

Explaining Non-Compliance with European Union Procurement Directives: A Multidisciplinary Perspective

KEES GELDERMAN

Open University of the Netherlands

PAUL GHIJSEN

Open University of the Netherlands

JORDIE SCHOONEN

Open University of the Netherlands

Abstract

Since their adoption in the 1970s, compliance with European Union (EU) procurement directives has been problematic. Many studies have reported on the effectiveness of the directives, mostly in terms of the impact on the openness of public procurement and the impact on cross-border trade. However, research on the explanation (or the lack) of compliance with EU directives is limited. This article identifies the directives which are most sensitive to non-compliance. A multidisciplinary model for explaining compliance is presented, drawing from criminal theory, economics, social psychology and public purchasing. The impact on compliance is quantified, using survey data from purchasing professionals of the Dutch Ministry of Defence. The results indicate that both the expected gains of compliance and the organizational pressure have a positive impact on compliance. In contrast, no support is found for the effect of certainty and severity of sanctions and the perceived resistance of suppliers in case of non-compliance.

Introduction

The idea of a single market is to create a well-functioning market amongst the EU Member States by guaranteeing the free movement of goods, services, labour and capital (Nielsen and Hansen, 2001). An important feature of a working single market is that the public sector is expected to source much more frequently directly from producers located in other EU

countries. The Commission envisages a borderless or open EU public procurement market in which physical location and the nationality of suppliers would be of no or limited importance (Madsen, 2002). The public procurement market has been traditionally considered as an area where national protectionism played a significant role and where a large potential for welfare gains existed as a result of the opening up of national markets (Nielsen and Hansen, 2001).

Since the 1970s, public procurement in the EU has been governed by directives designed to tackle problems of protectionism and discriminatory public purchasing, which were considered to be hindering competition and the completion of a single market. The directives are aimed at providing transparency and rules of conduct for the whole tendering process: compulsory publication of notices about public contracts, objective specifications, types of award procedures and time limits (Heijboer and Telgen, 2002). The first EU Directives on public procurement were adopted in the 1970s, dealing with public sector works and public supply contracts. These early directives were limited in scope and largely ignored in practice (Cox, 1993). From 1985, however, an intensive legislative programme from the European Council, resulting in Directive 2004/18/EC as a co-decision procedure of the Council and Parliament, extended the regime to services and to the utilities sector of water, energy, transport and telecommunications, which were formerly excluded (Commission, 2006; Curtol *et al.*, 2006). The directives offer the Open Procedure and the Restricted Procedure as standard procedures. Under the Open Procedure all potential suppliers who express an interest in tendering must be invited to tender. Under the Restricted Procedure the number of interested suppliers to whom invitations are sent may be restricted. Still, there must be no discrimination between suppliers on grounds of nationality of Member State. In specific circumstances the Negotiated Procedure can be used, which allows the procuring entity to engage in negotiations with the tenders concerning their initial offers. The Public Sector Directive 2004/18 EC introduced a new procurement procedure: the Competitive Dialogue. This procedure aims to provide a more flexible approach to the award of complex contracts. Whereas the Open, Restricted and Negotiated Procedures require the drawing up of tender specifications by the procuring entity, the Competitive Dialogue allows the specifications to be more than unspecific. The needs and requirements of the entity are the starting point for a dialogue between the entity and the chosen candidate (Losch, 2007). The Competitive Dialogue may apply when 'awarding particularly complex contracts' (Article 29 of Directive 2004/18 EC). Obviously, the various procedures are likely to show varied levels of compliance across sectors and Member States. Under the Open Procedure the tendering entities and the tenders have to follow rules that

are more limiting than rules in the other procedures. This article will focus on non-compliant behaviour regarding the Open Procedure.

Ever since the adoption of the EU Directives, their impact and effectiveness have been seriously questioned. A number of studies assessed the impact on cross-border trade, mostly based on an analysis of quantitative data on contract awards as published in the database Tenders Electronic Daily (TED). Most studies report disappointing results: the potential savings and levels of cross-border trade are not as high as anticipated by the European Commission (Martin *et al.*, 1997; Erridge *et al.*, 1998). The Green Paper of the European Commission (1996) states that *compliance* with the directives should be improved. The empirical study of De Boer and Telgen (1998) clearly suggests that the proper use of EU directives in public procurement is far from common practice. Now, many years later, compliance remains a major issue. More recent studies have reported insufficient levels of compliance with the directives (see, for example, Netherlands Ministry of Economic Affairs, 1999, 2004). Many reasons are suggested to explain why public authorities do not comply.

However, these claims are *not* endorsed with empirical evidence. Opinions differ with respect to the most effective way to realize compliance and the EU's ultimate goals. Nielsen and Hansen (2001) for instance suggest the introduction of a 'competitive dialogue' between public buyers and suppliers in combination with the further enforcement of existing rules, as later adopted by the EU in Directive 2004/18. Gordon *et al.* (1998) conclude that clearer rules are needed for more supplier awareness of the EU directives, and for a more effective enforcement. In contrast, De Boer and Telgen (1998) are opposed to a more strict and thorough monitoring. Instead, the key to more compliant purchasing practices would be a structural professionalization of the public purchasing activities. Others argue that the EU procurement rules will always fail, because 'the rules were framed on the basis of neo-liberal intellectual ideas, which assume that public supply efficiency is best achieved through competitive and open tendering processes' (Cox and Furlong, 1995, p. 87), which is at variance with 'best practice' in the private sector.

Many publications, primarily by the hand of lawyers, have been devoted to the interpretation and application of the EU directives, including in the *Public Procurement Law Review*, *European Law Journal*, *Public Procurement Law Review* and *Law & Policy* (Arrowsmith, 2005; Trepte, 2007). Some have discussed the problems of the directives, related to the EU's expansion into central and eastern Europe (Kanaras, 2000; Georgopoulos, 2000). Another stream of research is focused on the impact of the EU Directives on cross-border trade, competition and prices (Cox and Furlong, 1995, 1997; Nielsen and Hansen, 2001; Madsen, 2002).

Hardly any empirical studies can be found into the reasons that could explain the (non-)compliance with the EU procurement directives. Pachnou (2005a, 2005b), based on interviews with legal advisers and bidders, refers to legal remedies and alternative legal actions, specifically legal costs and the chances of winning a trial. Another, more comprehensive study is that of Gelderman *et al.* (2006) which presents empirical evidence for the impact of the purchaser's familiarity with the rules and the lack of organizational incentives on compliance. However, there is still a need for a sound quantitative, empirical study to analyse the relative impact of diverse factors with an alleged impact on the compliance with EU procurement directives. This study is aimed at filling this gap as it draws out and empirically tests hypotheses on compliance behaviour, adding to both conceptual and empirical knowledge of the issues at hand.

The organization of the article is as follows. In section I, a brief description of the EU directives and their intended purpose is presented,¹ followed by a review of studies on the (non-) compliance with the rules. Next, a literature review is reported in section II in search of explanatory variables, which results in a conceptual model and related hypotheses. In section III we will present the survey design among purchasing professionals of the Dutch Ministry of Defence. After presenting the results in section IV, the study is completed in section V by summarizing the conclusions and providing implications and suggestions for further research.

I. Compliance with the Procurement Directives

Compliance has a negative connotation, because it is usually associated with enforced behaviour. In the marketing-channel literature for example, compliance is considered as giving in to 'the wishes of a more powerful channel member' (Hunt *et al.*, 1987, p. 377). Kelman (1958, p. 53) too points at the negative aspects of compliance: 'an individual accepts influence [. . .] not because he believes in its content but because he expects to gain specific rewards or approval and avoid specific punishments or disapproval by conforming'. Compliance occurs when the target performs a requested action, but is apathetic about it, rather than enthusiastic, and puts in only a minimal or average effort (Yukl, 1989). Compliance can be contrasted with identification (the target agrees with the goals associated with the requested behaviour [Kelman, 1958]) and commitment (the target internally agrees with a decision or an action [Yukl, 1989]).

¹ This study covers the Directive 93/97/EEC Works, the Directive 93/36 EEC Supplies and the Directive 92/50 EEC Services. More information about the directives can be found at: «<http://europe.eu.int>».

Compliance can be defined as ‘acting in accordance with an influence attempt from the source’ (Payan and McFarland, 2005, p. 72). From the perspective of a formal concept of compliance, the conduct of the regulated actor is compared to a formal definition of the corresponding (legal) obligation (Lange, 1999). This formal definition of compliance differs from a perspective that considers the scope and degree of compliance as the outcome of a negotiated process between an actor and an enforcement officer (Fairman and Yapp, 2005). In this study we will use the first, more formal perspective of compliance. The scope of this study is limited to compliance, especially the degree to which public agencies and their employees act according to EU procurement directives.

The directives require that all tenders above specified thresholds have to be advertized in the Official Journal of the European Community and the TED database. The directives attend the procurement of suppliers, works and services by public agencies and the companies in the utilities sector. Contracts below the financial thresholds are not subject to the directives, as are some contracts for reasons of national security, defence or international procedures. Specifically, the so-called hard defence material, for example, tanks and fighter planes, can be excluded from the EC Treaty by Article 296(1)(b), only if national security reasons apply. However, when this security condition does not apply, hard as well as so-called dual use material and soft defence material are covered by the EC Treaty and the directives (Trybus, 1998). This study is limited to open procedures, as restricted and negotiated procedures as well as competitive dialogues are excluded from the research design (Curtol *et al.*, 2006).

The primary enforcement method is through remedies for aggrieved firms (Arrowsmith, 1993). The EU approach to the enforcement of rules is primarily a decentralized one, relying on proceedings brought by individuals before their national courts (Pachnou, 2000). The secondary enforcement method is through the European Commission, which ensures that the directives have been implemented and also follows up complaints about breaches (for example, Arrowsmith, 1993). If not satisfied, the European Commission can take action against Member States in the European Court of Justice or the Court of First Instance.

Over the years, non-compliance has come to be considered as a major hindrance to the effectiveness of the directives, although there are only a limited number of studies on the actual compliance with the directives. A study initiated by the European Commission (1999) concludes that the major problem has been the inadequate implementation of the directives into national law. A 1997 study shows that many contracts which should have been submitted for EU tendering actually were not (Commission, 1997). An

empirical study by De Boer and Telgen (1998) indicated that the level of compliance with EU directives should be considered to be 'highly insufficient'. The estimated non-compliance by municipalities in the Netherlands for example ranged from 77 to 83 per cent. Remarkable differences were reported between the discerned public agencies in a study commissioned by the Netherlands Ministry of Economic Affairs (2004) (see Table 1). In that study, the annual statements of accounts of a sample of 161 public agencies (out of a population of 678) were analysed. A list of all purchases was made for which the procurement directives applied. Next, these purchases were compared with the purchases which were actually announced in the Official Journal of the European Community and the TED database. Merely 35 per cent of the value of purchase spending was advertised in the prescribed media. In terms of the number of purchases, the level of compliance dropped to 12 per cent. It should be noted that the higher percentages for 'value'-compliance are a result of the fact that the compliance with EU tendering is relatively higher in the case of larger purchases. The overall conclusion seems to be that the compliance with the directives is rather limited. On behalf of the European Commission, Europe Economics evaluated the effects in the 15 Member States of the procurement directives. The report of the European Commission (2006) concluded that the overall compliance has improved since 1995, although a significant amount of non-compliance still remains. In countries where the directives were implemented on top of the national law and not sufficiently integrated into it, authorities had more problems with compliance compared to countries where a new national public procurement framework was created which incorporated the directives.

Table 1: Compliance with EU directives in the Netherlands in 2002

<i>Public agencies</i>	<i>Compliance</i>	
	<i>Value</i>	<i>Numbers</i>
Ministries	81%	59%
Provinces	44%	29%
District Water Boards	41%	12%
Universities	40%	21%
Municipalities	31%	9%
Police Regions	31%	21%
University Hospitals	24%	23%
Schools of Higher Vocational Education	19%	9%
National Museums	9%	11%
Total	35%	12%

Source: Netherlands Ministry of Economic Affairs (2004).

Smyth (1997) contended that for public sector purchasing competition is often more rhetoric than reality. Jones (1997) identified that buyers preferred to renew existing contracts rather than to issue new ones, where possible. Lian and Laing (2004) reported that, even in supposedly open tenders, limitations exist to the extent of competition, for instance because public agencies were using an approved list of suppliers. According to a Danish study (Konkurrencestyrelsen, 1997), the rules are being circumvented by public buyers through:

- dividing contracts into smaller amounts in order to avoid publication in the Official Journal;
- unnecessary use of the accelerated procedure;
- early notification of local/national suppliers; and
- delayed procurement procedures and faulty or unreasonable standardization requirements.

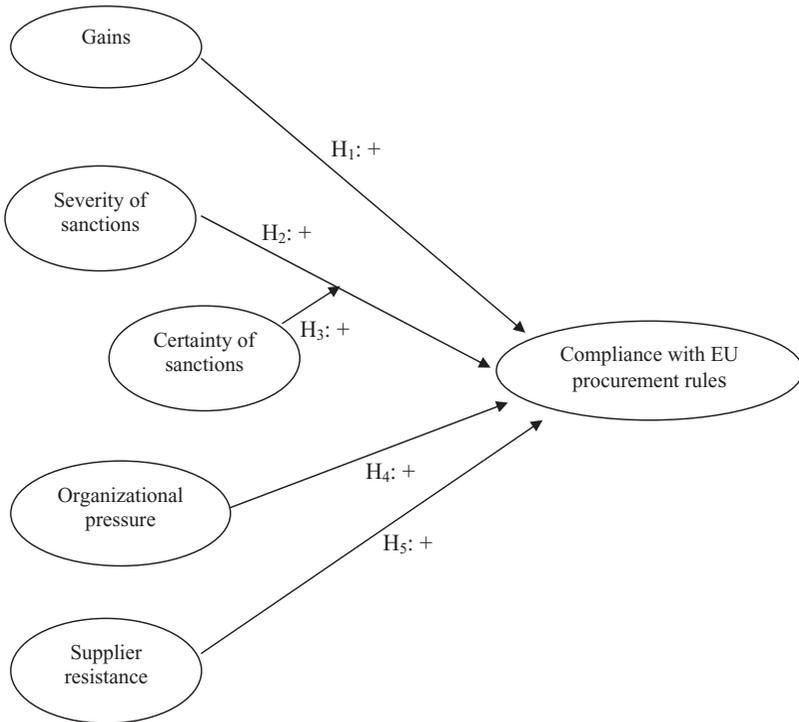
De Boer and Telgen (1998) likewise reported cases in which municipalities consciously refrained from using EU directives by not considering renewal of a contract as a purchase, and by withdrawing from co-operating with other municipalities. Braun (2003) investigated the apparent divergence between EC procurement law and the procurement practice in case of public–private partnerships in the UK. Practitioners adopted wide and flexible interpretations of the procurement rules which clearly must be considered as a consequence of non-compliant behaviour.

II. Compliance: Explanations

In this section relevant explanations for (non-)compliance with EU rules are presented. Compliance and non-compliance can be explained from a variety of perspectives and disciplines (Gelderman *et al.*, 2006; Van Snellenberg and Van de Peppel, 2002).

An economic perspective on compliance predicts that an individual is likely to comply if the expected utility from non-compliance exceeds the utility from engaging in legitimate activity (Becker, 1968). Criminal justice theorists would contend that individuals (and firms) outweigh the risks involved with non-compliance before deciding to engage in such behaviour in terms of the certainty and the severity of sanctions (Sutinen and Kuperan, 1999). This deterrence perspective has been used in many studies, aimed at explaining the involvement of individuals in criminal activity (Carmichael *et al.*, 2005). Research in psychology and sociology stresses the importance of socialization processes in affecting behaviour, as well as peers' opinions and organizational pressure. In addition to these general perspectives on

Figure 1: Conceptual Model for the Explanation of Compliance with EU Procurement Rules



Source: Authors' own data.

compliance, in this study we will explore the effectiveness of a specific reason: the perceived supplier's resistance and readiness to take (legal) action in case of a non-complying tendering agency. The reason for including this factor is the fact that the remedies heavily rely on suppliers to bring cases of possible abuses to court (Pachnou, 2005b).

The explanations are presented in the conceptual model for the explanation of compliance with the EU procurement rules (see Figure 1). The result is a comprehensive, multidisciplinary framework which is used to test the hypotheses and expected influences on compliance.

Perceived Gains

In line with rational choice theory, the dominant view within economic literature considers compliance as a decision which is motivated by financial arguments (Fairman and Yapp, 2005). Becker (1968) developed and

introduced a theoretical framework for explaining criminal activity, in which criminals (like all individuals) try to maximize their utility to a budget constraint. In Becker's model crimes are committed if the expected utility from non-compliance exceeds the utility from compliance with the law. Such a cost-benefit analysis assumes rational behaviour by individuals and organizations. Awarding authorities too are believed to compare the benefits and the costs of (non-)compliance [European Commission, 2006]. Respondents in Braun's (2003, p. 597) study maintained that constantly awarding authorities weighted the benefits and detriments of strict compliance with procurement law.

A well-known problem with the EU procurement directives is their perceived inefficiency which is supposed to have a negative impact on compliance (Gelderman *et al.*, 2006). The rules are criticized because they are not in line with best practices in the private sector (Cox and Furlong, 1995). Reported problems include: a prohibition of negotiations (Arrowsmith, 1998), prohibition of renewing contracts (Jones, 1997), prohibition of the exclusion of under-performing suppliers from the tendering procedure (Gelderman *et al.*, 2006), prohibition of using the experience of working relationships between awarding authority and supplier as an award criterion (Commission, 2006), the considerable (transaction and administrative) costs (Parker and Hartley, 1997; Bohan and Redonnet, 1997; Commission, 2006) and time-consuming, complex procedures (De Boer and Telgen, 1998). However, supporters of the EU directives emphasize the potential financial benefits and large cost reductions, which are expected to be the result of a proper implementation of the rules (Domberger and Jensen, 1997; Netherlands Ministry of Economic Affairs, 1999). In line with these latter arguments, this study assumes that public agencies are more likely to comply as they appreciate the (economic) gains which are associated with the procurement rules. Therefore, we posit the following hypothesis:

H₁: The perceived gains of complying have a positive impact on the compliance with the EU rules.

Severity of Sanctions

National systems may impose sanctions which by their extent and nature go beyond EC minimum requirements, for example criminal sanctions on individual officers (Curtol *et al.*, 2006). Criminal justice systems rest upon the power to impose legitimate penalties and punishments. The literature distinguishes two sorts of deterrence: the preventive effect on the offender himself and the preventive effect that applying a sanction has on a wider public. A common hypothesis is that the harsher the penalty, the greater the

level of compliance with behavioural norms (Van Snellenberg and Van de Peppel, 2002). Systems of enforcement rely on the effectiveness of its sanctions. In the case of the EU procurement directives, the primary enforcement method is through remedies for aggrieved firms, bringing their cases to the court (Arrowsmith, 1993; Pachnou, 2000, 2005a). Some point to the lack of coherent control systems to ascertain that the directives are being followed (Van Weele, 2005; Pachnou, 2005a), although the sanctions can be substantial and potentially harsh (Gelderman and Albronda, 2007; Pachnou, 2005b):

- Excluded suppliers must be admitted to the tendering procedure after all.
- The public agency is forced into re-tendering the contract and/or the agency must award the tender to the claimant.
- Ultimately, if the aggrieved supplier makes a reasonable case for wrongfully not being awarded the contract, he can put in a claim for damages and demand compensations.

Besides these legal sanctions, the public agency might suffer from the indirect, negative consequences of a lawsuit, for instance attracting negative publicity or running into delays. Obviously, public agencies are likely to take into account the (perceived) severity of sanctions in their decisions to comply with the procurement directives. We hypothesize:

H₂: The severity of sanctions have a positive impact on the compliance with the EU rules.

Certainty of Sanctions

The neoclassical deterrence framework also recognizes that besides the severity of sanctions compliance behaviour is influenced by the certainty of sanctions. The deterrence is determined by the expected penalty which in its turn is the product of the probability of being caught and the size of the sanctions (Sutinen and Kuperan, 1999). Prior criminal activity without detection or punishment reduces the credibility of the deterrent threat. The perception of being caught can vary from individual to individual, whereas in many cases the certainty of sanctions has more influence on the level of compliance than on the assumed size of the penalty (Van Snellenberg and Van de Peppel, 2002). Moreover, one can also state that prior non-compliance (for instance criminal behaviour) without detection and punishments erodes the impact of the severity of sanctions on compliance (Carmichael *et al.*, 2005). Therefore, the certainty of sanctions has an important moderating effect on hypothesis H₂. We posit that the higher the probability of sanctions, the greater the impact of the sanction size on compliance.

H₃: The certainty of sanctions positively moderates the relationship between the severity of sanctions and the compliance with the EU rules.

Organizational Pressure

Research in psychology and sociology emphasizes that compliance with rules and regulations is related to influences of the environment (Sutinen and Kuperan, 1999). In addition to the severity and certainty of sanctions, social influence is another extrinsic motivation factor that has an impact on behavior. Organizational failures, such as poor management, uncompromising procedures and inadequate co-ordination and leadership are possible explanations for non-compliance with (behavioural) norms (Van Snellenberg and Van de Peppel, 2002). Braun (2003) reported that public agencies are likely to switch to non-compliant behaviour to the extent that they had a higher administrative level behind them.

The case study of UK defence by Parker and Hartley (2003) highlighted that military personnel do not necessarily behave efficiently, because they neither share any profits from efficient behaviour nor experience losses from poor performance. Teutemann (1990) argued that public bureaucrats normally try to exhaust their budget fully so as to avoid reductions in their future budget. Cost reductions brought about by competitive tendering in this year do not necessarily result in a budget increase for the next year. The fact that such a restriction on transfer of budgets is at least problematic in many public agencies makes a negative impact on the compliance with the EU rules seem likely. Also, the lack of purchasing professionalism in the public sector has been mentioned as a hindrance for compliance (De Boer and Telgen, 1998).

The simple fact that the management of a public agency emphasizes the need and desirability to comply will function as an organizational incentive to comply. Gelderman *et al.* (2006) found that the internal incentives established by the organization have a positive and significant impact on compliance. Obviously, purchasers will take into account the policies and procedures imposed by the organization with respect to EU rules. Thus we posit the following hypothesis:

H₄: Organizational pressure has a positive impact on the compliance with the EU rules.

Supplier Resistance

The remedies system relies heavily on firms (suppliers) to bring cases of abuses if they feel aggrieved at the contract award or the procedures adopted either in the EU or in the national courts (Hoey and Garvan, 1995).

However, the system of remedies is an important concern for both awarding authorities and suppliers, although the Commission has worked to improve legal security and efficiency of remedies (Commission, 2006). Braun (2003) found that one reason why bidders do not employ remedies appears to be the (inadequacies of the) remedies system itself. This conclusion was confirmed by Pachnou's (2005b) study of the bidders' use of mechanisms to enforce EC procurement law. Interviews showed that the power of remedies to prevent breaches was not strong in the UK, as authorities consider their risk of being challenged as very low. The reluctance or willingness of bidders to react to breach with litigation depends prominently on the amount of legal costs and on the chances of winning at trial (Pachnou, 2005b, p. 260).

Apart from the features of the remedies system, the legal culture of a state member has been recognized as a factor that impacts the willingness to take action against breaches of the procurement rules (Braun, 2003). For instance, the non-confrontational national legal culture of the UK was found to be a major deterrent to litigation. Litigation is avoided while out-of-court negotiations are considered to be the natural reaction to a dispute (Pachnou, 2005b).

Pachnou (2005b) reported that bidders' threats to sue sometimes prompt the correction of breaches by authorities, although the authorities know that most cases are lost by bidders. Purchasers might take into account the probability that assertive suppliers take action in cases of non-compliance. The perception of public purchasers on the supplier's readiness to take (legal) action is therefore likely to impact the compliance with the rules (Gelderman *et al.*, 2006). Therefore, we posit the following hypothesis:

H₅: The perceived resistance of suppliers to non-compliance has a positive impact on the compliance with the EU rules.

III. Methodology and Data Collection

Research Method

The sample frame consisted of purchasing professionals of the tendering services of the Dutch defence organization. The respondents were selected based on their involvement in the procurement of suppliers, services and works for which the EU directives apply. The survey procedures included a pilot study aimed at enhancing the reliability and validity of the questionnaire. The final questionnaire was administered to 322 purchasing professionals of the Dutch Ministry of Defence meeting the inclusion criteria and included two mailings: the initial mail-out in July 2006 and a follow-up

mailing in early August 2006. Additionally, non-reacting invitees were asked to participate via telephone (mid-August).

Measurement

In most studies ‘compliance’ is operationalized as complying with the overall rule that a tender (above specified thresholds) indeed is advertised in the prescribed media. However, the EU procurement directives include a large number of requirements and prohibitive regulations. In this study we intend to gain more insights in the compliance of the rules that are most sensitive to non-compliance in the Open Procedure. In order to make a selection of rules that meet this criterion, ten experts from the Dutch Ministry of Defence were interviewed. These expert interviews resulted in a short list of the following five rules, which are considered most sensitive to non-compliance:

1. specifications cannot be adapted, after publication in the TED database: ‘fixed specifications’;
2. contracts should not be divided into smaller amounts in order to refrain from the rules: ‘no contract splitting’;
3. in principle, contracts may not be renewed automatically with the same supplier: ‘no contract renewal’;
4. suppliers can only be selected on the basis of technical skills and financial capacity: the so-called ‘prescribed selection criteria’;
5. the contract must be awarded to the supplier with the lowest price or the supplier with the most economically advantageous tender: the so-called ‘prescribed awarding criteria’.

In his study, Braun (2003) identified seven grey areas that correspond with procedural problems and uncertainties regarding the application of the directives to Public–Private Partnerships (PPP). Braun (2003, pp. 579–81) pointed at the discrepancies between EC procurement law and PPP procurement practices, which are the result of a number of legal uncertainties in PPP procurements. In this study we have used rules which are clear to the parties involved in Open Procedures and which are at the same time sensitive to non-compliance. Differences are likely to occur when comparing compliance in cases of clear rules with compliance in cases of these grey areas.

The compliance with a procurement rule can be measured as a dichotomous variable: either one complies, or one does not. A drawback of this operationalization would be that it does not capture the degree or the probability of compliance. To determine the compliance of a rule, respondents

were asked to indicate the level (on a five-point scale) to which they would agree that 'In EU procurement projects rule X is observed'. To conclude, the compliance with the procurement directives is measured on the five selected rules, each questioned by the perception of probability of compliance.

The respondents were also asked to indicate the level to which they would agree to a number of propositions which are related to the explanatory variables of the conceptual model. The questionnaire included closed items, measuring the reactions on statements on a five-point Likert scale (agree/disagree). The 'gains' variable was measured by items, referring to the advantages (in general) of complying with the rule, the contribution of the purchasing result, and the extra time needed to comply with the rule (the latter item was recoded in the analysis). The items capturing the 'severity of sanctions' points to the negative consequences of non-compliance for the progress of the procurement process, for the employees involved, for the managers of the agency. Supplier resistance is operationalized by items with propositions with respect to the probability that suppliers take actions and offer resistance, whenever they presume that the tendering party does not (correctly) comply with the rules. Single items have been used for the remaining variables (certainty of sanctions and organizational pressure). The items were reviewed by academics and practitioners for clarity and validity. This study requires that respondents actually completed five questionnaires for the five different rules (repeated measures design). Extensive, multiple item scales would have burdened respondents in an unacceptable way, resulting in a low response rate and (moreover) in unreliable responses due to 'fatigue, frustration, and boredom associated with answering highly similar questions repeatedly' (Robins *et al.*, 2001, p. 152). Although multiple-item scales are usually considered to be superior to single-item scales, single-items do have considerable advantages in specific research designs.

Response

A total number of 145 responses were received, of which in total 60 were not included in the analysis. Some respondents were not (sufficiently) involved in EU procurement procedures. To avoid a response bias due to a lack of experience, these respondents were removed from the sample. Also, respondents were not included when their response pattern was awkward using item response measurement (Rasch modelling; Mâsse *et al.*, 2006). The effective response rate is therefore 26 per cent (85/322). The potential for non-response bias was tested using the procedure recommended by Armstrong and Overton (1977) in which the data are classified into a first

category and a second category of returned questionnaires (late respondents). All tests on relevant variables indicated that no statistically significant differences were found between the first wave and the second wave of respondents.

The reliability tests of the multiple item constructs are all adequate. The stepwise regression technique was chosen to cope with multicollinearity among some of the explanatory variables.

IV. Findings, Conclusions and Implications

The results of the stepwise regression are presented in Table 2. They indicate (overall) support for the hypotheses that gains from compliance and organizational pressure to comply with the public procurement rules have a positive and significant relationship with the probability to comply. These results are in line with previous studies (for example, Domberger and Jensen, 1997; Netherlands Ministry of Economic Affairs, 1999; Gelderman *et al.*, 2006; Van Snellenberg and Van de Peppel, 2002). The severity of sanctions is only significant with respect to the probability to comply with the prescribed selection criteria. This conclusion offers partial support for the hypothesis that the severity of sanctions has a positive effect on compliance with the EU procurement directives as proposed by for example Gelderman and Albronda (2007). Supplier resistance also influences the

Table 2: Results of the Stepwise Regression Analysis

	<i>Rule 1: Fixed specifications</i>	<i>Rule 2: No contract splitting</i>	<i>Rule 3: No contract renewal</i>	<i>Rule 4: Prescribed selection criteria</i>	<i>Rule 5: Prescribed awarding criteria</i>
(Intercept)	(2.05)	(1.18)	(1.38)		
Gains		0.21	0.20	0.33	0.41
Severity of sanctions				0.22	
Certainty of sanctions					
Organizational pressure	0.51	0.41	0.42	0.42	0.47
Supplier resistance			0.32		
Severity × Certainty of sanctions					
adj. R ²	0.29	0.19	0.39	0.48	0.54
F-value	35.10	10.95	19.25	27.14	50.54

Source: Authors' own data.

Note: Results are significant at the 95% confidence level; n = 85.

directive of no automatic contract renewal significantly, thereby giving partial support to the existing hypothesis (Hoey and Garvan, 1995; Gelderman *et al.*, 2006).

The moderation effect from the certainty of sanctions on the relationship between the severity of sanctions and the probability of compliance is not apparent. The relationship between the certainty of sanctions and the probability of compliance appears not significant in any scenario, contrary to suggestions in the literature (Carmichael *et al.*, 2005; Sutinen and Kuperan, 1999; Van Snellenberg and Van de Peppel, 2002). Hence, the fourth hypothesis is not supported in this study.

Overall, the explained variance is accounted for by one-fifth in the case of the probability to comply (rule 2) and by about half in the case of the probability to comply with rules 4 and 5. The F-values are considered adequate as a test for the overall significance of the models.

The empirical findings seem to support the positive impact of the expected gains of compliance and the organizational pressure on compliance. In contrast, no support could be found for an impact of the certainty and severity of sanctions and the perceived resistance of suppliers in cases of non-compliance. The interpretation of these findings appears to be that the European Commission should encourage a greater focus on the *economic benefits* of compliance as distinct from the *legal aspects* of non-compliance. Compliance seems to be stimulated by economic gains, rather than the threats of legal action. This conclusion does not allow for generalizations beyond the scope and setting of this study, although Pachnou (2005b) reported similar ineffective remedies systems in the UK and in Greece. As mentioned earlier, this empirical research was limited to public procurement within the Netherlands. The procurement arrangements in the Netherlands are likely to result in relatively poor compliance rates: decentralized procurement functions, informal procurement legislation and a national legal system that is not well integrated with the directives (Commission, 2006). In such circumstances the effectiveness of legal remedies has many limits.

The managerial implication of our findings would be that public agencies should establish more internal incentives in order to stimulate compliance, as suggested by De Boer and Telgen (1998). This study suggests that organizational pressure has the most impact on compliance, relative to the other explanatory variables in the conceptual model. The management of public agencies should emphasize that their staff must comply with the EU procurement directives, putting compliance high(er) on their strategic agenda and fostering a (more) professional purchasing within their organization (as proposed by, for example, Gelderman *et al.*, 2006; Gordon *et al.*, 1998).

No significant impact could be established for the other dimensions. Neither the perceived supplier resistance, nor the severity and certainty of sanctions seem to influence the compliance with the directives. An implication for public policy-makers would be that the enforcement systems might be ineffective, partially disconfirming the statements by Nielsen and Hansen (2001). Policy-makers could devote greater effort to develop legitimacy, since the perceived fairness of any rule is important for individuals and organizations. A possibility would be that enforcement authorities target flagrant violators of the rules, punishing them accordingly, while tolerating minor violations to some degree (Sutinen and Kuperan, 1999). Another option would be to increase the potential gains of compliance (or conversely, reduce the gains of non-compliance), for instance by reducing compliance costs or by adapting some of the rules in order to bring them more in line with best practices of purchasing in the private sector. Also, public policy-makers could contribute to a dialogue between public buyers and suppliers, as suggested by Nielsen and Hansen (2001), to emphasize the perceived gains of compliance, make the procurement process more transparent and potentially lower the supplier resistance.

V. Limitations and Further Research

The current study is limited by its setting. The questionnaire was administered to purchasing professionals within the Dutch Ministry of Defence. Within the various public agencies for which the EU directives apply, ministries are likely to comply more than other public agencies, as was indicated in Table 1. Because of the sample frame, complying respondents are probably overrepresented in comparison with the Dutch public purchasers population. These limitations imply that the results of this study are not transferable to other types of public agencies or other agencies in other countries. Future research could replicate this study to other public agencies and authorities.

Another limitation of this study is that it relies on the perceptions of respondents. Future research could combine perceptual data and objective, measurable data on compliance issues. In addition, the personality of individual purchasers could be included, describing and explaining the perceptions of compliance-related issues. Next, a future study might include a sample of other kinds of respondents. It could be interesting to ask similar questions to higher-level managers (than purchase managers) in the hierarchy of organizations. After all, the attitude and directives of top management in public agencies might have a decisive influence on the compliance behaviour of purchasing staff.

Another limitation with respect to the characteristics of the respondents could be the possible overrepresentation of compliers, as non-compliers might want to ignore a confronting survey on compliance. Although we have administered two mailings and in addition made telephone calls to all non-respondents, further research on diverging perceptions and answer patterns between those respondents who claim to comply (to a large extent) and those who claim not to comply (to a large extent) could result in a comparative analysis of compliers versus non-compliers.

Studies within other Member States are recommended, since EU policy-making should be based on a more comprehensive picture of the issues at hand. The Member States have translated the EU procurement directives by means of national legislation, which has resulted in different patterns and behaviours concerning (non-)compliance. A study initiated by the European Commission (2006) stated that a significant amount of non-compliance remains and is not uniform across the different Member States. It was found that countries with a national legal system that is well integrated with the directives have higher and more strongly growing compliance rates than others. Based on these arguments we recommend further research in order to develop additional policy implications.

The explanatory variables in this study are derived from a variety of perspectives and disciplines. We have included an economic perspective on compliance (utility perspective), criminal theory (severity and certainty of sanctions), psychology and sociology (organizational pressure) and public purchasing theory (supplier's resistance). However, compliance and non-compliance can be explained by other perspectives as well, for instance public choice theory, which argues that the perceived legitimacy and the fairness of procedures are critical determinants of compliance (for example, Tyler, 1990). In psychology, an individual's personal values are often stated as influencing their compliance behaviour: individuals tend to comply with the law to the extent that they perceive the law as appropriate and consistent with their internalized norms (Sutinen and Kuperan, 1999). Social psychology stresses the importance of an individual's characteristics, for instance moral development and personal values, in determining compliance behaviour (Blasi, 1980). Research in the field of psychology and sociology stresses the importance of socialization processes in affecting behaviour, as well as peers' opinions and peers' pressure. To conclude, additional factors from various disciplines could enter a more complex and potentially rich framework for the explanation of the compliance and non-compliance with the EU procurement directives.

Correspondence:

Paul Ghijsen
Faculty of Management Sciences
Open University of the Netherlands
Valkenburgerweg 177
6419 AT Heerlen
The Netherlands
email paul.ghijsen@ou.nl
Tel +31 45 576 2199

References

- Armstrong, J.S and Overton, T.S. (1977) 'Estimating Nonresponse Bias in Mail Surveys'. *Journal of Marketing Research*, Vol. 14, No. 8, pp. 396–402.
- Arrowsmith, S. (ed.) (1993) *Remedies for Enforcing the Public Procurement Rules* (Winteringham: Earlgate Press).
- Arrowsmith, S. (1998) 'The Problem of Discussions with Tenders under the EC Procurement Directives: The Current Law and the Case of Reform'. *Public Procurement Law Review*, Vol. 7, No. 3, pp. 65–82.
- Arrowsmith, S. (2005) *The Law of Public and Utilities Procurement* (2nd edition) (Sweet & Maxwell).
- Becker, G. (1968) 'Crime and Punishment, an Economic Approach'. *Journal of Political Economy*, Vol. 76, No. 2, pp. 169–217.
- Blasi, A. (1980) 'Bridging Moral Cognition and Moral Action'. *Psychological Bulletin*, Vol. 88, No. 1, pp. 1–45.
- Bohan, N. and Redonnet, D. (1997) 'EU Procurement Legislation: Does the Emperor Have Clothes? An Examination of the New Empirical Evidence'. *Public Procurement Law Review*, Vol. 6, No. 4, pp. 141–73.
- Braun, P. (2003) 'Strict Compliance versus Commercial Reality: The Practical Application of EC Public Procurement Law of the UK's Private Finance Initiative'. *European Law Journal*, Vol. 9, No. 5, pp. 575–98.
- Carmichael, S., Langton, L., Pendell, G., Reitzel, J.D. and Piquero, A.R. (2005) 'Do the Experiential and Deterrent Effect Operate Differently across Gender?' *Journal of Criminal Justice*, Vol. 33, No. 3, pp. 267–76.
- Commission of the European Communities (1996) 'Public procurement in the European Union: Exploring the way forward' (Green Paper). Commission of European Community, Luxembourg.
- Commission of the European Communities (1997) 'The Single Market Review. Dismantling of Barriers. Public Procurement. The Single Market Review, Subseries III, Volume 2'. Office for Official Publications of the European Communities, Luxembourg.
- Commission of the European Communities (1999) 'Public procurement: Commission communication outlines policy priorities Direction General XV'. Brussels.

- Available at: [«http://europa.eu.int/comm/internal_market/en/publproc/comm/pubcomm.htm»](http://europa.eu.int/comm/internal_market/en/publproc/comm/pubcomm.htm).
- Commission of the European Communities (2006) 'Evaluation of Public Procurement Directives: 1993 to 2002'. Markt/2004/10D. Commission of European Community, Luxembourg.
- Cox, A. (1993) *The Single Market Rules and the Enforcement Regime after 1992* (Boston: Earls Gate Press).
- Cox, A. and Furlong, P. (1995) 'European Procurement Rules and National Preference: Explaining the Local Sourcing of Public Works Contracts in the EU in 1993'. *Journal of Construction Procurement*, Vol. 1, No. 2, pp. 87–99.
- Cox, A. and Furlong, P. (1997) 'Cross-Border Trade and Contract Awards: The Intellectual Myopia at the Heart of the EU Procurement Rules'. *European Journal of Purchasing & Supply Management*, Vol. 3, No. 1, pp. 9–20.
- Curtol, F., Pesarin, G. and Vander Beken, T. (2006) 'Testing the Mechanism on EU Public Procurement'. *European Journal of Criminal Policy and Research*, Vol. 12, Nos. 3–4, pp. 337–64.
- De Boer, L. and Telgen, J. (1998) 'Purchasing Practice in Dutch Municipalities'. *International Journal of Purchasing and Materials Management*, Vol. 34, No. 2, pp. 31–6.
- Domberger, S. and Jensen, P. (1997) 'Contracting Out by the Public Sector'. *Oxford Review of Economic Policy*, Vol. 13, No. 4, pp. 67–73.
- Erridge, A., Fee, R. and McIlroy, J. (1998) 'European Union Public Procurement Policy and Electronic Commerce and Opportunities'. *European Business Review*, Vol. 98, No. 5, pp. 252–9.
- Fairman, R. and Yapp, C. (2005) 'Enforced Self-Regulation, Prescription, and Conceptions of Compliance within Small Business: The Impact of Enforcement'. *Law & Policy*, Vol. 27, No. 4, pp. 491–519.
- Gelderman, C.J., Ghijsen, P.W.Th. and Brugman, M.J. (2006) 'Public Procurement and EU Tendering Directives – Explaining Non-Compliance'. *International Journal of Public Sector Management*, Vol. 19, No. 7, pp. 702–14.
- Gelderman, C.J. and Albronda, B.J. (2007) *Professional Purchasing* (3rd edition, in Dutch) (Groningen: Wolters-Noordhoff).
- Georgopoulos, A. (2000) 'The System Remedies for Enforcing the Public Procurement Rules in Greece: A Critical Overview'. *Public Procurement Law Review*, Vol. 9, No. 2, pp. 75–93.
- Gordon, H., Rimmer, S. and Arrowsmith, S. (1998) 'The Economic Impact of the European Union Regime on Public Procurement: Lessons for the WTO'. *The World Economy*, Vol. 21, No. 2, pp. 159–87.
- Heijboer, G.J. and Telgen, J. (2002) 'Choosing the Open or the Restricted Procedure: A Big Deal or a Big Deal?' *Journal of Public Procurement*, Vol. 2. No. 2, pp. 187–215.
- Hoey, A. and Garvan, J. (1995) 'A Purchasing Decision Support System – The Development of a Knowledge Based System in Public Procurement Law'. *Law*

- Technology Journal*, Vol. 4, No. 1. Available at: <<http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/>>.
- Hunt, K.A., Mentzer, J.T. and Danes, J.E. (1987) 'The Effect of Power Sources on Compliance in a Channel of Distribution'. *Journal of Business Research*, Vol. 15, No. 5, pp. 377–95.
- Jones, G.L. (1997) 'The Impact of Regulatory Legislation on Contractual Cost Risk and the Form of Contracts Used in the UK and Republic of Ireland'. *European Journal of Purchasing & Supply Management*, Vol. 3, No. 3, pp. 137–45.
- Kanaras, V. (2000) 'Enlarging the Scope of Public Procurement: The EU's Expansion into Central and Eastern Europe'. *Public Procurement Law Review*, Vol. 9, No. 3, pp. 109–47.
- Kelman, H.C. (1958) 'Compliance, Identification, and Internalization: Three Processes of Attitude Change'. *The Journal of Conflict Resolution*, Vol. 2, No. 1, pp. 51–60.
- Konkurrencestyrelsen (1997) 'Danske virksomheders muligheder ved offentlige EU-udbud i udlandet'. A study by the Danish Competition Authority of the Ministry of Trade and Industry.
- Lange, B. (1999) 'Compliance Construction in the Context of Environmental Regulation'. *Social and Legal Studies*, Vol. 8, No. 4, pp. 549–67.
- Lian, P.C.S and Laing, A.W. (2004) 'Public Sector Purchasing of Health Services: A Comparison with Private Sector Purchasing'. *Journal of Purchasing & Supply Management*, Vol. 10, No. 6, pp. 247–56.
- Losch, R. (2007) 'Competitive Dialogue and Negotiated Procedure in the Public Sector Directive 2004/18/EC'. Conference paper presented at the 3rd procurement PhD conference, Nottingham University, 21–22 June 2007.
- Madsen, P.T. (2002) 'Re-opening the Debate and the Lack of Impact of EU Tenders on the Openness of Public Procurement'. *Public Procurement Law Review*, Vol. 11, No. 5, pp. 265–81.
- Martin, S., Hartley, K. and Cox, A. (1997) 'Public Purchasing in the European Union: Some Evidence From Contract Awards'. *International Journal of Public Sector Management*, Vol. 10, No. 4, pp. 279–93.
- Måsse, L.C., Allen, D., Wilson, M. and Williams, G. (2006) 'Introducing Equating Methodologies to Compare Test Scores for Two Different Self-Regulation Scales'. *Health Education Research: Theory and Practice*, Vol. 21(Supplement 1), pp. 110–20.
- Netherlands Ministry of Economic Affairs (1999) 'European Tendering: Save Money with Those Rules'. Available at: <www.minez.nl>.
- Netherlands Ministry of Economic Affairs (2004) 'Measurement of Compliance Public Procurement – Results of a Study on the Compliance with the Procurement Directives'. Available at: <www.minez.nl>.
- Nielsen, J.U.-M. and Hansen, L.G. (2001) 'The EU Public Procurement Regime – Does It Work?' *Intereconomics: Review of International Trade and Development*, Vol. 36, No. 5, pp. 255–63.

- Pachnou, D. (2000) 'Enforcement of the EC Procurement Rules: The Standards Required of National Review System under EC Law in the Context of the Principle of Effectiveness'. *Public Procurement Law Review*, Vol. 9, No. 2, pp. 55–74.
- Pachnou, D. (2005a), 'Factors Influencing Bidders' Recourse to the European Commission to Enforce EC Procurement Law'. *Public Procurement Law Review*, Vol. 14, No. 2, pp. 91–102.
- Pachnou, D. (2005b) 'Bidders' Use of Mechanisms to Enforce EC Procurement Law'. *Public Procurement Law Review*, Vol. 14, No. 5, pp. 256–63.
- Parker, D. and Hartley, K. (1997) 'The Economics of Partnership Sourcing versus Adversarial Competition: A Critique'. *European Journal of Purchasing & Supply Management*, Vol. 3, No. 2, pp. 115–25.
- Parker, D. and Hartley, K. (2003) 'Transaction Costs, Relational Contracting and Public Private Partnerships: A Case Study of UK Defence'. *Journal of Purchasing & Supply Management*, Vol. 9, No. 3, pp. 97–108.
- Payan, J.M. and McFarland, R.G. (2005) 'Decomposing Influence Strategies: Argument Structure and Dependence Determinants of Effectiveness of Influence Strategies in Gaining Channel Member Compliance'. *Journal of Marketing*, Vol. 69, No. 3, pp. 66–79.
- Robins, R.W., Hendin, J.L.H.M. and Trzesniewski, K.H. (2001) 'Measuring Global Self-Esteem: Construct Validation of a Single-Item Measure and the Rosenberg Self-Esteem Scale'. *Personality and Social Psychology Bulletin*, Vol. 27, No. 2, pp. 151–61.
- Smyth, J.D. (1997), 'Competition as a Means of Procuring Public Service'. *International Journal of Public Sector Management*, Vol. 12, Nos. 1–2, pp. 21–46.
- Sutinen, J.G. and Kuperan, K. (1999) 'A Socio-economic Theory of Regulatory Compliance'. *International Journal of Social Economics*, Vol. 16, Nos. 1–3, pp. 174–93.
- Teutemann, M. (1990) 'The Completion of the Internal Market: An Application of Public Choice Theory'. Commission of the European Communities, Brussels.
- Trepte, P. (2007) *Public Procurement in the EU: A Practitioner's Guide* (Oxford: Oxford University Press).
- Trybus, M. (1998), 'European Defence Procurement: Towards a Comprehensive Approach'. *European Public Law*, Vol. 4, No. 1, pp. 111–33.
- Tyler, T. (1990) *Why People Obey the Law* (New Haven and London: Yale University Press).
- Van Snellenberg, T. and Van de Peppel, R. (2002) 'Perspectives on Compliance, Non-compliance with Environmental Licenses in the Netherlands'. *European Environment*, Vol. 12, No. 3, pp. 131–48.
- Van Weele, A.J. (2005) *Purchasing and Supply Chain Management – Analysis, Planning and Practice* (London: Thomson Learning, Business Press).
- Yukl, G. (1989) 'Managerial Leadership: A Review of Theory and Research'. *Journal of Management*, Vol. 15, No. 2, pp. 251–89.