Ethical infrastructure in a centralized organizational structure

A qualitative study on how formal and informal systems that are part of BTE Group’s ethical infrastructure are influenced by centralization

Master Thesis

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Name: Julie van Melick
Student number: S4455967
Supervisor: drs. L.G. Gulpers
Second examiner: dr. B.R. Pas
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Chapter 1: Introduction

1.1 Introduction
Business ethics has attracted attention in the business world. This interest in ethics is a response to financial crises, the loss of confidence in the business community and several ethical scandals that have occurred across multiple sectors in society (Rottig, Koufteros & Umphress, 2011; Martin, Kish-Gephart & Detert 2014). One example of these scandals is that of Ballast Nedam, which is a company that operates in the Dutch construction industry. The Ballast Nedam scandal is known as one of the biggest bribery cases in the Netherlands (Houtekamer, 2017). Through various bribes, the organization was able to hide 14 million euros between 1996 and 2003 (Houtekamer, 2017). Many authors researched why and how people make these kinds of unethical decisions within organizations (O’Fallon & Butterfield, 2005; Treviño, Weaver & Reynolds, 2006; Craft, 2013) and how to eventually encourage ethical conduct in organizations (Tenbrunsel, Smith-Crowe & Umphress, 2003; Stansbury & Sonenshein, 2012).

Scholars argue that one way to address ethical decision making in organizations, is through the creation of ethical infrastructures that aim to encourage ethical behaviour and discourage unethical behaviour (Martin et al., 2014). The concept of ‘ethical infrastructures’ has been developed by Tenbrunsel and Smith-Crowe (2008) and it is about ethical structures reinforce the ethical effectiveness of an organization. This ethical infrastructure is composed of three elements, these are: “both formal and informal elements – including communication, surveillance, and sanctioning systems – as well as the organizational climates that support these systems” (Tenbrunsel et al., 2003, p.287). The design and implementation of such an infrastructure within an organization is not an easy task, because all three elements have to align with each other in order for an ethical infrastructure to be effective (Smith-Crowe, Tenbrunsel, Chan-Serafin, Brief, Umphress & Joseph, 2015).

1.2 Research on ethical decision making in organizations
Research that addresses why and how unethical decisions are made in organizations has grown over the course of the past decades (Lehnert, Park & Singh, 2015). Despite this increased attention on ethics in business, there still remains much to be understood about under which circumstances individuals make ethical as well as unethical choices (Kish-Gephart, Harrisson & Treviño, 2010). In literature a distinction is made between individual level and organizational level determinants that influence ethical decision making in organizations (Craft, 2013).
Individual level determinants, like gender and age, have received extended attention in ethical decision-making literature (O’Fallon & Butterfield, 2015; Craft, 2013). However, there is still a call for research on how organizational level determinants influence ethical decision making (Lehnert et al., 2015; Craft, 2013; Smith-Crowe et al., 2015).

The concept of ‘ethical infrastructure’ refers to a set of such organizational level determinants that organizations can utilize in order to encourage ethical behaviour (Treviño et al., 2006). The first element of an ethical infrastructure entails the formal elements, which are defined by Tenbrunsel et al. (2003, p.288) as: “those elements that are documented and could be verified by an independent observer”. These formal systems have been argued to produce both a decrease and an increase in unethical behaviour (Tenbrunsel et al., 2003; Rottig et al., 2011). Smith-Crowe et al. (2015) argue that the primary reason for these mixed results regarding formal systems, is that organizations solely focus on designing and implementing the formal systems, without considering the ethical infrastructure’s informal systems. Currently, little research has been dedicated to these informal systems, which are in contrast to formal systems not documented and directly visible to outsiders but rather felt and expressed through interpersonal relationships (Tenbrunsel et al., 2003; Smith-Crowe et al., 2015).

The design and implementation of an ethical infrastructure is not an easy task because the three elements an ethical infrastructure consist of affect each other and have to align with each other in order for the infrastructure to be effective (Smith-Crowe et al., 2003). Multiple authors argue that in order to understand ethical infrastructures, they need to be researched within the organization they exist in (Tenbrunsel et al., 2003; Lehnert, et al., 2015; Smith-Crowe et al., 2015). These ethical infrastructures are part of an organization and are therefore not isolated from other organizational aspects, such as the organizational structure (Smith-Crowe et al., 2015). Therefore, these elements of an ethical infrastructure could also be affected by elements of the organizational structure. Centralization is such an element of the organizational structure (Mintzberg, 1980) and refers to “the degree to which the authority to make certain decisions is located at the top of the management hierarchy” (Pugh, 1973, p.21). As the ethical infrastructure and the organizational structure can both exist within one organization so do the elements they both consist of, which could mean that the three elements of the ethical infrastructures do not only affect each other, but are also affected by other elements of the organizational structure, such as centralization.
1.3 Research aim
Authors call for ethical infrastructures to be researched within the actual organizations they are manifested in, in order to better understand these ethical infrastructures (Tenbrunsel et al., 2003; Lehnert, et al., 2015; Smith-Crowe et al., 2015). A lot about how the three elements of an ethical infrastructure actually interact in various kinds of organizations remains to be unknown (Smith-Crowe et al., 2015). Furthermore, these elements are not isolated from other organizational aspects, but exist together with them in an organization (Smith-Crowe et al., 2015). However, as many authors emphasize that formal and informal systems have to be researched within organizations in order to truly understand them and their interaction with this organization (Tenbrunsel et al., 2003; Lehnert, et al., 2015; Smith-Crowe et al., 2015) current literature does not provide many insights on what this interaction looks like. Little research has been dedicated to how these other organizational aspects, such as centralization, affect elements of the ethical infrastructure. This research aims to contribute to theoretical insights about the formal and informal systems that are part of ethical infrastructure, especially with regard to the manifestation of these systems in actual organizations, by means of conducting a qualitative case study at BTE group in which is examined how the formal and informal systems that are part of BTE Group’s ethical infrastructure are influenced by centralization at BTE Group.

Within this study there will only be focused on two elements of the ethical infrastructure: the formal and informal systems and not the ethical climate. If one wants to examine a relationship with any type of organizational climate (including an ethical climate), which consists out of organizational members’ shared perceptions with regard to an organizational aspect (e.g. ethics), and any other variables one has to consider the level of analysis issue (Wimbush & Shepard, 1994; Tenbrunsel et al., 2003). This issue has to do with the various levels or departments within the organization upon which these shared perceptions exist (Wimbush & Shepard, 1994). An ethical climate may differ between hierarchical levels, within hierarchical levels, between various departments or within the same department (Wimbush & Shepard, 1994). This thesis does not allow for the extended research that is necessarily to adequately measure the organization’s ethical climate, because each subordinate group could have a different perception of this ethical climate, therefore it is not included in this research.

1.4 Case: BTE Group
The relationship the formal and informal systems, that are part of an organization’s ethical infrastructures, and centralization is researched at the company ‘BTE Group’. BTE Group is a Dutch holding company that operates in the concrete industry. It consists of ten concrete
production plants and one technological research centre. Each separate plant has a distinct specialism, which enables BTE Group to be active in 95% of all construction sectors in Western Europe (“Over ons – BTE Nederland B.V.”, n.d.). In 2013, the company changed its entire structure, going from a decentralized organization to a centralized organization. This change process started in 2013 and was finalized in late 2014. However, as the main structure of the organization has changed, its systems have changed as well (Interview report). Each separate organization used to have its own formal systems regarding ethical decision making. In the now centralized structure, central formal systems regarding ethics are in place (Interview report). Therefore, the organization BTE Group is chosen to investigate the relationship between BTE’s centralized structure and the formal and informal systems that are part of the organization’s ethical infrastructure.

1.5 Research question and research approach

The relationship between the formal and informal systems of an ethical infrastructure and centralization are examined at BTE Group. Subsequently, the main question of this study is formulated as follows: How are the formal and informal systems that are part of BTE Group’s ethical infrastructure influenced by centralization?

This question is examined by means of a qualitative empirical study, conducted through multiple in-depth interviews with employees at BTE Group. These interviews are aimed at the formal and informal systems that are present at BTE Group and how these formal and informal systems are influenced by centralization at BTE Group. Additionally, a document analysis is performed of documents of BTE Group regarding their formal systems and their centralized structure. Finally, two participant observations are conducted as well, in order to attain knowledge with regard to centralization at BTE Group, and the formal and informal systems that are part of BTE Group’s ethical infrastructure.

1.6 Relevance

This study aims to contribute to current literature in two manners. First, current literature does not provide sufficient insights on ethical infrastructures with regard to the interrelatedness of formal and informal systems (Smith-Crowe et al., 2015). However, as most research solely focuses on formal systems there is 1) lack of empirical research on informal systems and 2) lack of empirical research on both formal and informal systems that exist within one organization (Smith-Crowe et al., 2015). Therefore, Smith-Crowe et al. (2015) argue that more
research that focuses on both systems is needed. This research contributes to theory by examining both systems within one organization and one study and broaden the understanding on the interrelatedness of both systems. Secondly, Smith-Crowe et al. (2015) argue that if one wants to design a formal system that encourages ethical behaviour, one should account for the organizational aspects in which these formal systems operate as an ethical infrastructure is not isolated from these other aspects. However current literature does not provide insights regarding the influence of organizational aspects on the ethical infrastructure. Therefore, this study aims to contribute to theory by examining formal and informal systems in combination with an organizational aspect, namely centralization. This allows to broaden the understanding of these formal and informal systems within an organization and help understand their interaction with the organization.

Moreover, the results of this study can provide BTE Group insights with regard to the formal and informal systems that are part of BTE’s ethical infrastructure. These insights can help BTE understand these systems and therefore adapt them if deemed necessarily. Additionally, BTE Group has changed its entire structure, going from a decentralized organization to a centralized organization, as of 2014. This study can also provide some insights on how this centralized structure has actually affected these systems within BTE Group.

Finally, the insights generated in this study can be relevant for society. Understanding this set of determinants of ethical behaviour in organizations, can help organizations create better ethical infrastructures themselves that encourage ethical behaviour instead of promoting unethical behaviour. As organizations play a big part in everyday life, ethical behaviour within these organizations is important. Ethical infrastructures have the potential to encourage ethical behaviour in organizations, therefore it is important to understand how they manifest in these organizations in order to utilize them correctly (Tenbrunsel et al., 2003). The insights of this study could help centralised organizations understand their ethical infrastructures and potentially support them to design these infrastructures more effectively.

1.7 Outline of the thesis
In the following chapter a theoretical framework will be provided with regard to the concepts ethical infrastructure, emphasizing on the formal and informal systems, and centralization with regard to organizational structure. In the third chapter the methodological choices, as well as some ethical considerations of this study will be elaborated on. In the fourth chapter, the results of the analysis will be discussed. Finally, in the last chapter of this research, the conclusions and discussion of this study are presented. In the conclusion the main findings, as well as the
answer to the main research question can be found. In the discussion the limitations, theoretical contribution and recommendations for future research are presented.
Chapter 2: Theoretical framework

2.1 Ethics in organizations

Research on ethics in organizations has developed from a small area to a stand-alone field over the past decades, not only through the number of articles written about it, but also in its legitimacy within the field (Tenbrunsel & Smith-Crowe, 2008). However, as many studies emphasize ethics or morality in organizations (these terms are used interchangeably), few studies attempt to define the concepts (Treviño et al., 2006; Tenbrunsel & Smith-Crowe, 2008). Therefore, within this field there is a fundamental definitional problem (Tenbrunsel & Smith-Crowe, 2008). According to Tenbrunsel and Smith-Crowe (2008) many studies (see: Ferrell & Gresham, 1985; Treviño, 1986; Hunt & Vitell, 1986) do not give such a definition, even though these studies contributed to theory building within the field. Ferrell and Gresham (1985), like many social researchers, state that judging whether something is ethical or unethical is not within the scope of their paper (Tenbrunsel & Smith-Crowe, 2008). They rather concern themselves with determinants that influence ethical behaviour (Tenbrunsel & Smith-Crowe, 2008). Warren and Smith-Crowe (2008) argue that researchers do need to be prescriptive to a certain degree; in order to be able to describe and predict ethical behaviour a researcher must define what is ethical first.

There are authors who do attempt to give a such a definition of ethical behaviour, for example Treviño and Nelson (2011, p. 29) who define it as follows: “behaviour that is consistent with the principles, norms and standards of business practice that have been agreed upon by society”. Jones (1991, p.367) also provides a definition, he defines it as: “an ethical decision is a decision that is both legally and morally acceptable to the larger community. Conversely, an unethical decision is a decision that is either illegal or morally unacceptable to the larger community”. Jones (1991) notes that defining ethical behaviour is difficult, because it stays quite imprecise and relativistic. Just like Treviño and Nelson (2013), Jones (1991) refers to behaviour that is subject to generally accepted moral norms of behaviour. Tenbrunsel and Smith-Crowe (2008) conclude that most research on ethics in organizations is primarily concerned with explaining ethical behaviour within a larger context of social prescriptions.

The theory central in this study, which is that of ethical infrastructures by Tenbrunsel et al. (2003), also does not provide a definition of what is ethical or unethical behaviour. Neither do James (2000) and Ferrell and Skinner (1988) whose theories on how centralization affects ethical behaviour are used in this study. Providing a precise definition of what is ethical is not within the scope of this thesis, however as this research tries to contribute to theory on
infrastructures – which is a set of determinants - aimed at ethical behaviour some indication of what is ethical is considered to be necessarily. Therefore, the definition provided Jones (1991) is used, as his description is consistent with definitions used by other authors in the field of ethics (Tenbrunsel & Smith-Crowe, 2008) and his definition only provides an indication of what is ethical, as it subjected to what is deemed ethical by the larger community.

2.2 Ethical Infrastructures

Ethical infrastructures are one of many organizations level determinants that organizations can utilize to promote ethical behaviour of employees. The concept of ethical infrastructures has been developed by Tenbrunsel and Smith-Crowe (2008) and concerns ethical structures that communicate and reinforce the ethical effectiveness of an organization, or in other words promote ethical behaviour and discourage unethical behaviour. The ethical infrastructure is composed out of three elements: “the (1) formal and (2) informal systems - including communication, surveillance, and sanctioning systems – as well as (3) the organizational climates that support these systems” (Tenbrunsel & Smith-Crowe, 2003, p.287).

Tenbrunsel et al. (2003, p.288) define the formal systems as: “those that are documented and could be verified by an independent observer”. Conversely, the informal systems are defined as: “those indirect signals regarding appropriate ethical conduct that are received by the organizational members” (Tenbrunsel et al., 2003, p.288). Within both systems there are various mechanisms of which the three most prevalent ones are: communication, surveillance and sanctioning mechanisms (Tenbrunsel et al., 2003). These mechanisms can both go through a formal or/and informal system. For example, a communication mechanism, which is aimed at communicating certain standards for ethical behaviour in an organization, can either go through a formal system – like a code of conduct – or through an informal system – like a ‘hallway’ conversation about ethics between colleagues (Tenbrunsel et al., 2003). Formal and informal systems thus differ in their degree of formality; however, both are influenced by the third component of ethical infrastructures: the organization’s ethical climate. The organization’s ethical climate refers to the shared perceptions among employees about for example, certain practices, procedures or the fairness of procedures (Tenbrunsel et al., 2003). An important distinction between the organization’s ethical climate and formal/informal systems is that the two systems entail events or tangible objects, while climates solely consist of shared perceptions of employees (Tenbrunsel et al., 2003).

Tenbrunsel et al. (2003) argue that these three components are related to each other and in order to be effective, need to be consistent with each other. First, the three elements are
argued to be interrelated through embeddedness; the formal systems are embedded within the informal systems, which in turn are embedded within the organizational climates. This ordering of embeddedness is designed to convey the relative strength of the elements (Tenbrunsel et al., 2003). Formal systems are considered to be weaker than informal systems because principles conveyed through formal systems are argued to be less entrenched in an individual’s experience than those conveyed through informal systems (Tenbrunsel et al., 2003). In turn, principles conveyed through informal systems are considered to be weaker than principles conveyed through organizational climates. Second, the three elements need to be consistent with each other in order to be most effective. This entails that formal and informal systems have to align with each other and with the ethical climate in which they exist, and they cannot give contradictory messages (Tenbrunsel et al., 2003).

**Ethical infrastructures and ethical behaviour**

Tenbrunsel et al. (2003, p.286) argue that there is a positive relationship between ethical infrastructures and ethical behaviour. However, this relationship is considered to be curvilinear, rather than linear. A ‘strong’ ethical infrastructure promotes ethical behaviour because the importance of ethics is clearly conveyed in the organization and the infrastructure provides sufficient guidance for ethical behaviour. However, a ‘weak’ ethical infrastructure will not result in more ethical behaviour than an organization with a non-existing ethical infrastructure (Tenbrunsel et al., 2003). Therefore, the complete absence of an ethical infrastructure will result in more ethical behaviour than in an organization that has a ‘weak’ ethical infrastructure in place (Tenbrunsel et al., 2003).

According to Tenbrunsel et al. (2003) the reason for this curvilinearity is the cognitive shift that happens when an ethical infrastructure is in place as compared to the complete absence of such an infrastructure. In an organization without an ethical infrastructure, it is up to the individual to decide what is ethical. In contrast, when an ethical infrastructure does exist, the interpretation of what is ethical is already provided by the organization (Tenbrunsel et al., 2003). Individuals do not rely on their own values but on the values that the organization has already decided upon. Thus, according to Tenbrunsel et al. (2003) the absence of an ethical infrastructure pushes employees to think about ethics. Therefore, the reason to behave ethically is different for individuals in case of a strong or non-existing infrastructure, however, both stimulate higher ethical behaviour than weak infrastructures do. In case of a strong ethical infrastructure, individuals act ethically because the organization has told them it is important to do so. In the case of a non-existent infrastructure, individuals act ethically as they think it is the
right thing to do themselves (Tenbrunsel et al., 2003). Furthermore, the ‘relative strength’ of
the ethical infrastructure suggest how important or unimportant ethical principles are in an
organization; a ‘weak’ infrastructure suggests that these values are unimportant whereas a
‘strong’ infrastructure suggests that they are important (Tenbrunsel et al., 2003). Therefore,
Tenbrunsel et al., (2003) argue that a ‘weak’ infrastructure results in more unethical behaviour
than when the ethical infrastructure is strong, or non-existent.

This study focuses on two of the three elements that are part of the ethical infrastructure; the
formal and informal systems. Both systems contain similar mechanisms, from which the three
most prevalent ones are: (1) communication mechanisms, that convey the ethical principles of
the organization, (2) surveillance mechanisms, which monitor the adherence to these principles
and (3) the sanctioning mechanisms that either reward or punish ethical behaviour (Tenbrunsel
et al., 2003). These mechanisms differ in their formality, and therefore belong within the
organization’s formal or informal systems that are part of the ethical infrastructure. The formal
and informal systems discussed in these next paragraphs refer only to the formal and informal
systems within an organization that are part of the ethical infrastructure.

2.2.1 Formal systems

Tenbrunsel et al. (2003, p.288) define formal systems as: “those that are documented and could
be verified by an independent observer”. They are the tangible objects and events referring to
ethics that are explicitly designed and implemented by the organization (Smith-Crowe et al.,
2015). Tenbrunsel et al. (2003, p.288) define formal systems as those “documented and
standardized, visible to anyone inside or outside the organization”. Many organizations do have
some sort of formal systems in place, the most common one being codes of conduct or codes
of ethics (Ferrell, Freadrich & Ferrell, 2017). Other examples of formal systems are
organizational policies, procedures or training programs aimed at ethical behaviour (Tenbrunsel
et al., 2003). These formal systems often encounter mixed results (Rottig et al., 2011 & Smith-
Crowe et al., 2015): in some studies formal systems did have effects on ethical behaviour
(Treviño & Butterfield, 1998), in some studies mixed-results were found (Sims & Keon, 1999)
and in others no relationship was found at all (Cleek & Leonard, 1998).

Rottig and Koufteros (2006) suggest that more consistent results in research can be
reached, if in further research all three mechanisms – communication, surveillance and
sanctioning mechanisms – are examined together. Most studies solely focus on either one of
the three mechanisms, by for example only considering the code of ethics within an
organization, which is only a formal communication mechanism (Rottig & Koufteros, 2006). But the effectiveness of such a communication system depends on the surveillance and sanctioning systems accompanied by it (Rottig et al., 2011). Rottig et al. (2011) as well as Tenbrunsel et al. (2003) argue that communication systems are more effective if they are accompanied by successful surveillance systems that monitor whether employees act accordingly (i.e. to the norms communicated by the communication mechanism) and by successful sanctioning systems that reward or punish behaviour that is detected by this monitoring. Thus, if one only examines communication systems without the other mechanisms, different results in different organizations can be found because their effectiveness depends on these whether these other mechanisms are successful. Smith-Crowe et al. (2015) provide a different explanation on the varying results of formal systems in organizations, according to them this has to do with most of these studies only considering the formal systems without examining the formal systems they are embedded in. Therefore, within this study all the three mechanisms of both the formal and informal systems are concluded. The three mechanisms or formal systems - both terms are used interchangeably by Tenbrunsel et al. (2003) – are discussed in the next sections.

**Formal communication systems**

First of all, there are formal communication systems, which are: “those systems that officially communicate ethical values and principles” (Tenbrunsel et al., 2003, p.288). Examples of these kinds of systems are mission statements, ethical codes of conduct, training programs and written performance standards (Tenbrunsel et al., 2003). Codes of conduct are most common in organizations, they mainly communicate a company’s philosophy regarding business ethics, sometimes along with a list of expectations or guidelines for employees towards a variety of issues, such as: harassment, whistle-blowing, revealing confidential information, workplace safety, security and substance abuse (Rottig et al., 2011). The guidelines of ethical behaviour that these codes provide, legitimate the discussion of ethical issues within the company (McDonald, 2000). Messages about ethics conveyed in mission statements, written performance statements and training programmes are also argued to help focus employee attention on ethical dilemmas and therefore provide tools for employees to act in an ethical manner (Tenbrunsel et al., 2003).

There is some controversy regarding these formal communication systems. For example, Loughran, McDonald and Yun (2009) argue that some formal systems, like codes of conduct, are used to serve as “window dressing” to hide unethical practices. These codes are used to
achieve an appearance of ethical conduct to outsiders while in reality, the codes are ignored in the inner workings of the organization. However, other authors such as Stansbury and Sonenshein (2012) argue that these codes are actually a good start for an organization to start addressing business ethics.

Rottig et al. (2011) state that just having formal communication systems in place is not enough, there also needs to be some sort of recurrent communication of these codes and other value statements that express the organization’s position on ethical issues. Recurrent communication entails that the ethical codes of an organization should frequently be communicated to organizational members because it is likely to increase their ethical behaviour (Rottig et al., 2011). By making these ethical values available and visible to employees frequently, discussions about these topics may arise among employees. In turn, by means of these discussions the ethical values are reinforced within the organization (Rottig et al., 2011). Smith-Crowe et al. (2015) similarly state that mechanisms – such as a training – that allow for interactive communication of these codes and ethical values, and again by starting the discussing about them, could help guide ethical behaviour in certain situations.

**Formal Surveillance and Sanctioning Systems**

Besides the communication of ethical values, an organization needs to have a system in place that can detect ethical as well as unethical behaviour, and eventually punish or reward this behaviour (Treviño, 1992). Formal surveillance systems are defined as: “the officially condoned policies, procedures, and routines aimed at monitoring and detecting ethical and unethical behaviour” (Tenbrunsel et al., 2003, p.288). Formal sanctioning systems are: “the official systems within the organization that directly associate ethical and unethical behaviour with formal rewards and punishments” (Tenbrunsel et al., 2003, p.288). Both systems are distinct from another, however they are closely aligned (Tenbrunsel & Messick, 1999). The first mechanism secures whether the ethical values of the organization are complied with and the latter mechanism acts on the basis of this compliance. Therefore, both systems are discussed together in this section.

Formal surveillance systems aim to monitor and detect ethical or unethical behaviour. Examples of these formal surveillance systems are ethics hotlines, ethics help desks, ethical officers, ethics committees and ethical training, which could be used as a medium to monitor where the ethics of employees stand (Rottig et al., 2011). Hotlines and ethical officers are manners that organizations can utilize to report ethical behaviour (Tenbrunsel et al., 2003).
Formal sanctioning systems concern the punishment or reward of behaviour if detected by the surveillance systems. As O’Fallon and Butterfield (2005) concluded in their review on ethical decision-making literature, the impact of rewards and sanctions is clear. Rewarding unethical behaviour tends to reinforce such behaviour, while effective sanctioning systems tends to decrease unethical behaviour (O’Fallon & Butterfield, 2005). Tenbrunsel and Messick (1999) argue that if a sanctioning system is to be effective, it needs to have an effective surveillance system. A surveillance system increases the chance of detection of unethical behaviour, and sanctioning systems then assure that such behaviour will be punished. A surveillance system also increases the likelihood to detect ethical behaviour and in turn increase the opportunity to reward this kind of behaviour, and so reinforce it (Treviño, Butterfield & McCabe, 1998). Rottig et al., (2011) suggest that if organizations use formal surveillance and sanction systems, individuals will become more sensitive and alert to ethical situations.

2.2.2 Informal systems

Even though formal systems are the most visible component, they only represent a portion of the entire ethical infrastructure. The informal systems, in which the formal systems are embedded, play a significant role with regard to ethical behavior (Tenbrunsel et al., 2003). Informal systems are defined as: “those indirect signals regarding appropriate ethical conduct that are received by the organizational members” (Tenbrunsel et al., 2003, p.288). These informal systems are, conversely to formal systems, not documented and directly visible to outsiders but rather felt and expressed through interpersonal relationships (Tenbrunsel et al., 2003; Martin et al., 2014). They entail the subtle messages that are received about the ethical norms, or what is really considered appropriate by the organization and its members (Tenbrunsel et al., 2003). Examples of these subtle messages are informal conversations about ethics, or pressure exerted by colleagues to behave in an ethical or unethical manner (Tenbrunsel et al., 2003). Although informal systems are different from informal systems in their visibility, they do deliver ethical values through the same three mechanisms, which are: communication, surveillance and sanctioning systems.

Informal communication systems

Informal communication systems can be defined as: “those unofficial messages that convey the ethical norms within the organization” (Tenbrunsel et al., 2003, p.291). Ethical principles are communicated informally through various ways, examples are: “hallway” conversations about ethics, informal training sessions in which employees are “shown the ropes” and verbal or
nonverbal behaviours. Informal communication systems have the ability to display the importance of ethics within an organization and can therefore impact the extent to which formal communication systems are taken seriously (Tenbrunsel et al., 2003).

Treviño, Hartman and Brown (2000) argue that organizational leaders can play an important part here; through their actions the importance or unimportance of organizational ethics can be communicated. For example, at the company Enron, executives did not act according to their own formal code of ethics, which allowed them to hide millions. The behaviour of these officials sent a powerful message to other employees about the relative unimportance of ethics in decision making (Tenbrunsel et al., 2003). Another way to communicate ethics is through organizational stories, for example about organizational leaders and their ethical wrongdoing or their ethical behaviour. These kinds of stories informally communicate the relative importance of ethics within an organization (Tenbrunsel et al., 2003).

Additionally, Tenbrunsel et al. (2003) argue that informal communications about the importance of ethics can impact whether or not formal communications systems are taken seriously by organizational members. According to Treviño et al. (2000) organizational leaders should show their own morality through visible actions and by communicating regularly about ethics, as well as by holding others accountable to the formal systems that are in place to reinforce or sanction ethical behaviour. Through this behaviour organizational leaders display whether ethics are taken serious or not within the organization.

**Informal Surveillance and Sanctioning Systems**

Tenbrunsel et al. (2003) argue that in order for these informal communication systems to be effective, there must be an accompanying informal surveillance system. Informal surveillance systems are defined as: “*those systems that monitor and detect ethical and unethical behaviour, but not through the official channels of the formal surveillance systems*” (Tenbrunsel et al., 2003, p.292). The behaviour that is informally observed through these systems is often followed by sanctions delivered through unofficial means: the informal sanctioning systems. These systems are defined as: “*those systems within organizations that directly associate ethical and unethical behaviour with rewards and punishments and unlike formal sanctioning systems, they do not follow official organizational channels*” (Tenbrunsel et al., 2003, p.292). Both informal systems have a similar relation with each other as their formal counterparts do, therefore they are discussed together as well.

Informal surveillance systems can be distinguished from their formal counterparts, as they are carried out by organizational members, but do not go through official channels when
reporting ethical behaviour (Tenbrunsel et al., 2003). Unofficial channels refer to those channels that are not established within the company, these could be personal relationships (e.g. between peers) or even extra-organizational channels (e.g. the police or the government) (Tenbrunsel et al., 2003). Informal surveillance systems may best be resembled as an informal network of organizational members who observe and report ethical or unethical behaviour through an informal chain of command of which the origins might be known or unknown to them (Tenbrunsel et al., 2003).

The informal sanctioning systems differ from formal sanctioning systems similarly as informal surveillance systems do, they also do not follow official organizational channels. Informal sanctioning systems take the form of group pressure, or as perceived consequences that one might experience when behaving in a certain ethical or unethical matter or even physical harm (Tenbrunsel et al., 2003). Organizational members might choose to punish if someone acts in a certain ethical or unethical way (e.g. deviate from the norm in that group) by excluding them from group activities, or even ignore them completely (Tenbrunsel et al., 2003; Feldman, 1984).

2.3 Centralization

Centralization refers to: “the hierarchical levels within an organization, which influence the authority one has to make certain decisions” (Ferrell & Skinner, 1988, p.104). According to Mintzberg (1980) centralization (or decentralization) has to do with the extent to which power over decision making in the organization is dispersed among its members. Baum and Wally (2003) argue that decision power can refer to decisions regarding policies, tasks or behaviour within an organization. Furthermore, centralization and decentralization can be described as each other’s antonym. Pugh (1973, p.21) defines centralization as: “the degree to which the authority to make certain decisions is located at the top of the management hierarchy”. Thus, in centralized structures, power relations are vertical, with the authority to make decisions in the hands of a small group at the top level of the organization (Pfeffer, 1981; Corwin, 1975; Ferrell & Skinner. 1988). Conversely, within decentralized structures the authority to make decisions is allocated to lower levels in the organization (Ferrell & Skinner, 1988).

Various authors who have described centralization in organizations, use the terms: authority, decision-making power and hierarchy (see: Mintzberg, 1980; Pugh, 1973; Ferrell & Skinner, 1988; Baum & Wally, 2003). Hage and Aiken (1967) combine all three terms within their conceptualization of centralization, therefore their study will be used to further describe this concept. According to Hage and Aiken (1967) centralization within an organization can be
measured along two lines: 1) participation in decision making and 2) the degree of hierarchy of authority. Participation in decision making entails the number of employees of various positions within an organization that can engage in decisions about the allocation of resources and the determination of organization policies (Hage & Aiken, 1967). The degree of hierarchy and authority has to do with how power is distributed among positions within the organization (Hage & Aiken, 1967). They argue, that if most employees are allowed to make their own decisions, there is low reliance upon superior managers, and so low reliance on the hierarchy of authority (Hage & Aiken, 1967). However, as an organization becomes more centralized, employees tend to have lesser authority over their decisions as that authority turns to a superior in command (Hage & Aiken, 1967).

Many scholars have discussed why organizations should, or should not, opt for centralization (e.g. Child, 1972; Mintzberg, 1980). Weber (1947) for example argues that centralization leads to higher efficiency in the workplace and more specialisation. A study of Baum and Wally (2003) found that centralization is linked to a higher speed of decision making. Linstead, Fulop and Lilley (2009) stated that centralization allows for greater overall control and the benefits of economies of scale. On the other hand, within centralised organizations, resources and information are in the hands of top management, allowing them to make important decisions, which keeps other employees away from making these decisions, leaving these employees feeling left out or even demotivated to display certain behaviour (Child, 1972). Altogether, centralization has the potential to affect several aspects within an organization. In the following sections centralization and its relation to the overall organizational structure, as well as its effect on ethical behaviour in the organization will be discussed.

2.3.1 Organizational structure

Many scholars have discussed the topic of centralization and its relationship with organizational structure (Child, 1972; Mintzberg, 1980). Organizational structure is considered to be a set of factors that has the potential to influence behaviour of organizational members (Ambrose & Schminke, 2003; Ferrell & Skinner, 1988; James, 2000; Craft, 2013). Daft (1986, p. 212) defines organizational structures as followed: “the formal reporting relationships, including the number of levels in the hierarchy, the span of control of managers and supervisors, and the communication within the organization across departments”. It is important to note, that an organization’s structure and an organization’s ethical infrastructure, do overlap but are not the same. Within an organization’s structure the same systems, relationships, communications can exist as in the ethical infrastructure. However, within the ethical infrastructure not all elements
of the organization’s structure exist and vice versa. The ethical infrastructure consists out of elements that are solely focused on ethical behaviour, as discussed in section 2.2, while in an organizational structure, there are elements (e.g. formal reporting relationships, communication within departments) that focus on subjects other than ethics. Furthermore, informal systems such as ‘gossip’ and ‘hallway conversations’ within a department do exist in the ethical infrastructure but are not typically related to an organizational structure. Centralization is a concept that is usually related to the organizational structure (Child, 1972; Mintzberg, 1980)

Mintzberg (1980) argues that the extent to which an organization is (de)centralized determines the design of the decision-making system within the organizational structure. Therefore, the extent of (de)centralization is a parameter of the design of the decision-making system within the organizational structure (Mintzberg, 1980). Furthermore, Mintzberg (1980) distinguishes two groups of (de)centralization: vertical (de)centralization and horizontal (de)centralization within the organizational structure. Vertical decentralization refers to: “the extent to which formal decision-making power is delegated down the chain of line of authority” (Mintzberg, 1980, p.326). Horizontal decentralization refers to: “the extent to which power flows informally outside this chain of line authority” (Mintzberg, 1980, p.326). Thus, there are two ways through which centralized or decentralized decision making can go, this can either be through formal lines of authority or informal lines of authority. The formal lines of authority are lines that are intentionally designed in a centralized manner (or a more decentralized manner), informal lines of authorities refer to those lines that are not intentionally designed at all but do exist in the organization as well in a centralized or decentralized manner.

2.3.2 Centralization and ethical behaviour

Centralization, as designed in the organizational structure, has to potential to influence ethical behaviour. Ferrell and Skinner (1988) as well as James (2000) have studied the relationship between centralization and ethical behaviour. Ferrell and Skinner (1988) examined if the perceived ethical behaviour of employees is influenced by centralization at three organizations. At one of these organizations, significant evidence was found that centralization was related to higher perceived ethical behaviour (Ferrell & Skinner, 1988). James (2000) also argues that the authority and responsibility which one has to make decisions, which is affected by the extent that an organization is centralized or decentralized, is related to ethical behaviour of employees. However, according to him centralization has the potential to rather discourage ethical behaviour (James, 2000).
Within centralized organizational structures, decision-making responsibility is concentrated at top management, the rules, policies and procedures and decisions that management makes, dictates the behaviour of employees (James, 2000). Therefore, in centralized structures the authority to make certain ethical decisions does not necessarily lie with the same person who executes the action that has these ethical outcomes (James, 2000). This can encourage unethical behaviour in two different manners. The first manner has to do with the extent to which employees ‘feel’ a certain responsibility over their actions. Within centralized structures employees who face ethical dilemmas cannot always influence the outcomes of these dilemmas because they simply have no authority or control over decision-making processes that have to be made with regard to these dilemmas (James, 2000). Therefore, employees who feel compelled to act a certain way, either because they are told to do so (e.g. by a supervisor or procedure) or because they have no authority to choose ethical alternatives, are more likely to act unethical since they feel less responsible for the outcomes of their actions. Secondly, within centralized structures it is often the case that not all organizational members are aware of the ethical implications of a decision, only the employees that face them do (James, 2000). This could lead to the employees with relevant knowledge about the ethical aspects of a particular decision, not having the authority to make these decisions, because that authority lies higher in the corporate hierarchy (James, 2000). According to James (2000), this could encourage unethical behaviour as well, because decisions are made without considering the ethical implications of that decision, simply because there was no knowledge of these implications by the actual decision maker. James (2000) argues one should beware that organizational members have responsibility over the actions that have ethical consequences, because this encourages ethical behaviour in organizations.

2.4 Formal and informal systems and centralization
In this chapter theories regarding ethical behaviour in organizations, ethical infrastructures, centralization and organizational structure are discussed in order to construct a theoretical framework for researching the relationship between centralization and the formal and informal systems that are part of an organization’s ethical infrastructure.

First of all, Tenbrunsel et al. (2003) whose theory on ethical infrastructures is central in this study does not provide a definition of what is ethical, it mainly concerns the determinants – the elements of an ethical infrastructure – of ethical behaviour. The definition of what is ethical provided by Jones (1991) is used within this study, as it is relativistic and subjected to what is ethical according to the larger community. Moreover, according to Tenbrunsel et al.
The elements of an ethical infrastructure can be such a set of determinants of ethical behaviour most effectively if all three elements are aligned with each other, which means that they should not provide contradicting signals regarding ethical behaviour. The three elements of an ethical infrastructure are related through embeddedness; the formal systems are embedded in the informal systems and these are in turn embedded into an organization’s ethical climate.

The formal and informal systems, which are central in this study, can be conveyed through three mechanisms: communication, surveillance and sanctioning mechanisms. Rottig et al. (2011) state similarly to Tenbrunsel et al. (2003) that the effect of these mechanisms depend on each other, for example, communication mechanisms are most effective if they are accompanied by successful surveillance and sanctioning mechanisms. Rottig et al. (2011) add a fourth formal mechanism, which is that of recurrent communication.

Furthermore, centralization has been discussed as an aspect of the organizational structure. Within the organizational structure there is a decision-making system which can either be centralized or decentralized (Mintzberg, 1980). The organizational structure is not the same as the ethical infrastructure, however they can overlap. For example, certain formal reporting relationships, such as a manager that is formally appointed as an ethics officer but simultaneously is manager over a department. This manager is part of the organizational structure because the team he manages formally reports to him, however this very same manager is also part of a formal system that is part of the ethical infrastructure. Perhaps if centralization affects the organizational structure and thus the authority a manager has to make certain decisions, it could also affect the authority one has to make certain ethical decisions. Moreover, if certain decision-making processes are designed in a centralized matter this could mean that only a handful of managers are for example allowed to formally sanction unethical behaviour, while more employees are allowed to monitor ethical behaviour. This division of sanctioning and surveillance task affects what the ethical infrastructure looks like and perhaps how effective these systems are, because all three systems depend on each other (Rottig et al. 2011). Altogether, centralization could affect the elements of the ethical infrastructure in various ways, however as it affects one mechanism or system it could also affect another systems or mechanism as all are interrelated.
Chapter 3: Methodology

In this chapter provides an overview of the different choices regarding the research method of this empirical study. In section 3.1 the research strategy of this study is discussed. Subsequently, in section 3.2 the research design will be elaborated on and a case description is presented. In section 3.3 the interview guide is discussed and in section 3.4 the data-analysis method is outlined. In section 3.5 the quality of the study will be examined and finally in section 3.6 some ethical considerations regarding this study are elaborated on.

3.1 Research strategy

This objective of this research to contribute to theoretical insights about the formal and informal systems that are part of ethical infrastructure, especially with regard to the manifestation of these systems in actual organizations, by means of conducting a qualitative case study at BTE group in which is examined how the formal and informal systems that are part of BTE Group’s ethical infrastructure are influenced by centralization at BTE Group. The associated research question is formulated as: How are the formal and informal systems that are part of BTE Group’s ethical infrastructure influenced by centralization?

To answer this research question, theory-oriented research was conducted. The purpose of theory-oriented research is to contribute to existing theory with regard to a certain topic (Verschuren, Doorewaard, Poper & Mellion, 2010). This research aims to contribute to theory on ethical infrastructures in two manners. First, this study contributes to theory by examining both formal and informal systems within one organization in order to attain more insights on how they interact. Secondly, this study aims to generate insights about how formal and informal systems are affected by the organization they are manifested in, by examining how centralization – an aspect of the organizational structure – affects both systems.

Qualitative research was conducted in order to attain these insights on ethical infrastructures, because qualitative research is best suited to explore formal and informal systems (that are part of the ethical infrastructure) as well as centralization and the relationship between them within this study. Qualitative methods typically produce detailed, rich in-depth data about people’s experiences in their own terms (Labuschagne, 2003). Detailed, rich-in-depth data is necessary in order to study concepts such as informal systems, which is an essential concept in this study. These systems are not documented or directly visible, but rather consist out of indirect messages given and perceived by organizational members, who each ‘feel’ and interpret these messages (Tenbrunsel et al., 2003). Furthermore, centralization and the way
relates to these formal and informal systems is relatively unknown, therefore it is necessarily to capture the ‘how’ question - ‘how’ do these concepts relate with each other - which can best be investigated by securing rich descriptions of the phenomenon. Qualitative research methods allow for an emphasis on processes and meanings that are rigorously examined, but not measured in terms of quantity, amount or frequency (Labuschagne, 2003, p.100). These processes and meanings are also necessarily capture ‘how’ both systems are affected by centralization. Qualitative research methods are most fit for answering these kinds of questions, as it allows for deep understanding of a phenomenon through these rich descriptions (Symon & Cassell, 2012).

Current literature provides extensive research on the concepts central in this study, which are the formal and informal systems that are part of an ethical infrastructure and centralization (see: Mintzberg, 1980; James, 2000; Tenbrunsel et al., 2003; Craft, 2013; Smith-Crowe et al, 2015) However, there remains much to be understood about the relationship between formal and informal systems and centralization. This study focuses on the relationship between concepts. Therefore, previous literature on centralization as well as on formal and informal systems (that are part of the ethical infrastructure) will be used as it allows to measure these constructs more accurately (Eisenhardt, 1989). However, as there is little knowledge about the relationship between these concepts, an indicative approach is most suited to examine this relationship. This research can therefore be described as inductive as empirical data regarding this relationship will be directive in exploring it (Eisenhardt & Graebner, 2007). Eisenhardt (1989) argues that remaining open towards data, is crucial in contributing to theory.

3.2 Research design
The research design of this study entails that of a single case study. A case study concerns a specific instance or manifestation of the phenomenon to be studied (Swanborn, 2010, p.21). According to Yin (1984, p.89) the use of a case study is appropriate when: “an empirical inquiry must examine a contemporary phenomenon in its real-life context, especially when the boundaries between phenomenon and context are not clearly evident”. The phenomenon studied in this case in the relationship between centralization and formal as well as informal systems, within one single organization: BTE Group. Moreover, a case study presents a unique opportunity to focus on social interactions, and the meanings and interpretations that participants in within the specific case attach to each other and each other’s acts (Swanborn, 2010). Informal systems, which is an essential part in this study, rely on social interactions and interpretations of these interactions, therefore a case study seems the most appropriate to study
this phenomenon. Furthermore, as formal and informal systems interact these meanings that
participants attach to each other acts could provide help in understanding this interaction. Additionally, it can help gain insights in the perceived importance of certain formal systems, as they can depend on informal systems, which in turn can help understand the interaction between both systems.

Case studies are considered to be rich as they provide opportunity for empirical descriptions of phenomena, that are typically based on a variety of data sources (Yin, 1994). Therefore, case studies can accommodate various data sources, including interviews, archival data and observations (Eisenhardt & Graebner, 2007). Within this study, three methods of empirical data collection are used, these are; 10 open-ended interviews with employees of BTE Group, documents of BTE Group and participant observations of two training sessions. Using difference sources of data within one case, gives the researcher opportunity to ascertain whether evidence from these different sources converges into similar facts, or contradictory stories (Yin, 1984). Before elaborating on these three data methods, a case description will be provided.

### 3.2.1 Case description of BTE Group

This empirical study is conducted at BTE Group. BTE Group is a company that operates in the Dutch concrete industry. BTE stands for ‘Bouw Toeleveringsindustrie Europa’ (translated to English this is ‘Construction Ancillary Industry Europe’). The organization consists out of nine concrete production plants in the Netherlands, two production plants in Germany, and one technological research centre. Each of these factories has a distinct specialism, which enables BTE Group to be active in 95% of all construction sectors in Western Europe. BTE Group currently employs over 1000 people, divided over the different plants, research centre and head office (“Over ons – BTE Nederland B.V.”, n.d.).

BTE operates in the construction industry market, which was affected by the global financial crisis in 2008. The entire construction market in the Netherlands decreased about 20% from 2008 until 2014 (CBS, 2019). Which is one of the reasons why top management of BTE decided to start a process of centralization in 2013, which was formally finalized in 2014. In 2012, BTE Group operated with a decentralized structure, in which all staff departments (procurement, finance, sales, ICT, HRM and QHSE) were regulated at plant level. Also, BTE Group had four more factories, which were closed during 2014 and 2015 (Interview report). Before the centralized structure was in place, the different factories in BTE Group all had authorization over their own staff departments, currently these functions (procurement, finance, sales, ICT, HRM and QHSE) are regulated from head office. So, within BTE, responsibilities
over certain decisions have been reallocated from employees at plant level to management at head office.

Furthermore, BTE Group is currently trying to develop a ‘BTE culture’ in which employees across all plants, as well as different departments, feel that they are part of the organization BTE instead of the just plant that they are working in. At BTE’s head office, employees feel as if there has not been an established BTE culture among all factories. Head office feels as if this is the same with BTE’s organizational ethics (Interview report). Currently, they do have a code of ethics in place that applies to all members of BTE Group (Interview report). However, before the centralized structure, all factories had their own systems of ethics, in some cases this was a code of ethics, while in others there were other systems in place.

This case is chosen as the object of this study because this organization has a centralized structure that impacts the decision-making authorities and responsibilities throughout BTE Group. Additionally, before the centralized structure was in place, most ethical systems used to be at plant level, while currently BTE Group holds these systems from head office level. Due to the centralization process BTE had to align various systems throughout the organization, this is also the case for the ethical systems present at BTE. (Interview report).

3.2.2 Semi-structured interviews

The first method of data collection used in this study are open ended interviews with employees of BTE Group that operate in the level called: ‘management team’. Data gathered through open-ended interviews are: “direct quotations from people about their experiences, opinions, feelings and knowledge” (Labuschagne, 2003, p.101). Furthermore, open-ended questions allow for richer answers and elaborations on participants own actions and experiences (Labuschagne, 2003). The interviews were conducted in order to attain data about the formal and informal systems at BTE Group and how the centralized structure at BTE Group influences these systems according to the experiences, feelings and knowledge of these employees. Additionally, open-ended interviews are deemed as reliable gateways into what is going on in organizations including how decisions are made, or how certain processes are conducted (Symon & Cassell, 2012). By means of open-ended interviews, these processes of how decisions are made, which in turn are influenced by centralization, can be unveiled.

Furthermore, the interviews were semi-structured, which involves using a set of prepared open-ended questions that allow for spontaneous and in-depth responses (Baumbusch, 2010). Semi-structured interviews also provide the opportunity to gain insights about the constructs that where developed a priori to the interviews. This kind of interviewing allows
researchers to change the order of questions based on the responses and ask follow-up questions. The structure of semi-structured interviews facilitates the sorting, analysis and comparison of the data, while the openness gives opportunity for new perspectives and questions to arise (Alvesson & Ashcraft, 2012). This interview method is appropriate for this study, because it allows to attain data about the formal and informal systems and centralization structure at BTE Group, while at the same time it could help gain new insights of the relation between centralization and both systems, that have not yet been disclosed in literature.

Sample selection of participants

In qualitative research the choice of research participants is often constrained by what is practical (Symon & Cassell, 2012). Therefore, a choice had to be made in who to include in this study, to be able to meet the research aim (Saunders & Lewis, 2012). Eventually, a total of 10 interviews is conducted. The research participants have been chosen by the means of the researcher’s personal judgement, which indicates that a non-probability sampling technique has been used (Symon & Cassell, 2012). This sampling technique improves reaching the research objective, because the chosen participants should have relevant knowledge about the social phenomenon that is the object of this study.

Furthermore, the participants of the conducted interviews operate at the plants that reside in the Netherlands, and not Germany. The reason for this is the language barrier, the researcher does not have adequate knowledge of the German language to be able to conduct a proper interview. English is a language that is mutually spoken by the interviewer and employees from the German plants and could be a potential solution for the language barrier. However, according to Potter and Wetherell (1987) the use of a language, that is not a participant’s mother tongue, can form a barrier because participants might not be able to fully express themselves. Therefore, only participants from the Dutch plants were considered for the interviews.

Finally, all chosen participants operate within the same management layer (this layer is called: ‘management team’) across the eight Dutch plants. This layer of managers is dispersed among different plants and head office throughout BTE Group, some managers operate directly from head office, while other managers are mostly responsible for tasks related to a specific plant. This management layer is chosen because it is the layer that functions directly below top management and entails a variation of employees that have worked at BTE Group before and after the centralization. Moreover, the managers in this layer were expected to have substantial knowledge about the centralization process based on conversations with employees.
at BTE Group (Interview report). Eisenhardt & Graebner (2007) point that it is important to choose participants who view the phenomenon to be studied from different perspectives, therefore almost all chosen participants operate in a different plant or different department at headquarters. Additionally, these participants fulfil different tasks based on their position either at headquarters or at the plants, headquarter positions are more about policy making while plant positions are more about policy execution. Furthermore, a combination of participants who have worked at BTE Group before and after the centralization have been chosen to limit the biases of respondents who might have negative or positive feelings towards the change process that resulted in a centralized structure. In summary, six participants have operated in the decentralized structure before 2013, and four have only been hired after the centralization process implemented, which is 2014. Furthermore, six participants work at plants, while four participants work at BTE headquarters. A table of the participants can be found below. In this table, the job positions of the interviewees are not disclosed as well the name of the department/plant where they operate because of their anonymity.

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Plant/Department</th>
<th>Before or after Centralization</th>
<th>Duration Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviewee 1</td>
<td>MT manager central department</td>
<td>After</td>
<td>55 min.</td>
</tr>
<tr>
<td>Interviewee 2</td>
<td>MT manager central department</td>
<td>Before</td>
<td>68 min.</td>
</tr>
<tr>
<td>Interviewee 3</td>
<td>MT manager plant</td>
<td>Before</td>
<td>54 min.</td>
</tr>
<tr>
<td>Interviewee 4</td>
<td>MT manager plant</td>
<td>Before</td>
<td>47 min.</td>
</tr>
<tr>
<td>Interviewee 5</td>
<td>MT manager plant</td>
<td>Before</td>
<td>53 min.</td>
</tr>
<tr>
<td>Interviewee 6</td>
<td>MT manager plant</td>
<td>Before</td>
<td>55 min.</td>
</tr>
<tr>
<td>Interviewee 7</td>
<td>MT manager central department</td>
<td>After</td>
<td>50 min.</td>
</tr>
<tr>
<td>Interviewee 8</td>
<td>MT manager plant</td>
<td>After</td>
<td>55 min.</td>
</tr>
<tr>
<td>Interviewee 9</td>
<td>MT manager plant</td>
<td>After</td>
<td>47 min.</td>
</tr>
<tr>
<td>Interviewee 10</td>
<td>MT manager central department</td>
<td>Before</td>
<td>73 min.</td>
</tr>
</tbody>
</table>

Table 3.1 Overview of interviewees

3.2.3 Document analysis
The second research method used in this study is a document analysis. Documents play an important role in organizational life; they provide details of policies, procedures, prospective plans and even records of events (Lee, in Symon & Cassell, 2012). Furthermore, documents are considered to be stable, since the researcher cannot influence them, whereas in the case of an interview the researcher does influence the data, thus documents provide useful additional data of an organization (Swanborn, 2010). Formal systems are often formalized in documents,
(Tenbrunsel et al., 2003). Therefore, documents of BTE Group are analysed as well. Moreover, these documents can show how these formal systems are initially designed.

Selection of documents
The collection of documents can be difficult, as not all documents are accessible and a researcher does not know how many documents there are within an organization that contain useful data for answering the research question (Lee, 2012). Therefore, through an iterative process documents were gathered, mainly through investigating those documents that are mentioned by participants during the interviews. An overview of the analysed documents can be found in table 3.2 below. Furthermore, according to Lee (2012) within case studies only those documents are of importance if they correspond with the phenomenon to be studied. Therefore, only those documents are considered that provide data about formal and informal systems as well as centralization or BTE’s organizational structure. Additionally, these documents had to be in place within BTE Group from the year 2013, as this is the year that the process of centralization started. In summary, only those documents are considered that either cover one, or more of the following topics: ethics, communication of ethical values sanctioning of behaviour, surveillance of behaviour, BTE Group its organizational structure and centralization.

<table>
<thead>
<tr>
<th>Source</th>
<th>Reference in text</th>
<th>Length of document</th>
<th>Ethics</th>
<th>Communication of ethical values</th>
<th>Sanctioning of behaviour</th>
<th>Surveillance of behaviour</th>
<th>BTE’s organizational structure</th>
<th>Centralization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bedrijfsreglement BTE</td>
<td>BR19</td>
<td>22p</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BTE Business Guide</td>
<td>BTBG</td>
<td>14p</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poster 1</td>
<td>P1</td>
<td>1p</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poster 2</td>
<td>P2</td>
<td>1p</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poster 3</td>
<td>P3</td>
<td>1p</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Handout introductie training BTE</td>
<td>OBIT</td>
<td>2p</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organogram BTE</td>
<td>OG19</td>
<td>1p</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Visiedocument BTE 2018</td>
<td>BTVD</td>
<td>15p</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MVO jaarverslag 2017</td>
<td>ACR</td>
<td>21p</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3.2 Overview of selected documents
3.2.4 Participant observation

The final research method used in this study is participant observation, which is a specific approach of gaining knowledge, based upon direct contact between the researcher and the social objects of interest (Brannen & Oultram, in Symon & Cassell, 2012). Within participant observation “the researcher works as a mode of inquiry through the direct experience of circumstances and events; the researcher becomes the research instrument”, this allows the researcher to capture a sense of the dynamics in the organization at first hand (Brannen & Oultram, 2012, p.296). Formal systems in which certain ethical values are communicated are often training sessions for employees provided by the organization (Tenbrunsel et al., 2003). BTE Group provides various training sessions for employees in which organizational ethics are discussed as well. Therefore, participant observation of these training sessions is a manner to attain certain data with regard to both formal and informal systems at BTE Group.

There are various modes of participation in which the researcher can engage, in this study the researcher took the role of participant as observer which is characterized by the researcher openly adopting the role of both participant as well as observer (Brannen & Oultram, 2012). This role is chosen because the researcher was not able to fully participate in both sessions. The first session was an introduction training for employees who at least had been working for three months at BTE and thus already had some knowledge about the organization. The second session was meant for employees who have managerial functions within the different plants, and therefore managers who had severe experience of these functions. The researcher did not have adequate knowledge of BTE or experience from being employed at BTE to be able to fully participate in both sessions. Moreover, the role of the researcher was known by other employees who were present at the sessions as she was introduced as a researcher by the trainers of both sessions, which is also why complete participation was not possible.

A field report has been written about the observation of both training sessions by the researcher (see Appendix V), within this field report objective observations as well as subjective feelings of the researcher are recorded (Spradley & McCurdy, 1980). This field report is based on notes that were taken by the researcher during both sessions. For each observation an observation protocol has been established, these can be found in Appendix II. During the observations it was of importance that the researcher had a heightened sense of awareness (Spradley & McCurdy, 1980). The observations are considered to be semi-structured which entails that some concepts are already somewhat defined before the observations by means of literature (Bleijenbergh, 2015). These already operationalized concepts, which can be found in
Observations

BTE provided two training sessions in which the researcher was allowed to participate. The first training session is called “introductie training BTE” (in English: ‘introduction training BTE’), and the second training is called “Leiderschap module I” (in English: “Leadership module I’). The first training session is meant for all employees who start working for BTE Group. BTE Group aims to provide these training sessions to all employees within the first three months of employment. The training session is given on different locations, the introduction training that was observed for this research was at the plant “de Meteoor” in Heumen on the 10th of May 2019 from 1 p.m. until 4 p.m. The second training session was meant for employees who function as ‘Teamleider’ (in English: Team Leader) in the production of the different plants. The training was the kick-off of a module in which these employees are trained to further develop their leadership skills. The training session was given at the headquarter of BTE in Dodewaard at the 10th of May, 2019 from 8 a.m. until 10 a.m.

<table>
<thead>
<tr>
<th>Observation</th>
<th>Duration observation</th>
<th>Pages of notes (written, not typed)</th>
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<tbody>
<tr>
<td>Observation 1</td>
<td>120 min</td>
<td>10 pages</td>
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<tr>
<td>Observation 2</td>
<td>180 min</td>
<td>12 pages</td>
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</tbody>
</table>

Table 3.3 Overview of conducted observations

3.3 Interview guide

The questions that are included in semi-structured interviews with regard to the formal and informal systems that are part of an organization’s ethical infrastructure, are based on literature of Tenbrunsel et al. (2003) and Rottig et al. (2011). Furthermore, the questions relating to centralization are based on literature by Mintzberg (1980), Hage and Aiken (1967) and James (2000). These three concepts are operationalized in a scheme which can be found the section below. Several questions in the interview were based on this operationalization, in order to measure these concepts as adequate as possible.

However, as this research aims to explore the relationship between centralization and both systems in an inductive manner, interviewees were asked to describe how they engage in the formal and informal systems as detailed as possible, and how they perceive their decision-
making participation and authority with regard to these systems. Therefore, self-invented questions were also added to the interview guide in order to explore the relationship between these concepts. The interview guide can be found in Appendix I.

<table>
<thead>
<tr>
<th>Concept</th>
<th>Dimension</th>
<th>Sub-dimension</th>
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<tbody>
<tr>
<td>Formal systems (Tenbrunsel et al., 2003)</td>
<td>Formal communication systems</td>
<td>Codes of conduct</td>
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<td>Mission statements</td>
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<td>Written performance standards</td>
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<td>Training programs</td>
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<td>Recurrent communication</td>
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<td>Performance appraisals</td>
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<td>Formal surveillance and</td>
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<td>sanctioning systems</td>
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<tr>
<td>Informal systems (Tenbrunsel et al., 2003)</td>
<td>Informal communication systems</td>
<td>Unofficial conservations between</td>
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<td>colleagues regarding ethics</td>
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<td>Employees ‘showing each other the</td>
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<td>ropes’ on how it is done</td>
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<td>Verbal and non-verbal behaviour</td>
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<td>between individuals regarding ethics</td>
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<td>Behaviour of organizational leaders</td>
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<td>regarding ethics</td>
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<td>Informal surveillance and</td>
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<td>sanctioning systems</td>
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<tr>
<td>Centralization (Hage &amp; Aiken, 1967)</td>
<td>Participation in decision making</td>
<td>Various decisions one has to make</td>
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<td>with regard to ethics</td>
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<tr>
<td>Hierarchy of authority</td>
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<td>Reliance upon superior managers</td>
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<td></td>
<td>with regard to ethical decisions</td>
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<td>Vertical decentralization</td>
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<td>Reliance of subordinates with</td>
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<tr>
<td>(Mintzberg, 1980)</td>
<td></td>
<td>regard to ethical decisions</td>
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<tr>
<td>Horizontal decentralization</td>
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<td>Decision making power delegated</td>
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<td>(Mintzberg, 1980)</td>
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<td>through formal line of authority</td>
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<td>Responsibility</td>
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<td>Decision making power delegated</td>
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<td>(James, 2000)</td>
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<td>through informal line of authority</td>
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*Table 3.4 Operationalization of concepts*
3.4 Data analysis

In this study the collected data is analysed through a template analysis. In order to conduct this kind of analysis, all interviews have been transcribed to become textual data and a field report is made of each observation. Template analysis is used because in the process of analysing textual data, it “balances a relatively high degree of structure with the flexibility to adapt it to the needs of a particular study” (King, in Symon & Cassell, 2012, p.426). This technique is considered to be most suitable for this study, because it allows for an open approach towards the data which is necessarily for studying the relationship between centralization and formal and informal systems by means of an inductive approach. However, template analysis also grants some structure regarding the concepts of centralization and formal and informal systems. Therefore, at first, an initial template was developed based on literature on ethical infrastructures and centralization as discussed in chapter 2. This initial template can be found in Appendix V. The transcribed interviews, documents and the field reports of the observations are coded by means of themes established in this initial template or by words from the fragment itself. Fragments that were coded by words of the fragment itself were written down in Dutch instead of English, in order for them to be more data grounded.

After coding a few transcripts, the researcher started finding themes in these descriptive first-order codes. As more texts were coded, groups of similar quotes were clustered together in order to produce higher order codes (hierarchical coding), which allowed the researcher to analyse transcripts at varying layers of specificity (King, 2012). During a template analysis the coding template further develops based on themes found in the data. These themes are then used to further analyse the data through a process of revising and reapplying continuously (King, 2012). Moreover, within a template analysis, there are no restrictions on the amount of coding levels, themes are developed based on where the richest data is found (King, 2012). Throughout the coding process, the initial template changed continuously in order to capture the relationship between the concepts. Therefore, the final template is formed by means of an open approach towards the data. The final template can be found in Appendix IV. During the template analysis some additional (sub)themes were found, however these themes are not displayed in the final template because they are not the main focus of this study. However, these themes can be found in Appendix XI.

3.5 Quality criteria

Within qualitative research the quality criteria that are assessed may differ per study, as they depend on the philosophical assumptions of the researcher regarding science (Symon & Cassell,
The four criteria developed by Guba and Lincoln (1989) are used to access the quality of this study.

The first criterion is credibility, which entails that a researcher should aim to demonstrate a good fit between “constructed realities of respondents and the reconstructions attributed to them” (Guba & Lincoln, 1989, p.237). This research aims to achieve this through four means. First, by member-checking the informal interview report that formed the base of the case description, with the contact person in BTE Group to secure that the organization its case is accurately captured by the researcher. Secondly, by keeping a record (see Appendix VIII) of the initial constructions, understandings as developed by the researcher during the analysis. These records are able to demonstrate if these understandings and constructions are changed by the constructions of participants. Thirdly, throughout the research process, thoughts, data, ideas, the researcher’s interpretations and empirical choices have been discussed with fellow students and the supervisor of this study, who acted as a sounding board for the research. This form of ‘peer debriefing’, was helpful to reflect upon the understandings of the researcher. Finally, all the respondents were given the opportunity to check the transcripts of their interview. Some respondents gave feedback on these transcripts, when they had said something that – according to them – came out wrong or suggests something other as what they intended to say.

A second criterion developed by Guba and Lincoln (1989) is transferability, which according to Symon and Cassell (2012), enables the reader to judge whether the findings in this study may be applicable in other contexts as well. This research aims to be as transferable as possible, by providing a thick case description. By means of this description it becomes possible to judge whether the context of this study shares similarities with other contexts and can therefore be transferred to any other (comparable) cases.

A third criterion is the dependability of a study, which refers to “how methodological changes and shifts in constructions have been captured and made available for evaluation” (Guba & Lincoln, 1989, p.242). Dependability is improved by demonstrating why certain decisions are made, and how the researchers eventually made sense of the research situation. Throughout this research a record is kept, in which the understandings with regard to the various codes and potential relations between these codes are documented. This record can be found in Appendix VIII.

The final criterion developed by Guba and Lincoln (1989) is called confirmability. Confirmability means that the researcher: “should be transparent about where the data came from and how this data was transformed into the presented findings” (Symon & Cassell, 2012, p.208). Confirmability therefore means that the data was gathered an analysed in such a way
that it is transparent that the interpretations and outcomes are derived from this data and how this data was attained (Symon & Cassell, 2012). Therefore, the methods used for data collection and analyses are elaborated on in section 3.2 and 3.4 respectively. Furthermore, within the chapter 4 references to the actual data can be found, which makes transparent from which data these findings come from.

3.6 Research ethics

Ethical issues play a role all kinds of research (Gillam, Delany, Guillemin & Warmington, 2014). Especially, when a research is conducted within an organization and multiple people of that organization are involved, attention should be paid to the potential harmful effects of that research on these people (Holt, 2012). Which is why several ethical issues, that are of particular importance in this research, are taken into account and therefore are discussed below.

The first ethical issue that is of particular importance in this study is the matter of honesty because of the power relations in the organization. The researcher of this study is the daughter of a manager that operates at BTE Group in the Managing Board, which is one hierarchical management level above the participants of the interviews. Therefore, some issues might arise when asking questions to participants, because of this relationship. Bell and Bryman (2007) point out that power relations in organizations is a factor that researchers should take into account in order to protect research participants. Therefore, the researcher chose to be honest about her relationship with this manager to all research participants and all participants were all informed about the researcher’s intentions and content of the research. Additionally, coercion should not be used to ensure that people participate in the research, which is why the researcher did not use another member of BTE Group to ask employees to participate in the research as this might pressure the employees to participate (Holt, 2012). Furthermore, the participants were continuously informed that they could always decide to withdraw from the research.

Bell and Bryman (2007) argue that researchers can also deal with the issue of power relations through informed consent. Thus, all interview participants were informed about the topic of the interview, the aim of the study as well as the time it would take them to participate (see Appendix VI for the emails sent to participants). They are also informed about the findings of the study; the researcher will present the findings of this study to BTE Group through a management summary. Furthermore, it has been made clear to the participants of the interviews, as well as to members of top management at BTE Group, that the data that has been gathered
by BTE will be used for the researcher’s master thesis and that this thesis will eventually be put into a repository for thesis’s.

Another matter of importance in management research is that of anonymity and confidentiality (Bell & Breyman, 2007). First of all, all research participants who were invited for the interviews remain anonymous, this means that no names, specific job functions or other distinctive features are mentioned in this report. Additionally, the researcher ascertained that she shared no knowledge regarding who is or is not interviewed or what has been said during the interviews and observations to her family member at BTE Group and all other employees within BTE Group. Secondly, the data gathered at BTE from either documents, observations or the interviews, were dealt with confidentially as they are only used for the purpose of this study. Furthermore, interviewees were given the opportunity to examine the transcripts of their own interviews and could notify the researcher if some parts of their interviews could not be used for paraphrasing in the main text of the report, for example some company stories regarding certain incidents.
Chapter 4: Results

In this chapter the results of this study are presented and discussed. The chapter is structured as follows; first, results with regard to centralization at BTE Group are elaborated on in order to clarify what centralization entails at this particular organization. Secondly, the formal systems that are part of BTE Group’s ethical infrastructure are discussed as well as how centralization influences these systems within BTE Group. Subsequently, the informal systems at BTE Group are discussed. The data did not show how informal systems are directly affected by centralization, this occurs rather indirect, which will be elaborated on in the final section of this chapter.

4.1 Centralization

Centralization refers to the hierarchical levels within an organization, which influence the authority one has to make certain decisions with regard to policies, tasks or behaviour (Ferrell & Skinner, 1988; Baum & Wally, 2003). In a centralized organization the authority to make these decisions is located at the top of the management hierarchy (Pugh, 1973).

Within BTE there are in six main hierarchical levels: CEO, Managing Board (consisting out of four directors), Management Team (abbreviated to MT), Plant-managers, Team Leaders and as a final layer; production employees, account managers and office personnel at the centralized departments. Respondent 1 describes the various layers within BTE Group as follows: “You have the CEO, then a layer of members of the management board followed by the MT layer in which you can find: the manager operations, manager commerce and, the managers of the staff services. Thereunder are the plant managers, followed by the team leaders” (118-122). This data corresponds with document OR19, which is an organogram in which these layers are visually displayed.

Within BTE an employee can either operate directly for BTE head office or operate at a plant (and so indirectly for head office) (R1; OB2). The first two layers in the hierarchy (CEO and Managing Board) work directly for head office (R1; R3; OB2). The third layer of the hierarchy consists out of three kinds of management positions: Manager Commerce, Manager Operations and Manager of a centralized department. The first two positions operate at plant-level while the latter operates directly from head office. This can be explained by the division of responsibilities over BTE Group: sales and operations are executed and managed per plant at plant-level while all other (staff) functions are managed and executed in the centralized departments (R1; R3; R4). Employees within the fourth and fifth layer (Plant-managers and
Team leaders) operate at plant level (R1; R3; OB2). The sixth layer in the hierarchy consists of 1) production employees, who operate at plant level, 2) account managers who are part of the commerce team at plant level and 3) office personnel, whom are operative at the centralized departments. These three kinds of functions are all considered to be part of the sixth layer of the hierarchy because, in contrary to all other layers, within this layer there are no management positions. As mentioned before, all staff functions (procurement, ICT, QHSE, HR and finance) within BTE Group are centralized, meaning that there are no staff functions on plant-level (R1; OB2). Consequently, all office personnel operate directly for head office. Sales and operations are the only two functions that are managed per plant, therefore the corresponding job positions are at plant-level. In the figure below all layers within BTE and their corresponding positions either at a plant or at head office, are visually displayed.

**Figure 4.1 Organogram BTE Group**

### 4.1.1 Hierarchy of Authority

The figure above gives some indication about the hierarchy of authority within BTE. Hierarchy of authority entails how power is distributed among social positions within the organization, which influence the extent to which there is reliance upon superior managers in decision making (Hage & Aiken, 1967). Figure 4.1 provides a general representation of the supervising structure at BTE. The supervision structure does not represent the same as the hierarchy of authority. However, it does provide some indication about who employees formally rely on because
supervisors are responsible for their subordinate’s productivity and therefore want to manage their behaviour (R4). Within BTE Group the CEO is considered to be the supervisor of the Managing Board, while the Managing board in turn supervises the Management Team (BR19). The managers of the centralized departments are considered to be the supervisors of the office personnel of their particular department (R1; R3; R7). Supervision within plants is explained by various respondents as follows: production employees are supervised by their team leaders; team leaders are supervised by their plant-managers and plant-managers are supervised by the manager operations (R1; R3; R8). The manager commerce within a plant, supervises the various account managers of that particular plant. Therefore a ‘supervisor’ within BTE Group refers to an individual with a management position in the hierarchical structure, these are the management layers numbered 1 till 5 in the figure above.

Reliance upon superiors
When respondents – which are all MT members - were asked who they rely on in terms of decision-making, most of them referred to their supervisor, which was either the CEO or a member of the Managing Board (R1; R2; R4; R7; R8; R9; R10). Many (R1; R2; R3; R7; R8; R10) explained that they usually consult their supervisor in situations in which they do not know how to deal with it themselves, as is illustrated in the following quote: “I would not know how to handle that (...) and then I went to, well my supervisor, the highest in rank, to converse about ‘how can we manage this?’” (R1, 399-401). No respondents referred to their subordinates in terms of consulting them when dealing with certain issues oneself. Therefore, it seems that there is more reliance on superiors in terms of decision-making, and not so much on subordinates, which is considered to be typical for centralized organizations (Hage & Aiken, 1967).

Reliance on centralized departments
Next to the reliance upon superiors, the data showed that MT-members - who operate at plant-level - experience reliance on the centralized departments while MT-members at the centralized departments did not experience this reliance as much vice versa (R3; R5; R6; R8). For example, if an MT member at plant-level has issues between employees in their plant, they consult HR, as is illustrated in the following quotes: “To HR you ask, ‘how do we approach this?’” (R7, 6042-6043), “if you have issues with persons, you go to HRM” (R5, 4621-4622). Respondent 1 explains similarly that if a manager desires to fire an employee HR needs to be involved: “You have to make a case, because if you do not take the right steps a judge may say ‘you did
not do your homework’. Therefore, HR needs to be involved” (558-559). The centralized departments (procurement, ICT, QHSE, HR and finance) are staff functions that are meant to support the primary process, which include: sales and operations. Therefore, it seems logical that that the MT members who are assigned to sales or operations rely on the staff functions with regard to certain decisions, because these centralized departments (in which these staff functions are unified) are specialized to execute or support these kinds of decisions. Various MT members expressed they often have to wait before they can take action, until the decisions are made, or polices determined by the centralized departments (R4; R5; R6; R9).

In conclusion, MT members who are operative at plant-level rely on the centralized departments with regard to certain decisions. However, this reliance could just exist because these functions are meant to support the primary process and moreover are specialized to execute specific tasks (e.g. knowledge and expertise) related to their function. Therefore, the reliance on these departments cannot necessarily be attributed to centralization because it would also exist if these departments were decentralized.

4.1.2 Participation in decision making

Participation in decision making has to do with the number of employees of various positions within an organization that can engage in decisions about the allocation of resources and the determination of organizational policies (Hage & Aiken, 1967, p.77).

The data showed that the determination of policies mostly occurs within the centralized departments of BTE group (R1; R6; R7; R10). Respondents 1,7 and 10, who are managers of a centralized department, explained that they are responsible for designing the policies regarding the staff function of their department. Moreover, respondent 9 states the following about centralization and policies regarding procurement within BTE group: “With centralization it gets deployed a lot broader. When talking about procurement, then you go look ‘yes, what does this mean for the entire BTE Group?’” (7177-7181). In summary, policies regarding the staff functions are deployed company wide. Moreover, it is mostly the employees in the centralized departments who decide upon these policies that account for the entire organization (i.e. BTE group). The example by respondent 1 regarding the design of cross-company job profiles by the HR department: “We have cross-functional job profiles. So, a production employee [category] ‘a’, ‘b’ and ‘c’ that applies for all plants” (46-49). However, even though these job descriptions apply for all plants, respondent 1 explains that they do not include all specific tasks regarding the job because: “they can agree upon that in the plants itself” (49-50). The
respondent argues that HR does not know the specifics of each job, therefore these are decided upon within the plants.

In summary, within BTE Group there are six hierarchical layers which are dispersed over head office and the various plants. Within the MT layer of BTE Group, reliance is experienced upon superiors and not so much on subordinates. Furthermore, reliance is experienced upon the centralized departments, however this cannot necessarily be attributed to centralization. Finally, it is mostly these centralized departments that participate in decision-making regarding the determination of policies. In conclusion, it seems that centralization at BTE Group affects who is allowed to design polices, which seems to be mostly the centralized departments.

4.2 Centralization influencing formal systems

The data showed that BTE Group has various formal systems in place aimed at ethical behaviour of employees. The formal systems that are present at BTE Group are elaborated on in the next section. Furthermore, the data showed two manners in which centralization at BTE Group influences the formal systems that are part of BTE’s ethical infrastructure.

4.2.1 Formal systems present at BTE Group

Formal systems refer to those systems that are part of an organization’s ethical infrastructure that “are documented and could be verified by an independent observer” (Tenbrunsel et al., 2003, p. 288). Tenbrunsel et al. (2003) distinguish three mechanisms through which formal systems are conveyed, these are: communication, surveillance and sanctioning mechanisms.

**Formal communication systems**

The formal communication systems present at BTE Group are: the organization’s company rules (R1; R2; R3; R7), BTE Group’s business guide (R1; R2; R5), internal memos (R1; R2; R6), the introduction training for new employees (R2; R4) and the leadership module for team leaders (R1; R2; R10).

The company rules will be elaborated on in this section as they are considered to be the main formal communication system for ethical values and principles according to most respondents (R1; R2; R3; R4; R5; R6; R7; R8) and it contradicts with other data found regarding this document. Through document analysis it became clear that BTE Group’s company rules mainly contain practical information regarding employment conditions and policies such as
working hours and financial arrangements (BR19). In contrast, the specific objective of the business guide, which is formal communication system only mentioned a few times (R1; R2), is: “that employees can look up the goals, norms and values of the organization and act accordingly” (BTBG, p.1) The business guide is a document aimed specifically at communicating ethics within the organization, but it is rarely mentioned during the interviews as a formal communication system. Moreover, during both observations of the training sessions the document is not mentioned either while the company rules are (OB1; OB2). These contradicting results can be explained by the experienced importance of these documents.

Various respondents expressed that they do not consider documents (company rules; business guide; internal memo’s) important for communicating ethical principles to employees. According to them ethical behaviour is rather communicated by how people act (R5; R6; R7; R8; R9). Respondent 5 refers to this unimportance in the following statement: “All people have, in fact, received the book [formal documents] furthermore it is more about how you act, how you work. Instead of continuously saying ‘look, company rules say this’” (4108-4110). The rare mentioning of the business guide by the interviewees could therefore be explained by the perceived unimportance of these kind of documents with regard to communicating ethics. These results show that it is not about the importance of these documents itself, but they are just not that important in the process of actually communicating ethics.

Recurrent communication
Rottig et al. (2011) state similarly to the results mentioned in the previous section that just having formal documents regarding ethics in place is not enough. However, Rottig et al. (2011) state that regularly that by regularly communicating these documents, ethical behaviour can be influenced.

Data showed that the company rules and business guide are communicated to employees. First of all, all employees of BTE Group get the company rules and business guide sent to them with their labour contract when they start working at the organization (R1; BTBG). Furthermore, one respondent (R5) - who considers the company rules as the main formal system for communicating ethics - stated that he informs employees on these documents. He explained that he tells them the following: “on a rainy Sunday, sit back and read it through, make sure you do know what it [company rules] says” (R5, 4675-4678). This quote implies that the company rules are not considered to be high priority for employees to read, as one can just undertake it whenever it suits them. So, the communication of these documents that occurs here does not seem to contribute to the idea that such a document is actually important. Furthermore,
just providing a document once, or telling that one should read it, does not ensure that it is actually read. Therefore, this communication could not be effective and not be ‘recurrent’ as it only happens once or twice.

Furthermore, the data shows contradictory evidence regarding the responsibility to communicate these documents. The preface of the business guide states that it is the responsibility of all management (including all MT members) of BTE Group to communicate the business guide (BTBG). However, according to respondents 1, 3, 8, and 5 this is the task of the HR department. These findings seem to confirm the perceived relative unimportance of the business guide; what the document prescribes contradicts with what organizational members actually think. Altogether, formal documents such as the business guide are not recurrently communicated within BTE Group. This (lack of) recurrent communication of formal documents could lead to a reinforcing loop. If these documents are considered to be unimportant, it seems logical that one does not bother to recurrently communicate them. However, not recurrently communicating them contributes to the idea that these documents are not considered to be important. In turn, this perceived unimportance can lead to managers not feeling the need to communicate them and so on. It seems that these two formal communication systems affect each other’s effectiveness. According to the business guide, it is the official task of management to communicate the business guide to organizational members. However, as this task is not executed, the business guide is not considered to be important.

**Formal surveillance and sanctioning systems**

Formal surveillance systems are defined as: “the officially condoned policies, procedures and routines aimed at monitoring and detecting ethical and unethical behaviour” (Tenbrunsel et al., 2003, p.288). The formal sanctioning systems are: “the official systems within the organization that directly associate ethical and unethical behaviour with formal rewards and punishments” (Tenbrunsel et al., 2003, p. 288).

There are a couple of official procedures at BTE Group through which (un)ethical behaviour can be detected, these are: breathalysers to check on alcohol use (R1, BR19), employee surveys (R2), cameras (R1) and performance appraisals (R4; R9; R8). However, the data showed that these formal systems are not the main manner through which (un)ethical behaviour is detected at BTE Group. The surveillance of (un)ethical behaviour is mainly carried out by supervisors who check on their subordinates (R1; R2; R4; R3; R6; R8). Respondent 4, who is a Manager Operations, states that surveillance on behaviour ensues hierarchically. He describes this surveillance in plants as follows: “So eh, he [plant-manager] walks on the
production floor and sees what is happening there and corrects his team leader [...] the plant-manager corrects the team leaders, and I in turn correct the plant-managers. Well, eh, both correcting and monitoring” (R4, 3388-3394). This quote illustrates that - within the plants - the surveillance (and correction) of behaviour is executed through the role of a supervisor who monitors his or her direct subordinates.

Within BTE Group it is considered to be an official formal task of supervisors to monitor the ethical behaviour of their subordinates (R1; R2; R3; R6; R8; BTBG; OB1). However, there are no standard procedures or routines on how a supervisor should surveillance ethical behaviour (R3; R4; R6). Respondent 4, who is a manager at a centralized department, explains that he surveillances behaviour by means of “staying on top of things” (3273). Moreover, surveillance of (un)ethical behaviour is carried out through walkabouts through the factory or a department in order to: “to have an image of how it is going” (R3, 2734-2735). Furthermore it is described as a ‘feeling’: “I will not say that I detect everything, but eh, yes, eh, you try to keep a feeling with it, that everybody feels good” (R4, 3194-3196) and “It is more how people communicate. I see things passing me, in the mail or I notice stuff. I hear people talking on the phone and attend meetings” (R7, 5993-5995). These actions that the respondents undertake are not ‘official procedures or routines’, however when they undertake these actions they do this because of their formal role to surveillance ethical behaviour. This role is formal as (ethical) it is part of the Business Guide and the company rules. Thus, the formal authority to monitor the ethical behaviour of employees lies with superiors and therefore, they are considered to be a formal surveillance system.

Furthermore, the data showed three formal surveillance mechanisms that can be used to report unethical behaviour: informing the organizational confident, informing the Works council or informing one’s superior by email or just verbally (R2; R4; R6; R8; OB2). However, informing one’s superior is preferred by MT members over the other two manners unless this superior is the one who acts unethically (R3; R4; R6; R8; OB2). The supervisor – who gets reported to - in turn has to decide upon the severity of the situation and dependent on that, report to his or her supervisor (R3; R4; R6; R8).

The detection of unethical behaviour is often followed by a sanction depending on the severity of the situation. BTE Group has an official sanctioning policy in place for dealing with unethical behaviour, which is written down in the company rules (BT19). This sanctioning policy is described as a step-by-step procedure by various MT-members (R1; R5; R7; R8). Correspondingly, the sanction policy (BT19) itself provides three general steps regarding the sanctioning of behaviour: 1) a verbal warning, 2) a written warning in the personal system and
3) a sanction depending on severity of the behaviour (BT19). Several MT-members (R1; R5; R7; R8) confirmed that they, to some extent, follow these steps when dealing with unethical behaviour. However, a difference occurs between the usage of these steps by MT members and the steps as they are written down in the company rules in the first step. MT members often consider an official warning to be ‘heavy’ of a sanction (R5; R6; R7). This deviation will be further elaborated on in section 4.4. Moreover, another deviation from this ‘step-by-step’ procedure occurs when an employee displays unethical behaviour that is deemed to be ‘too extreme’; then a formal sanction (step 3 in the sanction policy) is enforced immediately. This became clear through the examples of unethical conduct that have been described by multiple MT members. Situations in which an employee was caught stealing, working under influence or using violence, formal sanctions like suspension or dismissal where used immediately (R1; R3; R5; R6). Altogether, it seems that the step-by-step procedure as described in the sanction policy is actually used more as some sort of scale: if behaviour is considered ‘too extreme’ the first two steps are skipped, if behaviour is not considered to be ‘too extreme’ the first step is carried out without any documentation.

Moreover, according the company rules the: “The Managing Board [including CEO], MT, the HR department and the department management [all other management positions in the organization] are jointly responsible for the implementation and enforcement of the sanction regulations” (BT19, p. 21). Thus, employees in a management position are formally allowed to use the sanction policy. However, the sanction policy differentiates between the kind of sanctions one is allowed to give depending on the kind of management position one has. The first two steps are allowed to be carried out by any supervisor, while the third step (giving a sanction such as disposal or dismissal) “can only be imposed by the highest local management in consultation with a BTE board member” (BT19, p. 21). In summary, actual sanctions can only be enforced by MT members (which are the highest local management) in consultation with the Managing Board.

The three kinds of formal systems and recurrent communication at BTE Group are discussed above. The data showed that these formal systems are influenced by centralization at BTE Group in two manners: one has to do with the formulation of them and the other concerns the authority to execute them.
4.2.2 Centralization influences formal systems: formulation of formal systems

Centralization at BTE group seems to determine two aspects regarding the formulation of formal systems: 1) who participates in formulating them and 2) who are they formulated for (i.e. the whole organization; a singular plant).

In centralized organizations, the authority to establish procedures and policies is located at the top of the management hierarchy (Pugh, 1973; Ferrell & Skinner, 1988; Baum & Wally, 2003). Within BTE Group, it is the centralized HR department, CEO and Managing Board that mostly participate in the determination of company-wide formal systems. The CEO and Managing Board are the two highest management layers in the organization. Respondent 5 explains this responsibility between these three actors as follows: “You have of course the company rules within it, eh, yes, that is drafted from higher up, let me put it that way. That is from management [management board], eh and there they lay something down with HR” (4074-4076). Additionally, the preface of the company rules, sanction policy and business guide states that they are established by the HR department together with the Managing Board and CEO (BT19; BTBG). However, it is the HR department in particular who is responsible for the actual formulation of these documents (R1). Secondly, as discussed in section 4.1.2, because of centralization, the procedures and policies that are established within the centralized departments are companywide. The ethical formal systems formulated in the HR departments, apply for all employees in the whole organization (R1; R4; R5). The data showed that this allocation of responsibility over the determination of company-wide formal systems, has two main consequences: workability of formal systems and the opportunity to give feedback on them.

Workability of formal systems

As stated previously, the formal systems (e.g. the sanction policy, business guide) are mainly designed by the HR department. The formal systems that they formulate, apply for all employees in the whole organization (R1; R4; R5). The data showed various examples in which these company-wide formal systems were not sufficient enough to apply for all organizational members (R4; R6; R7; R8; R10), therefore they are deemed not workable. Respondent 2 provides such an example with regard to the business guide: “I have to say, it is very much focused on managers, or maybe managers is not the right word, but maybe office staff. It is about agreements and eh, and how to deal with certain things. But well, I think then, most people at the [production] workplace do not really get that” (1084-1088). Respondent 6 argues similarly that the company rules “pass the manual workers in the factory” (5371-5373). In
summary, these this document does not seem workable for all employees in the organization, as they only apply for certain personnel. These points of criticism mentioned by MT members above on formal systems mainly deal with the differences between office personnel, managers and production personnel and how one system is too broad to deal with the specifics of each of these groups. Moreover, various MT-members argued that when dealing with ethical issues, one should always take the specific situation into account (R1; R7; R8). For example, respondent 8 provides the following statement about dealing with ethical situations: well, good, that you have to be capable to deal with things in a very situational way. So eh, there is no one-way, eh” (7083-7087). James (2000) substantiates this, as he argues that most ethical situations in organizations need to be dealt differently depending on the specific circumstances. Therefore, it can be argued that a company-wide formal system should not just be able to account for all organizational members, but also for the specific ethical situation in order to be workable.

This issue of workability of formal systems could be explained in terms of the span of control of the HR department. The HR department consists out of 3-4 (R2) employees, which is relatively small number of employees compared to the 900 employees of BTE Group. This HR department however is responsible to design policies that have to account for all employees and all situations in BTE Group. Therefore, it makes sense that these few employees do not have sufficient knowledge over all employees and situations over which these formal systems have to apply. Broader spans of control typically lead to lesser knowledge about each individual that falls within their span of control (Ouchi & Dowling, 1974). So, the span of control for the HR department is considered to be relatively broad, which leads to this apartment having lesser knowledge about all employees for which they have to design these systems which makes these systems not workable for all employees.

Within BTE Group this sort of gap of knowledge between policy makers and policy executers seems to be acknowledged. Various MT members, at centralized departments, expressed that by means of receiving feedback they can adapt their policies in order to make them more workable for employees who execute them (R1; R7).

4.2.3 Centralization influences formal systems: authority to execute formal systems
A second manner through which centralization at BTE Group influences its formal systems, is by means of the distribution of authority to execute formal systems. This particular influence of centralization on formal systems occurs with formal surveillance and sanctioning systems, not formal communication systems.
Various formal surveillance systems are only allowed to be executed by certain organizational members within BTE Group. For example, breathalysers and camera surveillance can only be conducted by MT-members (R1). Furthermore, the ‘surveillance of (un)ethical behaviour’, as discussed in section 4.2.1, is considered to be a responsibility of supervisors. Moreover, data of various sources showed that if employees - who are not a supervisor - notice unethical behaviour are expected to report this to their supervisor (R1; R4; R8; OB2; BGBT). Additionally, supervisors who are aware of unethical behaviour within their team of subordinates are expected to report this to their supervisor in turn (R4; R5; R7). Furthermore, the company rules state that unethical behaviour should first be assessed by the direct supervisor and if this was not sufficient it goes to a higher level in the management hierarchy (BT19, p.12). Altogether, the monitoring of (un)ethical behaviour occurs quite hierarchical.

This hierarchy in the reporting of unethical behaviour could be explained by the official sanctions a supervisor is allowed to enforce regarding unethical behaviour. The company rules state that Team leaders and Plant-managers have two official means to address unethical behaviour: an official verbal warning (documented in the personnel system) and an official written warning (BT19, p.12). Production employees, regular office personal and account managers are not allowed to use these sanctions (BT19). Therefore, it makes sense that these employees are expected to report unethical behaviour to their supervisor, because this supervisor does have the authority to enforce certain official sanctions. Furthermore, sanctions other than warnings can only be imposed by “the highest local management in consultation with a BTE board member [including CEO]” (BT19, p. 28). Therefore, it makes sense that supervisors, who do not have the authority to enforce sanctions other than warnings, are expected to report certain unethical behaviour to their supervisors, as these supervisors do have to authority to impose more severe sanctions. However, these supervisors in turn do need to consult with a BTE board member if they deem such a severe sanction appropriate. Furthermore, BTE board members are the only superiors who are allowed to “deviate from this [sanctioning policy] on the basis of facts and circumstances” (BT19, p.28). Even though not all of management has the same authority to enforce the various sanctions, all managers at BTE Group are considered responsible for sanctioning behaviour (BTBG). Furthermore, it seems that there is quite some reliance upon superiors (either a supervisor or the managing board) with regard the sanctioning of unethical behaviour. Depending on the hierarchical level in which one operates, one has more or less means to sanction unethical behaviour; the higher the management level, the more authority one has to enforce sanctions.
4.3 Centralization influencing informal systems

Next to formal systems, the data showed various informal systems that are part of BTE Group’s ethical infrastructure. These informal systems are presented in the following section.

4.3.1 Informal systems present at BTE Group

Informal systems are defined as: “those indirect signals regarding appropriate ethical conduct that are received by the organizational members” (Tenbrunsel et al., 2003, p.288). Like their formal counterpart, informal systems are conveyed through three mechanisms: communication, surveillance and sanctioning mechanisms (Tenbrunsel et al., 2003).

Informal communication systems

Informal communication systems refer to: “those unofficial messages that convey the ethical norms within the organization” (Tenbrunsel et al., 2003, p.291). As mentioned previously, various respondents expressed that they do not consider documents to be very important in communicating ethics, it is rather communicated by how people act (R5; R6; R7; R8; R9). Therefore, it seems that the informal communication systems are more important for communicating ethics within BTE Group than the formal communication systems.

The data showed that there is a variety of informal communication present at BTE Group, these are: employees showing each other the ropes: “you first take them by the hand and then they have to do it themselves” (R1, 510-512); exemplary behaviour “That we [as supervisors] do not do certain things, do not accept them. So, I think, that eh, eh, supervisors play a big part in showing what is not accepted” (R9, 7203-72-6) and communicating ethics through “how you present you, present yourself, as a company and as supervisors. Not so much about what you write down about what should be done and what should not, but rather the way you act and what you do” (R8, 7011-7015). The third manner of communicating ethics, as described by respondent 8, could also be considered as some sort of exemplary behaviour which is communicated verbally or non-verbally. A similarity can be found between the three previous quotes, as well as statements made by four other MT members regarding the role a supervisor has regarding the communication of ethics within BTE Group (R1; R4; R5; R7). All these MT members consider it to be their task, as a supervisor, as well as the task of all supervisors in the organization, to show others how one should act in the organization by means their own behaviour as an example. The business guide, even though the business guide is not well-known and intentionally acted upon throughout the organization, does substantiate this role: “Management plays an exemplary role in complying with the company code [i.e. business
Furthermore, in leadership module, the CEO explained to the participants of the module that they, as team leaders, always have to show exemplary behaviour because their subordinates will likely follow their behaviour (OB1, 9053-9060). Altogether, this data indicated that role of a supervisor as an example for communicating ethical behaviour is quite known throughout BTE Group. Similar to the formal task a supervisor has regarding the surveillance of (un)ethical behaviour, showing exemplary behaviour seems to be a formal task of a supervisor as well, as it is also written down in the business guide. Tenbrunsel et al. (2003) typically consider showing exemplary behaviour as an informal communication system. However, as this task is considered to be an official task of management (and so, supervisors) within BTE Group, it is considered to be a formal communication system in this research. However, this formal system is placed in this section of the results to illustrate that it is not typical to consider exemplary behaviour as a formal system. Furthermore, if organizational members other than BTE’s management would show exemplary behaviour it would be considered as an informal communication system, as it is not considered to be an official task for these employees to display exemplary behaviour.

Informal surveillance and sanctioning systems

Informal surveillance systems are described as: “those systems that monitor and detect ethical and unethical behaviour, but not through the official channels of the formal surveillance systems” (Tenbrunsel et al., 2003, p.292). Furthermore, informal sanctioning systems are defined as: “those systems within organizations that directly associate ethical and unethical behaviour with rewards and punishments and unlike formal sanctioning systems, they do not follow official organizational channels” (Tenbrunsel et al., 2003, p.292).

The data did not show many results regarding informal sanctioning systems, this can be attributed to all respondents being managers, as they have a formal task regarding the surveillance of ethical behaviour. However, throughout the observation of the leadership module it became clear that organizational members without a formal task to surveillance (un)ethical behaviour do detect it. The CEO implied this by stating that peers often notice each other’s behaviour and therefore it is important that they address each other on this. As peers are not considered to be each other’s supervisor, this detection does not follow official channels of formal surveillance.

Various results regarding informal sanctioning systems were found in the data, these are: gossip (R5; R7); isolation from groups (of co-workers) (R8) and shaming (R9). Furthermore, the data showed some informal rewards regarding ethical behaviour as well, such as
compliments (OB1) and a ‘pat on the shoulder’ (R1; R6). Nevertheless, the data showed that within BTE Group there is one main manner of informal sanctioning, which is labelled as: “informal addressing”. This method of informal sanctioning has been mentioned by all interviewees, as well as by participants of the leadership module (OB1). Therefore, solely this informal method of sanctioning is elaborated on. Informal addressing is described as: “that they really address each other like “oh you are nice and cozy today” [this is meant to be sarcastic], “It just goes through informal manners” (R5, 4207-4208), “Such as ‘hey guys, this, this is really not done’ or ‘this is very good, you handled this great, keep it up’, like this is how we want people to act, those kind of things” (R7, 5863-5866). These quotes illustrate that ‘informal addressing’ can either be a reward or a punishment. Moreover, ‘informally addressing’ is explained as a method of sanctioning that is not followed by any documentation of it (R1; R2; R3; R4; R5; R7; R8; R10; OB1). Informally addressing organizational members on their behaviour is not considered to be an official task of organizational members, as it is not written down in the company rules or business guide and it can be executed by all employees towards all employees (R1; R10; OB1). However, it is questioned whether most non-supervisors would dare to do this towards their peers (R1; R4; R8; R9). Respondent 8, reasons that the hierarchical position of someone affects whether they address somebody on their behaviour: “For me, for me it is very easy, I do not care at all, right? [...] But, but somebody who is their equal colleague, has a different hierarchical relationship to eh, such a person. That just becomes, that is just more difficult” (R8, 66270-6630). Additionally, various MT-members (R1; R5; R8) explained that if a superior informally addresses a subordinate, this action gets more ‘weight’ attached to it than if somebody from the same level does the same thing. The following quote illustrates this regarding addressing others on their behaviour: “I am than the ‘heaviest’ in term, and that, that can do a little, that is, is something. It does something to people” (R1, 470-473).

4.4 Centralization influencing the use of formal and informal systems
In the previous sections it became clear that centralization affects the formal systems within BTE Group. Firstly, within BTE Group, due to the centralized structure the authority to design formal systems (i.e. the sanction policy) lies with the HR department in consultation with the Managing Board. The data showed that this allocation of decision-making rights over the formulation of formal systems can lead to these systems not being workable in all situations (R2; R6; R7; R8). These systems not being designed sufficiently, could partly be explained by the span of control of the centralized HR department. Furthermore, the authority to enforce
(parts of) the sanction policy additionally depends on one’s position in the centralized structure, with the higher management levels having more decision-making authority over various sanctions. Either one of these consequences has a different effect on the way both systems relate with each other, as discussed below.

**The use of informal systems to compensate unworkable formal systems**

The first consequence of centralization can be looked at in terms of the various mechanisms of the formal and informal systems. Firstly, supervisors are considered to have an official task to communicate ethics to their supervisors, which they can do by means of showing exemplary behaviour or by communicating the business guide (which are both formal communication systems). However, some accompanying formal communication systems are not perceived as workable to execute these formal tasks (i.e. this formal system). Therefore, these accompanying formal systems are not used as frequently. For example, with regard to formal communication systems, supervisors barely recurrently communicate the company rules or the Business Guide as they do not think it is sufficient for communicating ethics. However, supervisors exercise the formal task to communicate ethics through their role as a supervisor – which is an official organizational channel - by means of communication systems that are not designed by the central HR department. Examples of such communication systems are “one-on-one conversations” (R7; 5897-5899) between supervisors and subordinates instead of performance appraisals and “canteen conversations” (3231-3232, R4). A similar argument can be made for the formal surveillance and sanctioning systems of a supervisor. The official task of a supervisor to sanction and surveillance (un)ethical behaviour is considered to be a formal system. The sanction policy also is a formal system that should contribute to the effectiveness of other formal surveillance and sanctioning systems (Tenbrunsel et al., 2003; Rottig et al., 2011). However, the sanction policy is not perceived as a system sufficient to deal with all kinds of ethical situations (R5; R6; R7). Consequently, a deviation of the sanction policy occurs in the first step of the sanction policy, this step prescribes that any verbal warning should be documented into the organization’s personnel system by the corresponding supervisor (BT19). Various MT members expressed that they prefer using verbal warnings without any documentation of this (R5; R6; R7). Respondent 5 illustrates this in the following quote with regard to the sanctioning of behaviour: “Again, in first instance I would try to do it, without the fuss of formalizing and documenting” (4628-4623). MT-members reason that using a verbal warning is often deemed a sanction ‘too heavy’ for unethical behaviour that occurs and
therefore is not appropriate. Therefore, they rather use ‘informal addressing’ to their subordinates as a mean to ‘sanction’ instead of following the sanction policy (R5; R7; R10).

Altogether the formal task a supervisor has to towards ethical behaviour is considered to be a formal system. However, within BTE Group this formal task is not always complemented by other formal systems (as they are not considered workable), but rather by informal systems. Nevertheless, as it is the supervisor with his/her formal task to communicate, surveillance and sanction (un)ethical behaviour, that executes these informal systems, these informal systems somehow become formal, as this supervisor is considered to be an official channel. In conclusion, the mechanisms of formal systems within BTE Group are not always able to complement each other, as some of these systems considered not workable. Therefore, informal systems are used to fill this gap, however with supervisors using these informal systems these systems, in turn, do become more formal.

Supervisor acting as a gatekeeper
The sanction policy prescribes per management layer which sanctions they are allowed to enforce. Due to this dispersion of these various sanction, certain management layers (Team leaders and Plant-managers) have gotten some sort of unofficial role with regard to the sanction policy. These management layers are considered to be the ones that decide what kind of unethical behaviour is severe enough to report higher up the hierarchy, and thus be sanctioned more severely. This role coheres with another ‘unofficial’ role that these supervisors experience, which is that of an ethical judge. The following quote about team leaders and plant-managers regarding workplace bullying illustrates this unofficial role of an ethical judge: “Yes, well, at some point you have to decide ‘is this bullying or not’ and eh, does he need a sanction or not? In that sense, you are also a kind of judge” (R4, 3620-3622). Thus, such a supervisor is left to decide whether something is unethical (enough to sanction) and what kind of sanction is appropriate. The second role emerges out of this previous decision and affects formal sanctioning. At this point a superior acts as a gatekeeper which entails deciding whether to involve their superior who has authority over more ‘severe’ sanctions. Respondent 7 reasons the following about this gatekeeper role regarding his decision to include his superior: “Yes, you know, it also depends on the extent to which you consider these things, eh, well yes, of which I think this is too extreme” (6037-6038). This quote illustrates that the decision to involve higher management levels depends on whether he (as an ethical judge) considers unethical behaviour ‘too extreme’. Altogether, within BTE Group certain supervisors get some kind of a ‘gatekeeper’ role between the sanctions they are allowed to enforce and more severe sanctions
that their superiors are allowed to enforce. This ‘gatekeeper role’ has the ability to communicate to other organizational members which behaviour is considered ethical or unethical, as it shows what behaviour gets reported to higher management levels and therefore potentially sanctioned more severely. Therefore, this role is considered to be an informal communication system.

Altogether, the formal sanctioning system in BTE Group, which is the sanctioning policy, has a certain decision-making authority dispersed over it, which entails how higher the management level how more severe sanctions one can enforce. However, as unethical behaviour within the lower management levels (Team Leaders and Plant-managers) is detected, it is these lower management levels that decide whether these situations get reported to higher management levels and thus potentially punished more severely. Therefore, these lower management levels get some sort of unofficial role of a ‘gatekeeper’ that also has the potential to become an informal communication system.
Chapter 5: Discussion

First of all, this final chapter contains the conclusion of this research, in which an answer on the research question is provided (section 5.1). Secondly, a discussion can be found in section 5.2, which consists out of a reflection of the methodological choices, theoretical choices, ethical issues and the role of the researcher. Finally, in section 5.3, the theoretical contributions and practical implications of this study, as well some recommendations for further research are elaborated on.

5.1 Conclusion

This research aims to contribute to theoretical insights about the formal and informal systems that are part of ethical infrastructure, especially with regard to the manifestation of these systems in actual organizations, by means of conducting a qualitative case study at BTE group in which is examined how the formal and informal systems that are part of BTE Group’s ethical infrastructure are influenced by centralization at BTE Group. The associated research question is formulated as: How are the formal and informal systems that are part of BTE Group’s ethical infrastructure influenced by centralization? In the previous chapter several insights regarding centralization and the formal and informal systems present at BTE Group have been elaborated on. Moreover, results regarding the influences that the centralized structure at BTE Group has on the formal and informal systems are presented. In this conclusion the focus particularly lies on these influences on a more abstract level, highlighting how these systems are affected by centralization.

Within BTE Group there are various formal and informal systems present. These formal and informal systems are influenced differently by BTE Group’s centralized structure. First of all, the formal systems are influenced more directly by centralization compared to the informal systems. Within BTE Group’s centralized structure the formal systems are determined within the HR department, occasionally in consultation with the Managing Board, which are both considered to be ‘higher’ levels in the management structure. The data showed that this allocation of decision-making rights over these few actors regarding to the formulation of formal systems can lead to these systems not being workable in all situations. Secondly, the authority to enforce the sanction policy - a formal sanctioning system- is centralized. This means that dependent on the management level one has, one has the authority to use more severe sanctions.
Within an ethical infrastructure the various mechanisms of a formal (or informal) system are argued to affect each other, as they can either reinforce or diminish each other (Tenbrunsel et al., 2003). Within BTE Group formal communication, surveillance and sanctioning systems were found that entail the formal task a supervisor has with regard to communicating, the surveillance and sanctioning of (un)ethical behaviour. Moreover, various other formal communicating, surveillance and sanctioning systems found in BTE Group, that should complement the execution of these formal tasks (i.e. formal systems), are considered not to be workable as a consequence of centralization (e.g. business guide, sanction policy). Supervisors with these formal tasks regarding ethical behaviour therefore started to compensate these unworkable formal systems by means of using informal systems. However, as a supervisor is considered to be a formal organizational channel, which is the channel formal systems go through according to Tenbrunsel et al. (2003), these informal systems do become less informal.

By capturing the formal tasks of a supervisor with regard to ethical behaviour as a formal system, one is able to determine the interrelatedness between the formal and informal systems within an ethical infrastructure in a different manner. Tenbrunsel et al. (2003) argue that the formal and informal systems are related by means of embeddedness, with the informal systems reinforcing or diminishing the formal systems. However, these results suggest that because of inadequate formal systems, or inadequate complementing between formal systems, informal systems arise that help reinforce certain formal systems.

The effect of centralization on the decision-making authorities with regard to the sanction policy also has the ability to affect informal systems. When unethical behaviour is detected within the lower management level managers, who do not have the authority to use most sanctions, they get to decide whether this unethical behaviour gets reported to higher management levels and thus potentially punished more severely. Therefore, these lower management levels get some sort of unofficial role of as ‘gatekeeper’ and ‘ethical judge’. This role in turn, becomes an informal communication system. These results give insight into the interrelatedness between the formal and informal systems in a centralized structure; a formal sanctioning system designed in a centralized manner, leads to the creation of an informal communication system, and this informal system in turn has the power to diminish or reinforce the importance of the formal sanctioning system.

5.2 Discussion
The various choices made throughout this research have had implications for the conclusions and quality of this study. Therefore, in this section a reflection is provided upon the
methodological and theoretical choices made. Furthermore, reflections regarding the role of the researcher and the role that ethics played throughout this research are discussed.

5.2.1 Methodological reflection
First of all, the case chosen to conduct this research might have affected the results of this study. BTE Group formally finalized its change from a decentralized structure to a centralized structure in 2014. However, during the interviews it became clear that the organization is still in a process of change, as several procedures and systems in the organization have not been fully adapted to the current structure yet. This process of change could have contributed to some formal systems, which are determined by the now centralized HR department, not being as workable as they could have been. Therefore, the results regarding the workability of formal systems within BTE Group can potentially not only be attributed to the centralized structure, but also to the change process towards this centralized structure. Subsequently, this might have affected the attitudes and opinions of the respondents towards these systems as well; the way they felt about the structure change might have influenced the way the feel about central formal systems. Therefore, the choice to interview a variety of respondents that were employed before and after the centralized structure seemed to have contributed to gaining a balanced understanding of how centralization actually affects the formal and informal systems compared to how negative feelings regarding this change process might influence how MT members experience this relationship. Nevertheless, MT-members who were operative at BTE Group before the centralized structure did provide opportunity to distinguish the effects a centralized structure has on several ethical systems as they were able to compare it with the previous structure. The attitudes and opinions of the respondents on the centralized structure can be found in Appendix VII and VIII and not in chapter 4 because these opinions might give away the identification of these respondents. Nevertheless, the specific features of this single particular case do make the results of this study less transferable.

Secondly, during this research it became evident that the choice to interview organizational members that vary on several aspects, such as their position being at a plant or central department and their employment either before or after the centralized structure, contributed to a richer understanding of the phenomenon, as it enabled to capture various views regarding this phenomenon. Additionally, it helped to distinguish which respondents had positive and negative attitudes regarding the centralized structure and thus help distinguish how these attitudes influence the results. However, the variety in respondents was limited to the hierarchical level at which they operate, which is the MT layer. Within the analysis it became
clear that the management layers called ‘Plant-manager’ and ‘Team leader’ play an important part regarding several formal and informal systems. However, data about both kinds of managers is not directly from provided them, making this data less reliable.

Semi-structured interviews with open-ended questions were used as a means to collect data. During the interviews it became clear that formal and informal systems that are part of an ethical infrastructure are not systems that are commonly thought about in everyday working situations by MT-members. Especially informal systems, which are indirect signals that are ‘felt’ by organizational members, was a difficult concept to talk about for respondents because they are not always aware of these systems. Therefore, ‘probing’ helped making them aware of these systems and therefore helped them to captivate and express their own experiences regarding these concepts. Because of the inductive approach of this research the ‘steering’ of the researcher during the interviews is kept at a minimum. Respondents were often asked about real life examples with regard to (un)ethical behaviour in the organization and were asked to reflect on these situations regarding the formal and informal systems that were used in those situations. As a result, respondents often mentioned examples of unethical behaviour, which led to a perhaps overemphasis on systems that deal with unethical behaviour rather than ethical behaviour. Additionally, these examples could not be mentioned in the results because of confidentiality and therefore it does affect the confirmability of this research. Nevertheless, the intention of asking for examples was that respondents relied on their own experiences and thoughts, rather than just elaborate on the examples of these systems that the researcher gave in order to contribute to the inductive character of this study.

Finally, ethics is known to be a difficult topic to study empirically because it is considered to cause an enhanced tendency to the social desirability response bias (Randall & Fernandes, 1991). This bias entails that individuals tend to present themselves in a favourable light, and therefore not expose what they truly feel or how they truly act (Randall & Fernandes, 1991). During the interview’s questions regarding personal ideas or behaviour regarding ethics were avoided as much as possible in order to limit the role of this particular bias. Additionally, this topic was avoided because of the relationship between the researcher and her relative who is operative at BTE Group. This relative has a function at top management level and therefore power relations in BTE Group might have played a role throughout the interviews. However, this bias might still have affected the results.

Altogether, the methodological choices made in this research could have implicated the results in several ways. However, the choices made do appear to be most suited to study the research question.
5.2.2 Theoretical reflection

Choices regarding the literature used to construct the theoretical framework of this research might have affected the quality of this study. Firstly, in this research this entails the choice not to include ‘organizational climate’, which is an element of the organization’s ethical infrastructure. However, the organizational climate is a decisive element of an ethical infrastructure because both formal and informal systems are embedded into this climate. Consequently, there is a particular risk the results found in this study regarding the relation between formal and informal systems are not correctly displayed because they are also affected by the ethical climate. Therefore, the conclusions of this research regarding the relationship between centralization and formal and informal systems as part of an ethical infrastructure are limited. Secondly, Tenbrunsel et al. (2003) provide conceptualizations of formal and informal systems with regard to ethical infrastructures. However, these conceptualizations do not explicitly consider potential tasks one can have with regard to these ethical infrastructures. Within their theory the only link between who can have such task and who does not with regard to either a formal or informal system are the ‘organizational or non-organizational channels’ which are used in Tenbrunsel et al. (2003) definitions of the two systems. However, data combined with theory on these concepts suggested that these formal tasks in fact are formal systems. However, it possible that these formal tasks should not have been conceptualized as formal systems and therefore, this theory on ethical infrastructures is not able to provide a more adequate conceptualization of this concept, which influences the credibility of this study.

5.2.3 Reflection respecting the role of the researcher

The researcher’s role in the practice of research and interaction with the research object might have influenced both the research processes and outcomes (Haynes in Symon & Cassell, 2012). Within this study in particular the relationship of father and daughter between the manager at BTE Group’s head office and the researcher, has affected the behaviour of the researcher during the data collection. Even though the researcher aimed to remain as neutral as possible, she could not help but feel, during the interviews, that interviewees where judging based on her father’s reputation. Therefore, a certain need to ‘prove’ herself during the interviews arose which led to the researcher trying to emphasize her differences from this distinct relative during the interviews. This might have influenced the collection of data through the interviews because the researchers’ attention shifted from the research questions to ‘proving herself’. These various ‘feelings’ are documented in the research diary (appendix VII) which helped de researcher
reflect on these feelings and have them play a smaller role in the subsequent interviews, aiming to decrease the dependability.

Furthermore, as this study involves systems that are aimed at ethical behaviour it becomes inevitable to ignore the researcher’s own ideas and opinions regarding ethical conduct. Many examples of unethical behaviour were mentioned during the interviews and the researchers’ might unknowingly reacted on these examples. These reactions might displayed certain emotions or opinions regarding these examples, which might have altered what the interviewee would further tell about these examples.

5.2.4 Ethical reflection
During the interviews two situations occurred in which an interviewee mentioned stories of unethical conduct that should have been reported to higher management levels but were not. Because the interviews are confidential and anonymous, these stories will not be reported to BTE Group. As the researcher is related to a manager at BTE Group, it did put her in an awkward position regarding these two stories.

Secondly, all interviewees have read the transcripts of their own interview and almost all of them provided notes on these transcripts; details of these notes can be found in the research diary (appendix VII) and transcripts (Appendix IX) itself. Passages that are requested by interviewees to be dealt with extra carefully are coloured red and passages that are adjusted by them are coloured orange. The adjusted passages by these interviewees do make the data more credible on one hand, as interviewees were able to react on pieces of text that might display an incorrect view compared to what they actually meant. However, it also makes the data less reliable, as interviewees might adjust these texts for other reasons. Nevertheless, within in this study these notes are incorporated into the transcripts in order to respect the respondents wishes. Furthermore, most of these notes dealt with examples of certain unethical incidents that have occurred at BTE Group. In order to secure the anonymity of the interviewees, as well as remaining as confidential as possible these incidents are only mentioned and not described in the results, however this does make the results less confirmable.

5.3 Contributions and recommendations for future research

5.3.1 Theoretical contributions
This study aims to contribute to theory in two manners. First, by studying how formal and informal systems, that are part of an ethical infrastructure, are influenced by a specific structural
aspect of an organization, namely centralization and so contribute to understand how these systems are manifested in organizations. Secondly, this study aims to contribute to theory by conducting a research that focuses on both formal and informal systems, within the same study and organization in order to broaden the understanding of the interrelatedness between both systems.

First of all, the results of this study showed that formal systems can be influenced by centralization, as centralization determines the allocation of the decision-making processes with regard to the authority to formulate and execute these formal systems. This relationship additionally illustrates that formal systems are not isolated from other organizational aspects. The informal systems are not directly influenced by centralization, it is the formal systems that are influenced by centralization and the informal systems that react on this shift that occurs in the formal systems. Tenbrunsel et al. (2003) argue that formal and informal systems are related through embeddedness, with the formal systems being embedded into the informal systems. Informal systems therefore have to power to reinforce and diminish formal systems. This research contributed to a broader understanding of this embeddedness by means of showing that informal systems can arise in order to complement formal systems where formal systems cannot complement each other. Tenbrunsel et al. (2003) suggests that these informal systems are already presented and therefore determine the effectiveness of formal systems. Smith-Crowe et al. (2015) additionally state that formal systems should be adapted based on the informal systems that already exist in an organization. However, these informal systems might be able to adapt themselves for the sake of the formal systems.

Secondly, within this research the formal task a supervisor has with regard to either the communication, surveillance and sanctioning of (un)ethical behaviour is considered to be a formal system. However, theories on formal systems usually describe formal systems as systems that are passive, such as a code of ethics and appraisal forms (Tenbrunsel et al. 2003., Rottig et al., 2011; Smith-Crowe et al., 2015). However, when a formal system is explained as someone’s official task, the formal system becomes a more active component in the ethical infrastructure. These results were found because these systems where investigated together with centralization and centralization deals with the dispersion of authority, which includes the determination of who is responsible. Furthermore, this research illustrated how centralization affects formal systems, therefore it can be concluded that centralization does influence the ethical infrastructure.
5.3.2 Recommendations for future research

When considering the previously mentioned implications of this study, some recommendations for future research on ethical infrastructures and the way it is influenced by centralization can be made. First of all, as Tenbrunsel et al. (2003) suggested, more research on ethical infrastructures should concern all three elements that are part of an ethical infrastructure. This research considered only the formal and informal systems, but if one wants to truly understand how an ethical infrastructure is influenced by centralization it would be wise to examine all the three elements. Additionally, this could help to provide insights into the way centralization affects a whole ethical infrastructure instead of just the formal and informal systems.

Furthermore, in future research the relation between centralization and formal and informal systems could be examined in multiple cases, with a variation of centralized and decentralized structures. A cross case analysis could be made between these cases in order to distinguish how centralization affects both systems, while comparing it with decentralized structures. For example, by means of a cross case analysis the results found in this study regarding the interrelatedness of formal systems and informal systems. This could help distinguish more specifically if this interrelatedness, and more specifically this reaction of informal systems on the formal systems, between these systems also exists in decentralized structures or if this interrelatedness actually depends on unworkable formal systems regardless of the cause of them. Moreover, centralization in the case of BTE Group entailed that a great deal of responsibilities regarding formal systems lied in the hands of the centralized HR department. Perhaps in other centralized organizations their centralized structure entails something slightly different and thus, researching the same relationship in those organizations could lead to other conclusions. Moreover, future research could focus on the interplay between the elements that are part of an ethical infrastructure. In this study, informal systems were used to compensate formal systems, further research could concentrate on whether this effect still holds up in other (similar) cases.

Moreover, the themes – such as the gatekeeper position of a supervisor - found in this study could additionally be examined through qualitative and quantitative manners in one research (mixed-methods). Quantitative research methods could provide insights in the extent to which these themes actually occur over varying cases, while qualitative research could help understand why or why not these themes occur. For example, how is this gatekeeper position experienced and does it actually become an informal communication system? And does this particular reaction ‘rise’ of this gatekeeper position also occur when formal systems are considered to be workable?
5.3.3. Practical contributions

This study can help management at BTE Group attain more insights on their formal and informal systems that are part of BTE’s ethical infrastructure. This research is particularly useful for the HR department of BTE Group, who is responsible for a great deal of the formulation of formal systems. Some formal systems are experienced as unworkable by organizational members, and the opportunity for most employees to give feedback on these systems appeared to be limited. However, through feedback the HR department could gain more knowledge about the employees at BTE Group and ethical situations they have to deal with, and thus the knowledge gap – which deals with by their wide span of control - can be tightened. The HR department could then adapt these formal systems in order to let them become more workable for employees. Furthermore, the data showed that supervisors have a formal task to either communicate, surveillance and sanction ethical behaviour. However, a formal system such as the sanction policy is not experienced as sufficient enough to use by all these supervisors. These managers now use ‘informal addressing’ of (un)ethical behaviour as a manner to deal with this kind of behaviour. Furthermore, they have become a ‘gatekeeper’ with regard to the sanctioning policy. Altogether, these managers seem to influence ethical behaviour in an informal manner throughout BTE Group. BTE Group should aim to have the various Team Leaders and Plant-managers discuss these situations with each other in training sessions, in order for them to learn from each other how to ‘informally address’ an subordinates in an effective way. If these particular supervisors learn how to execute informal addressing as effective as possible, ethical behaviour within BTE Group can be encouraged more successful.

Secondly, understanding ethical infrastructures can help managers to better understand how ethical behaviour in an organization is influenced, and can be influenced. This study in particular can be beneficial for organizations with centralized structures because this study illustrates how formal and (indirectly) informal systems are influenced by centralization and how they these systems are interrelated. Managers can therefore use these insights when designing ethical infrastructures, which can contribute to encouraging ethical behaviour more effectively in an organization and perhaps so; the world.
References


Appendixes

Appendix I – Interview guide

~ Dutch Version ~

<table>
<thead>
<tr>
<th>Datum</th>
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<tr>
<td>Tijd</td>
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<td>Afdeling geïnterviewde</td>
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<td>Functie geïnterviewde</td>
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<td>Werkzaam voor of na de centralisatie</td>
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<table>
<thead>
<tr>
<th>Persoon en functie: (invullen aan het einde van het interview)</th>
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<tbody>
<tr>
<td>1. Geslacht:</td>
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<tr>
<td>2. Leeftijd:</td>
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<tr>
<td>3. Hoogst genoten opleiding</td>
</tr>
<tr>
<td>4. Aantal jaren werkzaam bij BTE group</td>
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<tr>
<td>5. Aantal jaren werkzaam binnen deze functie</td>
</tr>
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Introductie
Hallo, ik ben Julie van Melick, masterstudent Bedrijfskunde aan de Radboud Universiteit in Nijmegen. Ten eerste wil ik u hartelijk bedanken aan uw deelname aan dit interview. Dit interview is onderdeel van mijn afstudeeronderzoek voor de opleiding ‘organizational design and development’. Het onderzoek gaat over de relatie tussen centralisatie en formele en informele systemen die onderdeel zijn van een organisatie zijn ethische infrastructuur. Centralisatie is onderdeel van de organisatiestructuur, en heeft onder andere invloed over hoe de autoriteit over bepaalde besluitvormingsprocessen verdeeld is over werknemers van een organisatie. Ethische infrastructuren hebben te maken ethisch gedrag in organisaties. Ethisch gedrag kan daarbij betrekking hebben op allerlei situaties binnen een organisatie, dit kan duiden op een situatie waarin werknemers stiekem een sigaret roken op een plek waar dit niet mag, tot situaties waarin werknemers gediscrimineerd worden. Een ethische infrastructuur is een manier om het ethische gedrag in organisaties te beïnvloeden. In dit onderzoek staan twee componenten die onderdeel zijn van een ethische infrastructuur centraal: formele en informele systemen. Bij formele systemen kunt u denken aan een business guide, trainingen of functioneringsgesprekken waarin ethische kwesties aan bod komen. Informele systemen duidden meer op informele gesprekken bij het koffieapparaat waarin men het heeft over ethische kwesties in de organisatie, of een situatie waarbij werknemers scheve blikken naar elkaar geven als men bijvoorbeeld een sigaret in een daarvoor niet bestemde plek opsteekt. Door middel van dit interview wil ik graag leren hoe u bovengenoemde dingen ziet, ervaart en hoe u zich daarbij voelt.

Als u hiermee instemt, dan zou ik graag een audio-opname maken van dit interview zodat ik het na afloop kan uitwerken. Hierbij is het van belang dat u weet, dat alles wat er wordt gezegd tijdens dit interview vertrouwelijk is, en alleen ik en mijn begeleider vanuit de universiteit op de hoogte zijn van de inhoud van dit gesprek. Alle namen en verwijsbare
informatie, zoals functietitels en afdelingen of locaties, worden geanonimiseerd in zowel de uitwerking van dit interview, als in het uiteindelijke verslag. Als u er klaar voor bent, dan zou ik nu graag over willen gaan op het daadwerkelijke interview. Het interview zal ongeveer een uur duren, mocht u een vraag hebben tussendoor of een vraag van mij is onduidelijk, dan kunt u altijd om extra uitleg vragen. Daarbij, neem gerust de tijd om na te denken over een antwoord. Het interview start zo meteen met enkele algemene vragen over u en uw functie bij BTE. Vervolgens gaan we dieper in op centralisatie en de formele en informele systemen binnen BTE. Heeft u nog vragen voordat we beginnen?

### Algemene inleidende vragen

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<tr>
<td>1.</td>
<td>Kunt u zichzelf kort voorstellen?</td>
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<tr>
<td>2.</td>
<td>Wat is uw huidige functie? Doenvragen over de positie van de functie (hoofdkantoor of fabriek) en in hoeverre deze functie zich bezig met procedures/documenten/formaliteiten opstellen of het uitvoeren hiervan [formele systemen]</td>
</tr>
<tr>
<td>3.</td>
<td>Hoelang werkt u al binnen deze functie? Doenvragen of deze functie voor centralisatie al bestond en hoe deze persoon hier is gekomen [centralisatie]</td>
</tr>
<tr>
<td>4.</td>
<td>Hoelang werkt u al binnen BTE group? Doenvragen hoe lang deze persoon al binnen de gecentraliseerde structuur werkt, als het van toepassing is of hoe lang deze persoon al voor de centralisatie bij BTE werkt. Indien van toepassing: doervragen in hoeverre de functie van deze persoon is verandert door de centralisatieslag bij BTE?</td>
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### A: Vragen over formele systemen

**Inleiding:** Binnen organisaties zijn er vaak verschillende geformaliseerde manieren waarin de normen en waarden van de organisatie met en de standaarden van organisaties betrekking gedrag van werknemers wordt overgebracht middels geformaliseerde systemen. Hierbij kunt u denken aan business guides, missie statements, maar ook trainingen waarin gedragsnormen die binnen de organisatie gelden te pas komen.

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<tr>
<td>1.</td>
<td>Hoe wordt ethische normen en waarden die gelden binnen BTE naar werknemers gecommunicceerd? Doenvragen naar training programma’s of omgangsafspraken. [formele communication systems], indien van toepassing: formele systemen die alleen in de fabriek/afdeling bestaan? [centralisatie] Wanneer en hoe vaak komt u deze systemen (a.h.v. voorbeelden die interviewee noemt) tegen? [recurrent communication]</td>
</tr>
<tr>
<td>2.</td>
<td>Bent ooit een situatie tegengekomen waarbij u gebruik heeft gemaakt van zo’n systeem, zo ja, kunt u deze situatie beschrijven? Zo, nee, in welke situatie zou u gebruik maken van zo een systeem? [formal communication systems] Doenvragen hoe belangrijk deze systemen zijn in het dagelijks opereren binnen BTE.</td>
</tr>
<tr>
<td>3.</td>
<td>Hoe wordt binnen BTE formeel toezicht gehouden op het gedrag van werknemers met betrekking tot ethiek? [formal surveillance systems]</td>
</tr>
<tr>
<td>4.</td>
<td>Kent u bij BTE formele systemen die het mogelijk maken voor werknemers om elkaar op bepaald gedrag aan te spreken of bepaald gedrag te controleren? U kunt hierbij denken aan een functioneringsgesprek, of bijvoorbeeld vertrouwenspersonen waar werknemers mogelijkheid hebben om ethische kwesties neer te leggen.</td>
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</tbody>
</table>
Doorvragen naar procedures die ethisch gedrag monitoren, straffen en beloningen die worden gegeven met betrekking tot ethisch gedrag.

Indien van toepassing: ga alvast naar vraag B6 of B7

5. Bent u ooit een situatie tegengekomen waarbij u gebruik heeft gemaakt van zo’n systeem, zo ja, kunt u deze situatie beschrijven?

Doorvragen in hoeverre deze systemen serieus worden genomen, en in hoeverre er werkelijk gebruikt van wordt gemaakt binnen BTE.

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### B: Formele systemen - centralisatie


Zo nee, als u hieraan zou willen bijdragen, in hoeverre denkt u dat hier mogelijkheid voor u is binnen BTE? [centralisatie, participation in decision making & extent to which individuals ‘feel’ as if they are responsible over ethical decisions]

Doorvragen wie volgens hen deze systemen ontwikkelt en invoert? Doorvragen of mensen die in ‘lagere’ management lagen ook mogelijkheid hebben om bij te dragen aan deze systemen

7. Als u gedrag van een werknemers tegenkomt in de organisatie wat volgens u niet naar de normen en waarden van de organisatie is, naar wie zou u dan formeel horen toe te stappen?

[formele systemen & reliance upon superior managers with regard to ethical decisions]

Doorvragen naar een situatie als het over gedrag zou gaan waarin er ‘slechts’ een organisatie norm is overtreden, of een situatie waarin er een maatschappelijke norm is overtreden.

Voorbeeld: interviewee geeft een voorbeeld waarin het gaat over een voorbeeld zoals “roken op een daarvoor niet bestemde locatie van een collega” dan een voorbeeld geven waarin discriminatie van pas komt en vice versa.

8. Als u zelf een keuze moet maken waarbij er sprake is van een ethische kwestie en u zou hier graag hulp bij willen, naar wie zou u formeel horen toe te stappen?

[formele systemen, decision making power through formal line of authority & reliance upon superior managers with regard to ethical decisions]

Doorvragen: in hoeverre zou de interviewee gebruik maken van deze personen in het maken van ethische keuzes? In hoeverre zou de interviewee hier werkelijk naar toe stappen?

[Informele systemen, decision making power through informal formal line of authority & reliance upon superior managers]

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9. Heeft u ooit een situatie meegemaakt waarin een collega-manager of een manager uit de directie (enige managementlaag boven het management team) onethisch gedrag vertoont? Zo ja, wilt u deze beschrijven? Zo nee, stel deze situatie komt voor, naar wie zou u dan formeel toestappen?

[formele systemen & decision making power through formal line of authority]

---

### C: Vragen over informele systemen

Inleiding: Behalve de formele systemen in een organisatie met betrekking tot ethisch gedrag, zijn er ook informele systemen. Informele, zijn in tegenstelling tot formele systemen, minder zichtbaar omdat ze niet vastgesteld of gedocumenteerd. Bij informele ethische systemen kunt
1. Hoe worden de normen en waarden die gelden binnen BTE, onderling door collega’s aan elkaar overgebracht?<br>
*Doorvragen naar verbaal en non verbaal gedrag, werknemers die andere ‘laten zien hoe het moet’, voorbeeldfuncties.*

2. Kun je een of meerdere situaties beschrijven waarin u informeel signalen op hebt gepikt over welk gedrag ethisch of onethisch is binnen BTE? Dit kan een situatie zijn waarin een collega laat zien hoe het er binnen BTE aan toe gaat met betrekking tot het veiligheidsbeleid of een gesprek dat u met een collega in de pauze hebt gevoerd met betrekking tot een ethische kwestie?<br>
*Informal communication systems*

3. Spreekt u zelf ooit met uw collega’s over ethische besluiten die u moet nemen binnen BTE? Zo ja, wanneer doet u dit?<br>
*Formal and informal communication systems*

*Informal surveillance systems or formal surveillance system*

5. In hoeverre worden normen en waarden volgens u overgebracht via voorbeeldgedrag?<br>
*Doorvragen: aan wie is het volgens u om dit voorbeeldgedrag te vertonen? En in hoeverre denkt u dat dit gedrag van die personen bijdraagt het ethisch gedrag van andere werknemers?*  
*Behaviour of organizational leaders*

6. In hoeverre zou u een collega aanspreken op zijn of haar gedrag als u dit nodig vindt?<br>
*Doorvragen: hoe zou u dit bij een college uit het management team, directie of andere lagen?*  
*Personal relationships & centralization*

7. Indien beantwoord bij vraag B9 deze overslaan.<br>
In hoeverre zou u met collega’s uit andere management lagen ethische kwesties informeel bespreken? *Informele systemen, decision making power through informal/formal line of authority & reliance upon superior managers*

---

**B: Informele systemen - centralisatie**

5. In hoeverre worden normen en waarden volgens u overgebracht via voorbeeldgedrag?<br>
*Doorvragen: aan wie is het volgens u om dit voorbeeldgedrag te vertonen? En in hoeverre denkt u dat dit gedrag van die personen bijdraagt het ethisch gedrag van andere werknemers?*  
*Behaviour of organizational leaders*

6. In hoeverre zou u een collega aanspreken op zijn of haar gedrag als u dit nodig vindt?<br>
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In hoeverre zou u met collega’s uit andere management lagen ethische kwesties informeel bespreken? *Informele systemen, decision making power through informal/formal line of authority & reliance upon superior managers*

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**Algemene vragen met betrekking tot ethiek**

- Indien het interview vastloopt met betrekking tot situaties over ethische kwesties;

Binnen een bedrijf kan iemand te maken krijgen met allerlei ethische vraagstukken, besluiten of situaties. Dit kunnen kwesties zijn waarin werknemers gedrag vertonen dat niet volgens de organisatie haar regels is, bijvoorbeeld alcohol nuttigen onder werktijd, of situaties waarin
gedrag wordt vertoond dat niet volgens de normen van de organisatie als maatschappij is, bijvoorbeeld als sprake is van discriminatie of intimidatie van werknemers.

| 1. Kunt u een situatie voor de geest waarin er sprake waarin u gedrag tegen kwam bij BTE waarin ethiek een rol speelde? Zo ja, kunt u deze situatie voor mij beschrijven?
| Ethisch gedrag van werknemers – situatie hoeft niet te gaan over de interviewee zelf |

| 2. In deze situatie (indien de interviewee een voorbeeld geeft) kunt u mij vertellen welke rol u hier speelde?
| Doorvragen of de persoon zelf een ethische keuze moest maken, of de keuze moest maken om iemand op ethisch gedrag aan te spreken, of zelf op ethisch gedrag aangesproken werd. |

**Debriefing**

Dit waren al mijn vragen. Dan wil ik u bij deze hartelijk bedanken voor uw antwoorden en uw tijd. Heeft u op dit moment nog vragen voor mij? Of andere zaken die u nog graag kwijt wilt? Wat vond u overigens van het interview?

Nadat ik het interview heb uitgewerkt zal ik deze naar u toesturen. U kunt het dan doorlezen, en nog eventuele opmerkingen doorgeven aan mij. Als u in de tekst kwesties vindt waarvan u liever niet heeft dat deze direct terug te zien in het verslag, dan hoor ik dat ook graag. Daarbij, zou u graag een samenvatting van het uiteindelijke verslag willen ontvangen?

Mocht u in de tussentijd nog vragen hebben, dan kunt u mij altijd bereiken via mijn email. In ieder geval hartelijk bedankt voor uw medewerking aan mijn masterthesis.
Appendix II – Observation protocols

Observation Protocol 1 – Observation 1

Subject of the study: the relationship between centralization and formal systems as well as informal systems (that are part of the ethical infrastructure).

Focus of the observation: centralization within BTE and the way top management addresses ethics towards its team leaders.

Location: BTE Nederland B.V., Headquarters, Dodewaard.

Date: 10th of May, 2019

Time: 08.00 – 10.00

Observant: Julie van Melick, participant as observer role, researcher is introduced as researcher in the training session.

Protocol: during the observation attention is payed to the following matters:

1. Content of the conversations between BTE members present during the training

2. Content of the presentations given by management

3. Content of the PowerPoint presentation

4. Facial expressions and body language of all BTE employees present during the training

5. Clothing of BTE employees

6. Contact between BTE management and the BTE team leaders

Instructions:
1. The researcher will not join the conversations during the training, unless asked by any BTE members.

2. If BTE members ask what the research is about; the researcher will say that this research investigates the relationship between centralization and ethical infrastructures. Furthermore, she is allowed to briefly explain what ethical infrastructures are.

3. Abbreviations are allowed to be used when taking notes during the observations.

4. If the research has certain ‘feelings’ during the training of e.g. uneasiness she can document it in the memo section, however it needs to be clear in the notes that this is about the researcher’s own feelings.

5. In the scheme below, notes can be written down.

<table>
<thead>
<tr>
<th>Time</th>
<th>Behaviour BTE management</th>
<th>Behaviour team leaders</th>
<th>Interaction between BTE members</th>
<th>Memo’s / Additional information</th>
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Observation Protocol 2 – Observation 2

Subject of the study: the relationship between centralization and formal systems as well as informal systems (that are part of the ethical infrastructure).

Focus of the observation: centralization within BTE and the way top management addresses ethics towards ‘new’ employees at BTE group.
Location: B.V. De Meteoor & Stelcon, Rheden.
Date: 10th of May, 2019
Time: 13.00 – 16.00
Observant: Julie van Melick, participant as observer role, researcher is introduced as researcher in the training session.

Protocol: during the observation attention is payed to the following matters:
   1. Content of the conversations between BTE members present during the training
   2. Content of the presentations given by management
   3. Content of the PowerPoint presentation
   4. Facial expressions and body language of all BTE employees present during the training
   5. Contact between BTE management and the participants of the training session

Instructions:
   1. If BTE members ask what the research is about; the researcher will say that this research investigates the relationship between centralization and ethical infrastructures. Furthermore, she is allowed to briefly explain what ethical infrastructures are.
   2. Abbreviations are allowed to be used when taking notes during the observations.
   3. If the research has certain ‘feelings’ during the training of e.g. uneasiness she can document it in the memo section, however it needs to be clear in the notes that this is about the researcher’s own feelings.
4. The researcher can join the different assignments during the training session, if asked by the trainers of this session.

5. In the scheme below, notes can be written down.

<table>
<thead>
<tr>
<th>Time</th>
<th>Behaviour BTE management/trainers</th>
<th>Behaviour participants of the session</th>
<th>Interaction between BTE members</th>
<th>Memo’s / Additional information</th>
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</table>
Appendix III – Initial template

1. **Formal systems**
   1.1 Formal communication systems
      1.1.1 Codes of conduct
      1.1.2 Mission statements
      1.1.3 Written performance standards
      1.1.4 Training programs
   1.2 Recurrent communication
   1.3 Formal surveillance and sanctioning systems
      1.3.1 Performance appraisals
      1.3.2 Procedures to report ethical/unethical behaviour
      1.3.3 Rewards regarding ethical and unethical behaviour

2. **Informal systems**
   2.1 Informal communication systems
      2.1.1 Unofficial ‘hallway’ conversations between colleagues
      2.1.2 Employees ‘showing each other the ropes’
      2.1.3 Behaviour of organizational leaders
   2.2 Informal surveillance and sanctioning systems
      2.2.1 Personal relationships
      2.2.2 Extra-organizational punishments
      2.2.3 Informal rewards

3. **Centralization**
   3.1 Participation in ethical decision making
      3.1.1 Various decision one has to make regarding policies, training, standards
      3.1.2 Various decisions regarding ethics
   3.2 Hierarchy of authority
      3.2.1 Reliance upon superior managers
      3.2.2 Reliance of subordinates
   3.3 Vertical decentralization
   3.4 Horizontal decentralization
   3.5 Responsibility
Appendix IV – Final template

1. Formal systems
   1.1 Formal communication systems
      1.1.1 Company rules
      1.1.2 Business guide
      1.1.3 Written performance standards
      1.1.4 Training programs
      1.1.5 Exemplary behaviour of supervisors
   1.2 Recurrent communication
      1.2.1 Frequency of communication
      1.2.2 Responsibility
   1.3 Formal surveillance and sanctioning systems
      1.3.1 Performance appraisals
      1.3.2 Breath tests
      1.3.3 Employee surveys
      1.3.4 Camera surveillance
      1.3.5 Surveillance by supervisors
      1.3.6 Sanctioning policy

2. Informal systems
   2.1 Informal communication systems
      2.1.1 Verbal and non-verbal behaviour
      2.1.2 Employees ‘showing each other the ropes’
   2.2 Informal surveillance and sanctioning systems
      2.2.1 Personal relationships
      2.2.2 Informal addressment on behaviour
      2.2.3 Gossip
      2.2.4 Isolation from group
      2.2.5 Shaming
      2.2.6 Pat on the shoulder
      2.2.7 Compliments

3. Centralization
3.1 Participation in decision making
   3.1.1 Various decisions one has to make regarding policies, training, standards

3.2 Hierarchy of authority
   3.2.1 Reliance upon superior managers
   3.2.2 Reliance on subordinates

4. How are formal systems influenced by centralization?
   4.1 Formulation of formal systems
      4.1.1 Scope of formal systems
      4.1.2 Workability of formal systems
   4.2 Authority to use formal systems
      4.2.1 Centralized authority to execute formal sanctioning system

5. Centralization influencing the combined use of formal and informal systems
   5.1 Informal systems compensating unworkable formal systems
   5.2 Gatekeeper role of supervisors
Appendix V – Interview Report BTE

The interview report is excluded of this document, they can be found in a separate file.
Appendix VI – Emails to interview participants

Invitation for interview

~ in Dutch

Geachte [meneer/mevrouw + achternaam],

Momenteel ben ik bezig met het schrijven van mijn thesis als onderdeel van de ‘Master Organizational Design and Development’ aan de Radboud Universiteit. Voor mijn afstudeeropdracht doe ik onderzoek bij BTE Groep naar de relatie tussen centralisatie en ethische infrastructuren.

U bent wellicht bekend met het begrip centralisatie, maar minder bekend met het begrip ethische infrastructuren. Bij ethische infrastructuren kunt u denken aan systemen in een organisatie die bijdragen aan ethisch gedrag van werknemers, voorbeelden hiervan zijn: gedragscodes, functioneringsgesprekken en/of trainingen.

Om deze relatie te onderzoeken zou ik graag interviews afnemen met meerdere werknemers binnen BTE-groep. Naar aanleiding van overleg met Dhr. [Anoniem in bijlage] benader ik u omdat ik denk met uw input de juiste informatie te kunnen verzamelen voor het onderzoek. Ik zou u bij deze dan ook graag willen uitnodigen voor een interview.

De interviews zullen ongeveer één uur duren en zijn bij voorkeur face-to-face. De informatie verkregen uit de interviews zal strikt vertrouwelijk behandeld worden, dit betekent dat alleen ik en mijn twee begeleiders vanuit de universiteit op de hoogte zijn van de inhoud van het gesprek. Alle namen en verwijsbare informatie, zoals functie-titels, worden geanonimiseerd in zowel de uitwerking van het interview als in het uiteindelijk verslag. U krijgt daarbij de uitgewerkte versie van het interview opgestuurd voor eventuele aan- en opmerkingen.

Ik hoor in ieder geval graag van u.

Met vriendelijke groet,

Julie van Melick
Email regarding interview transcripts
~ in Dutch

Beste [meneer/mevrouw + achternaam],

Enige tijd geleden heb ik u mogen interviewen voor mijn onderzoek, nogmaals bedankt hiervoor.

Bij deze de transcripten van dit interview. Heeft u nog enige opmerkingen of aanvullingen (betreffende centralisatie en de relatie met ethisch gedrag/systemen) dan hoor ik dit graag. Bovendien, mochten er stukken in staan die u liever niet direct in het verslag terugziet, laat dit dan ook vooral weten want dan houd ik hier rekening mee. Namen, functie titels etc., staan nu nog in de transcripten, deze worden uiteraard in het werkelijke verslag volledig geanonimiseerd.

Ik hoor in ieder geval graag van u.

Met vriendelijke groet,
Julie van Melick
Appendix VII – Research diary

The research diary is excluded of this document and can be found in a separate file.
Appendix VIII – Memo’s during analysis

*The memo’s made during the analysis are excluded of this document, they can be found in a separate file.*
Appendix IX – Transcripts and field reports with descriptive codes

The transcripts and field reports are excluded of this document, they can be found in a separate file.
Appendix X – Documents BTE with descriptive codes

Documents of BTE Group with descriptive are excluded of this document, they can be found in a separate file.
Appendix XI – Codes

The codes are excluded of this document, they can be found in a separate file.