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# FFI-RAPPORT

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16/02114

## Tenders in European Defence procurement

selective TED publication survey 2015

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Harald Andås



# **Tenders in European Defence Procurement selective TED Publication Survey 2015**

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## Summary

The European market in defence and security equipment and services is customarily perceived as rather fragmented and closed in the sense that relatively few contracts are awarded across borders. After the transposition of the 'Defence Directive' 2009/81/EC into national law and regulations (both union member states and states of the European Economic Area), an understandable interest in evaluating how this development has influenced European procurement related to defence and security has materialised.

The intent of the present study by the Norwegian Defence Research Establishment (FFI) has been to monitor developments after the Norwegian transposition date by observing the publication of European procurement related to defence and security. Due to resource limitations, the study is restricted to contract award notices published on Tenders Electronic Daily (TED), the online version of the 'Supplement to the Official Journal' of the EU, for the years 2014 and 2015 by nine nations. The TED database contains publications regarding information as mandated by the EU procurement directives 2004/18/EC and 2009/81/EC. The main findings are summarily itemised below.

- The Defence Directive is now commonly in use for defence and security procurement by most nations covered by the study.
- The use of the mechanisms / procedures varies among the countries in the study, but the main effort clearly is by the *negotiated procedure with publication of a contract notice*. The selected nations mostly tend to use such 'open' contracting procedures of the directives. In the case of the (mostly exceptional) use of restricted competition, the principal argument for using the exception are concerns regarding technical reasons or reasons concerning exclusive rights.
- The bulk of awarded contract value goes to domestic industry. Hence, when it comes to cross-border trade, there seems to be 'business as usual'.
- The negotiated procedure accounts for close to 80 percent of the awarded contract value, while 'exceptional procedures', such as the *negotiated procedure without a call for competition*, amounts to 15 percent. This study provides only limited data for analysis, but it seems appropriate to propose the conjecture that the negotiated procedure as a standard option in Defence Directive contributes to the status quo!

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## Sammendrag

Det europeiske markedet for utstyr og tjenester innen forsvars- og sikkerhetssektoren oppfattes vanligvis som ganske fragmentert og lukket i den forstand at relativt få kontrakter tildeles på tvers av landegrensene. Etter innarbeidingen av "forsvarsdirektivet" 2009/81/EC i nasjonal lovgivning og nasjonale forskrifter (i både EU-medlemslandene og landene i EØS-området), er det nærliggende å undersøke hvordan denne utviklingen har påvirket europeiske anskaffelser innen denne sektoren.

Hensikten med denne studien fra Forsvarets forskningsinstitutt (FFI), er å observere utviklingen av det europeiske forsvars- og sikkerhetsmarkedet i etterkant av norsk innarbeiding av forsvarsdirektivet ved å følge med på offentliggjøringer av europeiske anskaffelser relatert til forsvar og sikkerhet. Studien er avgrenset til kunngjøringer av kontrakter fra ni nasjoner for årene 2014 og 2015 på Tenders Electronic Daily (TED), onlineutgaven av «Supplement to the Official Journal of the EU». TED-databasen inneholder kunngjøringer med informasjon om offentlige kontraktstildelinger pålagt gjennom EU-direktivene 2004/18/EC og 2009/81/EC. Hovedfunnene i studien er gjengitt nedenfor.

- Forsvarsdirektivet er nå vanligvis brukt for anskaffelser innen forsvars- og sikkerhetssektoren av de fleste nasjonene som omfattes av undersøkelsen.
- Bruken av anskaffelsesprosedyrer varierer mellom landene i studien, men den verdimeslige hovedtyngden ligger på *konkurranse med forhandling (etter forutgående kunngjøring)*. I hovedsak benyttes dermed de «åpne» konkurranseprosedyrene i direktivene som kan brukes uten nærmere begrunnelser. Ved (unntaksvis) bruk av begrenset konkurranse, argumenteres det vanligvis for unntaket av tekniske årsaker eller eksklusive rettigheter.
- Både når det gjelder verdi og antall går anskaffelseskontraktene hovedsakelig til innenlandsk industri. Når det kommer til handel over landegrensene, synes det dermed å være "business as usual".
- Konkurranse med forhandling står for nær 80 prosent av verdien av de tildelte kontraktene, mens «unntaksprosedyrer», for eksempel *konkurranse med forhandling (uten forutgående kunngjøring)*, utgjør 15 prosent. Denne studien gir bare begrensede grunnlag for analyse, men det synes på dette grunnlaget formålstjenlig å fremme den hypotesen at forhandlingsprosedyren som et standardalternativ i forsvarsdirektiv bidrar til dette status quo!

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# Content

<b>1</b>	<b>Introduction</b>	<b>7</b>
<b>2</b>	<b>Methodology</b>	<b>8</b>
2.1	Source of information	8
2.2	Data	8
2.3	Caveats and challenges	10
2.3.1	Conceptual issues	10
2.3.2	Selection issues	11
2.3.3	Classification issues	11
<b>3</b>	<b>Results and discussion</b>	<b>12</b>
3.1	Application of directives	12
3.2	Contract categories	13
3.3	Contracting procedures	14
3.4	Notifications using restricted procedures	16
3.5	Who wins the competition?	17
<b>4</b>	<b>Country profiles 2015</b>	<b>19</b>
4.1	United Kingdom	19
4.2	France	20
4.3	Germany	21
4.4	Italy	23
4.5	Poland	24
4.6	Denmark	25
4.7	Norway	26
4.8	The Netherlands	28
4.9	Sweden	29
<b>5</b>	<b>Closing remarks</b>	<b>29</b>
	<b>References</b>	<b>31</b>
	<b>Appendix A Data tables for selected figures</b>	<b>32</b>
	<b>Appendix B Defining Defence &amp; Security</b>	<b>35</b>



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# 1 Introduction

The European market in defence and security equipment and services is customarily perceived as rather fragmented and closed in the sense that relatively few contracts are awarded across borders, i.e. to economic operators who mainly not are operating on national territory as seen from the customers' point of view.

This was acknowledged and expressed by the European Commission in its 'Strategy for a stronger and more competitive European defence industry'[1] from 2007 and constituted part of the background for the proposal of a 'defence package' of directives, approved by the European Parliament, which main component was the 'Defence Directive' 2009/81/EC [2]. The aim of the 'defence package' has been to improve the functioning of the Internal Market for defence products by increasing transparency and a standardisation of clearer and more open procurement procedures, thus pushing towards a 'level playing field and reduced application of Article 346 of the Treaty on the Functioning of the European Union (TFEU).

After the transposition of this Directive into national law and regulations (both union member states and states of the European Economic Area) in later years, it is of course of interest to evaluate whether this push has changed the state of affairs. Can we see any effects of the new directive on procurement practices?

In this context, the Norwegian NAD requested a study on European defence related procurement after the Norwegian transposition of the 'Defence Directive' by January 1<sup>st</sup> 2014. The intent of the present study by the Norwegian Defence Research Establishment (FFI) has been to monitor developments after the Norwegian transposition date by observing the publication of European defence related procurement. As such, it complements other surveys [3][4] that have been presented on this topic. Due to resource limitations, the study is restricted to defence procurement by nine nations only and to the period from 2014 and onwards, so far including results for 2015.

As a consequence of the introduction of the Defence Directive, there are two authoritative directives applicable for defence procurement outside the realm of Article 346 (TFEU) within the period relevant for this study – 2004/18/EC ('Classical Directive') and 2009/81/EC – with many similar devices. There are e.g. five basic contracting procedures prescribed by the directives. For the purpose of this study, these are grouped into two classes which we shall designate by *restricted competition* (our definition), which means that the choice of procurement procedure should be commented upon and justified explicitly (e.g. the 'Negotiated procedure without publication of a contract notice'). Otherwise, there is *open competition*.

An interesting aspect of the above question is the prospect of identifying a trend towards more open competition. Among other issues, there is also the question to which extent the Defence Directive is used in European defence procurement and to which extent this has any influence on the cross-border trade (i.e. the long-established preference for domestic/national suppliers).

## 2 Methodology

Below we address the acquisition of relevant data and present the main aspects of the analysis process, as well as challenges encountered by the chosen line of approach.

### 2.1 Source of information

Tenders Electronic Daily [5] (TED) is the online version of the 'Supplement to the Official Journal' of the EU, dedicated to European public procurement.

The database contains publications regarding information as mandated by the EU procurement directives (2004/18/EC, 2009/81/EC and, recently, 2014/24/EC). This information is structured according to schematics defined in annexes of the directives and is of particular interest since it e.g. requires reporting of contract values. As such, TED is an answer to the challenge of systematically assessing information on these matters in a timely manner based on easily accessible and reliable open (multinational) sources only.

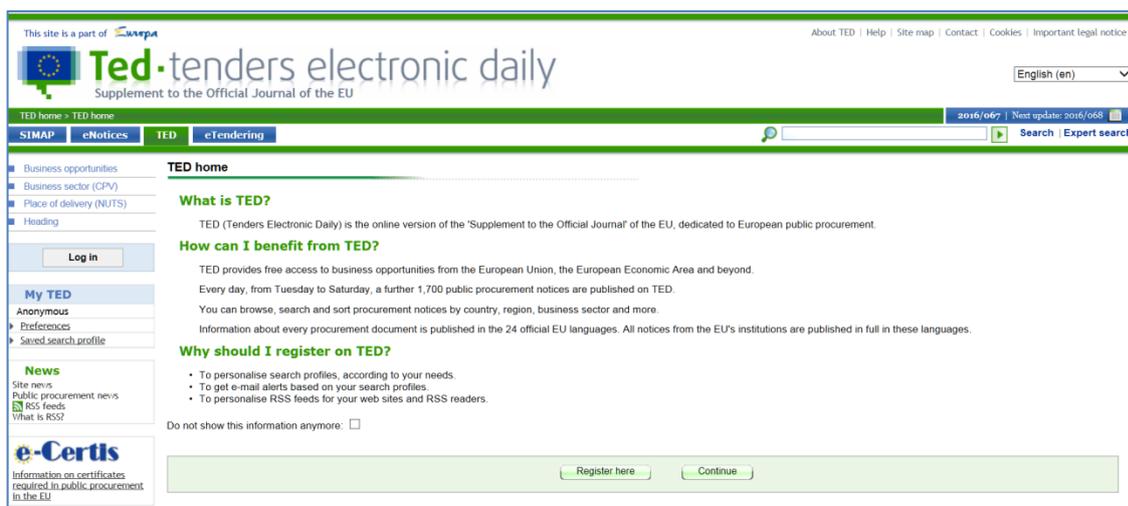


Figure 2.1 TED homepage (EN version)

### 2.2 Data

In the study we include information on 1272 *contract award notices* published on TED for the years 2014 and 2015 within the area of Defence and Security (D&S). The study of contract award notices only is partly due to limited resources in time and effort, which also justifies why the study had to be restricted to nine nations: Germany (DE), Denmark (DK), France (FR), Italy (IT), The Netherlands (NL), Norway (NO), Poland (PL), Sweden (SE) and The United Kingdom (UK), with data for Denmark and Poland limited to 2015 only.

D&S procurement contracts published on TED are categorised according to CPV-codes (Common Procurement Vocabulary). The CPV hierarchic taxonomy [6], adopted by Regulation (EC) No. 213/2008, establishes a single classification system for public procurement aimed at standardising the references used by contracting authorities and entities to describe the subject of procurement contracts. The primary considered codes, thus defining D&S in the context of this study, are (subcategories included — see also Appendix B):

- 35100000, 35300000, 35400000, 35500000, 35600000, 35700000, 35800000, 45216200, 50600000, 50840000, 73400000

This definition of D&S reflects the TED definition search filter of this category, cf. Figure 2.2, but concedes to the study’s limited capacity for data analysis by eliminating e.g. police and fire services and equipment as well as some security equipment (e.g. CCTV camera systems) used in control of public spaces and housing amenities etc.

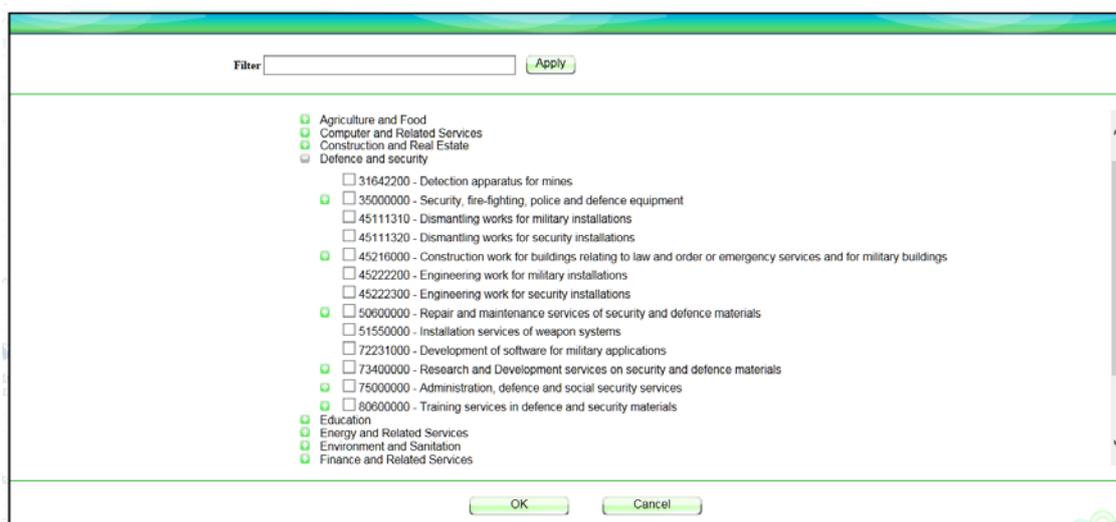


Figure 2.2 TED D&S filter from the TED homepage

Registered contract awards for 2014 and 2015 can thus be published according to two procurement directives: 2004/18/EC (“Classical Directive”) and 2009/81/EC (“Defence and Security Directive”). Framework agreements are included. These contracts are credited with their reported values at the time they are published on TED. This procedure has been chosen since monitoring expenditures for each single year is unmanageable with the selected study methodology. Moreover, there exists no formal obligation to report on this matter, neither for frameworks nor ordinary contracts.

Contract values, excluded of VAT, are registered in the specified currency and converted to Euros using monthly averaged exchange rates from Eurostat [7] for the month of the relevant contract award publication on TED. No further adjustment is made, so all values presented in the analysis below are nominal.

The collection of the data set is based on a ‘rolling’ approach by subscribing to customised rich site summary (RSS) feeds from the TED database. RSS feeds send automatic updates on the latest documents published, divided by business sector (i.e. CPV-defined), and can be customised through the advanced search functionality provided by the TED site (cf. Figure 2.3). This procedure is occasionally supplemented by using the regular search functionality directly.

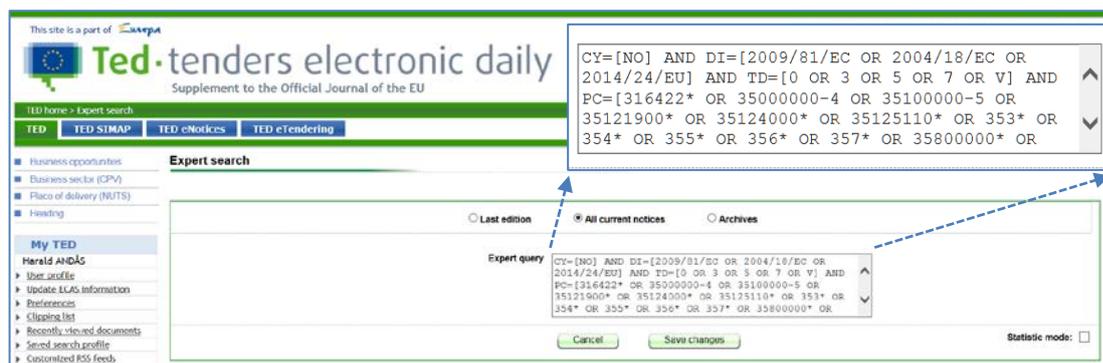


Figure 2.3 Example of customised RSS feed on TED

The received contract data are then inspected regarding their D&S relevance, such as the contracting authority (cf. Section 2.3.2) and accumulated in a format suitable for further analysis.

## 2.3 Caveats and challenges

As it is always the case in this type of study, there are some caveats and challenges related to execution and interpretation, cf. the discussion below. These can be grouped and related to the analysis tools (conceptual issues), data selection procedures (selection issues) and data classification (classification issues).

### 2.3.1 Conceptual issues

The choice of CPV as the primary variable in the characterisation of defence contracts follows inherently from selecting TED as the data source, since the use of this taxonomy is mandated by the EC directives. Some caveats should be noticed, however:

- Using the predefined D&S filter of the TED database is not the only possible subset of the CPV that is relevant. It can, however, be assumed to be well-known and thus ideally suited as a device for defining contracts related to defence related procurement.
- Available CPV code description can be misinterpreted or otherwise erroneously categorised<sup>1</sup> by the various contracting authorities required to publish their procurement on TED. This challenge is illustrated by classifying toner cartridges as ammunition

<sup>1</sup> Errors of this kind have been estimated to apply to roughly 13 % of the published items at high/medium CPV level [8].

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(cartridges) by mistake. Performing manual inspection of contract publications, as it is done in this study, largely counteracts this problem.

- The CPV taxonomy is non-homologous (relevant codes can be spread under a variety of higher level headings). This means that studies based on CPV codes would fail to register publications where the issuing authority did not find the appropriate defence related code, thus, unintentionally, underreporting D&S procurement. An assessment based on a closer investigation of Norwegian contract publications for 2015 from other available sources, suggest this effect could amount to an underestimation of the total published contract value in the order of 5 %.

### 2.3.2 Selection issues

- Selection of CPV-codes to be monitored, defining D&S in the context of this study, reflects the TED definition search filter of this category but reduces the workload by eliminating of most police and fire services and equipment and a lot of security equipment (e.g. CCTV camera systems) since the bulk of such contracts relate to control of public spaces and housing amenities. However, this equipment is included in the data set if applied to defence and security installations. Such considerations partly form the reason that the scope of study had to be rather limited (requires manual inspection of the contract publication).
- The selection of contract issuing authorities, with regard to which constitute proper D&S actors, may be discussed. This would vary between the countries of the study. As an example, the French *Gendarmerie* is organised on several levels (national, regional and local), but only contracts relating to the national level are registered as D&S contracts in the study.
- Contracts notified by *voluntary ex ante transparency notices* are not always followed by publication of the actual contract awards, which implies that the method is biased towards underestimating of total published contract values. This would be expected to vary significantly between the countries of the study. Again, assessing this effect based on an investigation of NO contract publications for 2015 suggests the potential underestimation could be around 10 % by value.

### 2.3.3 Classification issues

- Acquisitions falling under the exceptions regulated by the directives (e.g. cooperative R&D programmes, G2G) and of Article 346 TFEU are not normally registered on TED. Consequently, most D&S acquisitions will fall outside the scope of this study.
- What to do with incomplete information such as missing contract values etc.? In the study we register these contracts without (i.e. zero) value for the use in some relevant contexts, but they do count towards the main analysis. An attempt at estimating the

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missing value is made if a larger number of contracts without value are published for any given country of the study. This is mainly a problem regarding data for Sweden and The Netherlands, which therefore have to be eliminated from most of the analysis. This mainly reduces the problem to German contracts, for which missing values are «guesstimated» to account for about 10 % of the total registered contract value (all awarded to domestic industry).

- Failure in RSS solution will result in (unknown) loss of contracts.
- Relevant TED publications include various Services, Supplies and Works contracts. Not all of these are necessarily funded over defence acquisition budgets, such as weapons and ammunition for various police forces.

### **3 Results and discussion**

The main results are presented below. Data for 2014 and 2015 are compared whenever available (a full 2014 data set has not been created for Denmark and Poland), even though the current data set does not actually allow analyses on trends. The Netherlands and Sweden have largely insignificant publishing on TED of D&S contracts, both by volume and, particularly, value. Consequently, data from these nations are not included in most of the charts.

The standard unit in the charts of this survey is 1000 EUR, unless explicitly stated otherwise. Note the separate scale for the United Kingdom figures.

#### **3.1 Application of directives**

Overall, the United Kingdom is the biggest actor. For 2015, the value of its published contracts was an order of magnitude bigger than the runner up, France. The differences were considerably smaller for 2014; however, illustrating what can be conceived as a considerable variability in annual publication volumes. Data obtained for 2015 suggests that Poland could be an actor comparable to Germany and Italy.

Smaller nations, like Norway and Denmark, can occasionally become significant contributors to D&S contract publications on TED due to platform acquisitions. Since these are largely imported, these nations may have comparably large shares of contract awards to foreign industry. For larger nations, contracts are generally (more than 90 % by value) awarded to the domestic DTIB.

It is observed all the major European D&S procurers, with a possible exception for Italy, now largely publish by the defence directive (Directive 2009/81/EC). For 2015, all Danish S&D contract awards were published by this directive. For Norway, the change from 2014 to 2015 reflects the implementation of the defence directive. Also unlike 2014, Italy in 2015 publishes almost entirely (97 % by value) with the “classical” Directive 2004/18/EC. This is primarily due to a large procurement contract, cf. section 4.4. Even without regarding this contract, however, publication with Directive 2004/18/EC would still amount to a substantial 45 % of the total awarded value.

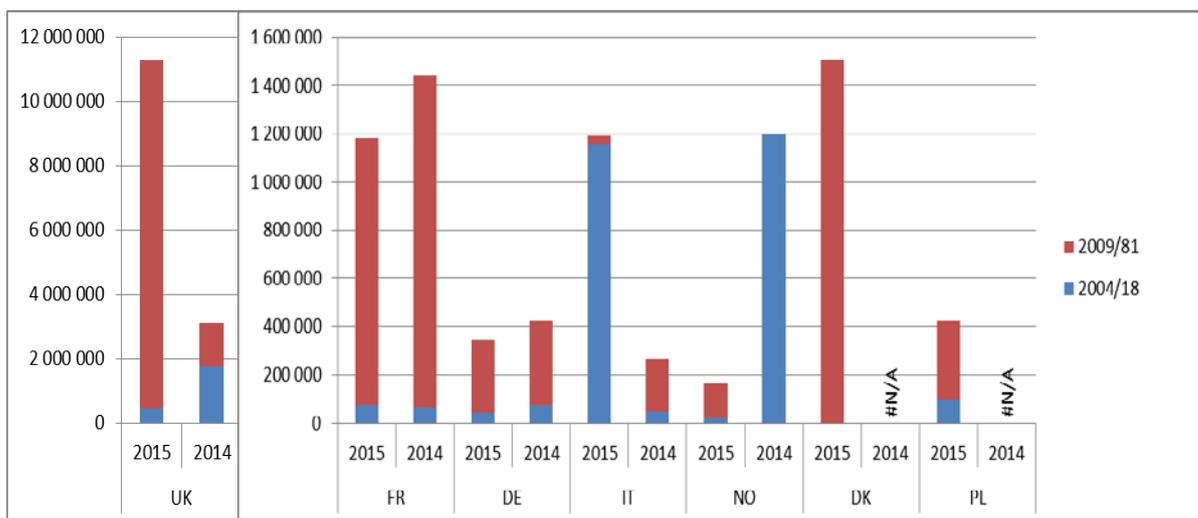


Figure 3.1 D&S contract awards published on TED for selected countries by (nominal) values (1000 €) for the years 2014 and 2015 broken down by directives 2004/18/EC and 2009/81/EC respectively. Data on DK and PL are not registered for 2014

### 3.2 Contract categories

The published contract awards, by value, display significant variation between countries also with respect to contract categories, i.e. acquisitions of D&S materiel (supplies), services and works.

For 2015, the United Kingdom has a larger share of service contracts (93 %) which is due to one huge logistics services contract, cf. section 4.1. Denmark, Italy and Poland have more substantial supply fractions; 99.5 %, 97 % and 70 % respectively. Overall, except for Norway in 2015 and the United Kingdom in 2014, very little has been published with regard to works contracts.

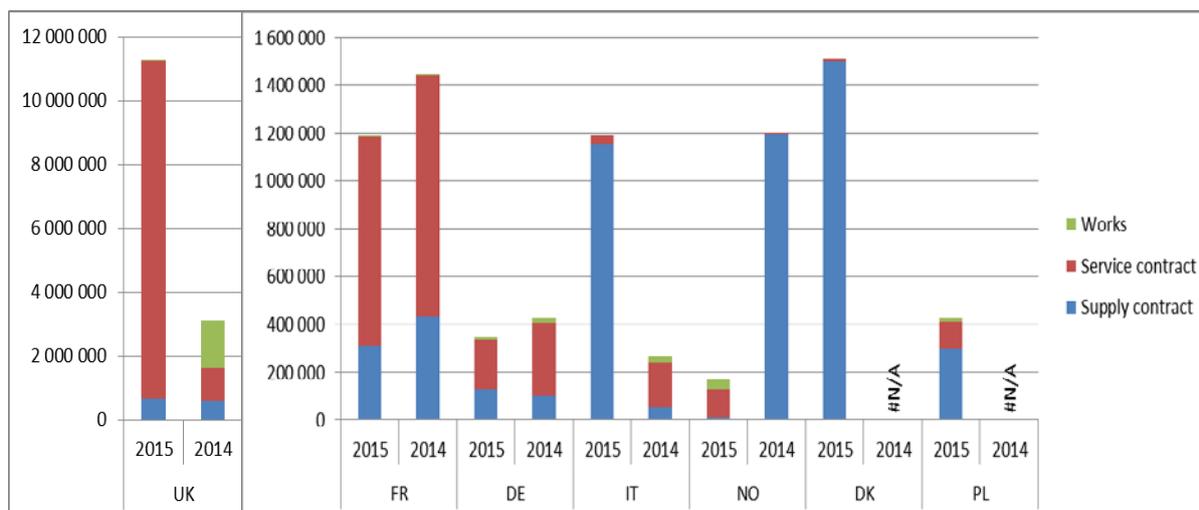


Figure 3.2 D&S contract awards published on TED for selected countries by (nominal) values (1000 €) for the years 2014 and 2015 broken down by contract categories. Data on DK and PL are not registered for 2014

### 3.3 Contracting procedures

There are five basic contracting procedures prescribed in the directives<sup>2</sup>. For simplicity, these are grouped into two classes which we shall designate by:

*Restricted competition* (our definition), which means that, according to the Directives, the application of the selected procedure should be commented upon and justified explicitly (e.g. the “Negotiated procedure without publication of a contract notice”).

*Open competition* (our definition), which means that the selected procedure does not require further justification (e.g. the “Restricted procedure”). We also include the competitive dialogue and the accelerated procedures in this class. For convenience, this also applies to what turns out to be a limited use of the negotiated procedure with publication of a contract notice, permissible in certain circumstances under the scope of Directive 2004/18/EC, since any verification of such valid settings is challenging.

In the registered period, the *competitive dialogue* is very rarely used (3 out of 1272 contracts, i.e. 0.2 %). *Accelerated procedures* were used 44 times (3.5 %), while the *negotiated procedure with publication of a contract notice* under the scope of Directive 2004/18/EC was used 19 times (1.5 %, but 6 % by value). A distribution of the 2015 use of contracting procedures by value is given in Figure 3.3 below.

<sup>2</sup> These are: Open procedure, restricted procedure, competitive dialogue and negotiated procedure with / without publication of a contract notice. Moreover, under certain conditions stated in the directives, optional accelerated versions of the restricted procedure and the negotiated procedure with the publication of a contract notice may be exercised.

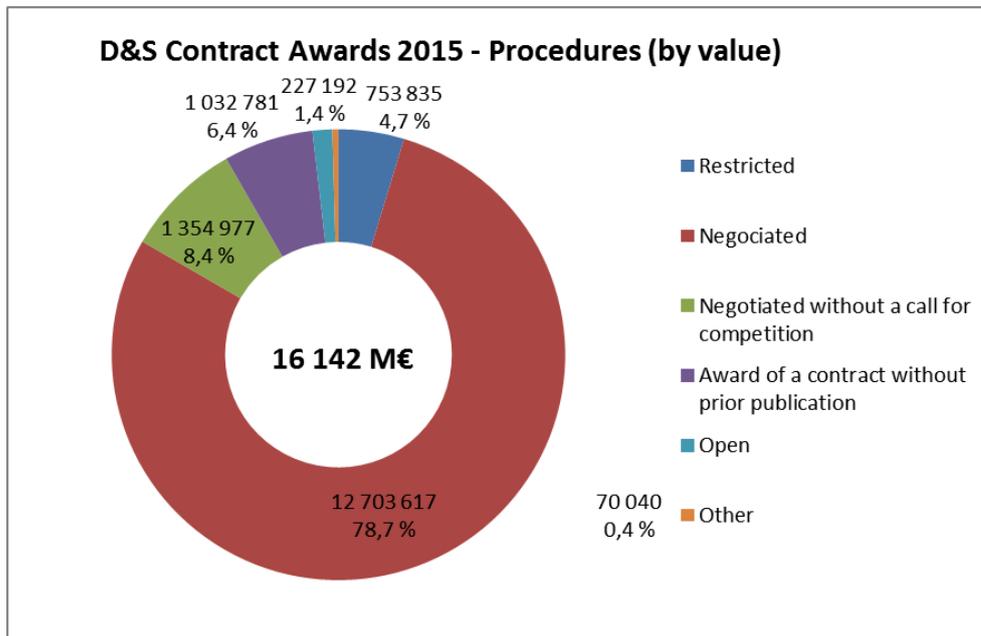


Figure 3.3 D&S contract awards published on TED for selected countries by value for the year 2015 broken down by contracting procedures (1000 €)

We observe that the selected nations mostly tend to use the ‘open’ contracting procedures of the directives. However, Italy uses significantly more ‘restricted’ competition than the United Kingdom, France, Germany and Poland, as “open” competition constitutes barely 4 % of the published contract awards by value. On the other hand, for Norway, “open” competition constitutes close to 100 % of the published contract awards.

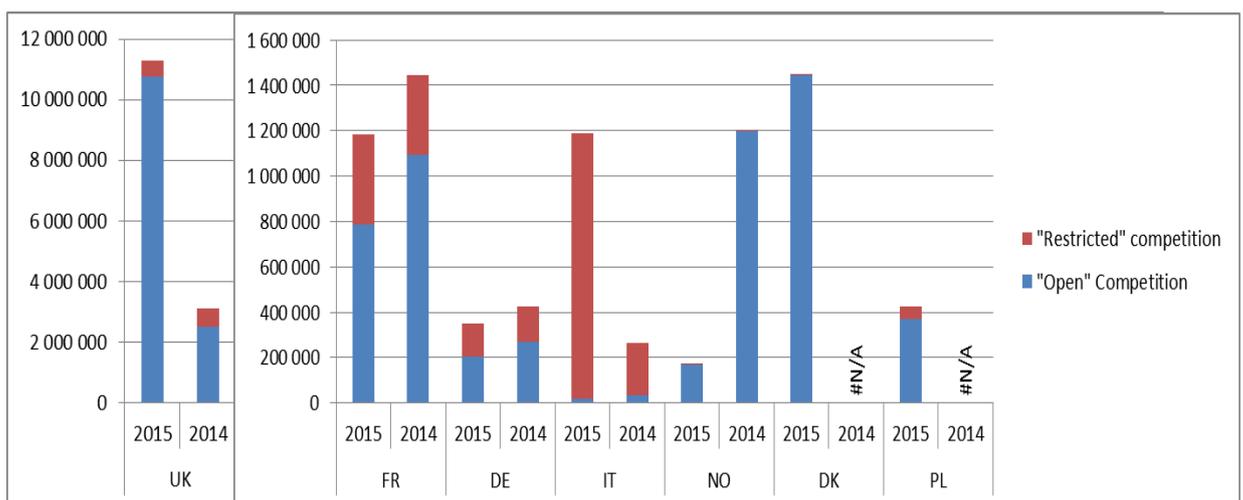


Figure 3.4 D&S contract awards published on TED for selected countries by (nominal) values (1000 €) for the years 2014 and 2015 broken down by procedures (open vs. restricted). Data on DK and PL are not registered for 2014

### 3.4 Notifications using restricted procedures

According to the EU procurement directives, contracts awarded with *restricted competition* (cf. our definition in section 3.3), should be commented and justified in preceding publications of a *prior information notice*<sup>3</sup> or a *voluntary ex ante transparency notice*<sup>4</sup>. However, in the case of use of the ‘classical’ directive, such notification is not mandatory.

From the data, it is registered that compliance with this requirement is highly variable, see Figure 3.5. While Denmark, Poland and the United Kingdom provide such notices roughly in half of the studied cases, Germany and France are clearly more reluctant, notifying only 2 % and 0 % of the relevant contracts, respectively. Norway hardly applies restricted competition<sup>5</sup>.

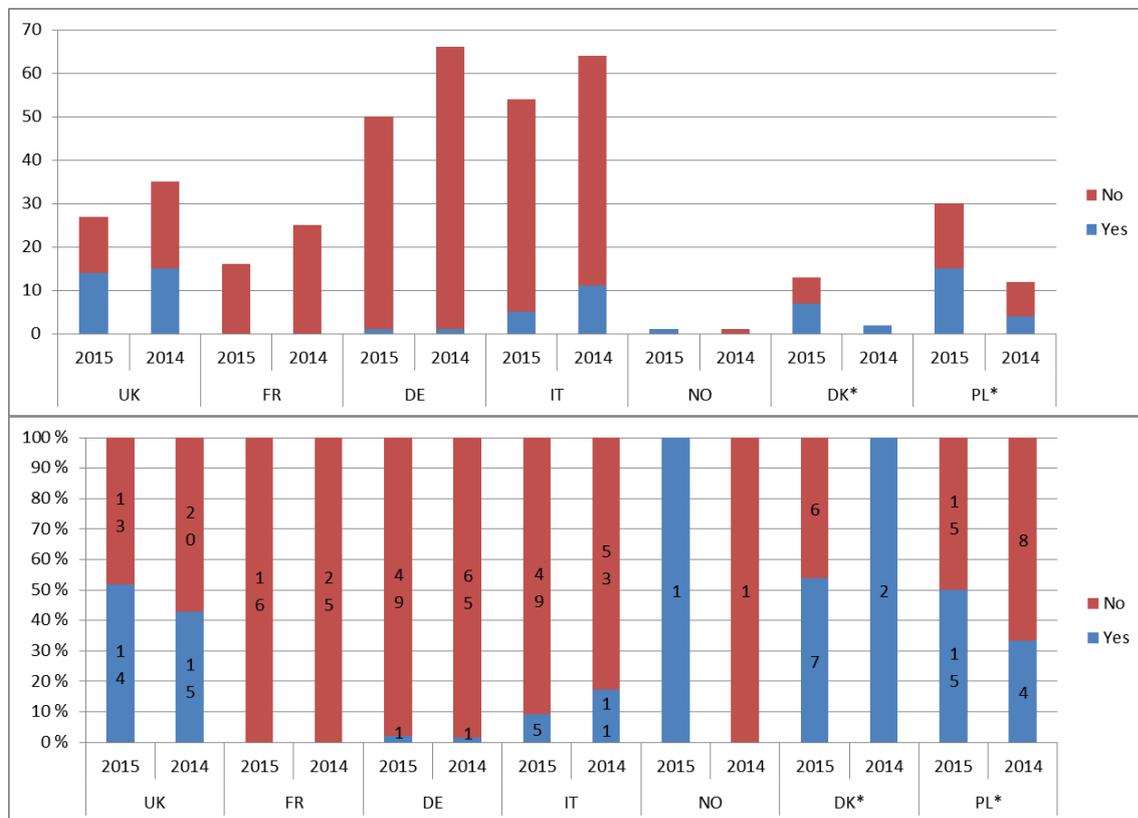


Figure 3.5 D&S contract awards with restricted competition published on TED for selected countries by numbers for the years 2014 and 2015. Yes/No flag indicates whether the contract award publications were preceded by notifications as recommended by directives 2004/18/EC and 2009/81/EC. Data on DK and PL for 2014 are based on a preliminary survey of Q<sup>IV</sup> only

<sup>3</sup> Directive 2004/18/EC, Article 35(1).

<sup>4</sup> Directive 2009/81/EC, Article 60(4).

<sup>5</sup> Caveat; cf. the discussion in Chapter 2.

In the case of the (mostly) exceptional use of restricted competition, the principal argument for using the exception are concerns regarding *technical reasons or reasons concerning exclusive rights*<sup>6</sup>, cf. Figure 3.6.

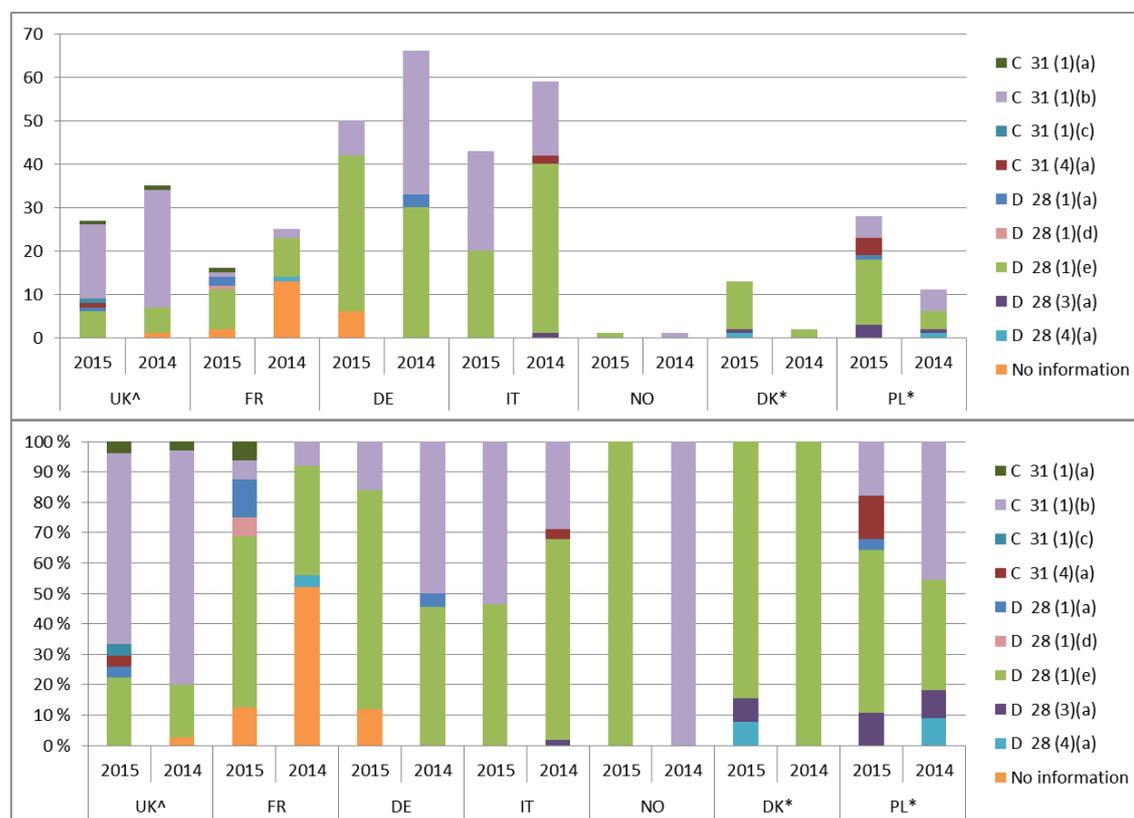


Figure 3.6 Distribution of arguments for the use of restricted competition in D&S contract awards published on TED for selected countries by numbers for the years 2014 and 2015 and broken down by arguments for restricted competition. Exceptions are motivated by Article 31 with subparagraphs of Directive 2004/18/EC (C 31) and Article 28 with subparagraphs of Directive 2009/81/EC (D 28). Data on DK and PL for 2014 are based on a preliminary survey of  $Q^{IV}$  only

### 3.5 Who wins the competition?

The bulk of awarded contract value goes to domestic industry (affiliation defined by the address of the economic operator awarded the contract<sup>7</sup>). For Poland and Italy, the share of the awarded value upon domestic industry is 99.3 % and 99.0 %, respectively. Conversely, for Denmark the fraction is 0.6 %. This remarkably small share is due to two large platform related supply contracts, cf. section 4.6.

<sup>6</sup> Article 31(1)(b) in Directive 2004/18/EC and Article 28(1)(e) in Directive 2009/81/EC.

<sup>7</sup> cf. annexes IV and VII A in the directives 2009/81/EC and 2004/18/EC, respectively.

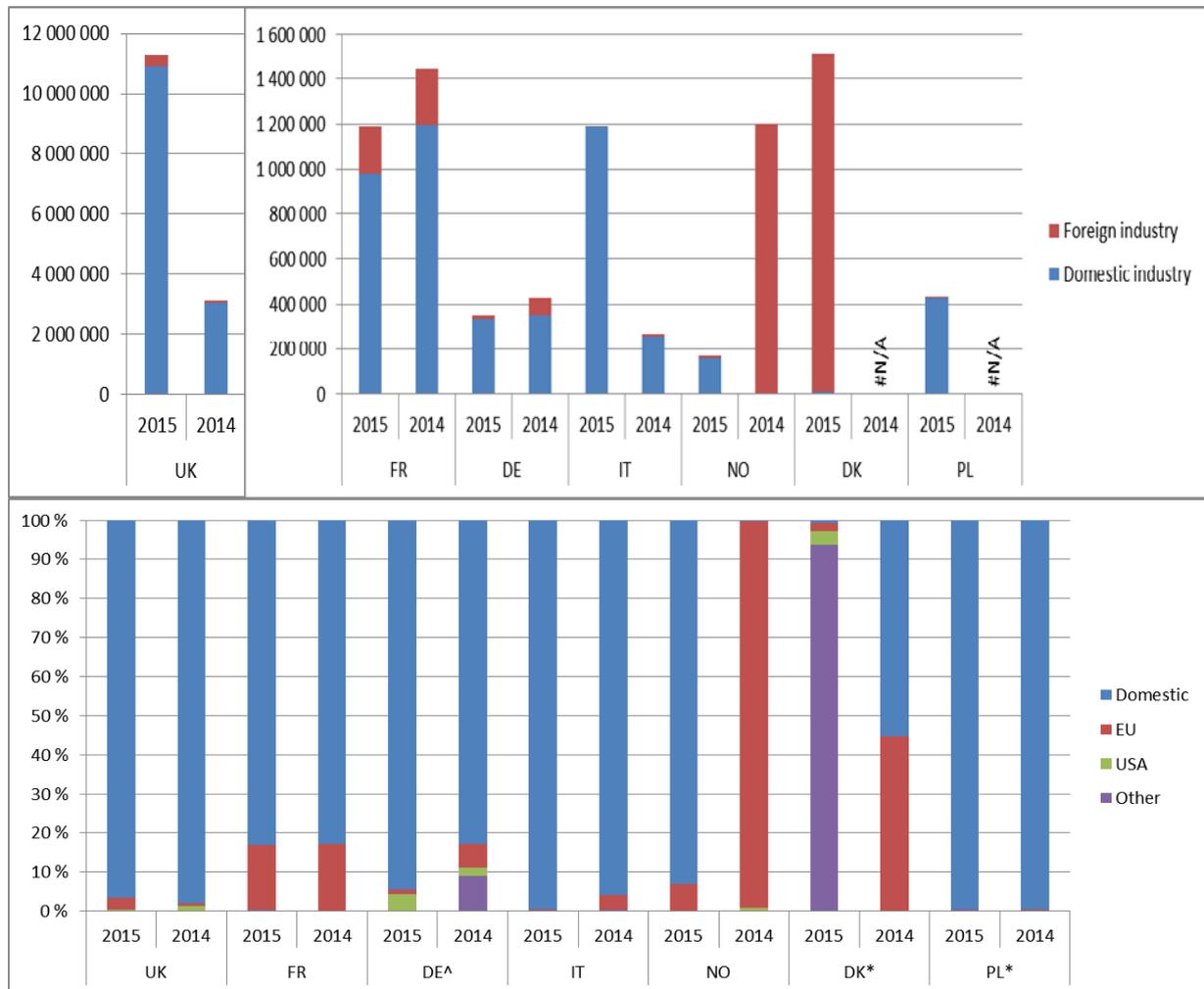


Figure 3.7 D&S contract awards published on TED for selected countries by (nominal) values (1000 €) for the years 2014 and 2015 broken down by industry affiliation (foreign vs. domestic), with further specification below. Data on DK and PL for 2014 are based on a preliminary survey of Q<sup>IV</sup> only

It is evident from Figure 3.3 that, at least for the time being, acquisitions in the D&S sector are predominantly (by value) processed using the *negotiated procedure with the publication of a contract notice*. This alternative was introduced as one of the two standard procedural options by the defence directive, which, as is evident from section 3.1, has become the preferred choice when it comes to defence related procurement. Interestingly, this indicates that such an opening for negotiations may be one key factor contributing to the apparent *status quo* in European defence procurement, with few ‘cross border’ contract awards, by facilitating contracting to domestic industry. Indeed, the correlation between the contract values awarded by the negotiated procedure and those awarded to domestic industry is substantial: 0.9515. Hence, in our view, this conjecture deserves to be examined in more detail.

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## 4 Country profiles 2015

Below are given some results by country for the year 2015 in order to illustrate different profiles. Each country is presented with some initial observations based on data obtained from TED (in tables) and supplemented with some appropriate remarks.

### 4.1 United Kingdom

1. *The UK published D&S contracts on TED valued at 11 295 MEUR*
2. *95 % of the value published on TED was according to contracting procedures that do not require specific commenting*
3. *Contracts corresponding to 96 % of the value published on TED are awarded to domestic industry*

	2015	2014
In total on TED	11 295	3 121
Supply contract on TED	680	619
“Open” competition procedures	10 757	2 507
Contract to domestic industry	10 898	3 056

Table 4.1 Values (nominal) of UK D&S contracts published on TED (M€)

#### Supplementary remarks:

- The considerable overall value of published contract awards for the UK originates mainly from a single, large service contract; the selection of *Leidos Supply Europe Limited* as Delivery Partner for the Logistic Commodities and Services (Transformation) Project of the Logistic Commodities & Services Operating Centre of the MoD valued at 8 319 MEUR over 13 years. Accordingly, the UK has a large fraction of Service contracts (93 %).
- Although much is published through the new defence directive by contract value, there still is a considerable number contracts reported with the “classical” Directive 2004/18 (30 of 55). For 12 of these 30, there are anomalies in the reporting, i.e. a mismatch between the reported directive and the reported contracting procedure, which indicate possible procedural errors. Thus, for the UK, reporting by Directive 2004/18/EC is likely slightly overestimated (roughly 3 % by value) for the year 2015, cf. section 3.1.

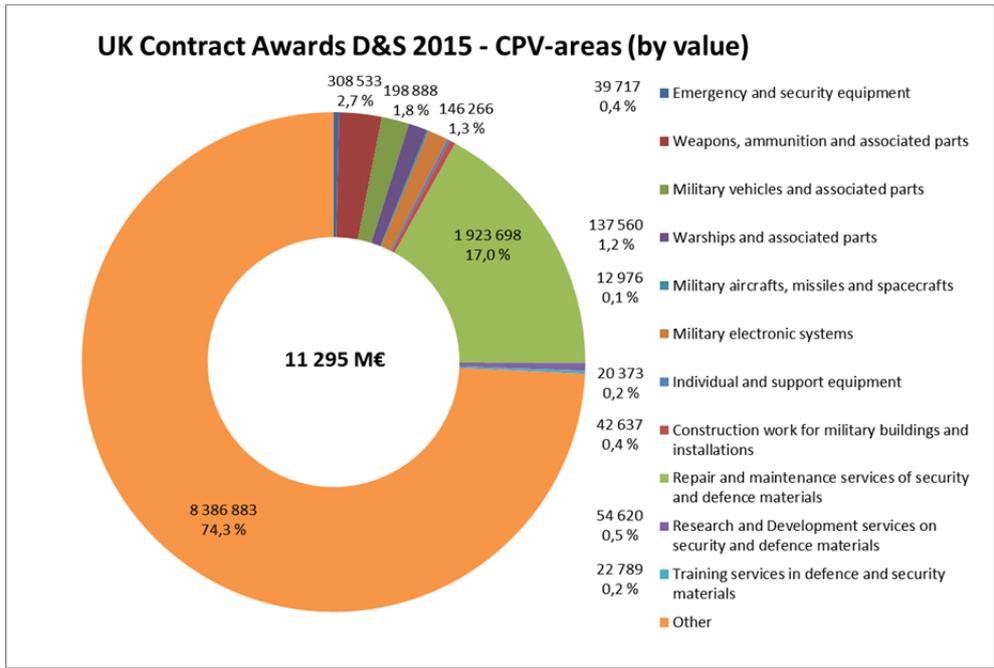


Figure 4.1 CPV breakdown of UK D&S contracts published on TED for 2015 (1000 €)

**4.2 France**

1. FR published D&S contracts on TED valued at 1 185 MEUR
2. 66,5 % of the value published on TED was according to contracting procedures that do not require specific commenting
3. Contracts corresponding to 83 % of the value published on TED are awarded to domestic industry

	2015	2014
In total on TED	1 185	1 445
Supply contract on TED	311	433
“Open” competition procedures	788	1 096
Contract to domestic industry	983	1 196

Table 4.2 Values (nominal) of FR D&S contracts published on TED (M€)

### Supplementary remarks:

- Compared to the other major nations, FR awards a relatively low share of the published contract value to the domestic industry. For 2015, this is due to two big contracts (191 MEUR, corresponding to approx. 16 % of the total FR value) given to *Westland Helicopters Ltd.*, UK, for 19 Lynx Mk 4 helicopters (ASW variety) and to *TAP*, PT, for the maintenance of Airbus airframes for the FR armed forces.
- For 2015, FR has reduced the value of contracts published on TED by about 18 % when compared to the 2014 level (nominal values).

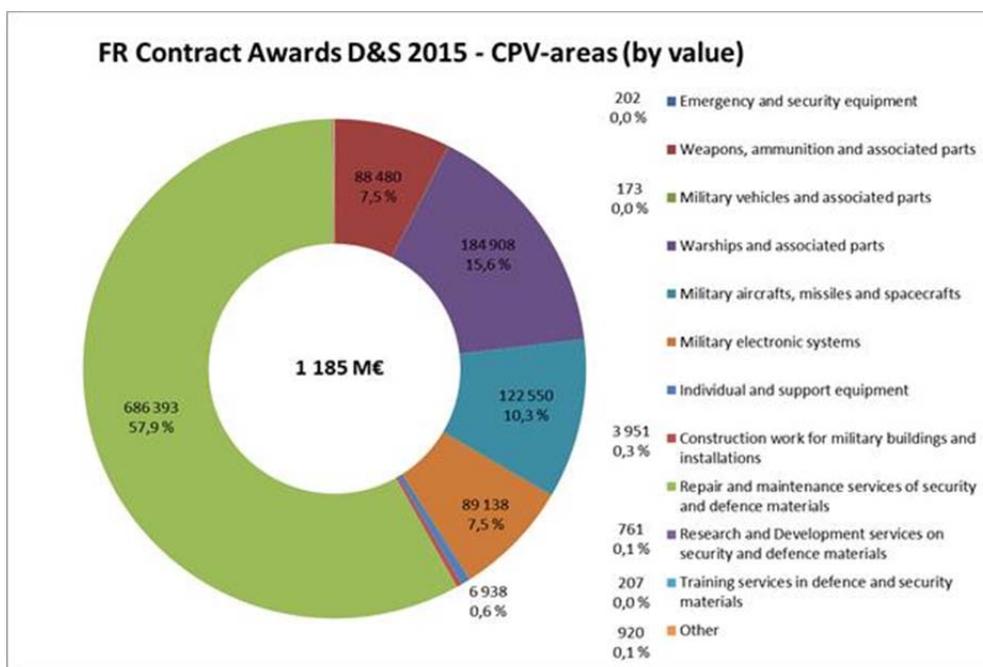


Figure 4.2 CPV breakdown of FR of D&S contracts published on TED for 2015 (1000 €)

### 4.3 Germany

1. DE published D&S contracts on TED valued at 348 MEUR
2. 59 % of the value published on TED was according to contracting procedures that do not require specific commenting
3. Contracts corresponding to 94,5 % of the value published on TED are awarded to domestic industry

	2015	2014
In total on TED	348	424
Supply contract on TED	125	98
“Open” competition procedures	204	270
Contract to domestic industry	329	352

Table 4.3 Values (nominal) of DE D&S contracts published on TED (M€)

Supplementary remarks:

- For 2015, DE has reduced the value of contracts published on TED by about 18 % when compared to the 2014 level.
- In 2015, there has been a trend towards DE reporting contract awards on TED lacking information on contract values. This particularly seems to apply certain Works contracts (16 of 50 contracts) and to framework agreements within the areas of repair and maintenance of military vehicles (22 of 53 contracts) and military uniforms (6 of 6 contracts). A conservative estimate of the missing contract values amounts to roughly 35 MEUR, or 10 % of the total reported value. These contracts are awarded to domestic industry.

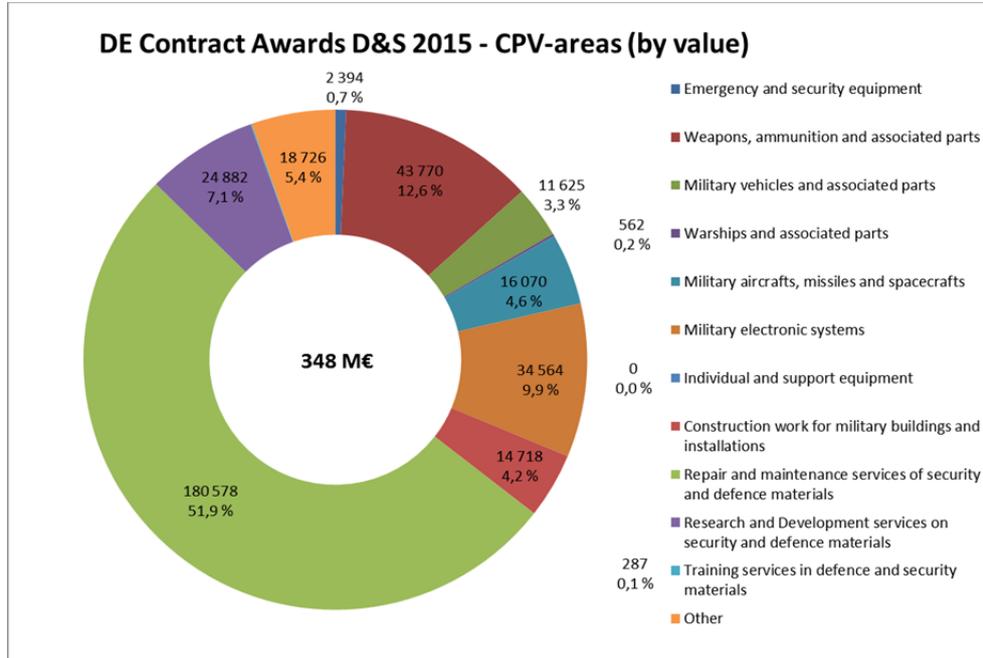


Figure 4.3 CPV breakdown of DE of D&S contracts published on TED for 2015 (1000 €)

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#### 4.4 Italy

1. IT published D&S contracts on TED valued at 1 190 MEUR
2. 1,5 % of the value published on TED was according to contracting procedures that do not require specific commenting
3. Contracts corresponding to virtually 100 % of the value published on TED are awarded to domestic industry

	2015	2014
In total on TED	1 190	263
Supply contract on TED	1 154	53
“Open” competition procedures	19	34
Contract to domestic industry	1 187	252

Table 4.4 Values (nominal) of IT D&S contracts published on TED (M€)

##### Supplementary remarks:

- IT distinguishes itself from the other nations by applying more restricted contracting procedures from the very outset of the acquisition process. The resulting share to domestic industry is, perhaps not surprisingly, considerable, cf. section 3.5.
- For 2015, IT has increased the value of contracts published on TED by about 350 % when compared to the 2014 level.
- This is primarily due to a procurement contract regarding the acquisition of a Landing Helicopter Dock (LHD) vessel awarded to *Fincantieri SpA*, valued at 1 126 MEUR, close to 95 % of the total reported value.
- Since this contact was published under Directive 2004/18/EC, the fraction of IT publication under the “classical” directive changed from 18 % in 2014 to 97 % in 2015.

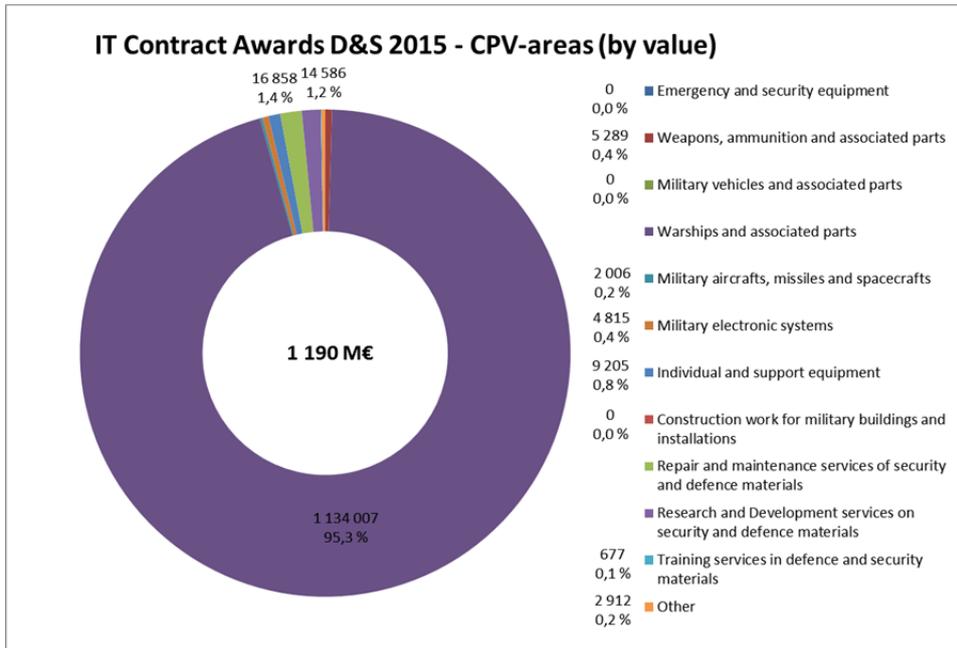


Figure 4.4 CPV breakdown of IT of D&S contracts published on TED for 2015 (1000 €)

#### 4.5 Poland

1. PL published D&S contracts on TED valued at 428 MEUR
2. 87 % of the value published on TED was according to contracting procedures that do not require specific commenting
3. Contracts corresponding to 99 % of the value published on TED are awarded to domestic industry

In total on TED	428
Supply contract on TED	298
“Open” competition procedures	371
Contract to domestic industry	423

Table 4.5 Value of PL D&S contracts published on TED for 2015 (M€)

Supplementary remarks:

- PL has a similar profile to the other big nations, with a quite large part of the contracts awarded according to “open” procedures. The share of published contracts given to domestic industry is high, however, comparable to IT.
- More than one third of PL contract awards published on TED are related to the acquisition of weapons, ammunition and associated parts. Also, there is a substantial fraction allocated to research and development services.

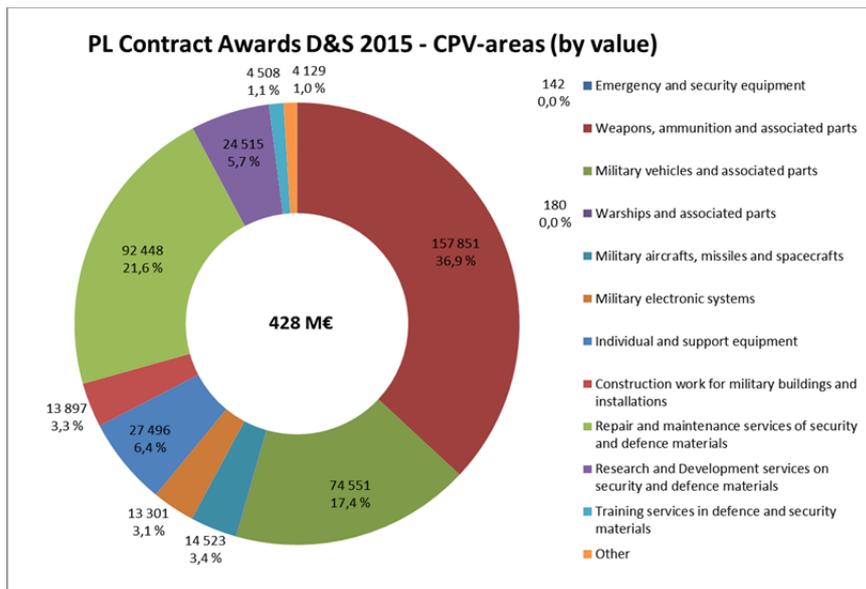


Figure 4.5 CPV breakdown of PL D&S contracts published on TED for 2015 (1000 €)

#### 4.6 Denmark

1. DK published D&S contracts on TED valued at 1 510 MEUR
2. 96 % of the value published on TED was according to contracting procedures that do not require specific commenting
3. Contracts corresponding to merely 0,5 % of the value published on TED are awarded to domestic industry

In total on TED	1 510
Supply contract on TED	1 501
“Open” competition procedures	1 446
Contract to domestic industry	9

Table 4.6 Value of DK D&S contracts published on TED for 2015 (M€)

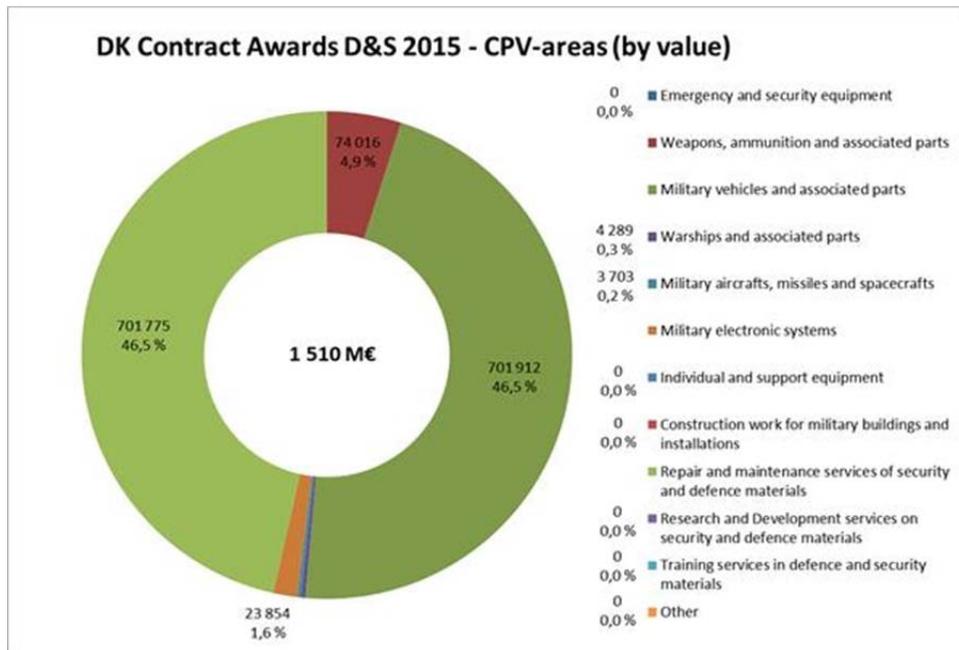


Figure 4.6 CPV breakdown of DK D&S contracts published on TED for 2015 (1000 €)

Supplementary remarks:

- The DK profile still distinguishes itself from the profiles of bigger nations like UK, FR, DE and IT by very limited awards to domestic industry.
- Most of DK contract awards published on TED are related to the acquisition of military vehicles and corresponding repair and maintenance services.
- The DK profile is dominated by two large supply contracts relating to the acquisition and sustainment (framework contract regarding services and supplies) of 309 armoured personnel carriers (APC) from *General Dynamics European Land Systems — Mowag GmbH*, CH, valued at 1 394 MEUR, roughly 92 % of the total reported value.

#### 4.7 Norway

1. NO published D&S contracts on TED valued at 169 MEUR
2. The entirety of publications on TED was according to contracting procedures that do not require specific commenting
3. Contracts corresponding to 93 % of the value published on TED are awarded to domestic industry

	2015	2014
In total on TED	169	1 200
Supply contract on TED	14	1 198
“Open” competition procedures	169	1 200
Contract to domestic industry	157	4

Table 4.7 Values (nominal) of NO D&S contracts published on TED (M€)

Supplementary remarks:

- Compared to the 2014 level, NO reduced the value of contracts published on TED in 2015 by 86 %, cf. section 3.1. However, 2014 will likely have been an unusual year for Norway due to the SAR helicopter contract which
  - Constituted 1 out of 9 published contract awards
  - Represented almost the entire value (1 178 MEUR of a total of 1 200 MEUR) of contract awards.
- The Norwegian profile distinguishes itself from the profiles of bigger nations like UK, FR, DE and IT by applying only ‘open’ competition procedures.
- However, unlike 2014, with comparably limited awards to domestic industry, the contract awards of 2015 have predominantly been given to the home market, cf. section 3.5.
- The NO contract awards for 2015 are dominated by three large contracts: the upgrade of *Nordkapp* class coast guard vessels (29 MEUR), a PBL maintenance agreement for search and rescue helicopter engines (53 MEUR) and construction of a maintenance building at Ørland air base (40 MEUR), all awarded to domestic industry.

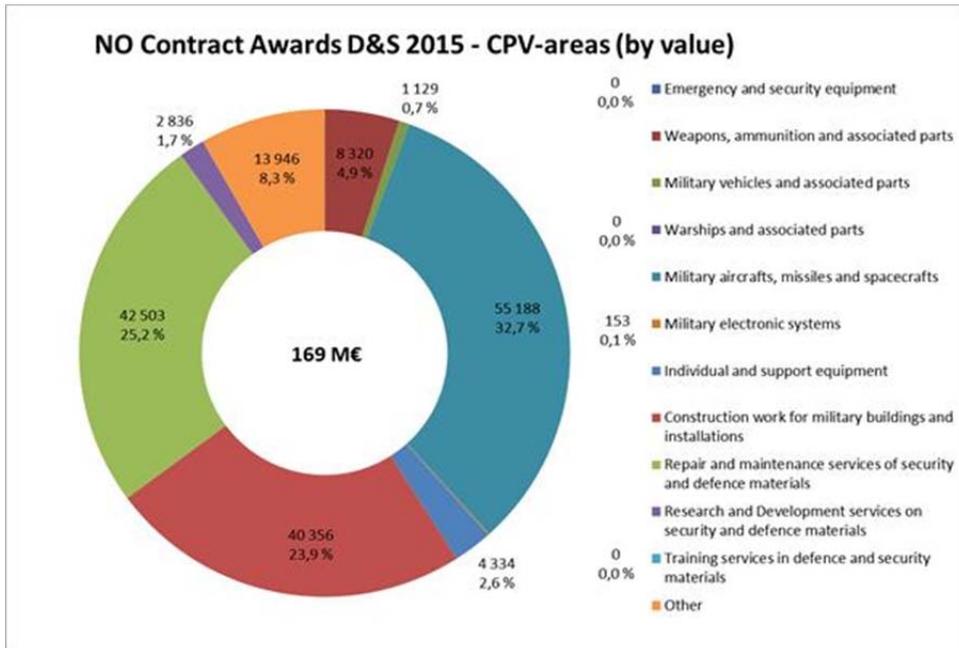


Figure 4.7 CPV breakdown of NO D&S contracts published on TED for 2015 (1000 €)

#### 4.8 The Netherlands

1. NL publishes D&S contract values on TED only to a limited extent (13 out of a total of 28 contracts)
2. The total published contract value is 18,5 MEUR
3. 11 % of the value published on TED was according to contracting procedures that do not require specific commenting
4. Contracts corresponding to 38 % of the value published on TED are awarded to domestic industry

	2015	2014
In total on TED	18.5	4.5
Supply contract on TED	18	4.4
“Open” competition procedures	2	3.5
Contract to domestic industry	7	3.4

Table 4.8 Values (nominal) of NL D&S contracts published on TED (M€)

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Supplementary remarks:

- Compared to the 2014 level, NL increased the number and value of contracts published on TED in 2015 by 311 %, i.e. from 4.5 MEUR to 18.5 MEUR (and 19 to 28 contracts).
- The published volume by value is fairly low, e.g. only 4 % of the volume for PL.

#### 4.9 Sweden

1. *SE did not publish D&S contract values on TED*
2. *The total no. of published D&S contracts is 10*

	2015	2014
In total on TED	0	3.5
Supply contract on TED	0	3.4
“Open” competition procedures	0	3.5
Contract to domestic industry	0	3.5

Table 4.9 Values (nominal) of SE D&S contracts published on TED (M€)

Supplementary remarks:

- The published volume by value is very low (if any publication at all).

## 5 Closing remarks

After the transposition of the ‘Defence Directive’ 2009/81/EC into national law and regulations (both union member states and states of the European Economic Area), an understandable interest in evaluating how this development has influenced European procurement related to defence and security has materialised.

On this note, the Norwegian NAD requested a study on this topic after the Norwegian transposition of the ‘Defence Directive’ by January 1<sup>st</sup> 2014. The intent of the present study by the Norwegian Defence Research Establishment (FFI) has been to monitor developments after the Norwegian transposition date by observing the publication of European procurement related to defence and security. Due to resource limitations, the study is restricted to *contract award*

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*notices* published on Tenders Electronic Daily (TED), the online version of the 'Supplement to the Official Journal' of the EU, for the years 2014 and 2015 by nine nations.

The main findings are summarily itemised below. Overall, the United Kingdom is the biggest actor, although there is a considerable variability in annual publication volumes for all nations in the study. There is also significant variation between countries also with respect to contract categories, i.e. acquisitions of D&S materiel (supplies), services and works.

- A. The Defence Directive 2009/81/EC is now commonly in use for defence and security procurement by most nations covered by the study, with a possible exception for Italy based on 2015 figures.
- B. The use of the mechanisms / procedures varies among the countries in the study, but the main effort clearly is by the negotiated procedure with publication of a contract notice. The selected nations mostly tend to use such 'open' contracting procedures of the directives. However, Italy uses significantly more 'restricted' competition. In the case of the (mostly exceptional) use of restricted competition, the principal argument for using the exception are concerns regarding *technical reasons or reasons concerning exclusive rights*.
- C. The bulk of awarded contract value goes to domestic industry. Hence, when it comes to cross-border trade, there seems to be 'business as usual'.
- D. The negotiated procedure accounts for close to 80 % of the awarded contract value, while 'exceptional procedures', such as the negotiated procedure without a call for competition, amounts to 15 %. A natural question to ask is whether this is likely to be the natural consequence of offering the negotiated procedure as one of the regular procedures of the 'Defence Directive'? This study provides only limited data for analysis, but it seems appropriate to propose the conjecture that the negotiated procedure as a standard option in Directive 2009/81/EC contributes to the status quo!
- E. Since the negotiated procedure now also is recognised as a regular procedure of the new procurement directive 2014/24/EU [10], it would be of interest to see how this affects both the use of the negotiated procedure option with directive 2009/81/EC, as well as a potential proliferation of the use of the negotiated procedure with the new directive.

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## Appendix A Data tables for selected figures

Applied Directives	UK		FR		DE		IT		NO		DK		PL	
	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
<b>2004/18/EC</b>	462 736	1 774	77	66	46	74	1 154	47	19	1 200	3 109	N/A	98	N/A
		499	437	849	213	460	711	996	486	122			134	
<b>2009/81/EC</b>	10 832	1 346	1 107	1 378	301	350	35	214	149	0	1 506	N/A	329	N/A
	206	363	184	457	963	031	643	914	279		439		407	
<b>Total</b>	11 294	3 120	1 184	1 445	348	424	1 190	262	168	1 200	1 509	0	427	0
	942	862	621	306	176	491	354	910	765	122	548		541	

Table A.1 Table to Figure 3.1 (unit 1000 €)

Contract Categories	UK		FR		DE		IT		NO		DK		PL	
	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
<b>Supply</b>	680 058	619 385	310 901	432 824	125 348	97 739	1 153 842	53 164	13 782	1 198 418	1 501 025	N/A	297 666	N/A
<b>Service</b>	10 572 247	1 019 228	869 823	1 004 977	208 110	310 307	36 513	188 648	114 626	1 704	8 523	N/A	115 979	N/A
<b>Works</b>	42 637	1 482 249	3 897	7 505	14 718	16 446	0	21 098	40 356	0	0	0	13 897	0
<b>Total</b>	11 294 941	3 120 862	1 184 621	1 445 306	348 176	424 492	1 190 354	262 910	168 765	1 200 122	1 509 548	0	427 541	0

Table A.2 Table to Figure 3.2 (unit 1000 €)

Contracting Procedures	UK		FR		DE		IT		NO		DK		PL	
	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
<b>Open</b>	10 756 696	2 507 388	787 641	1 095 699	204 043	270 447	18 703	34 466	168 692	1 200 099	1 446 033	N/A	370 667	N/A
<b>Restricted</b>	538 245	613 476	396 980	349 608	144 132	154 044	1 171 651	228 445	73	24	5 759	N/A	56 874	N/A
<b>Total</b>	11 294 941	3 120 864	1 184 621	1 445 307	348 176	424 491	1 190 354	262 911	168 765	1 200 123	1 509 548	0	427 541	0

Table A.3 Table to Figure 3.4 (unit 1000 €)

Reported Restricted Contract Values	UK		FR		DE		IT		NO		DK*		PL*		NL		SE	
	'15	'14	'15	'14	'15	'14	'15	'14	'15	'14	'15	'14	'15	'14	'15	'14	'15	'14
<b>Yes</b>	54	77	61	84	147	194	73	91	23	6	30	3	185	46	13	5	0	2
<b>No</b>	1	1	2	7	72	35	0	1	0	3	2	2	1	1	15	14	10	11
<b>Total</b>	55	78	63	91	219	229	73	92	23	9	32	5	186	47	28	19	10	13

Table A.4 Table to Figure 3.5. Data on DK and PL for 2014 are based on a preliminary survey of  $Q^{IV}$  only

Contract Awards	UK		FR		DE		IT		NO		DK		PL	
	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
<b>Domestic</b>	10 897 885	3 055 510	982 519	1 195 775	329 110	351 844	1 186 893	252 183	157 160	3 700	9 117	N/A	424 564	N/A
<b>Foreign</b>	397 056	65 352	202 102	249 531	19 066	72 647	3 461	10 727	11 605	1 196 422	1 500 431	N/A	2 977	N/A
<b>Total</b>	11 294 941	3 120 862	1 184 621	1 445 306	348 176	424 491	1 190 354	262 910	168 765	1 200 122	1 509 548	0	427 541	0

Table A.5 Table to Figure 3.7 (unit 1000 €)

Distribution of exception justifications	UK		FR		DE		IT		NO		DK*		PL*	
	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
<b>C 31 (1)(a)</b>	1	1	1	0	0	0	0	0	0	0	0	0	0	0
<b>C 31 (1)(b)</b>	17	27	1	2	8	33	23	17	0	1	0	0	5	5
<b>C 31 (1)(c)</b>	1	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>C 31 (2)(b)</b>	0	0	0	0	0	0	0	1	0	0	0	0	0	0
<b>C 31 (4)(a)</b>	1	0	0	0	0	0	0	2	0	0	0	0	4	0
<b>C 31 (4)(b)</b>	0	0	0	0	0	0	0	0	0	0	0	0	2	0
<b>D 28 (1)(a)</b>	1	0	2	0	0	3	0	0	0	0	0	0	1	0
<b>D 28 (1)(d)</b>	0	0	1	0	0	0	0	0	0	0	0	0	0	0
<b>D 28 (1)(e)</b>	6	6	9	9	36	30	20	39	1	0	11	2	15	4
<b>D 28 (2)(a)</b>	0	0	0	0	0	0	4	0	0	0	0	0	0	0
<b>D 28 (2)(b)</b>	0	0	0	0	0	0	6	4	0	0	0	0	0	0
<b>D 28 (3)(a)</b>	0	0	0	0	0	0	0	1	0	0	1	0	3	1
<b>D 28 (4)(a)</b>	0	0	0	1	0	0	0	0	0	0	1	0	0	1
<b>D 28 (4)(b)</b>	0	0	0	0	0	0	1	0	0	0	0	0	0	1
<b>No info.</b>	0	1	2	13	6	0	0	0	0	0	0	0	0	0
<b>Total</b>	27	35	16	25	50	66	54	64	1	1	13	2	30	12

Table A.6 Table to Figure 3.6. Data on DK and PL for 2014 are based on a preliminary survey of  $Q^{IV}$  only

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## Appendix B Defining Defence & Security

The following subset of codes from the CPV taxonomy is chosen to constitute the definition of defence and security (D&S) contracts for publications from the TED database in this study, cf. also Chapter 2. It is based on the version provided in [9]. The supplementary vocabulary has not been used.

CPV CODE	ENGLISH DESCRIPTION
31642200-0	Detection apparatus for mines
35000000-4	Security, fire-fighting, police and defence equipment
35100000-5	Emergency and security equipment
35121900-7	Radar detectors
35124000-9	Metal detectors
35125110-0	Biometric sensors
35300000-7	Weapons, ammunition and associated parts
35310000-0	Miscellaneous weapons
35311000-7	Swords, cutlasses, bayonets and lances
35311100-8	Swords
35311200-9	Cutlasses
35311300-0	Bayonets
35311400-1	Lances
35312000-4	Gas guns
35320000-3	Firearms
35321000-0	Light firearms
35321100-1	Hand guns
35321200-2	Rifles
35321300-3	Machine guns
35322000-7	Artillery
35322100-8	Anti-aircraft
35322200-9	Self-propelled artillery
35322300-0	Towed artillery
35322400-1	Mortars

35322500-2	Howitzer
35330000-6	Ammunition
35331000-3	Ammunition for firearms and warfare
35331100-4	Bullets
35331200-5	Shells
35331300-3	Grenades
35331400-7	Land mines
35331500-8	Cartridges
35332000-0	Ammunition for naval warfare
35332100-1	Torpedoes
35332200-2	Sea mines
35333000-7	Ammunition for aerial warfare
35333100-8	Bombs
35333200-9	Rockets
35340000-9	Parts of firearms and ammunition
35341000-6	Parts of light firearms
35341100-7	Gunmetal pipe fittings
35342000-3	Parts of rocket launchers
35343000-0	Parts of mortars
35400000-8	Military vehicles and associated parts
35410000-1	Armoured military vehicles
35411000-8	Battle tanks
35411100-9	Main battle tanks
35411200-0	Light battle tanks
35412000-5	Armoured combat vehicles
35412100-6	Infantry fighting vehicles
35412200-7	Armoured personnel carriers
35412300-8	Armoured weapon carriers
35412400-9	Reconnaissance and patrol vehicles
35412500-0	Command and liaison vehicles
35420000-4	Parts of military vehicles

35421000-1	Mechanical spare parts for military vehicles
35421100-2	Engines and engine parts for military vehicles
35422000-8	Electronic and electrical spare parts for military vehicles
35500000-9	Warships and associated parts
35510000-2	Warships
35511000-9	Surface combatant
35511100-0	Aircraft carriers
35511200-1	Destroyers and frigates
35511300-2	Corvettes and patrol boats
35511400-3	Amphibious crafts and ships
35512000-6	Submarines
35512100-7	Strategic submarine nuclear fuelled
35512200-8	Attack submarine nuclear fuelled
35512300-9	Attack submarine diesel fuelled
35512400-0	Unmanned underwater vehicles
35513000-3	Mine warfare and auxiliary ships
35513100-4	Mine hunter/minesweeper
35513200-5	Auxiliary research vessel
35513300-6	Auxiliary intelligence collection vessel
35513400-7	Auxiliary hospital; cargo; tanker; ro-ro vessel
35520000-5	Parts for warships
35521000-2	Hull and mechanical spare parts for warships
35521100-3	Engines and engine parts for warships
35522000-9	Electronic and electrical spare parts for warships
35600000-0	Military aircrafts, missiles and spacecrafts
35610000-3	Military aircrafts
35611100-1	Fighter aircrafts
35611200-2	Fighter-bomber/ground attack aircrafts
35611300-3	Bomber aircrafts
35611400-4	Military transport aircrafts
35611500-5	Training aircrafts

35611600-6	Maritime patrol aircrafts
35611700-7	Tanker aircrafts
35611800-8	Reconnaissance aircrafts
35612100-8	Combat helicopters
35612200-9	Anti-submarine warfare helicopters
35612300-0	Support helicopters
35612400-1	Military transport helicopters
35612500-2	Search and rescue helicopters
35613000-4	Unmanned aerial vehicles
35613100-5	Unmanned combat aerial vehicles
35620000-6	Missiles
35621000-3	Strategic missiles
35621100-4	Strategic anti-ballistic missiles
35621200-5	Intercontinental ballistic missiles
35621300-6	Submarine launched ballistic missiles
35621400-7	Intermediate range ballistic missiles
35622000-0	Tactical missiles
35622100-1	Air-to-air missiles
35622200-2	Air-to-ground missiles
35622300-3	Anti-ship missiles
35622400-4	Anti-submarines rockets
35622500-5	Tactical anti-ballistic missiles
35622600-6	Anti-tank guided missiles
35622700-7	Surface-to-air missiles
35623000-7	Cruise missiles
35623100-8	Air/ground/sea launched cruise missiles
35630000-9	Military spacecrafts
35631000-6	Military satellites
35631100-7	Communication satellites
35631200-8	Observation satellites
35631300-9	Navigation satellites

35640000-2	Parts for military aerospace equipment
35641000-9	Structure and mechanical spare parts for military aerospace equipment
35641100-0	Engines and engine parts for military aerospace equipment
35642000-7	Electronic and electrical spare parts for military aerospace equipment
35700000-1	Military electronic systems
35710000-4	Command, control, communication and computer systems
35711000-1	Command, control, communication systems
35712000-8	Tactical command, control and communication systems
35720000-7	Intelligence, surveillance, target acquisition and reconnaissance
35721000-4	Electronic intelligence system
35722000-1	Radar
35723000-8	Air defence radar
35730000-0	Electronic warfare systems and counter measures
35740000-3	Battle simulators
35800000-2	Individual and support equipment
35810000-5	Individual equipment
35811300-5	Military uniforms
35812000-9	Combat uniforms
35812100-0	Camouflage jackets
35812200-1	Combat suits
35812300-2	Combat gear
35813000-6	Military helmets
35813100-7	Helmet covers
35814000-3	Gas masks
35815000-0	Garments for anti-ballistic protection
35815100-1	Bullet-proof vests
35820000-8	Support equipment
35821000-5	Flags
35821100-6	Flagpole
38113000-0	Sonars
38115000-4	Radar apparatus

38115100-5	Radar surveillance equipment
38546000-4	Explosives detection system
38546100-5	Bomb detectors
45111310-4	Dismantling works for military installations
45111320-7	Dismantling works for security installations
45216200-6	Construction work for military buildings and installations
45216220-2	Military bunker construction work
45216230-5	Military shelter construction work
45216250-1	Trench defences construction work
45222200-1	Engineering work for military installations
45222300-2	Engineering work for security installations
50600000-1	Repair and maintenance services of security and defence materials
50610000-4	Repair and maintenance services of security equipment
50620000-7	Repair and maintenance services of firearms and ammunition
50630000-0	Repair and maintenance services of military vehicles
50640000-3	Repair and maintenance services of warships
50650000-6	Repair and maintenance services of military aircrafts, missiles and spacecrafts
50660000-9	Repair and maintenance services of military electronic systems
50840000-5	Repair and maintenance services of weapons and weapon systems
50841000-2	Repair and maintenance services of weapons
50842000-9	Repair and maintenance services of weapon systems
51550000-2	Installation services of weapon systems
72231000-3	Development of software for military applications
73400000-6	Research and Development services on security and defence materials
73410000-9	Military research and technology
73420000-2	Pre-feasibility study and technological demonstration
73421000-9	Development of security equipment
73422000-6	Development of firearms and ammunition
73423000-3	Development of military vehicles
73424000-0	Development of warships

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73425000-7	Development of military aircrafts, missiles and spacecrafts
73426000-4	Development of military electronic systems
73430000-5	Test and evaluation
73431000-2	Test and evaluation of security equipment
73432000-9	Test and evaluation of firearms and ammunition
73433000-6	Test and evaluation of military vehicles
73434000-3	Test and evaluation of warships
73435000-0	Test and evaluation of military aircrafts, missiles and spacecrafts
73436000-7	Test and evaluation of military electronic systems
75211300-1	Foreign military-aid-related services
75220000-4	Defence services
75221000-1	Military defence services
75222000-8	Civil defence services
80600000-0	Training services in defence and security materials
80610000-3	Training and simulation in security equipment
80620000-6	Training and simulation in firearms and ammunition
80630000-9	Training and simulation in military vehicles
80640000-2	Training and simulation in warships
80650000-5	Training and simulation in aircrafts, missiles and spacecrafts
80660000-8	Training and simulation in military electronic systems
90523100-0	Weapons and ammunition disposal services
90523200-1	Bomb-disposal services
90523300-2	Mine sweeping services

*Table B.1 CPV codes defining defence and security contracts in this study*

## About FFI

The Norwegian Defence Research Establishment (FFI) was founded 11th of April 1946. It is organised as an administrative agency subordinate to the Ministry of Defence.

### FFI's MISSION

FFI is the prime institution responsible for defence related research in Norway. Its principal mission is to carry out research and development to meet the requirements of the Armed Forces. FFI has the role of chief adviser to the political and military leadership. In particular, the institute shall focus on aspects of the development in science and technology that can influence our security policy or defence planning.

### FFI's VISION

FFI turns knowledge and ideas into an efficient defence.

### FFI's CHARACTERISTICS

Creative, daring, broad-minded and responsible.

## Om FFI

Forsvarets forskningsinstitutt ble etablert 11. april 1946. Instituttet er organisert som et forvaltningsorgan med særskilte fullmakter underlagt Forsvarsdepartementet.

### FFIs FORMÅL

Forsvarets forskningsinstitutt er Forsvarets sentrale forskningsinstitusjon og har som formål å drive forskning og utvikling for Forsvarets behov. Videre er FFI rådgiver overfor Forsvarets strategiske ledelse. Spesielt skal instituttet følge opp trekk ved vitenskapelig og militærteknisk utvikling som kan påvirke forutsetningene for sikkerhetspolitikken eller forsvarsplanleggingen.

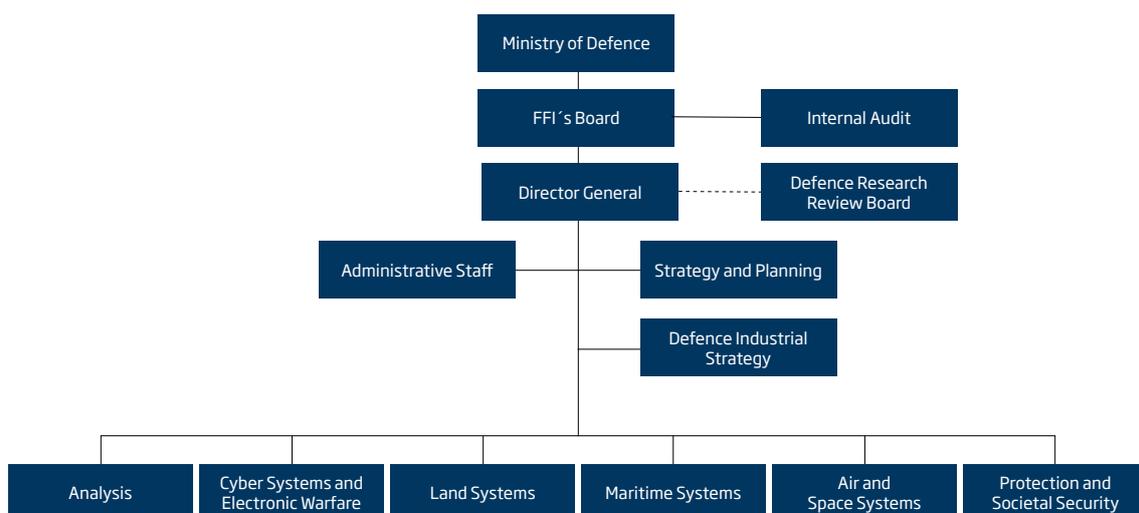
### FFIs VISJON

FFI gjør kunnskap og ideer til et effektivt forsvar.

### FFIs VERDIER

Skapende, drivende, vidsynt og ansvarlig.

## FFI's organisation



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