



**Universiteit  
Leiden**  
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**Public procurement distance: analysing European  
public procurement policy implementation in 27 EU  
member states**

Schermerhorn, A.E.

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TRANSLAET van eenen Brief, van den Commiffaris van Oórlóg GOBIN, aen HET MAGISTRAET VAN ANTWERPEN, de Dato :9 Germinal, derde Jaer der Fransche Republiek.

*H*Et warmen voór de Hospitaelen deézer Stad, moettende by afslag aenbesteed worden, noodige ik U uyt van te willen doen aenplakken, zoo in deéze Stad, als in de omliggende Dorpen, dat men tot deéze Aenbesteedinge zal overgaen den 23 van deéze loopende Maend Germinal, (12 April, O. S.) ten 10 ueren 's morgens, op eene der Zaelen van het Stadhuys, die U zullen aenwyzen, de Aenneéners, of die 'er toe genegen zouden zijn, zullen van de Conditiën diesaen gaende kunnen onderrigt worden, op mynen Bureau.

*Heyl en Broederlykheyd*

Geteekent

G O B I N.

Voór Cope conform by Translaet

M. E. SOLVYNS, Sec.

## WAERSCHOUWINGE.

**I**ngevolge den bovenstaenden Brief van den Commiffaris van Oórlóg GOBIN, laet HET MAGISTRAET DEEZER STAD een-iegelyk weeten, dat men tot de Aenbesteedinge van den Band in de Militaire Hospitaelen op den 12 deézer Maend April, (O. S.) zal overgaen, ten 10 ueren voór Middag, op den Raed-huyze, op de groote Staete-kamer, waer naer een-ieder zig kan reguleeren.

Actum in Collegio den 19 Germinal, derde Jaer der Fransche Republiek, Eene ende Onverdeelbaer.

D E H A A N, Vr.

M. E. SOLVYNS, Sec.

## Chapter 4

# **METHODOLOGY: FROM THEORY TO EMPIRICS**

### **4.1 Introduction**

The subject of this chapter is the development of an instrument to measure public procurement distance and identify its possible causes. Together with the previous chapter, it will answer research question 2 into the factors that potentially influence the emergence of a distance between intended policy and its implementation.

The research design will be discussed first, followed by the selection of the respondents. Next, the focus will be on the measurement instrument that was used and the indicators of public procurement distance. The chapter will conclude with a brief summary and look ahead to the results of the measurements.

### **4.2 Research design**

Using the scientific literature as point of departure, expectations were established in the previous chapter with regard to administrative organisation, professionalism, policy discretion and administrative culture & segmentation. These expectations will be evaluated using a digital survey, which was distributed among procurement officers within publicly contracting organisations in the 27 member states. They publish their calls for tenders on the central European procurement website, Tenders Electronic Daily (TED). They form the lowest unit of analysis. Higher up in terms of analysis are the administration tiers: the local, regional and national governments. The second highest level of analysis is formed by the member states, and the highest is the European Union as a whole.<sup>20</sup>

To test the expectations as established with regard to administrative culture and segmentation, cross-sections are used at all levels of analysis of the new dataset.<sup>21</sup> This ensures that the possible influence of the independent variables on public procurement distance (the dependent variable) can be examined from different

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<sup>20</sup> When this study was conducted, the UK was still a member of the European Union and Croatia was not.

<sup>21</sup> Dataset available via [doi.org/10.34894/UKGIUR](https://doi.org/10.34894/UKGIUR) on dataverseNL.

perspectives. The following paragraph will discuss how the respondents were selected and what this might mean for the representativeness of this study.

### 4.3 Selection of respondents

Collected from TED were 204,575 email addresses of public procurement officials of 27 member states' contracting governments. These officials were contacted electronically via the email system of Leiden University with an invitation to participate. The invitation came with an accompanying email in which the study and the researcher were introduced. This email also explained the purpose of the study (Appendix A). The questionnaire was also attached (Appendix B). Participation in the survey was voluntary and anonymous. Respondents had the option to cancel their completion of the survey at any time and not return it to the researcher. Furthermore, the responses were separated from the respondents' email addresses, and the email address data were deleted. This made it impossible to trace which respondent gave which responses. The voluntariness and anonymity were explained in the email accompanying the survey.

From the file of email addresses used, it was not possible to determine whether they were personal addresses, project email addresses or general addresses for departments or organisations, for instance. Therefore, the questionnaire inquired about the position held by the respondent. For the same reason, it asked whether respondents were mainly active in public contracts in the field of works, services, supplies or utility sectors. The member state of the respondents was known, so that the completed responses could be linked to the corresponding state. This allowed for respondents whose member state was missing or incorrect, who were not employed by the government or whose sector of work was unclear to be excluded from the responses.

One point of consideration that arose from involving 27 countries in this study was the variety of languages. Creating the survey only in English could have led to differences in interpretation because assuming that everyone would have sufficient proficiency in the English language was risky, potentially resulting in a lower response rate. For that reason, the survey was translated from Dutch into the 20 languages of the member states.<sup>22</sup> The translation agency responsible for the translations had expertise in the languages used and was accredited and certified

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22 Bulgarian, Czech, Danish, English, Estonian, Finnish, French, German, Greek, Hungarian, Italian, Latvian, Lithuanian, Polish, Portuguese, Romanian, Slovak, Slovenian, Spanish, and Swedish.

under the quality standard NEN-EN 15038:2006 that was applicable at that time. It was also decided to provide translators with a list of technical terms to ensure they pay extra attention to them during the translation process. To gain further insight into implementation practices, the respondents were asked if they were willing to share an interesting case with the researcher and if they would like to be interviewed (by telephone) about the case in question. This resulted in a number of narratives illustrating the difference between theory and practice, which are included in Chapter 2.

To achieve the highest possible response rate, questions on procurement practices were asked from various angles. The respondents were not only asked which components were included in their job responsibilities, for instance, but also about specific procurement situations such as the impact of the number of suppliers in the procurement process and the role of contract extensions in policy implementation. This may have led to greater recognition of their own daily duties, which could prompt respondents to answer the questions posed. To increase the likelihood of spontaneous, not overly reasoned and not mutually agreed-upon answers between respondents, no option was provided to go back and revise responses.

Respondents had the opportunity to leave an email address to receive a summary of the research results in due course.<sup>23</sup> To further increase the response rate, 3 reminders were emailed to the respondents.

#### 4.3.1 Response data by country

Of the questionnaires sent (204,575, 'Sent'), a total of 172,434 did not reach the recipients ('not delivered'). This number was made up of emails that ended up in spam filters, were undeliverable or arrived somewhere but not with the intended recipients as their email addresses were no longer in use, for example. A number of email addresses turned out not to be unique (122); they received the survey 2 or 3 times. On balance, this resulted in 32,141 responses ('gross response'), including 15,327 recipients opening the questionnaire but not completing it, and 81 surveys being left unread and deleted. The total number of uncompleted questionnaires was 15,408 ('nothing filled in'). Thus, the net response was 32,141 minus 15,408 i.e. 16,733 ('net response'). This broke down into and 7,401 fully completed surveys ('complete response') and 9,332 partially completed surveys ('partial response'). The response rate ('net response' divided by 'gross response') for the 27 member states combined was 52%.

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23 Ninety-eight participants used this opportunity.

The table below shows the response data per member state:

TABLE 2

## Response data per member state

Member state	Sent	Not delivered	Gross response	Nothing filled in	Net response	Complete response	Partial response	Response rate
Austria	3,875	3,019	856	403	453	218	235	53%
Belgium	8,056	6,524	1,532	866	666	345	321	44%
Bulgaria	1,884	1,497	387	182	205	76	129	53%
Cyprus	520	376	144	38	106	51	55	74%
Czech Republic	5,068	4,023	1,045	338	707	289	418	68%
Denmark	5,072	3,859	1,213	738	475	244	231	39%
Estonia	823	604	219	57	162	92	70	74%
Finland	5,250	4,448	802	271	531	362	169	66%
France	43,622	38,497	5,125	3,171	1,954	731	1,223	38%
Germany	26,000	20,746	5,254	2,110	3,144	1,245	1,899	60%
Greece	3,483	2,872	611	242	369	144	225	60%
Hungary	3,515	3,065	450	242	208	82	126	46%
Ireland	2,833	2,351	482	240	242	125	117	50%
Italy	17,251	15,196	2,055	1,181	874	350	524	43%
Latvia	1,683	1,484	199	74	125	63	62	63%
Lithuania	2,273	1,855	418	132	286	173	113	68%
Luxembourg	435	321	114	68	46	18	28	40%
Malta	180	154	26	7	19	10	9	73%
Netherlands	8,484	6,446	2,038	932	1,106	598	508	54%
Poland	13,018	10,958	2,060	810	1,250	430	820	61%
Portugal	2,103	1,661	442	178	264	102	162	60%
Romania	4,701	3,665	1,036	584	452	166	286	44%
Slovakia	1,719	1,361	358	116	242	93	149	68%
Slovenia	2,296	1,608	688	207	481	242	239	70%
Spain	8,137	6,896	1,241	508	733	302	431	59%
Sweden	6,842	5,382	1,460	647	813	449	364	56%
United Kingdom	25,452	23,566	1,886	1,066	820	401	419	44%
<b>Total and %</b>	<b>204,575</b>	<b>172,434</b>	<b>32,141</b>	<b>15,408</b>	<b>16,733</b>	<b>7,401</b>	<b>9,332</b>	<b>52%</b>

To ensure that only respondents working for governments were included in the analyses, the respondents were asked whether they worked for commercial rather than public organisations. The 288 respondents who ticked the commercial box were filtered out of the data and deducted from the net response of 16,733, while 4,649 respondents did not answer the question on their specific sectors or member state. This number was also deducted from the net response, resulting in 11,796 observations (N). This number was used to conduct the empirical analyses.

#### 4.3.2 Representativeness

According to the European Commission, there are over 35,000 contracting and purchasing government entities in the member states that publish a European call for tenders at least once a year (Commission, 2011b: 8). Public contracts above European threshold values must be published on the European website (TED).<sup>24</sup> Previous studies do not provide much data on the performers of these contracts.

A large number of respondents (16,733) returned the survey in part or in full by email. The assumption is that the survey results are representative of the entire research population. By using all the email addresses found, the risk of potentially overlooking a group of respondents was minimised. Yet, it is conceivable that under the influence of a number of factors, the actual extent of the public procurement distance reported by respondents differed from reality. This could be due to the fact that it was impossible to verify whether all procuring entities at all levels of government indeed published all their announcements regarding public contracts. Certain procuring entities may not have been aware of the existence of a publication requirement, as a result of which this group could not be approached. Procuring entities could, for example, also choose not to publish a call for tenders in certain situations but, for reasons best known to them, award the contract directly to their preferred supplier. Any non-publication could also be due to contract splits so that the separate amounts remained below the European thresholds and did not have to be put out to tender. The percentage of undelivered and unopened emails could also be a result of email addresses having only been used once for a specific procurement project and subsequently closed. Alternatively, the recipient might no longer be working in the relevant position or changed email addresses without closing the former. Staff could have been absent and unable to read emails. Recipients could also discard the message unopened. This could potentially have resulted in an underestimation of the public procurement distance as measured in this study, resulting in less variation in the dependent variable in the sample compared to the variation in the population.

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<sup>24</sup> See footnote 9 in Chapter 2 for the thresholds.

#### 4.4 Measurement instrument used

To investigate public procurement distance and measure variation in the independent variables, a questionnaire was used as a measurement instrument. Its design was based on the theoretical framework developed in Chapter 3.

The perspective of the respondents and the avoidance of any confusion about the content of the questions were prioritised in its design (Neuman, 2000: 251). This led to the decision to use a closed anonymous questionnaire. Respondents might be more willing to answer questions about potentially sensitive subjects such as their job performance with this particular type of questionnaire. It was also considered that this type of questions would be simpler and quicker to answer, with responses being easier to process and analyse than answers to open-ended questions about procurement practices. It could be that respondents answered questions on topics they knew little or nothing about. It is also conceivable that a topic they considered important did not appear in the questionnaire or that certain practical situations were oversimplified in the questionnaire or incorrectly interpreted, which could also influence the responses (Neuman, 2000: 260-261). To avoid this problem as much as possible, the measurement instrument comprised different types of closed questions with scales, categorical questions and questions in the form of statements. Moreover, the issue of public procurement distance was approached from multiple angles, using the different theoretical perspectives as presented in Chapter 3 as a starting point. This was also expected to reduce the likelihood that respondents would lose their attention. The diverse question types also served to mitigate the potential impact of straight-lining (Cole et al., 2012: 2).

The respondents' opinions were measured using questions on a 5-point Likert scale ranging from 'Strongly disagree' to 'Strongly agree', with the middle option on the scale being 'Neutral'. One question, concerning the use of discretionary policy instruments, had to be answered on a 4-point Likert scale. The use of a scale gave the opportunity to translate complex theoretical perspectives into response options understandable to respondents. It also created the possibility of unlocking respondents' opinions with precision (DeVellis, 2003: 9-10). Having five answer options was expected to allow for properly nuanced responses without overcomplication. This could have negatively affected the quality of the responses (Krosnick & Fabrigar, 1997: 144). The scales also ensured that the relevant responses could be analysed at an interval measurement level. This made it possible to apply multivariate regression analysis using ordinary least squares (OLS). This approach was chosen because it was assumed, based on the literature and on the domain knowledge of the researcher, that the relevant variables which

may influence public procurement distance were included in the regression model (Majka, 2024).

Several questions were measured on a nominal scale. These were included in the analyses as dummy variables. As for the three potential project effects measured in this study, it will be determined whether they can be transformed into a single factor.<sup>25</sup>

#### 4.4.1 Testing the draft questionnaire

The questionnaire was tested three times before it was sent to all respondents. The very first draft questionnaire was submitted to four Dutch procurement experts with extensive practical experience in tender procedures. It was modified based on their feedback, particularly in terms of unclear language and content.

A second draft was implemented by mailing the questionnaire to 25 Dutch and 25 Flemish respondents. This not only tested the survey, but also whether the software chosen to collect the data with was useful for this study. Of these test surveys, 20% did not arrive, and 40% arrived but were never opened. The test response was approximately 20%. Based on the respondents' answers, the wording of the questions was further honed.

The following test was carried out by writing to 50 email addresses across all EU member states. The aim of this international test was to check the accuracy of the translations in terms of the clarity of the language used, to assess the comprehensibility of the procurement-technical aspects and to evaluate the effectiveness of the questionnaire's composition. The test respondents received the survey as well as two reminders by email; 40% did not reach the recipients. The response rate across the 27 member states was about 30%. The most important adjustments following this international test were further refinement of the questionnaire, adding a third reminder and adjusting the accompanying letter. It was also decided to include the estimated completion time in the digital questionnaire by adding the sentence *"This survey will take a maximum of 20 minutes of your time"* and a progress bar running along checking the respondent's advancement through the questions.

#### 4.4.2 Validity

Where the internal validity was concerned (Yin, 2014: 239), four distinct perspectives were identified based on the literature that might explain the emergence of public procurement distance: administrative organisation, professionalism, policy discretion, and culture and segmentation. These perspectives can be interpreted as

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<sup>25</sup> These effects are optimism bias, scope creep, and planning fallacy.

potential alternative explanations for public procurement distance. If one explanation shows no effect while another does, conclusions can be drawn about the possible causes of public procurement distance and to what extent European procurement policy actually leads to the desired effect. This addresses the central research question of this study. The perspectives are described in paragraph 4.6.

A questionnaire was compiled to measure such possible causes. Moreover, the researcher incorporated his practical experience into the questionnaire. For example, by asking respondents whether they drafted contractual terms more broadly than necessary for the tender. The regulations do not allow this, but the researcher has found it to be a regular occurrence in practice. All the email addresses of public procurement officers within the EU available during a certain period were collected. The list was tested and further refined based on the findings. This was described earlier in this chapter.

For each theoretical perspective, questions were asked from different angles in order to make valid statements about the cause of public procurement distance based on the opinion of the research population from across Europe. This broad design also meant that socially desirable answers were avoided as much as possible, and no relevant aspects were overlooked. The survey was also anonymous, meaning that answers could not be traced back to individual respondents. This might have also contributed that socially desirable answers were avoided as much as possible. In section 5.3, this point is further elaborated based on the survey results.

As for *administrative organisation*, the questionnaire inquired into both the use of procurement and legal consultants as well as whether these consultants worked inside or outside the relevant procuring organisation. The extent to which contracting authorities cooperate was also asked. Where *professionalism* was concerned, not only the level of experience in the field was examined, but also whether education played a role in influencing public procurement distance. As for *policy discretion*, it was measured not only whether respondents experienced leeway to be able to steer tender procedures in the desired direction in terms of content, but also whether they sometimes allowed minor errors in tenders to be rectified without immediately excluding suppliers from further participation in the procurement process. *Culture* was approached from various cross-sections of the dataset in order to reveal how this might affect the dependent variable.

Regarding external validity (Yin, 2014: 238), factors contributing to public procurement distance may also offer valuable insights for a broader range of policy areas beyond public procurement. The dynamics observed in public procurement policy can support implementation strategies and governance models across the policy spectrum. Elements such as administrative organisation, public administration culture, policy discretion and levels of professionalism can play a role. For

example, in the implementation of healthcare in different parts of Europe (Weziak-Bialowolska, 2014), quality of public administration (Charron & Lapuente, 2013; Bubbico et al., 2017), the way in which technological innovations are translated into the economy (Rosenberg, 1985), social programmes (Pressman & Wildavsky, 1984), and even international politics (Varoufakis, 2017).

Based on the literature, various cross-sections of the dataset were made for the cultural perspective. One of these cross-sections was based on compliance with the guidelines. Falkner et al. (2005) and Falkner & Treib (2007) found four cultures of compliance with a directive in the social domain. Based on this, they made a classification of 19 member states<sup>26</sup>. Perhaps a similar pattern of countries will emerge for procurement. If this is indeed the case, a general statement can be made about possible compliance patterns in the EU.

The timing of the survey (2015) in relation to the publication date of this study may affect the validity of the results. Will the same results be found when the study is repeated for a different group, over time, for instance? There will probably be no difference. This is because there is clear evidence that the nature and persistence of distance issues in European public procurement policy have changed little over the years (see also the overview in Chapter 1). The bottlenecks in public procurement have been a consistent topic of discussion in publications by the European Commission (Commission, 1989; 1998, 2001; 2008c; 2011a; 2011c; 2017a, b), specialised organisations (Sylvest et al., 2011; European Court of Auditors, 2015; OECD, 2017) and in scientific literature (Liberatore, 1991; Csáki, 2006; Maandag, 2007; Van Weele, 2010; Volker, 2010; Arrowsmith, 2012; 2015; Semple, 2016; Andhov et al., 2022) since the 1980s. Therefore, the results are still relevant, useful and reproducible in new research. This does, incidentally, raise the question of why that is still the case, which will be answered in the upcoming chapters.

#### 4.4.3 Reliability

Where the degree of reliability of the measuring instrument was concerned (Yin, 2014: 240), several questions were asked about the different theoretical perspectives used to maximise the knowledge about the underlying concept. The measurement instrument comprised different types of closed questions with scales, categorical questions and questions in the form of statements. The aim was to achieve adequate refinement in the responses without the answer options leading to too much complexity for respondents.

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26 Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

By introducing sufficient variation into the questionnaire, respondents were stimulated to answer the questions. It also minimised the risk of straight-lining (Cole et al., 2012: 2). This could negatively affect the response rate as this could lead to sloppy answers with a negative impact on the degree of reliability of the survey.

#### 4.5 Public procurement distance

During the procurement process, which covers the specifying of the procurement needs and selecting the most suitable tender (Van Weele, 2010: 29, 117-120; Van der Horst & Schenk, 2016: 105-106), public procurement distance may arise in relation to the mandatory procurement policy.

The said distance can also emerge with regard to discretionary policy on the deployment of the strategic instruments and cross-border procurement. Therefore, it is important to use separate analyses to determine whether different circumstances play a role in the emergence of procurement distance in the implementation of mandatory policy and discretionary policy. The expectations and the associated questions used to make this part of the theory measurable are presented in summarising table D1 in Appendix D.

Point of departure in mandatory European public procurement policy as examined in this study is that the regulations are applied to the letter. The assumption was, therefore, that the conditions and obligations of the intended policy would be implemented as formulated in advance. To make this key point measurable, the respondents were asked whether they indeed always applied the procurement regulations to the letter.

In the first stage of the procurement process, varying types of effects may occur that contribute to explaining why public procurement distance arises because of which the procurement regulations are no longer strictly applied. This study tested 3 possible effects referred to in the project literature: optimism bias, scope creep and planning fallacy (Brodkin, 2000: 3; Flyvbjerg et al., 2003, 2012; 2016; Lovallo & Kahneman, 2003; Capka 2004; Cantarelli, et al., 2012). To gain insight into this regard, the respondents were asked whether they indeed experienced that the costs and risks of projects to be tendered were stated too low and too optimistically, their scope was made more extensive than necessary or the lead times of projects to be tendered were deliberately estimated lower than necessary in advance. The responses to these three questions were considered to further delineate the issues surrounding the implementation of procurement policy.

According to the literature, these three effects often occur simultaneously (see also Chapter 3), suggesting the presence of a specific underlying latent construct

that comes to the fore upon the realisation of a project. Through exploratory factor analysis (EFA), it was measured whether this underlying construct might be made visible based on the collected data (Fabrigar & Wegener, 2012: 19-21). If so, a 'project effects' factor would be defined.

The second step in the procurement process centres on selecting the winning tender. If respondents would indicate in their responses that they did 'not get what they expected to procure in advance' and were 'not satisfied with the result of the procurement', the selection process had not functioned properly, resulting in distance.

Secondly, indicators for the discretionary strategic instruments (sustainability, social return, innovation, participation in government contracts of small to medium-sized enterprises) were tested by asking the respondents about the extent of their use of these instruments and to what extent they applied them in their tender procedures. The instruments differ too much in terms of intended policy objective to be able to turn them into a single factor, so that they were measured separately.

As for the discretionary policy for cross-border awarding, it was important to establish the extent of purchases abroad so as to make visible to what extent this played a role in public procurement. To raise this issue in the responses, the question was to what extent the respondents ever awarded a contract to a supplier in another member state. They were also asked whether they ever awarded contracts to suppliers from outside the European Union. This would give an even sharper picture of whether cross-border awarding to non-national suppliers had any influence on the emergence of public procurement distance within European procurement policy.

#### **4.6 Making potential causes of public procurement distance measurable**

This paragraph highlights the independent variables used to identify possible causes of public procurement distance. This will be done, firstly, for administrative organisation by addressing available capacity and collaboration between contracting authorities, and, secondly, for professionalism. Here, a distinction will be made between tacit knowledge and training, and intrinsic motivation. Thirdly, the independent variables that may influence policy discretion will be discussed, followed by a final presentation of possible causes of distance in a cultural clarification. The responses to most questions were measured using a Likert scale. If questions were not measured on this scale, this will be specified in the discussion below. A table of summarising statistics is included as Table C21 in Appendix C.

The expectations formulated in Chapter 3 and the questions used to make the expectations measurable are presented in summarising table D2 in Appendix D.

### **Administrative organisation: capacity and collaboration**

If a government organisation lacks procurement or legal expertise on how to apply regulations and policies as intended in advance, it may call on consultants with the necessary knowledge. These consultants may come from within or outside the organisation. Expectation 1a suggests that as an organisation has more procurement expertise, public procurement distance is likely to decrease because it is assumed that the specific knowledge brought by consultants has a positive influence on bridging such distance. To gain insight into this part of the study, the survey inquired about the extent of deploying internal and external legal and procurement consultants to reveal how this affects public procurement distance.

Where collaboration is concerned, contracting organisations can join forces to compensate for a lack of expertise, thereby reducing distance as expected (expectation 1b). To capture this, the respondents were asked if and to what extent they collaborated with other contracting authorities. This was expected to provide insight into whether collaboration affects the dependent variable.

### **Professionalism: tacit knowledge and formal knowledge**

Occupational control over procurement actions from the perspective of professionalism was examined through two approaches – firstly, based on practical experience in the form of tacit knowledge. Secondly, occupational control over procurement actions was measured based on formally acquired knowledge through training.

As for tacit knowledge, it is expected that extensive experience in supervising tender procedures and working in the field of expertise (seniority) leads to more knowledge among the respondents as to how to run these procedures, resulting in less distance (Expectation 2a). The response options were converted into dummy variables. It will now be discussed how both points were made measurable.

To gain insight into the impact of the number of tender procedures to be supervised on the public procurement distance, the number of contracts concluded each year were used as a benchmark. Research has brought to the fore that this annual number decreases as the contract value increases (PwC, 2011: 69). It is conceivable that this is due to tender procedures becoming more complex as the contract value increases. This can lead to increasingly more time being spent on supervision, meaning that increasingly fewer tenders can be implemented each year. To gain more insight in this respect, the respondents were presented with

a question to be scored on a scale where the intervals between the measurement points became progressively larger. The point of reference is set at supervising 2 or fewer procurements per year. The questions ranging from 3 to 5 up to more than 20 supervised tenders per year formed the dummy variables.

Regarding seniority (the other aspect of tacit knowledge to be measured), it is assumed, based on Freidson (2004), that the more years of service respondents have, the better they are familiar with the sector and the organisation where they work. This makes tacit knowledge increase and distance decrease. Involvement in European tenders for 1 year or less becomes the point of reference, and the other possibilities form the dummy variables. This was the way of measuring whether the degree of seniority affected public procurement distance. To gain proper insight, the dummy variables were to be scored on a scale where the intervals between the measurement points became progressively larger, as it was conceivable that an additional unit of experience would not lead to a proportional increase in tacit knowledge and, therefore, to a proportionally greater influence on the dependent variable as well.

A second approach within professionalism focused on formal knowledge. This is knowledge in the form of education and training. Expectation 2b suggests that the better educated the respondents say they are, the better they knew how to perform procurement tasks. This is expected to reduce the distance between policy intentions on paper and their implementation. Several authors consider specific professional training to be important to successfully perform work activities (Freidson, 2004, Callender & McGuire, 2007) but there are also authors who observe that a certain amount of practical experience suffices (Matthews, 2005; Abutabenjeh & Gordon, 2015). For that reason, a distinction is made in the questions in terms of the respondents' learning through specific public procurement training, general procurement training or practice without training. The response options were converted into dummy variables. Only having practical experience became the point of reference and the other options formed the dummy variables. This was the way of measuring whether the training affected public procurement distance.

### **Professionalism: intrinsic motivation**

Intrinsic motivation to serve the public interest was the last aspect of professionalism to be examined. In the public administration literature, it is known as public sector motivation (Perry & Wise, 1990). The expectation is that intrinsic motivation has a positive effect on reducing public procurement distance (expectation 3). To measure this, the respondents are asked to what extent they agreed with the question of whether they considered that they served the public interest. The

more respondents said they considered the public interest, the more intrinsically motivated they were.

### **Policy discretion**

Policy discretion is the leeway that the policy leaves to actors to, if desired, interpret and implement certain parts of that policy within a given regulatory framework. It is expected that as the scope to manage the details of tender procedures increases, public procurement distance also increases (expectation 4a). To gain insight in this regard, two questions were put to the respondents. The first was to measure the policy discretion aspect by asking whether procurement officers had the leeway to control the details of a tender procedure or, in fact, experienced that procurement regulations left little room for their own input. This helped assess whether the two extreme aspects of policy discretion, namely experiencing a great or, in fact, little freedom, influenced public procurement distance.

Tender procedures are performed by procurement staff who exercise a certain profession in procurement (buyer, lawyer, contract manager or part-timer). They face complex regulations and diverse, often conflicting, interests of actors. In practice, these interests must be combined into a successful procurement process. This may lead to the need to bend rules to make them better implementable in the eyes of procurement officers, thereby increasing public procurement distance (expectation 4b). To gain insight into the possible influence of the occupational groups on public procurement distance, these were converted into dummy variables. Part-timers became the point of reference, and the other possible occupational groups form the dummy variables. This was the way of measuring whether the profession affected public procurement distance.

Actors other than public procurement officers may also influence public procurement distance. They may affect the degree of policy discretion available to procurement officers in practice. To measure this, the respondents were presented with statements in which it was examined for various actors why a contract could not be awarded to a winning bidder. The actors being measured were the organisation itself (expectation 4c), politics (expectation 4d), market parties (expectation 4e) and media (expectation 4f). A statement was formulated for each actor about the influence of stopping the award of a contract to the winning bidder: because their own employer wanted it that way, or because there was certain political pressure to stop a tender procedure. To reveal this where the market was concerned, the proposition was put forward whether the threat of a complaint or legal action affected the procurement process. For the media actor, it was stated that a publication influenced whether a contract could be awarded. The statements were not included in the regression analyses because

they represent a certain procurement situation with a dependent variable already linked to an independent variable in the statement. The results will be presented in Chapter 5 and 6, in which the outcomes of the measurements will be described. The statements form a further exploration of the theoretical perspective of policy discretion.

### **Public administration culture and segmentation**

The final theoretical perspective is that of the public administration culture and segmentation. Public procurement can be embedded in multiple administration tiers or segments that may play a role in implementation. To provide more clarity, the respondents were asked which member state they came from. The responses from these countries were then segmented by sectors, compliance, administration tiers, geography and general system of governance based on what emerges from the literature. This would provide insight into whether there are compliance patterns that originate from a particular shared culture. Statements in this regard would be based on the outcomes.

An initial segmentation is made based on a breakdown by public or utility sectors since, according to Bovis (2007: 49-50), the guideline for the utility sectors is less strict than for the public sectors. This may affect public procurement distance (expectation 5a). To make this clear, the respondents were asked for which sectors they supervised tender procedures – for the public or the utility sectors. These response options were converted into dummy variables. ‘Utility sectors’ became the point of reference and the public sectors the dummy variable. This was the way of measuring whether the sector affected public procurement distance.

A second classification took as its starting point a segmentation by tier of administration. There might be a difference between levels of government in the implementation of the procurement process. This is based, among other things, on Pressman & Wildavsky (1984) and Guccio et al. (2014) who identify differences in the way centrally formulated policy is translated into implementation at the regional and local levels of public administration. This may affect public procurement distance (expectation 5b). To make this measurable, the question posed to respondents was segmented into national, regional and local governments. The response options were converted into dummy variables. ‘Local’ became the point of reference and the other options formed the dummy variables. This was the way of measuring whether the level of government affected public procurement distance.

In the third segmentation of member states, the four cultures of compliance (expectation 5c) found by Falkner et al. (2005) and Falkner & Treib (2007) – law

observance, domestic politics, transposition neglect and dead letters – were the point of departure for the classification of 19 member states. These groups of member states were tested to see if a corresponding response pattern as found by Falkner et al. (2005) and Falkner & Treib (2007) emerged. If so, there could be a certain European compliance culture. The response options were converted into dummy variables. ‘Law observance’ became the point of reference. This was the way of measuring whether compliance affected public procurement distance.

The fourth segmentation is based on geographical regions. The question here was whether the geographical division of 27 member states into the regions North, West, South, East and Central<sup>27</sup> would reveal possible differences in administrative culture (expectation 5d). The response options were converted into dummy variables. Based on the theory (Fazekas, 2017; Falkner et al., 2005), ‘North’ became the point of reference, and the other regions formed the dummy variables. This was the way of measuring whether geographical region affected procurement distance.

The last classification by general systems of government was established based on literature by Le Galès (1998) and Pollitt & Bouckaert (2000). These authors analyse – among other things – differences in administrative cultures between unitary and federal systems of government (expectation 5e). These may have an influence on distance. To measure this, the dataset was divided into unitary governed member states and federally governed member states. The response options were converted into dummy variables. According to these authors, in unitary systems, governance and decision-making power is somewhat concentrated in central governments. In federal systems, governance is more distributed across the tiers, which may result in greater public procurement distance than with centrally managed systems, so that ‘Federal’ became the point of reference.<sup>28</sup>

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27 North: Denmark, Finland, Sweden. West: Austria, Belgium, France, Germany, Ireland, Luxembourg, the Netherlands, United Kingdom. South: Cyprus, Greece, Italy, Malta, Portugal, Slovenia, Spain. Central: Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovak Republic. East: Estonia, Latvia, Lithuania.

28 Unitary: Bulgaria, Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Sweden, United Kingdom. Federal: Austria, Belgium, Germany, Spain.

## 4.7 Conclusion

This chapter has constructed the research design to measure the theoretical model of public procurement distance through the distribution of an electronic survey to European procurement officers of contracting organisations. The questionnaire that formed the basis of the survey was tested and adjusted before it was sent, and 16,733 surveys were fully or partially completed and returned. This corresponds to a response rate of 52%.

The results of these analyses will be presented in the following chapters, followed by conclusions and recommendations linked to the outcomes of the measurements.