

Changing quality assurance,  
on the basis of the Building Decree,  
in construction

Master Thesis

Management in the Built Environment,  
Faculty of Architecture and the Built Environment,  
Delft University of Technology

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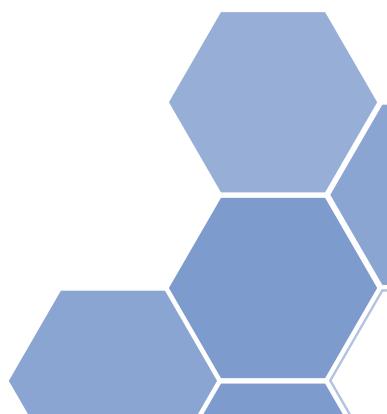
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# Changing quality assurance, on the basis of the Building Decree, in construction.

A research on the contractor adopting a  
pro-active attitude in quality assurance.



# PREFACE

// In front of you lies the end report of this master thesis, belonging to the final presentation of the graduation process from the Master Management in the Built Environment at the Technical University of Delft. The start of this graduation thesis is based on the Dutch law, proposed in 2016, relating the quality assurance of constructions; 'Wet Kwaliteitsborging voor het bouwen'. The main aim of the proposed change of certain laws is to privatize the quality assurance, on the basis of the Building Decree, of construction projects. This thesis describes the research that is performed on organisational changes, within culture and structure of contractors. Changes by which the contractor can adopt a pro-active attitude regarding the new responsibilities this law will bring.

My thanks go out to my two supervisors, Louis and Leon, who have both given their critical opinion on my work. Based on their advice and instructions, I have been able to take this research to a higher level. I also want to thank the validation experts from Bouwend Nederland and BAM Bouw and Vastgoed for their help in validating my advice.

// Voor u ligt het eind rapport van deze master thesis, behorende tot de laatste presentatie van het afstudeerproces van de master Management in the Built Environment aan de Technische Universiteit Delft. De start van deze afstudeerscriptie is gebaseerd op de Nederlandse wet, voorgesteld in 2016, met betrekking tot de kwaliteitsborging van bouwwerken; 'Wet Kwaliteitsborging voor het bouwen'. Het belangrijkste doel van de voorgestelde wijziging van bepaalde wetten, is het privatiseren van de kwaliteitsborging, op basis van het bouwbesluit, van bouwprojecten. Dit rapport beschrijft het onderzoek dat is uitgevoerd over organisatorische veranderingen, in de culture and structuur van aannemers. Veranderingen waarmee de aannemer zich proactief kan opstellen ten aanzien van de nieuwe verantwoordelijkheden die deze wet met zich mee zal brengen.

Mijn dank gaat uit naar mijn twee begeleiders, Louis en Leon, die beide hun kritische mening op mijn stukken hebben gegeven. Aan de hand van hun adviezen en aanwijzingen heb ik dit onderzoek naar een hoger niveau kunnen tillen. Daarnaast wil ik de validatie experts van Bouwend Nederland en BAM Bouw en Vastgoed bedanken voor hun hulp bij het valideren van mijn advies.



## ABSTRACT

This research is based on a new law relating quality assurance in construction that was proposed in 2016. The main aim of the legislative proposal is to improve the quality of construction by privatising the way of assessing quality on the basis of the Building Decree. The problem is that the contractor gets more responsibility in this process through the new law. Since the change in the way of quality assurance asks for a new way of working from contractors the contractors have to adapt their organisations towards this change in responsibility. The changes can be distinguished on a legal implementation and organisational implementation level. This research focuses on the social scientific perspective of this law; being the organisational implementation. Within this organisational implementation, the focus of this research is the organisational culture and structure. The research question is therefore: How can a contractor change its culture and organisational structure, to adopt a pro-active attitude in quality assurance? The research strategy is to perform qualitative research. For this research, the method to be used is doing literature research. The literature research reviews the change based on a why-how-what structure. This literature research results in multiple findings on different subjects. Findings which form the basis of an advice on how to approach an organisational culture and organisational structure change. To validate these findings and the advice, both are submitted to a validation process. The deliverable at the end of the research is the advice for the contractors on how to adapt their organisational culture and organisational structure, which will be reflected in an advice brochure. The conclusions of this research start by describing that current organisations of contractors miss a branch or layer on quality management. To change this, a power strategy or planned strategy should be chosen with unilateral implementation instruments. The change process should, regardless the chosen strategy, be implemented on different levels, which was found to reduce resistance for change. The process of change should be started within a project in which the client is interested in improving quality assessment as well. It is concluded that a manager who stands behind the changes and is committed to those change, should be made in the lead of implementing the strategy within that project.

**Keywords** – Quality Assurance, ‘Wet Kwaliteitsborging voor het bouwen’, Building Decree, Contractors, Organisational Culture, Organisational Structure, Change

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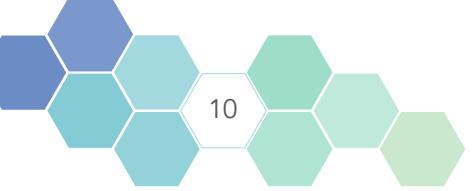
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## 1 Introduction

On the 15th of April 2016 a new law, relating quality assurance, was proposed in the House of Representatives of the Dutch Parliament. This law, 'Wet kwaliteitsborging voor het bouwen', proposed changes to the 'Wonin-gwet' (Housing law), the 'Wet Algemene bepalingen omgevingsrecht' (Environmental Licensing Act) and the 'Burgerlijk Wetboek' (Dutch Civil code) (Ahraoui, 2016). The main aim of the legislative proposal, as described by Ahraoui (2016), is to improve the quality of construction. Improving by means of adding a private way of assessing quality, next to the public manner. In this way, the role of the governmental institutions (mostly municipalities), in being the only authorised supervisor, will change. The suggestion of adding a private way of quality assessment is in line with the thought in the Netherlands, that society can regulate certain (or even many) processes without government interference (Neerhof, 2016). Neerhof (2016) further explains that privatized quality assurance is an example of self-regulating, self-regulating being a way of sharing responsibility in society.

Responsibility is often seen as a four-letter word in the construction world. In research performed by CROW, van Ommen (2017) describes the so-called 'cliché' that contractors are not to be trusted. In this analysis of the current state of collaborating between clients and contractors in the infra- and construction world, the situation is often described with words such as 'disrupted balance', 'hassles' and 'tension'. Ponjée (2014) endorses this feeling, by explaining the tension that can occur in the growing use of integrated contracts. With these contracts, the contractor gets more freedom in certain decisions. Decisions that will not always please the client. In addition, he explains that in the current process, the client often has to check the quality systems used by the contractor, this gives the client a big responsibility relating the quality. Quality should, therefore, be assured in a new way (Ponjée, 2014).

The legislative proposal can, therefore, be seen as a logically substantiated step of modification of the quality assurance process on the basis of the Building Decree. After the proposed law passed the House of Representatives, the case was handed over to the Senate. The Senate is what is referred to in Dutch as the 'Eerste Kamer'. In adopting new legislation, the Senate is one of the last phases in the process of adopting (Eerste Kamer der Staten Generaal, n.d.). On the 11th of July 2017, Minister Plasterk adjourned the voting by the Senate (Eerste Kamercommissie BZK, 2018). Adjourning the voting is the legal expression in Dutch 'aanhouden van de stemming'. This means that the handling and the final decision relating any case is postponed (RechtBlog, n.d.).

At this point, it is therefore just a matter of waiting until some clarity will come



about the way the proposal will be worked out (van Egmond, 2017). Before the voting will be continued, a general consultation ('algemeen overleg') will be held in the House of Representatives. After that, the assumption was that the voting will take place, dependently on the outcomes of the Provincial States elections. The outcomes of these elections determine the composition of the Senate. In a conversation, the advisor on market and government from Bouwend Nederland said that the composition of the Senate will influence the outcome of the voting on the law on quality assurance (R. Heezen, appendix II). For that reason, he explained it is likely that the voting will take place right before or close after the new reassembling of the Senate.

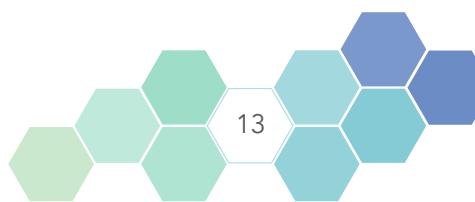
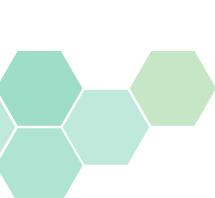
Exceptional to the procedure relating this law, is the debate on last December 6th within the House of Representatives, which shows that even after the law passing the House of Representatives, questions about the actual implementation of the law keep arising (De Tweede Kamer, 2018). The restart of the debate follows the publication of the research report on the collapse of a parking garage at Eindhoven Airport, just a month before going into operation. The reason for this research done by the OVV (Research Council for Safety) is considering the way the construction industry handles safety, as they already concluded a lack of coordination and assessments (Onderzoeksraad voor Veiligheid (OVV), 2018). Conclusions written down in this report support the opinions of the many opponents of this law. They feel, and conclude with this report, that the Dutch construction industry is not suitable to have privatised quality assessments on the basis of the Building Decree (De Tweede Kamer, 2018).

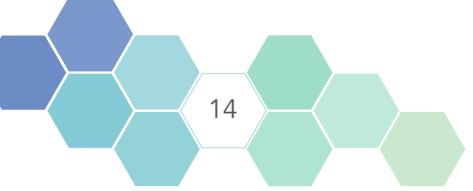
In response to the debate on December 6th, the minister of Homeland Affairs and Kingdom Relations Mrs Ollongren started conversations with the association of Dutch municipalities on the content of the proposed law. Both parties came to an administrative agreement (bestuursakkoord) on the proposed law, with the intention on adopting the law and let it come into effect on January 1st in 2021 (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2019). This administrative agreement gives more clarity on some parts of the proposed law that came up for discussion, with the intention of letting the law pass the Senate more easily so it can officially be adopted.

Current literature about the proposed law predominates the reasoning behind the law with its pros and cons and the legal implementation of the law. A literature gap exists in the implementation of this law on an organisational level, including the organisational level of the contractor. Based on this gap, especially the implementation issue on quality assurance on the basis of the

Building Decree and how to change organisations in relation to the new (proposed) law will be researched. The purpose of this research is not to highlight opinions on the adaptation and especially not the content of this law. This research is therefore focussed on the content of the law as it is up to this date and will only reflect the consequences as seen from the current content.

// On the 14th of May in 2019, the law was adopted by the Senate, just before the new Senate would be appointed at the end of May. This made the first of January in 2021 the deadline date, on which the law will come into effect. Since this voting happened within the last week of this research, the term 'proposed law' will still be present during the bigger parts of this thesis. However, the content of the law has not been changed since the 'proposed' version and the law that has been adopted the 14th. This makes that the relevance of the content of this law still stands; the outcomes of this research are for those willing to change based on advantages for the process of the contractor.





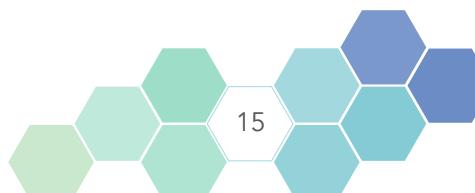
## 2 Research question

### 2.1 Problem statement

Although it may be clear that not all parties agree with the 'solution' of privatizing, the reason for the proposed change of the current system of quality assurance is to improve the quality in construction (Ahraoui, 2016). The underlying problem of the current level of quality within the construction industry is the assumption that the private actors do not set the same requirement levels as the government has in mind (Evers & van Ommeren, 2016). Although the level of quality provided by private actors can be questionable, some conclude that the reason for privatizing processes and products, such as quality assurance, is often an outcome of change wanted throughout a certain branch (Evers & van Ommeren, 2016). As mentioned before Neerhof (2016) explains that our society is about sharing responsibilities, so preferable within branches as well. Reflecting this need for quality improvement and sharing responsibilities, one can say that the construction industry is not at the level of taking on the responsibility in delivering quality at the level that is desired by the government and within the branch itself.

Besides the need for quality and responsibility, the fact that the law is not adopted yet can highlight another related problem in this case. With the proposed law being approved by the House of Representatives, but being adjourned by the Senate (Eerste Kamercommissie BZK, 2018) the exact content of the law is not completely determined. Given the uncertainty about the final content of the law, for instance, the fact that the requirements that will be demanded are unclear, some indistinctness of the direction to change is present. Best would be if the contractor would obtain a stimulus, a pro-active attitude, to change before the private quality assurance comes close to the realisation (Ahraoui, 2016). However, no evidence can be found of contractors that have thoroughly adjusted their organisation already, which can be explained by the lack of clarity on this law.

Concluding all of the above, one can say that the reason for the new law is the demand for better quality within construction. Besides that, some parties agree that the responsibility within this quality assurance on the basis of the Building Decree should be more in the hands of the market; the contractor. This is, therefore, the reason that the quality assurance is to be privatized; the shift in responsibility. The problem is that the contractor gets more responsibility in this process through the new law. Since the change in the way of quality assurance asks for a new way of working from contractors (Instituut voor Bouwkwaliteit, 2018b) the contractors have to adapt their organisations towards this change in responsibility. Part of this problem is that this change



in responsibility, and with that, the organisation of the contractor, is not likely to happen when the law has not come into effect already.

## 2.2 Research goals and objectives

The main research goal is to come to a solution to the problem stated above. The goal is to do this by providing advice on how contractors can adapt to the new situation. Objectives within reaching that goal are:

- getting a full understanding of the changes the 'Wet kwaliteitsborging voor het bouwen' will bring
- obtaining knowledge about changes an organisational can go through
- obtaining knowledge about the implementation of changes
- analysing the attitude towards quality assurance in practice
- discovering the structures within an organisation that are affected by the proposed law
- identifying the critical structures within the organisation that need a change in relation to the proposed law

Besides the objectives mentioned, a personal objective is to become a 'specialist' somehow in advising companies, most likely contractors, on how to change their organisation towards the new situation of privatized quality assurance on the basis of the Building Decree.

## 2.3 Research question

No substantial research has been performed on the change this law will have on the organisations of contractors, even though there is a question for change in quality within the construction industry. For that reason, the law is proposed, and for change within the responsibility taken on by the contractor, a term of this proposed law.

In this research, the aim is to solve the problem of how contractors can adapt their organisation when having more responsibility within quality assurance. This, without feeling the urgency to do so, because the new law on quality assurance is not yet taken into action. The aim is therefore to provide an approach on changing the organisations of contractors, based on the new responsibility in quality assurance in construction, for those contractors who are willing to take on a pro-active attitude in this change.

Based on the assumption that this law will come into effect at some point and the contractor will adopt changes related to this law, two parts can be questioned relating the problem. The changes can, therefore, be distinguished into the legal implementation question and the organisational implementation question. This research will focus on the social scientific perspective of this law; being the organisational implementation. Related to the implementation of changes within organisation Gareis (2010) explains the theory of Levy and Merry that is widely used. The theory is based on the distinction they make between first order and second order changes, with the second order being described as 'radical organizational change involving a paradigmatic shift' (Gareis, 2010). When defining a paradigmatic shift as the way in which something is done (or thought about) changing completely (Cambridge University Press, 2018b). The change in privatizing quality assurance can be seen as such a paradigmatic shift since the core of that privatizing involves changes in responsibility and liability. Therefore the organisational changes in response to the proposed law are approached as second order changes. These changes are related to structural change, were internal structures of an organisation can be subdivided into:

- objectives and strategies
- services, products, and technologies
- organisational structure and culture
- personnel and infrastructure
- budget and financing (Gareis, 2010)

Based on this, organisational implementations are presumed to be done within one or multiple subdivisions within organisation structures. From these five subdivisions within organisation structures, the one to be researched is the organisational structure and culture. This focus on structure and culture is chosen, knowing that especially the culture within construction suffers from a bad reputation, as was discussed in the introduction. The main research question therefore is:

*How can a contractor change its culture and organisational structure, to adopt a pro-active attitude towards quality assurance?*

## 2.4 Research subjects and sub-questions

To be able to answer the main question within this research, multiple subjects have to be researched. Most of these research subjects can be linked to the problem statement, but moreover with the multiple research objectives. Getting acquainted with the legal aspects, the legal implementation of this law is researched briefly as well. This is done in the first two subjects (with the relevant sub-questions):

- Privatization of quality assurance
- Quality assurance process(es) (on the basis of the Building Decree)

The other subjects are focused on researching organisational implementation. Each subject having more sub-questions, to structure this research. The other subjects related to the main question are:

- Quality assurance and management
- Change and implementation management
- Resistance and problems within change
- Organisational culture
- Organisational structure

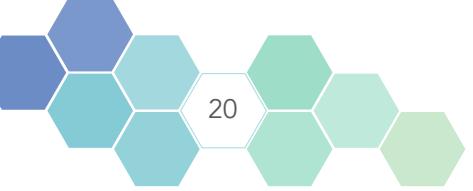
The research subjects mentioned above are related to sub-questions. The sub-questions will be answered by researching and reviewing literature, explained in the next chapter. The sub-questions related to all research subjects are as follows:

### Legal implementation

- Privatization of quality assurance
  - o What is privatization (of quality assurance)?
  - o Why the change of law/privatization?
  - o What aspects are important in privatization?
- Quality assurance processes (on the basis of the Building Decree)
  - o What will change between the current process and the new?
  - o What is the quality assurance instrument (how does it work)?
  - o How does this change of process affect the contractor?
  - o What are the systems in quality assurance in other European countries?

## Organisational implementation

- Quality assurance and management
  - What is done in quality assurance?
  - How is this related to quality management?
  - What is the link between quality management and the contractor?
- Change management
  - What is change management?
  - What are the main components and/or steps within change management?
  - Which instruments are used within change management?
- Implementation management
  - What is implementation management?
  - What are common implementation problems?
  - What implementation systems (or interventions) exist?
- Resistance and problems within change and implementation
  - What are general change and implementation resistance and problems?
  - What resistance and problems exist within quality systems?
  - What resistance and problems exist relating the contractor and quality assurance on the basis of the Building Decree?
- Culture (organisational culture)
  - What is a culture within organisations?
  - How can cultural changes be stimulated/implemented?
  - What changes in culture are related to the change in quality assurance?
- Organisational structure
  - What is organisation structure?
  - How can changes be stimulated/implemented in organisational structures?
  - What changes in organisational structures are related to the change in quality assurance?



## 3 Research method

### 3.1 Research strategy

As mentioned before the aim of this research is to consider the change contractors face within their organisation. The reason for adapting their organisation is because of the change in responsibility that will occur when the new law on quality assurance will be adopted. The goal is to provide an approach on how to change the organisations of contractors, by changing the culture and organisational structure. Delineating culture and organisational structure as internal factors related to people. In understanding the changes that can be translated into the structures and cultures, the focus is on interpreting and understanding the actions of those people. For that reason, the research strategy is to perform qualitative research since qualitative research has the emphasises on understanding the social world by interpreting the world through its participants (Bryman, 2012). Bryman further explains that this research strategy is focussed more on words than on numbers when talking about collecting and analysing data. This focus on words is consisting when talking about the interpretation of participant, the people within organisations.

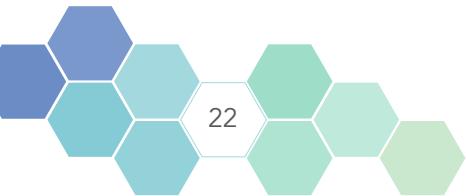
### 3.2 Research method

With the strategy in mind, the research method can be determined. For this research, the method to be used is that of literary research. Although this method was not chosen at first, it can give a literary, theoretical answer to the research question by making extensive use of the literature available on the concepts of quality assurance, change, implementation, organisational culture and structure.

Literature research is defined as the research with the aim of producing critical, theoretical or historical writing (da Sousa Correa & Owens, 2014). It is further explained by da Sousa Correa and Owens that this piece of writing is a product of original researches, with the thesis being the most common type of work (2014). The discussed 'original researches' are those researchers who have researched and published on the topics that are subjected to this literature research. In reading, reviewing and synthesizing those works, theoretical writing can be made to answer the research question. In creating a critical remark on the findings and advice that comes from the literature research on those works of others, a validation will be held.

### 3.3 Validation

The method described above will give multiple findings. Findings which will be the basis of the advice on how to approach a cultural and organisational structure change. To validate these findings and the final advice, both will be submitted to a validation process. Validation is often referred to as respondent validation, Bryman (2012) describes this process as 'The researcher feeds back to a group of people or an organization his or her impressions and findings in relation to that group or organization'. Validation can, therefore, be defined as the process of verifying the correctness of research outcomes. The main reason for these respondent validations is the aim of seeking corroboration on the findings from the perspectives of others (Bryman, 2012). When performing the validation of the findings and advice, this can be referred to as external validation. The findings of the research will be presented to an expert panel. In this way, the external validity is focussed on whether the findings can be generalized (Bryman, 2012). In this case, the generalization would mean that the advice is useful throughout the construction industry.



## 4 Research output

### 4.1 Deliverables

The deliverable at the end of the research is an advice for contractors to adapt their cultural and organisational structure, most favourable being sort of a 'tool' or 'step-by-step plan'. A remark has to be made relating the 'tool' and 'step-by-step' outcome, since this may possibly be not the most applicable deliverable. So even if it seems the most desirable deliverable, the advice should be matching the outcomes of the analyses of the case studies. The actual set-up of the advice is to be determined later on. From now on the main deliverable is simply referred to as 'advice'. This advice will be based, as said before, on the findings of the case studies and literature review.

After the findings and the advice are validated by two different panels, some adaptation of the advice is possible. A critical position must be taken on, in adapting the advice. The advice should reflect the outcomes of the literature research with some critical remarks, where it should not only reflect the opinions of the different validation experts. Based on the response from the validation process and the advice adaptation, a conclusion will be drawn. These conclusions will reflect the answers to the different sub-question and the main questions. The discussion will contain remarks and responses on the findings and the advice from the validation, substantiated with the reasoning and basis behind the responses. In the end, it should contain a critical remark on the outcomes of the research, with the advice as the deliverable to be workable and appropriate to contractors. Besides this all, it may give some thoughts on researches that can follow on this research within the recommendations.

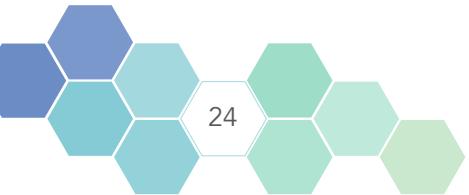
### 4.2 Dissemination and audiences

The outcome of this research would be best, when usable for not one specific, but multiple contractors. The focus within this large group of organisations will be on the medium to large sized contractors. This means that the outcome of this research would preferably be generalised in a way, to address all those medium to large-sized contractors. Because of the timeframe of this research, and because of limited scope within this research, the audiences are limited to the medium and the large-sized contractors. The smaller contractors are therefore not taken into account as a possible audience. In discussing the outcomes, however, small remarks on those smaller contractors will be made.

With the goal to provide overall advice, applicable to all contractors, the



dissemination of this advice is important. Although it will not be published, a brochure will be made to address the contractors on the proposed changes. The brochure will contain the content of the law proposal and the outcomes of this research on how to change the organisations of contractors. In this way, the theoretical knowledge, summarised in the different findings and conclusions, will be shaped into a tangible end-product that can be used within practice.



## 5 Research plan

### 5.1 Research structure

The literature research will review the literature based on a why-how-what structure (Jaeger, 2017). In this way, the literature and its subjects are researched and synthesised with three questions in mind. Starting from the inner circle (see figure 01), these questions are:

- Why an organisational change?*
- How can organisations be changed?*
- What to change in organisations?*

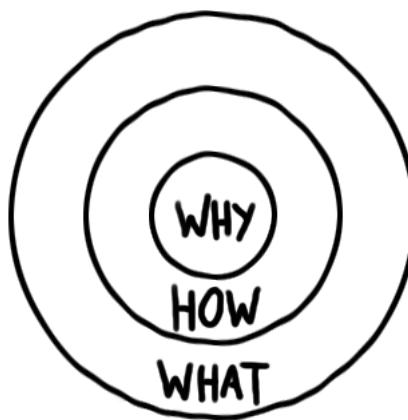


Figure 01: The Golden Circle from Simon Sinek (Jaeger, 2017)

These questions are used to answer the general questions, besides the different sub-questions. Coming back to the difference between the legal and organisational implementation, figure 02 shows in detail that distinction in this literature review with its subjects. These are related to the sub-questions and the overlap and connections that can be found between the subjects.

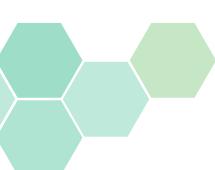
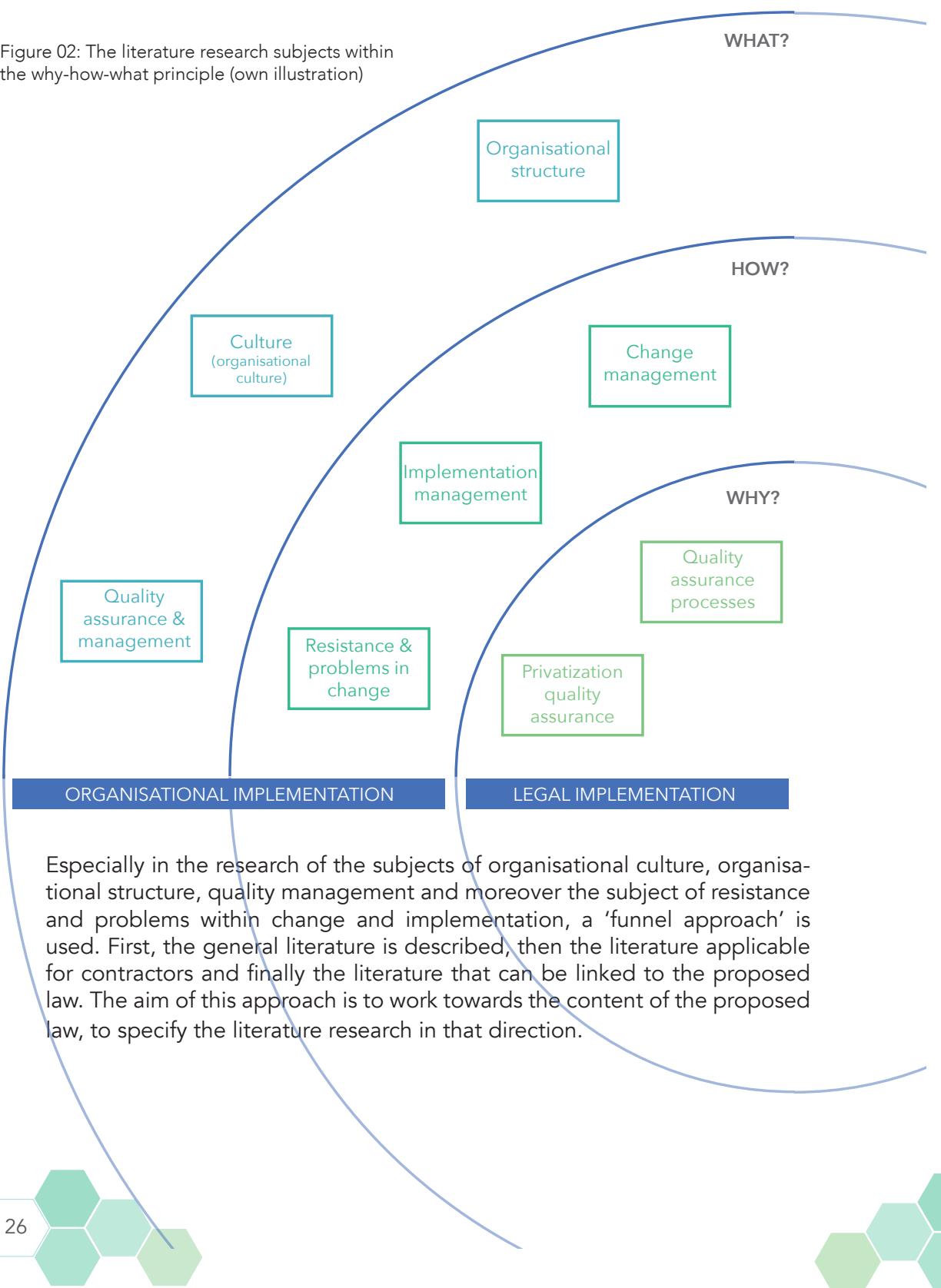


Figure 02: The literature research subjects within the why-how-what principle (own illustration)



## 5.2 Main tasks

After defining the research method and the outcomes related to that, the plan to start this research can be determined. Defining the tasks within this research is the first part of this research plan. These tasks can be seen as steps towards the research outcomes.

### 5.2.1 Flow chart

To show all the steps to come to the conclusions and answers on the research questions, in the end, are presented in a flow chart. This flow chart in figure 03 shows the steps, the order of these steps and feedback loops that come with these steps.

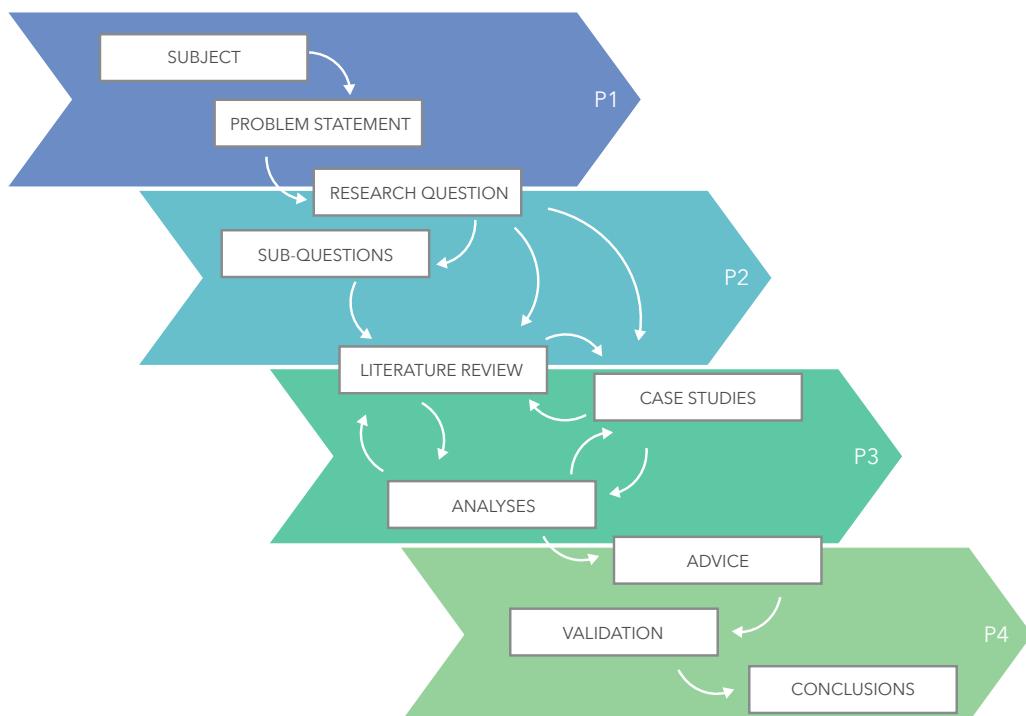
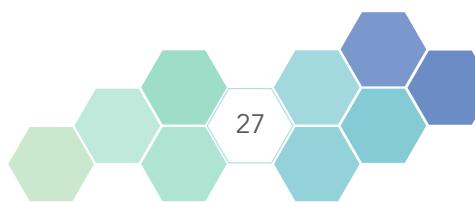
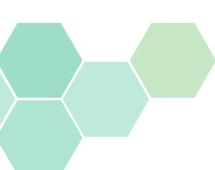


Figure 03: The flow chart with the global research steps in relation to the presentations (own illustration)

This figure also shows the overall time planning, between the different milestones of the P-presentations. It shows that certain processes happen simultaneously and that some steps happen with feedback loops to previous steps: an iterative process.



### 5.2.2 Literature research

When analysing the steps presented in figure 03 in the literature research is the main task performed up till now (and for the upcoming period). The structure that is used within this literature research is as illustrated in chapter 5.1; the why-how-what structure. Outcomes of the literature research will form the basis of the next task.

### 5.2.3 Findings

Analysing the outcomes of the literature is the next main task. This analysing will give multiple findings on the research topics. As shown in the flow chart, the task of analysing is connected with the literature research in both ways, predicting a coherent process between these tasks. The objective is to find those things necessary to come to the goal of writing an advice on changing the culture and organisational structure for contractors.

### 5.2.4 Validating findings/advice

As explained before, the aim of the validation process is to look for corroboration on the findings (Bryman, 2012). The reason for this respondent validation is to get the perspectives of others. After this validation of the proposed advice, the advice can be revised based on the comments given. The validation of the findings will give input for the conclusions on this research.

## 5.3 Main milestones

The main tasks stated before, are linked to the main milestones for the period in which the research takes place. These milestones are overall interdependent with the presentations P3 and P4.

### 5.3.1 P3

The first main milestone is the next presentation moment, the P3 presentation. The aim is to deliver the first draft of the advice. Since this is one of the main deliverables, this cannot be achieved at once, it, therefore, asks for intermediate milestones. The first intermediate milestone is to complete the literature research. Although it is imaginable that new concepts present themselves during the research, at some point, the research within literature has to be completed. After that, the analysis of the outcomes can be started with. The findings coming out of that analysis have to be delivered before an advice can be written down. This advice, which is the main deliverable at the P3 presentation is a rough version at that stage.

### 5.3.2 P4

The next milestone is the last presentation, P4. The most important intermediate milestone is respondent validation. This intermediate milestone will, however, come, after the milestone of finalizing the draft advice. This advice will be used for the validation, but will possibly be slightly altered after the validation process. This provides another intermediate milestone, the final advice. After this, conclusions can be written down. These conclusions will partly be based on the expert panel validation of the findings as well. This last intermediate milestone will answer the main research question and provide in the content of the last presentation moment.

## 5.4 Timeline

The milestones mentioned before can be shown in a timeline. In this way, the time spent on each (intermediate) milestone becomes clear and gives guidance throughout the coming phases of this research. The global timeline is shown in figure 04.

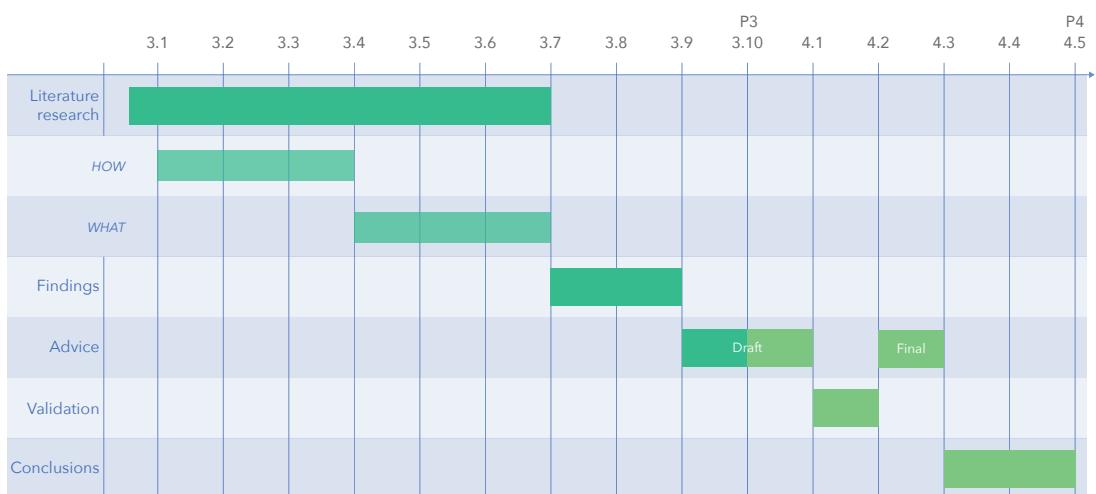
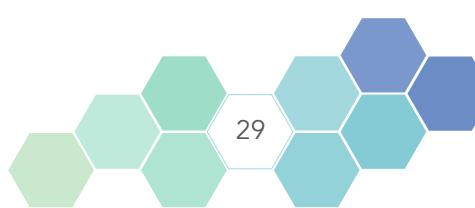
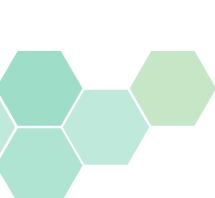
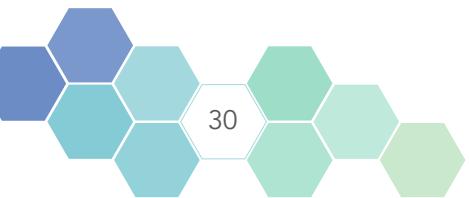


Figure 04: The time line of the milestones within the research up to P4 (own illustration).



Starting from the period following the research proposal, the timeline with its milestones starts with finishing the literature research. As explained before the literature research is divided into three parts, of which the last two are the first steps within finishing the literature research. With this schedule, this would mean that after six weeks the global research of the literature is performed. The analyses of that literature, with the goal of formulating the findings, then take about one to two weeks, after which the first draft of the advice can be written before the P3 presentation.

After that, the advice can be written out more specified. The validation will then take place in the upcoming weeks. After that, the final advice can be made and the findings can be used to write the overall conclusion before the P4 presentation.



## 6 Literature research

As explained in the introduction to this research, a gap within literature exists. The gap considered to be on the implementation of the law on an organisational level, including the organisational level of the contractor. It can be found to be an obvious gap since the actual implementation is not into question yet. Although some literature is already discussed, the literature research in this part will go more into depth. For that reason this literature research is seen as the main task within this research, originating from the research questions and is therefore placed after the research question, method and plan.

### 6.1 Why

Described in the reasoning behind the research subjects, is the importance of getting an understanding of the legal implementation of the proposed law. With the legal implementation in mind, the organisational implementation will have a better-founded argumentation. The literature researched the legal implementation focusses on privatization, its emergence and important aspects, the laws to be changed and the current and proposed system of quality assurance on the basis of the Building Decree. This literature, therefore, addresses the why-question within this research: why is there a change within the organisation needed?

#### 6.1.1 Privatization of quality assurance

The proposed change in quality assurance in construction is built around the principle of privatization. Quality assurance: is the most common just term relating to the law is 'kwaliteitsborging'. The term that is a direct translation is 'quality assurance'. It is closely related to the person to check the quality, the translation used for the 'kwaliteitsborger' in this research is; quality surveyor. Privatizing quality assurance is to be explained as the assessment of a product or process by a private institution. Privatizing is the change from public authorities towards private companies, in checking the quality. It is referred to in Dutch legislation texts as 'privatisering'. The goal is then to determine if the subjected product or process is in line with previously determined requirements (Neerhof, 2016). The private institution, that is performing these assessments, should perform an independent act. Neerhof (2016) therefore introduces the concept of conformity assessment. When the assessment is done by independent and impartial institutions, it is referred to as a 'conformity assessment'. One example of a conformity assessment is certification, providing a satisfactory assessment for a certain period.

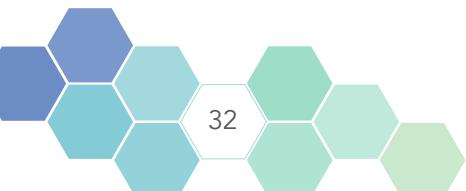
The idea of privatizing quality assurance, in multiple work fields, has been around for some time. Three main motives of governmental authorities to privatize quality assurance are distinguished (Evers & van Ommeren, 2016). First of all the technological developments are developing rapidly, this asks for rapid changes in quality requirements as a response. The second motive is related to the first, quality assessing asks for experts in that area. Often those who are closely involved in these work fields, are better in assessing that quality. Ahraoui (2016) adds that it often cannot be guaranteed that the public supervision, delivers in following the construction regulations.

Although the first two motives concluded by Evers and van Ommeren (2016) can be seen as limitations in knowledge and staff of governmental authorities, the third one is of a complete other base. The last motive is based on the opinion of authorities, that more responsibility should be accepted by producers. This motive of accepting and sharing responsibility by society was already mentioned. Neerhof (2016) expresses the thought that society itself can regulate quality assessment without governmental interference. This interest in private quality assurance is not only present at the national level, but on the European level as well. For both levels, the remark is once again made that the authorities do not have the knowledge to assess complicated products or processes (Neerhof, 2016).

The goal of adopting the law of privatizing quality assurance within construction is to improve the overall quality of construction. Giving responsibility more clearly to the construction sector itself is the starting point of this goal (Ahraoui, 2016).

Issues often related to privatization are impartiality, independence and technical competence. Issues that could be seen as problems within privatization within all types of quality assessment, but are to be solved with an aspect of conformity assessment (Neerhof, 2016). Conformity assessment is the process of assessing products and/or services by an authorized institution (Neerhof, 2016). In the case of the proposed law, this conformity assessment is addressed as a quality assessment.

He further explains that, based on papers from the House of Representatives on previous cases, the conformity assessment is reliable ('enough') when these institutions assessing the conformity of products/services are accredited. Accreditation is defined as 'the fact of being officially recognized, accepted, or approved of, or the act of officially recognizing, accepting, or approving of something' (Cambridge University Press, 2018a).



This other aspect related to privatization is thus based on the principle that institutions assessing conformity are officially authorized to do so. In every EU Member State, one body is appointed to execute accreditations<sup>1</sup>. In the Netherlands, this is the RvA, the Raad voor Accreditatie ('Board for Accreditation'). The process of accreditation, to authorize the organisation to perform assessments, is based on two types of standards (Raad voor Accreditatie (RvA), n.d.):

- The international standards (ISO or ISO/IEC)
- The European standards (EN)

Conformity assessment is, as mentioned before, based on privatized assessing products or services. Although most private assessment instruments come from conformity assessment institutions, not all of them are done by conformity assessment institutions, accredited by the RvA. The overall system of this conformity assessment and accreditation is shown in figure 05.

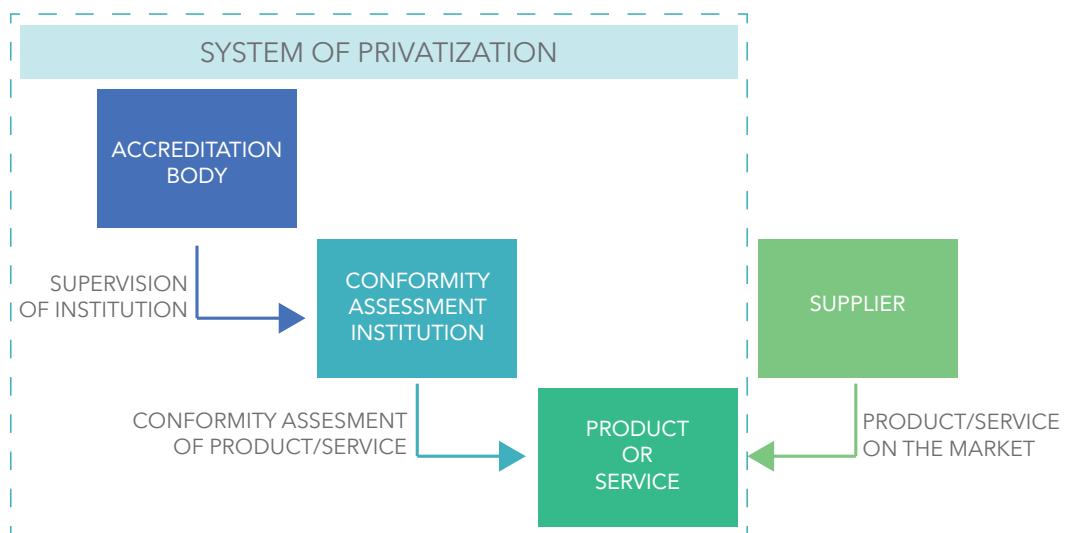


Figure 05: The system of accreditation and conformity assessment  
(own illustration, adapted from Raad voor Accreditatie (RvA), n.d.)

As can be seen in figure 05, the body of accreditation, the RvA, has a supervisory role on the institutions that are authorized to perform conformity assessments. In the process of the proposed law on quality assessment, an exception is made. In the case of the quality institutions, those institutions

are not appointed by the accreditation body (as usually is the case), but only the instruments to be used are supervised by the accreditation body. In this case, the assessment institutions (the quality institutions in the proposed law) are themselves authorized to choose their checkers (Ahraoui, 2016).

#### 6.1.2 Quality assurance processes (on the basis of the Building Decree)

Now that there is an understanding of what privatizations is, what motives for privatization there are and what principles are involved in privatization, the focus can go towards the actual legal implementation of the law.

As mentioned before the proposed law will include changes to existing laws. These are the 'Woningwet' (Housing law), the 'Wet Algemene bepalingen omgevingsrecht' which is abbreviated as 'Wabo' (Environmental Licensing Act) and the 'Burgerlijk Wetboek' (Dutch Civil code) (Ahraoui, 2016). For each law, a short explanation is given on the extent of the change that is proposed. The change in the Housing law contains most of the change that is proposed. Within this law, the new system of quality assurance will be included. As will become clear further on, the assessment of the Building Decree will shift from the municipality towards the private quality institution (Stichting Economisch Instituut voor de Bouw, 2016).

The Environmental Licensing Act will contain the change that is related to construction works that are not obligated to be assessed by the Building Decree. This category of works is referred to in Dutch as the 'bouwbesluit-toetsvrije bouwwerken'. The change will mean that this category of works will be widened. In this way, more works with low risks will not be part of the new system of quality assurance (Stichting Economisch Instituut voor de Bouw, 2016). This concept will be explained more in depth later on.

These first two changes are changes within public law. The last change is one within private law: the Dutch Civil code. The change proposed in this code is to increase the liability of the contractor. This is done by widening the concept of hidden defects ('verborgen gebreken'). The contractor also gets the responsibility of informing the new-construction consumer about his financial insurance and insurance on hidden defects. The last change is the duty of notification of the ending of the right of suspension (Stichting Economisch Instituut voor de Bouw, 2016). On these last three points, the insurances and the right of suspension, no further deepening will be given as the primary focus will be on the social scientific implementation in the end.

To get an understanding of the changes that the contractor will go through

when the law is adopted, the general changes within quality assurance in construction have to be covered. As said in the introduction, the law, 'Wet kwaliteitsborging voor het bouwen', proposed changes to the 'Woningwet' (Housing law), the 'Wet Algemene bepalingen omgevingsrecht' (Environmental Licensing Act) and the 'Burgerlijk Wetboek' (Dutch Civil code). These changes of laws have two main goals: changing the lawful position of the clients and contractors and the new system of quality assurance (Ahraoui, 2016). The 'Woningwet' and the 'Wet Algemene bepalingen omgevingsrecht' are proposed to be changed in relation to this new quality assurance system.

The system differentiates, with the current system of assuring quality, in the manner of supervising and the one responsible for supervising. In elucidating the proposed new system, the current system is shortly explained (see figure 06). In this figure the four phases of a project are shown, relating each phase to the roles of the different stakeholders within that phase. Note that the stakeholders, different than the municipality and the client, are merged into the project team. Important to notice, is that the public authority is now further referred to as the municipality (since this is most often the public party that is authorised with construction projects).

The processes as stated below, both for the current as of the proposed system, are based on the explanation of Ahraoui (2016) on the legal texts.

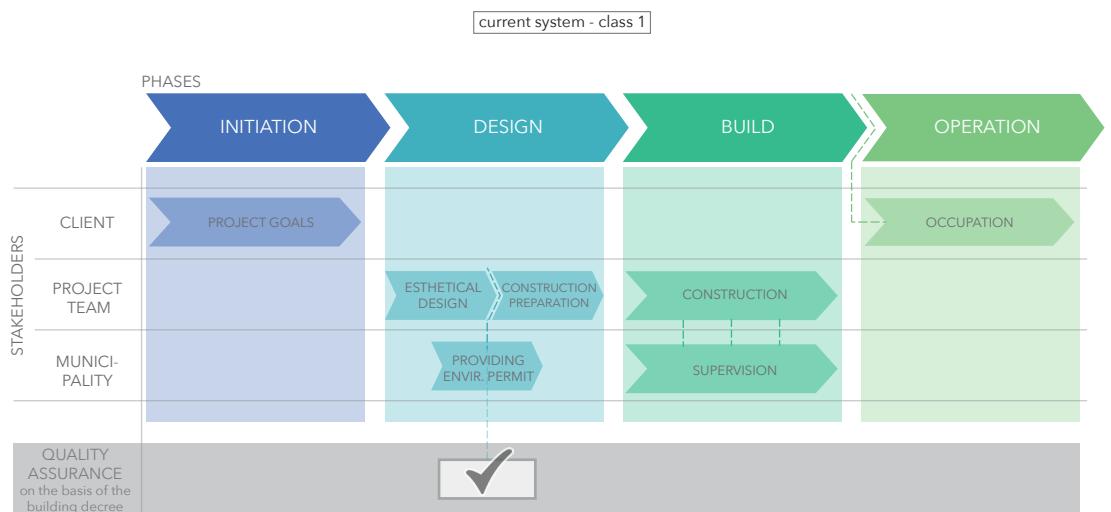


Figure 06: The current system in quality assurance on the basis of the building decree for class 1 (own illustration, adapted from Instituut voor Bouwkwaliteit, 2018a)

The current system of quality assurance has the public authority (municipality) as the main checker. In the current process of assessing the quality, an 'opzichter' is sent from governmental authorities (most common from municipalities). His/her task is to supervise the construction during the build phase of the project, it is therefore referred to as the 'supervisor' in this research. During the permit application, for the environmental permit, the municipality tests the design to the building regulations. The environmental permit is granted if the design of the building is not in conflict with the Building Decree (Dutch: Bouwbesluit), the municipal building bye-law (Dutch: Bouwverordening), the land use plan (Dutch: bestemmingsplan) or with the requirements of external appearance (Dutch: redelijke eisen van welstand) (Hobma & Jong, 2015). After construction has begun, supervising will take place during the build phase of the project. The one responsible for supervising is the supervisor of the municipality. The main task of the supervisor is to see whether the construction complies with the granted environmental permit. The supervision is therefore not focussed on assessing the quality, but on constructing what was designed and the permit was granted for; being in line with the building regulations. After the delivery of the building, the client can occupy the building after the constructor has 'signed-up' the building at the municipality (Ahraoui, 2016).

In the description of the illustration is already mentioned that the system shown in figure 06 is the system for works within consequence class 1. The class contains the works that have the lowest risk and therefore have the lowest rules for quality assurance (in the future system as well) (Stichting Economisch Instituut voor de Bouw, 2016). When analysing the other two consequence classes, quality surveyors are present.

CONSEQUENCE CLASSES	FRONTLINE SUPERVISION		SECOND-LINE SUPERVISION	
	MUNICIPAL SUPERVISOR	QUALITY ADVISOR intern or extern	EXTERNAL TESTER	
1	X			
2	X	X		
3	X		X	X

Figure 07: The current supervision in relation to consequence classes (own illustration)



Figure 07 shows that the number of parties involved in supervising rises with the consequence classes the projects are in. This is because the size and therefore the risk as well rises between every consequence classes (Stichting Economisch Instituut voor de Bouw, 2016). Concluding this fact, the current system of consequence classes 2 and 3 slightly deviates from the system of consequence class 1. Illustrating the consequence classes 2 and 3, figure 08 shows the current system.

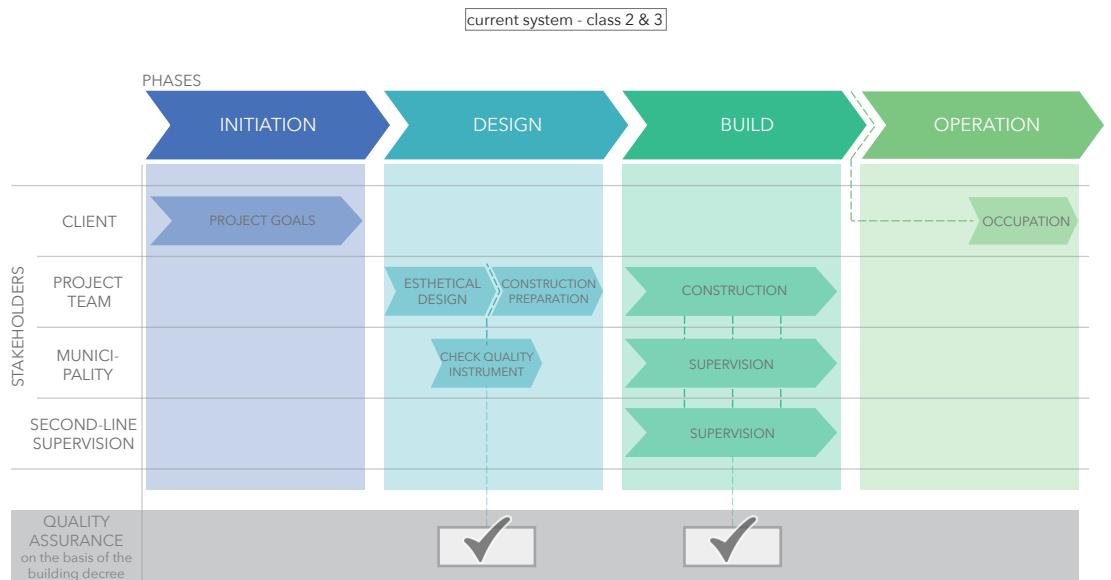


Figure 08: The current system in quality assurance on the basis of the building decree for class 2 & 3 (own illustration, adapted from Instituut voor Bouwkwaliteit, 2018a)

Taking a look at what can be associated with 'quality assurance' in the current system, only one moment can qualify for being related to quality assurance for consequence class 1. This moment is when the municipality is checking the designs, to see if it complies with the Building Decree, building byelaw, land use plan and external appearance requirements. For consequence classes 2 and 3, two moments can be related to quality assurance; the moment of the municipality checking the designs (as in consequence class 1) and during construction by the quality advisor and (in class 3) the external tester. Concluding the current way of assessing the quality, all consequence classes have different ways of assessing. Moreover, when quality is assessed during multiple phases, the assessment is done by different parties. This assessment only takes place within the design and build phase.

Now there is an understanding of the current system, the proposed system is visualised in figure 09.

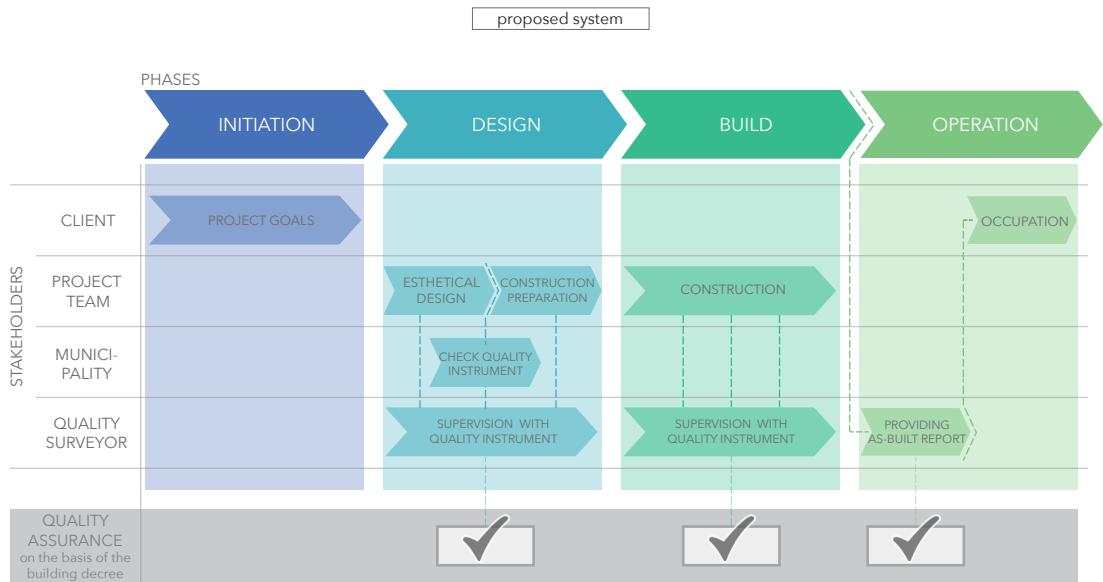


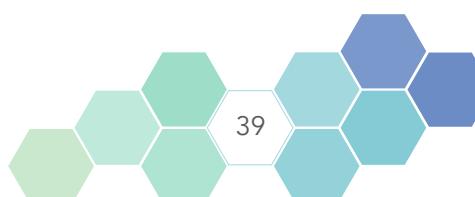
Figure 09: The proposed system in quality assurance on the basis of the building decree (own illustration)

The first thing with which figure 09 deviates from figures 06 and 08, is the stakeholder 'quality surveyor'. This stakeholder is added, because of the new responsibility in supervising. The one responsible for supervising is the quality surveyor from a private institution. This institution is sometimes referred to as the instrument administrators (instrumentbeheerders) (Van Leeuwen, Barendregt, & van Egmond, 2015). The municipality, although it still grants environmental permits for some constructions, has been given the main task of checking the quality assurance instrument. In the proposed new process of assessing quality, use is made of 'instrumenten voor kwaliteitsborging'. These are ways, instruments, to assess quality during and after construction. A quality instrument has to be chosen before construction starts, based on the type and related risks of the construction project (Ahraoui, 2016). This instrument is used by an authorised quality surveyor, who is employed by the private institute providing this quality assurance instrument (Ahraoui, 2016). The quality surveyor makes use of this instrument before, during and after construction. In this way, the quality assurance is spread over three phases.

Important to mention is the fact that not all construction projects have to be assessed on the basis of the Building Decree. This is the case for small construction projects and small renovations such as placing dormers and making expansions of houses. In the proposed law the group of projects that do not have to be assessed on the basis of the Building Decree will be expanded. The estimation is that about 60% will become assessment-free. This results in only 40% of all construction projects being assessed. Within the projects that have to be assessed on the basis of the Building Decree, new consequence classes will be introduced. The projects are put within these consequence classes based on the size and on the risk of the project. Based on those consequence classes, the quality instruments have to be chosen. The type of quality instrument is, therefore, depending on the type, size and risk of the project (Stichting Economisch Instituut voor de Bouw, 2016).

As mentioned before, the quality assurance in the proposed system will be performed with the use of quality instruments. These instruments are a methodology to check during construction. In this way, the construction work obtains a legitimate 'credit' if it complies with all technical requirements (Ahraoui, 2016). The instrument administrators are institutions that develop the instruments. These instruments have to be proposed to an admission organization (toelatingsorganisatie), the organization that decides whether or not these instruments are suitable to be used (Van Leeuwen et al., 2015). As expressed by Evers and van Ommeren (2016) the quality instruments can differ in the level of quality and in the way to be used. For that reason, the admission organisation will be established (at this point the admission organisation does not yet exist). This complies with the system of privatization explained before. In the case of changing the quality assurance in construction towards a privatized system, the admission organization is the accreditation body. The quality instrument institutions have to the task of performing the conformity assessments; the quality assessments.

Concluding the new system in comparison with the current system, some big changes can be listed. The first major change is the role of the municipality in the assessment on the basis of the Building Decree. The municipality shifts in activities from checking Building Decree to only checking on a planological way, besides the safety of the surrounding just as they do now (Van Leeuwen, Barendregt, & van Egmond, 2014). The responsibility of meeting the Building Decree, that was partly with the municipality, makes a shift towards the contractor. The contractor will be responsible for choosing the right quality instrument, according to the consequence class. New conditions for these



consequence classes will come into effect and the way in which these consequence classes are used changes. These consequence classes will no longer decide on the amount of checkers but on the type of instrument that is used by checkers.

Most aspects of the proposed system have been discussed already, including some parts of the role of the contractor. To complete the role of the contractor, the next step is to clarify the exact changes for the contractor during the complete process. Van Leeuwen et al. (2014) describe the proposed system in six different steps. Five of these steps are related to the process of the contractor and are explained below.

→ Step 1: Preliminary consultation

The first change is the preliminary consultation with services companies (such as the fire brigade) about the structural and fire safety. In this way choices to be made by the contractor can be worked out, based on these consultations.

→ Step 2: Environmental permit

The next step is for the contractor to acquire the environmental permit. This permit is no longer granted based on the technical aspects of the construction project. Besides the external appearance and the safety issues, the new permit has two new points of attention: the chosen quality instrument and the chosen quality institution who has responsibility.

→ Step 3: Start construction

At the start of construction, an announcement of 'start construction' has to be notified. In the proposed system the notification should contain the information needed for the supervision of the chosen system; the quality instrument and quality institution.

→ Step 4: Completion construction

The contractor has the task to realise the construction project. The responsibility of completing the building in accordance with the Building Decree lies with the contractor. The responsibility of testing and supervising with the quality surveyor, but besides his main task of constructing, the contractor should keep in close contact with this surveyor to prevent shortcomings.

→ Step 5: Completion notification

After completion, a mandatory notification has to be given to the municipality by the contractor. In this last step, the content of this notification changes in the new system. This is because an 'as-built report' should be added to the notification (Van Leeuwen et al., 2014).

This as-built report is drawn up by the quality institute, who is responsible for the assessment of the project by using the quality instrument (Ahraoui, 2016).



In this way, this quality assessment will probably become an outsourced product, a way that is not unknown for contractors as they often sub-contract. This type of outsourcing to quality institutions can be described as that of service suppliers (Bemelmans, Voordijk, & Vos, 2012).

In the procedure of assessments, an interaction between the one who is inspecting and the one who is being inspected comes forward (de Bruijn & ten Heuvelhof, 2005). They explain that there often is a mutual dependence between the inspector and inspected, introducing the system of 'checks and balances'. The system of checks and balances should prevent the occurrence of a one-sided orientation, making, for example, the inspector a 'captive' of the inspected (de Bruijn & ten Heuvelhof, 2005). In the process of quality assurance with the use of quality instruments, it is important to, therefore, recognize that some quality institutions may work closely and repetitively with a contractor. This could mean that their interests can become interdependent, in the inspector wanted to be the client of the contractor and the contractor wanted to get the quality assessment approved.

Although these are the global steps and the related changes, in theory, it may be possible that reality shows differences. Without performing case studies, some insights in the actual steps contractors go through to assess the quality on the basis of the Building Decree, will remain somewhat vague, especially with a non-adopted law. However, with the focus on the organisational implementation as the main focus of this research, the actual steps are of less importance.

#### 6.1.3 Foreign examples of private quality assurance

The proposed system as described before can be compared to systems in other countries within Europe. Without going into the functioning of these foreign systems, some comparisons can be made relating the structure of, and reasoning behind these other systems of quality assurance. In their research, Meijer and Visscher (2017) looked into the quality assurance systems within the construction industries of England, France, Germany, Ireland, Norway and Sweden in comparison to the proposed system of the Netherlands. The results of this research show a trend in those European countries of privatizing quality assurance and an agreement in only assessing the complex construction projects. In all countries, it is recognised that private controllers play an important role within quality control. Besides that, it stands out that control is spread over the entire building process (Meijer & Visscher, 2017). Although similarities can be found in surrounding countries, the actual

characteristics of each national procedure differ. Since from this research becomes clear that in countries such as France, Germany, Ireland and Norway the architect or engineer has a great responsibility in these quality assurance processes, the processes differ too much for further in-depth use in this research.

## WHY?

Concluding the subjects discussed above, asking the why-question about the change in organisations is evident. So, why the organisational change within the culture and organisational structure? Privatization of processes is a movement based on rapid technological change and changing thoughts on bearing responsibility within society (Evers & van Ommeren, 2016). This takes place within the quality assessment as well, as can be seen in foreign countries, which adopted new systems as well. Systems that often have resemblance with the system proposed in the Netherlands (Meijer & Visscher, 2017).

Besides that, with the proposed law liability changes for contractors. There is a considerable change within the process of quality assurance on the basis of the Building Decree for them (Ahraoui, 2016). The steps for the contractor to take during the new process, based on the proposed law, were discussed. In short, these steps entail a longer period of consultation, before applying for the environmental permit with the right instrument to assess the quality. During construction, the quality institution is present to check the progress of the project according to the Building Decree, by using its instrument. After completion, an as-built report has to be drawn up (Van Leeuwen et al., 2014). The change in responsibility during the described process will ask for another way of working (Neerhof, 2016), reasoning for the organisational change that will arise from the change in ways of working. Looking at the movement of privatization, with the change in liability and change in the responsibility of the contractor, the question of why organisational change is needed is answered.



## 6.2 How

Now that the legal implementation of the proposed law, the ‘why-question’, has been submitted to the literature research, the organisational implementation can be researched. Explained in the subjects and sub-questions sections, the subjects to address are quality assurance and management, change and implementation management, culture and organisational structures.

How can this proposed change within culture and organisational structure be addressed? Addressing the ‘how-question’ the two subjects, change management and implementation management, are the ones to research. After that, the problems and resistance within change and implementation are addressed.

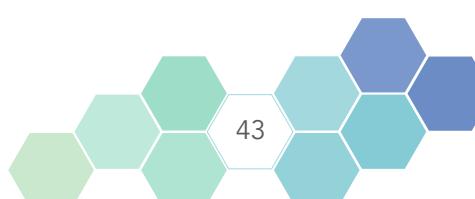
In the paragraph on problems and resistance, the narrow-down approach is used. First, the general resistance and problems within change are discussed, followed by the resistance and problems found in quality system implementation. Lastly the proposed law on quality assurance, on the basis of the Building Decree, will be reflected against the possible change resistance and implementation problems.

### 6.2.1 Change management

Before starting about the way to change, an understanding of what change and how it can be managed is needed. Change management is a term used within multiple industries where planned change exists. Although change occurs consciously and unconsciously (de Caluwé & Vermaak, 2002) the focus is on the consciously change, the planned change. This planned change, change management, is defined since the 1950s. De Caluwé and Vermaak (2002) discuss the definitions of the well-known names within change management (i. e. Bennis, Benne and Chin, Tichy, Moss Kanter etc.) and explain that the terms of change, planned change and change management are used interchangeably, but can be summarized into six constituents:

- Outcomes
- History
- Actors
- Phases
- Communication
- Steering

These six constituents are used as the basis of an extensive definition. Their definition of planned change, based on their predecessors in the change management science, is, therefore:



*Change is....*

- realising the outcomes you want;
- as a function of reason, context and philosophy;
- through an influencing game of actors;
- by going through a process in stages or steps;
- by communicating and giving meaning;
- whereby the entire process is controlled by conscious interventions of change agents. (de Caluwé & Vermaak, 2002)

Going into what change is, the first constituent of the definition discusses the outcomes that are desired within planned change. Those initiating the change often have an idea of the outcomes they would like to achieve (de Caluwé & Vermaak, 2002). Coizjnsen (2014) adds that the outcomes can be evaluated in different ways with questions as 'was the change successful?' or 'was the change meaningful?'. In his perception, both successful and meaningful should be achieved to have an integral change. Successful is related to (time) efficiency and profit increase, whereas meaningful is linked to working with integrity, certain ambience and strengthening of the core tasks (Coizjnsen, 2014). This is in agreement with the four characteristic-groups in which De Caluwé and Vermaak (2002) divide the wanted outcomes, being the product, service and process outcomes, the organisation and control outcomes, the interaction outcomes and the people outcomes. Figure 10 shows the relationship that can be drawn between the two views on outcomes.

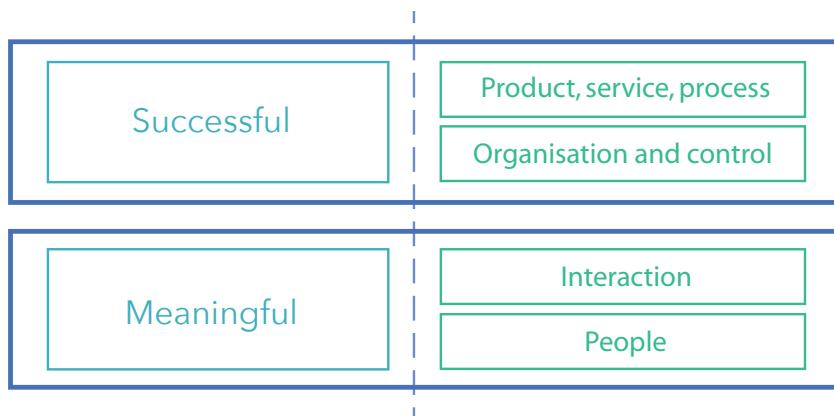
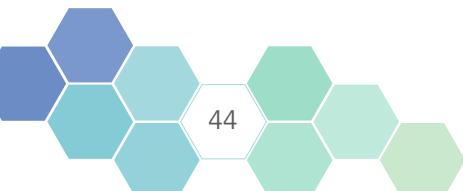


Figure 10: The relationship between the two views on outcomes of change (own illustration)

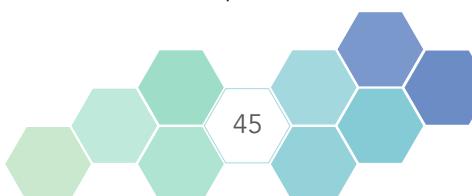


With these categories of outcomes used to review change, one can conclude that the perception of change differs between people. Different views and perceptions can lead to conflicts. For that reason, it is useful to start change processes with imagining how others look towards the problem and related change solutions (Boonstra, 2013). The different views people can have on different aspects, ways of thinking, can be distinguished in five types. These five ways of thinking are labelled with colours. Although these five colours come with different aspects in even more different processes, the ideals of these colours are described in order to give a quick overview of the differences between the colour-print thinking (de Caluwé & Vermaak, 2002).

-  Yellow-print thinking: the ideal is that people see the overarching interests and want to achieve those collectively.
-  Blue-print thinking: the ideal is that everything is makeable and controllable, if a rational planning is achieved.
-  Red-print thinking: the ideal is that the right 'fit' is found between everyone, if people are stimulated in the right way.
-  Green-print thinking: the ideal is that everything can be taught and learned, that organisations are learning organisations.
-  White-print thinking: the ideal is that evolution is spontaneous, with a positive attitude towards conflicts and crises.

Based on these five ways of thinking, organisations, sections, departments and staff can be categorised or typed. In changing organisation there is often made use of (external) change managers (Boonstra, 2013; de Caluwé & Vermaak, 2002). These managers will have a colour-print way of thinking as well, making each change process once again differ. In this way approaches to change can be adjusted to the organisation and those responsible for the change, to fit the thoughts on change this will be discussed further on.

The fourth constituent discussed in the definition of planned change was the constituent of change as going through a process in stages or steps. In 1996 Kotter was the first to write down a change model, consisting of 8 steps. This change model is reviewed, discussed and reconsidered multiple



times. Although most steps find support in review studies, not all steps were supported in all studies (Appelbaum et al., 2012). With the aim of changing the organisations in the Netherlands, the views of three (four) Dutch change managers and/or change experts on the steps or phases of change are discussed.

The first change expert describes change in 7 steps. Boonstra (2013) explains these steps as lessons towards learning from the change that was intended with these steps:

1. Orientate and observe uninhibitedly
2. Diagnose and understand the area
3. Formulate ambition and imagine the future
4. Choose change strategy and set off
5. Change and deal with the unexpected
6. Intervene and search for passable paths
7. Take a rest to evaluate and learn

Although some of these steps are straight forward, most of them are cryptic and perhaps not that clear. In the works he published a few years earlier, his fourth and sixth step are not mentioned as separated steps (Boonstra, 2008). These formerly five steps are more in line with the next experts, who have a lower amount of steps. De Caluwé and Vermaak (2002) talk about phases, four phases that can be found within each change process:

1. Diagnosing phase
2. Strategy phase
3. Intervention plan phase
4. Intervention phase

The first thing that stands out is the resemblance between the last two phases. The difference is the action based (with evaluating) tasks of the fourth phase, whereas the third phase is particularly about designing the actions to take. The last expert to debate is Cozijnsen (2014), who presents change with building blocks. His view on change is that of an integral process, where the behaviour of people is an important building block:

1. Organisation context
2. Improvement concepts
3. Behaviour
4. Steering

When looking at these four building blocks, similarities with the previous phases and steps can be found. To summarize the similarities found between the phases, steps and blocks, figure 11 gives a view on the resemblance between the three change managers and experts.

Boonstra (2013)	De Caluwé and Vermaak (2002)	Coijnsen (2014)
1	1	1
2		
3	2	2
4		
5	3	4
6		
7	4	(3)

Figure 11: The similarities between the different views on phases, steps and building blocks within change (own illustration)

What becomes clear when looking at figure 11, are the similarities between the different steps, phases and building blocks. One thing stands out, the third building block discussed by Coijnsen (2014), behaviour, is not in depth discussed by the others. Even though Boonstra talks about evaluating and learning about the change that has happened (so far), the actual behaviour of the people undergoing the change is an underexposed subject.

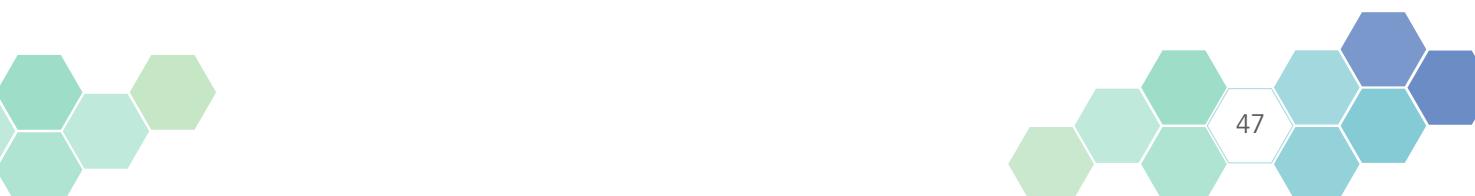
Looking at the different ways of designating the division of change processes, Boonstra (2013) stresses that there is no 'best' way to change, reasoning that change processes may differ each time. Concluding the three ways of categorizing the process of change, a general phasing of a change management process can be made. The phasing, combining the knowledge obtained, that will be the basis within this research is as follows:

1. Orientation phase
2. Strategy phase
3. Implementation phase
4. Evaluation phase



Figure 12: The four phases of change, concluded from literature, to be used.  
(own illustration)

Figure 12 shows the phasing as will be used during this research and the advice that will follow from this research.



In their description of the change process, the change managers and experts all address different instruments that can be used within change management. These instruments can be appointed to the different phases within change management that were discussed above. For that reason, the instruments to be used during the orientation phase are discussed first.

De Caluwé and Vermaak (2002) call the instruments to use within the first phase the diagnose models. The distinction that is made between the different models is based on two dimensions; the level and the point of view. The first dimension distinguishes the individual, the group, the organisation and the organisation context levels. The second dimension distinguishes the business, the organisational and the change point of view. Putting the four levels and the three points of view crosswise give twelve different groups of instruments to use when diagnosing the organisation (de Caluwé & Vermaak, 2002). Some of those diagnosing instruments are mentioned by Cozijnsen (2014) as well. The ones that are mentioned by both are the organisation type (or organisation culture), the core activities and the field of influences (actors within the teams). These instruments are therefore seen as the basic three to use in the orientation of organisations.

The next set of instruments are the ones used for the actual change; the change strategies. All change experts agree on the fact that all strategies used nowadays originate from three main strategies (Bennis, Benne and Chin in De Caluwé & Vermaak, 2002):

- Power pressure strategy
- Rational – empirical strategy
- Normative – re-educative strategy

Boonstra added a fourth strategy, the exchange & reward strategy, in 1992, which he, later on, called the negotiation strategy. In his books published 16 and 21 years later, the number of strategies discussed increased with a fifth, the dialogue strategy (Boonstra, 2008) and went up to six with the learning strategy. His list of strategies possible to use is therefore as follows (Boonstra, 2013):

- Power strategy
- Planned strategy
- Development strategy
- Negotiation strategy
- Dialogue strategy
- Learning strategy

These last two, new strategies are not really mentioned by other authors. The only references that can be made are to the so-called 'learning organisations'. Coming back to the five types of thinking about change, the five 'colour-prints', a strategy can be linked to each of them (de Caluwé & Vermaak, 2002).

Yellow-print thinking:	Negotiation strategy
Blue-print thinking:	Planned strategy (rational-empirical)
Red-print thinking:	Power strategy
Green-print thinking:	Development strategy (normative – re-educative)
White-print thinking:	Dialogue (& learning) strategy

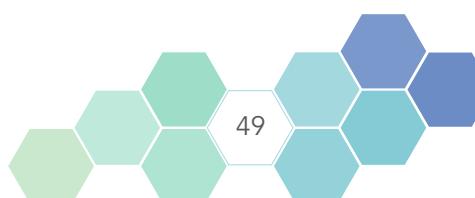
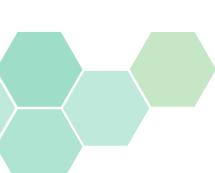
Knowing the strategy that may fit the type of thinkers, an organisation (or department) can be appointed to a certain way of thinking. This can give guidance in the type of strategy to address change, the type that is suitable for that organisation or department.

The last set of instrument that is widely discussed in change management and planned change literature are the intervention types. These interventions are ways of working by which the change is implemented from the change plan (de Caluwé & Vermaak, 2002). The types of interventions are therefore discussed in the next chapter about implementation management.

### 6.2.2 Implementation management

As mentioned in the previous chapter, this chapter on implementation management will result in an exposition of ways to implement the change strategy: the intervention types. Before coming to the actual instruments used within implementation management, an understanding of the implementation and its managerial aspects is needed. From the conceptualisation of the term change, one can conclude that there is no 'best' way to change because of the complexity that planned change is. For that reason, the actual implementation of the change asks for great demands of those managers involved in the implementation process (Imran, Rehman, Aslam, & Bilal, 2016). They explain that implementation management is a process of implementing change by those who play a key role: change agents (or implementation managers).

In different studies, the two main approaches used by change/implementation managers are mentioned, the participative approach and the unilateral approach. The two approaches differ in the relationship between attitude and behaviour (Waldersee & Griffiths, 2004). In their research Waldersee and Griff-



fiths (2004) describe the participative approach as the approach that seeks support, it assumes that behaviour change will happen if attitudes towards the change are positive. The opposite approach, the unilateral approach, is described as the forced one. It assumes that the attitude towards the change will become positive after the behaviour was forced to be changed. The reason for choosing either of those approaches can be based on the scale of the change. From studies in the 1990s Dunphy and Stace argue that large changes are better suited to be addressed by a unilateral approach, because of possible high resistance. Given that the smaller changes have a higher potential to get lower resistance, it makes the participative approach a more obvious choice in the smaller changes (Waldersee & Griffiths, 2004).

Independently of the approach, it is discussed how some aspects are important to have an effective change implementation. Those things important for effectively implement change are described as the knowledge level of the change agents and the way in which the dissemination of information about the change process is done (Imran et al., 2016). A third aspect related to the effectiveness of the implementation of change is the social structure or network of an organisation (Lynch & Mors, 2018; Tenkasi & Chesmore, 2003). This social structure or network is often mentioned as an important part of the organisation to be explored and understood, by the managers responsible for the change implementation. This social structure can, therefore, be seen as the link between the knowledge level of the change manager and the way he communicates within this social network (see figure 13).

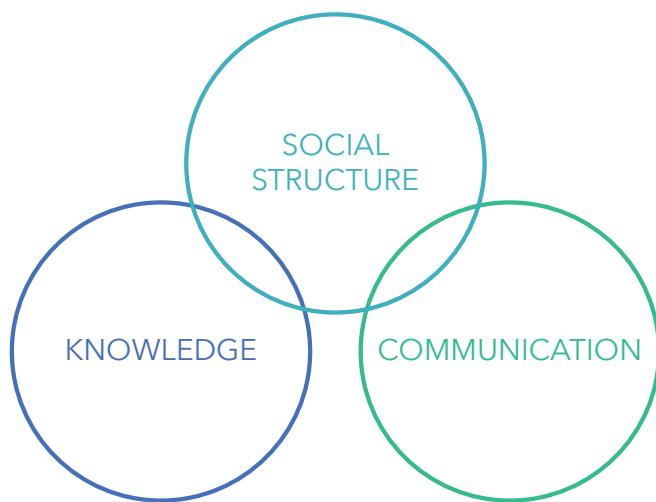
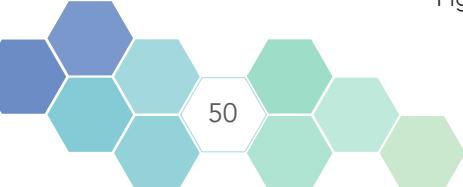


Figure 13: The three components needed from managers for successful implementation (own illustration)



These three criteria imply that the lack of one (or more) can cause problems, which lead towards an ineffective implementation.

Ineffective implementation is the outcome following problems that occur during the implementation process. Although an ineffective implementation of the intended change is presumably an accumulation of different factors, some argue that its problem is particularly in the implementation and not the choice of strategy (Waldersee & Griffiths, 2004). In his research Coijnsen (2014) explains the risk factors that he distinguishes. These risk factors are divided between the four building blocks mentioned before, with some of the risk factors overlapping these building blocks.

The risk factors related to the building block 'steering', are most related to the actual implementation of change since steering can be seen as a way of implementing change. The two risks mentioned, related to the implementation phase, are the risk of choosing the right instruments and the risk of the effectiveness of these instruments (Coijnsen, 2014). This shows the importance of implementation instruments. Other problems and risks within implementation and change in general, are discussed later on in the next paragraph on resistance and problems.

The approaches that were mentioned before, the participative approach and the unilateral approach, can be used to categorise the different implementation systems; so-called intervention types or instruments. It is described that these interventions are the activities to come to the desired outcomes, keeping the context in mind, within certain phases, by different actors, with the right communication and steering; in other words the six constituents of change (de Caluwé & Vermaak, 2002). This shows how the actual activities of a change process are performed within the implementation phase.

In their work (de Caluwé & Vermaak, 2002), they categorise the intervention types/instruments suitable for particular situations, by a crosswise placing (like the diagnose instruments) of the ways of thinking in colours and three of the levels; the individual level, the group level and the organisational level. It must be said that these intervention instruments discussed in the context of colour thinking are not the only ones available. Over 100 types of instruments and ways of implementing change exist (Schminck and Miles (1971), Blake and Mouton (1976) in De Caluwé & Vermaak, 2002), but these 45 discussed are well-known and frequently discussed (Boersema-Vermeer & de Groot, 2016; van Nistelrooij & de Caluwé, 2016). This categorising on the three



levels, however, shows that change is best to be implemented in a suitable manner for each level.

	Individual level	Group level	Organisation level
Yellow-print thinking	Personal commitment-statement	Confrontation meetings	Improving the quality of work
	Outplacing	Third party-strategy	Strategic alliances
	Protégé construction	Top structure	Collective-agreement negotiations
Blue-print thinking	Management by objectives	Working in projects	Strategic management
	Hygenic working	Archiving	Business process redesign
	Working with an agenda	Decision-making rules	Screening / Auditing
Red-print thinking	Career development	Social activities	Rewards within organisations
	Recruitment and selection	Team roles	Mobility and diversity
	Job broadening	Management by speech	Triple ladder
Green-print thinking	Coaching	Teambuilding	Open systems planning
	Intensive clinic	Gaming	Parallel learning structures
	Feedback sessions	Intervision	Quality circles
White-print thinking	T-group	Self-steering teams	Search conferences
	Personal development	Open-space meetings	Rituals and mysticism
	Networking	Making mental models explicit	Sacrificing sacred cows

Figure 14: The implementation instruments based on the three levels of implementation and the five ways of colour-print thinking (own illustration, adapted from De Caluwé and Vermaak, 2002)

The implementations in figure 14 are illustrative for a large number of instruments available. This shows how a process of change is not a straightforward one and is tailor-made per organisation.

Coming back to the distinction made between the participative and unilateral approaches of implementing change, the 45 instruments named in figure 14 can be divided between those two approaches. Although De Caluwé and Vermaak (2002) do not make that distinction, a quick and rough one can be made based on the strategies they describe. The planned strategy (the rational-empirical strategy) and the power strategy denote to be more unilateral, where the other three (or four) strategies appear to be more participative.



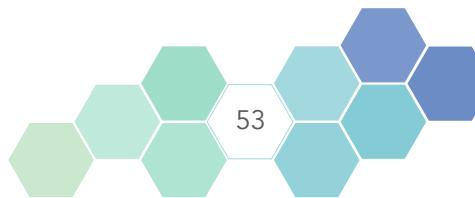
Besides these types of instruments to change organisations, the project-based nature of the organisation should be kept in mind. In his research on change Gareis (2010) once again appoints the difference between first order and second order changes. In introducing that changes should be managed, for the greater part, by working in groups, projects or change of projects, the second order changes fit this approach most (Gareis, 2010). The longer duration of second order changes and the related resistance to those changes are the reason (besides other reasons as well) why changes by projects are more relevant for second-order changes. He further mentioned that this way of implementing change by projects can help to overcome that resistance in change (Turner and Müller in Gareis, 2010). A critical remark is however made on the level of this implementation of change by using projects. De Caluwé and Vermaak (2002) explain that this way of implementing only addresses the group level within organisations, not the organisation level of the organisation.

#### 6.2.3 Resistance and problems within change and implementation

As became clear from the previous two chapters, problems and resistance occur during the process of change and the implementation of that change. The first discussion appearing, whether the change is successful and/or meaningful, gave already an insight into the debate of the effectiveness of change and implementing that change. As mentioned before the problems and resistance for change will be discussed first from the general perspective of change, after that the change within quality systems and ends with the possible problems in changing organisations related to the proposed law on quality assurance on the basis of the Building Decree.

On the subject of change is successful or not, the reasons for failure, resistance against change and readiness to change has been written by many different researchers and change experts. Although opinions differ, this chapter will try to expose the most common thoughts on the general subject of resistance and other problems.

The first obstacle that is addressed in the literature is the readiness for change. Readiness for change is described as effective preparation as an integral part of a planning phase (Imran et al., 2016). They describe that this readiness for change is focussed on developing the required type of alterations, that must be achieved on individual and the group level. This complies with the design of the change process (Werkman, 2009). This design of the change process, together with properly addressing the readiness for change, is crucial



if failure of the whole change process is to be prevented (Imran et al., 2016; Werkman, 2009). Besides the readiness, failure is related to the actual willingness to change. Even if organisations appear to be ready, the willingness to change can be absent. Werkman (2009) connects the presence of willingness to the choice of the right approach.

If willingness to change is not existing within the organisation, resistance is often found. The resistance to change is discussed by many. In discussing resistance, four main reasons why resistance exists and how it emerges are distinguished by (van Nistelrooij & de Caluwé, 2016). First of all people like rational and predictable planning, which change interferes with. Besides that resistance is often not recognized by those who act in that way and therefore that way of acting is not altered. Related to that, resistance is often a way of acting that manifests from surrounding behaviour within an organisation. Lastly, resistance is a perception of the process, because it is about shifting interpretations, as the process of change is usually an unconscious one (van Nistelrooij & de Caluwé, 2016). Although they conclude that resistance to change is more than those four reasons, they can give guidance in the process.

The nature of this resistance is a subject as well and can be linked to different levels. With the first footnote that resistance can be negative, as well as it can be a positive resistance (de Caluwé & Vermaak, 2002; van Nistelrooij & de Caluwé, 2016). Resistance is described as the phenomenon that protects us from potential chaos and comes at different levels. Ones again are these different levels, the level of the individual, the group and the organisation (de Caluwé & Vermaak, 2002). The individual often experiences psychological barriers of fear, trust and security (Cozijnsen in De Caluwé & Vermaak, 2002). The group dynamic processes are the reason for resistance on the group level. With changing compositions, roles and goals the new process within groups can be the reason for resistance. The last level of resistance, on the organisation level, often consists of four factors for resistance. These four are the cultural norms and values of the organisation, the absence of urgency or vision, the size of the change and the emotional load of the change, for instance because of a fear of losing identity (de Caluwé & Vermaak, 2002). Besides the readiness, willingness and resistance, two other problems that cause for change not to be successful are mentioned by Burnes (2003) in his research. The first opportunity organisations often miss when changing an organisation, is to link this change with development within management. They are often seen as two separated actions, while his advice is to combine both to get an optimal outcome. The second point that is made is that managers

need to make sure, that the planned change is not only implemented on a strategic level but on the operational level as well. The actual operational, day-to-day, activities should be in line and supported by a strategical plan (Burnes, 2003).

After discussing the general implications for the problems and resistance against change, the focus will now go towards the obstacles coming forward within quality systems changes and implementations.

Within organisational change, three great types that have gathered attention are distinguished by Burnes (2003). One of those three is the adoption of TQM: total quality management, the best-known quality system that was implemented. TQM is explained as a set of management and control processes. Its focus is to change an entire organisation with the aim of giving (better) customer satisfaction by its products and/or services, usable for many types of organisation within different industries (Talha, 2004).

Even though TQM is well known and implemented in many organisations, research shows that the failure rate, whether it is in the USA or Europe, is between 80 and 90 per cent (Burnes, 2003). This failure can, as was concluded in the previous section, be connected with the lack of development of management. Failure of management is explained with different factors that caused the failure of TQM, but the exact reasons cannot be listed.

Discussing the TQM system is not equal to summarizing all quality systems that exist to change organisations. Since the reasons for the failure of TQM are not even clear, an often implemented system, discussing other quality systems is not applicable nor achievable.

The previous section described the changes relating to TQM, that is focussed on the job of satisfying customers, which is not the first goal of the proposed law. The aim of improving the quality of building projects should be a justified reason as well to start a change process of the organisation for contractors. The law for quality assurance, on the basis of the Building Decree, is at the time of this thesis not adopted yet. This is of influence on the change process, the question is however how it exactly influences the process. In literature, a discussion exists on the aspect of urgency on change (Appelbaum et al., 2012; Boonstra, 2013). Although this law could hypothetically be adopted and be put into operation within a few months, an actual sense of urgency seems not to be present at this point of time. Creating a sense of urgency was discussed by Kotter in his eight-steps model for change in the early 1990s. In later studies, this model, with its first step of creating urg-



cy, was subjected to see if this model is still relevant today. In their research Appelbaum et al. (2012) found that the first step, creating urgency within organisations, is still relevant. Although their research was based on multiple studies, that opinion on urgency being relevant is not shared by all. Boonstra (2013) describes that the thought of creating urgency is an obsolete one. The connection is made between urgency and paralysis in the organisation, concluding that when urgency occurs it is counterproductive to the change process. A comment has to be made on the urgency that Boonstra directly links to a crisis, suggesting that urgency only originates from a crisis situation (Boonstra, 2013). The word crisis is however not mentioned in the description by Appelbaum et al. (2012).

The willingness to change was already mentioned before. Coming back to his crisis theory, Boonstra (2013) explains that when there is no crisis and there is time to change this process can be different. A joint problem experience is the start of a change process when there is time to change. This joint problem experience will higher the willingness to change (Boonstra, 2013). Concluding that, willingness can be created by starting a change process by talking about possible problems within for example their core activities.

The idea of coming to a joint problem experience is for one reason, to overcome the scepticism that is currently present regarding this law. Interpreting this law as a controversial change, this change can be perceived as threatening. Controversial innovations, as privatising of quality assurance can be seen, often involve institutional and/or cultural changes that are seen as threatening by some. These changes are within behaviour, routines and thought and therefore can be frightening (Tenkasi & Chesmore, 2003).

Concluding this part on the change related to the proposed law on quality assurance, on the basis of the Building Decree, the previous part about scepticism is of great importance. In research, it is discussed that within cynical and/or sceptical contexts (i.e. organisations) a participative approach will not catch on. Moreover, it is explained that besides the opposite approach of unilateral implementation, the power-based strategy is more likely to be already part of the organisation (Werkman, 2009). In explaining that these ways of acting are embedded within the organisation, a unilateral (e.g. power-based) approach for change processes is an obvious choice. In addition to that, the unclear contexts of change are discussed. With not knowing how the law will exactly be shaped and when it will be put into operation, the contexts of the law are not a firm basis for the change that has to happen. A systematical change approach, the planned strategy, is seen as the most useful (Werkman, 2009).

These last two conclusions, on the appropriate strategies and the way of implementing one of those strategies, are perhaps a bit simply drawn. On these subjects, the chapter with findings will give a more extensive reasoning.

## HOW?

Concluding the question of how the proposed change within culture and organisational structure can be approached, the phases, elements and instruments discussed above can give guidance. The four phases, the orientation, strategy, implementation and evaluation phase, are derived from different researches from change experts (Boonstra, 2013; Cozijnsen, 2014; de Caluwé & Vermaak, 2002). These phases are shown in figure 15, as are the parts and steps within those phases.

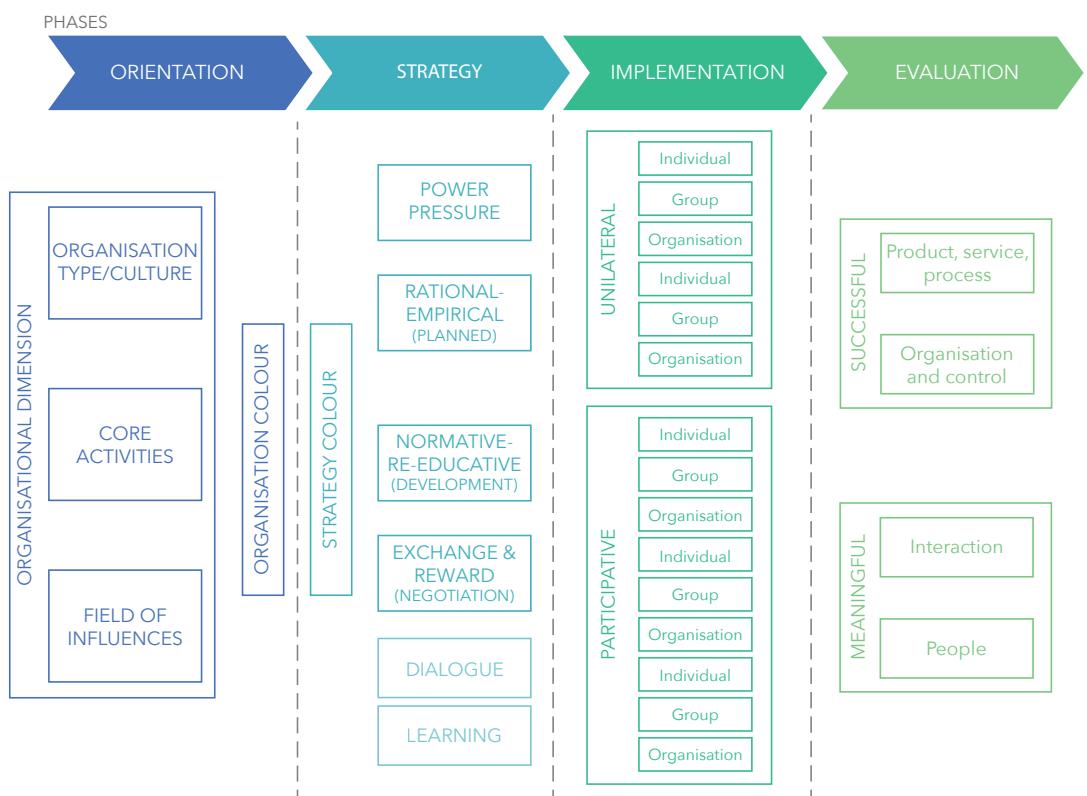


Figure 15: The phases and steps concluded from literature on change and implementation  
(own illustration)

The orientation in the first phase can be done within three dimensions, is the business, the organisation and the change point of view (de Caluwé & Vermaak, 2002). In the case of changing the organisation from contractors, the organisational dimension is chosen to focus on. Although there are multiple instruments to go through an orientation of organisations, the three mentioned are complying with constituents of change (see figure 15). Organisation type or culture, the core activities and the field of influence can jointly give an insight in the context or history, the actors involved, the way of communicating within the organisation, all aspects that are important for change (Cozijnsen, 2014; de Caluwé & Vermaak, 2002).

Another thing that can be done within orientation of the organisation, is the step of allocating the organisation to a certain way of thinking; colour-print thinking (de Caluwé & Vermaak, 2002). This, however, is not a 100% naturally step, since all individuals and groups within organisations differ between themselves, from the colour-print in which they think.

The second phase is the strategy phase. With the (possible) colour-print way of think of the organisation, a strategy complying with this colour-print thinking can be chosen (see figure 15). From the six strategies discussed (Boonsstra, 2013), with the four best-known strategies derived from the original three strategies (Bennis, Benne and Chin in De Caluwé & Vermaak, 2002), these can be divided into a unilateral or participative implementation (Waldersee & Griffiths, 2004).

This implementation, within the implementation phase, is focused on different instruments that can be used. Instruments that comply with the strategy, and the unilateral or participative nature of that strategy (Waldersee & Griffiths, 2004). Different instruments are available within different strategy choices and apply to different levels of the organisation (de Caluwé & Vermaak, 2002). These levels are important because of different natures of resistance. Besides the instruments, it was mentioned that the project-based nature of contractors can be of interest in implementing change, by starting with certain projects (Gareis, 2010), best fitting a power or planned strategy (de Caluwé & Vermaak, 2002).

After implementing the change, evaluating the change is the last phase. At least that is the last phase if the change is evaluated as being implemented successful and meaningful (Cozijnsen, 2014). The evaluation or checkpoints of successful and meaningful are subjects on which the evaluation can be based.

## 6.3 What

The last part of the literature research, following the structure of the golden circle, is the 'what-question'. This question focusses on what can be changed, being the appointed subjects of quality assurance and management, culture and organisational structure. The first research subject, being the quality assurance and quality management, is to get insight into the current approaches within these topics and how they are related to the proposed law. The goal is to see how, if quality management is influenced by culture and/or structure. After that, the culture and organisational structures are discussed, focussing on the changes that can be created within those two, with keeping quality assurance management in mind.

### 6.3.1 Quality assurance and management

Previously, the quality assurance in this research was described as quality assurance on the basis of the Building Decree. The reason for this specific description is the fact that the term quality assurance is widely used within different types of industries. Within the construction industry, the Building Decree is most directly linked to quality assurance. The Building Decree is the leading document that contains all regulations for buildings, regulations that determine the minimum technical level of these buildings allowed. These regulations include the regulations regarding technical housing quality as well (Hobma & Jong, 2015). Quality assurance is defined as planned, systematic actions (the process) that are necessary to deliver confidence about the product or service, related to the given requirements (objectives) of quality (Cheetham & Carter, 1993; Pheng, 1993). This definition addresses the fact that requirements are determined when it comes to assessing quality. The quality of buildings began to be questioned when the level of performance of building started to lack in the 1970s. As a result, a bigger emphasis was put on assessing the quality, which led to quality systems for buildings. With these quality systems, the quality of mass production within the industry could be assessed (Cheetham & Carter, 1993). Pheng emphasised already in 1993 that quality assurance is the process of achieving standards within the construction industry, quality standards. These quality standards, written down in the current Building Decree, show this understanding of quality assurance is still accurate.

Quality assurance is directly related to quality management, as quality management is defined as the overall function of determination and implementation of the quality process (Cheetham & Carter, 1993). In their literature re-

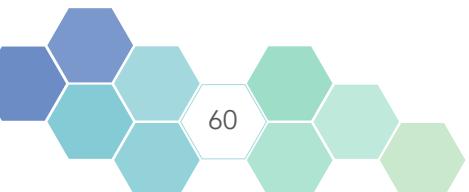


view Kumar, Maiti and Gunasekaran (2018) introduce quality management as an integral part of organisations to achieve quality and market success. They add that good quality management is a demonstration of the level of commitment to quality achievement within organisations. Quality management is further explained as the function of taking responsibility (besides choosing how to assess) checking the quality standards (Cheetham & Carter, 1993). Part of the responsibility within quality management is explained as determination/choosing how to assess. This 'how'-question is related to quality management systems; instruments to implement quality (change). Quality management systems, or in short quality systems, are described as the structure, the process and the resources of assessing quality (Cheetham & Carter, 1993), with the aim of taking measures to prevent poor quality instead of corrective actions afterwards (Pheng, 1993).

Worldwide there are a number of quality management systems, applicable for all types of organisations. The best-known quality management systems, and the most often used ones are Continuous Improvement (CI), Six Sigma, Total Productive Maintenance (TPM), Toyota Production Systems (TPS), Lean Manufacturing, Theory of Constraints (TOC), Total Quality Management (TQM) and ISO 9001 QM standards. The ones mentioned are systems, but more often even principles or approaches (Kumar et al., 2018). Although these systems are applicable to organisations in multiple industries, the last two systems (TQM and ISO 9001 QMS) are used within construction as well (Burati Jr., Matthews, & Kalidindi, 1992; Kumar et al., 2018). Within this research, however, the focus is on quality management on the basis of the Building Decree. This does not signify that the systems for organisational quality management, TQM and ISO 9001 QMS, cannot be used alongside the Building Decree intended for construction quality.

Coming back to quality management in relation to quality assurance on the basis of the Building Decree, the other systems mentioned are to be kept in mind but will not be the main focus within this research. This is because the proposed system is meant to deliver more documentation on quality assessment on the basis of the Building Decree (Stichting Economisch Instituut voor de Bouw, 2016), which can be seen as more quality management on operational level than on a business/operational level for which the systems mentioned above are intended for.

With the understanding of what is meant when talking about quality management, the link between quality management and contractors can be described. The definition of what quality management is, namely determining



and implementing the quality process, is applicable to multiple tasks of the contractor before and during construction. As explained by Ahraoui (2016) the main idea of the proposed law is that the parties involved during construction, with the contractor as the main party, are responsible for the process of assuring that constructing goes accordingly to the Building Decree. This process is the process to be managed by the contractor. One can, therefore, conclude that when talking about the contractor and quality management, the quality to be managed by the contractor is that of the building to be delivered. Part of the construction industry is the contractor having multiple sub-contractors and suppliers. This asks for quality management as well. By close supervision and inspection of the suppliers, the contractor can achieve the quality standards (Pheng, 1993). A remark is made by Pheng, about the reason for this way of seeking safeguards because of liability issues. Although this shows the importance and the role of a quality manager within construction, the actual presence of a quality manager at contractors is not mentioned in literature.

With this research the focus is on changing the process of quality assurance with contractors, so quality management as well. Miller, Duesing, Lowery and Sumner (2018) describe the change within quality management; the quality movement. They view the movement in quality from six perspectives, being a global trend, a national mandate, an industry trend, an organizational strategy, an operational strategy and as a personal philosophy. Knowing that contractors are focussed on offering the lowest price (Onderzoeksraad voor Veiligheid (OVV), 2018), it is acceptable to say that if they operate this change in quality management, it is because of a trend within the industry. Industry trends motivate the organisation to participate in the quality management process because there is a competitive advantage to gain (Miller et al., 2018). With this characteristic of focussing on the lowest price to gain most profit, the change in quality management is not likely to be because of a personal philosophy of the contractor.

### 6.3.2 Culture

As concluded before, the change within the construction industry is not likely to happen from personal philosophies adopted by contractors. This says something about the culture of contractors in The Netherlands.

In literature, the culture within organisations is referred to as organisational culture. The importance of this subject is addressed by Bemelmans, Voordijk and Vos (2012) as they highlight the recommendations of exploring organisa-



tional culture and organisational structure.

Starting with culture itself, the definition that is referred to quite often is that of culture as being shared perceptions, values and/or practices. This culture can be analysed from different perspectives, for instance, a country, religion or language (Hofstede, 2015). One of these perspectives is the organisation in which people work. In that perspective organisational culture is defined as values, visions and beliefs shared by members of an organisation, creating a unique style of an organisation (de Waal, van der Heijden, Selvarajah, & Meyer, 2012; Hartmann, 2006; Nase & Arkesteijn, 2018).

In contrast to his definition of culture, Hofstede (2015) found in his research that organisational culture is not based on shared values, but only on shared practices. A strong sense of identity could be created when values are shared among the different members of the organisation, but these values do not create a deep culture as the shared practices do (Hofstede, 2015).

Specifying his definition, based on literature, Hartmann (2006) adds the way in which such an organisational culture comes into being. He describes this process of a culture emerging within an organisation as the interaction of individuals within that organisation, from which things are learned from each other. In this way, they shape their behaviour fitting with the character of the organisation (Hartmann, 2006). This description of the emerging of organisational culture complies with the thought of Hofstede that this culture is built around shared practices, practices that are an interaction between individuals.

In describing what culture entails, a distinction is made between deep and shallow culture. Deep culture is linked to a national culture, where shallow culture is associated with cultures such as those of organisations (Hofstede, 2015). This type of culture is of importance in the process of trying to change that culture. Another distinction that is made is that of implicit versus explicit culture. In their research Cheung, Wong and Wu (2011) discuss this distinction of the explicit culture that lies on the surface, communicated as the official way of working. The implicit culture is defined as the culture that lies beneath the surface and is the actual way things are done; that is considered to be of real importance by management and staff (Cole in Cheung et al., 2011). This suggests that the culture that is expressed to others can differ from the culture that is perceived within the organisation by its members and staff.

Knowing that a possible distinction between the culture 'on paper' and the one that is actually being observed can occur, the option where these two intertwine is an interesting one. When these two cultures, the explicit and implicit one, are in harmony, the term of a strong culture (named by Schein)

arises (Cheung et al., 2011). In addition to this strong culture, the overall culture of an organisation is mentioned. In previous chapters, three dimensions were discussed within an organisation, the individual, the group and the organisational level. This complies with a conclusion that is drawn, that different cultures exist next to each other within an organisation: a worker culture, a group culture and a managerial culture. An overall culture, preferably a strong culture, is seen as an overarching culture for the organisation as a whole (Cheung et al., 2011).

Since this research is focussed on the organisations of contractors within the Netherlands, a small remark has to be made in addressing the Dutch culture. Although a lot is written about this subject, an extensive analysis of the Dutch culture does not apply. A general remark that is made on the Dutch culture, is, however, worth mentioning. Dutch culture is explained as being feminine and long-term oriented. In practice this means a higher appreciation of intentions than on the actual results, that the quality achieved is more important than the quantity achieved and that the future perspective is leading over a short moment in time (Hofstede, 2015).

With the knowledge obtained on culture and especially on organisational culture, the next step in culture can be taken. With the proposed law in mind, a change within the culture of contractors was addressed before. For that reason, the possibilities within culture change, and thereby in organisational change, are to be explored.

In earlier descriptions of the process of change, the 8 steps model of Kotter was already mentioned. In his last step, he addresses the change of corporate culture by coming back to the definition of culture. He concludes that change is easier inserted when it is rooted in shared norms and values (Appelbaum et al., 2012). A good implementation of change is thus an extension of change of the organisational culture.

The work of Schein was already mentioned in the research of Cheung et al., (2011) and is again mentioned when discussing the change of cultures. In this aspect, the role of leaders is pleaded. Leaders, managers to be assumed, are expected to shape and change the organisational structures, moreover the organisational cultures through their way of acting and interacting within groups (Werkman, 2009). This role of managers is reasoned by other researchers as well (Hartmann, 2006; Hofstede, 2015). The latter researcher discusses that, even though managers would like to control the culture of the organisation, he or she can do no more than creating the way in which employees are selected (Hofstede, 2015). Close to the opposite of that state-



ment is suggested by Hartmann (2006), with describing managers as the motivated people needed to implement new ideas and organisational culture changes. Their acting as managers can help the way of communicating this change. For all reasons mentioned, the role of managers within the change process in general, and in cultural change, should not be underestimated and taken into account when choosing a certain change strategy.

Even though the influence of managers on culture change is mentioned by many, the actual suitability of culture to change is discussed by many as well. In his research Hofstede (2015) gives reasoning to why cultural change is difficult to realise. He explains that companies, but moreover societies consist of multiple individuals, of which anyone has control on which way the culture change is directing towards. This shows that every individual has an influence on the culture that is present.

Coming back to the deep and shallow cultures that exist, this is in relation to the remark on the influence of individuals on culture change. It is concluded that the deep cultures, existing within nations, change across generations. While the shallow cultures, existing within organisations, can change over years or decades. It is further stated that change can be implemented by changing the pressure on a group (Hofstede, 2015), implying that this is easier done within organisations based on the time span the change will take.

The last thing that is addressed, and will make the step to the next subject, is the thought that culture change is the solution to something that is wrong. This is often explained as the feeling that the organisation is not functioning at its best, but no obvious cause can be appointed. In that way the culture change is nominated as the solution (Hofstede, 2015). This brings up two points of attention. First of all, is the change for contractors, based on the proposed law, seen as a solution to the change in responsibility that comes with this law? Besides that, is changing the organisational culture seen as the way to address the new law? The next chapter will focus on the culture within construction and how this can be changed relating the law on quality assurance.

In order to explore how the construction industry can change its culture, this culture and its aspects are to be researched in advance. For that reason, the current state, perhaps better-called reputation, of the construction industry is looked into. Besides that, the organisational culture within construction is tried to be construed.

The construction industry is facing various changes in the past decades. Ageing of the working force, globalization, growth of construction organisation



etc., things which all asks for continuous development and change of processes within the industry (Chinowsky, Molenaar, & Realph, 2007).

A more direct cause that got the industry talking about change, was the construction fraud that was exposed in 2002. This caused a breach of trust between contractors and the parties they worked with (Nijhof, Graafland, & de Kuijer, 2009). Mentioned in the introduction of this research was the feeling, which is often expressed, that contractors are not to be trusted (van Ommen, 2017). One of the reasons for this mistrust, besides the large-scale fraud of 2002, is the cost-driven market in which the contractors operate. The way of working promotes competition, based on coming to sharp prices. For that reason, this market is described as cost driven and therefore typed as a traditional one as well (Bemelmans et al., 2012; Nijhof et al., 2009).

These reasons for mistrust and the thought of a traditional, only price focussed market, can give motivation to the actions taking to enhance the image of the industry. In relation to this improvement of the reputation of the construction industry, with the reputation of contractors perhaps foremost, is the recognition of the quality of the performance (Nijhof et al., 2009). This is consistent with previously made statements that if the quality within construction has to become better, the contractors should adapt their organisations to take and accept the changing responsibility.

In describing the organisational culture within construction, Cheung et al. (2011) found seven factors that identify this culture. Of these seven the two factors that ranked the highest were 'goal settings and accomplishments' and 'team orientation'. These two are described as the primal organisational culture factors, that give shape to the industry (Cheung et al., 2011). This complies with the research that was performed in the Netherlands specifically. In that research Nase & Arkesteijn (2018) found different cultural groups that were absent or present within different industries, of which the Dutch construction industry was one. The first finding that stood out was the low percentage of 'hierarchy' as a cultural group within the construction industry. Only 2.5% of the cultural groups referred to as being hierarchical, were found in construction. This, however, does not exclude hierarchical cultures at contractors, since the word 'traditional' was mentioned in relation to contractors. Besides that, a certain culture can be present but not recognized by all. The two cultural groups that were found more often in construction were 'clan' and 'adhocracy' (Nase & Arkesteijn, 2018). With adhocracy been found the most within construction, followed by clan, a link can be found with the factors that were found by Cheung et al. (2011). Based on those studies the construction industry in the Netherlands can be described with: goal ori-



tated working and accomplishing those goals within teams.

With this understanding of the reputation and the organisational cultures that are present within the Dutch construction industry, the implementation of change can be discussed. Chinowsky et al. (2007) suggested the idea that contractors should become learning organisations, making the improvement of processes a fundamental part of the business. Although this seems like a straight forward and perhaps the simple solution, others foresee a more difficult path. Hartmann (2006) describes the successful implementation of new products, services and processes as a critical challenge for construction firms. This shows that change is not easily implemented, let alone changing organisational culture. Moreover, the organisational culture of contractors seems to strongly influence the change of processes. The real importance of the organisational culture of contractors on things such as innovating is still not recognized (Hartmann, 2006). One can conclude that if the importance of organisational culture on change processes is not recognized, or even underestimated, a change of this organisational culture is even harder. The question arises if construction firms are willing and capable of changing that culture for a 'greater' purpose.

Once again the role of the managers is opened for discussion. It is argued that the construction managers have an important share in encouraging their employees to innovate their activities and behaviour and to create commitment for the organisation (Hartmann, 2006). This complies with the aspects defining culture, behaviour, values and practices, showing that construction managers have some influence on the culture within the organisation.

### 6.3.3 Organisational structure

Having discussed what organisational culture is, how it can be changed and both especially within construction, the next subject is organisational structure. After discussing organisational structure, the possible changes within those structures will be reviewed. Lastly, it is tried to make a connection with organisational structures and changes within the construction industry

Before even discussing if and how an organisational structure can be changed in the construction industry, especially at contractors, a clear understanding is needed of what organisational structure is.

In discussing the definition of organisational structure the first definitions of Mintzberg are mentioned by different researches. His definition of an organisational structure is that it is a set of all the ways in which the work is divided into distinct tasks. In this way coordination of the tasks is achieved (Anum-

ba, Baugh, & Khalfan, 2002; Martínez-León & Martínez-García, 2011). In explaining that definition it is often mentioned that the organisational structure reflects relationships and management reporting relationships, by which processes and communication are performed. The word 'formal' is used to reflect this structure (Anumba et al., 2002; Martínez-León & Martínez-García, 2011), for it reflects the way of working decided on paper. This shows that, although this structure may be agreed upon, the actual way of working may deviate on a day to day basis.

The reason for formulating an organisational structure, even if it may only be the formal way of working, is to cope with problems that the organisations and its managers might face (Ogbonna & Harris, 2003). This is related to approaching goals in the most efficient way within the different phases of approaching those goals (Zeffane, 1992). With this knowledge it can be said that formulating an organisational structure gives direction to a way of working, moreover, it is something to fall back on when needed.

Understanding what organisational structure is and how it supports an organisation, the different types of organisational structures can be discussed. Within literature two main structures are distinguished. Although the names used to describe these structures differ, the general idea is the same. The distinction is referred to as participative versus bureaucratic structure (Teubner, 2015), organic versus mechanistic structure (Shah Abdullah & Ahmad, 2009) or functional versus product structure (Zeffane, 1992), but its simplified descriptions are flat and tall structures.

The tall structure (see figure 16) is described as being the bureaucratic, mechanistic or product structure. This structure has highly formalized rules and protocols. The jobs are organised according to power and authority, making the low-level employees little involved in decision making. Collaboration between different levels is very low and communication is mainly downwards (Martínez-León & Martínez-García, 2011; Shah Abdullah & Ahmad, 2009).



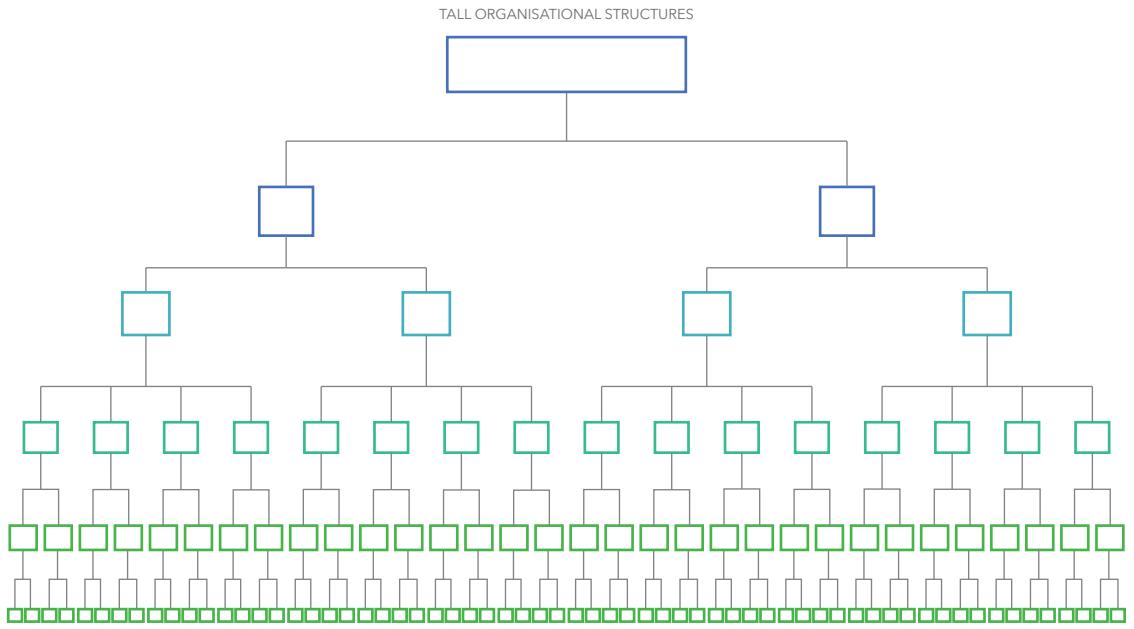


Figure 16: The general visualisation of the composition of tall organisations  
(own illustration)

The flat structure (see figure 17) is referred to as being the participative, organic or functional structure. This structure is based on knowledge and experience from people, making the formalization of rules and protocols lower and creating high participation in decision making. Employees are structured in a horizontal way, eliminating many levels of power and authority. The communication is directed upwards as it is downwards (Martínez-León & Martínez-García, 2011; Shah Abdullah & Ahmad, 2009).

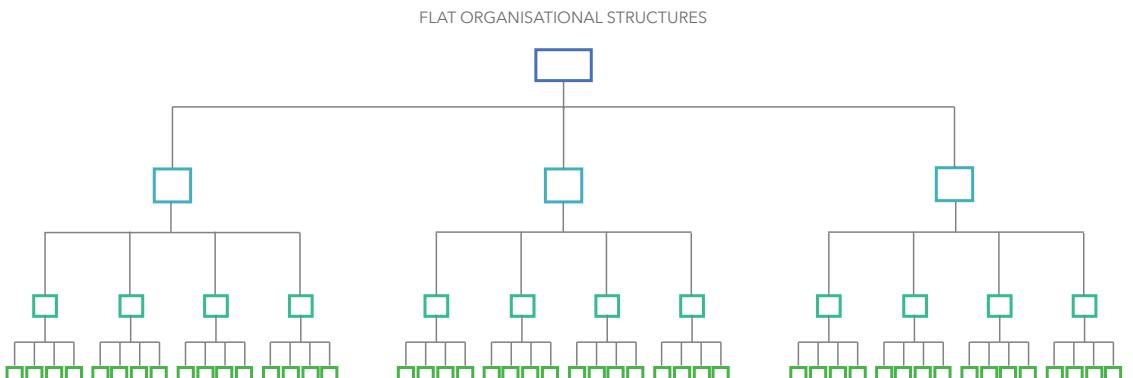
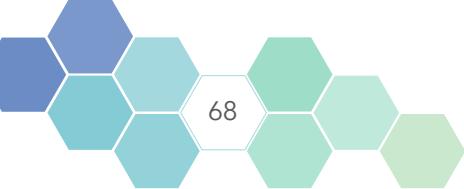


Figure 17: The general visualisation of the composition of flat organisations  
(own illustration)



Of course, these descriptions are the structures in its utmost form. Martínez-León & Martínez-García (2011) even argue in their research that there is no such thing as a uniform organisational structure for the complete organisation. It is therefore not surprising that it is concluded that if organisations are 'too tall', they are expensive and tend to interfere with normal business flows. On the other hand, it is said that if structures are 'too flat', managers get overloaded with too many tasks, having them to compromise on some tasks (Zeffane, 1992). Besides the argument that organisations usually do not have uniform structures, it is also pointed out that structures are often dynamic. Dynamic structures meaning that structures change over time, for the complete organisation or different departments (Martínez-León & Martínez-García, 2011).

The two structures discussed are those of a traditional form, with the tall structure being the 'most' traditional. Besides that distinction between the two main ways of structuring an organisation, another well-known division that is made are the seven organisational structures from Mintzberg (de Caluwé & Vermaak, 2002). These seven structures are the 'simple structure', the 'machine bureaucracy', the 'professional bureaucracy', the 'diversified form', the 'adhocracy', the 'missionary form' and the 'political arena'. For the first one, the simple structure, the contractors are used as example organisation (de Caluwé & Vermaak, 2002). As mentioned before, the organisations of contractors in the Netherlands were found to be adhocracy typed organisations as well (Nase & Arkesteijn, 2018). This complies with the description of adhocracy organisations as being project orientated, multidisciplinary and task oriented. With the description of the simple structure of being action-oriented, having a low level of specialisation and a limited educational level of part of the employees (de Caluwé & Vermaak, 2002), this simple structure suggests being a traditional, hierarchical one. Both these two structures can be applicable for contractors. It can be concluded that the type of structure of contractors differs for each organisation, perhaps with the size of the organisation being the line of demarcation.

New organisational structures have appeared in the last decade, structures such as 'cellular forms', 'modular forms' and 'project-based networks'. These organisational models are often more focused on continuous problem solving and innovating (Martínez-León & Martínez-García, 2011).

The importance of distinguishing the type of organisational structure(s) present within an organisation, lies in the management decisions that follow these structures. As said before the number of tasks of managers rises with the flatness of the organisation, this clear task division may be the reason for



the tall-ness within construction. The level of managerial decisions that have to be made and the level of responsibility managers have depended on the type of structure (Gilmore, 1998). This shows that even for small organisations it is advisable to decide on the type of structure appropriate for that organisation (Zeffane, 1992).

After discussing the different views on approaching change and knowing what organisational structure is, various ways of changing that organisational structure can be distinguished as well.

Reasoning why a change within the structure is useful, Moss Kanter came with a three-part division of change in organisations. She explained that change can be subdivided into identity change, culture and structure change and change in control and power (Moss Kanter in De Caluwé & Vermaak, 2002). Cozijnsen (2014) emphasizes that change should not be separated from the type of organisation, the so-called 'theory of organisations'. This shows that the structure is of importance in changing an organisation. In research on corporate responsibility, the process of changing organisations in structure and culture is linked to that responsibility (Aldama, Amar, & Trostianki, 2009). Knowing why a change in structure is advised, the way to change can be addressed. One of the solutions mentioned, possibly feeling somewhat superficial, is that of turning tall structures into flat structures. In their research Anumba et al. (2002) make the same remark for manufacturing companies, only not for construction firms. Consequently, one obvious solution is not available, making a change process of the structure a company-specific process. One way of coming to a new structure within an organisation, is called the design process (Zeffane, 1992). He distinguishes those involved into the steering committee and the design team. The steering committee is formatted first, consisting of senior managers of the organisation. The design team is defined as 'a small group of members representing a vertical slice of the organisation' (Zeffane, 1992). The division of roles between these two groups is as follows; the steering committee leads the design process, where the design team designs the restructuring by following some basic steps. With this approach, it is emphasized that the employees do the work of the change process; making use of in house experts (Zeffane, 1992). Although this description of this process seems like a straight forward one, this way of changing an organisational structure is not appointed by others. Another way of implementing structure change is however mentioned in other research. Making use of the project-based nature of the organisations of contractors was mentioned as a starting point for second-order changes, one of them



being changes within culture and structure (Gareis, 2010). In this research, it is discussed that changing organisations by projects, gives space to pilot new structure changes within organisations (Turner and Müller in Gareis, 2010).

It is often mentioned that changing the organisational structure is related to a change strategy. Aldama et al. (2009) comment that changing the organisational structure is part of implementing a defined strategy. Reforming the organisational structure is therefore also named as one of a series of substantial changes (Rosenberg & Keller, 2016), so part of a strategy with different ways of implementing that change strategy. The strategy and structure must go 'hand-in-hand' in that aspect (Anumba et al., 2002).

Lastly, the change in structures is found not only to be useful for large companies. It was earlier mentioned that deciding on the type of structure is helpful for small organisations (Zeffane, 1992). This corresponds to the findings, concluded by Ogbonna & Harris (2003) that innovation structure is done by small organisations as well. They even make the note that these organisation perhaps are even more flexible and responsive. This can reason to get smaller contractors to consider a structural change as well.

The construction industry is not mentioned very often when organisational structure is discussed. One thing concluded by Gilmore (1998) is that the organisational structure is of influence on decision-making activities. Since the proposed law asks for a different way of working and therefore making other decisions than before, the organisational structure has to be reviewed, if not changed.

On how this change should be approached by contractors is not much written. In one research, that of Anumba et al. (2002), the distinction is made between structures on the project and corporate level for contractors. At the corporate level the traditional way of structuring an organisation, being more along the lines of a tall structure, should be held on to. A remark, however, is made that it 'should be made less rigid so that they can promote a teamwork environment, which will support team working at project level' (Anumba et al., 2002). It is namely recommended to create integrated team structures at the project level. This can be concluded to be the combination of the simple, clan and the adhocracy structures, discussed before. The division of structure types within an organisation is in line with the earlier remark made, that there is often no uniform structure for the complete organisation (Martínez-León & Martínez-García, 2011).

Although this may seem like a reasonable conclusion, based on the work of Anumba et al. (2002), it is the only research giving direct recommendations

on the organisational structures of contractors. This makes the reasoning a very thinly substantiated one.

## WHAT?

Concluding the question on what can be changed within the construction industry, in relation to the proposed law, the organisational culture and organisational structure are the focus of this research.

As said before, the quality management within construction was looked into at first, to see if and how a change within management can contribute to an organisational change. The quality movement was discussed, with the six perspectives in which the start of shifting in handling quality can lay (Miller et al., 2018). A change in addressing quality, by contractors, is expected to be from an industry trend, because of the competitive advantage that is linked with that type of perspective. This assumption is based on the image, which is part of the culture, of the Dutch construction industry.

The Dutch construction industry is known for its cost-driven market, focus on accomplishing the work for the lowest price (Nijhof et al., 2009; Onderzoeksraad voor Veiligheid (OVV), 2018). This is linked to traditional relationships with other companies in the construction market, in other words, a traditional market (Bemelmans et al., 2012).

This cost-driven market is somewhat opposite to the other term describing the culture within construction; the teamwork way of working (see figure 18). This teamwork culture is based on the 'team orientation' factor and the 'clan' way of working found in research (Cheung et al., 2011; Nase & Arkesteijn, 2018).

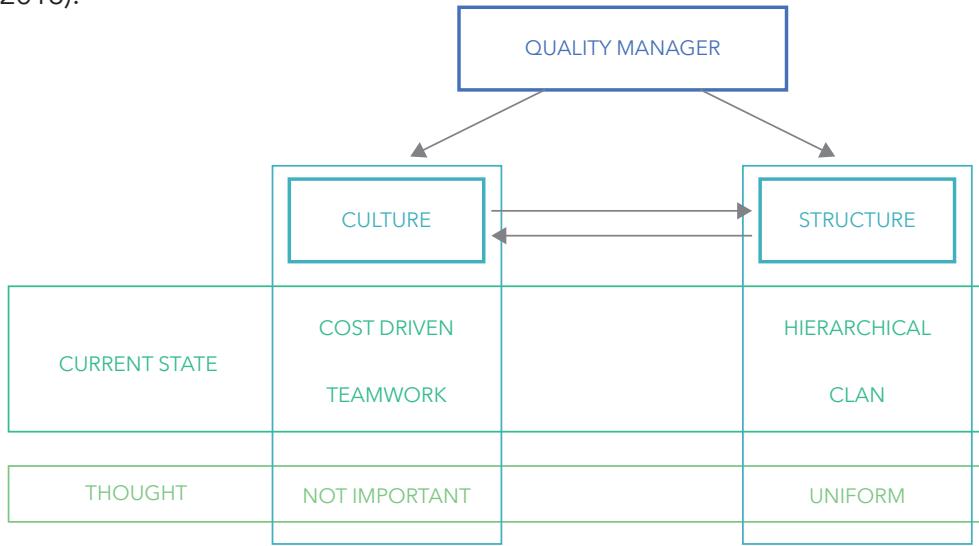
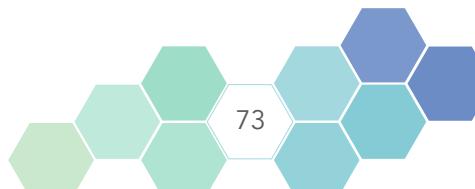


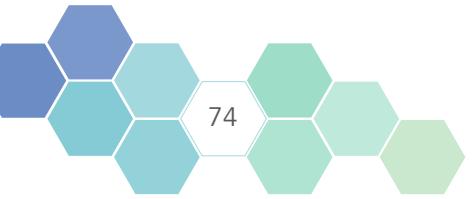
Figure 18: The visualisation of the similarities between culture and structure and the current state and thought on both culture and structure (own illustration)

With this knowledge on the way the culture can be typed, the very direct link with structure comes forward. The clan mentioned in typing culture is found to be a way of describing the structure within the organisation, closely linked to the flat organisational structure because of participative decision making (Shah Abdullah & Ahmad, 2009). Another factor is the 'goal settings and accomplishments', in other words, the 'adhocracy' way of working (Cheung et al., 2011; Nase & Arkesteijn, 2018). The last factor, in the current state of the organisational structures of contractors, can be described as hierarchical or 'simple' related to the traditional culture, as can be seen in figure 18 (de Caluwé & Vermaak, 2002; Nase & Arkesteijn, 2018). Reflecting this knowledge back to the figures 16 and 17 presented earlier, the link between culture and structure can be visualised. With more people within one layer, the teamwork culture can be found in that clan or flat structure. The opposite is shown in the hierarchical structure, where the traditional, cost-driven culture is represented by few people in each layer and with more layers, showing that traditional culture of multiple responsible managers in 'layers' above. When discussing culture and structure, a few things stand out. Regarding the organisational structures, applying to virtually all companies is the thought that an organisation has one uniform structure. However, this is often not the case, suggesting structure differences between departments (Martínez-León & Martínez-García, 2011).

The thought on culture is one that is perhaps a bit more problematic. As concluded before, the importance of the organisational culture of contractors is still not recognized (Hartmann, 2006). Once again the question, whether construction companies are willing and capable of changing its culture, arises. In different subdivision in which change can be accomplished, culture and structure change is one of three outcomes in change (Moss Kanter in De Caluwé & Vermaak, 2002). The reason for changing the organisational culture and structure was also linked with taking on responsibility (Aldama et al., 2009), a responsibility of contractors that will change according to the content of the proposed law.

Coming back to the first part of the what-question, quality management, the link with the culture and structure of organisations is the last step. The connection construction managers have on their employees was already discussed before. The influence can be found in changing activities and behaviour (Hartmann, 2006), being the culture part, and can also be found in taking part in design teams (Anumba et al., 2002), is the structure part. Possible development in management was linked to successful organisational change, showing the importance of involving managers (Burnes, 2003).





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## 7 Findings

This chapter will discuss the findings, based on the literature research performed before. In starting this research a distinction was made in the legal and the organisational implementation of the proposed law. These two ways of implementing were further dived into by specifying three main questions; the why, how and what question according to the golden circle theory. In this way, the subjects of interest of the literature research were categorised, before being explored as well. This structure of specifying can be visualised as a funnel, by which the literature research has been conducted.

In discussing the findings, this approach will be reversed, shaping this process like a pyramid (see figure 19). First, this chapter will go into specific finding on subjects and after that, the findings will be formulated in an overall picture.

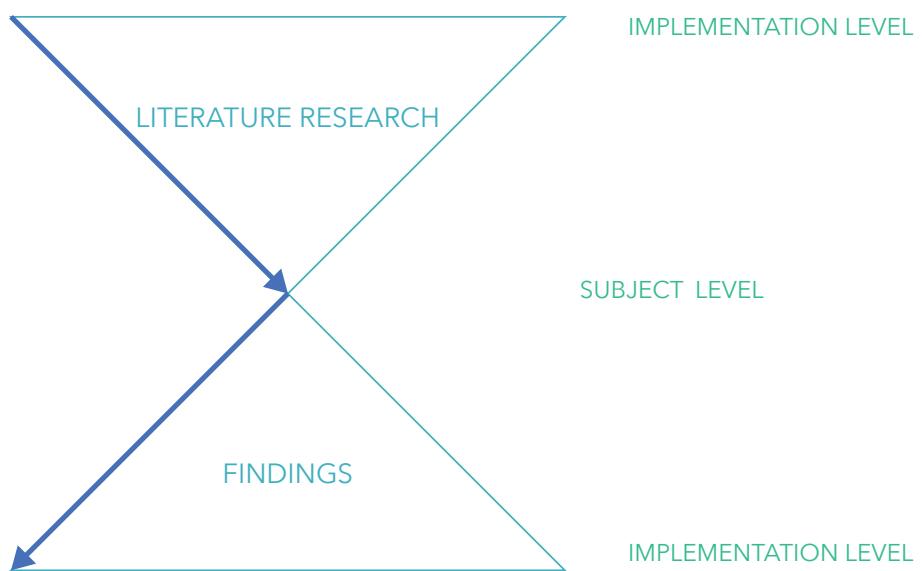
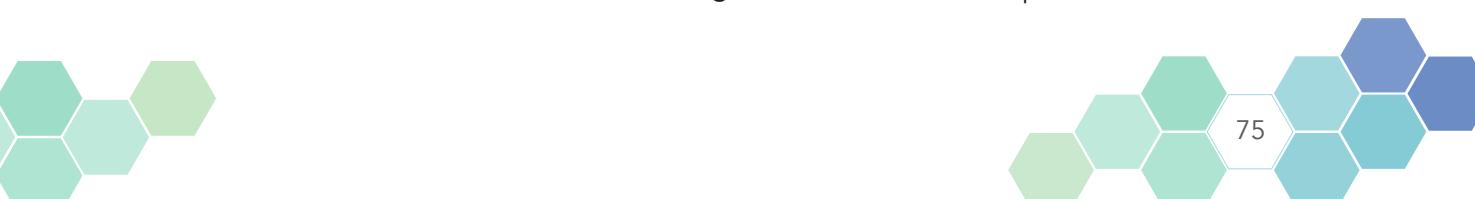


Figure 19: The visualisation of the process coming to the findings and relating them to the implementation level from which they originated (own illustration)

The findings will be reviewed on the subject level at first in paragraph 7.1 to 7.4. After that the findings on the why, how and what questions will be talked about in paragraph 7.5. In this way, a more generalised view can be given on the findings, by especially focussing on the change related to the renewed quality assurance system. After that the implementation of the proposed law will be discussed, addressing both the legal level of implementation, but moreover with a focus on the organisational level of implementation. This



will be presented in paragraph 7.6 and 7.7, which will lead up to the advice following in the next chapter.

## 7.1 Findings on quality assurance

pp. 20 – 29

### **Privatization as political view rather than means of improvement**

Research showed that privatization of certain processes is mainly a political view on how to govern a country. This results in different reasoning behind the hesitation or postponement in adopting this law. It was often argued that the market was not ready yet to get the responsibility in assessing the quality according to the Building Decree, instead of the municipality checking this quality. This argument was used in debating the proposed law and in the revision of the content of the law. However, it can be substantiated that the real obstruction in adopting the law, is found in the ideal within political views to keep the quality checks internally; in other words within the municipalities and provinces. This finding relating the influence of the views of political parties on the concept of privatization questioned the aim of the law. The aim of the proposed law was submitted to improve the quality within construction. Research raised the question of whether this aim of improving quality is used as a means to privatize processes, rather than it was presented as the intended goal of this law.

### **The practice of the proposed quality assurance process**

The proposed process following the new way of quality assurance, on the basis of the Building Decree, will lead towards a new partnership within construction. Literature showed that the contractor will get into a new, close relationship with the quality institution performing the quality assessment already during consultation and later on during the construction phase. Although the liability for the delivered quality increases for the contractor, the actual work of assessing that quality and providing an as-built report is found to be the task of the quality institution. It can, therefore, be concluded that quality control is found to become an outsourced product. In engaging collaboration with a quality institution, the contact is expected to go with certain managers. These managers are likely to be operating within a department and not the direct project team. In practice, this will result, in all likelihood, into a greater part of the project team not taking on the responsibility relating the quality assurance. This expectation in the collaboration with the qual-

ity institution is based on the finding that the proposed process of assessing the quality is perceived as a new formality, instead of a necessity to change the way of working on project level.

## 7.2 Findings on change and implementation

pp. 30 – 42

### Change as tailor-made solution

In the research, on how to address the proposed change, four main phases within a change process were found. This change process showed many different options in addressing the handling of that change, starting immediately within the first phase. The orientation within the organisation to change can be approached in many different ways, although it was found that in relation to the organisational dimension three points to focus on; organisational type of culture, the core activities and the field of influences. Based on the outcomes of those first orientation activities, the way of thinking of the organisation can be typed on which the right strategy is chosen. This showed that there is no one-fit solution for all contractors on how to change. The change process has to be tailor-made for each organisation to be a successful and meaningful change. For that reason, it is found that there is not specifically one strategy applicable to change all contractor organisations.

### Different levels of implementation

In relation to the strategy, it was found that implementing that strategy can as well be done in multiple ways. This again pointed out that change is different for each organisation, as is the way to implement that change in each organisation. It was also found that the way of implementing, being unilateral or participative, is in relation to the chosen strategy to change. This underlined the finding that implementation is tailor-made for each organisation. The most important finding in that same aspect was that implementation should take on different levels within an organisation. The individual level, the group level and the organisational level were often mentioned. These levels were mentioned in relation to implement change within the actual operation of an organisation. Decisions, made on a strategic change on an organisational level, should be reflected in change within the way of operating on the group and individual level. It was found that in this way the organisational change is more successful. Different ways of implementing, with the use of different implementation instruments are therefore concluded.



### **Resistance and the influence of managers**

Resistance towards change was found to originate from a reaction to protect ourselves from chaos. The resistance was concluded to be different at each level, the individual, group and organisational levels, because of certain perceptions of the process of change. In relation to that perception, the influence of managers on those perceptions was found to be of importance, besides the earlier mentioned importance of implementing at different levels. The effective change was linked to the knowledge and way of communication of managers. Thereby was concluded that the development in management is linked to that effective organisational change as well. Jointly this showed that the influence of managers is an important aspect of change. The presence of managers and the way of acting of those managers is therefore found to be an important means for change, as in overcoming resistance. An important last aspect found, in conjunction with the strategy of change chosen, is the type of manager. The colour-print way of thinking was connected with the type of organisation but is moreover linked to individuals. The type of manager to lead the change is therefore found to be of importance, with acting and communicating fit to the manager and the chosen strategy.

### **7.3 Finding on quality management**

*pp. 43 - 45*

#### **The role of the so-called quality manager**

Literature showed the importance of managing quality and how it, therefore, is of importance for contractors as well within changing processes. As a result, the question whether quality managers do already exist within organisations of contractors came forward. It is therefore questionable if there is someone responsible as being the quality manager in charge during projects. Besides that it was found that the trend in changing towards this law is based on an industry trend, not because of strategic or personal beliefs. This implies handling according to this law of doing the bare minimum by the contractor. Again this can be linked with the collaboration with the quality institution, that of outsourcing the focus on achieving the level of quality described in the Building Decree to another party. With the found definition of the quality manager and his/her role in determining and implementing the quality process in mind, a possible problem presented itself on the side of the contractor. Although it could be that within the organisations of contrac-

tors, some managers are appointed as being the 'quality managers', this title is not specified to the task of assessing the quality of the built work. Without an actual quality manager (in the sense of quality assurance on the basis of the Building Decree) present, structuring and steering the 'new' process, will come close to the 'doing the bare minimum needed' as mentioned before.

## 7.4 Findings on organisational culture and structure

pp. 45 - 54

### Culture change as an (unlikely) outcome

It was found that the culture of the Dutch construction industry suffers a bad reputation, with the main reason for it being perceived as a cost-driven and traditional industry. This traditional organisational culture implied a great resistance towards a potential cultural change. Reason for this resistance is the inference that cultural change is linked with being the solution to something that is 'wrong'. The long traditional culture in construction is not perceived as being wrong within the industry itself, thus seen as not important. Even though a change in culture is not likely to happen in that line of findings, the relation between change or innovation was directly linked with effective organisational change. This showed how closely related cultural change is with an actual change within ways of working. In the case of the contractors in the Netherlands it is therefore found that, because of not understanding the importance of culture, if the culture does happen to change, it is reasonable to believe that is rather an outcome than a means.

### Hierarchical yet flat structure

Concluding that the culture is found to be a traditional one, the link between culture and structure presented itself as correct. The structure within Dutch constructional organisations was described as being a hierarchical and as a clan. This showed the misperception that organisational structures are uniform within an organisation. With the different researches describing the structures within construction, especially the contractors, this dichotomy in structures is found to be justified. The dichotomy is expected to be clearly visible when zooming in on different levels within the structure. In that reasoning, it is reasonable to find a clan structure, in other words, team-wise way of working, within the different hierarchical arrangement of management levels. The hierarchy is therefore found to be absent within layers of management and especially within project teams. This, however, will influence changes



within the organisational structure, a starting point of effective organisational change.

## 7.5 Findings on why-how-what

The questions of why, how and what in relation to organisational change, based on the proposed law on quality assurance, was researched in literature. This paragraph will focus on those three questions by presenting findings that are in direct relation to the change in quality assurance. Whereas the previous paragraphs were focussed on the findings per subject, this paragraph aims to seek similarities between those subjects. Moreover, the goal is to show the findings of coherence between the different findings.

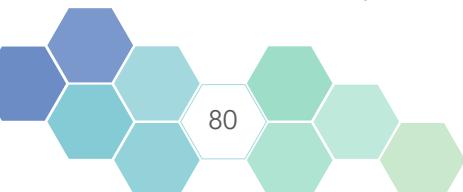
### Why should we?

Two main findings show a coherence on why a contractor should adapt the organisation towards the proposed law. First, the finding that the privatization of the quality assurance process is more a political view than a belief in improving quality. Besides that, the finding other finding addressed the new collaboration that contractors enter into, which mainly was shown to be a liability and formality issue. These two findings, however, give direct reason to the coherent finding that contractors are likely to not adapt their organisation. Although these findings give motive to not undergo any changes, the fact that the law is still not adopted catalyses this thought.

Despite these findings, the further findings with later on the advice as well are based on those contractors that look beyond that. This complies with the direction of this research, on contractors that do have a pro-active attitude towards quality assurance. Keeping the findings in mind, the advice will be for those taking the probable future change seriously, those who want to do more than just the bare minimum. Another point in this aspect was mentioning that changing organisation takes time, even though shallow organisational cultures that are easier changed.

### Someone who knows how

The influence managers have on the change process was found to be substantial. It showed that the role of managers during the process of change should be taken seriously, as they can influence the behaviour and attitude towards alterations in ways of working. However, it was also found that change and its implementation are activities highly tailor-made to organisations. In all four phases, orientation, strategy, implementation and evaluation, it was



found that decisions have to be made on how to proceed within this phase. Especially in choosing the strategy and the implementation instruments it was found that various options exist. This implied that the manager, with the known influence on the process, has to have certain knowledge on the decisions to be made. It is therefore found, that the one leading the change process within the organisation should know how to change. In literature, a change manager was often mentioned, whether being an internal or external one, knowledge on how to change is shown to be needed. This not only includes knowledge on change processes but moreover on the changes the proposed law introduced.

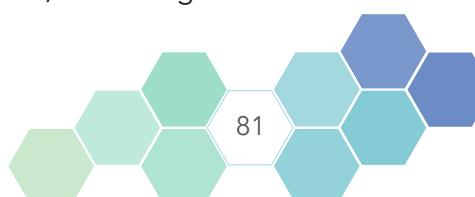
In continuing on how this manager should approach this change, the project-based nature of the contractor should be taken to heart. It was found that in changing organisations, with second-order changes, these changes can be done by projects. In this way, a pilot of the changes could be tested and the resistance was found to be overcome more easily.

### **Acknowledgement is what should be done**

In the research of what to do, to change an organisation, the organisational culture and structure were looked into and were moreover found to be of great importance in achieving organisational change. Within organisational culture it was found that the importance of culture was not recognized, which showed that that perception of culture has to be changed. Discussing organisational structure it was found that the structure within organisations of contractors is hierarchical at first, but more clan/team oriented within levels. It showed that this dichotomy in structure is not uniform and has to be taken on as it is. The direct relation between culture and structure was found to be important and has to be acknowledged. In that same aspect, the current culture and structure are found to be not directly connected to the process of quality assurance, as literature showed no links between quality systems (implementation) and culture or structure.

### **7.6 Finding on the legal implementation**

Bringing together the different findings, the first overall summarizing finding can be written down on the legal implementation. In implementing the proposed law on a legal level, the term 'ticking boxes' described the new way of working if only addressed from the legal issues. The liability and responsibility are to be changed for contractors but were shown to be easily dealt with if wanted. Collaborating with the right quality institutions, delivering work



with the appropriate quality instruments was found to be most important. In acquiring an environmental permit within the new quality assurance process, the type of instrument that will be used was found to be the biggest change of importance, that has to be thought of by contractors. In partnering with qualified institutions that liability and responsibility are somehow transferred to the quality institution. If really wanted, it was found that in this way only the bare minimum can be done.

Since understanding the best legal implementation is not the aim of this research, in combination with the lack of substantive knowledge, the focus will now go towards the organisational implementation.

## 7.7 Finding on the organisational implementation

In combining nearly all different findings, the organisational implementation is found to be a combination or a chain of the different subjects and related findings. It showed that change cannot be achieved without the right implementation (instruments), implementation cannot be effective without a suited strategy, the right strategy cannot be chosen without the desired change in mind, and so on.

With the finding that all subjects on change, implementation and the organisational structure and culture are related, a way to systematize that coherence is convenient. In showing the coherence and the mutual relationships in the change process, the logic model that was developed by the W.K. Kellogg Foundation is used. The logic model is defined as 'a systematic and visual way to present and share your understanding of the relationships among the resources . . . , the activities . . . and the changes or results you hope to achieve' (W.K. Kellogg Foundation, 2004). In this model, a distinction is made between the planned work and the intended results as is shown in figure 20.

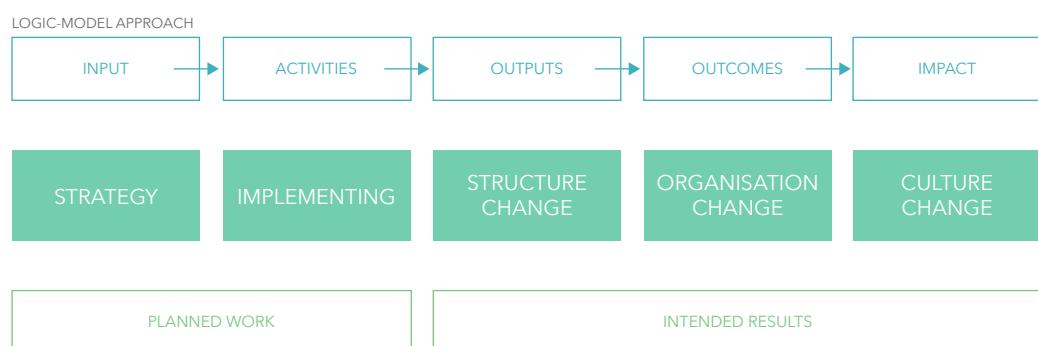
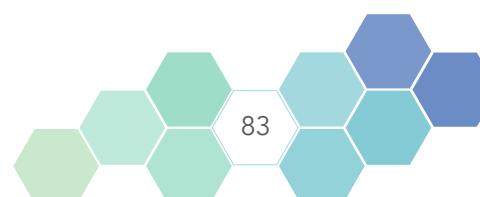
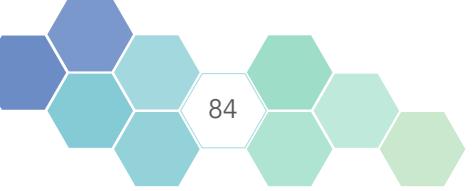


Figure 20: The finding on the logic-model approach linked to the process of change on organisational culture and structure (own illustration)

The planned work describes what to implement, found to be the strategy, and what you intend to do, found to be the use of implementation instruments. In that aspect, the strategy and the implementation of the strategy are what can be planned in the change process.

The intended results are the desired results after completing the planned work. The outputs are described as being direct products to be delivered (W.K. Kellogg Foundation, 2004), found to be the change in organisational structure. The outcomes are explained to be the specific changes in behaviour, knowledge, skills and levels of functioning. These outcomes are expected to be attainable within 1 to 3 years, whereas the impact is expected to show within 7 to 10 years. The impact is in that aspect described as fundamental change (W.K. Kellogg Foundation, 2004). Knowing the difference between outcomes and impact, the organisational change can be appointed to being an outcome. It can be seen as an outcome because of changes in behaviour, knowledge, skills and levels of functioning since the organisational change was found to be linked to change in ways of working. The impact of the organisational change is found to be linked to cultural change. It was mentioned before that it is expected that cultural change is not likely to be a means of change. However, it is found to be possible that cultural change happens, since it is so directly linked to structures of organisation. Reason of believing that culture change is an impact is the fact that the culture in construction is found to be traditional, making a change over a time span of nearly a decade more likely.





## 8 Advice

In this chapter, the long-discussed advice will be presented. With the knowledge obtained from the literature research, those findings that originated from it will form the main basis of this advice. After compiling the advice, it will be submitted to the validation process.

With the previously discussed structure of the four phases of change in mind, the advice is structured in the same way where possible. The various points of advice for each phase are briefly stated at first, after which a substantiation will be given. The first point of advice is, however, the most important one:

- Start this change process if it is actually believed that a change is positive for the organization

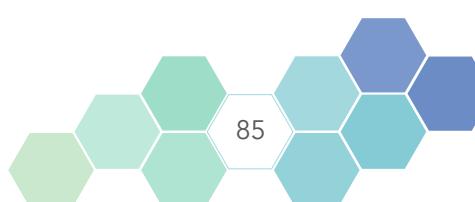
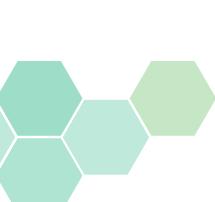
→ Although this advice is intended for those contractors with a pro-active attitude towards change, based on the proposed law, they must actually support that change. To start the process of change, even though it seems to be rather obvious, the decision to change the organisation should be supported by those in charge. In that same aspect, entering this process should be done with the thought of approaching the change thoroughly.

### Orientation

- Show that the current way of working does not comply with the changes the proposed law will bring
- Show that culture and structures of organisations are intertwined

→ The reason for a change may come forward if it becomes clear that the current way of working does not support the pro-active attitude in quality assurance. In this process of orientation, coming to a jointly perceived problem is, therefore, the first step. When reasons to change, based on that problem, are accepted, they can prevent resistance to change.

→ The importance of culture must be discussed, especially its relation with the handling of quality assurance and the structure of the organisation. In discussing this together, the culture within the construction and how this is observed from the outside world should be done. Underline that there is not necessarily something "wrong" about the current culture within construction, but that it does not always comply to the new way of assessing the quality and the responsibility that comes with it.



## Strategy

- Show that the current structure is missing a branch or layer on quality management
- Choose a power strategy or planned strategy (with unilateral implementation)
- Choose a project with an interested client to start with the chosen strategy

→ It is important to show that the current structure lacks a “branch” or “layer” in quality management, even though a manager has a lot of influence on processes of change. By adding such branch(es) or layer(s) (see appendix I), the influence managers have can be taken advantage of. Someone (or several people) who are responsible for the quality, is likely to influence behaviour and processes that are related to quality assurance.

→ Because of the traditional culture and the hierarchical basis of the organisational structures of organisations of contractors, resistance to change is likely to present itself. Knowing that the power strategy is focussed on stimulation of people using the power certain managers have, with the aim of finding the right ‘fit’ between everyone, both comply with the hierarchical, yet in some ways clan-like, organisational structures. The planned structure is known to be based on controlling process by making rational planning, this fits in the traditional way of working, fitting the traditional culture.

→ With knowing that the project-based nature of the construction industry can have its advantages in implementing change within structures, this fact should be used. In choosing the right project, the client related to that project should be an interested one. The validation process (next chapter) concluded, among other things, that the clients are of influence on achieving quality and improving quality assessment. Working within projects complies both the planned and the power strategy.

## Implementation

- Choose unilateral implementation instruments (fitting the chosen strategy)
- Choose a manager who stands behind the changes and is committed to those changes, to lead the implementation of the strategy
- Discuss the changes on different levels within the organisation to tackle resistance



→ Implementation instruments are linked to the type of strategy chosen. Even though there are many different instruments, the unilateral instruments comply with both the planned and the power strategy. Unilateral instruments support both strategies in the way that they are chosen in advance and by those in charge of the change. Moreover, they therefore support the hierarchical and traditional organisational structure and culture of contractors.

→ Knowing that the influence of manager is high, a manager responsible for leading the implementation of the chosen strategy can help the process. This manager should support the decision to change and agree with the chosen strategy. Best would be if the colour-print way of thinking of that manager complies with the chosen strategy type. In larger organisations, an external change manager could be hired, with the aim of implementing the change with a view considered from the outside. This could be helpful, considering that changing larger organisations could be more complex and raise more resistance.

→ In finding the importance of implementing change on different levels, the change should be discussed on those different levels within the organisations as well. In this way possible resistance is tackled at different levels, thinking of the different natures that resistance has. At each level of implementation, different implementation instruments can be used.

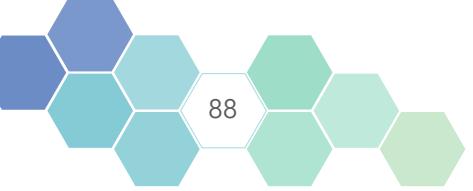
### Evaluation

- Review the change knowing that extra work, ways of implementing, may be needed
- Take the time as the change will take time as well

→ When it seems that the perceived change does not work immediately, it should be understood that it is not a sign to give up that change. If the change process is stopped, it may be possible that the resistance will rise again. It is therefore important to keep standing behind the decision of changing the organisation.

→ Taking the time to change is an outcome of the knowledge that change may take some time before being recognized or successful. Knowing that a cultural change may take years, even decades, that change should be seen as an outcome and not as a goal in itself.





## 9 Validation

### 9.1 Participants

The validation of the findings and the draft advice was conducted on the 7th of May 2019 at the Faculty of Architecture and the Built Environment in Delft. For this validation, two participants were present, both employed in the construction industry, but within different companies that cover other sectors within the construction industry.

The first participant is working at Bouwend Nederland, the umbrella organisation of construction and infrastructure companies in the Netherlands. In his position of being the advisor on 'Market and Government', this participant is closely related to the proposed law. Especially analysing the content of the law and the influence it will have on contractors is within his daily activities.

The second participant is working at BAM Bouw en Vastgoed, one of the biggest construction companies in the Netherlands. This 'Process Quality' manager has had the proposed law on his agenda for the last few years, besides his other activities in improving the quality of processes within BAM.

### 9.2 Design and process

Prior to this validation, the participants were given a short introduction via e-mail on the content of this research. This was primarily done to attract the right participants, with the knowledge or special interest in this subject of quality assurance.

During the validation, the participants were given a presentation on the research performed so far, with concluding with the findings and advice. These two parts, the findings and the advice, were the main focus of the presentation and the validation that followed.

After the presentation, the validation was shaped as an unstructured interview. This way of interviewing is based on asking only a few open questions, giving the interviewees time to freely respond and get engaged in a conversation with each other (Bryman, 2012). In this way, a more informal conversation was created, about the topic of quality assurance in general and the contractor in that aspect.

The presentation and the following unstructured interview were held in Dutch, in this way the conversation was started more easily. Besides that, the participants were given a hand-out with the findings and advice written down. To give the participants guidance in the interview that followed the last slide of the presentation was shown during the conversation, containing the questions of the validation (see figure 21).



## Vragen, commentaar & aanbevelingen

### Bevindingen

- Zijn gebaseerd op onderzoek
- Wat zijn jullie ideeën vanuit de praktijk hierover?

### Advies

- Is gebaseerd op opgedane kennis (met persoonlijke inzichten)
- Hoe zien jullie de inhoud (en het gebruik) van dit advies in de markt?

### Brochure

- Een eindproduct met advies voor aannemers
- Welke informatie is volgens jullie van belang hierin?
- Welke informatie is interessant of juist overbodig?

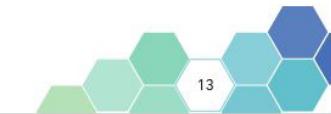
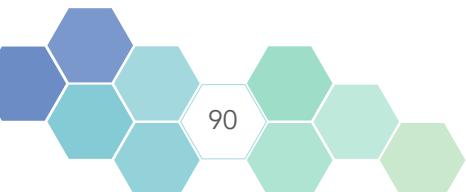


Figure 21: The last slide of the validation presentation, with the most important questions within that validation (own illustration)

Within the unstructured interview, there were four questions, as can be seen in figure 21. The first one was to discuss the findings. In explaining that the findings were based on literary research, the question was; 'What are your ideas about this from practice?'. The aim of this question was to get insights if things are perhaps (not) researched or described within literature, but are perceived differently in practice.

The second question was based on the advice that was presented; 'How do you see the content (and use) of this advice in the market?'. This question was focussed on finding out whether this advice was clear (knowing the different steps within the advice) and how this advice would be received by contractors in the market.

The last two questions were asked with an information brochure in mind and were addressed only shortly towards the end of the interview. These questions were: 'Which information do you think is important in this brochure?' and 'Which information is interesting or unnecessary?'. The aim of these questions was to make a distinction between the information of real importance to advice contractors and other additional information. Part of the last question was to filter out the things that were thought to be unnecessary information.



### 9.3 Comments and recommendations

The transcript of the interview part of the validation (included in appendix III) is used for the comments and recommendations within this paragraph. The comments and recommendations that are presented were translated from Dutch, to ensure that the use of those comments and recommendations are better substantiated.

#### 9.3.1 Comments on findings

##### **Intrinsic motivation versus the sword of Damocles**

The first comment on the findings was made on the motivation to change organisations. One participant mentioned:

"I think if you want to bring about a change in the organisation, that it can be done in two ways, the first one is, is a sword of Damocles eh. So something is being imposed. [...] And the second is a strong intrinsic motivation. And on that, on that second one, that is, that is where I think you focus on a bit more within your research."

Taking this statement that change can be put into motion based these two ways, the intrinsic motivation is indeed the focus of this research. This can be seen in addressing the pro-active attitude of contractors, that is the target audience of this research. However, in discussing these two ways, the other participant said:

"But I think that is a bit of that culture that it is accepted. And I think that it is precisely this change in legislation that must make it demonstrable. [...] If that law comes, it becomes an obligation, right."

With this comment he demonstrated that there is a certain culture, that is waiting for the law to come into action. More interesting is the fact that this last comment was made by the participant working at the contractor. This could show that some contractors instead prefer the sword of Damocles to motivate taking on the changes, overtaking on the pro-active attitude in advance.

##### **Culture in perceiving quality**

In the previous comment, the culture within construction was already mentioned. From the interview it became clear that the way quality is experienced, is different than perhaps preferably would be expected:



"I think that, that is also the most important point in change because the culture exists "but we build well". It is also said internally with us. How so? On average, we do not yet have a punch list point per property. So isn't that really low? [...] And I know a little bit how it works, because when it is delivered and there is something seen there. "I will stop by this afternoon and we will immediately brush up". Is therefore not written down. [...] Apparently we accept that."

"I have spoken to construction foremen who say 'yes of course I always deliver quality, I constantly check. When I walk outside I check'."

These comments show that the perception of quality is often linked to a number of points on the punch list, just before delivery, and on the knowledge that a construction foreman is present during construction, in charge of assessing what is built. This could indicate the traditional culture within construction, endorsing the thought that the current way of working is correct.

### 9.3.2 Comments on advice

#### **Advice for smaller contractors**

One of the first comments made, based on the advice that was presented, was that of approaching smaller contractors. Both participants made comments on those smaller contractors:

"Do you already have in your advice, are you also going to apply some sort of specialization, or some sort of realization in which you provide customized advice or some sort of sales-size advice. For small companies, they will of course not take on a quality manager."

"And I think that aspect, of course you have multiple forms of cultural change, more imposing and more the system of looking together what would that mean for us? And how are we going to change ourselves? I think that especially at smaller companies, the latter is much more obvious."

The latter comment implied that the presented strategies, the power strategy and the planned strategy, would not fit the smaller contractor. The point of advice of making someone the responsible quality manager was pointed out as being too big of a step for smaller organisations, implying that the current advice is not fit for all contractors

#### **Clients in need of advice**

In addressing why quality is not one of the most important points for im-



provement within construction, both participants mentioned the role of the client. One participant explained:

"And I think it is also very strong on the side of the client. And not so much on the contractors side. Because a client who will also be very clear, must show his will, because 'I would like to put a very good product for my market for my target group'. And I think there's a whole thing there too. Because of course there are also many developers who develop purely on costs."

This could imply why the contractors do not feel the urgency yet to change their organisations with the aim of delivering higher quality. Clients do not ask for higher quality, or different assessments of that quality, giving the contractors no direct reason to deliver that higher quality or more thorough assessment.

### 9.3.3 Recommendations on the brochure

#### Show link with proposed law

In presenting the research performed, with the findings and advice as part of that presentation, the direct link with the proposed law was not discussed. Even though this law was the reason for this research, the legal implementation of the law was not taken on in the advice (as it was not the focus of the research and therefore the advice). In response to what should be included in the brochure for contractors, the participants however said:

"But I think in such a brochure I would still have the clear link with, I would like to see that private quality assurance again. That you have items coming forward. 'Hey this and that from that new legislation'. There are things why you are triggered to really do something with it."

This once again may show the importance of actual law, in this case, the changes it will bring, to show what will change for contractors. Reasoning on what the advice to change is based is, therefore, something that was mentioned to be important within the brochure.

#### Ask questions to trigger

The second point that was mentioned in discussing the brochure, was the way to trigger the contractors to, first of all, read the advice, but also think about the contents of the proposed change. In triggering those contractors, both participants mentioned the same aspect of asking questions:



"You can just start the brochure with do you know you actually know what the quality is that you deliver? I think it is the 80 per cent of companies or it is good to go behind the ears and that well actually I think it is good but I know I don't know for sure."

" More the asking. How do you demonstrate the quality?"

In both comments the links were made between asking questions to trigger and the content of those questions; being the quality. The motive to change is therefore linked again with the way quality is assessed and could be improved.

### **Focus on language use**

The last recommendations that were made, was based on the research subjects/terms that were used during the presentation and the tone of the language. The participants both give a mention of that use of language:

"And besides that, from your research you have to make sure that you don't point the finger."

" [...] you could generally say things, 'I have done research and it appears that a number of issues in the field of quality come forward. You could think of a kind of change strategy, a kind of culture change'. Only you shouldn't call it that, because those are of course very nasty words for people."

Important to keep in mind, based on those recommendations, is the use of words such as 'cultural change', 'change strategy' and 'organisational change'. That last one was mentioned as well, making the brochure as an output of research on organisational change a challenge.

### **9.4 Use within the advice**

Knowing the comments and recommendations from the validation process, these points of attention that were obtained can be used. First of all, it should be noticed that, even though the comments made on the findings are well reasoned, these comments are not to change those findings. These findings were based on literary research, which will not be adapted after these comments. This is because of limited time to research additional topics, as well as the fact that these comments are experiences from only two participants. After the validations process, the most likely part of this research to be adapted is that of the advice. The advice used was for that same reason referred to as the 'draft' advice up to now. The two comments on the advice, as



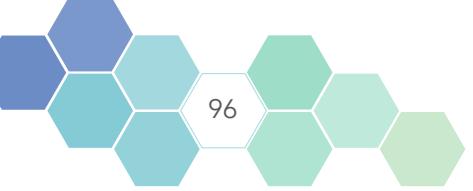
presented, were the absence of a small contractor specific advice and the collaboration with clients that is of influence in discussing delivering quality. Since the smaller contractors are not within the scope of this research, the advice will not be specified or changed to cover those contractors as well. However, it should be noted that is logical reasoning that the power strategy and the planned strategy (with the unilateral implementation instruments) are less applicable for the smaller organisations.

The influence of the clients, in the process of improving quality and the assessment of that quality, is a more difficult comment to discard. If both participants of the validation strongly feel that, without a change in the requested quality and its assessment of the client (and the market as a whole), a change from the contractor will not happen, this should be taken to heart. For that reason the next point of advice was added after the validation:

- Choose a project with an interested client to start with the chosen strategy

Besides this point of advice, that was added to the strategy phase of the change process, the brochure can benefit from the validation. With the three recommendations coming from participants working in practice, one even working at a contractor, this input is highly useable. The most important reason for the usability of this input is the fact that the findings, advice and the language used within that advised were mainly adopted from literature. With the lack of a practical research part, such as an internship could have been, this input from both participants gives an insight into how it would be received in the market. In taking these three recommendations to heart, it could be possible to present the advice beyond the scientific perspective and more suitable for practice.





# 10 Conclusion

## 10.1 Conclusions

The start of this research was based on a new law relating to quality assurance, on the basis of the Building Decree, in construction that was proposed in 2016. The main aim of the legislative proposal was described as to improve the quality of construction by privatising the way of assessing quality on the basis of the Building Decree. Within this new system, the contractor gets more responsibility in this process. Since the change in the way of quality assurance asks for a new way of working from contractors, the contractors have to change their organisations towards this change in responsibility.

The changes can be distinguished on a legal implementation and organisational implementation level. This research will focus especially on the social scientific perspective of this law; being the organisational implementation. The research question therefore was:

*How can a contractor change its culture and organisational structure, to adopt a pro-active attitude in quality assurance?*

The research strategy that was performed is qualitative research. The method that is used, is that of doing literary research. After the literature research, findings were stated on which a preliminary advice is based. That draft advice was put to validation and is slightly altered after that validation process.

Before coming to the research question and the conclusions in answering that question, the different subjects that were researched are concluded at first.

### 10.1.1 Conclusions on legal implementation

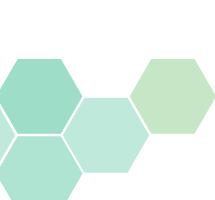
In concluding the legal implementation subjects that were discussed, the privatization of quality assurance and the way it will change the quality assurance process were researched.

#### Privatization of quality assurance

On the privatization of quality assurance, it can be concluded that the reason for the law is mainly based on political views on to what extent assessing quality is a governmental task.

#### Quality assurance processes

In researching what changes the privatization of quality assurance will bring, it was concluded that contractors will get involved in new partnerships with quality institutions. In this way, the quality control is expected to become an



outsourced product. It is therefore concluded that without changing the organisation, the managers directly related to the quality institution will not be within the project team but within certain departments. Assessing the quality is concluded to will be perceived as a new formality, instead of a necessity to change the way of working on project level.

#### 10.1.2 Conclusions on organisational implementation

Summarising the organisational implementation, in coming to the research question, the subjects of quality, change and implementation management were discussed, next to the subjects of resistance for change, organisational culture and structure. On quality management, it is concluded that, without a quality manager in the preferred role of assessing the quality, the new process of quality assessment will come close to doing the bare minimum.

#### Change management

Change is concluded to be managed within different phases, of which one is choosing a fit change strategy for the organisation. It is therefore concluded that there is not one specific strategy applicable for the organisation of contractors.

#### Implementation management

The conclusion on implementation management connects with that of change management, as there are multiple implementation instruments for different ways of implementing for various organisations. Part of that conclusion is that implementation is most effective on different levels within the organisation.

#### Resistance and problems within change and implementation

In researching resistance and problems within change and implementation of change, the most important conclusion is that managers are of great influence. These managers can reduce resistance by using their knowledge and ways of communication. Besides that, it is concluded that the resistance for change occurs on different levels.

#### Culture

After researching organisational cultures, the most important conclusion is that of the culture within contractors is highly traditional and cost driven. Defining the culture as cost driven concludes the reason why quality is not of great consideration with contractors. It was also concluded that cultures take longer to be changed.



## Organisational structure

The organisational structure is strongly linked with culture. It is concluded that the organisational structures within the organisations of contractors have a dichotomy with being hierarchical, but being perceived as clan-wise on lower levels. The organisational structures of contractors lack a clear layer or branch of quality management, complying the desired task of quality management.

### 10.1.3 Concluding the research question

Knowing the conclusions on the different subjects, the main research question on how a contractor can change its culture and organisation, in adopting a pro-active attitude in quality assurance, can be answered;

The contractor should make a manager in the lead of the process of changing the organisational structure, by adding a branch or layer on quality management, through choosing a fitting strategy for the organisation with the appropriate implementation instruments, with the pursuit of changing the culture.

The contractor should start a change process only when actually is believed that change will bring improvement to the organisation. The start of this process should be done by orienting the ways of working within the organisation. The current way of assessing quality does not comply with the changes the proposed law will bring, this must be shown. After that, the intertwining of culture and structure within the organisation should be discussed. This will lead towards the fact that the current organisations of contractors miss a branch or layer on quality management, one of those should be added to the organisation of contractors. To do so, a power strategy or planned strategy should be chosen. In choosing one of those strategies, the points from the orientation can be used to characterise the organisation, which will lead to a fitting strategy. In implementing one of those strategies the unilateral implementation instruments must be used, these comply with the two proposed strategies. The change process that is started should be discussed on different levels and be implemented with different instruments on those levels, this was found to reduce resistance for change. In making use of the project-based nature of contractors, the change should be starting within a project in which the client is interested in improving quality assessment as well. In managing this project, it is concluded that a manager who stands behind the changes and is committed to those change, should be made in the lead of implementing the strategy within that project. The change must



be reviewed with keeping in mind that extra ways of implementing are often needed. Since change will take some time, this time should be taken to make the change successful.

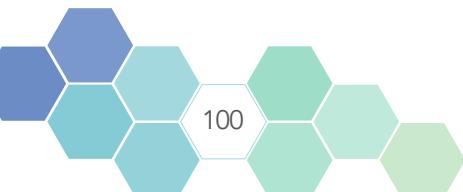
## 10.2 Discussions

Now that is concluded how contractors can change their organisations, in the aim of adopting a pro-active attitude towards quality assurance, these conclusions can be discussed.

This first thing that can be discussed is whether the initiator of changing the way quality is assessed and documented should only be the contractor. In this aspect, it is debatable that contractors are willing to change their organisations only based on a pro-active attitude if the market does not initiate the same movement. During the validation, it was mentioned that the current real estate market is one of the suppliers. With that thought, it can be understood why developers and another type of clients are not focussed on real estate with the highest quality assessment. The link with the client was already made before in this same subject, the link that as long as clients do not ask for higher quality and more extensive quality assessment, the contractors will not adapt towards that process themselves. Both aspects, of the current market and the involvement of the clients, were not researched within this research and are therefore both limitations to this research.

The next point of discussion is the intrinsic motivation discussed during the validation. From the perspective of the contractor, the question of how to change may have been subordinate to the question of why to change (note: until the law was adopted). Even though the focus of this research was not on how to motivate contractors to adapt their organisations, in other words provoking that intrinsic motivation to become pro-active, it is a small limitation to this research that the focus was pointed at those contractors that are already pro-active. In this case, how to make them pro-active is not looked into.

The project-based nature of the organisations of contractors was mentioned as an advantage in implementing the change strategy. The remark that was made earlier on, namely that this implementing within projects only addresses the group level of organisations, was not explained more thoroughly but is however a point of discussion. It can cause problems when the step to implementing the change strategy on an organisational level is made. The problem in working within projects can be the fact that each project is performed with different team compositions. Besides that, the fact that each project is



different can form an obstruction. In combining these two aspects, the different teams and type of projects, it can make the transition of information and lessons learned based on the change strategy more difficult. The knowledge obtained during one project is therefore not a guarantee to be taken to the greater level of changing the organisation as a whole.

In this research, the focus was on organisational culture and structure. However, there are far more factors of influence on changing organisations. As was mentioned in the paragraph on the research questions other factors are of important, perhaps even of higher influence. Especially the factors of budget and financing were appointed during the validation process, reasoning that changing ways of assessing the quality and therefore working could be held back because of financial reasons as well.

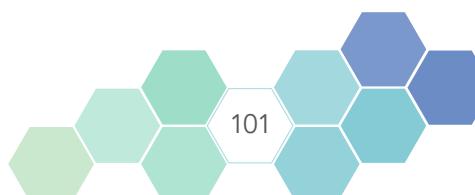
The last point of discussion is that of culture change. In the findings, the possibility to change the culture within organisations of contractors was already mentioned. Changing the culture of contractors was described as a possible outcome, by using the logic-model approach. This however raised the issue of a cultural change being perhaps too hopeful, knowing the traditional nature of the industry. During validation, this was appointed as well. Researched showed that cultures can change, being deep or shallow cultures made the difference in time. This gives reason to believe that in theory, it could be possible.

### 10.3 Recommendations

In this last paragraph, the recommendations will be presented. These recommendations are the ones found useful for those who are willing to do research on topics with similar interfaces. The reason that this part of the conclusions does not contain general recommendations for contractors, is the presence of the chapter 'advice'. All relevant recommendations are described within that advice, providing an opportunity to focus on further research.

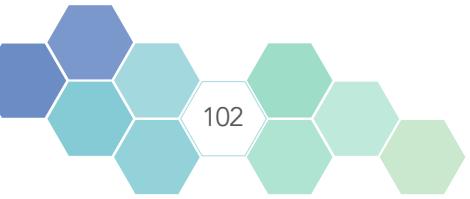
Keeping the comment in mind that is made within the discussion, the other factors that are of importance in changing organisations can be the starting point for further research. Especially the financial aspects of changing an organisation, related to the changing process of quality assurance, is worth researching. This would, however, become more financial research, rather than organisational implementation research.

In the spirit of further researching within the organisational implementation theme, the discussion on intrinsic motivation is interesting. Researching how the intrinsic motivation of contractors can be addressed would be an addi-



tion to this research. Knowing now that the law is being adopted makes this intrinsic motivation not relevant any more, it, however, can be applicable for other innovations and changes directed to contractors.

The most direct way of further research is implementing the advice within the organisation of a contractor. It can be expected that the willingness to cooperate within the research field of this subject has increased after the law was adopted. With testing the advice, and the phases and steps within that advice, the practical dimensions of this research can be researched. In this way, this research can be used as the theoretical foundation of that further research.



## 11 Reflection

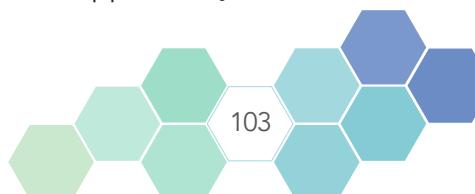
The last part of this research is the reflection. In this chapter the focus of reflecting will be upon the process of the research and the goals and objectives of that research. Important within this reflection is a personal view on the subjects to be discussed. First the overall process of this research will be reflected upon, after that the influence of colour-print ways of thinking is reviewed.

### 11.1 The process

The process of this research went, although being highly structured, not exactly as was planned. Even though this report, with its method of doing a literature research, is presented as a thought out plan, the method was planned to be differently.

Up to and including the presentation of the research proposal, the method of performing case studies was mentioned. This method was based on the fact that in accordance to the proposed law, over one hundred pilot projects with this law were done (Instituut voor Bouwkwaliteit, 2018a). The original plan of doing case studies was based on the difference between processes and between contractors. Three contractors would have been chosen of which two projects will be studied. One of those projects would have been taken from data research on pilot projects. These are the projects that have implemented the restrictions of the proposed law. The second project under each contractor would have been the 'reference' project, performed under the current system. The different project approaches from the case studies could then have been compared, in analysing the projects. After the project approach comparison, the differences between the three contractors could have been analysed. Based on these analyses the findings and the advice would have been written.

As may be clear, this process that was envisaged did not come to execution. Even though the current conclusions are expected to be different with the method that was done in the end, it does not make these conclusions of higher or lower value than when case studies were done. It can be concluded that the findings, advice and conclusion would probably have been more practice orientated when these would have been based on the case studies of the pilot projects. The discussed findings, advice and conclusions may be more theory based. However in this way the known theory on the subjects of change, implementation, organisational culture and structure are researched more in-depth than would have been the case when case studies would have been the research method. The advice has been submitted to a validation process, which gave more insights in the practical applicability of



this advice. In this way the fact that this advice was mainly based on literature and theories, was looked beyond with this way of addressing the practical perspective.

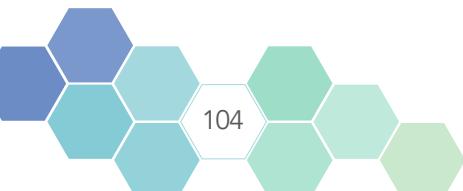
Concluding on this change of method during the process of this research, the scientific relevance of this work can be discussed. During this research scientific relevance felt to be of interest within different fields of change management. Multiple subjects discussed in addressing change, implementation, resistance, culture and structure can be used within multiple other research work. The link between changing organisations of contractors and that of the proposed law on quality assurance was however a very underexposed subject within literature. Even though this was a logical consequence of the fact that this law was not adopted yet, it made the scientific relevance of the research based on pro-active contractors more obvious.

In discussing the scientific relevance of the research topic of changing organisations for those contractors with a pro-active attitude, the relevance was present, however it became more socially relevant after the 14th of May 2019. In adopting the law the scientific research may hopefully become a useful addition to personal knowledge on changing organisations towards that law. Besides that, other industries, other types of companies, other legal changes and so on, may find social relevance in this research.

In the first part of this research, the research goal and the objectives within reaching that goal were stated. The main goal of this research was to come with an advise on how contractors can adapt their organisations, by changing the organisational culture and structure. The objectives in relation to this goal were as follows:

- getting a full understanding of the changes the 'Wet kwaliteitsborging voor het bouwen' will bring
- obtaining knowledge about changes an organisational can go through
- obtaining knowledge about implementation of changes
- analysing the attitude towards quality assurance in practice
- discovering the structures within organisation that are affected by the proposed law
- identifying the critical structures within organisation that need change in relation to the proposed law

Looking at these objectives most of those can be reviewed as being accom-



plished during the process of this research. In this reflection the two objectives that are however not fully accomplished, are worth discussing briefly. The first objective of getting a full understanding of the changes the 'wet kwaliteitsborging voor het bouwen' will bring is the first that is not achieved to the fullest. Reason for that, is the organisational implementation of this law having a predominance on the legal implementation on this law. Besides that the substantive interpretation of the quality institutions and the quality instruments that will be used, are still not completely clear.

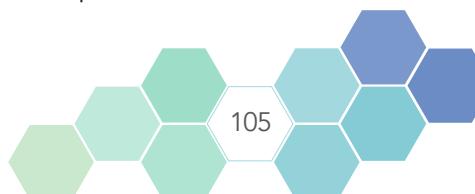
Analysing the attitude towards quality assurance in practice is, as the previous objective, accomplished not completely as well. The validation of the findings and the advice did give some insights in how quality and quality assurance is perceived within practice. However, an collaboration with a contractor (better would even have been multiple contractors) could have given better and more extensive analyses.

Besides the objectives mentioned above, the personal objective to become a specialist in advising contractors on changing their organisation towards privatized quality assurance was present as well. This objective can be concluded as being accomplished as well as possible within the time frame of this research.

## 11.2 Colour-print thinking

Part of this reflection can be linked to the theory of colour-print thinking that was used within the research. With the knowledge that there are five ways of thinking (about change), the way in which change and process of change is considered, can be viewed from that perspective. To do so, the colour test (two different ones) were performed to experiencing what colour fits personal thoughts on change. These colour tests were done after the previous chapters were finished. In this way the results of these test could not influence results of this research. However, it is important to recognize that the knowledge obtained on change and implementation of that change within organisations, is likely to have influenced the way of reasoning during those tests.

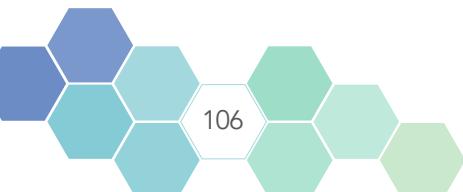
Both tests resulted in the blue way of colour-print thinking. This blue way of thinking is related to one of the two strategies that were advised for contractors; the planned strategy. This way of thinking is focussed on rational designing and implementing of change (Commendatio, 2019; Twynstra Gudde, 2019). It may be possible that this way of changing has come up as one of the



best solutions for contractors, because of a personal preference for this way of working. However, the red way of colour-print thinking, which is related to the other proposed strategy (the power strategy), did in both tests not come up as the second result. Besides that the blue way of thinking is described as the way of working for those who see change independently from personal views and preferences, making the choice for the planned strategy a rational choice.

In the approach of this research, this way of thinking and rational planning can be found. People that are 'labelled' as being blue prefer clear roadmaps, overall schedules and reductions of complexity (Twynstra Gudde, 2019). This is clearly reflected in the way of working during this research in the search and describing of the structures used. First of all the separation between the legal and organisational implementation, with the multiple attributed subjects, and the clear planning of the second phase of this research, show this way of thinking. Besides that, the why-how-what structure reflects the reduction of complexity, providing the clear structure in which the literature research was performed. Several paragraphs and chapters of this research were summarized within a figure, making the steps that were taken and the literature that was reviewed visible in a complexity reducing way. The last point of reflection is the personal approach of this research, which can be described as a very independently working. This complies with the 'independent of people' explanation that is ascribed to those who think in a blue way (Commendatio, 2019). Besides the few moments of consulting with supervisors, this is also reflected in the fact that the option of doing an internship had to be overcome. This way rapidly turned into a renewed, positive and independently approach to the research.

Knowing the way of thinking that fits the approach of this research, reflecting on that way of thinking is easy. More difficult is looking at the other ways of colour-print thinking and the approaches of change that are linked to those colours. Both tests showed that the green way of colour-print thinking came last, in describing how change is personally seen. Changing within the green way of thinking is based on learning situations, by bringing people together (de Caluwé & Vermaak, 2002; Twynstra Gudde, 2019). This complies with the participative implementation instruments, of which one is that of 'storytelling'. Storytelling is described as the 'search for collective meaning' and has proved to be an effective approach in discussing change (Boersema-Vermeer & de Groot, 2016). The aim of this instrument is to describe events or experiences and explain the emotions and thoughts that are linked with those



events or experiences. After the participants shared their stories, the goal is to make connections and come to the core of the change issue (Boersema-Vermeer & de Groot, 2016). One of the examples that this way of thinking about change does not comply with the approach of this research is the brochure. Looking at the brochure as the end-product to make the connection between theory and practice, this shows a clear contrast between blue and green thinking. Where green thinking is explained as finding connections together and learning from each other's stories, the brochure is a visualisations of thinking within 'boxes and arrows', the systematic and planned approach fitting blue thinking. In that aspect it can be reflected that, even though this research with its structure and products can be reviewed as a clear research, it may lack on appealing to a wider, more diverse audience with different ways of thinking of change.



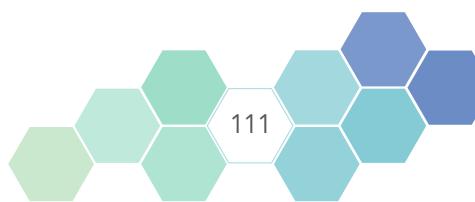
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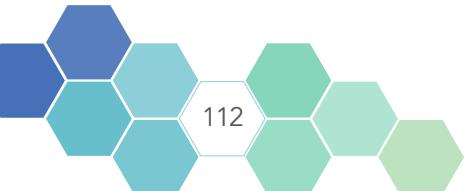
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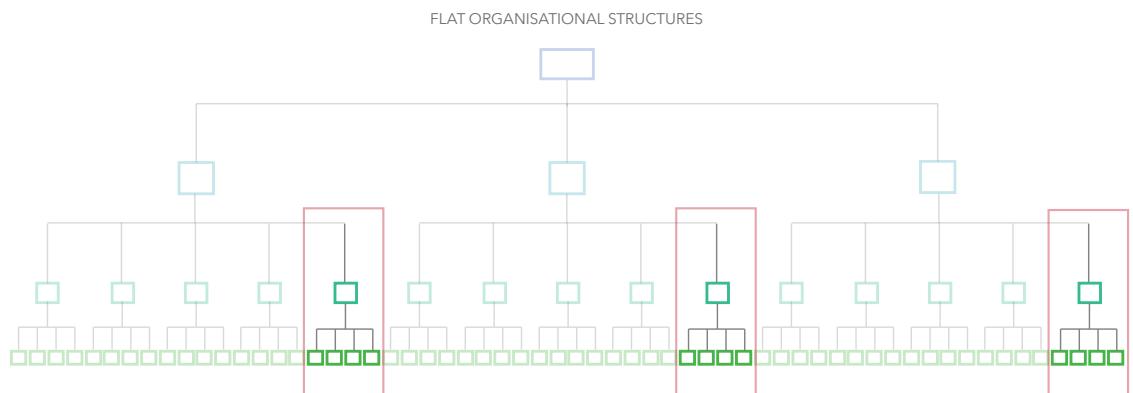
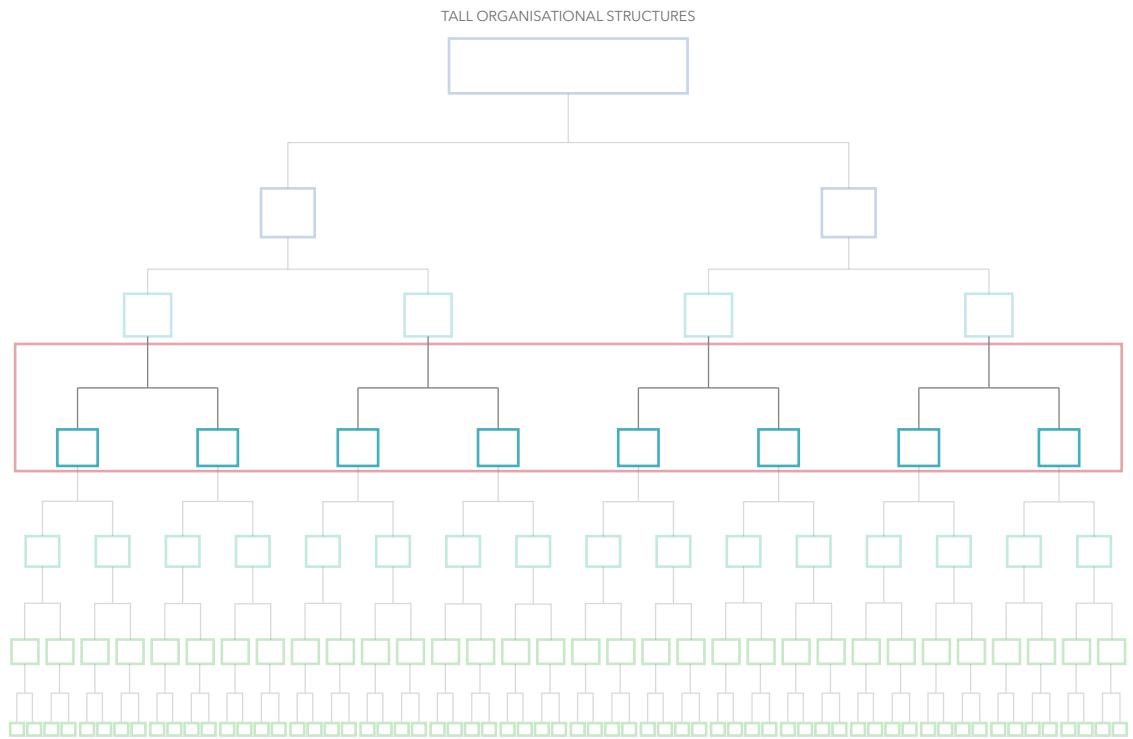


## Appendix

- I. Organisational structures with new branches/layers
- II. Transcript Interview
- III. Transcript Validation
- IV. Advice Brochure



## Appendix I. Organisational structures with new branches/layers



## Appendix II. Transcript Interview

Datum : 28 Oktober 2018, 15:00  
Locatie : Bouwend Nederland, Zilverstraat 69, 2718 RP Zoetermeer  
Interviewer : Anoek Moeskops (A)  
Geïnterviewde : Ruben Heezen (R), Adviseur Markt & Overheid

A: ..... Die aannemerswereld, ja ik weet niet, dat trekt mij gewoon heel erg. Terwijl veel van mijn studiegenoten zoets hebben van 'wie gaat er nou bij een aannemer werken'.

R: Ja is dat zo ja? Wat zonde.

A: Ja daarom en ik snap het ook niet. En ik heb gewoon gezegd, nou jongens ik ga dat gewoon doen.

R: En wat moeten we doen om jouw studiegenoten ook te overtuigen?

A: Ja ik heb geen idee.

R: Iedereen kan aan het werk bij ons he, in de sector.

A: Ik weet het niet, ik weet het echt niet. Misschien het idee dat ze, dat ze een management opleiding doen en dan zo groot mogelijk willen ofzo. Dat ze dat maar een kleine bijzaak vinden.

R: Ok.

A: Het moment van bouwen zelf ofzo. Omdat het natuurlijk ook, er zit nog heel veel voor en heel veel na. En omdat onze studie zo breed is, denken heel veel mensen waarom zou ik me alleen met het bouwen zelf bezig houden.

R: Je hebt natuurlijk ook heel veel ontwikkelende bouwers.

A: Ja precies ja.

R: En zeker ook met de nieuwe onderhoudscontracten en dergelijken. Dan kun je natuurlijk in dat hele proces betrokken worden.

A: En ik denk dat ik dat wel door heb.

R: Ja precies.

A: Dus vandaar.

R: Nou ik zou zeggen, verspreid de boodschap.

A: Ik zal heel even kort vertellen wat ik wil gaan doen.

R: Ja doe maar eens.

A: Ik ga, ik wil onderzoek doen, naar hoe een aannemer zijn bedrijfscultuur en -structuur kan aanpassen. Om daarmee voorop te lopen op de wet Kwaliteitsborging in het bouwen. Dus niet dat ze achteraf zoets hebben van 'de wet is erdoor en nu, wat moeten we doen?'. Maar dat ze eigenlijk al hun manier van denken, manier van bewegen, manier van doen aanpassen om gewoon daar al mee bezig te zijn. Ook omdat ik denk dat het wel eens belangrijk eens om af en toe eens te kijken naar 'doen we het nog goed?' en 'zijn we er al mee bezig, wat we kunnen qua kwaliteit?'. Dat wil ik eigenlijk gaan onderzoeken, alleen omdat er nog niet zoveel bekend is met implementatie van die wet, moet ik eerst starten bij de wet zelf. En wat houdt het nou in? En ik hoop dat jij me daarbij kan helpen, of in ieder geval jouw kennis wil delen.

R: Ja tuurlijk, tuurlijk. Ik ben Ruben Heezen, ik werk hier. Eigenlijk werk ik voor de regio, Bouwend Nederland heeft verschillende regio's. Ben je überhaupt bekend met Bouwend Nederland?

A: Ja ik heb het idee dat jullie een hele grote overkoepelende organisatie zijn.

R: Ja Bouwend Nederland is de branche vereniging voor alle bouw en infra bedrijven. Dus we hebben ongeveer 4500 leden in Nederland. Van de BAM's inderdaad tot aan de kleine ondernemer op de hoek, met 2 man personeel. Dus hele diverse achterban en daarvoor doen wij belangenbehartiging, wij houden ons bezig met dienstverlening, wij houden ons bezig met brancheontwikkeling. Dus aan de ene kant heel veel informatie verstrekken aan de verenigingen en aan de andere kant ook wel echt in Den Haag en in Europa mee denken en mee praten over hoe wij denken, of hoe onze achterban denkt, dat we een

bepaalde richting op zouden moeten gaan.

A: Ok.

R: Nou ik werk voor de regio. Bouwend Nederland is onderverdeeld in een aantal regio's, dus ik werk voor Noord-Holland en Utrecht. Daar ben ik verantwoordelijk voor de belangen behartiging. En hier vanuit dit huis, dit is ons hoofdkantoor, voer ik het dossier kwaliteit. Dat coördineer ik. Dat dossier kwaliteit heeft ook weer twee onderdelen eigenlijk. Dat is aan de ene kant, hoe gaan we om met de kwaliteit van onze leden? Met name constructieve kwaliteit. Dus wat kunnen wij als branchevereniging daarin betekenen, om het naar een hoger plan te tillen? En aan de andere kant de belangen behartiging richting de wet kwaliteitsborging. Dus dat zijn een beetje de twee dingen die we vanuit hier doen.

Dus dat zijn volgens mij dan ook meteen twee dingen waar je een onderscheid in kan maken, in jouw onderzoek.

A: Ja zeker.

R: Dat is namelijk het ene, de kwaliteit van een bouwproces dat is iets wat continu in ontwikkeling zou moeten zijn en daar heb je eigenlijk geen wet voor nodig.

A: Nee, als het goed is niet.

R: Precies.

A: Maar de ervaring leert dat dat toch soms nog af en toe nodig is.

R: Ja, nou ja kijk, wat je daarin ziet is ook weer dat verschil tussen die ondernemer tussen 4 of 5 man in dienst en de BAM bijvoorbeeld, waar je zelf stage hebt gelopen. Als ik daar naar kijk, zie ik echt dat BAM al, die voldoet aan bijna alle eisen van de kwaliteitsborging. Dus die zijn er al best wel ver mee.

A: Oh ok, interessant.

R: Ik zie, bijvoorbeeld Era Contour dat hier tegenover zit, die ontwikkelaar. Dat is ook zo'n club die echt al ontzettend ver is met de kwaliteitsborging. Dus ook het echte, echte vastleggen. Er zijn ook heel veel bedrijven die wel volgens eigen ideeën wel, bepaalde manieren kwaliteiten... Maar dat niet aantoonbaar maken. En daar zit ook meteen het grote verschil in tussen de gedachte zoals wij die nu hebben, zoals die overheerst in de sector. Van we leveren allemaal kwaliteit, anders zouden we niet leveren, dan zouden we failliet zijn. Dus we staan voor de producten. Maar als je vervolgens gaat vragen, van joh 'hoe leg je dat dan vast?'. Dan merk je dat dat, dat dat niet bij iedereen van even hoog niveau is zeg maar. Om het maar even heel kort te zeggen. Sommigen doen het niet, sommige doen het wel. Of sommigen kijken erna en die zien dat het goed is en dan is het dus goed. Maar als dan het pand 5 jaar later instort, of 10 jaar of 15 jaar, kunnen ze niet aantonen hoe ze dat dan hebben gedaan.

A: Nee precies

R: Dus die verschillen daarin die zijn heel groot. Vanuit de vereniging is die interne check op kwaliteit, van je eigen leden, is ook meteen de lastigste vind ik. Omdat je als vereniging geen kwaliteitskeurmerk bent.

A: Nee.

R: Daar kun je voor kiezen. Bouwend Nederland heeft ervoor gekozen dat niet te doen.

A: Kun je uitleggen waarom dat dan niet is gedaan? Ik kan me er iets bij voorstellen, maar...

00:06:08

R: Nou kijk, als vereniging ben je er voor al je leden eigenlijk. Je houdt je met belangenbehartiging bezig, zoals ik net al zei, met vertrekken van dienstverlening. Dus je hebt een veelvoud van onderdelen waarop je zelf actief bent. Als je al een soort van kwaliteitslabel gaat voeren, dan beperk je je heel erg tot een heel klein onderdeeltje van dat hele verhaal. Bouwend Nederland is echt veel meer dan alleen maar dat. Dat maakt het dus nu in deze situatie ook meteen lastig om je met de bedrijfsvoering te gaan bemoeien van je lid bedrijven. Binnen Bouwend Nederland wordt er wel aan gewerkt, dus er worden allemaal notities opgesteld, kadernota's. Er wordt nagedacht over prioritering op het gebied van kwaliteit. Dus maar jaarprogramma's opstarten om echt die leden toch wel wat meer in die bedrijfsvoering meer te gaan mengen. Handreikingen geven waarop ze kunnen verbeteren. Dat is dus een continu proces. De wet kwaliteitsborging, dat is een wat ander verhaal. Ik weet niet of je die ontwikkelingen, hoe ver ben je?

A: Ik ben nu bezig met het volledig uitpluizen van die wet. Dus waar, wat houdt het in, hoe ziet de kwaliteitsborging er nu uit en waar wil het naartoe. Ik hou me echt op de vlakte. Ik vel geen oordeel van vind ik het een goed idee, of vind ik het geen goed idee.

R: Moet je ook niet doen. Als je onderzoek gaat doen.

A: En helemaal niet met mensen waarmee je dan gaat praten. Want dan gaat het alleen maar daar over ben ik achter, mensen hebben allemaal een mening. Zelfs mijn docenten, waarvan ik denk jullie zitten inmiddels hier en niet meer buiten. Maar goed. Maar ik ben nu vooral bezig, ik moet gewoon eerst zorgen dat ik die wet volledig snap en snap wat dat dan betekent voor een aannemer. Voordat ik iets kan zeggen over hun bedrijfscultuur en -structuur. Dus daar ben ik nu. En ik heb wel al stukken gelezen over die wet en ik heb ook over twee maanden geloof ik een gesprek met Monica Chao Duives. Ik weet niet of je haar kent? Dat is een hoogleraar en professor en dokter bij ons aan de TU en die heeft ook adviesstukken geschreven aan de kamer over deze wet. Dus zij gaat me daar nog verder bij helpen, dus echt de juridische kant, maar wat ik vooral naar op zoek ben is...

R: Wat betekent het voor het bedrijf?

A: Ja precies.

R: Nou misschien, over die wet kun je best wel kort zijn denk ik. Je hebt een aantal veranderingen op privaat rechtelijk en publiek rechtelijk niveau. Op dit moment is het zo dat als jij een nieuw huis wilt gaan bouwen en je vraagt een vergunning aan bij de gemeente, je krijgt die vergunning schakel je een aannemer in, en die aannemer gaat het huis voor jou bouwen. En de gemeente die is uiteindelijk verantwoordelijk voor het toezicht en de handhaving op het werk, op jouw huis. Of dat allemaal, niet, goed gaat.

A: Hoe vaak gebeurt dit nou echt? Want dat is heel vaag. Ik kan dat nergens...

R: Ja je moet altijd, onderscheid maken tussen wat feitelijk is en wat af en toe wordt geroepen. Het feitelijke antwoord is dat we het niet precies weten. De praktijk, zoals wij hem uit onze achterban krijgen, is dat de gemeente bij name bij de wat complexere werken, dus dan heb je het over een parkeergarage met appartementen erboven, over appartementencomplexen, echt de wat complexere bouwwerken, in de stad met name. Er wordt nu heel veel binnenstedelijk verdicht, binnenstedelijk gebouwd. Dat brengt wat meer omgevingsrisico's met zich mee, noem maar op. Dus dat zijn de zaken, dan komen ze 1, 2 keer. Dan komen ze langs de gemeente, de bouwinspectie. En bij melding van onveilige situaties.

A: Dus dat zijn de uitzonderlijke gevallen.

R: Dus bij complexe werken zie je ze met enige regelmaat, bij minder complexe werken af en toe op de belangrijke momenten. Dus bij stortingen, dat ze checken, en anders op afroep basis zeg maar. Dus bij constatering van slechte of onveilige situaties. Dat is een beetje, dat is ook de reden waarom die wet nu wordt behandeld. We moeten toch eens gaan kijken met elkaar, we constateren toch dat het huidige systeem niet werkt zoals we willen dat het werkt. En we willen met elkaar wel verbetering van de bouwkwaliteit realiseren. Dus moet we er iets aan doen. Dus dat is dan ook het enige punt waarop alle partijen het over eens zijn.

A: Ja ok.

R: Dus dat is de situatie nu. Dus waar we dan met die wet private kwaliteitsborging naartoe gaan, is dat dat wat toezicht dat nu bij de gemeente ligt, dat gaat over naar een kwaliteitsborger die gekozen moet worden door een opdrachtgever. Dat is ook meteen de publiekrechtelijke wijziging van de woningwet.

A: Dus door de opdrachtgever? Niet door de aannemer?

R: Door de opdrachtgever en de opdrachtgever kan vervolgens in overleg besluiten, de aannemer dat te laten doen.

A: Ok, maar in basis doet de opdrachtgever dat.

R: Dus dat, ja. Maar een aannemer kan ook opdrachtgever zijn. Dat is zoals de wet is, maar in de praktijk verwachten wij dat het erop neer gaat komen dat de aannemer die kwaliteitsborging in gaat schakelen. En dat wordt uiteindelijk doorberekend natuurlijk aan de eindgebruiker. En daar zit ook meteen een grote haak aan de hele wet, met name dat publiekrechtelijk deel. Het toezicht op de bouw moet gedaan worden door de kwaliteitsborger. Dat moet hij doen door alle stappen, die vooraf besproken zijn aan het begin van het proces. Bij de vergunningverlening, gaat de kwaliteitsborger met de gemeente en de aannemer in gesprek om gewoon die punten te checken waarop geborgen moet worden. De kwaliteitsborger is dan vervolgens verantwoordelijk voor dat toezicht op die vooraf besproken punten tijdens de bouw. Daar moet hij een dossier van maken. Dat wordt weer teruggegeven aan de gemeente. En de gemeente moet vervolgens het werk vrijgeven.

A: Vrijgeven voor in gebruik name.

R: Ja voor in gebruik name. Dus dat blijft.

A: Maar vooral dat laatste stukje is ook echt significant anders toch? Dat er echt zo'n 'as built', zoals gebouwd, rapport echt komt.

R: Dat klopt. Je hebt twee dossier eigenlijk. Aan de ene kant heb je het opleverdossier, dat is het dossier van de kwaliteitsborger, dat is publiekrechtelijk. Aan de andere kant heb je het privaatrechtelijke, het consumenten dossier. Dus dat komt er

ook nog bij, maar dat is wel iets anders ja. Je moet dus inderdaad aan het eind zo'n compleet dossier kunnen overleggen.

A: Ok, dan heb ik de wet tot nu toe wel helemaal begrepen.

R: En dan, in deze situatie is er niets aan de hand, want dan betekend dat de kwaliteitsborger goede informatie krijgt van de aannemer. Het werk verloopt goed en de informatie overdracht tussen kwaliteitsborger en gemeente dat is ook allemaal prima, want we weten elkaar allemaal te vinden. Ideale situatie. In de praktijk ga je er tegenaan lopen dat de kwaliteitsborger toezicht moet regelen op het werk. Dat de gemeente verantwoordelijk is voor de omgeving en dat de gemeente de handhavende bevoegdheid heeft.

A: Ok.

R: Dus die heeft de kwaliteitsborger niet. Dus op een moment dat de kwaliteitsborger op het werk constateert dat er iets niet goed gaat...

A: Moet hij eerst terug naar de gemeente?

R: Nee dan heeft hij eerst nog een stapje daarvoor, dan moet hij eerst de aannemer de kans geven om die fout te herstellen.

A: Oh op die manier.

R: Als het dan niet goed is, dan moet hij inderdaad terug naar de gemeente en dan moet de gemeente gaan handhaven. En daarbij is ook meteen de kritiek: hoe gaat dat dan met die informatie uitwisseling tussen de gemeente en tussen die kwaliteitsborger? Hoe gaat dat eruit zien? Kun je dat eigenlijk wel zo strikt scheiden van elkaar? Dus dat maakt het wel wat lastig, aan die publiekrechtelijke kant. Dat heeft echt te maken met die roverdeling daarin. Als je dan vervolgens gaat kijken naar de privaatrechtelijke kant, dan kom je al snel bij de verandering van de aansprakelijkheid. Dus in de huidige situatie is het zo dat als wanneer wij iets hebben gebouwd, wij hebben jouw huis gebouwd en het is opgeleverd; dan lopen we een rondje. En dan kijken we even of alles goed is, of alle tegeltjes recht zitten, of er geen scheurtje in het glas zit. Dan zet je een krabbeltje en alsjeblieft het is jouw huis. Mocht er dan uiteindelijk iets fout zijn, of iets van wat je had moeten kunnen constateren tijdens de oplevering, dan ben jij er voor verantwoordelijk.

A: Ja ik heb ook rechten vakken gehad. Dus dit is bekend bij mij, dit komt een beetje terug.

00:15:25

R: En dat verandert nu ook. Wat er nu eigenlijk, nu is de situatie zo dat jij moet aantonen dat de aannemer fout zat en in de toekomstige situatie is het zo dat de aannemer aantonen dat hij niet fout zat. Dus de bewijslast, de aansprakelijkheid wordt vergroot. Dat geldt voor professionele opdrachtgevers en particuliere opdrachtgevers. Dus voor de hele, over de hele linie aan opdrachtgevers. Dat is ook een van de punten waarop wij af en toe aan het steigeren zijn.

A: Dat kan ik me voorstellen.

R: Dat betekent natuurlijk ook wel iets he. Dat draagt ook wel bij dat de aannemer, naast die administratieve lasten voor dat oplever dossier, alles moet vastgelegd worden, alles moet met foto's vastgelegd worden, want anders kun je natuurlijk niet bewijzen dat het goed is. Daarnaast zou het ook zomaar kunnen, dat een professioneel opdrachtgever tijdens een bouw, een aantal wijzigingen doorvoert waarvan je denkt 'moeten we dat wel doen? Is dat slim? Welke consequenties gaan dat hebben voor je oplevering?'. Waar die aannemer uiteindelijk aansprakelijk voor is. Dus dat is even iets wat privaatrechtelijk verandert en wat echt wel heel erg ingrijpend is. Daarnaast heeft de aannemer een toegenomen waarschuwingsplicht, dus die moet eerder constateren.... Dat moet ik anders zeggen. In een bouwproces heb je natuurlijk een architect die een tekening maakt en een constructeur die bereken doet, goed he. Op het moment dat de aannemer dat allemaal heeft geaccepteerd als het ware en daarmee aan de slag gaat, dan is het ook zijn verantwoordelijkheid, dan kan hij er aansprakelijk voor worden gehouden. Dus die waarschuwingsplicht houdt eigenlijk in, dat als je eerst meteen al constateert, dus je constateert in de tekening van de architect van 'die wand moet geen 1,5 meter breed zijn, maar 2 meter breed' of weet ik veel wat. Dan moet je dat meteen aangeven. Dat wordt nu uitgebreid, want je hebt dan al een bepaalde waarschuwingsplicht maar dat wordt iets geïntensieveerd. En dat opleverdossier waar ik het net over had. Dat is echt voor de consument, dus dat gaat over de ingebuikname; hoe werkt je ventilatiesysteem? Wat is je lichtinval? Dat is heel erg gedetailleerd. Dat is eigenlijk in de basis hoe die wijzigingen eruit zien.

Voor de aannemer bekent dat dus, er zitten een aantal gevlogen aan. We moeten niet alleen denken voor de aannemer, maar we moeten het totale plaatje bekijken volgens mij.

A: Natuurlijk ja.

R: Voor die gemeente betekent dat, dat die bevoegdheden veranderen. Dus de handhavende bevoegdheid blijft, maar de toezichthoudende bevoegdheid verdwijnt. Dat is ook redelijk essentieel. Dat is ook waarom de VNG bijvoorbeeld, niet bijster positief is over deze wet.

A: VNG?

R: Vereniging Nederlandse Gemeenten is dat. Een beetje de vertegenwoordiger van alle gemeentes in Nederland.

A: Ja zijn zij daar dus niet blij mee? Ik zou juist denken dat de gemeente dit bedenkt om het weg te willen hebben.

R: Ja maar dat betekent ook dat, voor hun eigen organisatie, dat ze heel veel personeel weg moeten doen. Want alle mensen die nou op bouw en woningtoezicht zitten die heb je niet meer nodig. Dat betekent iets voor de leges gelden. De leges bij aanvraag van de vergunning, terwijl dat best wel een post is waar gemeentes...

A: Nog iets op verdienen.

R: Ja binnenkrijgen. En uiteindelijk zijn de gemeentes verantwoordelijk voor de veiligheid van een werk en de mensen op een werk. Überhaupt voor de veiligheid in algemene zin, openbare ruimte. En de vraag is hoe goed kan jij veiligheid borgen, op het moment dat je geen toezicht houdt op een werk?

A: Ligt die verantwoordelijkheid voor de veiligheid zo erg bij de gemeente?

R: Nou de eindverantwoordelijkheid, ja. Wat je nu ziet in de praktijk is dat er in bestekken wordt opgenomen dat veiligheid als (envy?) criterium, in ieder geval als belangrijke post in de aanbesteding wordt opgenomen. Wordt vaak in concurrentie-sfeer gebracht, terwijl dat eigenlijk een feitelijke verantwoordelijkheid is van het rijk. Maar goed je hebt dus, de vraag is of je genoeg informatie hebt met het nieuwe systeem om je taken uit te voeren. Daar komt het op neer, dat is de rol voor die gemeente. Voor de consument zie je dat, Vereniging Eigen Huis, ken je misschien wel?

A: Ja, ja.

R: Zij zijn daar erg mee bezig. Voor de consument merk je gewoon dat er, dat de kosten omhoog gaan. Dat kwaliteitsborgen kost geld, maar dat gaan de bedrijven niet betalen, dus dat wordt doorberekend. Wat gaat dat dan betekenen? Dat geldt ook voor de lege kosten. Als die niet naar beneden gaan, of maar een beetje, wordt dat doorberekend. Dat is voor de consument niet gunstig. Voor die aannemer, in de bedrijfsvoering, dus hogere kosten aan de voorkant, want je gaat al die stappen doorlopen, je planning wordt preciezer, je moet beter weten wat je allemaal gaat doen, je moet ook beter alles vast gaan leggen. Dus op het werk zelf heb je ook iemand nodig die het wat structureeler, structureeler gaat borgen. Je moet dossier maken en je dossier, moet je voorstellen, moet je voor seriematig nieuwbouw moet je dat doen. Moet je ook doen voor die European Medicin Agency. Dus voor een flat van, met 32 verdiepingen, en op een moment dat het zo gedetailleerd is, met lichtinval stopcontacten. Dan heb je het gewoon over een stapel bier vanaf de grond tot het dak ongeveer, wat je dan krijgt. De vraag is dan of je je doel niet voorbij streeft in die administratieve lasten. Dus dat is voor die aannemer nog een ding. En natuurlijk die aansprakelijkheid achteraf. Hoe rechtvaardig is het, als je als aannemer verantwoordelijk bent, voor alle fouten die er in zo'n proces zitten. Ook als die veroorzaakt worden door de opdrachtgever. Professioneel opdrachtgever, waarvan je misschien wel mag verwachten dat hij kundig is. Dat hij voldoende weet, dat hij bouwkundig inzicht heeft.

A: Denk je dat je daardoor misschien ook een shift gaat zien in de contractvormen, waarin de opdrachtgever een grote stap terug doet? Zoals bijvoorbeeld een DBFMO, dat je gewoon echt zegt; dit willen we. Tenminste, zo is het ons uitgelegd dan, dat je daarin dat de opdrachtgever daarin echt een stap terug doet, in die geïntegreerde contracten. Dat ze tijdens het bouwproces gewoon minder betrokken zijn of aanwezig, laten we het zo zeggen. Want dat zou betekenen dat ze minder beslissingen nog, voor wijzigingen zorgen tijdens het bouwproces. Want dat is wat je bedoelt toch? Mocht een opdrachtgever tussendoor nog dingen wijzigen...

R: Ja dat is de theorie inderdaad. Dan blijkt in de praktijk nog steeds, dat ook bij de nieuwe geïntegreerde contracten, waarbij het inderdaad lijkt dat er meer verantwoordelijkheid naar de markt toe gaat. Waarbij marktpartijen meer vrijheid krijgen, om te ontwerpen, om te bouwen. Maar dat we toch zien dat, zeker bij de wat grotere werken, dat de opdrachtgever daar wel degelijk invloed op heeft. Ook tijdens het proces nog. En ook bij de nieuwe geïntegreerde contracten, zien we ook dat de gemeentes nog steeds een toezicht functie hebben en een handhaving functie. Dus het is niet zo dat als je een geïntegreerd contract hebt dat je minder wordt beïnvloed. Het is wel dat je bij een geïntegreerd contract ziet is dat werk aan de voorkant, ook al wordt gedaan. Dus in die zin zou je kunnen zeggen dat de kans groot is dat de administratieve lasten, minder worden dan bij andere contractvormen. Omdat dat nu ook al zicht meer voor doet.

A: Ok. Ik had ook nog een vraag over, ze hebben het over kwaliteitsinstrumenten. Waarmee die kwaliteitsborging gedaan moet worden. En dat er dan verschillende kwaliteitsinstrumenten zijn en dat er dan per werk een bepaald instrument zou moeten worden gekozen, dat het best aansluit bij de klasse van het werk of bij het type werk. Welke instrumenten zijn dat? Wat moet ik me daarbij voorstellen? Want het klinkt een beetje alsof je dan gaat kiezen wat voor jou het meest voordeling is. En dan aan de hand daarvan, gaan we toetsen. Hoe werkt dat?

00:24:34

R: Wat er in de wet komt te staan, is ook dat er een onafhankelijk instituut wordt gevormd, dat dit soort instrumenten, waar je het over hebt. Dus waarin die kwaliteitsborging vastgelegd moet gaan worden. Dat die uiteindelijk een aantal instrumenten op de markt gaan laten. Nu wil het feit dat, dat onafhankelijk instituut er niet is, nog niet is. En dat er heel veel instrumenten worden ontwikkeld. Maar dat we dus ook nog niet weten aan welke criteria zo'n instrument moet voldoen. Of de instrumenten die nu worden ontwikkeld daarvoor in aanmerking komen. Dat moet uiteindelijk door dat onafhankelijke instituut worden

toegelaten worden tot de markt. Dus ja, er komen verschillende instrumenten die daarop gaan toe zien. Dat zal ook voor de verschillende gevolg klassen, zullen daar instrumenten voor zijn. Voor die parkeergarage met die appartementen zal dat anders zijn dan voor de seriematig nieuwbouw. Wat, wat overzichtelijker is.

A: Ja precies.

R: Maar daar kunnen we nog niet zoveel over zeggen, we weten nog niet wat erin komt. We weten niet waar het naar toe gaat. Dat maakt jouw onderzoek ook heel erg lastig denk ik, want je hebt. Ook het hele probleem met die wet, het is best wel een drastische wijziging. Drastisch stelsel wijziging, met name publiekrechtelijk. We weten eigenlijk nog niet zo goed hoe dat eruit gaat zien in de praktijk. We weten eigenlijk ook niet goed; een onafhankelijk instituut, dat is redelijk essentieel. Dat moet erop toezien dat er goed geborgd gaat worden, samen met die kwaliteitsborgers. We weten eigenlijk nog niet zo goed waar dat aan zou moeten voldoen. Wie dat dan zijn, waar ze op zouden moeten toetsten. Dat zijn allemaal vragen die nog wel open staan, terwijl de wetsbehandeling al best wel ver is.

A: Ja inderdaad. Is er ergens een overzicht van de instrument die er nu al zijn? Zijn er ook al instrumenten, of ja uitontwikkeld ben je natuurlijk nooit, maar die ook. Want ik weet dat er een aantal pilot projects zijn gedaan in Nederland. Kun je mij daar informatie over geven? Over die projecten, over de betrokken aannemers, over die instrumenten?

R: Ja. Woningborg is daar een grote in. Ik weet niet of je die kent, moet je maar eens opzoeken. Woningborg is, ben je bekend met bouwgarant?

A: Ja van naam...

R: Kijk het is een instelling die, dat op het moment dat jij een huis gaat bouwen. Dus jij bent opdrachtgever voor een aannemer en die aannemer gaat jouw huis bouwen. Die heeft al de opdracht getekend en die gaat failliet, dan heb jij een probleem. Want je bent niet de grootste schuldeiser, dat is de bank namelijk. Wel betaald, maar je huis is niet af. In dat geval zorgt woningborg, mits die aannemer aangesloten is bij woningborg, zorgt woningborg ervoor dat het huis verder wordt gebouwd. Je hebt daarin ook een extra tak, die zich bezig houdt met de kwaliteitsborging en certificering en meten. Die hebben ook van de, 27 ofzo pilots, hebben zij er een aantal gedraaid. Dus zij zijn er ook best wel ver in, in die instrumenten om te ontwikkelen. Dus daar zou je eens kunnen kijken in ieder geval.

A: Het is moeilijk om daar informatie over te vinden, voor mij dan. Omdat ik voor mijn gevoel ook bij veel dingen niet bij kan.

R: Ik zal ook wel even de directeur van VN constructeurs, die kennen we goed. Die zal ik wel even vragen, want die heeft misschien wel een overzichtje. Maar ik denk dat het voor je beeld, er zijn er zo veel, dat je er een paar hebt. Dat je kan zien wat de richting is.

A: Het liefst ook nog, tenminste dat zei mijn docent. Dat je er 6 hebt, bij 3 verschillende bedrijven. Dan kun je namelijk bij ieder bedrijf zien hoe.. Maar toen dacht ik al ja, ik ben blij met ieder project dat ik vind. Want zoveel zijn het er niet lijkt me.

R: Er is volgens mij wel een onderzoek gepresenteerd, een analyse, over de uitkomsten van de pilot projecten en de ervaringen van de bedrijven, gemeentes en aannemers. Die heb ik wel hier ergens.

A: Dat zou heel fijn zijn. Ik krijg bijvoorbeeld ook die, er zijn heel veel stukken geschreven in rechten vaktijdschriften en zo. Daar mag ik dus al niet bij, omdat ik een technische student ben en geen rechten student. Het is super Nederlands natuurlijk al die regeltjes, maar daar mag ik dus officieel al niet bij. Dus dan moet ik iemand anders vragen. Dus het is voor mij heel erg moeilijk om daar doorheen te komen.

R: Dat snap ik ja.

A: Daarom zei mij docent gisteren, alles wat je wil vragen, morgen vragen. Want misschien heeft hij een hele hoop aan informatie voor je en dan ben je er.

R: Ja ik kan, alles wat juridisch is wat ik heb dat is sterk gekleurd. Dus dat zal ik je niet aan doen. Want naast dat we bezig zijn met de kwaliteit, voeren we wel een sterke lobby richting de kwaliteitsborging, richting de wet. Dus daar komen onze eigen punten wel sterk in naar voren.

A: Dat snap ik. Dat is ook verkeerd en daar kan ik ook wel doorheen kijken, maar het is.. Er is niemand neutraal in dit verhaal of zo. Dat is een beetje, ik probeer het een beetje te zijn nu, maar ik lees ook heel veel dat ik ook wel, ik snap wel waar het vandaan komt.

R: Het is gecompliceerd. Want het is dus wel. Twee weken geleden was er ook een afstudeerde stagiair van een bedrijf, die zijn onderzoek hierover deed. Het is gewoon allemaal nog in ontwikkeling. En we weten niet eens zeker of die wet er gaat komen. En het is natuurlijk wel belangrijk dat zeggen we ook altijd tegen onze bedrijven, dat je bezig houdt met kwaliteit. Dus ook als die wet er dadelijk niet komt, zal je toch naar enig systeem van borging moeten gaan. Hoe je dat dan doet? Dat is dan onze vraag. Daar gaan wij een rol in spelen als die wet er niet is en anders zijn dat die instrumenten die nog ontwikkeld moeten worden. Of doorontwikkeld moeten worden. Binnenkort gaan er nieuwe pilots starten, er is een stuurgroep die wat meer gaat

over de implementatie van die wet. Met Binnenlandse Zaken, Woningborg, Bouwend Nederland zit erbij, wat grote partijen. Daarin wordt ook gekeken, als we nu die nieuwe tranches pilots gaan doen, moeten we dan niet gewoon 1 instrument gaan handteren en daarbij criteria opstellen? Maar goed dat is natuurlijk best wel bizarre, want die criteria zijn er nog niet. Dus dat je daar nu nog over aan het nadelen bent.

A: Aan de andere kant, misschien kun je het dan een soort van sturen. Ik weet niet of dat per se is wat je wilt, maar op het moment dat jullie als branche en met zijn allen, al criteria hebben waarvan jullie denken dat, jullie als groep denken goh laten we hiermee aan de slag gaan. Dat kan ook een basis zijn, voor iets wat later nog is.

R: Precies. Dat is zeker waar. Vandaar ook die stuurgroep, die eigenlijk wat verder zou moeten kijken dan de behandeling van de wet. Maar in de praktijk is wel, dat we ook gewoon een paar loopgraven hebben, waar we niet uitkomen.

A: Die projecten die binnenkort starten. Wat is binnenkort? En?

R: Volgend jaar waarschijnlijk.

A: En volgend jaar. Is daar een soort overzicht ergens van? Is dit strikt geheim?

R: Nee het is simpelweg niet bekend. Ik ben niet zo van het geheime hoor. Nee dat is nog niet bekend. Daar is ook in gezegd in die stuurgroep, van eerst even die criteria gaan verzinnen met elkaar. Maar als we gaan kijken naar hoe dat wetsvoorstel gaat, dan, bijvoorbeeld overeenstemming hebben over criteria, dan zijn we nog wel een tijdje verder. Al kan het ook heel snel gaan, als de behandeling door gaat.

A: Want ze hebben, toen deze behandeling is geschorst in juli 2017 of zo, toen hebben ze gezegd dat ze het willen hervatten in januari 2019. Dus komende januari. Hoe...

R: Nou toen hebben ze gezegd dat, bij die behandeling in de tweede kamer en de eerste kamer is hij uiteindelijk niet in stemming gebracht.

A: Nee klopt. Niet in stemming gebracht, de stemming is aan...

R: Ja het wetsvoorstel is aangehouden. Want op het moment dat er wordt gestemd en het wordt weggestemd, dan is alles van tafel. Dan moet je weer helemaal opnieuw beginnen. Plasterk heeft toen gezegd van joh, ik wil eigenlijk 1 januari 2019 dat die wet ingaat. Nou dat gaat het hem niet worden. Het ministerie van Binnenlandse Zaken wil nu dat hij gelijktijdig met de omgevingswet wordt ingevoerd. Per koninklijk besluit, dus dat betekent eigenlijk, dat heeft ... gezegd volgens mij, de minister, de behandeling willen we hervatten. Dan willen we hem in stemming brengen in de eerste kamer, in de eerste kamer eventjes aannemen, dan laten we hem invoeren per 1 juli 2021.

A: Want dan komt er een nieuwe omgevingswet?

R: Ja. Althans daar staat hij nu op. Dat is zeg maar de richt datum, dan zeggen ze dan kunnen we tot 2021 nog pilot projecten uitvoeren. Om even wat meer te ontdekken hoe dat dan in de praktijk gaat werken.

A: Dat is best een kort tijdsbestek. Want projecten duren gewoon lang.

R: Ja zeker.

A: Het klinkt zo van, dat gaan we even doen. Dat is best wel he...

R: Ja dat is het verschil tussen theorie en praktijk. Dat klinkt eigenlijk overal door in de hele behandeling. En de situatie nu is dat, dat de eerste kamer ging een half jaar geleden ofzo, heeft weer geroepen om de behandeling weer te hervatten. Daar heeft de eerste kamer het een keer over gehad. Toen werden er ook vragen meteen gesteld door de tweede kamer, over een bestuursakkoord en dat wordt nog gecompliceerd. Want wat ik net al zei is dat de gemeente verenigde gemeente eigenlijk tegen de wet is vanwege de informatie plicht. En het ministerie van Binnenlandse Zaken stuurt nu eigenlijk aan op een bestuursakkoord tussen het ministerie en de VNG. Om wat opheldering te geven over die informatie voorziening. Zodat de VNG eigenlijk omdraait en voor de wet zou stemmen. Maar goed dat zijn allemaal lobby trajecten natuurlijk. Dus dat speelt en daar zijn vragen over gesteld in de tweede kamer. De tweede kamer, of de eerste kamer heeft gezegd van, joh als jullie vragen stellen, terwijl jullie de wet al hebben behandeld, dan wachten wij tot dat jullie het daar weer over hebben gehad. Wat eigenlijk een hele vreemde gang van zaken is, want ze hebben er al voor gestemd. Maar goed. Dus nu wordt er een algemeen overleg ingepland in de tweede kamer. Dat zou eigenlijk eind oktober gaan plaatsvinden, is nog niet ingepland. Dus nu is het gissen waarom dat niet zo is. We hebben natuurlijk vorige week het rapport van de onderzoeksraad van de veiligheid gehad. Over de parkeergarage Eindhoven. Die ook iets zegt over de wet kwaliteitsborging. Namelijk dat de bouw daar nog niet klaar voor is. De privatisering van toezicht. Dus je, er is nog wel wat onduidelijk. We krijgen eerst een AO, dan worden er moties ingediend, of niet. Daar moet over gestemd worden in de tweede kamer. Dan gaan hij vervolgens weer naar de eerste kamer, eerste kamer behandeling. Ze hebben ook al aangegeven dat er nog een schriftelijke ronde komt.

A: Wat houdt dat in, een schriftelijke ronde?

R: Dan kunnen ze, de senatoren, per mail, per brief vragen indienen bij de minister. Dan wordt hij nog behandeld en dan moet er nog gestemd gaan worden. Maar alles moet nog ingepland worden. En wat een complicerende factor is, is dat in maart provinciale staten verkiezingen zijn. Waarbij de veranderingen in de eerste kamer natuurlijk optreedt, in de samenstelling. Dus het is ook de vraag, of, hoe het ministerie de samenstelling inschat na de verkiezing. Of ze hem daarvoor of daarna in stemming willen brengen. Maar er liggen nog een paar, de stappen zijn duidelijk die genomen gaan worden, het is alleen de vraag wan-ner dat gaat gebeuren.

A: Dan had ik nog een vraag. Dit, als deze wet erdoor komt, dan is het een grote wetswijziging. Zijn er wetswijzigingen in het verleden, waarvan jij denkt, kijk daar eens naar? En dan hebt ik het puur over, hoe organisaties zich daarop hebben aangepast.

R: Nee. Nee. Ik begrijp dat je het vraagt. Kijk deze wet, het is uniek dat zo'n ingrijpende stelselwijziging en eigenlijk in zo'n korte tijd er doorheen wordt gerammd. Dus in die zin geeft dat ook een hele kort tijd voor bedrijven om zich aan te passen in hun bedrijfsvoering aan regelgeving voorkomend uit die wet. Daarin is deze wel uniek, naast dat het hele traject. Dat het hele wetgevingstraject uniek is. Wat wel een interessante is, is de crisis- en herstelwet, bijvoorbeeld. Daar zou je eens naar kunnen kijken hoe die tot stand is gekomen. Die heeft ook bijzonder grote gevolgen gehad, maar meer aan de kant van versnellen van procedures. Dat zijn toch wel wat, het is toch wel lastig om daar vergelijking uit te trekken, want het is toch wel...

A: Nee dat snap ik.

R: .... Omdat het toch wel een groot traject is.

A: Nee dat snap ik, maar ik had het er gisteren met een studiegenoot over en die zei dat toen die omgevingswet werd ingevoerd, dus toen al die kleine vergunninkjes werden vervangen door één grote, zijn er ook bedrijven geweest die daarop een hele afdeling hebben aangepast. Van, hoe gaan we dit nou doen? Maar ook de verandering in de aanbestedingswet, was ik zelf even niet bekend mee, maar hij zei; kijk daar eens naar. Want dat is interessant, daar hebben ook bedrijven ook een soort van organisatorische verandering in gemaakt, omdat die aanbestedingen anders werden.

R: Wat bij die, deze wet kwaliteitsborging, die gaat gevolgen hebben voor publieke sector en private sector. En dat, in die zin kan je de vergelijking met de omgevingswet trekken, alleen is de omgevingswet nog niet zo ver. Die is, wat overigens ook typend is, want dat is een grote verandering en dan zie je dat deze met de jaren naar achteren wordt geschoven. De aanbestedingswet is iets minder complex in die zin, denk ik. Daar zou je het ook in kunnen zoeken. Crisis en herstel ligt wat meer bij de overheid, maar in de procedure voorafgaan is het wel interessant.

A: Ok, dan ga ik daar eens naar kijken.

R: Maar het is, één op één, ik loop hier al een jaar of 4-5 hier rond en in Den Haag. En in de tweede kamer en zo en als je daar met lobbyisten praat dan, over hoe dat wetstraject wat ze daarvan denken, of ze dat al een keer eerder hebben meege- maakt.... Dit is echt uniek hoor. Mensen die 20-30 jaar rondlopen, die nog nooit hebben meegemaakt. Dat er zoveel on- duidelijk is, zulke grote gevolgen en, ja het is one of a kind.

A: Dat maakt het wel heel erg leuk, maar iedereen waarschuwt me wel van, op het moment dat jij zo meteen klaar bent met studeren, of met je onderzoek, dan is er nog nijs en jouw antwoord op je onderzoek is over een jaar misschien al niet meer een antwoord.

R: Er zijn natuurlijk wel veel vergelijkende onderzoeken, hoe is het in Duitsland, Denemarken, Frankrijk, Italië geregeld. Ook systemen waarin de private kwaliteitsborging wordt gehanteerd, ook wat de rol van overheden dan is. Misschien dat je daar nog iets mee kan.

A: Ja daar wil ik sowieso wel iets mee doen, mee gaan doen.

R: Voorafgaand zijn dat dezelfde politieke processen geweest, voor aanpassingen van bedrijven. Dus misschien dat daar wat te halen is. Maar je hebt geen makkelijk thema uitgekozen.

A: Nee daar kom ik ook wel achter, wel heel erg leuk. Voor mij was het dit dan denk ik.

## Appendix III. Transcript Validation

Datum : 07 Mei 2019, 12:00h

Locatie : Faculteit Bouwkunde TU Delft. Julianalaan 134, 2628 BL Delft

Interviewer : Anoek Moeskops (A)

Panel experts : Ruben Heezen (R) - Adviseur Markt & Overheid, Bouwend Nederland

Perry Pos (P) - Manager Proceskwaliteit, BAM Bouw en Vastgoed

A: Nou volgens mij redelijk snel doorheen gegaan. Zo presenteert ik vaker. Is er iets wat jullie het meeste is opgevallen of waar je mee wil beginnen?

00:00:24

R: Ik vind het hartstikke, hartstikke leuk dat je dit zo doet, dat allereerst. Zo 2, 2 dingen die mij opvallen en dan op een wat abstracter niveau. Redelijk concreet. Ik moet zeggen een concrete vraag. Als ik even naar Bouwend Nederland kijk. Naar de bouwsector. Dan hebben we een aantal hele grote bedrijven. Maar heel veel kleine bedrijven. Heb jij al in je adviezen, ga je daar ook nog een soort van specialisatie, of een soort van concretisering aanbrengen waarin je maatwerk adviezen of een soort van, een omzet-grootte advies geeft. Voor kleine bedrijven, die gaat natuurlijk geen kwaliteitsmanager aannemen.

00:01:06

A: Nee. En er moet heel eerlijk zijn dat ik ben gefocust heb op de grote en middelgrote aannemer. Maar ik wil inderdaad wel wat, wat ik ook nog eens je kunt een externe manager even inhuren om je bedrijf te veranderen ik snapte dat niet voor iedere grote van bedrijf van belang is. Ik werd heel eerlijk gezegd van niet hoe maar ik wil er sowieso wel een stuk over schrijven dat dit gewoon. Zoals net zoals ik al zei er is geen 1 duidelijke manier voor alle bedrijven. Maar. Mijn focus lag wel op de grote en middelgrote aannemer met het idee dat. Ja daar. Veranderingen misschien moeilijker zijn maar wel duidelijker zichtbaar denk ik.

00:01:48

R: Dat misschien nog een interessante kunnen zijn. Daarnaast zit ik eventjes te denken. En in de eerste bevindingen bij. Bij het waarom, of het hoe. Daar gaat het op een gegeven moment over. Waarom zouden we? Volgens mij als je een verandering in de organisatie teweeg wil brengen, kan dat op 2 manieren de eerste is een, is een zwaard van Damocles hè. Er wordt dus iets opgelegd. Dus je moet.

00:02:14

A: Ja precies.

00:02:15

R: En de tweede is een sterk intrinsieke motivatie. En op die, op die tweede daar, daar ga je denk ik met je mee met je onderzoek wat, wat, wat meer zitten. En dan vraag ik me af hoe je hoe je denkt. Een soort. Intrinsieke motivatie gecreëerd kan worden in een sector die conservatief. Het is als conservatief wordt beschouwd.

00:02:39

A: Nou ik moet heel eerlijk zijn. Dat dat dat 1 van mijn grote conclusie en reflectie punten is. Want ik denk dat dat eigenlijk bijna niet te doen is. Misschien bij de, de enkele we de, de grote 5 zeg maar uitgezonderd. Maar. Ja ik denk dat zij moeten inzien dat het ook iets oplevert in plaats van alleen geld kosten en daar zit het hem natuurlijk vaak geen maar ik weet zelf heel eerlijk gezegd niet goed. Daar die die. Maar ik heb ook niet met een bij een bedrijf stagelopen dus dat vind ik heel erg moeilijk. Maar ik snap wel jouw punt.

00:03:19

R: Ja dat vind ik het heel interessant aan een discussie over over kwaliteit. Kwaliteit en de sector zegt denk ik 90 procent van de leden die ik spreek die zegt ze ja maar ik, ik bouw goed want als die goed bouw, waarom zou ik dan bouwen? Dit is mij dit is dus mijn vak.

00:03:38

A: Ja.

00:03:40

R: Dus dus. Ze denken al dat het altijd heel goed gaat dus die intrinsieke motivatie is, is heel erg is inderdaad heel erg lastig zoals je concludeert. Mmm. En dan, dat was voor ons dezelfde zoektocht. Maar dan krijg je van jou hoe ga je dat dan op een gegeven moment wel borgen want daar gaat het uiteindelijk om die kwaliteit ten eerste. Maar hoe ga je dat dan aantoonbaar maken? En dat is iets heel anders dan dat je een fundamentele discussie over kwaliteit in de sector gaat hebben. Dus dat, nee. Maar goed.

00:04:12

A: Ja ik snap je.

00:04:14

P: Ik denk dat daar ook het belangrijkste punt ligt in verandering want de cultuur leeft 'maar we bouwen goed'. Het wordt bij ons intern ook gezegd. Hoezo? We hebben gemiddeld nog geen oplever punt per woning. Dus dat is toch hartstikke laag? Ja de en dan kun je ook nog aantoonbaar maken he. Kijk want dit is een oplever rapport en daar staat maar een puntje op. Nou ben ik intern iets kritischer. En ik weet een klein beetje hoe het werkt want als opgeleverd wordt en d'r wordt daar wat gezien. "Ik kom vanmiddag langs poetsen we gelijk bij". Wordt dus niet opgeschreven. Dus. Dan heb ik intern ook al van ja dus heb je niet aantoonbaar wat kwaliteit is. Hè want ja. Blijkbaar accepteren we het dan toch dat. Er 'k zeg maar ja fouten of afwijkingen worden toegestaan. En dat op het laatste moment nog wat bij gepoetst misschien hè even persoonlijk dan. In, in de hoop van nou ja als het niet zien, dan hoef ik het niet bij te poetsen.

00:05:18

A: Ja.

00:05:20

P: Hè terwijl je ja iets de, de bouw vergeleken met de auto-industrie. Als je een auto koopt is, is alles spic en span en hartstikke goed. En een woning ja. Het is eigenlijk maar een half product want er is nog lang niet af om te wonen dus dat wordt nog wel weer bij gepoetst tegen maar dus dat zit wel. Maar ik denk dat dat een beetje dat cultuur is dat het geaccepteerd wordt. En ik, ik denk dat juist die verandering van de wetgeving, dat aantoonbaar moet gaan maken. Dat veel meer aannemers moeten kunnen laten zien dat dat zeg maar daarachter of in de vloer ook gewoon goed is. En dan met name installatietechniek. Kijk want wat is de kwaliteit van thermische geven goed? Bij de oplevering kun je dat niet zien. Totdat misschien wel veranderd op de opdrachtgever verandert die zegt van ja ik koop van jouw een product aannemer. Zullen we effe kijken eind januari? Dan verwacht ik dat het wel viest. Dan gaan we de warmte foto's maken buiten. En als het goed is. Als het goed is, is dat allemaal groen. Groen was het he? En zitten daar geen rooie vlekken in wat een rooie vlek is een brug er heb je iets niet goed gedaan. En dan is de vraag en hoe ga je dat straks oplossen? Intern hebben we de vraag wel eens gehad van de opdrachtgever van goh durven jullie het aan om op die manier het product op te leveren? Hè dat dat dat u de gebouwen prima dat zal wel. Ja ik wil ook weten of de warmte technisch goed is en. Durf je het aan? Hè dus aannemer lever jij kwaliteit dat jij met een vorst periode. Dat we dan met een warmte camera langs gaan.

00:07:10

A: Maar als ik, hier dus uit op maar dan is het dus eigenlijk het tegenovergestelde ongeveer want Ruben, zegt Ruben zegt; Je moet die intrinsieke motivatie vinden. En jij zegt eigenlijk, ja als die wet er komt. Dan dus eigenlijk.

00:07:26

P: Als die wet er komt wordt het een verplichting hè.

00:07:30

A: Ja precies. Maar dat zeg je wel 2 keer. Van goh, als die wet er komt dan.

00:07:37

P: Maar tuurlijk. Je zou qua verander cultuur bedrijven moeten kunnen overtuigen. Hè of, of die bedrijven zouden inderdaad het moeten willen van ja maar wacht eens even dit is gewoon het product wat, wat mijn klanten eigenlijk. Dus dat ga ik hem leveren. Wet of niet. Ik heb heel vaak discussie gehad binnen is SWK. Omdat wij natuurlijk en SWK deelnemer zijn. Van stichting waarborgfonds koopwoningen. Ja hun uit de ook gewoon continu van ja maar even los van het feit of het nou wel of die wet wordt. Je zou het eigenlijk. Qua klanterechtheid al moeten willen. Hè wees transparant en helder in het hetgeen wat je verkoopt. Hoe lastig dat ook wel te beschrijven. Maar laat dat dan ook inderdaad zien je in uitvoering en realisatie. En dat dat is wel een hele duidelijke verandering van mind-set omdat. Ik heb uitvoerders gesproken die zeggen 'ja tuurlijk lever ik altijd kwaliteit, ik controleer continu. Als ik buiten loop controleer ik'. Het ligt niet vast. Het zit in z'n hoofd en en dat is denk ik die cultuur en dat is wat. En dat ja. Dat is wel lastig want je wilde heel graag hè tenminste dat dat probeer ik intern ook te uiten. Dat dat vanuit die intrinsieke eigenschap komt. Ja en dan merk je in 1 hiëarchie of in teams of? Of daar ligt gewoon heel duidelijk een. Een financiële targets project staat al bijvoorbeeld om de druk omdat nou ja om verschillende redenen. Dat ze zeggen van ja ja we zouden er wel meer kwaliteit willen leveren. Maar budget hebben we niet. En dan is maar de vraag doen ze het wel of doen ze het niet. En ik denk dat het ook heel sterk zit dan opdrachtgevers kant. En niet zozeer om aan de aannemers kant. Want een opdrachtgever die zal ook heel duidelijk zijn, zijn wil moeten tonen van 'joh maar ik wil graag een heel goed product voor, voor mijn markt neerzetten voor mijn doelgroep'. En ik denk dat daar ook nog wel een heel ding zit. Want er zijn natuurlijk ook heel veel ontwikkelaars die puur zeg maar ontwikkelen op kosten.

00:09:56

A: Ja.

00:09:57

P: En dan hobbelen we zeker in de huidige tijd achter de feiten aan. Want ja ze zeg maar dan 3 jaar terug wordt een plan ontwikkeling gestart hè. Dus dat wordt dan een hele exploitatie model achter gezet goh dat wordt mijn markt, dat is mijn doelgroep. En dat is mijn locatie dat is de verwachting van wat men wil, dus ik ga dat product hier zetten. En dat gaan ze misschien pas over anderhalf jaar. En bij een aannemer uitzetten om. Voor voor een aanneem overeenkomst. En dan kan dat binnen een half jaar tijd of een jaar tijd zeker in de huidige periode. Zomaar toe leiden dat zij budgetair niet meer uitkomen van wat hun in een exploitatie hebben neergezet. En dan gaat het gewoon natuurlijk ook wringen want ja dan. Ja daar gaan we zoeken naar zuinigheden een hele mooie keramische pan die op het dak lag wordt misschien toch een betonnen zuil-dekpan, want die is goedkoper. En de mooie goot wordt misschien toch een kunststof goot, een prefab goot.

00:10:54

A: Dus je zegt dat een groot deel, ook nog bij de opdrachtgever ligt.

00:10:59

R: Het mes snijdt aan 2 kanten hoor, want je ergens in de terecht doel opdrachtgever die let ook op de portemonnee. Nu de afloop tijdens een prijsstijging van 15 – 20 - 30 procent. Dus dat moet ergens gecompenseerd worden. Aan de andere kant moeten we ook vanuit, vanuit de aannemerij moet je bepaalde opdrachten niet aannemen op het moment dat je niet de goede kwaliteit voor kan leveren zit dus dat voor voor het budget. Dus als je inderdaad de vraag krijgt van de ontwikkelaar die zegt van joh wil je hier een huisje neerzetten voor een ton? Maar het kost eigenlijk anderhalve ton, als je dat kwalitatief goed wil doen. Dan moet je dat dus niet doen.

00:11:37

A: Mmm ja.

00:11:38

R: En daarin daarin zit nog ook nog wel een stuk lerend vermogen voor de sector waar we inzitten.

00:11:44

P: En dat ligt ook aan de kwaliteit van de ontwikkelaars hè.

00:11:47

R: Ja. Zeker.

00:11:47

P: Dus de focussen en dat dat het begin zeiden van joh. De focus ligt misschien heel erg op die uitvoering is fase. Ja

maar ik vind de fase daarvoor. Is natuurlijk minstens, minstens zo belangrijk.

00:12:02

A: Ok.

00:12:03

P: En ook heel duidelijk van wat is kwaliteit zet je neer maar dat wordt natuurlijk bepaald aan de hand van de specificatie die je samen overeen komt. Want als we een specificatie overeenkomen van goh ik maak van houten planken hon-denhok. Dan is het natuurlijk een andere beleving dan ik, ik krijg daar een hele luxe villa met domotica en 0 op de meter, gas loos, volledig zelfvoorzienend in energie. Dat is maar net wat voor een specificatie bepaal je vooraf in. Op het moment dat je die specificatie aangaat dan kun je het toetsen van oké. Dat is de kwaliteit die ik verwacht en afspreek. En dat op basis daarvan moet je gaan toetsen. Hè als je. Een specificatie met elkaar afspreekt van goh. Wij leveren een woning kaal op. En je gaat niet eens je gaan het niet eens hebben over wel of niet behang klaar of hè zegt maar dat soort termen. Dan is de verwachting die. Degene die het product gekocht heeft hè. Kan natuurlijk wel eens heel anders zijn dan overeengekomen is tussen een ontwikkelaar een aannemer. Want er is niet altijd een relatie tussen de klant die er ook echt in gaat wonen en de aannemer die het realiseert. Hè dus zeker bij de grotere aannemers zitten er natuurlijk altijd de ontwikkelaars tussen of corporaties. En bij iedere schakel in iedere afspraak die ertussen zit. Dat bestaat gewoon het risico dat. Maar die verwachting. Anders want anders kan..

00:13:41

A: Anders wordt overgebracht

00:13:42

P: Anders kan over worden gebracht.

00:13:44

A: Maar die specificatie denk je dus dat die heel belangrijk is, ook los van alleen het bouwbesluit. Dus die specificatie vind jij bepalender voor kwaliteit?

00:13:54

P: Ja het is een duidelijke omschrijving van die specificatie voordat, voordat je dan start met bouwen. Ja dat dat. Vind ik zou eigenlijk alle op hoger peil moeten liggen.

00:14:05

A: Oké.

00:14:07

P: Want tegen, tenminste mijn ervaring is dat het van goh ja als je naar een koopwoning, een koopwoning koopt. Dat is heel vaak op zolder is een niet afgewerkt ruimte met een dak gaan. Maar als ik. Vanuit een soort kwaliteiten oogpunt gaan kijken hè de opdrachtgevers of de verkopers van de woningmarkt die zeggen wel nee maar 'k heb kwaliteit want bij mij krijgt u Velux dakraam. En dan? Bedoelen ze te zeggen dat Velux een bepaalde kwaliteitsindicatie aangeeft. Hè. Terwijl. Letterlijk in de contract stukken staat daar komt het woord Velux dan bijvoorbeeld niet voor. Alleen het woord het dakraam. Een 4-pans dingetje of? Ja wat wat wat is dan die kwaliteit. Terwijl jij misschien als klant denkt van oh nee maar daar heb ik echt zo'n kwalitatief goede Velux dakraam hebben ze erin zitten. Maar ja dat was op het moment dat ie bedacht toen ging ik naar de aannemer toe en die zei ja. En zeggen paar ontwikkelaar ik zit te 8000 euro per woning boven je budget. Gaan we doen. En die zegt. Doe maar een ander type dakraam want ik heb naar de klant toch een dakraam verkocht. Dus of het nou een Velux wordt of een Fakro of een ander type hè. Met name het sanitair gaat dat vaak anders. Er worden in de verkoop vol villeroy boch of sfinx in. Omdat het ook een bij die klanten gevoel van kwaliteit schept. En ik denk dat daar ook. Ik denk dat dat ook wel een soort cultuur dingetje is. Wat? Enerzijds bij ontwikkelaars en aannemers leeft maar ik denk dat er ook wel een beetje meer in de markt van. Mensen leeft die de woningen komen.

00:15:51

A: Ja.

00:15:52

P: Ik even dan op het gebied van woningen en ik kijk de de de wet kwaliteitsborging gaat natuurlijk straks veel breder gelden er natuurlijk ook gelden over utilitaire gebouwen en. Met de focus op dit moment lag nog altijd op de gebruiksklasse 1 is dat geloof ik?

00:16:09

R: De gevolgklasse 1.

00:16:11

P: En maar ja ik denk dat als je straks wel doorgaat dat heel snel ook naar gebruiksklasse 2 gaat. 3 weet ik nog niet. Zal nog wel een discussies zijn. Over veiligheidsaspecten.

00:16:23

A: Kun jij je daarin vinden?

00:16:25

R: Ja maar dat is ook logisch.

00:16:28

A: Ja nee ok.

00:16:31

R: Ja zeker.

00:16:33

P: En dan ga je gaan natuurlijk wel wat. Meer weer in de in de. Ja. Meer niet meer in detail in op onderwerpen van. Waar liggen of kunnen dan bijvoorbeeld pijnpunten liggen? Maar ik denk dat dat al een vorm is van van zeg maar die verandering van mindset. Je je zou aan de voorkant zou die ontwikkelaar al zijn product beter moeten verkopen. Want naar tegenwoordig gaat het al wat sneller hè zeker in die discussie met gas besparen gas loos bouwen, meer de 0 te meter. Nou kijk voor een 4 jaar geleden was dat er eigenlijk nog helemaal geen issue dan werd het wel gedaan maar werd niet als verkoopargument gebruikt worden.

00:17:17

A: Precies.

00:17:18

P: En tegenwoordig leeft dat veel meer in de maatschappij eigenlijk hè. Van we moeten duurzaam en gasloos. Dus dan zie je dat. Nou is gas loos nog geen wetgeving hè maar dat is niet. Je moet niet gas loos bouwen. Je mag gas loos bouwen. Vanuit de regelgeving. Maar daarin zie je toch wel heel snel een trend dat ze toch inspelen op de ontwikkelingen die leven. Ja. Maar om, om een dusdanige culturomslag te maken dat eigenlijk vanuit de markt de, de vraag om een hogere kwaliteit meer. Dat is nog wel...

00:18:01

A: Maar kan dat in de huidige markt? Zou dat wel kunnen?

00:18:03

P: In de huidige markt is dat is dat lastig.

00:18:05

A: Ja.

00:18:06

P: Kijk een aantal jaren terug meer dat de crisis de staat had was het meer kopersmarkt. Terwijl het nu weer meer en markt is van van de aanbieders. En dat dat is ook weer die tegenstrijdigheid en ik denk dat als daar weer een omslag komt. En dat kun je aanvoelen, dat gaat echt al weer komen. Wat bijvoorbeeld mij is de, de prijsstijgingen zijn alweer aan het afvlakken gelukkig hoor vind ik. Ik denk als dat weer een bepaalde daling gaat inzetten nou dan denk ik dat men zich wel bij je gaat focussen om onderscheid te gaan maken in het aanbieden van product. Ook omdat de markt daar toch wel meer om gaat vragen. Ja en natuurlijk de wetgeving draagt er ook aan bij wat ja.

00:18:49

A: Natuurlijk ja.

00:18:50

P: De overheid die wil daar wat is het geloof in 2020 of 22 naar meer naar je EPC van 0 en dat soort dingen.

00:18:58

R: Je dat is nu uitgesteld. Halverwege 2021 waarschijnlijk.

00:19:03

P: Oké ja. Dus dus dat zijn dat zijn veranderingen die in mijn ogen wel. Die invloed hebben op bepaalde. Toch wel een soort soort mind-set van de sector zowel de ontwikkelaars als de aannemers. En ja nu komt private borging bij en ik denk ik denk juist dat het een kans is om je. Als marktpartijen daarin dan ook te onderscheiden en ik denk dat als dat geduid kan worden dat dat. Bijdraagt aan meer die iets z'n 3 keer motivatie om. Dat toch op te gaan pakken.

00:19:45

R: Maar vindt u dat als? Ik denk dat het uiteindelijk is de sector is redelijk vraag gestuurd volgens mij. Denk jij dat? We in de concurrentie sfeer binnen de bouwsector onderscheid kunnen maken, elkaar kunnen beconcurreren op de kwaliteit van een woning? Of zal dat meer liggen in. Jullie kunnen die extra dakkapel aanbieden voor, voor 2000 euro zoals die consument wat meer ruimte krijgt. Terwijl de andere partij dat dat misschien niet want.

00:20:15

P: Ik denk dat dat voor grotere partijen niet zo heel veel onderscheid in zit. Want ik denk dat de, de reden waarom. Iemand kiest om een woning te kopen. Voor 80 procent denk ik gewoon locatie is. Waar wil je wonen? Hoe is de ligging? Wil ik binnenstedelijk wonen in een appartement of wil ik juist een rijtjeshuis met een tuin of wil ik heel graag een 2 kapper? En wil ik daar wel niet grond eromheen en wil ik dat terug. Of wil ik drukker wonen. Ik denk dat dat de eerste. Ja punten zijn waarop mensen letten van goh daar dat zou willen kopen en daarnaast natuurlijk budget. Kan ik het kopen. Kan ik het financieren. En ik denk dat als dat aantrekkelijk is dat men dan verder gaat met van oké maar. Als ik dan op die locatie wat kan ik dan kopen op die locatie wat kan ik kopen in Delft want ik wil graag in Delft blijven. Hè of op iedere locatie in Nederland.

00:21:19

A: Maar we hadden het over 80 procent dat zeg maar locatie. Maar als ik nu zelf denk van goh als ik over een jaar of 2 jaar eerder een huis ga kopen. Ooit misschien nooit. Ik kom uit Brabant hè dus dat is nog iets makkelijker.

00:21:36

P: Dat ligt eraan waar je in Brabant zit.

00:21:37

A: Ja. Maar dat ik denk ja hoeveel procent moet dan? Die kwaliteit zijn om die man te kunnen veranderen want als die 80 procent nog steeds de locatie blijft en eindigt in mijn hoofd die 20 procent nog steeds de prijs is. Hoeveel moet dat waar zit de schuiving, en waar hoever heeft prijzen te maken met kwaliteit? Want 3 ton voor het ene huis is geen 3 ton voor het andere huis ook al staat het in dezelfde straat. Waar moet dat omslagpunt zitten en er is daar een omslag dat ik ik?

00:22:06

P: Ik dacht dat het een uitdaging is voor de markt. Om. Om het verschil. Tussen een ene aanbieder een andere aanbieder die misschien allebei drieeenenhalf ton naar huis aanbieden...

00:22:19

A: Tastbaar te maken?

00:22:21

P: Ja. Van waarom, waarom verkoop ik jou waarom vind ik dat ik een heel goed product verkoop voor drieeenenhalve ton? En zou ik van mijn concurrent vinden van ja. Die verkoopt het ook voor drie ton. Maar je kan beter die van mij kopen want. Nou en noem maar op.

00:22:36

A: En dan zal het voor mij werken.

00:22:37

P: Is een complete naar huis komt bij mij krijg je is huis compleet. De badkamer is gewoon compleet, en de keuken is compleet.

Want dat is ook niet altijd heel gebruikelijk is hè bijvoorbeeld. Bij mij krijg je ook gewoon een basis keuken maar.

00:22:50

A: Als we die kwaliteit verder trekken dan een badkamer en een keuken. Er is veel meer aan kwaliteit in een huis te maken dan dat.

00:22:56

P: Klopt. Oppervlaktes, aantal kamers dat soort dingen meer. Dat vind ik altijd nog wel.

00:23:02

R: Constructieve kwaliteit?

00:23:03

A: Ja dat bedoel ik meer.. Ja maar dan is de vraag natuurlijk. Wat vinden wij kwaliteit en wat vindt de markt kwaliteit maar als we het hebben over type constructie type? Isolatie. Ik noem maar even iets.

00:23:22

P: Ik denk dat een isolatie dat dat duidt zich dan natuurlijk in bijvoorbeeld uit in de energie of gas. Bijvoorbeeld. Hè zeg maar die die in hoever waarvan je wel of niet isoleert? Maar ik denk ook dat de dat. Kopers daar ook deels in gevoed moeten worden. Van wat dat is, omdat ik denk een doorsnee koper dat inderdaad niet ziet. Want die focust zich op. Daar wil ik graag wonen en mijn huis ja dit is de stijl van, van woning die mij aan spreekt. Hè de jaren 70. Of juist moderner of he.

00:23:57

R: Zo'n bewoner die zal het krasje op z'n raam zien maar die is al niet zien dat er.

00:24:01

P: Een technische lek in zit of?

00:24:06

A: Ja.

00:24:06

R: En daarvoor, daarvoor is dat natuurlijk helemaal geen gek idee om de positie van consument ook sowieso te verbeteren.

00:24:12

P: En dat is natuurlijk wel het doel van de overheid achter de wetgeving die is natuurlijk wel ingegeven vanuit. Een aantal dingen die jaren fout gingen in de bouw hè. Natuurlijk had gezegd. Balkons die naar beneden komen in Maastricht was dat geloof ik.

00:24:33

A: Een parkeergarage in Eindhoven.

00:24:40

P: In Eindhoven? Daar weet ik weinig van. Die wordt nu toch hartstikke goed neergezet. Het schijnt ja. Inderdaad en dan ontstaat er inderdaad het beeld van ja. Dat zijn die aannemers eigenlijk aan het doen met ja.

00:24:54

A: Want weet je wat grappig is. Ik liep toen stage bij de BAM. Volgens mij heb ik dat toen ook tegen jou verteld. En die parkeergarage stortte in. En ik had de dag ervoor had ik de conservatieve berekeningen daarvoor het stempelen van de, net gestorte betonnen vloeren.

00:25:06

P: Bij die parkeergarage.

00:25:07

A: Nee. Op IJburg. En ik zei ja kan hier iemand nog effe een keer naar kijken, meer met het idee van ja ik kan me wel een soort van rekenen maar ik kan niet alles. Kan iemand die nog naar kijken die het zeker weet want ik dacht dat moet mij niet gebeuren dus het stomme is dat op het moment dat fout werd voelde ik in 1 keer de aanleiding. Terwijl we al die de wanden en zo dat ik alle maakt dan niet ieder uit met die stempels ik lag om 's nachts wakker ik denk het gaat mij niet gebeuren. Je wil gewoon niet hebben en toen had ik ze eigenlijk stom want het. En dan wordt het bij stagiair neergelegd natuurlijk de constructeur kun je er altijd nog naar. Maar ik vroeg gewoon kan 'm nog iemand naar kijken los van die constructeur. En dat is toen uiteindelijk ook gebeurd toen was bleek het ook allemaal goed maar toen dacht ik anders dan is het ook maar zo van nou ja die is. Het is goed gedaan. En we gaan door de en daar voelde ik toen een beetje wrijving dat ik dacht kijk ik ben er komt als een soort van buiten staan je binnen. Ik heb een berekening gedaan jullie vertrouwen op mij. Die constructeur kijk het nog na, maar die die doet natuurlijk effe van hoe hoe hoe. Toen pas besefte ik hoe snel zoiet dan fout kan gaan dan denk ik goh.

00:26:16

P: Klopt ja.

00:26:17

A: Ik vond dat kwam voor mij heel dichtbij en toen dacht ik ja maar dat is ook. Een duidelijke vorm van constructieve kwaliteit. Laat daar dan nog effe een keer iemand extra naar kijken.

00:26:26

P: Dat is ook kwaliteit hoe denk ik bedrijven dat inderdaad intern regelen en bepaalde zeg maar intern afspraken hebben van hoe lopen de dingen hè inderdaad als als werkvoorbereider of stagiair praktikant de kozijn tekening controleerd. In hoeverre wordt dat dan nog? Conform 4 over principe zeg maar gecheckt?

00:26:46

A: Ja.

00:26:47

P: Dat ben ik met je eens.

00:26:49

A: En ik wilde eigenlijk nog even naar het laatste 't laatste puntje gaan en ik ben dus bezig met een brochure een soort van tastbaar eindproduct voor die aannemer. Ja wat denken jullie dat daar, wat vinden jullie dat daar invloed vanuit die bevindingen en het advies dat jullie voor je hebben liggen? Vanuit de dingen die ik heb verteld vanuit mijn onderzoek zijn er dingen waarvan

je zegt laat dat er lekker uit of stop dat er wel in.

00:27:11

P: Nou wat ik interessant zou vinden. Want dat in je presentatie focus hè dat gaf je al aan heel sterk op de veranderingen van cultuur of gedrag binnen de organisatie. Naar aanleiding van de wet privaat kwaliteitsbevordering, omdat die in, in onze beleving veel impact heeft op de handelswijze van de aannemer. Dat je in de presentatie wel heel sterk gaat over de verander cultuur en veranderingen. Maar ik ik denk in zo'n brochure zou ik de toch de de duidelijke link met. Die private kwaliteitsborging terug zou willen zien. Dat je dat er items naar voren komen van. Hè dat en dat vanuit die nieuwe wetgeving. Er zaken zijn waarom je getriggerd wordt om daar echt iets mee te gaan doen. Niet in een algemener zin, willen zien van goh het is toch wel belangrijker dat dat er een vanuit het kwaliteitsperspectief een soort cultuurverandering moet gaan plaatsvinden. Ja. Ik denk ze in hoeverre dat een paar haakjes van een kapstok zijn zeg maar waar die die bedrijven kunnen triggeren en ja heel terecht dat je zegt van ja je hebt natuurlijk ook de branche. Best een hele brede scope hè want ik heb de kleinere aannemers en je hebt de grotere spelers. En af en toe waren er ook heel sterk last van dan wel heel groot zijn hoor want wij wel het gevoel van goh. Door er ook vanuit vanuit bouw-en woningtoezicht wordt dan met zo'n vergrootglas naar ons gekeken. Ja denk ik hoor dat van uitvoerders die kan bouwen en toezicht komt bij ons graag langs. En als er dan iets niet goed is dan maar. Terwijl er als er een kleine aannemer aan de andere kant van de straat werkt er aanleiding ja. Maar hoe meer dan eens kijken wij werken veilig maar heb je daar ziet lopen. Ja nee maar we moesten vandaag alleen even bij jullie controleren. En dat dat wringt zeker bij uitvoerders heel sterk.

00:29:19

A: Ja. Maar ik ben toch met je eens in dat er meer moet worden. Gekoppeld aan zeg maar de inhoud van die van die wet. Alleen in hoeverre wordt het dan een soort van betuttelend verhaal?

00:29:35

R: Je kan gewoon beginnen de brochure met weet u weet u eigenlijk wel wat wel wat de kwaliteit is die die je levert? Ik denk dat het toch de 80 procent van de bedrijven of het is goed om te gaan achter de oren krabben en die nou ja eigenlijk denk ik dat het goed is maar weet ik het weet ik het niet zeker. Ik kan het niet laten zien. En daarnaast dan moet je vanuit je onderzoek op gaan letten dat je niet met het vingertje gaat wijzen.

00:30:05

P: Meer het vragende. Van goh hoe toont u de kwaliteit aan?

00:30:10

R: En dan kun je gewoon globaal zeggen van ja kijk, ik heb onderzoek gedaan en het blijkt dat een aantal zaken op het gebied van kwaliteit naar voren komen. Dan zou je eens kunnen denken aan een soort van veranderstrategie een soort cultuur omslag. Alleen moet je dat niet zo noemen, want dat zijn hele nare woorden natuurlijk voor mensen. Maar met zo'n vraag beginnen is niet gek. Kijk uiteindelijk moet het doel van zo'n brochure volgens mij zijn dat je mensen aan het denken zet over dit thema. Dan geef je ook toegevoegde waarde.

00:30:43

P: En ik denk bij kleinere bedrijven. Maar goed dat is voor mij een wat onbekender vlak. Ik vraag me dan af van hoe zullen die omgaan met termen als 'cultuurverandering' en dat soort dingen. Ik heb zelf het gevoel dat bij kleinere bedrijven, heel anders opgepakt wordt en anders verstaan wordt. Cultuur hoezo? Je heb een directeur en je hebt...

00:31:10

A: En het woord organisatorische verandering? Is dat ook nog te groot?

00:31:15

R: Ja.

00:31:18

P: En je hebt het hele bedrijf. Bij hele kleine aannemers.

00:31:21

R: Dat soort mensen moet je gewoon vragen: van joh borg jij je kwaliteit?

00:31:29

P: En ik denk dat dat aspect, je hebt natuurlijk meerdere vormen van cultuurverandering, meer het opleggende en meer het systeem van goh samen kijken wat zou dat dan voor ons gaan betekenen? En hoe moeten we onszelf gaan veranderen? Ik denk dat juist bij kleinere bedrijven het laatste veel meer voor de hand gaat liggen.

## Appendix IV. Brochure



## DE WET

### 'KWALITEITSBORGING VOOR HET BOUWEN'

#### Deze brochure

Het advies in deze brochure is opgesteld aan de hand van onderzoek naar organisatie veranderingen. Aanleiding voor dit onderzoek is de wet 'Kwaliteitsborging voor het bouwen'. Deze wet is op 14 mei 2019 aangenomen en zal in werking treden op 1 januari 2021.

#### U als aannemer

Deze brochure is bedoeld voor u als middelgrote of grote aannemer. Daarnaast is deze brochure voor hen die verdier willen kijken dan alleen de juridische toepassing van deze wet, omdat de organisatie naar een hoger niveau te tillen in het kader van kwaliteitsborging.

#### Doel van de wet

Het doel van de wet 'Kwaliteitsborging voor het bouwen' is het verbeteren van de kwaliteit in de bouwsector. Om deze beoogde hogere kwaliteit te bereiken, zorgt deze wet ervoor dat het zwaartepunt in de verantwoordelijkheid van deze kwaliteit meer naar de aannemer verschuift.

#### Privatisering

Het middel, dat wordt gebruikt om deze verschuiving van verantwoordelijkheid te realiseren, is dat van privatisering. Privatisering is het principe waarbij een bepaald proces, dat voorheen werd uitgevoerd door overhedsinstanties, wordt overgenomen door de particuliere sector.

#### Wat gaat er veranderen?

De veranderingen die de wet 'Kwaliteitsborging voor het bouwen' met zich mee gaan brengen hebben invloed op de verschillende fasen van bouwprojecten. De verandering in de voorbereidings-, bouw- en gebruiksfase worden kort toegelicht:

#### Voorbereidingsfase

In de fase voorafgaand aan het bouwen van het project, verandert de procedure van het aanvragen van de omgevingsvergunning. Waar voorheen de toetsing vooraf plaats vond aan de hand van het Bouwbesluit, wordt de vergunningsaanvraag vanaf januari 2021 vooral getoetst op het gekozen kwaliteitsinstrument waaraan wordt getoest.

#### Bouwfase

Het gekozen kwaliteitsinstrument wordt gebruikt voor toetsing aan de hand van het Bouwbesluit. Deze toetsing wordt uitgevoerd door een instrumentaanhieder, de partij die tijdens de bouw een borgter aanstelt voor controles. Hiermee vervallen de controles vanuit de gemeente.

#### Gebruiksfase

Ter oplevering van het project, als start van de gebruikers fase, dient een opleverdocument te worden opgesteld. Hierin dient alle informatie aangaande het gerealiseerde project te worden opgenomen, ter overhandiging aan de klant.

JANUARI  
2021

# IS UW ORGANISATIE KLAAR VOOR KOMENDE VERANDERINGEN?

## Onderzoeksresultaten

Uit het onderzoek naar de organisaties van aannemers en de verandering in kwaliteitsborging, zijn een aantal resultaten naar voren gekomen:

## Uw organisatie en kwaliteitsborging

Met de genoemde veranderingen in gedachte, kan een kritische blik op uw organisatie een aanleiding zijn tot aanpassingen. Met het oog op de wetswijziging, kunt u zich het volgende afvragen:

- ◆ Bent u voldoende op de hoogte van de veranderingen in het proces van kwaliteitsborging?

◆ Weet u al hoe u het veranderende proces gaat aanpakken in uw organisatie?

◆ Wie wordt verantwoordelijk in het proces van kwaliteitsborging binnen uw organisatie?

## Maar belangrijker nog:

Wilt u de veranderingen op een breder vlak, voorbij enkel de juridische inpassing, aanpakken?

Lees dan verder! Aan de hand van de onderzoeksresultaten, zal het advies in deze brochure worden uiteengezet.

# WAT DOET U AL AAN KWALITEITS- BORGING?

## Huidige manier van kwaliteitsborging

De huidige manier waarop aannemers hun kwaliteit borgen, is niet toereikend voor de nieuwe wet. De wet vereist een nieuwe manier van werken.

## Kwaliteitsmanager (op de juiste plek)

In de organisaties van aannemers zijn kwaliteitsmanagers van groot belang. Huidige kwaliteitsmanagers zitten echter niet op de juiste plek.

## Aanpassing in organisatie-organogram

De huidige organisatie-organogrammen zouden gebaat zijn bij een aanpassing, waarin de kwaliteitsmanager een andere plaatsing krijgt.

## Strategie en implementatie

Om aanpassing succesvol te laten verlopen, wordt het kiezen van een strategie die past bij de organisatie belangrijk verondersteld. De implementatie van de strategie komt het beste tot zijn recht, wanneer deze geleid wordt door een toegewijde (verander)manager.

## Fasering

# HET ADVIES HOE ORGANISATIES AAN TE PASSEN

Wanneer wordt gesproken van het aanpassen van een organisatie, wordt vaak een fasering voor die aanpassingen gebruikt. De fasering, gevonden vanuit het vakgebied van verandermanagement, is die van de oriëntatie, strategie, implementatie en evaluatie fases.

### Advies per fase

In het formuleren van het onderstaande advies, is gebruik gemaakt van deze fases.

### Het advies

Met de onderzoeksresultaten die eerder al genoemd werden, in gedachte, wordt hier het advies beknopt uiteengezet. Het eerste punt van advies is dat een traject van aanpassingen alleen moet worden gestart, wanneer daadwerkelijk wordt geloofd in het verbeteren van de organisatie.

### Oriëntatie

De fase waarin de organisatie wordt geanalyseerd en uitdagingen worden vastgesteld. Geadviseerd wordt om te laten zien dat de huidige manier van werken niet overeenkomt met de veranderingen die het wetsvoorstel zal brengen. Belangrijk is om te erkennen dat het orgaanogram samenhangt met de manier van werken.

FASES

ORIËNTATIE

IMPLEMENTATIE

EVALUATIE

### Strategie

De fase waarin wordt bepaald welke punten vanuit de oriëntatie kunnen worden aangepast en welke strategie daarvoor wordt toegepast. Geadviseerd wordt om te kiezen voor een machtsstrategie of geplande strategie. Erken dat het huidige organogram een tak of laag mist ten aanzien van kwaliteitsmanagement. Het advies is om de strategie te introduceren, beginnend bij een enkel project met een geïnteresseerde klant.

### Implementatie

De fase waarin doormiddel van verschillende instrumenten de strategie wordt geïntroduceerd en geïmplementeert. Het advies voor aannemers is om eenzijdige implementatie instrumenten te kiezen, passend bij de gekozen strategie. Kies een manager die achter de aanpassingen staat en toegewijd is, om de implementatie hiervan te leiden. Bespreek de aanpassingen op verschillende niveaus in de organisatie om weerstand te voorkomen.

### Evaluatie

De fase waarin de beoogde aanpassingen worden geëvalueerd en vervolg stappen worden gepland om de aanpassingen voort te zetten. Laatste punt van advies is om de aanpassingen (tot dus ver) te evalueren, wetende dat er mogelijk extra werk of manieren van implementeren nodig zijn. Neem de tijd, aangezien verandering ook tijd zal kosten.