work is of course in the lower levels of the organization. And the knowledge of strategy and objectives is higher up in the organization and we must try to bring that together. As we are busy setting up ERM at the higher level, we can only tell you what the objectives of ERM are if that is also completely clear. I also expect that we will be able to take real steps there, especially in Q3. Because you can then say, for example, you have identified risks at [subsidiary cluster] level. Well, and then I can start looking at what exactly emerges from the projects and contracts at branch level and does that rhyme with each other or do we have blind spots that we still have to fill in. There are still discrepanties there, I think.
2.4	Which steps/parts go wrong in the execution of the RM cycle and what is the reason for this? Can you give an example?	What's going wrong? Yes, I think with all the steps still. What you see now is that people often go from identifying to controlling too quickly. When in fact you should first identify as completely as possible, then prioritize, and only then start rolling out control measures, because it makes no sense to run with your acceptable risks or your smallest risks when you should actually start with your top risks. And I come across such examples often. So people start with a risk dossier and then the first risk that they identify, they will work out completely and put in a lot of effort, while If you then continue to ask questions and you sit down with a team, it eventually turns out after a group discussion that other risks are much more important. And that you have to start with those first, so you really have to take time for that.
2.5	In which areas should the RM cycle be improved?	I think that the risk management cycle itself is good. It's just the implementation that needs to be improved.
2.6	How or where can (E)RM add value to existing RM and business processes?	I notice that people derive more job satisfaction and motivation when they see the connection between their own work and the company's results, so the connection with your own work and what that ultimately means in risk management and results at corporate level. When I start explaining that, I notice that some people just really enjoy it Because they never realized that, or they were never told.

3	Interaction between ERM and RM within [CONSTRUCTION ORG.]	
3.1	How is the "tone from the top" regarding RM and ERM? Can you indicate what you think is good and where there is room for improvement with regard to the policy on RM and ERM?	The tone from the top, that's actually the Board of Directors and top management. I think things are going well there. But if you go to a branch office, then the tone at the top, that comes from your own branch. [Company corporate headquarters] is perceived as far away. You can see big differences between the branches, how far along they are and what leadership style there is. This is partly due to the fact that there have been many personnel changes and that teams need to be assembled per location. And that just takes time and there are still vacancies for some key functions, such as business controllers and contract managers. The moment those People come in, they still have to get to know all the processes, procedures of [CONSTRUCTION ORG.] before they can also communicate that to their own people. It varies a lot per location. I think what you see is typical of corporate headquarters in that [company corporate headquarters] is very 'far from my bed' for some people. I think that the distance between [company corporate headquarters] and the branches should be reduced, because it has also been found in the past that branches functioned very autonomously within [CONSTRUCTION ORG.] and they actually didn't care what happened in [company corporate headquarters]. And that's not good. I always find a very good example is the high number of layers of directors you encounter within a construction company. Even at branch level you already have one or two director layers, while in fact they are actually just managers who work and are accountable to central management.
3.2	What is or can the added value of ERM be for [CONSTRUCTION ORG.]? What does [CONSTRUCTION ORG.] want to achieve by implementing ERM?	I think what has gone wrong with the construction company in the past is that it has often been driven by sales and 'Can Do'. That idea of we can do everything and thereby taking irresponsible risks. And by looking very closely at risk profiles, determining what we consider acceptable risks and then weighing every tender and then project against that, by comparing them to our ERM principles. Then you make the choice much more consciously whether you want to or can do your project at all.
3.3	Can you indicate how risks are cascaded from ERM to program or project level and escalated/aggregated the other way around? Can you give examples of this?	From ERM downwards I don't think that is happening yet or if so, insufficiently. From project to branch to corporate, that has to improve. So not enough at the moment. **What would that look like if it were that far, that cascading of those 17 risk domains that have been defined?** I think at the moment the 17 risk domains, that's a very theoretical story. The branch managers of [subsidiary01] and [subsidiary02] have to know them and they have to have that conversation about that, but it doesn't easily connect to the language used by project managers or contract managers I think. So they have to translate that and think, what does this mean for projects and contracts? What I do see is that there is now much more discussion at branch level, what are our objectives now and what are our results and what risks do we now see?

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English version

		I was at a branch today where there are plenary discussions on risk dossier between the branch director and all contract managers to learn from each other. Well, I hadn't seen that example before, so that made me very happy. You can see there that some branches are really taking steps in this direction. That is also learning from each other. I think that's the most important thing.
3.4	Can you indicate how communication is progressing with regard to setting up and/or optimizing ERM processes between stakeholders?	I actually have very little insight into that from my position.
3.5	What barriers are there to performing RM and ERM on construction projects?	I don't see any barriers, in the sense that every major construction project is simply obliged to have a risk dossier. And in the tender we test the risk profile of that tender against ERM objectives and decide whether or not to tender. So is that a hindrance, well, it's just making conscious choices. Yeah, I think you just need enough staff support for that. Yes, so you ultimately want to invest in line as much as possible. But you also see that that line needs support. Capacity has to be made available in the organization for that, otherwise it just won't happen. At [subsidiary01], I was at the [branche location] this morning. There they have a specific process coordinator who drives all those processes and ensures that those agreements are made, that the risk files are properly filled, that the quality is good. In [branch X] they have that, other branches don't, you can see right away that a difference in quality arises.

4	Behavior and culture	
4.1	How does behavior affect RM at [CONSTRUCTION ORG.]? Can you name examples? Where is there room for improvement?	I think what you see is that the transition from a classic construction company where everyone has to do everything themselves there is a hierarchical structure. This is partly due to corona, it has really led to the acceleration, whereby people are given responsibilities. And they're also given space. And are held accountable for their results, not their presence. I think that's very important. So a culture of trust, a culture of openness. And I think the most positive thing about good risk management is that people dare and are allowed to express in advance what they see as possible risks. And talking about it with each other instead of keeping bad news under wraps because there is a culture of reckoning. So discuss with each other in all openness in advance what could go wrong, prioritize, determine control measures and call each other to account, I think that risk management can make a very positive contribution to the corporate culture. What you often saw in the past is that projects that encountered problems, that caused stress in the organization and people were constantly putting out fires. And now you see that projects, due to the [phased tendering process], due to having set up your process, periodically checking the risks, thinnking what we can do about it, that you get a much more stable project and also a more pleasant working environment. I literally heard those examples mentioned this morning, the fact that you can talk about it with each other and also take the time for it, step out of the work, think for a moment, think ahead and then consciously make choices and continue... creates calm In the organization.
4.2	What barriers are there to changing RM behavior within [CONSTRUCTION ORG.]?	That is very clearly In the behavior of the leadership. People behave the way they are treated themselves. And if the leadership simply communicates, we think that risk management is important, we want to see risk dossiers and we will not judge people when risks occur, but we will reward people the moment they dare to report bad news and dare to ask for help, then you get a whole different culture. And then what do you need for that? Sometimes you just literally need different leadership, so no longer the old classic series of hierarchical project directors. You need a flat hierarchy. And you need leaders who exude openness and friendliness. Well, I see very good examples at the moment. It means approach each other critically but in a different way.
4.3	Can you describe the current risk culture within [CONSTRUCTION ORG.]? Can you name examples of this? What are the top 3 most dominant aspects in a positive and negative sense?	It varies per [subsidiary cluster]. I think that [subsidiary cluster specialized in infrastructure] reorganized earlier than the other [subsidiary clusters], because the need was also the highest there. Those in the [subsidiary cluster specialized in general construction], I now see that the risk management is quite okay with the larger projects. But that within [subsidiary01]that we actually have to start building it from scratch, because no attention has ever been paid to it. And, I do think that the reception is very good and that is perceived as very positive. What we also try to relay is, yes, it's a must, but it is also something that helps you as a contract manager or project manager, that you just know where to change course, what are your focus points and that you should talk about them periodically. I think that in the past you often saw that when risks occurred, for example whether risk files were incomplete or when risk provisions were not sufficient to absorb setbacks, for example, that you were more often a finger-pointing culture. While now, due to company RM framework and we know much better, especially with the larger projects, that you have several jars that fill the risk jar, so not only the risk and opportunity dossier, but also your price indexation, your quantities, your time uncertainty. If you think about this carefully in advance, you also have less chance of setbacks because you simply put in a bid with a decent risk reserve. And that can mean that you don't win a project or contract. But that's better than working in a frustrated environment where you lose money.
4.4	Where is there room for	[skipped]

	improvement in the current risk culture? What are the 3 most important aspects that are currently missing from the risk culture at [CONSTRUCTION ORG.]?	
4.5	What barriers are there to changing the culture within [CONSTRUCTION ORG.]?	They are often at leadership level. It's on branch management level and, that's what I understand is one of the parts of the current [leadership assessment]. It determines whether people meet the requirements that are set for the new leadership of [CONSTRUCTION ORG.].That may mean that People have to either leave the company or need to be retrained. What is missing now, what you could say is if the leadership does not see the need for good risk management then the whole organizational layer underneath them will remain stuck in old behavior. I like the way we work now, I now work within [subsidiary cluster] and work bottom up. [Risk & Control Dept] and the national leadership team, they work more top down, And we are getting closer together. By exchanging impressions of what you see happening on contracts, in my case at branch level and is that also the impression that leadership has centrally? By simply discussing this with each other, I think you will bring out the weak spots in the organization.
4.6	How does culture affect RM/ERM implementation?	RM is a tool aimed at communication and decision-making. So when I start from the bottom up, the language use in the risk dossier, so clearly expressing risk cause and effect, that's where you start a bit with culture, because the clearer you write down what the problem actually is, the greater the chance that it will be picked up, that you will take the right control measures, so just communicate clearly with each other and review, what do you actually mean? Do you understand what you mean? Ask, inquire. That improves the culture, because you just really have to take the time for a good conversation. In the old culture it is perhaps that people kept running and if you still had some time left, you got another project and then you were completely overburdened with work until you fell over, so to speak. Yes, I also think that you see that, given the current labor market with the great shortage of personnel, that has two sides. One, there's just not enough staff. So there is a risk of overloading People. On the other hand, if you don't have enough staff, you have to make more conscious choices and risk management helps with that. So yes, there is a very clear trade-off in that, I think.

Summary interview transcript – ANONIMIZED
English version

Interview date: May 2023
Respondent: Emp_H

Background respondent	
function course work experience number of years working at [CONSTRUCTION ORG.]	My position is [subsidiary cluster] risk manager. That's a new position since the beginning of this year 2023. I am responsible for the RM process at the [subsidiary cluster specialized in infrastructure]. We are improving the risk management process and also support RM in tenders and projects that are more complex. And we do that either by guiding or, increasingly, we do that by reviewing. Education is business administration, and I have been working for [construction org.] for a little over 3 years now. In terms of work experience, all those years have been at [CONSTRUCTION ORG.]

1	Expertise	
1.1	How do you deal with risk management in your work? Do you have any formal risk management responsibilities?	I deal with risk management every day because it is my job. I have less common ground with ERM. In our reviews on the more complex tenders, we check the content of such a file according to a standard checklist. But we also want to increasingly check these against what we call hot topics. And those can be things that just suddenly arise as a calamity in the organization. Consider, for example, that we are suddenly dealing with delivery delays and rising prices. That was suddenly a thing last year. We could assess that in the risk file. But also things that we want to escalate from ERM to a higher level, those we could also include in such a review. So in that sense, more and more combinations are being sought, so I think it will be intertwined in that way. And do I have formal responsibilities with regard to risk management: in principle, I never make a decision whether or not to do something, I give advice with whether there is a clear picture of the project under consideration, so I don't think I have any formal responsibility with regard to risk management. That is something management should do.
1.3	Are you adequately prepared for your tasks related to RM and ERM?	In RM the focus always changes quite quickly. At first I had the idea that I also had too little understanding of how contracts work, then you put energy into it and then I think, now you're up and running again. And then planning becomes very interesting so then I talked to planners, learn something new. So I always have the feeling that I... you're never fully prepared, because the moment something pops up somewhere, you have to dive in again. So you are actually continuously learning. But I do have that skill to quickly pick things up and learn and understand them. So in that sense I think I am well prepared. And you can't know everything about everything. But it is important to have open ears as a risk manager; just to listen to other people, their expertise and really take the time to dive into it. So both prepared and unprepared in that sense. And for ERM, it's been development for a very long time. Am I prepared for that? I still don't know what my part is in it, so not prepared in that sense.
1.4	How do you view risks and risk management in construction/construction projects?	I think we work in one of the riskiest industries, certainly at least, my area of focus is [subsidiary cluster specialized in infrastructure]. There's a low level of standardization in the work we do. Now and then we have a project where I think, hey, it looks like a previous project And then you see that the risk profile is often different from what we encountered last time. But if you look at the [subsidiaries] for which I work, how many different types of product/market combinations and types of projects there are and how they differ from each other... It's been worse. And there are also [subsidiaries] who do repetitive work for [subsidiary cluster specialized in infrastructure], for example roads. The laying of asphalt is fairly repetitive work. But there you see other kinds of risks. There are also certain things happening there. And of course it also has to do with the margins you make in the market, which are not great. So yes, you simply run the risk of loss-making projects in that sense. I think that if we want to make something useful out of ERM, it shouldn't be a corporate thing, then we would be here in [company corporate headquarters] doing ERM and it would never make it into the business. And my opinion is that money is made in the business. And that money is also lost there. And that risks occur there, manifest, at a rapid pace and with ERM you can give a good direction to what you think of certain themes. But if you don't bring that into the business, I don't think you can do anything about it. That's my opinion. So I hope I get to deal with it more, to be honest.
1.5	How do you use the knowledge you have gained about risks and RM from previous projects and/or work situations in new projects and/or work situations?	We are getting better at that. Currently, a large part of my job is reviewing tenders. We call this the risk opinion. And in that we it's not just, what's in the file? And is it somewhat consistent with the complexity that we see from the documents, from conversations we have with the team? But also: is it consistent with what we see from risk files of reasonably comparable works. What we're working on more and more is that you don't just say, hey, this job is a bit like that job. In fact we also split those works into: in this work we made an underpass, piece of trackThat we can also extract those aspects and then find comparable aspects of other works, which may well be a completely different work, but that we can also extract those aspects and compare them with each other. So we are really taking steps in that direction this year, so I think we're doing very well in that at the moment. And there's growth potential.

2	2 - Implementation of (E)RM in practice	
2.1	Can you describe the risk management cycle/process you apply in your work? (techniques and method)	In the business, the cycle is very clear. In the tender we go through the cycle once. So identify, then let's think a little bit about quantify and control. And then yes, it's transferring and monitoring. And then the cycle starts again.

Summary interview transcript – ANONIMIZED
English version

2.2	What do you think of the current RM processes you deal with in your work? What has been achieved in this area? What can be done better?	The nice thing is that I was present at the start of standardizing the opportunity and risk Excel lists. I've working on that for a very long time. We wanted to standardize all those different methods, methodologies, all our own Excels. So that was the standardization of the process, the working method, the language. You run into some hickups a few times, but in the end it went really well. And you notice that people now speak the same language. And now we are currently also digitizing. We will now get rid of those Excels, we will simply work in Relatics or in DiPro. And well, that's the next step, then we can work with data again. But I think that the processes are therefore becoming better, more uniform and also more useful for [subsidiary cluster specialized in infrastructure] and I think we have really arrived at a good point. If we have taken that digitization step, then we have reached a very good point. And what could be better? You can resolutely say we have to do risk management everywhere and we have to do it at this level everywhere . But it needs nuance. For a roundabout that you complete in a week, it is not necessary there, but to set that limit of, when are we really going to do it thoroughly, when are we going to work with it a bit and when are we going to not work with it? No one dares to have an opinion about that and no one has even come up a good idea like: that's how we're going to do it, from then on we're going to do something. So that's something, maybe we should really dive into that sometime. I think we have to link it to complexity, don't we? Classify tenders according to complexity A, B, C, D, E. In principle, that is already an initial risk assessment: you look at how complex a project is. The question is whether it's done very well. I do think it's something to link to that. But what could be done better, in my opinion, is that we should not burden people with risk management who have projects that are perfectly manageable. We just have to make it clear that it really isn't necessary there.
2.3	What are the main differences between risk management at ERM and RM at other levels?	Well, that seems pretty simple to me. Risk management on a project: that's where you come across project-specific things. And I think ERM is precisely about the risks that occur on multiple projects. In other words, not being project-specific. For example, you already have to deal with…The easiest example is Human Resource. We don't have enough people, maybe not enough equipment. You don't have that on a project, it's not project-specific. You simply have that overarching, you are bothered by it, but if that is an identified risk on ERM, it is best to look in your project like: what are the critical phases? Where do we have high peaks for crew or equipment? So I think it's very much related, but as far as I'm concerned, the difference is: the moment you suffer from it on a lot of projects, it becomes an ERM thing. If it affects you on one project, you have a project risk.
2.4	Which steps/parts go wrong in the execution of the RM cycle and what is the reason for this? Can you give an example?	Well, plan and implement we can do better. So then you have identified risks, you have quantified them, you have provided them with control. That control isn't always quite SMART, is it? We sometimes say: should we discuss with such and such. And that is not a control measure. It is a control measure if we say: in that meeting it will become a permanent item on the agenda. That is also more of a control measure, we need to be a little more focused on that and then you can also monitor its implementation. Keeping an eye on that is now very difficult. So that's something that can be improved. Also in terms of monitoring. I think we monitor pretty well… In the sense that we just tweak the quantification a little bit and this and that. And that we ask for an update, I think that's fine. But the real evaluation of: what happened? We still have to work on that. That's also for the end of this year Q4 on [my colleague's] and my agenda to start piloting with modules to evaluate.
2.5	In which areas should the RM cycle be improved?	Well, I think it's the same answer. In terms of the use of data to support the RM cycle, we aren't that far yet. We are now taking really big steps for our department. What we are now trying to do with data is not the quantitative story, because I think that: there is some tweaking here and there, so you can't just say. well that risk, that cost a hundred grand there . You don't know that, because that is interpretation and also politics that has to do with it. But where we can do a lot with data is the qualitative part. In other words: in a comparable component of another project, we saw these risks there. Why aren't they in yours? Have you thought about it, yes or no? So for the qualitative story I find it very useful to work with data. As for the quant data, I know the [tender dept] does keep track of how much risk reserve is being carried across and how much profit is being made. Well, there may be a relationship between them. But I personally haven't dealt with that.
2.6	How or where can (E)RM add value to existing RM and business processes?	Well, very simply: money is being made or money is being lost in the projects, I think. The moment you map out your risks and opportunities properly and you deal with them realistically, then you can predict whether it will be nice project. So we want to tweak it a bit here and there. And then it seems like a nice project and then it actually turns out not to be a nice project, but oh well. In the end you know… you ensure predictability in the execution of a project. And I think that adds value that you already know: which way is it going? And if things are not going in the right direction, then we can focus on that. So I think there is a great added value of risk management there. For ERM, I think it might be quite helpful if we started working together on business risks, because we're not doing that. Those are all separate companies at [CONSTRUCTION ORG.]. They all have their own way of working. I think we should work together on major themes. For example, last year we panicked, because delivery times were getting longer and the costs for delivery were also rising rapidly. That was really chaotic for a while and then there were no groups at all that we put together as standard to talk about it. So you got a group there, people were working on it, we were working on it. That, to bring that together, I think ERM is a very good tool for that and you can learn from each other that way. Plus [CONSTRUCTION ORG.] is a big company. You should also say: large companies, which carry out many projects and can achieve economies of scale in that sense.

3	Interaction between ERM and RM within [CONSTRUCTION ORG.]	
3.1	How is the "tone from the top" regarding RM and ERM? Can you indicate what you think is good and where there is room for improvement with regard to the policy on RM and ERM?	Well, I still think that's pretty much like safety, that it's mentioned a lot. RM has ensured that these projects have gone from loss-making to neutral or profitable. RM is the tool that allows us to become better. That is mentioned quite often in all of those meetings. That's step 1, that's naming it. But, what should we do about it? That is not said. That is perhaps quite convenient for our department, because then we can give substance to it, because that is what we are here for. But it's not the case that we are ready and equipped with a very good plan on the entire risk management strategy. That's just not the case. I mean, yes, we come up with initiatives, we get to work on them. An example is: predictable work. That is one way in which we can jointly implement the same way of working for risk management and for a number of other matters. I don't know if you can see that as "tone at the top".

Real commitment to it, I personally don't notice that. I hear a bunch of corporate muck. Come up with a concrete plan, like: this is how we're going to do it. You always have to pilot that a bit yourself, and I don't feel much guidance in that. I do think there is a commitment to: risk management is something we have to do. So that's good. But for the rest it remains a bit of corporate muck.

In the business I think it's more concrete. When I talk to the boards of [subsidiary cluster] and [subsidiaries]... It is certainly highly regarded in the [subsidiaries]. They want to understand better, including why we are doing it. And what I like: boards of the [subsidiaries] with whom I have contact, is that you can have a nice conversation where they say: we see this. And not immediately that we say: hey, it's very risky, we shouldn't do it. No, we say it's risky and we're going to consider whether or not we do something, so to speak. So I feel there that my work contributes to decision-making. I think that's what it's for, too, so that's very good. For [subsidiary cluster] that is slightly less, in the sense that the management of [subsidiary clusters] is, in my opinion, fairly busy with, say, large projects that are not going very well.. In principle, we are no longer active there from our [subsidiary cluster] risk management role, because we have closed that activity. But we have regular contact with [financial director] from our role . We always give them an update on the state of affairs. What we are still missing in that sense is the need from the management [subsidiary cluster] of joh: where do you want us to focus? Because I do get that a lot from the [subsidiary] boards, but less from the [subsidiary cluster]. But that may be because they are also busy with the somewhat larger fires, which we are actually trying to complete now. While: we naturally focus mainly on tenders. |
3.2	What is or can the added value of ERM be for [CONSTRUCTION ORG.]? What does [CONSTRUCTION ORG.] want to achieve by implementing ERM?	What we want to achieve with it is not yet clear to me, to be honest. At least yes, it is important, they say it is important. But the concrete added value of it has not yet become apparent to me. But right now it's just reports and corporate muck talking to each other as far as I'm concerned, yeah. I haven't seen much of where it adds value. If you can tell me in Jip and Janneke language, then you know it yourself. Look, if you need 8 or 9 sentences to determine what the added value is, then you don't have a good business case. That's my opinion. I really understand that it has to be done and what is important about it. I can imagine why, but it's not very strong yet.
3.3	Can you indicate how risks are cascaded from ERM to program or project level and escalated/aggregated the other way around? Can you give examples of this?	We don't do that yet, at least not that I know of. But we are working on the risk opinion, so how do we actually review a tender? How do we make that a little more formal? So we want to add those hot topics there and that could possibly be topics that have flowed down from ERM. After all, if we reduce the risk appetite somewhere (in other words: we want to run less risk on part X), we will have to look in the tenders to see whether this tender does not contribute too much to the risk profile of such an ERM. At least, that seems like a useful interpretation to me. So that.
3.4	Can you indicate how communication is progressing with regard to setting up and/or optimizing ERM processes between stakeholders?	The only thing I know is that it takes a very long time, so you would say that the communication is not perfect. I'm not trying to bash it or anything. I don't mean that either, but I know a lot of hours have gone into thinking about it and talking about it, but...Yeah, so I haven't seen the results of it yet. So in that sense I would say that communication is not optimal.
3.5	What barriers are there to performing RM and ERM on construction projects?	For risk management, project risk management you just deal with people... Look: you can hire a risk manager, you used to be able to do within the company. That is no longer possible, so you have to look for them externally and you have such an external person at work who will do risk management for you. And if you don't, it will end up somewhere in the team and that costs time and money. I always think it's a bad excuse, because risk management is just your daily work. And what issues there are and just make sure that your colleagues know about it. And that, to me, is what project risk management is. But people see it as an extra task, an administrative burden. But on the other hand, that is becoming less and less and on large projects you don't hear that anymore. For smaller projects: you occasionally hear that it is indeed an administrative burden. And often it is. If that is said, then you can also ask yourself whether that is the case, yes or no, so it is not like hey, you really have to do it then. Sometimes they are right too. So, that's getting better. But one obstacle remains that it takes time to write it down.

And for ERM. What barriers would you have there? Yes, I think people are not so quick to feel ownership over a certain domain. I think if you had someone from HR from each of the [subsidiary clusters], and you would regularly sit them down at the table and have them talk about Human Resource things, then I think you could have a nice conversation. Only I don't think that People would quickly take ownership over there on their own... At least, that's my experience at [CONSTRUCTION |

		ORG.]... So then you would have to say: then you have to appoint people. So domain ownership, I think that can be an obstacle.

4	Behavior and culture	
4.1	How does behavior affect RM at [CONSTRUCTION ORG.]? Can you name examples? Where is there room for improvement?	Sometimes my personal behavior deviates from the culture and I think that is what a risk manager should do to a large extent. Yes, you can put that on a tile, right? if I have an opinion about something, I'll say it. And, I think part of the culture is that we don't always do that and that we sometimes prefer it when difficult things are not talked about. But I think that a risk manager who does not go to the heart of the problem is not a good risk manager. But that's not, say, something I've noticed and acted upon. It's just: I'm personally quite direct and if I think something is nonsense, I will say so. And I don't mean that in a bad way, but that's my contribution, I think, to this organization. So, what influence does my behavior have? I think I name things, so to speak. So I like to have an honest conversation with people. And that I don't necessarily judge them if it's wrong or something. Because I don't care if people lie to each other. They have to figure that out for themselves. But I would like to say: why don't we do it honestly? I'm not afraid to say that. But, it is also not the case that I, based on personal behavior, always do everything according to the rules and agreed processes. Because then I would make everyone angry everywhere on all my reviews with: you haven't filled in your responsible project role there, and you haven't filled that in there. But, I think that's nonsense, too. So I always try to gauge what is useful? What suits the operation. And I think that's also something for my behavior. I'm quite business oriented, so I always try to think of: is this useful for the place where we make money? So with the projects. And if not, then we shouldn't do it. What I encountered was resistance. In behaviour. Really just pure resistance, because something came from [branch location] at the time. Because that was where we operated then, now from [company corporate headquarters]. That's behavior, I guess. Maybe even a bit of culture, that if something comes from corporate, it's automatically not good. But that's changing. But that has two things. This is not only because people's behavior changes, but also simply because useful things regularly appear. So that's for instance, say, the DiPro. You expect a lot of resistance there, because with [RISK AND OPP. REGISTER] did lead to some resistance here and there... But, because it's just really well put together, because it's useful, because it works, then... That helps. While, in the past we also sometimes had things that just didn't work. So I think that's covered by that we've also just gotten better at the work we do.
4.2	What barriers are there to changing RM behavior within [CONSTRUCTION ORG.]?	The same answer basically. You are dealing with people and with time. And there's always a must. What is difficult about risk management is: if you do it well, you don't see that you have done something. That is also a cliché, can also go on a tile. But, yes, to make it explicit: why is that necessary? I think that's getting better too... that it's also lessened resistance, changed behavior. That people now see: oh yes, that's why we do it. Also just because...You have to give people something too. You don't just have to come get something. You shouldn't just come and critically check things out. Review is initially, you come and ask for something. Because we want to see how it is going. We also really need to deliver something. That is very important to us. So you have a file, and you also try to add something to make it better. And then it is also nice for those people, because the file is then also assessed by the [phased tendering process]. Then it's ready again. So you're coming to bring something too. And I think that... if you don't bring something, you just get something, then that's a huge barrier to risk management. But that's what we're working on. Another obstacle is: You're dealing with people who are busy realizing projects. So when you come up with sentences that you have to read 3 times to understand, what is being said...That's bad. Plus if you need 8 or 9 sentences to explain one thing then you have a bad story. And I think that's a huge obstacle for Enterprise Risk Management. When you go into management, I am convinced that you have to talk quite abstractly. I don't know why, it's not quite clear to me. It could be due to the need for nuances. But people also find it scary, at least I think so. I personally find that difficult to understand. So another language. While, if you want something to come alive, you just have to be able to say it in Dutch. So I think that's a huge barrier, we really have to watch out for that.
4.3	Can you describe the current risk culture within [CONSTRUCTION ORG.]? Can you name examples of this? What are the top 3 most dominant aspects in a positive and negative sense?	Current risk culture has greatly improved for [subsidiary cluster specialized in infrastructure], I can only speak about that, not for the other [subsidiary clusters]. I think people are seeing the importance of it more and more. So it becomes more useful. That people are increasingly benefiting from it themselves, that's what I also mean by getting-bringing. I think people are also feeling more and more like, hey, this is useful for me too. So that might be one aspect. Yes, I don't know how you can describe that in one word, but...That it also becomes more tangible for people or something. How would I further describe the risk culture? The fact that we don't dare tell the story too openly and honestly. Also simply because we have drawn up rules with each other, which means that we have to be a little creative with the risk file. Because otherwise it might be too risky on paper to work with. Well, I'd rather we say, it's a risky project, but this is the reason we want the job, so we're just going to do that. A positive aspect is that a very large proportion of people are open to talking to you. So let's say: openness, in that sense. It's a different openness I mean. I mean more like: welcoming. From: yes, of course you can come by and of course I would like to talk to you. And people are in that sense social. Still interacting with each other. At [CONSTRUCTION ORG.] that is something that is very positive for the risk culture. So seeking interaction with each other, both with risk managers and with the team itself. What is also positive is that we now speak the same language, I think. Yeah, I don't know if that's an aspect per se, but we kind of have that. The language exists. I happen to know that [subsidiary cluster specialized in general construction], that

		the language there… we are now working on uniformizing that a bit. So there the language is the same. If you speak the same language, you can understand each other. Negative aspects: time it takes if it is not yet clear what the results will be. It's getting better. Yes, a bit of that island idea, but that's for the whole of [CONSTRUCTION ORG.] then. We're busy there, busy there, busy there. And we all have targets, and we have to stick to them and that's what connects us, the targets. But for the rest: there is connection, but that is on the island. There is no inter-island cruise.
4.4	Where is there room for improvement in the current risk culture? What are the 3 most important aspects that are currently missing from the risk culture at [CONSTRUCTION ORG.]?	Yes, the most important thing is simply: openness. That we also dare to say: this is not necessarily an interesting project on paper, but we are going to accept it for this reason. That openness. I understand that that is sensitive, because it is a bit political here at times. But, I don't like politics. I like to talk openly and honestly with each other. That would really be the very, very, most important thing. Then risk management would be much better here.
4.5	What barriers are there to changing the culture within [CONSTRUCTION ORG.]?	The islands I mentioned. Is there one culture, I don't think so. I also think culture is not objective anyway. I did business administration myself, there you are also completely bombarded with culture this, culture that. And what appeals to me in practice, especially at a company like [CONSTRUCTION ORG.], that if you come to a different branch of a sub-[subsidiary], the culture is different there. In fact, they all have their own character. Also within a sub-[subsidiary] where they have a culture of non-openness, there are still people who strongly oppose it. So I always think culture…You have to deal with the fact that every branch has a different culture anyway. For example, I didn't dress very formally today. Because I'm looking for a bit of a middle ground. I have people in the workplace who walk in a dirty sweater and jogging trousers, and here people suits. But that is also how people interact with each other, the language people speak to each other. Here they speak a different language than in [branche location]. In [branche location] they speak much more Dutch than here. And, well, we also speak Dutch here, but corporate Dutch.. So that's already another with culture. You can recognize patterns here and there, but I don't know if you should call that culture. Yes, I think you want to change some patterns. I have trouble with the word culture, that's what it really is.
4.6	How does culture affect RM/ERM implementation?	For risk management, project risk management, and then I think similarly to the new initiative that is now running with DiPro, we are going to digitize. That is therefore positively influenced, or at least less held back by the culture that was there before. That's actually going much smoother now, so that's two thumbs up. For ERM, I'm assuming it's here, in [company corporate headquarters], and it's still in management muck.. If it is in THAT language in 8 sentences, where you are still sort of trying to figure out what is meant…That you shouldn't bring that to the [subsidiary clusters] by the way. But I think it just really, really has to be in simple language. And if it's not immediately clear what it's for, then it's just not good. And that doesn't mean I don't think it can't be useful, because I think it can be very useful. I also have ideas about how it can be useful. I don't know if that's going to be it, I'll have to see that and I'd like to have that explained in 3 sentences, in Jip and Janneke language. Because if I get it, a lot of people get it.

Respondent: Emp_K
English version

Interview date: May 2023

Background respondent	
function course work experience number of years working at company	**Function** • [high-level executive position] Internal Control, since January 2022 of [construction org.], previously served as head of the consolidation and reporting department • responsible for all external reports, financial reports, internal financial reports • Responsible for Operating plan, from the [parent company] perspective. • Member of the Audit Committee, there is a quarterly meeting in which we also discuss financial reports, accountability for the past period as well as specific topics that are dealt with in a quarter, including, usually in the third quarter, and an update in the fourth quarter, the update on ERM, the scores, the output on the [requirements framework]. **Education** • trained as a chartered accountant **work experience** • [25-30] years work experience • Worked for a long time at [accountancy firm] as an accountant and also for a number of years in the transaction server practice. From [accountancy firm] I went to [technical firm]. I was head of consolidation & reporting there and from [technical firm] to the [construction org.] in 2020. **number of years working at [CONSTRUCTION ORG.]** • with the [construction org.] since January 2020 In the role of Head of Consolidation and Reporting since '22 as [high-level executive position] Control.

1	Expertise	
1.1	How do you deal with risk management in your work? Do you have any formal risk management responsibilities?	In January '22, based on the new [operating model], RM moved from governance, risk and compliance to finance. So that applies to both the [parent company] and the [division]s. The [division]s have existed since January '22, and the risk function falls under Finance. So [heads of risk and control dept] report directly to [finance director] who has a risk management function and a role and reports to me. So that's the formal role and how that's placed. In that context, from the [parent company] perspective, we from the [divisions] also consolidate the findings from ERM and the [requirements framework]. And we also feed that back to EXCO from a consolidated level and also to the Audit Committee. The Audit Committee then also provides feedback to the Supervisory Board. This is especially the case in Q3, Q3 has the most findings, in Q4 we do an update because there is also a relationship with the annual report in which all kinds of in control statements from the [divisions] and from the [parent company] are also drawn up. We look at how those risks and the activities in response to the [requirements framework] are developing, what the final score is and are you able to issue an in control statement from ExBo as well. So of all those platforms, tools and reports that We have and exercises that we do, the ExBo can say, yes, we are in control and where we may still have gaps, this is the follow-up, these are the actions that we take on that to take.
1.4	How do you view risks and risk management in construction/construction projects?	It is good to distinguish between inherent risk and residual risk. Inherent risks, for example in the field of safety or project execution, can be high. They can be complex, depends on your portfolio. These can be complex projects that also involve a high risk, so that all kinds of procedures and all kinds of risk measures reduce that risk to an acceptable level. And what is considered acceptable is determined by the risk appetite. It is determined by EXCO from a [parent company] perspective with input from the [divisions]. All [divisions] also determine their risk appetite based on the 17 key risk areas, for a strategic period. This will continue for a number of years, unless circumstances change in the world that give cause to adjust that appetite. Then you look periodically, now also from the [divisions], how does the residual risk relate to the risk profile? The input, also from the [divisions], is consolidated, which sometimes results in deviations. If there is a very large deviation, you have to have a good dialogue about that from the [parent company]. We also do this with the individual Members of the EXCO. In the end you say, this is the consolidated picture and that is also endorsed in the ExCo, which is then reported to the Audit Committee. We have had quite a few problematic projects in the past, but we have de-risked a lot through the divestments we have done recently. I think the risk profile is decreasing and you can see the financial impact of that. What is important in the execution of projects is the tender process. If you take on good projects with a risk profile that is manageable, that you are well prepared for and properly weighed up, including in your contracts, then the execution mu st also go well. But there is sometimes a discussion about this within the construction industry: whether it is in the execution or in the tendering. I think that's a combination of both. In tendering you try to prevent that as much as possible. You try to tie everything off properly in the contracts and that the execution also matches that. And then there is also knowledge and skills, whether you are used to working on complex, risky projects or not, there is a different skill set. You learn a lot in large complex projects, but the risks are greater.
1.5	How do you use the knowledge you have gained about risks and RM from	If you do a very large building in [foreign city] once, but then you never do it again, and by the way, in [foreign city] you work mainly with subcontractors, how can you still leverage that in the [company divisions]? So that we can use what we have learned there so that we can do things much smarter and more efficiently. I sometimes wonder, but from my view that means

	previous projects and/or work situations in new projects and/or work situations?	that the playing field can develop. The more learning, the more leverage , the more you can at some point mitigate the inherent risk you have on such a project. Lessons learned are included in the tendering. Where did something go wrong in the past in a certain project and to what extent you can also take that into account with the tendering and which aspects you should pay attention to in order to prevent such situations. There is always a handful of projects on which we run a high risk. We therefore identify them as key projects within [construction org.]. You can see on those projects that in addition to the hundreds or thousands of projects that we do, we run and have run great risks. And if you also look into the past, you see that it runs into the hundreds of millions there. And what do we learn from that? Sometimes these are issues that arise in new situations that may have never really happened before, but I think it often also comes down to good contract management, timely procurement, good coordination of the design. Well, if something goes wrong there, then because the projects are so big, it really has a major impact.

2	2 - Implementation of (E)RM in practice	
2.2	What do you think of the current RM processes you deal with in your work? What has been achieved in this area? What can be done better?	I think a lot has been accomplished. What is very important is the implementation of the new structure and from those [divisions] that previously took place more top-down, much more is now taking place bottom-up. A very important observation, also in the field of ERM. If you look at those 17 key risks, that was often an exercise that took place at a consolidated level with EXCOs and now you see that happening much more at [subsidiary cluster] level, [division] level. This is also reported on a periodic basis and there you see a huge leap compared to previous years, so also a lot of maturity that that brings about, more awareness. What could be improved? Every year we try to take a step towards higher maturity in ERM. An assessment takes place by [CONSULTANCY/ACCOUNTING FIRM], an independent third party that looks at those themes, at those processes, what is the maturity of [CONSTRUCTION ORG.]. And every year you try to get a few 10ths of a percent better in that. An important step is, for example, at the time everything was put in Sharepoint and Excellets, now you see that we have implemented a Bric tool for all those ERM, [requirements framework] and also other processes. The [requirements framework] is linked to the ERM, on the key risks you have the [requirements framework], to tie off those risks. That is actually the Internal Control framework. And from there it goes back to the processes in the [divisions] and controls, and these are also carried out periodically to see where self-assessments are being made. That's how it moves up the ladder. That is a huge step in terms of reporting, recording, also in terms of maturity of [construction org.] in this area. That could improve, can still improve. What's gotten better, the maturity is increasing in terms of the rollout. And then you will also see, and what we have to work towards is to be able to generat very good and meaningful reports.
2.3	What are the main differences between risk management at ERM and RM at other levels?	We have our strategy and our [operating model], which is the structure that accommodates it. Then you check whether this is the best structure to accommodate this strategy. From that [OPERATING MODEL] you get the [parent company] policies. From those policies you go to the [requirements framework] which then also verifies this and from that strategy you look at the key risks and the [requirements framework] is then linked to those policies, linked to the strategy and then you go to the processes and verify within [division] and within the [parent company], how the policies must be complied with, of course. How we do it? We have a [requirements framework] for that. What's the risk? We have ERM for that. And so you can make that link and that alignment with each other. And in the [division], certainly in the [subsidiary clusters] and the [subsidiaries], that's where it all takes place. There you have the the processes. These may not always be completely aligned with the [requirements framework], they cover it, but they are not aligned. Well, you attempt that in the [subsidiaries] under the responsibility of a [division] to align that again. In the [subsidiary clusters] and [subsidiaries], the focus is on procedures and processes and here in the [parent company] it's more the focus on context.
2.4	Which steps/parts go wrong in the execution of the RM cycle and what is the reason for this? Can you give an example?	There is always a lot of discussion about interpretation. So how clear is a [requirements framework] in the context of the risk management cycle, in the context of policies and what have you? Interpretation can lead to one saying: I think it is effective. But you can also interpret that differently. Documentation substantiates that you are effective. That someone else says: well, I don't really think that or that could be taken up a notch. There may be a difference in interpretation and you have discussion and dialogue about that. So also from the assessor, risk management tries as much as possible to align it with internal audit, we also have a lot of dialogues with that, because what do you mean by this or that, OK, then I will go back to… this is what we mean by it, no, this goes too far, this is something that... Interpretation generally I think is an important one and that lies in documentation, how do I interpret the [requirements framework], how do I execute that? And how do I achieve effectiveness with that, or not? And we sometimes have discussions with internal audit, like: we think it is effective. They then say: no, I don't think it is effective.
2.5	In which areas should the RM cycle be improved?	Clearer [requirements framework] documentation, that's my belief. Well, look, the ERM is of course the starting point of your existing RM, so that is the context you give to the organization. So, for example, safety, what measures are you taking to limit the incidents? You determine that on an organizational level, don't you? Now you have more interaction with the [division], but those are also largely pre-determined. Well, that has repercussions in how you ultimately secure your processes in the [subsidiary clusters], so the framework, the standard so to speak, becomes via that ERM; from ERM to [requirements framework], from the policies, also to [requirements framework] are determined.
2.6	How or where can (E)RM add value to existing RM and	You have ERM to manage your risks, seen from an overarching framework. So with ERM you create a playing field and a framework of standards. But also with clarity of, when do you have a risk? Yes, that has to do with the probability of

	business processes?	something occurring and the impact. If the likelihood is low but the impact of something is very high, then you can start taking many mitigating measures… For example, you know that there are high fines for speeding, but you know you will never get caught, sure, then drives too fast. So you try to deploy that framework there and then plot things out. It has to do with likelihood and impact and if both are high then I have quite a high risk profile. Like on safety and on execution, you can say, I don't want to take any risks. So somewhere there is a framework, how many risks are we willing to take and that is also a decision, also based on a strategy. If you say, I'm working on quite a lot of new innovative things, well that's a higher risk profile, but are you willing to take that risk? There may be something making it feasible, ie you have the funding for it or you have great resilience , and as soon as the resilience improves, for example, you may be able to do even more. If the resilience is somewhat more limited, your risk appetite also decreases. If I have a blooper there and they are somewhat larger projects, the size may also have something to do with that. Okay, I am resilient but I'll do my smaller projects first. If I have great resilience and my solvency is very good, I can handle higher risk on bigger, innovative projects. If it goes well we'll be lucky and you decide that in your ERM. And if you shift to digitization or industrialization, for example, it can mean that your risk profile or your risk appetite decreases. You can imagine that you could make a link with the automotive industry… if I start working more industrially, and there is one mistake, everything can be affected. It can also cause reputational damage... ERM is again a framework for that through which you can have a dialogue and that you can also plot it and interpret it.

3	Interaction between ERM and RM within [CONSTRUCTION ORG.]	
3.1	How is the "tone from the top" regarding RM and ERM? Can you indicate what you think is good and where there is room for improvement with regard to the policy on RM and ERM?	Well, what's good about it: that you think from different layers. That people are working on risk management, so what more you see from the top down, setting up the implementation of ERM, implementing [requirements framework], integrating the risks, you see that increasingly seeping through, cascading to the organization especially with the implementation of that new [OPERATING MODEL], I think that's very strong. In it strengthening the maturity in that area. Yes, That is something where there is room for improvement and there is also an action plan to realize that. I can imagine in the business that people think: I want to build, that's what I love, that's my passion. And that you start looking at opportunities, but you also have to think about the back end, every opportunity also has a risk associated with it. I think a good entrepreneur also considers where the opportunities lie, but I also have to keep those floodgates closed at the back of course. That's good entrepreneurship. So on both sides, opportunity and risk. Like putting on your seat belt, preferably you just want to get in your car and drive away. These considerations are now all very common, but when I first put on the seat belts I thought: what am I going to do with that thing, I feel trapped. That is more movement there now and it's getting more of a platform.
3.3	Can you indicate how risks are cascaded from ERM to program or project level and escalated/aggregated the other way around? Can you give examples of this?	So cascaded from ERM [requirements framework] and that's how it goes to the projects, that's how it is from the [divisions], also for people who are constantly on those projects and from risk management.
3.4	Can you indicate how communication is progressing with regard to setting up and/or optimizing ERM processes between stakeholders?	We also do external checks. Then we look at our ERM processes, how mature they are and that in turn provides a basis, also for the action plan for the findings from it. These also give rise to, like, okay: we should focus on that in order to regain maturity and thus strengthen our entire risk management system and processes.
3.5	What barriers are there to performing RM and ERM on construction projects?	What you see is that it is full-steam ahead in construction. Due to time pressure, perhaps due to margin pressure. Yeah, we have to, because hey, otherwise we won't make the deadline. Of course, this can lead to you saying it can be taken up a notch. The culture should be hey, wait a minute, this is… stop! this is not going well, or stop, this is not going well, but hey, then I'll get chewed out, so I won't say anything. So I think culture is a very important element in which you feel safe, physically, but also psychologically to name the things that may also have a risk. And that could mean, and that is how people deal with it, then they are 'late' and that is a big no-no. So they may continue, but again with a risk to safety, for example. If the culture is not good, not safe, if we do not adhere to the values and do not consider it important that those values are there. We talk a lot about sustainability, but that includes more values, such as psychological safety. Yes, we work together, we say 'speak up' etcetera; is of course a very important element and yes, I don't know if we are all there yet. If you make a mistake people think quickly, you will be judged for that. That can cause fear, but you should actually embrace it and see how you can improve it. But it can also be paralyzing. If you are no longer allowed to make mistakes, you no longer take risks.
3.6		

4	Behavior and culture	
4.1	How does behavior affect RM at [CONSTRUCTION ORG.]? Can you name examples? Where is there	Well, I've already mentioned that a bit, haven't I, what influence that is about. That is of course very big.

Summary interview – ANONIMIZED
Respondent: Emp_K
English version

	room for improvement?	
4.2	What barriers are there to changing RM behavior within [CONSTRUCTION ORG.]?	In particular, it is about the execution. The complexity is not in identifying risks, I think. Or that's the least complexity. It's mainly in I think in the execution.
4.3	Can you describe the current risk culture within [construction org.]? Can you name examples of this? What are the top 3 most dominant aspects in a positive and negative sense?	That is taking shape, getting more of a platform. You can already see that in the appointment of people. So new positions have been created on the risk management side of the business. In terms of Human Resources it has also been strengthened. That also indicates that the topic is important.
4.4	Where is there room for improvement in the current risk culture? What are the 3 most important aspects that are currently missing from the risk culture at [CONSTRUCTION ORG.]?	Yes, I think you have to link all of those to the wider company culture. It's not only about risk culture, but I think you can link it to organizational culture. The important thing is that you feel psychologically safe. I think there is a very important element in the organizational culture that contributes to increasing the risk culture. In other words, strengthening the risk culture.
4.5	What barriers are there to changing the culture within [CONSTRUCTION ORG.]?	The challenge is to make people feel more engaged and involved with the company. That is important, that has also been measured: if you do not feel involved, it can have a negative impact on performance. And I think lack of psychological safety is an important one and of course we have to promote our values. Eg cooperation, reliability, ownership. You see less ownership, if something falls between the cracks, so role clarity is also very important, I think for safety. The clearer it is who is responsible for what, the better and safer and clearer it is what is expected of you and also of course in the risk culture. Yes, that's my responsibility, I have to watch that, that belongs to me. Then you can see that that is also a good reinforcement. I think those are the values we strive for. That includes commitment. And I also think, yes, the safety that you can link to this. If you reinforce that in terms of culture, I think that will also have a positive effect on the whole, but also in this area.

Respondent: Emp_L
Datum interview: april 2023

Achtergrond respondent
Functie: [enterprise risk manager] van de [parent company].
Opleiding: Registeraccountancy. Ook social analytics aan de MIT.
Werkervaring: Eerst gewerkt als accountant en daarna nog een stukje deals en M&A., afgelopen 10 jaar in de offshore industrie gewerkt, ook onder andere op het gebied van risicomanagement.
aantal jaren werkzaam bij [CONSTRUCTION ORG.]: [0-5] jaren

1	Expertise	
1.1	Op welke manier heeft u te maken met risicomanagement bij uw werkzaamheden? Heeft u bepaalde formele verantwoordelijkheden mbt tot risicomanagement?	Nou ja, in principe is dat je werk. Dus wat wij hebben gedaan is, we werken hier met een ERM [parent company] policy. Die hebben we als eerst gemaakt, die moest worden geupdatet. Dat is in principe de basis voor alles. Vanuit de [parent company] geef je daarbij de richting. Uiteindelijk komt alles samen bij de [parent company] . De [division]s stuur je aan aan de hand van policies, die rapporteren, hier consolideer je en hier heb je ook de gesprekken met de ExCo. En ook, er is een Risk and Control Committee waar functionele verantwoordelijkheden zitten op het gebied van IT, finance, legal, compliance en daar worden dit soort thema 's besproken.
1.3	Bent u in voldoende mate voorbereid op uw taken mbt RM en ERM?	Ja
1.4	Hoe kijkt u tegen risico's en risicomanagement aan in de bouw/bij bouwprojecten?	Voor mij gaat risicomanagement over de informatiestroom. Echte functionele risicos die je binnen je eigen functie kan beheersen, binnen jouw eigen controle omgeving, dat zie ik eigenlijk als de meer 'makkelijke' risico's, maar waar het gewoon fout gaat is de interacties. Met een bouwproject moeten heel veel verschillende functies met elkaar samenwerken. En, het is ook het gehele lifecycle van een project. Uiteindelijk begin je natuurlijk met een contract en een tender, er wordt scope afgestemd. Die voer je uit en als dat niet goed met elkaar loopt, dan zitten daar ook risico's, ook financiële risico's natuurlijk, dus niet alleen op het gebied van kwaliteit. Ik denk dat bouwprojecten, dat zijn complexe projecten, ze kunnen ook dynamisch zijn, dus daar is zeker een verhoogd risico op gebied van die interacties.
1.5	Op welke manier gebruikt u de opgedane kennis over risico's en RM van eerdere projecten en/of werksituaties bij nieuwe projecten en/of werksituaties?	Ik heb van heel veel werkervaring in de offshore industrie en dat is misschien nog dynamischer dan de bouwindustrie, want daar zijn die projecten ook nog eens wendbaar of ze verplaatsen zich. Hier bouw je op de grond, daar bouw je op de zee en daar kunnen ook golf komen van 15-20 m en dan moet alles doorgaan. Dus daar is het eigenlijk nog iets dynamischer, denk ik, zelfde complexiteit met name je cultuur, hoe ga je om met cultuur, dat is natuurlijk een heel belangrijk risico en daar moet je ook de balans zien te vinden tussen je procedures en bijvoorbeeld waardes die je niet kan laten vastleggen. Ja en dat probeer je ook mee te nemen in je werk. Met cultuur bedoel ik werkcultuur. Safety bijvoorbeeld. Kijk cultuur is toch iets wat je niet kan vastpakken, maar het bestaat wel. Dus daar moet je wel mee omgaan en hier moet je toch wat meer waardes gaan sturen. Je kan wel allemaal mooi procedures maken, maar uiteindelijk zijn het wel de mensen die het moeten uitvoeren en de interactie tussen die mensen. Ja, die is natuurlijk heel belangrijk.

2	2 - Uitvoering (E)RM in de praktijk	
2.1	Kunt u het risicomanagement cyclus/proces beschrijven die u toepast in uw werk? (technieken en werkwijze)	Wij volgen de klassieke RM cyclus op basis van 17 geidentificeerde risicodomeinen. Dat doen het hier op kwartaalbasis. En daar kijk je dus naar interne, externe events, gebeurtenissen wat daarvan de impact is maar ook de likelihood, en de tijd dat de risico zich voor gaat doen. In de praktijk zie je waar de grote inschatting en veranderingen inzitten. Een risico kan je beheersen, en daarvoor heb je informatie nodig. Als je die informatie hebt kan je juist de controlemaatregelen bedenken, maar die informatie is vaak onzeker en gedurende de tijd krijg je meer of minder informatie en dat kan natuurlijk impact hebben op je likelihood, waardoor je risicoprofiel kan veranderen. Wat je dan probeert te doen is dat risico wil je monitoren ten opzichte van je risicobereidheid. En daar heb je natuurlijk ook nog toleranties tussen zitten en op die manier probeer je te kijken waar je staat. Dat is onderdeel van het risico assessment en daarnaast moet je natuurlijk kijken, past mijn risicostrategie daar nog wel in. Als jij ziet dat je continu boven je tolerantie zit, dan moet je op een gegeven moment afvragen, wat betekent dat dan voor mijn totale risico hè? Moet ik mijn bereidheid aanpassen of moet ik misschien het risico wel afstoten of moet ik dat bijv. gaan verzekeren. Dus die strategie is belangrijk en continu in ontwikkeling. Daarover moet je ook communiceren met je stakeholders en in dit geval is dat de ExCo en de Risk & Compliance Committee want risico's zijn dynamisch. Dus die zijn met elkaar verbonden, want hier kan iets gebeuren dat heeft weer impact op die plaats in de organisatie, dus je moet daar goeie communicatie hebben. En uiteindelijk dan de rapportage in het jaarverslag, dus ook naar de externe wereld moet je communiceren, maar ook naar de Raad van Commissarissen, dus dat is eigenlijk de cyclus die je hebt.
2.2	Wat vind u van de huidige RM processen waar u mee te maken heeft in uw werk? Wat is er bereikt op dit vlak? Wat kan beter?	Kijk, ik heb altijd een mooi voorbeeld. Je hebt twee teams, die gaan een berg beklimmen. Team A en team B. Team A heeft de laatste technologie, die kan het weer voorspellen, die kan die berg helemaal scannen. En die zegt, op basis van de voorspellingen ga ik klimmen. Team B heeft die technologie niet, het zijn mensen die allemaal een keer die berg hebben beklommen, en die nemen toch wat meer equipment mee voor als het gaat regenen etc,. Nou, welk team gaat er als eerste boven komen? Ja, als alles klopt team A natuurlijk, maar als halverwege blijkt dat het toch anders is, dan heeft team A een probleem. Maar team B, die klimt gewoon lekker door dus jouw risicobereidheid hangt ook af van de mensen die je hebt en welke procedures je hebt ingericht. Kijk team A die stuurt op data, wat je vast kan leggen in procedures, maar daardoor kunnen ze ook dus niet meer afwijken. En team B stuurt op informatie en dat is wat wij nu doen. Met risicomanagement, heeft het allemaal te maken met onzekerheden en om onzekerheid om te gaan heb je informatie nodig en je hebt bepaalde

Samenvatting interview – GEANONIMISEERD
Respondent: Emp_L
Datum interview: april 2023

		controles nodig. Dat is een mix. Uiteindelijk waar je heen gaat is ook als je bijv. na gaat denken over toleranties of risico thresholds, dat is allemaal heel mooi, maar je moet wel die data hebben. Waar je ook over na moet denken is de datakwaliteit en is die betrouwbaar. Vervolgens als je meer dan 100 projecten hebt dan wil je wel weten per project het risicoprofiel. Nou, dat moet wel allemaal vast worden gelegd in een database en er moet wel IT ondersteuning voor zijn. Dat is wel waar je aan gaat werken als je wat in de vakvolwassen profiel komt met je risicomanagement om die onderliggende data te maken, beter te krijgen, maar ook om gebruik te maken van die technologie. Om gewoon sneller en makkelijker die informatiestroom te laten gaan.
2.3	Wat zijn de belangrijkste verschillen tussen risicomanagement bij ERM en RM op andere niveau's?	In principe is ERM het hoogste niveau. Je werkt vaak met een risicotaxonomie, zoals dat heet. Het allerhoogste niveau is, strategisch, operationeel, financieel en compliance. Het niveau eronder krijg je dus bijvoorbeeld de 17 gebieden die wij hebben, denk aan sustainability, supply chain, allemaal dat soort zaken en dan kan je nog dieper gaan natuurlijk op supply chain niveau of op projectmanagement niveau, kan je ook op dat niveau risico events gaan identificeren en daar ga je ook meer kijken naar welke controlemaatregelen horen daarbij en welke wil ik daarvoor inrichten. Dus daar zit je eigenlijk op een lager niveau. En op ERM niveau kijk je dan, als ik naar het supply chain risico kijk, ja, wat is er nou gebeurd in dat proces? Zijn bepaalde controles niet effectief geweest. Nou, dat kan een intern event zijn, waardoor je totale risicoprofiel misschien verandert op ERM niveau.
2.4	Bij welke stappen/onderdelen gaat het mis bij de uitvoering van het RM cyclus?	Uiteindelijk gaat het over communicatie en informatie. Risicomanagement is gewoon een informatievoorziening. En als de informatie niet tijdig naar boven komt, ja, dan weet je het ook niet en daar gaat het vaak mis. Het gaat vaak ook mis als er nieuwe mensen komen. Projectmanager die wisselt, nieuw iemand, andere ervaring, andere inzichten. Daar zul je, tenminste het hoeft niet mis te gaan het kan ook goed beter gaan natuurlijk, maar dat zijn wel momenten waar waardoor het verandert.
2.5	Op welke onderdelen zou de RM cyclus verbeterd moeten worden?	Wij zijn nu mee bezig om goede toleranties te bedenken. Wat wij hier doen is de risicobereidheid van [CONSTRUCTION ORG.] definiëren op corporate niveau. Vervolgens is het aan de [divisions] om hun toleranties te bepalen. Dus wij zeggen bijvoorbeeld dat je die 50 km per uur mag rijden en zij zeggen, nou we willen af en toe 53 rijden en dan is het aan ons om te bepalen van oké, hoe ga je dat dan in een veilige omgeving doen? Prima, wat doe je dan als je niet meer 53 wordt rijdt? Kan je dan weer terug? Dat is wat wij vanuit ERM [parent company] monitoren, maar de bereidheid die je kan dragen, dat is iets wat op [division]niveau wordt ingeschat. Wat de uitdaging is van een RM functie is dat je toch een soort tweede lijn bent. Daar bedoel ik mee dat je niet verantwoordelijk bent voor het risicomanagement, dat zijn de mensen die het doen. Dus de projectmanager is verantwoordelijk, niet de risk functie. Die faciliteert dat wel. Waar het verbeterd kan worden is dat RM steeds meer embedded wordt in the day to day work van de mensen en dat het niet een rapportage vereiste is één keer per maand. Daar is wel ruimte voor verbetering. En dan is de vraag van, waarom doen mensen dat dan niet? Waarom zit dat niet zo embedded? Heeft dat te maken met documentatie of niet?
2.6	Hoe of waar kan (E)RM waarde toevoegen aan bestaande RM en bedrijfsprocessen?	Uiteindelijk is het gewoon risicomanagement. Als jij in een hele stabiele omgeving werkt waar alles voorspelbaar is, heb je eigenlijk geen risicomanagement nodig. Wij werken in een complexe wereld. En complexiteit betekent dat er ontzettend veel interacties zijn, extern maar ook intern. Die interacties, die goed monitoren, zorgen dat het allemaal consistent is en dat mensen goed begrijpen van wat wordt van elkaar verwacht, ik denk dat daar een hele belangrijke rol voor RM zit. Uiteindelijk draait het gewoon om conflicterende verwachtingen vaak en hoe ga je daarmee om? Dat is je risico. Want als we allemaal met elkaar aligned zijn, dan gaan we altijd per definitie de goede weg op en volgen we onze risicobereidheid. Dat zie je vaak binnen bedrijven, vanuit ERM is wel leuk omdat je natuurlijk naar het hele systeem kijkt. Kijk, een project wil een stukje wendbaarheid hebben. Die moet met die verandering om kunnen gaan. En die wil noodzakelijker wijs niet alles vastleggen, maar finance in de organisatie, heeft een heel groot belang dat alles vast is gelegd. Nou, dat is een conflicterende doelstelling en die je wel moet accepteren. Want het is nou eenmaal hoe het bedrijf is ingericht. Maar je moet er wel voor zorgen dat het niet naar een of twee kanten uitschiet. Ik denk dat ook de rol is van van risicomanagement om die dialoog ook goed te houden en ook te zeggen wat voor soort controles heb je dan nodig? En dat je niet een te geordend systeem ervan maakt. Chaos is niet goed, je moet de minimale structuur hebben, maar ja, teveel orde is natuurlijk ook niet goed dat gaat ten koste van je wendbaarheid en de cultuur.

3	Interactie tussen ERM en RM binnen [CONSTRUCTION ORG.]	
3.1	Hoe is de "tone from the top" mbt tot RM en ERM?	Tone at the top is sterk denk ik. Er is hier ook een Risk en Control Committee wat advies geeft aan de ExCo. De voorzitter is de CFO en die is dan ook onderdeel van de ExBo. Je hebt natuurlijk de auditcommissie, Raad van Commissarissen die ook meekijken. Ja, je hebt natuurlijk als beursgenoteerd bedrijf heb je ook allemaal governance verplichtingen. Ja, ik denk dat het tone at the top gewoon sterk is.
3.2	Wat is of kan de toegevoegde waarde van ERM zijn bij [CONSTRUCTION ORG.]?	Wat [CONSTRUCTION ORG.] wil bereiken, dat je gewoon je strategie kan uitvoeren. Uiteindelijk draait het om de strategie. Want het zijn de risico's waardoor je strategie niet realiseert. Die risico's gaan over het hele bedrijf heen en dat is waarom het Enterprise Risk Management heet natuurlijk. Risicomanagement is gewoon onderdeel van goed ondernemerschap.
3.3	Kunt u aangeven hoe risico's worden gecascadeerd vanuit ERM naar programma- of projectniveau en andersom geescaleerd/geagregeerd? Kunt u hier voorbeelden van geven?	Het cascaderen gaat deels formeel, deels informeel natuurlijk, maar formeel moet je denken aan je governance structuur. Als [parent company] ben je meer strategisch en coördinerend. En je zet dus de policies vanuit de [parent company], dus dat zijn de verwachtingen. Nou, die policies die moeten worden vertaald in procedures. Dat gebeurt op de [division]s en vervolgens moeten die procedures, die moeten weer uitgevoerd worden en dan krijg je werkinstructies en dat zit dan weer op het allerlaagste niveau. Maar het moet consistent zijn met elkaar, dat is de formele communicatie. En dan informeel wordt natuurlijk ook wel gesproken. De [CONSTRUCTION ORG.] waardes natuurlijk, die zie je overal dus, op die manier wordt dat gedaan. Wat het cascaderen betreft, gaat het eigenlijk ook een beetje de andere andere kant op. Wij zeggen op hoog niveau,

		dit zijn de risicogebieden, maar de de feedback loop komt ook vanuit wat er gebeurt in de projecten. En, en je wilt dat bepaalde incidenten, wil je graag dat dat naar boven wordt gerapporteerd, zodat wij weer kunnen zien van nou, oké, wat betekent dat nou? Is dat een incident of is dat een structureel probleem? Als er iets structureels is, zou je weer je policy misschien willen aanpassen of je risicostrategie. Dus het is niet alleen top down, maar ook bottom up wat belangrijk is.
3.5	Welke belemmeringen zijn er voor het uitvoeren van RM en ERM op bouwprojecten?	Je hebt je procedures en je hebt de beslissingen die je neemt en die moeten wel met elkaar consistent zijn. Als de projectmanager andere beslissing neemt omdat die zegt, ja, die procedures zijn wel goed, maar nu doen we even wat anders dan de mensen die er zijn weten niet meer wat er gedaan moet worden. Dat is ook wel een belangrijk onderdeel van risicomanagement, dat je zorgt dat die tone at the top ook wel consistent is met de procedures, maar ook hoe je uiteindelijke beslissingen neemt. Dat kan een grote belemmering zijn. Risicomanagement is gewoon belangrijk, als ik bijvoorbeeld de offshore industrie neem, er zijn bepaalde ongelukken die kunnen gebeuren. Nou, om een bepaalde verzekering af te sluiten, soms moet je wel eens aantonen dat je een goede risicomanagement hebt. Hetzelfde geldt als een BV failliet gaat en je hebt geen goed risicomanagement gedaan of niet over risico's nagedacht dat kan jou verweten worden dat je onbehoorlijk hebt bestuurd. We zijn in een veel meer juridisch, compliance-gedreven wereld terechtgekomen. Ik denk dat risicomanagement wel steeds belangrijker wordt, maar ik denk niet zozeer het technische risicomanagement, maar meer die interacties.

4	Gedrag en cultuur	
4.1	Welke invloed heeft gedrag op RM bij [CONSTRUCTION ORG.]? Kunt u voorbeelden noemen? Waar is er ruimte voor verbetering?	Ja, een van de belangrijkste dingen. Dat is net wat ik zeg, die tone at the top, procedures en hoe je beslissingen neemt, dat moet consistent zijn. Als dat niet consistent is, dan inconsistentie creëert een soort onveilige omgeving. Mensen weten niet waar ze aan toe zijn. Dat is ontzettend belangrijk, cultuur. Kijk, ik zeg altijd mensen gedragen zich naar wat zij denken dat hun baas belangrijk vindt. Dus als jouw baas afwijkt van de procedures, dan gaan mensen uiteindelijk die baas volgen, dus dat is gewoon hoe het werkt. Dat is ook wat je bijvoorbeeld ziet binnen veel bedrijven, maar ook binnen [CONSTRUCTION ORG.], als je ziet dat het afwijkend is, hè, dan moet ook iedereen bereid zijn om iets te zeggen erover en dat moet je natuurlijk ook stimuleren. Nou, en dat is ook een stukje gedrag natuurlijk, ja.
4.2	Welke belemmeringen zijn er bij het veranderen van gedrag op het gebied van RM binnen [CONSTRUCTION ORG.]?	Als je weer kijkt naar team A en team B, team A heeft bijna geen autonomie meer want alles ligt vast in procedures. En je hoeft ook bijna niet meer competent te zijn, snap je, en er is ook bijna geen sociale interactie, omdat je eigenlijk alles vastlegt. Dan raak je wel de kern natuurlijk van hoe de mens werkt en hoe gedrag werkt. Ja dan creëer je eigenlijk een omgeving waar jij eigenlijk niet meer kan afwijken en waar eigenlijk alleen nog maar feedback-gestuurd gedrag kan plaatsvinden. Waarin Team B, die zullen bepaalde minimale procedures hebben maar ja, als je dan mag afwijken, dan moeten ze met elkaar in gesprek en dan mogen ze ook en dat kunnen ze ook, want ze weten met wie ze moeten praten. Nou, dat zal veel sterker uiteindelijk zijn op langere termijn dan team A. Team A zou heel effectief zijn als de wereld heel voorspelbaar was, maar dat is het gewoon niet. En daar kom je nu wel een beetje achter. Dus is het juiste mix van beheersingsmaatregelen en procedures. En daar ligt wel de rol van een corporate. Die staat wat verder weg van de business en als die te dominant wordt of teveel in controle gaat, ja en de business die zegt niks meer dan gaat het fout.
4.4	Waar is er ruimte voor verbetering bij de huidige risicocultuur? Wat zijn de 3 belangrijkste aspecten die nu missen bij de risicocultuur bij [CONSTRUCTION ORG.]?	Als je uitgaat van systeemdenken dan begrijp je dat cultuur eigenlijk een emergente eigenschap is van een complexe adaptief systeem. Dan weet je ook dat die interacties ontzettend belangrijk zijn en dus moet je daarop sturen. Daar moet je bijv. vaak een facilitator opzetten want organisaties zijn vaak erg hiërarchisch ingericht vanuit de beslissingsbevoegdheid. Dat slaat eigenlijk nergens op als je vanuit een dynamisch systeem naar een organisatie zou kijken. Ook belangrijk voor RM: zorgen voor een goede informatiestroom. Dus die interacties kunnen alleen maar goed gaan als er geen conflicterende belangen tussen zijn. En met die conflicten omgaan, dat is denk ik wat goed risicomanagement is. Ook belangrijk is de korte termijn waardes van efficiency en effectiviteit in balans te brengen met andere lange-termijn waardes. Ook heel belangrijk voor goed RM: je realiseren dat elk bedrijf door levensfases gaat, door groeifases. En elke groeifase is anders, dan heb je een andere type mensen voor nodig. Ja, dus als jij in een heel gereguleerde omgeving zit, heb jij misschien mensen heb jij geen cowboys nodig of hele creatieve mensen. Maar als jij in een stukje, in innovatie zit en als je dan hele controle gerichte mensen hebt, die heb je hier weer niet nodig. Dus het is continu bijsturen en dat is risicomanagement en op het moment dat risicomanagement een Excel spreadsheet is en een keer per maand even die openen, dan is dat eigenlijk geen risicomanagement, dan is dat gewoon compliance.
4.5	Welke belemmeringen zijn er bij het veranderen van de cultuur binnen [CONSTRUCTION ORG.]?	Hier kom je echt op organisatiekunde terecht natuurlijk en verandering… Als de top niet de waardes laat zien, gaat de rest niet volgen. Zo simpel is het en daar zit je uitdaging. Als de ExCo zegt, dit vinden wij belangrijk, en zij zeggen dit, maar ze doen vervolgens wat anders, dan gaan die waarden niet vliegen in de organisatie. Dus op dat gebied moet het wel echt vanuit je hart komen, het moet geen social of greenwashing zijn. Uiteindelijk draait het allemaal om het leiderschapsteam in mijn beleving.
4.6	Hoe beïnvloedt de cultuur de implementatie van RM / ERM?	Cultuur is hoe het systeem op dit moment werkt. Als jij een heel geordend systeem hebt, moet je niet verwachten dat er iets gaat veranderen als jij niet die orde weghaalt. Het systeem moeten veranderen eerst. Het gedrag is een gevolg van die interacties, dus als als die interacties consistent zijn, mensen voelen zich bekwaam en hebben een bepaalde autonomie, dan krijg je per definitie de juiste cultuur. Cultuur verplaatst zich niet door de tijd. Het wordt gevormd in de tijd. Als je zegt, ik heb een andere cultuur nodig, zeg je eigenlijk, ik wil een verandering. Ik ga altijd uit van die 3 basisprincipes: er moet een bepaalde autonomie zijn, er moeten bepaalde competenties zijn en er zijn sociale interacties. Dat heeft met elkaar te maken. Nou, als jij ziet dat op één van die 3 vlakken iets nog ontbreekt dan moet je eerst daaraan gaan werken voordat je die cultuurverandering gaat doen.

Summary Interview transcript – ANONIMIZED
Respondent: Emp_M

English version

Interview date: May 2023

Background respondent	
function course work experience number of years working at [CONSTRUCTION ORG.]	Function: [high-level executive position in finance]. I normally work and live In the UK. And so I am financially responsible for that [division]. I manage the organization together with [member of executive committee]. About 3 billion in sales. It's a pretty mixed business. So it contains construction, real estate, civil engineering, specialisms. I have been working [25-30 years] at [construction org.]. I had more or less a similar role before this, but for a Construction and Property business line. I mainly did the foreign countries, then also [subsidiary cluster specialized in general construction in UK] and [foreign division], but also many [European countries]. That was kind of what was on my plate. And before that I spent a long time in real estate within [construction org.] in the construction industry. Always had the financial role and worked in accountancy way before that. Education: I studied economics, then later got an MBA.

1	Expertise	
1.1	How do you deal with risk management in your work? Do you have any formal risk management responsibilities?	1.1/M - In the [FOREIGN DIVISION] it is organized slightly differently compared to the Netherlands. In [FOREIGN DIVISION] we also have a role in a management team with the abbreviation DA, delivery assurance. And together with that person I do risk management. Under delivery assurance is, say really the hardcore, technical construction company issues. That includes purchasing, internal audit and we also have interfaces with Enterprise Risk management. In a formal sense, we have a risk specialist In [FOREIGN DIVISION] who reports to me who I have periodic consultations with. That's the formal side with a formal agenda. Yes, we coordinate that with the [subsidiaries] and of course also coordinate that periodically with [city or corporate headquarters], with the Board of Directors.
1.2	How do you deal with ERM in your work? Do you have any formal responsibilities related to ERM?	1.2/M - Yes, I'm more on an ERM level, RM is of course for the most part, a theme plays out in the primary process. I have a lot to do with that too. So tender phases. Which projects do we acquire? What is the risk profile? Both from a technical point of view, looked at by the technical colleagues and from the legal and finance Point of view, where I contribute more. And that also continues in the execution of the project and in the delivery. ERM If you start talking about those 17 sub-areas, for example In those 17 topics that we are now trying to assess together, that is more at the board level and the Divisional Leadership Team. And what I said earlier that, I really think that is still a journey, because we have really made a number of steps in that, but honesty requires us to say that we still have to do a lot of work to bring it to a more mature level.
1.3	Are you adequately prepared for your tasks related to RM and ERM?	1.3/M - I think the answer is whole-heartedly yes. While asking yourself, do you have sufficient reflection both internally and externally to act sufficiently well in this? There are Of course so many topics whether it is about market inflation, Financial Resilience or the Company, Of course it is a very broad field. So yes, but let's be humble.
1.4	How do you view risks and risk management in construction/construction projects?	1.4/M - Difficult to make general statement considering the wide range of project types within the company. Both within the company as well as what I also see at other companies, RM is certainly a theme that is very high on the agenda. And one that requires daily attention, both in the primary process and in the support functions. At corporate level it's less developed. In the primary process RM is quite well developed.
1.5	How do you use the knowledge you have gained about risks and RM from previous projects and/or work situations in new projects and/or work situations?	1.5/M - It's a continuous circle, I sometimes say connecting the dots, which leads to input and output every single day, so RM and sharing experiences and knowledge is a 24/7 pattern. In my role I have seen so many things that go we well and things that go wrong, you use that pretty much every minute of the day.

2	2 - Implementation of (E)RM in practice	
2.1	Can you describe the risk management cycle/process you apply in your work? (techniques and method)	-
2.2	What do you think of the current RM processes you deal with in your work? What has been achieved in this area? What can be done better?	2.2/M - The governance, process and model is excellent, which has led to an increase of maturity. Creating a consolidated picture of the entire division can be very difficult due to internal differences of opinion based on divisional characteristics and the different markets they are working in. There is much to gain from following trends much better. Currently I see periodic reports with little context it would help me a lot to see the trend over the past 4 quarters for example.
2.3	What are the main differences between risk management at ERM and RM at other levels?	2.3/M - If you talk about more RM themes that lie at an corporate level, it is a bit more difficult in the construction world. When it comes to the primary process level, I think they are very advanced in construction.
2.4	Which steps/parts go wrong	2.4/M - It's important to ascertain whether we have enough information internally and externally to reflect appropriately and

	in the execution of the RM cycle and what is the reason for this? Can you give an example?	based on that, do the right things. Plans and assessments were always recorded in Excel and now we have a tool for that, so the reports will improve and as a result, we also get much better reporting and better comparison material. And then I think we can also integrate it better again at the front end of the process, in terms of tenders and new projects.
2.5	In which areas should the RM cycle be improved?	2.5/M - I think it can be improved across the board. Whatever subject you touch on, for example HR is also high on that list. We have recently done some research into, for example, talent, which we characterize as talent, who leave the organization within 12 months, then you are talking about 35%. Those are very big numbers. They come up in these types of assessments. So that adds value to having those numbers and that data to discuss with each other. What are we going to do to prevent or improve this? It's just one example. But it also occurs, for example, in purchasing, occurs in the entire market around us in particular, inflation developments are a very big theme in the UK. So yes, it adds value pretty much on a daily basis as far as I'm concerned.
2.6	How or where can (E)RM add value to existing RM and business processes?	[skipped]

3	Interaction between ERM and RM within [CONSTRUCTION ORG.]	
3.1	How is the "tone from the top" regarding RM and ERM? Can you indicate what you think is good and where there is room for improvement with regard to the policy on RM and ERM?	3.1/M - I am impressed by how we are approaching this together and tone from the top is, as far as I'm concerned, extremely serious, positive, but also expertly approached. And yes, always room for improvement, but not on this theme. It is more a question of how do you get ERM and RM increasingly more integrated and discussed in the organization, so that's the biggest challenge.
3.2	What is or can the added value of ERM be for [CONSTRUCTION ORG.]? What does [CONSTRUCTION ORG.] want to achieve by implementing ERM?	3.2/M - Both in the primary process and in the support services ERM can lead to a more predictable product both in execution and In performance ERM benefits financial performance predictability which leads to a better operating result.
3.3	Can you indicate how risks are cascaded from ERM to program or project level and escalated/aggregated the other way around? Can you give examples of this?	3.3/M - The most important added value of ERM is what I call connecting the dots so connecting what you see, perceive and experience across the breadth of the company and implement that in your tender process. In term of governance, projects periodically report on the performance of both financial and non-financial KPIS, in extensive reports. In the new tooling that is being implemented, there is also a desire to link these types of topics (link risk domains ERM and projects) with each other. And then you get an even broader picture of, how was it viewed and assessed in the tender phase, how did that lead to the budget or calculation? How was that project carried out? To see what the effects are and how you can link that back to, let's say the Deming circle, Plan Do Check Act.
3.4	Can you indicate how communication is progressing with regard to setting up and/or optimizing ERM processes between stakeholders?	3.4/M - I think it's good and we have a certain rhythm for that. The reporting happens bottom-up and leads to a consolidated picture per division which we then discuss at corporate headquarters, and together we reflect on that. Ultimately, these reports also end up with the Audit Committee and Supervisory Board. Of course you also get reactions to that, so that circle is good and it's running and those reports are also at a good level as far as I'm concerned, including the entire communication around it.
3.5	What barriers are there to performing RM and ERM on construction projects?	3.5/M - A big challenge is integrating the primary process and supporting processes as much as possible. Can we react quickly enough to our market and our environment? That is always complex in a construction company, because we are actually lagging behind In the economy, so our assignments that we carry out today, they were contracted two years ago, for example. So we are already in a completely different market, in terms of customer contacts and the supply chain. The RM challenge lies for me in trying to make processes smarter and better, and being able to identify problems earlier so that appropriate steps can be taken.
3.6		

4	Behavior and culture	
4.1	How does behavior affect RM at [CONSTRUCTION ORG.]? Can you name	4.1/M - I see the effect as the other way around, so how RM effects behaviour, because of the noticeable improvement in a behavioral sense since we started periodically having discussions about RM.

English version

	examples? Where is there room for improvement?	And if you talk about ERM and its influence, in terms of culture or behavior, it has been a very positive one as far as I'm concerned. In the last year and a half it is increasingly seen as normal and is increasinly incorporated into the normal business pattern. Oh, we still have to write the report, it is end of the month, we have to write some about RM, what have we actually done? An exaggerated example.
4.2	What barriers are there to changing RM behavior within [CONSTRUCTION ORG.]?	4.2/M - The biggest challenge lies in embedding the processes deeper in the organization. ExCo level determines how to deal with governance and these kinds of processes and then implement it, but the difficulty is always 2 or 3 layers deeper.
4.6	How does culture affect RM/ERM implementation?	4.6/M - From what I have seen in the past 1.5 years, my feeling is positive. Risk awareness is more present in the various stages of a project, in fact the whole project life cycle. And also in terms of thinking about new operational plans for the future, predictions on market developments. I'm happy that we've made some real progress now and I see the impact as being positive, professional and it's accelerating which is good.

Summary Interview – GEANONIMISEERD

Datum interview: May 2023
Respondent: Emp_P

Background respondent
Function: [head of Risk & Control in foreign division]
Education: Bachelor of Commerce, Accounting and Management and fully qualified chartered accountant.
Work experience: [10-15] years. Started in at mid-tier accounting firm [accounting firm] where half portfolio was compliance (preparation of financial statements for a range of different sectors), and other half of the portfolio was order work, financial audits. Moved to [foreign division country] in [2010-2015] and moved into management accounting. Worked in contract auditing, finance, and business partnering.
No. of years at company: [0-5] years. Worked in finance on management accounts then became the risk and control specialist.

1	Expertise	
1.1 1.2	Description of Role, Responsibilities & Reporting structure in €RM	1.1/P -There's two areas that I look after. First is the ERM in terms of setting that up. That was centralised previously and when I started my role, that was when it then decentralised down into the [division]s as well. So I work quite closely with the Netherlands [division], but also with [ERM manager at parent company level], so we have quite a good functional triangle. I look after ERM, but also the internal control framework. So it's been very closely linked. So there are the two main responsibilities. I also then support on other projects where [executive director finance foreign division] sees fit and that's generally in response to some of the weaknesses that we identify we'll then go in and spend some time in create that specialism there. So Risk and Control at the moment is just myself in [foreign division]. So when you compare it to NL it's slightly different because what we have is, if we look at NL, the Risk & Control team looks after the enterprise risk, but it also captures the project risk. In the [foreign division], where that project risk side sits the Delivery Assurance department. So that's got your business assurance or your licence to operate, and all project side-driven activities. They also work on the internal control framework, but from a project level, what we call the primary, whereas I look after the supporting. That's where we also capture that project RM as opposed to NL where that's within the risk and control team. So at the moment, we're still just familiarising ourselves with how we want to be running them. Part of the role and when we decentralised with the new [operating model] was to really develop this RM and maturity. So this is something we've worked together on as a functional triangle in terms of how we want to run this in the [division]s and then consolidate that up. We're working through that at the moment in a lot more detail, we're doing it, but there's a lot of development we're looking to do on their end. I think a lot of it is then getting the connection between the internal control framework as well, so having that coverage across the two. And my responsibility and in my role is to run the framework is to build its maturity. And when I talk about building the maturity I'm talking about bringing in the risk appetite, bringing in those tolerances and doing that in a pragmatic way with the business.
1.3	Perception of own readiness for role	1.3/P -Yes, I think we as a function of triangle, we're quite clear on the the framework that we've chosen that we are now implementing it into the business. So yes, we are.
1.4	Perception of RM in construction projects	1.4/P - I think there's a lot of maturity to be had. And when I say that, I mean in terms of making it more of an integrated RM at the moment, I think that there's pockets of good work being done around RM. But it's the integration. And I think that's where there's opportunity. I think there's the maturities of each company is, yeah, it's quite, it's quite diverse. I think in it, a big part of it coming from tone at the top has been, is it on their agenda, you know how high up on that is it. So I think the last few years it's made it very important to be out there. So I think more so in the last few years you see it.
1.5	Perception of own and/or organizational use of lessons learned	1.5/P - It's quite nice the way that we've structured the ERM framework in terms of the cycle that we run, I think it allows a lot of cross [subsidiary cluster], but also cross divisional up to [parent company] understanding of the key risks and those priorities really. And then there's a lot of transparency across the [division] and [subsidiary clusters] now that they have the visibility of that. So anything that's coming out that's demonstrating a weakness, we then create the action plan and shift to harmonisation or best practise across the wider [subsidiary clusters], but also then we're talking closely as a triangle as the wider business which then creates cross learning, I think. It's continuous. This is a huge part and it will forever be continuous because enterprise risk with evolving emerging risks happening everyday, every year that are different. This is continuous cycle of improving that control environment.

2	2 - Execution (E)RM in practice	
2.1	Descr RM cycle used in work	2.1/P - For ERM, we use the COSO framework, but we are on a quarterly basis engaging with the business. We're doing an in depth Risk assessment, once a year, and then we'd do more of an update on the other quarters with the business. We we start with our top 17 risk areas and we're looking across those and then we bring those into a top five, which we then report up and consolidate with the other division up to [parent company], . And that's done formally in a quarterly cycle and and what we're doing with the business in between is then working on where the weaknesses are, or perhaps lack of knowledge. There's a lot of education, behaviour, mindset and behaviours, training that sort of stuff is also happening as a foundation

		layer. But the formal reporting is done quarterly with the annual once a year for risk assessment. And that goes against our risk appetite.
2.2	Perception of RM processes in own work, accomplishments and points for improvement	2.2/P - Yes, I think it's a start of it. We're on the journey of maturing this, we're moving at a nice pace. I think the opportunity really is to get it more integrated into the internal control framework to make sure that we're mitigating those key enterprise risks. We're working strongly, and of course there's always continuous improvement, but what we've achieved so far is we're looking to try and you know build in that next maturity. We've got our risk appetite. we're now focusing on more risk tolerances and this, again, adds more depth to moving it to more quantitative analysis as opposed to qualitative. So plenty to be done better, but it's about moving the business at the right pace with it, not trying to overload it. I think that this is the nice part that we're treating quite well and that support comes right from the risk and control committee to do this right, which is good. In terms of enterprise risk, we've fully aligned in terms of their approach we're taking. In terms of the maturity, perhaps maybe compare to NL, we're a little bit ahead, but we've now aligned. I think we're at a similar stage of that now and actually this is again going back to that continuous learning. We've now collaborated even more to say, how have you done it, how has the business reacted, how have I done it and we're creating that best of the two worlds really. So I think we're pretty aligned from ERM. I think that's really of key importance that that continuous cycle is that it's directly linked to the internal control. Um, so I think the big thing as well is making sure you it's the right balance within a business, you're not trying to make it too bureaucratic in that sense. Making sure you get a good balance of those assessments and in a pragmatic way.
2.3	Descr of difference between ERM and RM other levels	2.3/P - So we've got the project risk and which is dealt with through delivery assurance and then we've got the ERM cycle. I guess the delivery assurance team cover the other assurance work across the projects which is essentially RM as well. But that's more the quality side as opposed to project risk directly.
2.4	Perception of where RM cycle goes wrong, challenges	2.4/P - At the moment I think we are aware with the maturity that it's too subjective. So I think that's where there's opportunity to make sure that we're having those key indicators to be measuring and having against that risk appetite. So I think that's perhaps where, the actual enterprise risk is maybe misunderstood because of a lack of, that objective nature of those indicators but that this is something we're working in maturity on.
2.5	Perception of where RM (steps) can be improved	2.5/P - That reflects straight away what I just said, just really making that more quantitative approach to it and in terms of making it very clear what our tolerances are and that's then creating the response so that we're focusing our efforts on the correct weaknesses. And then just deeper integration to our internal control framework and to make sure we've got the right coverage.
2.6	How ERM adds value to company processes and existing RM	2.6/P - It's huge, I think this is a really strong part of the ability to identify where our weaknesses are in our controls and that then directly links to our business process. If there's missing controls or perhaps weakness, this then directly links to that business process so by identifying those again focuses us on making sure we've got the right coverage and that those processes are control based and coverage of those.

3	Interaction ERM - RM	
3.1	Perception of "tone from the top" and ERM policy, points for improvement	3.1/P - I think that the tone at the top is really good. I think there's absolute focus on that and from ERM level, this is, yeah, the investing, my role being created is a demonstration of that, that they're taking it seriously and expanding the team further. And then if you switch to RM again, this is a hot topic in terms of, if we look at our primary internal control framework, one of those 13 assessments as risk and opportunity management and this is being, identified as absolute key, you know top priority, to have review, let's look at how we're doing this, how can we do better and strengthen that process. I think the focus is absolutely there. And and it's supported by the investment and creating this risk and control Function in the [division]s.
3.2	Perception of added value of ERM to company, company's goals with ERM	3.2/P - I think it's embedding it in people's mindsets and behaviours. It's giving the right people the bigger exposure to that, yes, project risk is important, but you actually need to look at it then how that then consolidates up to our enterprise risk and that feeding in and perhaps the reasoning, rationale behind some of them, the higher decision making, is that's wrapped up. So I think the exposure, giving what we're doing is embedding it deeper in the business so that they understand the bigger picture of how this is all linked back to our financial statements, our decision making. I think it's giving our people the transparency and changing that mindset and behaviour and a culture change as well, that it's wider than just the project risk. We also need to take into account this enterprise and I think again the economic climate at the moment helps us a bit there as well because they are very well known factors.
3.3	Description of how risk are cascaded from ERM to PRM	3.3/P - So this, I guess we are doing our internal control and assessments at project level and for primary we're doing quite a decent coverage of that. So we're doing a sample across all of our project level which then feed into the results of our internal control assessments and when we come to do our enterprise risks aggregating up you then are considering those results that we're seeing as an output to then influence in terms of our maturity against the risk matrix. So that's the aggregating up. And again we're getting the project level information feeding into that assessment but also across like I said, the cross [division] within consolidate that up to [parent company] level and then I think from that we're going back downwards. For those top five that we come to each quarter, that's then action plans are taken to then go back to the business process level to then improve. So I think that's the full feedback loop of those risk owners, and that's where it then feeds back into projects.

		And then like I say, what we're also doing is doing that whole mindset behaviours piece and awareness so that we're enabling the business to, this is where you are highlighting these risks, this is the avenue in which you cascade these within the business. So it's creating that transparent platform for the business to escalate but within guardrails so it's the right level,
3.4	Description of communication between stakeholders re ERM	3.4/P - This is really nice. I think that the business [foreign division], again reflecting back on the tone at the top, this is really encouraged. So I'm sitting in the operational committee, which is made up of the [COO] of [foreign division], the Executive finance director and then the four executive directors. So I'm sitting on that committee meeting every single month giving an update on this topic. I'm kinda running through the cycle, the processes with them and they're giving that direct feedback: this is our feedback from last quarter, can we make this more pragmatic, can we embed it bit more with the business. So this is progressing really well. There's another divisional leadership meeting which is bit wider, so you've got your enabling services directors. So all of them are really fully supportive at that level but then also embedding me and supporting their teams further to optimise their Services. I think we're well aware that we're on the journey of this, that it's not something that's been around for a long time and we're trying to get this right and adding value to them. I think all the stakeholders are very supportive of that. They see the benefit of it as well and yeah we're continuously working with them on it. So it's quite good I think. I think the hierarchy is relatively flat over here in terms of behavior and the way communication takes place. It's enabling them to see where it feeds back into I think is the big picture and that the transparency from our side is that we can't be sitting at the, Operation Committee and just feeding back into the executive committee, here's our top five risks and not feeding it back. So it's making sure that we're embedding that further back down that full loop to then show that they then see where how it's going to help their business meeting those objectives. So I think the key behaviour at the moment is being transparent at the top, and whilst we do have that hierarchy, it's making sure that your communicating that back down to then allow them to understand the impact it's having. But like I say, I think that by doing that, I think you then encourage the business to be more transparent about it, but at the same time, it's a big topic, so it's enabling them with the right tools, so here's the parameters in which you would be talking about these things as well. I guess the benefit of having it flatter is that you can be a a lot more transparent with the business.
3.5	Perception of hindrances / challenges in execution of RM in construction	3.5/P - It depends on each of the companies, but I think the culture change. So that's at the moment it's that building that foundation and trust. And the journey of health and safety as a continuous evolving journey. You're never going to do a big exponential change in this topic. So I think in terms of barriers, I guess, culture, which is what we're directly working on and we can see improvement in that. But also then the maturity in those indicators as well. I think being really clear on those principles of how we measure these risks so that we're enabling the business by giving them the tools to measure against. At at the moment it's more KPIs. The risk indicators is what we're developing this year. This is something we are focussing on, this is all in development, but mostly it's more looking to our KPIs and our quarterly reports at the moment as our current assessment.

4	Behavior and culture	
4.1	Perception of influence of behavior on RM at company, points for improvement	4.1/P - I think behaviour is huge. I think in terms of investing in this area. And I think this is always thought to be embedded with another role, so I think that behaviour like that switching behaviour I think is a big influence of of RM and [construction org]. And I think it's giving that rightly attention to it. And then again I think this is tone at the top as well. It correlates back to that where you're seeing [top management] sitting at the table, this is on their agenda every quarter and then it's expected from the executive directors to be reporting and on this quarterly as well. And I think the ownership is really key, a step change that we're seeing.
4.2	Perception of hindrances to change in behavior in RM in at company	4.2/P - I think the obstacle is that the businesses aren't used to having these discussions and it's creating that trusted platform to allow the business to be transparent. So the obstacle at the moment is the culture and that's the game we're working on with them. But that's going to take time. It's not going to change overnight. And that's a really big one, I think.
4.3	Description of current risk culture within the company	4.3/P - I think at the moment we're still in the mix of changing operating models. We have 4 [subsidiary clusters] in the [foreign division] so at the moment there's slightly a different approach to how we do RM there. But this is all now part of the project where we are creating a harmonisation and aligning that best practise. So I think slowly we're getting that wider ways of working aligned and actually collaborating a lot more, which I think people are starting to see the benefit of. But again, that takes time. So I think by doing that, that risk culture will be strengthened. But at the moment, we are in a little bit of silos. And doing some things slightly differently, so that this is a key piece I think where we need to move to. But yeah, there's still a gap there at the moment. I think for sure. The positive is that we've got really good tone at the top from it in terms of this support in the business. I think it's giving that clarity on, these are our expectations and and creating more accountability to it. What's probably the negative at the moment is that we need more of that to it. Also the effect of the different silos. I think the positive is that it's becoming more and more focused, and is on everyone's agenda. I think this is where we're building on the maturity to allow more bottom up input to it because I think that's where we got to

		and a good example of that where making step change in it is our construction [finance director] came to me, so I had done a lot in the Ops Committee and they said OK, you know we've done the first cycle in quarter four and we you know it's really good, but we really wanna get more involvement. He's got 7 [sunsidiaries] under that construction. And so he said, right can you come into my management leadership meeting on Thursday and then look to maybe go out to the seven [sunsidiaries] as well to really enable them. So I think we're getting more input from them feeding up, but absolutely you still have that decision making as it gets fed through up each time because they have the biggest scope of, the wider picture of the enterprise as opposed to that business unit. So it's ultimately making sure we're communicating back down, but it's still that hierarchy of top down at the end of the day in terms of that quarterly assessment that it is more top down, but we're trying to get more of that bottom up done. To bring that mindset, behaviour, culture down to the right level and you to really get a good reading of the condition of the business from that level.
4.4	Perception of how the current risk culture can be improved	4.4/P - I think for this, it's just making this part of when we're recruiting people, this needs to be one of those topics that we bring to attention, it's in job descriptions, it's right at the start. And it's not only those one-off risk trainings, it's just part of your professional development, every year you have this, it is just an ongoing thing. So I think this is the real opportunity for improvement, it's to get it right from the start. Even as an interview question, it's really starting to making sure we'll bring the right people into the business. And then you know, walking the talk by having a continuous training and that's mandated in the sense that it's always evolving. So I think this is again something we're working on and we're trying to look at these procedures and getting them in place but this is a big step change I think, getting it right from the start.
4.6	Perception of how culture influences ERM and RM execution and implementation	4.6/P - It's huge because ultimately if we're not creating that platform and transparent nature, then we're identifying these things too late. So I think to get that right, I think to empower our business to really understand what we're talking about when we're talking Enterprise risk etcetera. And this is key to really get a worthwhile result. Otherwise you're doing a cycle and you're not really adding value from the business. It's then two separate kinds of views. So I think it's really key that we're, creating that culture to them, get the right information feeding into our internal control framework assessments, but also then aggregating that up to our enterprise level. So yeah, I think this is huge. If you don't have this, you're going to do a cycle, but it's not going to add value.

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Interview date: May 2023
Respondent: Emp_Q

Background respondent
Function: managing director of [subsidiary cluster containing specialist technical subsidiaries]
Education: Architecture and BuildingTechnology at technical university, later an MBA
Work experience: [25-30] years. Whole career at [construction org.] or one of the predecessors. Started in the concept department, because they had just started putting a housing concept on the market and that needed further development. I did that for about 20 years on the residential side of the company in all kinds of different positions and then moved to the [subsidiary cluster containing specialist technical subsidiaries]. But we are constantly looking at how we can approach things conceptually and start thinking much more in terms of products and services instead of supply-driven. We are very busy looking at how we can get rid of continuous cost plus thinking and continuously making unique objects, because yes, unique objects have a lot of failure costs. Well, that connects to risk management.
number of years working at company: [25-30] years.

1	Expertise	
1.1	How do you deal with risk management in your work? Do you have any formal risk management responsibilities?	As far as I am concerned, risk management is a daily task, also for managers, so it is not only for a risk management department. So I actually think that risk management belongs in all layers of the organization and together you have to think very carefully about what is the risk you are taking and what is the return on it? And that has to be in a certain balance and taking risks is part of doing business, if you don't want to take any more risks, then you better stop. It just has to be done responsibly. Well, We are now introducing a new concept in the market, the flow concept. That is actually a product that is developed within [subsidiary specialized in residential construction], but I have of course been on the residential construction side for a long time and have a lot of experience with concept development. [subsidiary specialized in residential construction] couldn't make it work, so I've been working on fine-tuning that concept myself for 3/4 years now and making sure it's ready for the market. And, we also involved Enterprise Risk Management, to see what risks do you see now? What is well tied off? Where do we still have blind spots or where do you have advice to look at, so [Risk lead at Div NL] is working on that to see where, in his opinion, is it well secured and where is it still insufficient?

We operate in all kinds of different markets, so the field is very broad anyway. So you actually have to have an understanding of everything or know how that market works, so that means that you have to take in a lot of expertise. When I started at the [subsidiary cluster containing specialist technical subsidiaries] 4.5 or 5 years ago, risk management was not well developed. So the quality of the People was insufficient, People just did whatever. I replaced more than half of the directors because the People were not suitable for what they were doing.

5 years ago [subsidiary cluster containing specialist technical subsidiaries] did not exist, then those companies were mainly part of [subsidiary cluster specialized in general construction] and part was under the [subsidiary cluster specialized in infrastructure] side. Smaller companies that are under the wings of very large companies do not receive enough attention and there is insufficient focus on them. And what you often saw is that managers who did not function at the large companies were placed back and they were then, for example, given a non-critical position. When I got there, the grade you gave to the average manager was really below 5 in many cases, so an unsatisfactory.

We had decided within [construction org.] to set up the [subsidiary cluster containing specialist technical subsidiaries] separately, because it contained a number of growth brilliants for the future. Especially in the field of off-site manufacturing and modular solutions.You also have to set up very good People there, because otherwise a modular solution or a concept will come up… if a concept is not well developed, it will not bother you once, but 100s of times. If you sell that product 100s of times, so it must be well put together, otherwise you will run completely empty on your maintenance or on your service costs or, say, on claims. So yeah on the front end it was just really bad with the risk management and also thinking about it. And we have now made enormous progress in this, so we have much better quality People in the right position. We have separated development and production, so that there is a real focus on certain knowledge areas.Yes, so I think the [subsidiary cluster containing specialist technical subsidiaries] is currently well prepared for risks and for recognizing, acknowledging and dealing with them. |
| 1.3 | Are you adequately prepared for your tasks related to RM and ERM? | Yes. |
| 1.4 | How do you view risks and risk management in construction/construction projects? | I think we often underestimate the risks. And that's because we employ a lot of techies and techies just think it's cool to solve problems, they like doing that. And, that is actually at odds with risk management, because with risk management you have to ensure that problems do not arise and that there are no problems at all, so that you actually get a very smooth construction period and everything actually just goes by itself.Technicians were not appreciated for that.Techies were appreciated that if there was a problem they sent someone there and they fixed it. And then you were a very good manager? If you look at conceptual building, then you try to engineer the concept in such a way that you can make a lot of things with it, but that you never actually run into problems.That actually all details or all solutions or all things that can contain risks, you standardize them, so that you can build many different variations, but where you actually know for sure that you won't get any problems. A lot of techies don't like doing that, because there's no challenge in it Because it almost always goes well, and as far as I'm |

		concerned, there's really a bottleneck in our way of thinking and our organization, that we have far too many techies who think it's cool to solve problems. Instead of making sure that there is no problem at the front.
		That is common throughout the construction industry in the Netherlands. We are actually a kind of management company, because 70% of what we do is outsourced to third parties, and we actually manage the whole thing. And with that we also take on a lot of responsibility and risk, because we also manage all kinds of things that we actually know far too little about…
		And the second is contract management, which really needs to be taken to a higher level. Because you see that the contract management courses do not get a lot of time and energy, so that there is a kind of basic knowledge within the company about contract management, but actually far too little. If you look at the complex forms of contracts we have today and the responsibilities we are assigned to get. And then you really have to do that contract management very well and make sure that you pass things on to the parties that can actually bear that responsibility, or that you return it to clients if we simply cannot bear that responsibility. Yes, we just need to be a little more assertive and a little more adept at it.
1.5	How do you use the knowledge you have gained about risks and RM from previous projects and/or work situations in new projects and/or work situations?	I have gained a lot of knowledge in the field of concepts and product development where you try to manage risks in a completely different way, so it is much more about processes than technology. So if you have your processes organized very well, then the technology becomes less important. So I always try very hard to ensure that our processes run smoothly. And that there will be much more attention for that. Because if you think about it carefully and have it properly secured, filling in the technology automatically becomes a lot simpler.
		If you look at a building process, what we think is that every building is unique and every building needs to be rethought. While if you look at homes or an office or whatever, 80% of everything is always the same, isn't it? So every house has a toilet. Every house has a bathroom, every house has a kitchen, every house has a hall. Every house has a landing, every house If it is a multi-storey house, has a staircase. Yes. So many parts of a house are actually continuously the same. We think it's different every time, but one toilet in the Netherlands is often 90, 95% the same size, the same technical solution, so what you need to think about a lot more in your process is, how can you get those 80% that are continuously the same? How can you secure and record these and ensure that you do not change them anymore, because you do not have to and that you can devote all your attention, i.e. 100% of your attention to those 20% deviations, then the chance of success is many times greater than if you spread your attention over everything, because yes, then there are and it turns out In construction, 7.8% failure costsThat's about the average. Yes, If you can put 80% of your Energy on those 20% deviations yes, then the chance of failure is suddenly only 1% or two. So yes, then you just saved 5% failure costs. Well, that's what I mean by thinking from concepts and thinking from processes rather than from technology.

2	2 - Implementation of (E)RM in practice	
2.1	Can you describe the risk management cycle/process you apply in your work? (techniques and method)	We have a [phased tendering process] within [construction org.] in which one of the companies sees projects that seem interesting then make offers or participate in a tender. First an analysis is made to see if this fits, so then it actually starts within [subsidiary cluster containing specialist technical subsidiaries] by filling in a form for this and each [subsidiary] has made its own form. To answer about 15 questions like, does this TYPE of work fit with us now, do we have the right People available at the moment when this project is going to run, do we have experience with this client or with this TYPE of work and have we always made a profit with it in the past or not? Does a lot of engineering have to be done at the front-end, do we get paid for it or not? And that is actually the first start-up, we already started with a kind of risk management procedure to first determine, well, does this TYPE of work suit us, are we good at it. So are we only judged, for example, based on price? Or is it also the quality and also our process how we approach it and things like that? Well then next If you get further down the [phased tendering process] , you get all kinds of risk management forms, so it really comes the risk management form that's laid down by [construction org.], where If we say up front, We're going to participate , so we think this all fits our risk profile, then you also have the risks of the work itself. …And in the end, in the [phased tendering process], those from C tenders all come to me, and D tenders and lower, they come to my colleague. And are judged every time whether these are acceptable risks for us. Do we think that the return we can make on this work meets the principles of [CONSTRUCTION ORG.] as a minimum requirement. Well, then we decide whether or not to get involved in such a project.
2.2	What do you think of the current RM processes you deal with in your work? What has been achieved in this area? What can be done better?	Well, I think we've made some really good strides in that over the last few years, so it used to be very strict from the [parent company] as far as how the risk forms and what exactly had to be filled out, so sometimes it was shooting a rifle at a mosquito, say, instead of an elephant. So large projects and small projects all were handled the same way, where all kinds of forms had to be filled out. Sometimes the costs at the front were so high for time and energy that it actually no longer made sense to participate in those kinds of projects. We now have a much better balance in this regard, so a simple risk analysis or simple documents for smaller projects, where the risks are also much less, and more extensive risk inventories and extensive files for really large projects with major risks. So I think that's a really nice step in the right direction.
		I also think that risk management is much more ingrained than a few years ago, so a few years ago a lot of people thought it was all burdensome and all hassle. And now today they do see that if you really want to be an organization that makes a profit of 5, 6, 7 or 10% and also really wants to have something left over at the end of the year, that you have to think much more about how to recognize and acknowledge them, so that you avoid big bleeders like [examples of big past loss-giving

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		projects]. Because that kind of project ruins the [company's year-end financial result] . And if we are able to screen those projects much better at the front, and make the choice to not participate, no matter how annoying it is, then we save ourselves a lot of misery and we are able to just be a very good construction company with returns that investors simply want to invest in, because we don't have to have to make a10% margin. If we just manage to make 5, 6% margin continuously, then all investors will be lining up for [construction org.].
2.3	What are the main differences between risk management at ERM and RM at other levels?	Well, I think ERM has more of a helicopter view of the projects and looks a lot more at directions from [construction org.], so where do we see risks coming from, say if contracts change or if we move into other markets. Project level risk management is a different kind of risk management. You then looked at project-specific aspect like, what is this TYPE of contract? Which risks do we now face as [construction org.], which can we control? Which ones can we transfer? So that goes much more into the fibers of the project itself.
2.4	Which steps/parts go wrong in the execution of the RM cycle and what is the reason for this? Can you give an example?	I think that where things often go wrong is simply the knowledge and skills of the People. So that starts with identify. So identifying risks. I think, and I'll say right away that I'm not making myself very popular, but I also think that some people think like, let's not make it too complicated, because everything I write down I get questions about, so the less I write down, the less questions I can get about the risk list. And I also think in the past the top management of [CONSTRUCTION ORG.] sometimes were unnecessarily difficult about risks instead of looking at things as an entrepreneur, so OK we know there are certain risks out there, how are we going to figure that out together now instead of some kind of cross-examination of, how could that project team be so stupid to not have managed this risk or this risk yet. In the end, people also think that if they don't write it down, they won't get any questions about it and we really need to get rid of that.
2.5	In which areas should the RM cycle be improved?	Yes, I would like risk management to be much more helpful instead of judgemental. Because I think that a lot of people simply lack knowledge, so risk management is not why you chose a particular field. That comes with the rest. It's like contract management. You didn't choose to be a contract manager so if you're a techie then you want to be involved with the technology, but the work has evolved in such a way that it ultimately contract management, risk management are maybe even more important than the content itself. So having the awareness of this and getting help with, say, identifying the risks properly with each other and also talking about them properly and getting help with that. And that also applies to contract management. I think that will help a lot in that People really dare to simply name all the risks and not think well, we'll think about that later.
2.6	How or where can (E)RM add value to existing RM and business processes?	That is a good question. Well, I think that's one of the things where we can really make a big step as [CONSTRUCTION ORG.] being, that is that we can use our processes, our management systems, and by that I mean for the implementation of projects and the preparation of projects, which many work planners and project leaders and project managers have to do. That is all laid down in systems, but they are filled with too much informatio, so people no longer go to a management system to look at how to do a certain risk analysis, or certainly do not look more closely at how they have to fill in another form, they do it based on the knowledge and skills they have. And they prefer to pull their own form out of their drawer because it simply works for them.

I think that workflow management systems, so the fact that you automate things, so that the correct form automatically comes up, so that the right steps are automatically followed and you don't go overboard on a list that is simply copied, because I regularly see that there are just things in lists or overviews that I think how is this possible? And then you ask, oh yeah, sorry, That's from the previous project, so they just copy. That doesn't always have to be a risk list, you know, but just all kinds of other documents are just copies and then they fill in something else above and then well, the rest is taken over for 80%, but that means that so you don't think, that you just copy things. And then you jump through the hoop to the next phase. And well, then Everyone is happy, while if you go to a workflow management system, where automatically good forms are already filled in with all the general things of the project. But then you really have to think for yourself about filling in risks, for example. And then you can't copy anything, because the form has already been filled in completely, so then you just have to fill in the risks instead of changing things at the top, then all that is filled in for you and you can spend your time and Energy really thinking about risk. |

3	Interaction between ERM and RM within [CONSTRUCTION ORG.]	
3.1	How is the "tone from the top" regarding RM and ERM? Can you indicate what you think is good and where there is room for improvement with regard to the policy on RM and ERM?	Well, like I said, it's gotten better. That's the positive thing about it. We have also started to differentiate between simple projects, i.e. smaller projects, and very large projects. So I actually think that's good too. I think the tone from the top could be even more in helpful rather than judgemental. Because I think that will ensure that people eventually also dare to ask the question, can someone help me with this? Well, we hardly get that question now, so everyone thinks they have it figured out. But I think that we don't see a lot of things, because we can't dive into every detail ourselves. So It's just what I get presented, I have to assume that they have looked at it carefully, but I know from experience that it is not always the case.
3.2	What is or can the added value of ERM be for [CONSTRUCTION ORG.]? What does [CONSTRUCTION ORG.] want to achieve by implementing ERM?	I think the difference between risk management, like I said, risk management of projects versus say up there like a kind of umbrella over it to see what are the developments In the market? What does that mean for [construction org.] and its risk profile? So where should we, what trends should we recognize? What risks do we see coming our way? How do we deal with a corona, for example? Well, what does that mean in our contract forms? Yes, I think that's where the value lies in having a helicopter view of the business. As in, what's happening, what's coming at us? What do we see happening in the world and how should we as [construction org.] anticipate this to ensure that, That is always the trick, that things remain in balance. So we don't create a contract which is so one-sided that no client agrees to it and vice versa. So, how do we manage to find balance in the risks and in the management of those risks, so that we can continue to do business and continue to earn our

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		living without running into major problems 3 or 4 times a year?
3.3	Can you indicate how risks are cascaded from ERM to program or project level and escalated/aggregated the other way around? Can you give examples of this?	I find this very difficult. Look what you sometimes see is, you ask the corporate risk team, they translate it into a document, you give a document back to them, so that sounds more like a kind of secretary-like task. And if the corporate risk team says, move a little more to the left and a little more to the right, then that will also be adjusted. Actually, I would like an ERM to become much more self-managing and have its own opinion about how it works, so that also means going deeper into it and actually deciding for yourself instead of someone shouting 3 times that it is good, then indicating that it's good. Yes, I prefer someone to say, Well, you can say it's good, but yes, we think this is insufficient, We are going to help you, but we don't think it's good. Well, I still miss that.

I would like there to be a plan in advance where the plan is simply stated from ERM, this is how we are going to do it with a clear structure so better plans at the front and much more in the lead from the corporate risk dept. I would very much like that. |
| 3.5 | What barriers are there to performing RM and ERM on construction projects? | I don't think they are obstacles, I just think that we should perhaps offer more help from a risk management point of view. Look, you can't do that for all projects, but we always have a top 10 of riskiest projects for this year. And that's not Rocket Science, so with a 200 million project then you know that anyway left or right if something goes wrong there, say, that's going to cost you a lot of money. So at the start 7 of those 10 projects can be designated as high-risk. And so you actually want to have more time and attention from risk management in terms of help to have a good session about the risks at the front with those kinds of projects, so that if a really large tender comes along together we can make a good analysis of, do we now have all the risks, do we still have everything in view, do we now have a good picture of it. Because if you have 3 people who are very involved in contract formation, but very few in, say, materials, there may also be risks in material shortages or security of supply or things like that. Yes, if you don't know about it or you have no affinity with it at all, chances are very high that you don't think about it, so that it won't be on the risk list. Well, and I see it's kind of scary sometimes in terms of risk assessment because well, certain people work that way. The one knows a lot about this and the other about that, but what are you still missing? And yes, if you don't know what you're missing, it's also very difficult to question or do something about it. So you would actually like a broader and more rounded palette of knowledge and skills to be put together to ask the right questions, so we know whether we have a good view of all the risks. |

4	Behavior and culture	
4.1	How does behavior affect RM at [CONSTRUCTION ORG.]? Can you name examples? Where is there room for improvement?	We've talked about that quite a bit in the previous questions, but I think the more we [construction org.] on the helping side rather than the judging side, so like judging a risk list, the more people dare to ask for help or admit that they doubt whether something is a risk. I never see that on a risk list. Because people just have the feeling of, if I report something and I don't know, then I will be punished. And that is not good. So there's really room for improvement there. f you continuously hit People with the stick, then yes, they'll make sure they stop getting hit. So then they will no longer admit they are uncertain about something, or don't quite knowing how it works, but they think they see something, I would like people to indicate that. So how are you gauging the situation? Which parts do you not quite have figured out? Well, then we'll see if we can get some help to map that out. And now that never comes up, because People just think like, If I don't quite know and I'm going to admit that I don't know, I'll be punished. So I'll just keep quiet and then we'll see. And then it turns out, I've seen it in a lot of big projects, that there were people at the beginning already giving warnings, so we already knew this. Well and that really gives me the creeps, cause then I think, how is it possible that someone knows that this is going to be a problem and yet we continue and do nothing. They then say yes, but you know, if we had talked about that then we would have been punished.

When it comes to behavior, I also think that knowledge is just very limited in some cases. I found out 4 years ago that, when I had just been there for a year [subsidiary cluster containing specialist technical subsidiaries] and then I found out that at the company [technical subsidiary] there are huge risks or yes huge, they are not very large projects, but for the company there were enormous risks in contracts. And also In collecting money, so chasing after your money and also getting more and less work reimbursed from clients, so don't start before you just have a deal. Yes I thought, how is that possible? And then you talk to the management and then they their side of th story, and it wasn't that big a deal. Well, it was indeeed a big deal, so you end up talking to the business leaders and the project leaders and that was just the honest answer: yes, but that's not what I was hired for, that anything that has to do with money is the responsibility of the financial department and contract management people, or that should be arranged by purchasing. And I'm the specialist on the content and construction. Well, then you really have not understood, that as a project manager you are responsible for the entire project and that starts with a good relationship with your customer, then a good contract and then proper management of the contract. And only then comes the technical execution and the entire supervision of the project and a good delivery to your customer and then again the aftercare. You are all responsible for all that and you have to make sure you get your money on time. You have to make sure you manage your risks well and you have to make sure that there is a good contract, that's it. Well, then the eyes widen and then they say, but we don't have that expertise. So then, courses and training and help. |
| 4.2 | What barriers are there to changing RM behavior within [CONSTRUCTION ORG.]? | |
| 4.3 | Can you describe the current risk culture within | See what I said, I do think the risk culture is improving. And, I also think that was urgently needed, But we also discussed some things that could be improved or that still need attention. I think currently that we are much better able, than in |

Interview transcript - <mark>ANONIMIZED</mark>

	[CONSTRUCTION ORG.]? Can you name examples of this? What are the top 3 most dominant aspects in a positive and negative sense?	previous years, to properly interpret the importance of risk management and to communicate it better and also to get the forms more focused on theTYPE of work. And by doing so, we have lowered the threshold for a lot of People to get serious about it, so I think we are on the right track, But as I said, there are still a number of things where we can improve.
4.6	How does culture affect RM/ERM implementation?	I think what has been created in the past, is the basis for a culture, because that culture doesn't come into being in a year that takes maybe 10, 15, 20 years before there's a certain culture and we want a different culture. But we all know how hard it is to change a culture and how much time it takes. So I think it's good to realize that the things that we liked 15 years or 10 years ago is the current culture of an organization and today we think something else is important and I think naming that helps to ultimately move the culture in the right direction. So I think that's twofold, that on the one hand ERM and risk management are actually needed to change that culture for the better for the future, but also the realization that, yes, we have a population of People who have always been rewarded at say problem solving. Yes, now they are actually being asked to ensure that there are no more problems at all. Yes, that's less sexy. That makes them feel less appreciated for that. So rewarding and recognizing that People do a good job is very important, I think, so if you know how to prevent things from the front, you just know how to keep projects well under control. Yes, now that you think about it, should you actually award the trophy for safety per year, but maybe you should award a risk management award for the project, say where the risk assessments were most spot on after a work was completed dat If you say Van dude, look at this project, so to speak. There, the team at the front had thought very carefully about the risks and we rewarded that with a trip or a dinner or make something up. But, but with that he gets the better attention that thinking at the front is really rewarded and not at the back. Or for all I care you give those Humans a bonus, which might be even better, because Humans were always rewarded but for solving a problem. Well, then you reward them for recognizing the problems in the front.

Summary Interview – ANONIMIZED
English version – Emp_R

Interview date: May 2023
Respondent: Emp_R

Background respondent	
function	Finance Director [construction org.] [subsidiary cluster specialized in infrastructure] .
course	Education is scientific and I am a chartered accountant.
work experience	Work experience I worked for c 13 years at [CONSULTANCY/ACCOUNTING FIRM] in the audit of mainly construction,
number of years working at [CONSTRUCTION ORG.]	construction companies, industrial companies. I started at [construction org.] in 2010 at the [parent company], so in a [parent company] position. There I was responsible for a piece of business control for [country 01] , [country 02] and real estate in the Netherlands.. I work now. Have a look. Then I did investor relations for about 5 years and M&A (Merging & Acquisitions) and I've been working in [subsidiary cluster specialized in infrastructure] for about 4 years now. That's the Chief Financial Officer of Mergers and Acquisitions. Yes yes, so extensive work experience In the industry, various functions and in total I have been working at [CONSTRUCTION ORG.] for about 13 years now.

1	Expertise	
1.1	How do you deal with risk management in your work? Do you have any formal risk management responsibilities?	Risk management or ERM. The way I look at risk management, call it ERM, the big themes. Well, I regularly discuss this with my colleague [managing director]. Well, that doesn't change very much unless you have some issues in between, think about the labor market, scarcity of people, resources, COVID, and so on and so forth. So you are periodically working on that, and it is part of my formal responsibility to give substance to this. And we do that with the risk management team, with [head of RM at Risk & Control Dept], whom we then speak to every quarter. Risk management, in a more narrow sense, I'm working on it every day. We run a portfolio of projects. So I have to make sure I have a portfolio that's diversified enough and the risk profile is right. So my risk appetite is determined by that and every new big project you want to take on. As far as I'm concerned, in my role, risk management is one of the most important things. So you get up with that and you go to bed with that, to put it very bluntly and that determines your actions, because it is very easy to take on a lot of risk, but it is very difficult to then get rid of risk, so you actually have to do it every day and also through my role on the tender board in the approval of the tenders.

I am statutory director of van [subsidiary cluster specialized in infrastructure], so together with [managing director] I am ultimately responsible for ensuring that this has its place in the organization in the right way. We now have segment risk managers, who advise and help. And then we have dedicated project risk managers for large projects. |
1.3	Are you adequately prepared for your tasks related to RM and ERM?	Yes, certainly. It is very important to set up the structure properly and to get the People ready for it in their heads. We started doing that 3 years ago with [head of RM at Risk & Control Dept]. Well, the beginning took a huge effort. And now I think the whole risk management, as we do it within the [subsidiary cluster], I think is seen as one of the better clusters. We are a bit more mature in this and if all goes well, we will see the benefits more and more, so that we no longer take on cumbersome projects. And, It's a mindset, because you can have all kinds of systems and tools that help you get it between your ears every day but in the end, People just have to think, would I take on this project at home? So, I am sufficiently prepared. I think that also comes from my RA training and that you gain a lot of knowledge from it, from the COSO model, etc. etc.
1.4	How do you view risks and risk management in construction/construction projects?	It's key: as far as I'm concerned, construction is mainly managing risks. And where does that start: with the tender; and actually before that, am I going to bid? The way I look at it: you have a portfolio, it has certain characteristics, so you know exactly what you do and don't want. If you already have a lot of turnover from 1 customer, you know from basic risk management, then you want turnover from other customers if you can choose. Also, you have a lot of big projects, you want more smaller ones, you have a lot of smaller ones, you might want something more medium and bigger. So you're defining markers where you say, okay, this is what my portfolio should look like and those markers largely determine your risk appetite on projects that you're going to take on. And if you take on a project like that, then a lot of generic things apply. So ground risk we never accept. If it's a lump sum price set at a certain size, we won't bid. If we can't create value, there's no point. If there is no sustainability in it, we will not do it. Sustainability: if you don't take on the right projects there now, you run the risk of not meeting your sustainability goals. So that's risk management too, right? So not only on financial performance, but also on sustainability performance, but also on safety performance, and all sorts of other things. Risk and risk management in construction, that's just your bread and butter, that's what you have to do, otherwise you won't be successful. Then you have bleeders. So very important. And I think that also distinguishes successful and less successful companies in the longer term.
1.5	How do you use the knowledge you have gained about risks and RM from previous projects and/or work situations in new projects and/or work situations?	Yes. Personally, I think I use that pretty well. It is very difficult for people on the work floor, because the project has ended, you are going to a new project. But then they forget to secure the Lessons Learnt. When we have tenders, we always ask the question: that project, what did you learn there? We are still in a phase there where we have to point this out to people, but that we are already doing better and better ourselves. How do we provide tools, say? We use Relatics. That is a program that projects use for risk management. And we now have DiPro. We have recently started to introduce that. And what we were already working on in Relatics: you actually want when someone starts a project (building a bridge) and we have just finished building a bridge and those projects have major similarities: at the start when assessing whether you are going to tender, consider the risk file of the project you have just completed. Because that's where all the recent data is, it's in it and use that project evaluation. So, I try for myself to do the best I can, but that's at a very high level. That is mainly asking questions. But in the projects, in the tenders, we have to do that even more. We now also have the tooling that will help with that.

2	2 - Implementation of (E)RM in practice	
2.2	What do you think of the	We have worked hard on this for 3 years in the past year and I think we are at a satisfactory level. What We have achieved is

	current RM processes you deal with in your work? What has been achieved in this area? What can be done better?	that within the [subsidiaries], it has become common practice. They use the same statements, so we have risk and opportunity register. That's a really standard Excel, we all use it everywhere. We either use Relatics or that basic Excel that gets automated. One uses version 1.1, the other version 1.2, I dont care. One that that fills it in a little to the left and the other one a little to the right; does not matter. The first step is that you have at least one [risk and opp. register] as we call it. That's a gain. That it is discussed and updated: that is a gain. The fact that management contributes is a gain. You know, that's all good and what we're working on right now is: We're getting a project dashboard. That we let people fill in Excel in a controlled environment, an application. So they still have to fill it in. Only It's not Excel anymore. The advantage of that application is that you start getting an overview of your portfolio and then I get enthousiastic and I think: hey: then I can see on the portfolio level how certain risks are named if they are not included then you can add themn anywhere and then you can also ask, hey, how do we estimate that risk? And those are the steps we are taking now. The risk with us at the moment is that we are spread too thin, because the entire [Risk & Control dept] that does serviced [subsidiary cluster specialized in infrastructure] now services the Dutch division. So let's just say, the others got a chance by copying everything that we learned. And what could be better, that the tooling will support that better, so that I can push even further and that I have a better portfolio overview.
2.3	What are the main differences between risk management at ERM and RM at other levels?	Yes, it's the level of detail of course. That is a big difference, but when we talk about skilled people, that is really a problem for us. We've got the People got the work, huh? So that's really a risk for the company, even if we don't get that done. So [managing director] and I talk about that. And what that means for HR and the choices we make, everywhere. On [subsidiaries], so we also talk to the [subsidiaries] about those kinds of topics, because of course we see that from Enterprise Risk management. Only the lower it gets, the more operational it becomes. I think that's the main difference that you operationalize it to the lower levels. Communication goes through [managing director] and me to the various MTs and we discuss it in the MT. We just do ERM on [subsidiary cluster]. But let's say what we do at the [subsidiary cluster] are no different things than what we deal with every day at the [subsidiary] level. So you can say if [managing director] and I summarized it from above. Or we'll cascade it down, but that's just the conversation you're having. If you have business review conversations and we have them every month then always have a risk and ops overview. And in those risk and ops often ERM-like things come to the fore. Sometimes it's a project, isn't it, but at the moment, if you're talking about, for example, not getting vacancies filled, labor market blablabla, so in ERM we have something about labor market stuff. Their risk register then shows that they are missing out on turnover and results because they cannot get their people hired. Risk management is not something you do once a quarter or once a year or once: oh, what did I write down again? That's good to do, but it's just what you do every day. It's just a standard topic to discuss.
2.4	Which steps/parts go wrong in the execution of the RM cycle and what is the reason for this? Can you give an example?	In my opinion, no big problems. Look, when we talk about enterprise risk management, when you get out of bed in the morning, then you can list the biggest 3, 4, 5 risks. Don't forget the opportunities, by the way, because we call it risk management, but opportunities are also good, opportunities. I think it goes wrong lower In the organization, Because they don't have the big picture on, let's say. Because of course you have [subsidiary cluster], you have [subsidiary] and you have project. Project/Tender, Tender team. So, they have to be really really helped by the [subsidiary] to be well directed, that we tender In the right pocket. Or that we don't do this particular big project now, because we already have too many big projects. That's it then, let's just say In the implementation or operationalization you run the most risks, that's where you keep the discipline, so you have to stick to the plan. Basically, we are just a portfolio of projects that we are managing. And, we try to get the best possible risk profile for that. And where we used to have more risks than opportunities, we are now trying, so just as an example: We used to have a portfolio, then this was the bandwidth. So we had a lot of risks and if things went well, we had a lot of opportunities. And the margin was here: too low. And what we are actually doing now: we want to have the margin here. We want that upside down, because that's the result of your downside also decreasing. So the margin has to go up and the bandwidth around that margin has to get smaller. That's what we're working on every day to make that happen. And that means you have to be pickier about what you choose. And then say, That's the portfolio you always manage and let's just say: Enterprise Management are the big themes that influence that, so for me it's in constant contact and that's something we always tell our People get better attention. We want to industrialize, standardize, sustainability is of course very important, and digitize. So those 3 things, are actually the things that we try to put on our projects, to ultimately improve our margins… In terms of the overarching business to move to more process and product leadership, we try to give substance to that in our own way. We cannot say, dear customer, this is your bridge. You can do that with the commercial parties. You can discuss that with consumers. But We have so many different customers who just really want to have their own bridge. So what you can do is industrialize parts of that bridge, so that it becomes a kit of industrialized things that you then offer. So we have a slightly different market than, for example Residential, where you can simply offer those concepts very easily. So We do have options, but in a different way. That's why I mean: we interpret it in our own way. So what we're trying to do, influence as much as possible the strategy from above by bringing market and customer and all that information from us into the [subsidiary cluster]. In the end you still see that things sometimes diverge or that the nuances are slightly different. But I think that is how it works in every corporate, but we do have to work hard to be able to provide as much advice as possible. What is good now: We have now made our Long-term Financial plan and that is input for

Summary Interview – ANONIMIZED
English version – Emp_R

		[parent company]. So we do everything we can to maximize our influence in a positive way.
2.5	In which areas should the RM cycle be improved?	As far as I'm concerned, it doesn't need to be improved further. The current level is satisfactory. I prefer to spend my time improving things that will bring me more value. We have sufficiently secured risk management within our club now.
2.6	How or where can (E)RM add value to existing RM and business processes?	This is mainly about the lessons learned. You learn a lot within risk management, of course. Because you start with a risk or an opportunity and eventually that risk or opportunity ends in a certain way with certain control measures and actions. And, we need to safeguard, analyze and use it more to improve business processes. So that we can take on better projects when it comes to tendering, execution and things like that, for example. So we have to use that data more to our advantage I think there are a lot of business processes where you could do this. And, It's already a gain anyway that you're working on it, right? We also have our [requirements framework], of course, don't we? Almost forgot to mention. That's where you actually put the measuring stick in to see what the quality really is, which also ensures a certain discipline. And at first it was just gathering things together because someone else wanted it. And now they see the added value and that there is an opportunity, the same opportunity to improve it, so that you can ultimately achieve better results through that improvement. So yes, it is a kind of flywheel, a circle and yes, I think we have already made good progress within [subsidiary cluster specialized in infrastructure] with that. Just as an example, we came to that [REQUIREMENTS FRAMEWORK], we started seriously with that 3 years ago. That was really a pain, a lot of hassle.

3	Interaction between ERM and RM within [CONSTRUCTION ORG.]	
3.1	How is the "tone from the top" regarding RM and ERM? Can you indicate what you think is good and where there is room for improvement with regard to the policy on RM and ERM?	I'm the top myself along with [managing director], and I think our tone is good. We are open to discussion about it, it is regularly on the agenda. It actually affects our daily actions, doesn't it? You see that the [subsidiaries] also see the value of it. Of course there is always room for improvement. Look, you have policy and how you act. And as far as I'm concerned, policy is just paper and that you can check how we would like it. But if you then act differently every day, yes, that is not good. So for me it's really about "tone from the top." How are you in your daily actions? How are you in your tenders? How are you in your projects? How do you look at your portfolio? So those actions to me show how it's going and I think we've made really big strides forward there together in the past year. We don't notice much from the corporate level in terms of tone from the top, because we actually have nothing to do with that. They do convey something, but that is very far from the operation. So we are actually dealing with the Dutch division. So we do the important tenders with [COO], for example. I know that Enterprise risk management, the lists, is also regularly discussed in the MT of [division] Netherlands. I'm not in that. That includes [managing director], so there is I think enough attention for that.
3.2	What is or can the added value of ERM be for [CONSTRUCTION ORG.]? What does [CONSTRUCTION ORG.] want to achieve by implementing ERM?	Yes, as far as I'm concerned, the second question is already there, Enterprise risk management, for us within [subsidiary cluster specialized in infrastructure] the Netherlands. I think any self-respecting company does that. Just like you would manage things at home, though that's less formal. The added value is just huge.
3.3	Can you indicate how risks are cascaded from ERM to program or project level and escalated/aggregated the other way around? Can you give examples of this?	How that's done, that's what I talked about earlier, that we'd like to have that data in a place that you can generate overviews, right? And we're going to make that step this year, so then it's done in a way that you think okay, then you can actually cascade it and then you can see it's in the projects. Right now it's not possible, you have to go through all those Excels and know how to find what your looking for? So that is the wish and then I think we will finish this year and then you can also see how things are at the portfolio level. Currently it's difficult, that is manual work and hassle. So real cascading with data is difficult, impossible or limited. So that's for this year.
3.4	Can you indicate how communication is progressing with regard to setting up and/or optimizing ERM processes between stakeholders?	From the top to us it is limited. Between us and our [subsidiaries], Yes, you actually talk about it every month in the monthly conversations via the risk and ops overview. Yes, and if there are any developments, we will immediately share them within the team. The MT team, sometimes it's very simple things, We have an index, an indexation. Projects have an indexation scheme and the index is the CROW, and the CROW, which was calculated incorrectly in our opinion. That's just a basket of wages, increments and things like that and that's the index that can be used in a contract. Well, then you immediately see in the market strange developments. Well, that has an impact on our portfolio and action is taken immediately. Also towards the person who has to calculate all this and does so in the figures. So we just have very short communication lines and we communicate briefly with each other because we are an integrated business and are all in the same boat, aren't we? So we, unlike other [subsidiary clusters], you see more that are companies and they work together in a certain way through a contribution model. Our contribution model is simply that we like to work together and get the job done together. You know, it is. It is not systematically driven. We just work together, so you also see that this kind of thing is actually fed back very quickly. And also through that account management, eh, key account management, Then someone spoke to [port operation org.], because he was working there on a bridge. It gets checked immediately, does this influence our cluster as a whole? Oh, we're also working on a road. Well, then that person is immediately informed via that line. But also if there are problems with suppliers or customers. So with us we're pretty close together. So our ERM process is also very much along the existing lines and therefore informal. You know, we're just a 900 million club. We're not [multi-billion dollar companies] or anything, huh, we're just down to earth, pragmatic and just stick together. Work well together. Then you can handle it well.

3.5	What barriers are there to performing RM and ERM on construction projects?	There are none.
3.6		

4	Behavior and culture	
4.1	How does behavior affect RM at [CONSTRUCTION ORG.]? Can you name examples? Where is there room for improvement?	Yes that behavior and culture, you just have to act every day as if it were your own money. So opportunities, you try to collect them if the costs are okay and you try to transger the risks away. So transfer to the client, you try to mitigate them through a measure or you price them in a certain way. And that's actually the mindset you need to have. And because we as management communicate how we view this and what our risk appetite is and how we look at larger movements in the market: that's just what it's all about, isn't it? You can write down policy, but how do you really act and what is your exemplary role? Yes, that's key. And we see that we've been able to embed that risk awareness much better over the past 3 years because of everything we've done in the area of risk management. And, of course, we have our [subsidiary cluster] risk managers who help, eh, where it is necessary to tighten it up a bit. We have dedicated risk managers for large projects. It's the people, as has often been said: it stands or falls with your People. And their discipline and their rigor.
4.2	What barriers are there to changing RM behavior within [CONSTRUCTION ORG.]?	That you say what you do. And do what you say. It is also simply about "tone from the top," exemplary behaviour. 3 years ago it was still in its infancy with us. But by persevering, being consistent, reminding… and at first the business really wasn't interested, it all had to come through [Finance]. But in the end you just get the business on board because I reminded the [managing director]. Make lists. Well, you're the odd one out now, because you're at the bottom. And you are the top because you are at the top of the list. Show me the list. You don't even have to say anything. Then everyone thinks: I don't want to be at the bottom, so let's accelerate. So yes, whatever it takes to get us in control here. That's very important.
4.3	Can you describe the current risk culture within [CONSTRUCTION ORG.]? Can you name examples of this? What are the top 3 most dominant aspects in a positive and negative sense?	Quite satisfactory within our [subsidiary cluster], because I can only speak for that. Well, you see that in tenders, for example: what risk appetite do you have? At first we sometimes had to refuse tenders. We also did regularly, [managing director] and I. And now we have the tender list and then we say, yes, this one is on the list, but we don't do that for such and such a reason. And then I think: hey, we've learned. Or, we only do it if the customer wants to change A, B, C and D and otherwise we don't, so those are examples of the risk culture starting to work. Downside is of course, and you see that especially in projects that are not going well, then they have a list of 100 risks and 5 opportunities. But there may be more money in those 5 opportunities than, let's say, in those 100 risks. So have you now covered, mitigated your top 5 risks? Then take a look at those opportunities. Because otherwise you forget to realize those opportunities. Because then you get stuck in those risks: mitigate all risks, do all of them. Look at the opportunities, because there's money in that too. So where there was always only a very opportunistic view, you now sometimes see that we sometimes just calculate it a bit more heavily. Which can sometimes also price you out of the market. On the other hand, if you do win that tender, you pretty much have a good project. And tenders are often not lost at 1 or 2%. There is often a much bigger difference between them. So, I'm quite happy with this.
4.6	How does culture affect RM/ERM implementation?	We are implemented. I don't know how much further they want to deepen it. I think it's good enough what we have now at [subsidiary cluster specialized in infrastructure]. I don't need a grade of 8 or a 9, not necessary at all. I think our risk appetite is just okay right now. So yes, you know: how perfect do you want to make it? I think: a 7 is good for me, an 8 is fine for me and if someone wants to make it more than an 8: yes please go work on something else. Because that's a better use of your time.

If we hadn't had risk management, we wouldn't have existed long ago, wouldn't we? Only what we do, we take in too much risk, so that what you actually do in terms of risk management is not sufficient to ultimately have good performance. So we weren't picky about what we ate. If you walk through the woods, you just pick mushrooms here and there because you're hungry and you think you have to eat those things, yes, you will die. And luckily we had a system where we removed the most toxic ones. But yes, because we were too hungry, we occasionally had a wrong project in the mix. So because risk management was not institutionalized and not standardized, you didn't know exactly where you stood, and it was much more complicated and look, we've made those steps now. It was, and still is because you don't change that culture: We just really want to build too much and we will solve it, Client. And we'll fix it, Client. And we are now saying goodbye to that. And that is part of the entire risk management within our club. It's mostly let's just say the culture you're trying to influence and how the People act, so they do what they say and say what they do in this area. And we started as police officers 3 years ago. And now we have a good parent-child conversation. |

Interview transcript - ANONIMIZED

Interview date: May 2023
Respondent: Emp_S

Background respondent	
function course work experience number of years working at [CONSTRUCTION ORG.]	I am a branch director at [subsidiary specialized in residential construction]. In 2017 we are organized a bit differently. That's where we set up the commercial organization. who are really regionally bound, who therefore have regional contacts with the customers. There we have 4 from South, Southwest, [Midedn], Northeast and Northwest, so those are the commercial organizations that are organized regionally and We also have 4 production units 5 at the moment that are really deployed on their specialism. We're already doing about 180, 185 million this year. We do have 3 directorates, but we do have a single profit and loss ledger so we report as one to [subsidiary specialized in residential construction] and so we also share the controller and HR. Started here on 1 July last year. Number of years at company: [30-35] years. Education: HBO Building Sciences Work experience: I did work preparation, did execution. Project management done, business management done. Deputy Director of Production. I've done the preparation, so I've actually already had flavors. Been in a lot of different locations.

1	Expertise	
1.1	How do you deal with risk management in your work? Do you have any formal risk management responsibilities?	So of course we work with [phased tendering process] here, which is Together with [AREA DEVELOPMENT COMPANY SUBSIDIARY], we get about 50% of our work from that. That makes it a bit easier for us, because then we no longer have to review our clients that we get through them, because the developer already does that. With other clients, housing corporations also a little less, but other developers, we usually do that with the commercial unit. Then they run a risk analysis on that, eg solvency, who are the owners, are all included in the [phased tendering process] procedure. The risk that we mainly look at here in the production units is more the technical risks and the planning risks. So there we look at what does it do in time? What does it do in terms of money, what environmental factors there are, so everything that has to do with technology and safety, we really put a magnifying glass on that. That's one and two what we take a good look at is our procurement market where all our subcontractors and suppliers come from, do we have sufficient coverage in the bids. Who are they? And then we compare those bids, see if there are no major differences. Because some calculators say but this is the cheapest, but that doesn't mean that the company can handle the work or is solvent enough. So we really look at that in the unit at project level, but also strategically, of course. That is also part of our [phased tendering process]. If we only have a quote from one party, is it in line with the market? Usually we find that out in advance before we actually make the price offer. You will never get fully covered in because the one that is the lowest today can be full tomorrow, so then you come more to the strategic choices. And we do that together with purchasing and how much work does a party get from [CONSTRUCTION ORG.]? Well, we'll do that with Purchasing, What happens if a subcontractor goes out of business or If you have too few staff, so you also have strategic choices that sometimes you don't have the lowest bid but the next one up because you also want a little more spread among subcontractors. Yes, the formal responsibilities... As a director you are responsible for everything. When I look at business, it's mainly the portfolio that I look at. Then there is a risk in, are we doing everything for [AREA DEVELOPMENT COMPANY SUBSIDIARY] or are we doing work for other clients? Is that 50-50% guaranteed? It can sometimes work out, we'll do 70% through the developer and 30% other clients. There must always be a certain spread so you don't become dependent on one party. So strategically we look at it. All projects that we register via the [phased tendering process] are categorized. Here we have up to and including C tenders I believe. We work with the internal tender agency. Things are going a lot better now, but we also had people there who spent a lot of time in the infrastructure cluster and who then started translated that to risks on the building construction side. We said risks associated with the land, that's for the client, at [subsidiary cluster specialized in infrastructure] they say wait, but that's not possible… Well maybe not in infrastructure land, but that's the way it works in building construction land. So steps have been taken in that direction. And the tender office is always easily accessible, so you hand in your stuff as required and you can communicate about it and and have discussions if need be. I see Tender Bureau and [COO] and the Board of Directors as People who want to help us and ask critical questions. And that's ok. From their point of view, they may not look very deeply into the project, but more of which team is on it. Do you have enough People, are the People good for it that you have, so I think that is a very strong point.
1.3	Are you adequately prepared for your tasks related to RM and ERM?	You have to be ahead of it. And the role of [colleague01] is very important for us, our contact person with the tender office of [subsidiary specialized in residential construction] . He has gathered all that knowledge and you can have good conversations with him on that subject.
1.4	How do you view risks and risk management in	I always look at the staffing of teams and is there enough people and is the distribution of those subcontractors right. That is more at the project level. But also just talk with the purchasing dept.. I think we're pretty well on track and it's actually very

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	construction/construction projects?	detailed at the moment, because there's a change coming across [construction org.], what are the real risks and what are the variables in your budget, eh? So shortfalls … Baseboards estimate, that is a variable, that is not actually a risk, because you have budgeted your baseboards, only yes, you have not stretched it properly or too much, so they are going to take the step with risk management to make it more clear, that it's clear what the real risks are. A calculator I know here yes, I know them here that they forget a room or forget 3 doors or Maybe two, Some things we see twice In the budget, right? Look, a budget is an accumulation of errors. I always say I at the end of the day we never spend exactly what we budgeted for, sometimes we have a little more left over. They are now going to make that a bit more clear and I am happy with that. Only it is for a lot of people, we have just taught them to work like this for 6 years and now things are different again. It has advantages, but also the disadvantage that some people think, no, we have something new again. In terms of ERM, we see that corporate is organizing a lot, but whether they have the connection with where it happens, I wonder about that. They are all already mentioned in the [phased tendering process steps]. I think it's very good that there are rules and that you have to explain it well, but try to do it in such a way that the People who have to work with it become enthousiastic about it. I'm talking about the introduction of new systems. They deal with risk management on a daily basis. We look seriously at the risks and opps list. It's also a storyline, isn't it? So it grows too. So what we submit to the [phased tendering process] doesn't mean that's the end of the opportunity and risk list. That's the beginning of the […], because after that comes many more opportunities and risks that tell the storyline of the project. The risk list is put on the table at every financial meeting. Yes, we usually look at the Deltas and if, for example, the pile-driving has been completed, you can also set it to closed. Yes, then you can also hide it so you don't have to look at it anymore. But it's still there and tells the story of the project. The PMs are all good with with risks. They submit them in advance. And [deputy director of production] and I, we regularly come go the job sites. Have a cup of coffee, listen to what's going on. So we don't always sit here in the office, then I go the site and hear quite a bit about what's going on. And on the other hand with purchasing, I also hear a lot from the market parties if something is going well or less well at their work, right? So I think sometimes that corporate should come and have a look at the job site, that would be an even better interaction. And Of course, the project team does not only include the project manager, but there is also the technical manager who is also there. But there is also a business project controller. I keep an eye on the finances and other things, so the group is quite diverse and everyone can have their say.
1.5	How do you use the knowledge you have gained about risks and RM from previous projects and/or work situations in new projects and/or work situations?	As soon as that project goes into execution, a project team is created and lessons learned are not very effectively transferred to the people of the other project because if something goes wrong, they first try to solve it at the job site, that's a normal human response. It's specifically in our business plan for [subsidiary specialized in residential construction], that we are even going to reward People who have done things wrong, as long as they talk about it. That's a mindset thing. Where people think they're like oh, so it's not a big deal. Yes, it's not great If you make a mistake, but If you can say, guys, I didn't do this right, but we did this and this about it, what do you want from it. That's that much more valuable than solving the problem and saying nothing. A lot of People have read it, but still find it difficult, because most of the time People think that talking about mistakes is uncomfortable. Today's austerity is tomorrow's misery, so let's talk about it. And that is quite difficult.

2	2 - Implementation of (E)RM in practice	
2.1	Can you describe the risk management cycle/process you apply in your work? (techniques and method)	We discuss that during the budget meetings, the opportunity and risk lists are discussed there. We look at the project content, the team also comes, every four weeks. We look at how far the project is, for example if the project has just reached the piling stage 4 weeks in and then that will be a somewhat shorter conversation than when a project is in progress. So during the budget meetubg all the posts come up, the risk lists come up, the team lineups come up, equipment, so everything related to the project comes up really comes up and is also appreciated. The opportunities and risk list will become digital. That's called Dipro. We still need to be trained in that. That's all coming soon, I understand. And, that's more in the real risks and the variability as I call it. But it doesn't start with techniques and working methods, risk management first starts with thinking things through. I think we can learn from it if more data becomes available. Only sometimes you have to ask what's the back story and who or where do you get your information? Because we sometimes notice that, we have a project, we have experienced that once, yes, who should I contact?
2.2	What do you think of the current RM processes you deal with in your work? What has been achieved in this area? What can be done better?	It is a lot of work for the teams at the moment, so that we are going to make that step between the real risks and the variables, I think that is a good step. And the next question, how are you going to value that? Well, you really have to do that in the team. And what could be better? I would say, try to keep the risk management and the processes a little closer to the discipline. So [AREA DEVELOPMENT COMPANY SUBSIDIARY], our developer has different opportunities and risks than we as a production, as a builder. And [subsidiary cluster specialized in infrastructure] will have completely different risks than in the construction sector. A few things do match. It is necessary that you can talk with someone, say it is a tender agency or my manager, that you can exchange ideas with someone who also understands general construction.
2.3	What are the main differences between risk management at ERM and	I think ERM looks more at systemic risk. I don't think we have much to do with it. You know, also looking at risk management, what does my organization look like? Should I grow? Staff shortage? Do you

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	RM at other levels?	have spare staff? So yeah that's the organizational and business risks here. Am I cost-effective? Usually there is more spending than coming in on general costs, then we usually get other conversations that I've seen a few times over the past 30 years. People have to leave, there are cut backs.
2.4	Which steps/parts go wrong in the execution of the RM cycle and what is the reason for this? Can you give an example?	Well, when creating the opportunities and risk dossier, you see, I lead a project management myself, I am involved myself, so that will also stick with the MT. Then it passes to the project management. Transfer is always moments of information loss, so that's why I'm glad that that the story is written down and also the things that have been completed, that you can retrieve them in the file If you don't know something, ask your colleague. It's mostly about discipline. And time, for People to take the time. To write down their risk profile and in a timely manner. And, usually what goes wrong when I look at the peojects is that it… suddenly there's a problem, right? And they say, yes, I actually saw it coming. Why didn't you say anything then? Yeah, I forgot about it. With the purchasing, for example, I am looking at how much work does Everyone get? Can they do it all? So it's more in the transition phase from the inside out. And that the People in, and we always call that the tandem bike, project manager, who sits in front and the project leader, takes over, who then sits in front of the tandem and project manager who goes behind. That the project manager too, and me afterwards, also continue to go to those job sites to see whether what they came up with, whether they are actually doing that on site. Those are also People with other ideas who think like hey, it's a vertical window but I'll put in a horizontal window, for example. People who came up with the plan inside have to go look outside. Go outside regularly. Because then you follow the construction and then you think, hey, they are making something there that I didn't think of. Or why are you doing it that way? You can still adjust that. And aside from that, they can access all financial documents and the opportunities and risk files. So if things go wrong, it's more about staying ahead of the process outside. If people are outside for too short a time during production, then we have to pay attention.
2.5	In which areas should the RM cycle be improved?	A technical manager has other financial risks, he thinks € 1,000 is a lot of what you would sometimes think of well don't worry so much, but it is an issue for him, so you have to occasionally let that go. I hope that digital risk management that will take hold and I still use paper, I'll write things down but anything digital you have to open and click first and then look at it so I hope that the new generation of employees will now do this faster than the foremen who are now 60.
2.6	How or where can (E)RM add value to existing RM and business processes?	I think, when I look at Enterprise Risk Management, we have different islands. We have [subsidiaries] and We have also arranged purchasers centrally. Yes, there are People working very hard, but they never come to the workplace. At least, we do have project buyers here, but let's say [subsidiary clusters] buyers, what is really going on outside? So if you look at corporate, and the connection inside and outside, there's too many middle men, I think. And that is also sometimes the case with finance. That is a bit better, but when I look at Purchasing I sometimes think of, do you ever listen to what is going on outside instead of making very thick contracts that nobody can read. The contracts are usually good , but they are unreadable to People in the workplace. So if you look at your risk management, ask yourself, are we organizing things at the top in plain language that the man on the work floor can also understand.

3	Interaction between ERM and RM within [CONSTRUCTION ORG.]	
3.1	How is the "tone from the top" regarding RM and ERM? Can you indicate what you think is good and where there is room for improvement with regard to the policy on RM and ERM?	Like I said, they should listen to people on the job site to understand what's going on. We recently had someone from risk management that said for a job of 20 million, then I think 5 risks is not enough. Why? If someone from the outside thinks that 5 risks are not enough, they are assuming that it hasn't been looked at well enough. If corporate has an opinion about something and you continue to ask questions then I usually get a corporate tone as a response. They say, yes, but this is just how we see it. And then, who is 'we'? The it gets tricky. I call it the misery of the past. Listen carefully and usually in small groups with corporate, yes, I do try to keep in touch with the business. And, I think it's essential, otherwise people will leave. You can be a big corporate, but if nobody likes working at [construction org.] anymore, people just leave. The bureaucracy and many management layers and Everyone has to have an opinion about everything, it is hampers the company [construction org.] from being seen as a good employer.
3.3	Can you indicate how risks are cascaded from ERM to program or project level and escalated/aggregated the other way around? Can you give examples of this?	There's very little really cascaded from top to bottom, in terms of risks. Not at project level, right? Because project level is bottom-up. What risks are there, we bring them up, you discuss them, they go down again. We don't have that with Purchasing. I think we do business with very large companies, which is arranged in a more corporate way, but we also work a lot with SMEs. They want to arrange all that at a higher level Large companies. If there are real problems with suppliers going bankrupt, it's all taken care of from by [CONSTRUCTION ORG.]. If we hear in the projects that there are problems on the horizon, we usually know it before corporate does and then we pick up the phone and call. You can always just call each other here.
3.5	What barriers are there to performing RM and ERM on construction projects?	There are no obstacles. Sometimes you have to take a step back to give people space again. Some like to do it, others don't so It's also a bit of discipline.

4	Behavior and culture	
4.1	How does behavior affect RM at [CONSTRUCTION ORG.]? Can you name examples? Where is there	You have to know your own People well, I thinkTo see how someone looks at opportunities and at risks. And, I think that in such a team too, because opportunity and risk management is not one person's responsibility but with the whole team, it's important also to see if the team is in balance, that we don't have too many people thinking the same way. I think that is very important. I think that's one of the most important things. So that People can speak freely if they have an opinion about

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	room for improvement?	something. They can also write it down. So the behavior is dependent on the person, I think. And sometimes it's better to discuss it with People, one-on-one from the team to say, I thought you were very quiet during the meeting, what's going on? So you have to keep on eye on that too. The culture is good, I think. Room for improvement… don't just try to talk about risks. People don't want to think about threats all day. What opportunities are there, that will give you Energy. And especially if People also see the opportunity being realized, that's even better.
4.2	What barriers are there to changing RM behavior within [CONSTRUCTION ORG.]?	Watch out that it doesn't become something sent down from above, from top to bottom. And that people think, I'm going to work somewhere else where we don't have all this. That's, I think, the biggest one. At the [CONSTRUCTION ORG.] you have to fill in 50 lists and with this client I only need one. So the workload, what are all the things I have to do? What is imposed from above? And we sometimes notice that yes, then they have to do all these extra things…then we'll just go to [other construction org.] because they don't have it all there. I often hear that. At our company a lot more is being asked. Risk management is one, then we have sustainability and so on… all those themes up there, they all go down that funnel until the site manager sometimes says if all those people who are in the office come here for a day to help with carpentry, then I can actually make some progress. So allow the People to do what they can. And don't ask too much because otherwise people will really leave. And then you start again. [Deputy director of production] and I always look at the projects from a different perspective than the teams to see what is really going on. So if you have a bit more experience after 30 years, then you think, I think there are still some risks there and there, or there are still some opportunities there and there. A little coaching, that people also enjoy it, so culture and behavior, people have to enjoy it a little. They must have it in them.
4.3	Can you describe the current risk culture within [CONSTRUCTION ORG.]? Can you name examples of this? What are the top 3 most dominant aspects in a positive and negative sense?	Because of the whole succession of problematic projects, very large projects, that people spend all day looking for risks,. Just when someone says, I think 5 is too little, then you think, yes, what are you looking for? Should there be 10 or 5 or should I make them up? They are there or they aren't and whether there are 3, I'd rather have 3 good risks than 30 risks on a list because everyone thinks they should. I prefer 3 good ones. Be concise. Yes and the culture, I think everyone is just doing well in their own way. Look, we often work here with project partners. I have an opinion about that and that is more in the spread of the portfolio. Do we work only with that plumber? After a while the man says, I actually have very little staff, do I have to do that job, that job, or that job in progress, let me know. Then suddenly it becomes my risk here, then it becomes my problem again, so I look at more of what is Plan B. What happens if someone goes under or no longer has the capacity, do we have something up our sleeve? But where we can easily scale up. That is also behavior and culture, because purchasing says that I should only do business with such and such and such, because I find that nice and easy. And we then think if that, that or that one is not going to make it, will you come and help me or will you say yes, that's a pity for you. Then you have to solve that in the business because we see that sometimes. So doing business with just one company and in term of culture, we can learn a lot from each other, but I think your risk management is also about seeing if you can learn a lot from others instead of one company.
4.4	Where is there room for improvement in the current risk culture? What are the 3 most important aspects that are currently missing from the risk culture at [CONSTRUCTION ORG.]?	At the regional level. there is always room for improvement, but those are not big shocking things. And the risk culture… Well, I just kind of pointed that out. If Everyone Upstairs thinks something about the risk management, don't try to make plans from above and force it down as a one-size-fits all. Because then people will no longer be receptive. It doesn't bother me personally, but that's because our projects are a bit more limited. I think if you're in the A and B tenders, which I've been on a number of, then more and more people are starting to get involved. Sometimes not bad at all.
4.6	How does culture affect RM/ERM implementation?	Positively I think. I think everyone is helped with some degree of implementation and risk management and business perspective. We also go with our quarterly figures every quarter and what we report goes to the construction site, to the contractors, and they think, what is it all about? But we explain to them why we make choices. And people say, nice of you to tell us, we are doing a bit of carpentry, we don't worry about it. The only thing they want to ask is how will the company be doing in a year or so and will you still have work. That is also part of risk management, because if you give people good prospects, they will also be remain. At [subsidiary specialized in residential construction] we really had problems 2, 3 years ago, unwanted outflow, a lot of unwanted outflow, yes. Where people say, all kinds of things, [phased tendering process steps], big paper masses, I'm just leaving, I'm done with it. At [subsidiary specialized in residential construction] I had a lot of unwanted outflow from People who said it's about so many discs here, it drives me crazy. If I have to order a paper clip, I almost have to go through a [phased tendering process] you know? I have to ask permission for everything.

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Interview date: mei 2023
Respondent: Emp_T

Background respondent	
function	Function: Business Controller at [subsidiary specialized in infrastructure].
course	Education: HEAO and additional courses.
work experience	Number of years employed at company: [25-30] years
number of years	Work experience: the first [20-25] years worked at [subsidiary cluster specialized in general construction], and the last [5-10]
employed[CONSTRUCTION ORG.]	years with [subsidiary specialized in infrastructure].

1	Expertise	
1.1	How do you deal with risk management in your work? Do you have any formal risk management responsibilities?	I'm on the management team, I'm responsible for [subsidiary in infrastructure]. We look at the opportunities and risks that exist for our company. And above that you have [parent company] , so they do the opportunities and risks for the entire company. My responsibilities are limited to the first two , so the projects that I have in my portfolio and also in our [subsidiary] to look at, where we are in the market and how we deal with turnover, financial KPIs, environment, the current circumstances.

Usually we look at what is happening around us, where we're running into issues, what is coming our way. So looking ahead to the things that could happen and how we're going to anticipate. Or how to mitigate those risks. Or capitalize on opportunities. That is mainly what you are doing, but that is actually daily work for me. That's the most important thing. If you look within the projects, that is very specific, because then you have very tangible opportunities and risks from the start of a tender up to after delivery of a project while If you look at the company level, then it's a bit more of what's happening around us In the environment and that's not very tangible . You really have to rely on reports or the things you hear around you, so what's happening in society? Which way are we going, which portfolios should we take, which PMCs, ie Product-Market Combinations? And within those PMCs, the opportunities and risks that we have in there, that's more, at [subsidiary]level . At the MT, you have bi-weekly meetings. That's pretty usual, but you also have your deep-dive sessions or your off-sites where you go a little deeper and brainstorm with each other about what we can do now, what are our strengths and weaknesses and should we anticipate further on that. And in between, you are constantly monitoring , for example based on the dashboardings we have.

When it comes to business strategy , we get information about what the organization is doing through many channels, you get things through the intranet , there are meetings in which our strategic goals are presented. From [parent company] it arrives at the [subsidiary cluster]. Within the [cluster] this is discussed in away sessions. And then it comes to us [subsidiary specialized in infrastructure], and we then pass on the example to project leaders, implementers. It is therefore increasingly being translated to the business. |
| 1.3 | Are you adequately prepared for your tasks related to RM and ERM? | This is just daily work in my opinion. It's a constant theme, because risk management is simply your gateway to what happens to you. In any case, everything that happens within a construction project must first be mapped out via those opportunities, otherwise it will be an unexpected thing that you cannot control, and then there is nothing you can do about it. If you foresee everything, you can also do something with it. If you don't foresee it, so if you don't practice good risk management, things will surprise you. So if you do that well, you stay one step ahead, so in that respect it is one of the most important topics for me in my position, risk management. I think risk management in the era of de-risking, we're a little more company-wide and with the de-risking, [phased tendering process]it's getting a lot more emphasis and more of the attention that it deserves. |
| 1.4 | How do you view risks and risk management in construction/construction projects? | We always talk about the risks, but you also have to look at the opportunities above all. Because it is the idea that you hear a lot, you have to do risk management, we need to write everything down, what we expect to encounter, but actually also have to talk about the opportunities you have, so thinking in terms of opportunities. We're not very good at that as a company. If you only think about risks then you run the risk that you are indeed driving on that narrow road and that you look into the ravine all the time and that you also drive into it… so it's also about looking at the opportunity, and steering towards it, the right side of the road.

I often have project meetings, also for example on projects that are not going so well. Then it is actually very powerful to start looking at, where are there opportunities? How can we get out of this debacle, for example, do we need to put the project on hold, so to speak, or do we need to have a difficult conversation with the client, it could be anything. Do we have to come up with a legal solution? And how can we move towards the delivery of a project where we cross the finish line with zero delivery issues. So really the positive sides, also for a client. By doing that you bring reign the project back in, and in that way you get control of the ball again. But it is a matter of finding a good balance between opportunities and risks. It can't just be opportunities or risks. If you just do this well, you will stay on the ball in the project. If you loose the ball, then during the game the opponent gets the chance to score from you. You really have to stay ahead of the game and risk management is one of the most important things to maintain that well. |
| 1.5 | How do you use the knowledge you have gained about risks and RM from previous projects and/or work | If you 've been around for [25-30] years, you have a whole 'backpack' <of knowledge> full of everything that can happen on a project. Sometimes the people around me or colleagues sometimes suffer from this, also because I see it happening. In the project I think, hey, I also experienced that in another project there. It ends like this, do you also know with a customer or something like hey, okay, then it will go that way or now you have to put a stop to it. So indeed a lot of past examples from |

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	situations in new projects and/or work situations?	history. If you have that, yes, That's a huge benefit for me to have that . That is not somewhere in a spreadsheet or something like that, but it is just available knowledge that you simply have and experience with which you anticipate in your work situations. We now use Relatics. Now we are working on using the DiPro app. In any case, it is good to record everything properly and certainly also product-market-oriented, so PMC-oriented. Just so you know that If I'm going to take on this project, these are the most common risks on such a project. If I do business with that client, then I have to watch out for such and such things. With that I might be able to capitalize on opportunities. I can take risks with that. That's the great thing about Relatics, you can pick up things across the projects more and more actually at DiPro, are they also working on it . And, I think it's very valuable. That is also a bit of the step that [CONSTRUCTION ORG.] has been made towards those product-market combinations. Then you really get very specific opportunities and risks from files of which you say, I come across them often. Well, they are in my head now, but you can get them out of there.

Anyway, every project is also unique. It is not always a standard process and of course we describe it as a standard process, but every project has slightly different ingredients. You can see that again, different contract conditions, different customer, different assignments, different environment. You have to kind of figure it out every time. But it is very handy if you can retrieve it from all the files that have been made, within a certain product group, and that is a great advantage. On the other hand, almost no project is the same. That's the tricky part. |
| | | |

2	2 - Implementation of (E)RM in practice	
2.1	Can you describe the risk management cycle/process you apply in your work? (techniques and method)	Plan Do Check Act, that's actually the cycle. This cycle takes place in the projects. I think they often have two-weekly meetings on a project and actually bi-weekly meetings should start with risk management as far as I am concerned, because that is your gateway to everything. In it you determine , who is responsible for which risk or opportunity, to mitigate or capitalize on it? The worst thing I have experienced is that I entered a trailer and the project leader was still working on updating his opportunities and risk file and that is not the way it should be, then you are not doing it right, because it is a team play. Everyone within the project team has tasks and responsibilities. Then it cannot be the case that the project leader when you walk into the trailer that he is working on it, then that completely misses the point. Because risk management is a team play. You have to know what others are up to, who is working on what, otherwise we will all be chasing the same ball, chasing the same opportunities, watching the same risks. There are also deadlines when things have to be done, so you have to keep each other informed, how far along you are with it and whether it is still up to date.

It may have to do with time. When I think back to my time at [subsidiary cluster specialized in general construction], it was very different from what it [subsidiary cluster specialized in infrastructure]is today. A lot is also asked by clients, to keep opportunity and risk files in Relatics, for example, which we also share with the client. You see that a little less with the [subsidiary cluster specialized in general construction] projects, there you do it more for yourself. That is often more turn-key, so you deliver a building and how it came about is a little less described and here you have to keep track of all the steps. I see that happening. Though I have to say, with [subsidiary cluster specialized in general construction] I think risk management is also at the top of the list, but that does not mean that it gets done properly everywhere. |
| 2.2 | What do you think of the current RM processes you deal with in your work? What has been achieved in this area? What can be done better? | I think we are really on the right track with risk management. Because [cluster risk manager] is there, for example, and his presence is a new phenomenon for me. It is very nice to see that he is so close to the projects and can even advise me on this, while in the past I was actually expected to do that, so I think that in itself is just an enrichment, that you have someone who only focuses on that. And also visits the projects and it inspires enthusiasm, so we are really on the right track with risk management [CONSTRUCTION ORG.] compared to years ago.

And can it be improved? Yes, can always be improved. RM is a bit non-obligatory. The internal process starts out quite well organized because you also upload your [opps and risk register] with your tender documents in [phased tendering process]. Then you win an project if all goes well and then it comes in the implementation part. Yeah, and as I see it and of course I have been around for a while, it varies how it's handled throughout the company. |
| 2.3 | What are the main differences between risk management at ERM and RM at other levels? | ERM is a bit broader I think, that's how I see it. And I actually described that a little bit in the beginning, it becomes more and more tangible the closer you get to the product that you produce. How does that affect the products we produce or the constructions we do ? And there you really just have concrete opportunities and risks that you can control, while the ERM does contain things that are not so controllable. I am talking about societal changes, for example, and you cannot control that. You *can* make sure that you have that in mind and that you anticipate it. |
| 2.4 | Which steps/parts go wrong in the execution of the RM cycle and what is the reason for this? Can you give an example? | Time and planning , that's where things go wrong. If a project becomes problematic and busy and a project comes under pressure, you run the risk that too little attention is paid to it. People are caught up in the moment. And then you come back to what I just said, then you lose the ball. And then it goes wrong. Sometimes with projects, then we just stop the project for a day. Then we just start thinking about things like this, how can we turn this around because we lost the ball and how do we get the ball back. I do that with a director of production. Usually, then we just really spend a day thinking with the whole team, we just shut down construction for a day. Well, these are extreme examples when I've done that in the past, but it's delivered so much. Yes, just put your feet up on the table, get pulled out of hustle and bustle. Because that's what it's more about, people keep going, hey we have to stay on schedule, every hour is...Then we say, we're going to stop for a day. Huh, that's not possible. Yes, it is, because that delay causes you to speed up again. Slowing down for a day is greatly accelerated afterwards by figuring out, focusing on, what should we do next? When does something really have to be finished? Can we |

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		drop something, can we postpone something without it causing us problems, so that we can think about it a bit longer or things like that.
2.5	In which areas should the RM cycle be improved?	Yes, something like more saying is doing. I mean, we all say we're doing it, but is everyone doing it that way. And how are we doing it within the teams? Does everyone feels responsible, does everyone have an idea of what risks there are and how we deal with them or opportunities that we can use? Or is it one person on a project who knows it all? Or are there a lot of people who know that and can deal with it or can influence it. So I think it could be better in those areas. Really make it more of a team play In the projects. And you have to show them more that risk management has added value.
2.6	How or where can (E)RM add value to existing RM and business processes?	It's what it's about, what it's all about, especially in our profession.

3	Interaction between ERM and RM within[CONSTRUCTION ORG.]	
3.1	How is the "tone from the top" regarding RM and ERM? Can you indicate what you think is good and where there is room for improvement with regard to the policy on RM and ERM?	I think that in the field of ERM the tone from the top is good, because I think we get quite a lot of information about that. I'm okay with that. The level below that I think risk management is communicated as a must, as in: you've got to do risk management, you've got to do risk management, however it's a team play. And play actually means to play , so it is also a bit of playing the game well, just like the game of football. If you're going to say, every Saturday at 8 o'clock you're on the field, then you won't enjoy it anymore, I think. When in fact it should be a part of you, where you think: risk management gives me peace of mind. I enjoy discussing with my colleagues about how such a project, how we can bring it to a successful conclusion, what obstacles we see in our path and what opportunities we see . It should inspire enthusiasm instead of, Thou shalt have your risk file in order . Because if you do that, then it becomes like, well, we're going to write that down because we were told to. When in fact it is actually a game that needs to be played, where everyone also sees a bit of fun in it, hey, this gives us peace. This offers us added value In the projects or in a team so that we can properly anticipate things. So the tone from the top is not, That shalt have your risk management in order and by the way I will also audit you twice a year to check whether you have everything up to date. It should be much more about whether you have your project in control. The steering is the most important and you do it because you like it, probably because you think it's important. If it really is being drilled, that's not good. I don't feel that way, but if you think, the risk management is not very good, let me just tell them, this has to be done, this has to be done and this has to be done. Yes, then I miss the mark. Then it will happen, but then it just becomes a list with something on it and nothing else is done with it. It's more about that interaction. And the attention you give it. If I am in the project meeting and there is an opportunity and risk map and you don't pay attention to it then a team is also thinking, why am I even doing this? Next time we'll add the same list and see if it's even noticed. While if you start asking questions about it, if you give it sincere attention, you ask, great opportunities, how are you going to capitalize on that or that risk, how can we solve that or how can we minimize that if that is possible performance or? And then RM gains a certain importance.
3.2	What is or can the added value of ERM be for [CONSTRUCTION ORG.]?What do you want [CONSTRUCTION ORG.]to achieve by implementing ERM?	Yes, it's a must . I actually assumed that it [parent company]is at the level of ERM with those maps and whatever else. So yes, I think it is simply a must for a listed company to have a good picture of this implement it. I think those steps translate more, from from [parent company]to the [division] and then on to the [subsidiary cluster]and [subsidiary].And that cascades down and it actually becomes more and more tangible I think. From coarse to fine.
3.3	Can you indicate how risks are cascaded from ERM to program or project level and escalated/aggregated the other way around? Can you give examples of this?	We have product -market combinations (PMCs). For example, we have In the company [construction org.] [subsidiary specialized in infrastructure],we have 6. We then bundle projects into them and you can indeed see in them, well, what are they? The opportunities and risks, but that is also a market that we still want to enter to operate. Is it a market that has a future? How can we serve the customer even better? Which partners should we have on board? At [subsidiary specialized in infrastructure] we've just started over. It has been a merger of the major projects with the regional company for six months now . And in that we have really structure the entire company around PMC, so PMC-oriented. We have 3 directors, that is 3 PMC directors, they all have two PMCs under them and they have experts below them. These are People from the company who make many of these types of projects or who have a great deal of knowledge of the PMC and who also make plans for this in that area. Part of the plans is also as an expert, what are we good at and what are we not good at? Which projects should we prioritize and which projects should we avoid? What type of contracts should we try to acquire in this PMC, which ones should we not. For example, we specialize in certain market combinations.
3.5	What barriers are there to performing RM and ERM on construction projects?	The aspect of time really plays a role in construction projects. The daily chaos they end up in and, the project is under pressure, understaffing which means that people no are no longer pay attention to <RM issues> As far as I can see, the competencies are there. The biggest hindrance is just really time and and you just really see it's a missed opportunity if you don't maintain this properly because if you don't then you really just lost the ball. To use the football metaphor again.

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		It's time. And understaffing . Also meanwhile, if you end up doing a project with insufficient staff, then you would say that risk management is very important, because then you have to [do] a lot with a small team and then they sometimes say, yes, but we do the risk management stuff briefly while we're having a sandwich at lunchtime. That's not good enough.
3.6		

4	**Behavior and culture**	
4.1	How does behavior affect RM in [CONSTRUCTION ORG.]?Can you give examples? Where is there room for improvement?	I find that difficult because I limit myself to one [subsidiary]and I also see how other companies deal with it or I have seen it from the past. So that's hard to say. I think that gets a lot of attention in the [subsidiary], but it is also very important, you can see where we've come from with the big projects and the company.
4.4	Where is there room for improvement in the current risk culture? What are the 3 most important aspects that are currently missing in the risk culture at[CONSTRUCTION ORG.]?	Room for improvement is in seeing that it is not only risks but also opportunities, there really is something in that. Because if you ask someone about a project, name the opportunities and maybe they'll come up with one or two and if you ask for the risks, they come up with 30 or so there is definitely something to be gained there, I think. It should be fun and indeed one should see it in the projects as a tool or really as a game, a kind of management game to bring the projects to a successful conclusion and stay out of the fray of planning problems and […] on projects. Inside [CONSTRUCTION ORG.], I think we're a pretty easy-going company. I myself can sometimes be a bit direct, I also don't want to say that steam is coming out of my ears, but if something becomes unpredictable, it becomes a bit more difficult. And even then, I think we will solve it quite well together, but indeed, yes, if it goes too far at some point, then yes. I do think that things are less easy-going in the smaller companies or SMEs. I think we can be very patient at times. I am sometimes told that I move too quickly towards my goal or that I am sometimes too direct. I prefer to be a bit more direct as opposed to asking all kinds of indirect questions. I'm often more direct, looking for the answer. Of course in the beginning, we'll look and see, how can we solve that together? But at some point we reach the breaking point, then things have to change.
4.6	How does culture affect RM/ERM implementation?	I've said a lot about that already. I think that the culture, there's a lot of work being done on that if you now look at the core values, that is where cooperation and ownership come in. But they are also competencies that must be a part of you. You can all say, I think those 5 core values are very important, but you also have to give substance to them in your daily actions. If you think, I can name those core values, but I don't know what they really mean, then it misses the mark. In my opinion, a great deal is being done to change the mindset so that it can be translated into your personal actions, and in doing so we create a culture in which risk management is also an important part.

Interview transcript
Interview date: May 2023
Respondent: Emp_U

Background respondent
Function: • [member of executive committee] of [construction org.] **Education:** • Civil Engineering **Work experience:** • originally trained in road construction and traffic engineering • the first few years still worked at the operating company that was the old family business, within [construction org.] • then at [construction org.] [subsidiary cluster specialized in general construction], held various positions and eventually became director of a region • in [2000-2010] asked by [former member of ExCo] to go to [former name of subsidiary cluster specialized in residential construction] as jointly responsible for the operating company. unfortunately ended up in the housing market crisis. • then, together with the then director of [area development company subsidiary], linked the two activities through the contribution model. • then the traditional model of an operating company with regions has been discontinued, instead production activities have been grouped into specialisms. Very new for [construction org.] at that time, but also crucial for the formation of [construction org.] many years later. • Asked to join the Executive Committee in 2019 • since January 1, 2022 [construction org.] has been converted to 2 [division]s. Own field of work includes construction, real estate and all infrastructure activities in the Netherlands. The support functions were then placed in the [division]. **Number of years working at [construction org.]:** • [25-30 years]

1	Expertise	
1.1	How do you deal with (Enterprise) risk management in your work? Do you have any formal risk management responsibilities?	I am ultimately responsible for the ERM of [construction org.]The Netherlands and jointly responsible for ERM of the [parent company] . RM is an integral part of your business operations. My job is to make RM much more explicit and much better directed. The aim is, among other things, to move from reactive to proactive RM. My view on RM: we need to develop it further, from identifying risks to very actively managing risks across the entire breadth of our activity. When you tie PRM and ERM together, you have mature risk management, as opposed to taking stock of risks and hoping they don't happen.
1.4	How do you view risks and risk management in construction/construction projects?	In the old world this happens very implicitly and in the new world it must be much more explicit and built up in layers from project risks to Enterprise risks, taking into account the changing way of working. In certain activity clusters we work much more with concepts, products and services that have a repetitive character. If you work that way, the implementation risks are much more limited than traditional risks, because a traditional construction project is actually a kind of prototype that you build every time and that is where the risks are in the implementation. If you work with products and services that contain knowledge and always work with fixed parties in the same way, you have that risk much better under control, but reputation risk, for example, is very high if there is a mistake somewhere in your concept. It's not just about looking at the risks in the projects, but also in the portfolio and the market, and that last part in particular is therefore my responsibility

2	2 - Implementation of (E)RM in practice	
2.4	Which steps/parts go wrong in the execution of the RM cycle and what is the reason for this? Can you give an example? *Example shown to respondent by researcher of typical RM lifecycle: Identify – Assess – Plan/implement – Monitor – Repeat*	The first two steps (Identify & Assess) are okay. So where it's complicated is applying the right measures at the right time. That could be better. It is also important to that colleagues experience RM as a normal part of their work. If you work with concepts, products and services, you will see that this works much better, because the same team will be doing the same thing in a different place and then they will benefit from completing the RM cycle themselves. And then you see that the learning capacity of such an organization that works more in work flows or construction flows that one continuously improves with very small steps. And then you notice that the cycle is closing. In the project organization you sometimes see, apart from the good cases, that it is difficult to re-insert that learning capacity back into the organization and into the systems. How could you improve RM? Partly by changing the way you do the business by making much more use of fixed teams, repitition, fixed systems and just managing the deviations. While a lot of People who work on construction projects were actually raised to put out fires and those People often don't have much interest in implicitly going through an RM cycle, because if you do that well, there is nothing left to put out and they are not prevention officers. And you do need that to do risk management properly. In addition, the entire breadth of risk management must be looked at and the various risk domains made explicit, both for ERM and PRM, to look at the entire scope and then look at the most important domains from a kind of heat map and there especially to get started. The last thing that is considered very difficult is the quantification of risks and the residual risks after the measures taken. One of the points for improvement that we are now very emphatically working on is to incorporate the PRM into the financial systems. We do this in a low-threshold way with a pleasant user interface, where you can very easily add your risks on the construction site, manage them and complete them, so that it is not something for the manager somewhere in the office, but it becomes something for you. . Those are making very tangible translations of RM

		part of the daily work
2.6	How or where can (E)RM add value to existing RM and business processes?	As the person with ultimate responsibility for ERM, I linked the various domains to colleagues who are experts in those domains. For those different domains I have appointed action holders who, together with the RM professionals [head of RM at Risk & Control Dept] with the department, work together in a very explicit way on ERM. I always take the market (risk domain) myself because I consider it important and the overall picture together with my financial director [executive director finance]. The risk profile of a developing builder has a fairly limited upside, but an almost unlimited downside, so I always use that as an argument to say, guys, risk management is crucial for us, because you have to compensate for a bad project by not 10, but Maybe 20 or even 50 good projects. So what if we could prevent those very large negative outliers from happening with good risk management as part of our daily work. Look, you'll always see some movement, won't you? Managing risks does not mean avoiding risks at all costs, otherwise you will not seize the opportunities. If you can reduce the very large negative bandwidth and bring it in proportion to the positive bandwidth, then you just become much more stable as a company and sustainable business operations are of course crucial to continue delivering value to colleagues and to customers and to our environment .

3	Interaction between ERM and RM within [construction org.]	
3.1	How is the "tone from the top" regarding RM and ERM? Can you indicate what you think is good and where there is room for improvement with regard to the policy on RM and ERM?	In the old operating model, ERM was always done at the [parent company] level, but there was a lot of nothing in between and then you got project risk management. What we have tried over the past 1.5 years is to connect the two, so that means that we also started doing ERM at [division] level and together with the [subsidiary cluster] responsible stakeholders, we started to work it out, with action holders on those 17 different domains, to get the whole picture in view to prevent us from having blind spots.
3.2	What is or can the added value of ERM be for [construction org.]? What does [construction org.] want to achieve by implementing ERM?	In this way you can improve the added value of ERM, because that used to be seen as a kind of tick-the-box idea. And now we are much more actively tying it together and we are also using the outcomes of risk management to shape the meetings. So we zoom in on those areas where we see a large delta in the risk, a delta in the degree of risk versus the risk appetite that we're willing to accept. Because again, It's not about zero risk, It's about not exceeding your risk appetite, because that's when it gets problematic.

4	Behavior and culture	
4.1	How does behavior affect RM in [construction org.]? Can you name examples? Where is there room for improvement?	In the old way of working as a project company, the firefighters have the upper hand, they mainly focus on activities when risks have occurred. We are now trying to improve culture and therefore behaviour, but also leadership style in such a way that we are much more focused on preventing risks. The impact (of behavior and culture) is enormous if you think about the transformation of a group of projects, the old [construction org.] into a number of targeted product-market combinations (PMCs) in which we work with products and concepts where we make use of construction flows and partial off-site manufacturing, then this question takes on a much larger resonance than you would initially think.
4.5	What obstacles are there in changing the culture within [construction org.]?	What we used to encourage was 'best for project', but now it should be 'best for company'. For instance, we may not use a certain working method anymore that might be just a few percent more efficient for a residential high-rise somewhere in the Netherlands, because we say we can manage our risks much better by always building with the same building system. Even if it is a bit more expensive in the high-rise, your learning curve and the bandwidth of risks and also the risk distribution, so maybe more upside than downside, is so much more effective than 'best for project' which focusses on taking that last 3%. Those are major behavior changes.

Stelling 1: Er moet een CRO aangesteld worden.

Emp_G

ik denk dat het sowieso een goede zaak is om centraal een CRO aan te stellen. Maar daar hoort wel een ontwikkeling aan vooraf en de vraag is of [construction org.] in die volwassenheid zit. [Construction org.] is nog steeds eenvoudigweg ook door haar controles organisatie vaak nog enkel gefocust op de finance. Risk kan bijdragen tot doelbepaling, waarbij finance er één van is. Dus ik zeg ja, ik vind het een goede zaak als je een CRO aanstelt, echter vraag ik me tegelijkertijd af of finance, die nu ook risk in zijn portefeuille heeft, daarin ook al genoeg in meegaat. Je kan wel een persoon aan de top stellen maar als er geen geledingen in hun volwassenheid mee zijn gegaan, dan weet ik niet of dat je met het enkel aanstellen van een CRO met het doel een verbeterde organisatie, op verbeterde wijze de doelen haalt. Ik hoor graag van [Emp_C] hoe er met risk management in projecten wordt omgegaan en dan is de vraag als je een CRO aanstelt, zal dat nu in die projecten dan ineens gaan veranderen en ik denk dat volwassenheid hier een rol speelt. Dus: "ja, maar…" of je kan ook zeggen: "nee, want.."

Emp_C

in theorie vind ik het iets wat onderdeel moet zijn van alle processen en dat ieder vanuit zijn eigen expertise op die manier met risico's omgaat. Dat ga je niet bereiken door daar juist een aparte functionaris vanuit een aparte zuil voor in te richten in mijn ogen en ik sluit me aan bij wat jij zegt, (Emp_G), dat het hebben van zo'n functionaris geen onderscheid gaat maken op projecten en tenders. Dat is mijn beeld.

AG

Dus jullie vinden niet dat juist door het aanstellen van een CRO de risk functie nog beter in staat gesteld zou kunnen worden om die veranderingen door te voeren om de maturity te verhogen binnen de organisatie?

Emp_C

We komen al uit de fase dat we niet eens onder wat dan ook vielen, maar gewoon een adviseur waren. Dus ik vind de stap onder finance al een enorme stap in de goede richting en misschien dat dit in het eindplaatje wel een stap zou kunnen zijn, maar op de korte termijn zie ik het nog niet helemaal gebeuren.

Emp_G

We zijn inderdaad wel bij finance, maar die heeft als eerste doel: finance en dan pas risk. En dan zeg je als we risico management goed toepassen kunnen we dat ook verder doorontwikkelen. Maar wat zie je ontstaan, de eerste vraag die de business stelt is: kost dat ons extra tijd en dan praat ik ook over projecten die het al niet lekker doen. Dus dan zeg ik, dan gaat het niet zozeer om tijd, maar prioriteit. Maar je merkt als het extra tijd gaat kosten, dan vindt men risicomanagement en het invullen van Relatics of een spreadsheet of wat ook altijd als een extra iets, daar zit men niet op te wachten.

Emp_C

Het zou veel meer over houding, gedrag en cultuur moeten gaan en dat mensen zich bewust zijn van het contract en de haken en ogen die aan dat contract zitten. Het begint al dat mensen niet eens doorhebben waar ze ooit in het verleden ja tegen hebben gezegd en waar ze wel degelijk voor verantwoordelijk zijn.

Emp_G

Nou, je ziet ook dat problemen worden opgelost met het sturen van een contractmanager, terwijl risicomanagement in principe alle disciplines behelst. Maar inderdaad interpretatie van het contract is er dan een van, maar dat betekent tegelijkertijd dat je veel meer kan doen met risk management in de volle breedte, zoals, en dat weet [Emp_C] beter dan ik, zoals je al in een tenderfase naar verschillende aspecten kijkt.

Emp_C

Zeker, je kijkt in de hele breedte, maar je vertrekpunt is gewoon de set met eisen, je contract waar je invulling aan moet geven en dat is je kader. En vanuit dat kader ga je een aanpak bepalen. Lees een scope en planning en een prijs en daar zitten gegeven de keuzes die je maakt nog haken en ogen aan, lees risico's.

Emp_G

Ja en dan heb je nog op een gegeven moment te maken met een aantal zaken, en dat is ERM, dat zijn bijvoorbeeld die 8 fundamentele principes van ISO 31.000, dat je agile moet zijn omdat je ook een soort veerkracht aanwezig zou moeten hebben in het team lees de houdingen en gedragingen om problemen als ze zich voordoen zo snel mogelijk op te lossen. Dan moet je ook van een bepaalde volwassenheid zijn. En dat zie je nog niet altijd. De CRO kan een alleenstaande hoog in de boom zijn, die kan zich heel erg roepen in de woestijn voelen op het moment dat dat nu zou gebeuren.

Emp_C

Dus in de toekomst misschien wel iets om naartoe te groeien, maar ik denk nu nog even net niet.

Stelling 2: ERM bestaat niet op projectniveau

Emp_C

Uiteindelijk denk ik dat dat zo is, maar ik denk wel dat risico's die je op een project signaleert, dat die niet alleen op dat project hoeven te spelen, maar ook op bedrijfsniveau kunnen spelen. Dus er zit wel degelijk een wisselwerking en omgekeerd zijn er risico's die je als bedrijf signaleert die ook relevant kunnen zijn op een project, zijn wel degelijk van belang om ook kenbaar te maken binnen de projectorganisatie dat zodat zij ook kunnen beoordelen of dat ook een relevant item is voor hun. Vanuit die 17 domeinen dat allemaal beschouwen op projecten en tenders, een paar domeinen heb je een wisselwerking, maar niet op alle 17. [Emp_G] jij denkt daar vast anders over...

Emp_G

Nee hoor, dat is van de situatie afhankelijk. Maar in principe, voor het denkniveau, ERM is wel alles hè? Dat is Enterprise Risk Management, dus zowel op bedrijfsniveau als zeker projectniveau. Maar ik ben het met je eens, maar dan heb je het over de domeinen, de risk areas, als je het dan hebt over, bijv. een transformatie die wat meer tegen een strategie aan zit ja, dan zou je op een project niet mee te maken krijgen. En "bestaat niet" op projectniveau betekent nooit. Nou, er zijn zelfs een paar domeinen die hebben alles te maken met de stage gates en dus het bestaat sowieso integraal hè? Deze moet ik dan ook met nee beantwoorden, want het bestaat altijd wel iets op projectniveau.

Emp_C

Nee, maar ik zou meer zeggen, bepaalde domeinen zijn relevant op projectniveau en een aantal domeinen niet.

Emp_G

Precies ja.

Emp_C

En omgekeerd heb je wel de wisselwerking ook vanuit projecten die voeden weer bepaalde domeinen binnen ERM.

Emp_G

Daar kan je eigenlijk nog niet eens eenduidig een antwoord op gegeven denk ik omdat zelfs als het gaat om een transformatie, kun je best een project hebben waar de transformatie ook speelt. Je kan hem bij wijze spreken wat lastig ruled-based toepassen in de zin van dit project wel en dat project niet.

Emp_C

Ik denk dat je een onderscheid moet maken tussen projecten in de zin van bouwprojecten, onze core business en projecten in de zin van ICT of andere soorten projecten. Als ik dit zeg, zeg ik het puur vanuit, we bouwen buiten iets in de context van een bouwproject. En hebben wij ook allerlei ondersteunende processen en de daarbij behorende projecten, daar heb ik het niet over, maar dat is uiteraard wel een onderdeel van ERM [Emp_G], dat klopt.

Stelling 3: De urgentie om ERM te implementeren binnen BAM ontbreekt

Emp_C

Nou, dat kun jij beter antwoorden [Emp_G], ik zit daar iets verder vanaf, mijn gevoel is dat dat zo is. Maar dat is misschien ook omdat ik er te ver vanaf zit.

Emp_G

Daar heb je gelijk het antwoord op de stelling. We zijn er net uit dat ERM alles is, dus jij kan ook dat antwoord geven, maar ik ben het eens als je het erover hebt dat urgentiebesef ontbreekt binnen [construction org.]. Dat heeft te maken met de doelstellingen en die zijn nog steeds als 5 jaar geleden: finance, finance, finance. En dan krijgt risicomanagement een andere bijna label of toepassing dan waarvoor het eigenlijk in het leven is geroepen, namelijk om op een effectievere en efficiëntere manier doelen te halen. Maar het wordt nog wel eens gezien als: we hebben toch een spreadsheet? En we moeten over naar Relatics? Moeten we het nog groter gaan maken, nog bureaucratischer? Daar hebben we de tijd niet voor. En hoeveel kost dat? ==Dan heb je vaak dat die urgentie wel ontbreekt ja, meer dan nodig ontbreekt==.

Emp_C

Wat mij altijd triggert bij dit soort dingen is, wat is de meerwaarde en zien mensen de meerwaarde? Want als ik heel eerlijk ben, toen ik voor het eerst mee geconfronteerd werd, dacht ik ook, we doen het al jaren niet. Wat gaat er nou mis dan? Natuurlijk, het kan altijd beter, maar het was mij ook niet helemaal duidelijk, dus als de meerwaarde duidelijk is, de toegevoegde waarde, dan is het makkelijker om urgentie te krijgen dan wanneer mensen denken, daar hebben we weer een papieren tijger, wat gaan we doen dan?

Stelling 4: ERM is cruciaal voor het vertalen van de bedrijfsstrategie naar de organisatie en de projecten

Emp_C

Voor de projecten herken ik hem niet. Dus om nou te zeggen dat het cruciaal is, ik heb de aansluiting nu in ieder geval niet. Als ik niet eens ervaar dat ik nu iets mis en dat het helemaal faliekant misgaat… Want ik heb er geen beeld bij. Ik doe er niet heel veel mee. Ja, ik snap het wel hoor, maar ik heb nog nooit op die manier zo gewerkt en ik heb nog nooit ervaren van, nou gaat het helemaal mis.

AG
En in het kader van de huidige transformatie binnen [construction org.]? Met het oog op een andere manier van werken, meer werken met product-marktcombinaties, meer standaardisatie, werken met concepten…

Emp_C
Ja, maar dan heb je het ook over ander soortige projecten, andere keuzes. Dat gaan we ook merken inderdaad, met ook je andere strategie en waar richt je je op. Dat gaat zich wel vertalen in met name de type projecten waar we ons op gaan richten, maar dat bepaalt meer de keuze van de dingen waar we ons op gaan focussen wat wel, wat niet. Maar op het moment dat je een keuze hebt gemaakt om je ergens op te gaan richten, dan is het wat mij betreft qua risicomanagement weer gewoon business as usual, dus dit zit veel meer in de voorkant van, daar waar wij in het verleden grote infraprojecten deden met grote omvang hebben we nu andersoortige projecten voor andere opdrachtgevers et cetera. En dat komt voort uit de strategie, maar de strategie bepaalt de omvang van de projecten en de type projecten waar we ons op gaan richten en dat ervaar je wel. Alleen gegeven de projecten waar we mee aan de slag gaan, is het voor mij daarna niet echt heel anders. Dus in die zin, ik zie daar wel een rol, maar ik zou het niet cruciaal noemen.

Emp_G
Nee, dat is ook het woord waar ik de nadruk op leg, cruciaal is het niet. Omdat ERM wat dat betreft een tool is en wat ik veel belangrijker vind, dat zijn de houdingen en gedragingen van de medewerkers, waarbij ik ook zelf stel dat een uitvoerder in het werkveld echt wel weet waar die mee bezig is. Eigenlijk ook wel echt wel zijn risico's echt goed kent alleen ERM als tool kan helpen om dat wat meer te formuleren en dan met een methodiek zoals een bruto netto risico om daar wat meer mee om te gaan. Maar uiteindelijk als die man of vrouw het weet dan hebben ze die tool dan ook een andere kant niet nodig. Maar andersom geredeneerd, het gaat ook wel eens goed fout op die projecten en ik denk, dat is niet alleen omdat je het van tevoren niet zag, je had het kunnen zien of dat het ineens een incident is, ==dus daar kan je hem wel mee helpen. Maar het is niet cruciaal, want het is net zoiets als je ERM niet hebt, kun je nog steeds hele goede resultaten halen op projecten== en in de organisatie.

Emp_C
Maar voor de vertaling van de bedrijfsstrategie naar de organisatie, want daar heb ik geen antwoord op gegeven eigenlijk, misschien zie ik hem daar wel iets meer. Omdat het je wel dwingt om over bepaalde domeinen, bepaalde risico's te onderkennen en daar bewust over na te denken.

Emp_G
Als onze [COO] op een stoel gaat staan en iedereen met een road show en een walk-the-talk bedrijfsstrategie vertaalt naar organisatie en projecten, dan pas je geen risicomanagement toe, maar dat is bijna wel de eerste stap om dat te doen. Dus ja, zonder ERM lukt het ook wel. We hebben hem niet nodig, maar het gaat je die waarde wel brengen omdat het op een bepaalde manier je leert gestructureerd nadenken inderdaad dus ook het vertalen van bedrijfsstrategie. Maar het is dus niet cruciaal, dat is eigenlijk het punt.

AG
Dus wel belangrijk, maar niet cruciaal?

Emp_C & Emp_G
Ja

Stelling 5: ERM is meer dan Plan-Do-Check-Act

Emp_G
Mijn beeld is, het is het verschil tussen een in control statement cyclus, want de Plan Do Check Act is eigenlijk ook de kwaliteitscyclus van Deming, dit is meer een controlecyclus, maar risicomanagement is veel breder. Het is ook met elkaar afstemmen, dingen bespreken, duidelijk maken, transparantie, er hoort veel meer bij, dus ik zou bijna willen relateren aan die 8 beginselen van ISO 31.000 en dat is meer dan enkel een Plan Do Check Act. Er zit veel meer context bij bij een risicobeheer en control cyclus, bij ERM dan enkel die cyclus.
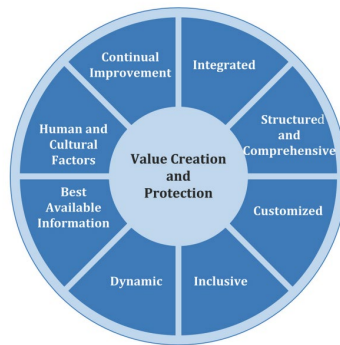
Figuur 2 — Principes

Figure 2 — Principles

Emp_C

Ja, het begint al met je context definiëren. Wat zijn de doelen van je klant. Want het ene keer zijn de doelen heel anders dan de andere en dat bepaalt al de context voor je risicomanagement. En daarbinnen ga je dus dingen benoemen et cetera dus Plan Do Check Act, dat is leuk als je eenmaal in de fase zit van benoemen beheersmaatregelen, maar er zit inderdaad veel meer aan vast.

Emp_G

Je kan stellen Plan Do Check Act is eigenlijk het operationele proces binnen risicomanagement.

Emp_C

Dus ERM is meer dan PDCA, klopt. En risicomanagement is ook meer dan Plan Do Check Act, dus voor beide geldt het ja.

Question 1: Wat vinden jullie van de verbinding tussen ERM en PRM en welke uitdagingen zijn er m.b.t de interacties tussen de twee niveaus?

Emp_C

Er ontstaat iets van een verbinding, vind ik. Het wordt wel steeds duidelijker, maar dan heb ik het over mezelf. Ik denk de gemiddelde risicomanager op een project niet horend bij onze afdeling die verbinding niet ziet, erkent of herkent. Als ik voor mezelf spreek, wisselen wij wel informatie uit, heb ik er wel een beeld bij, ken ik ook die domeinen, zie ik ook welke risico's op dat niveau spelen. En er beginnen nu ook mondjesmaat hoog over op bedrijfsniveau risico's te zijn die ook worden aangedragen binnen onze vakgroep van, doe er wat mee. Ik denk dat we in bredere context naar ongeacht van welke afdeling mensen zijn die de rol van risico coördinator invullen, dat daar nog wel meer te verbeteren is. Maar ik vind de eerste stap wel degelijk al gezet. Dus ik zie wel al een eerste stap en ik begin ook beter te begrijpen wat het is en ik begin ook de meerwaarde in te zien, terwijl als je mij dat een of twee jaar geleden had gevraagd, dan had ik gezegd, geen idee.

Emp_G

Ik denk dat ik begrijp wat je bedoelt, maar zoals het hier staat, [AG] heb je een onderscheid gemaakt tussen ERM en project risk management. Ik zei eerder, voor mij is het een, maar ik lees het als het onderscheid tussen het bedrijfsniveau en het projectniveau, dus ik snap ook wat [Emp_C] daarin stelde. Dan ga ik helemaal mee in wat [Emp_C] zegt, dat is inderdaad zo. Het is wel mooi dat je zelf die ontwikkeling ook hebt meegemaakt, [Emp_C] om op een andere manier te kijken.

Emp_C

Ja alleen nu de rest nog mee, de rest van de organisatie en ik denk, dat wordt nog wel een uitdaging. Het begint al dat wij weten wat we moeten uitdragen. Als wij het geheel niet snappen, hoe gaan we dat uitdragen dan?

Emp_G

En dan wordt er gevraagd naar uitdagingen, dus daar hebben we nog niet echt een antwoord op gegeven. Vanuit risk, we hebben gewerkt aan trainingen, mensen meenemen om die zienswijze meer te onderschrijven, over te brengen. Meer kun je niet doen van vanuit risk en dan hoop je aan de andere kant dat er inderdaad voor dat urgentiebesef dat men ook open staat om zich mee te laten nemen tot het bekijken op een andere manier naar riskmanagement.

Emp_C

Ja, het zit echt in kennis, kunde en awareness op dat gebied. Dat mensen in projecten zich daar beter van bewust zijn wat het inhoudt. En wat dat aan meerwaarde kan hebben op een project, want vooral dát.

Emp_G

Ja en overigens ook op bedrijfsniveau hoor, want als je ziet bij de risicosessies over de ERM risicodomeinen, de domeineigenaren moet je echt meenemen in dat proces en ik snap het ook nog. Ik ben zelf geen ingenieur, als een ingenieur mij iets moet uitleggen, dan moet ik me ook helemaal mee laten nemen. Nou, zo geldt het voor risk management ook, het is onze expertise en dus dat snap ik ook.

Emp_C
Ja dus de bal ligt wel bij ons om ze daar ook in mee te krijgen.

Question 2: In hoeverre gelden de genoemde thema's voor de bouwsector in het algemeen?

Emp_C
Ik zat hiervoor bij [competing construction org. 01]. Die waren er veel verder mee. Nu niet meer denk ik, ik denk dat ze nu een paar stappen terug in de kelder hangen, maar in de tijd dat ik daar werkte, hadden ze dat gewoon geïmplementeerd en bespraken ze dit ook wel op bedrijfsniveau en hadden ze ook risicodossier zelfs met kwantificering, alles erop en eraan en maatregelen en ook nog op bedrijfsniveau. Maar daar heb je het over [5-10] jaar geleden, maar ik heb nu het vermoeden dat dat een beetje met het vertrek van bepaalde mensen, wat wisselingen dat het aardig versloft is.

Emp_G
Dus is het helaas niet helemaal geborgd.

AG
En dat urgentiebesef waarvan jullie zeggen dat dat nu ontbreekt binnen [construction org.] (om ERM te implementeren en meer in het algemeen de maturity van risicomanagement te verhogen), is dat voor zover jullie weten wel bij andere bouwbedrijven aanwezig? Met bijv. het oog op de duurzaamheidsopgave in de bouw?

Emp_G
ERM is alles natuurlijk, maar wat je ook nog wel eens hoort als term is GRC, dus governance, risk management and compliance activities ook in die volgorde, dus een internal auditor die wordt zo opgeleid om er zo naar te kijken. Die governance, dat heeft te maken met de inrichting van je organisatieprocessen et cetera, dus ook het poppetje, die CRO, moet hij nou aan de top of op een lager niveau? En ik zeg wel eens van risk management, die voldoet het beste waar de omgeving van alles ingericht is, zo niet, je moet eerst inrichten. Daar is HR bijvoorbeeld nu mee bezig, die nieuwe directrice. Dan kom je daarna tot je controle activiteiten, de PDCA cyclus van, hoe ga je daar nou mee om? Hoe effectief ga je met je beheersmaatregelen om? In de andere sectoren is het sowieso, dus buiten de bouwsector, is het aanwezig. Ook bij de banken zie je, op het moment dat er stront aan de knikker is ineens risicomanagement heel erg belangrijk en dan wordt er nog flink aan gewerkt met heel veel mensen en na verloop van tijd na een jaar of 3, 4 dan merk je wel dat dat urgentiebesef gaat toch terug. Dan moet je oppassen dat je weer niet in het oude patroon valt. En dan ben je soms als riskmanager, maar ook gewoon wat meer aan het roepen. En of het geldt voor de bouwsector in het algemeen, daar kan ik moeilijk wat over zeggen omdat ik ook de rest van de bouwbedrijven niet ken.

Emp_C
Wat ik zei, ik weet het uit mijn [competing construction org. 01] tijd en verder heb ik op dit thema geen vergelijkenissen, dus dat maakt het moeilijk.

Emp_G
Het is wel voor deze een interessante om de risicoparagrafen mee te nemen vanuit jaarverslagen, van een [competing construction org.] en al die grote jongens, want dat geeft wel een bepaalde indruk hoe ze met risicos omgaan. Hoewel, papier is geduldig, kan mooier beschreven zijn dan men toepast.

AG
Het Enterprise Risk Management wordt al genoemd vanaf [2010-2015] in de jaarverslagen van [construction org.] en pas vorig jaar is men daar pas echt mee bezig om het te operationaliseren. Tot vorig jaar leek ERM veel meer gericht op de compliance en control kant. Welke ambities heeft [construction org.] mbt het doorontwikkelen van de risk kant?

Emp_G
Wij zijn eigenlijk pas overgegaan als ik het goed heb per 1 oktober 2022. We zijn eigenlijk nog maar vers bezig. Nou is er ook een soort twee splitsing ontstaan tussen een ERM en Internal Control terwijl normaal ERM alles is. Je merkt, dat is precies het onderscheid ook tussen die PDCA, dus dan ga je testen op je [requirements framework] waar er controles zijn, terwijl als risk manager aan de voorkant met je domeineigenaren van risk kun je veel meer binnenhalen. Dat is natuurlijk ook het idee, dus je ziet, en dan heeft [head of finance] ook gezegd dat hij probeerde dit jaar ook internal control en risk in ERM wat meer bij elkaar te brengen. Dus je ziet ook dat we daar zelf ook nog aan moeten werken, willen we nog effectiever met elkaar samenwerken.

AG
Dat waren dan mijn stellingen en vragen. Ik wil jullie heel hartelijk bedanken voor jullie deelname aan deze expertsessie.