

## Public procurement - an explorative study of the contracts of the Tender Electronic Daily (TED)<sup>1</sup>

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### 1. Introduction

Public procurement is estimated to constitute more than 16% of GDP in the EU, see e.g. Ramsey (2006). This is one of the reasons why a lot of interest has been attached to this topic. Most of the papers in this field have been of a theoretical nature but during the last ten years also a few empirical studies have become available, see e.g. Marion, J. (2007) and Bajari et al (2008). At the EU level liberalizations have been going on since the late 80'ies (see e.g. the EU commission (1985). Here certain regulations imply that public projects of a certain size need to be subject to a public tender. Again according to Ramsey (2006) around 16% of all public procurement in the EU is subject to these rules and regulations and information on the contracts corresponding to these 16% can be found in Tenders Electronic Daily (TED) database. In general, the hypothesis is that public procurement will increase competition and ultimately lead to cheaper contracts for the authorities, see e.g. Cecchini (1988) for the economic arguments. But in practice: do the rules and regulations ensure more competition? Do they lead to more internationalization in the sense that more foreign firms become contract winners? Do the government and municipalities in the EU countries actually gain economically from the procurement? Does the choice of type of procedure matter? A lot of interesting questions immediately pops up and some of them – but only some of them - may be analyzed based on the content of this data base. Still, due to the large coverage and the international nature of the data base we believe that a thoroughly study of the possibilities of TED is of major interest and the present study is just a first step in this direction. One of the students who extracted the TED data has also used them for analysis in his master thesis, see Bundsgaard (2010). He has, however, limited his interest to analyze the choice of procedure: auction vs. negotiation and therefore our study has a broader scope when it comes to available variables. To our knowledge we are the first group of researchers who begins to analyze the content of this database using explorative statistical techniques based on a broad range of variables.

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<sup>1</sup> We would like to thank the European Union for making the TED data available, © European Union, 1998-2012

## 2. Methodology

The data set is analyzed using log-linear models, see e.g. Andersen(1997) or Agresti (2002). Such models build only on categorical data where the logarithmically transformed probability of a cell is parameterized as

$$\log(\pi_{i_1..i_k}) = \tau_{i_1 i_2 i_3} + \dots + \tau_{i_1 i_2} \dots \tau_{i_1} + \dots + \tau_0$$

where only interactions up to order three are stated.

## 3. The data set

In the present study we work with TED: The Tender Electronic Daily which is ‘an online version of the ‘Supplement to the Official Journal of the European Union’, dedicated to European public procurement’, see <http://ted.europa.eu/TED/misc/aboutTed.do>. In addition to being a forum for doing business in the procurement field with announcements and notices and links to detailed specifications of the projects, the site also contains a database including all public procurement contracts in the EU countries back to 2003. However, it is possible only to retrieve data through the archives 5 years back in time. We exclusively use data from awarded contracts and do not look at tender announcements. The contracts are text documents and for some of our variables of interest also a data-sheet is available. But to sum up only limited parts of the information is made ready for use in a more traditional database sense. Hence in order to use these data a large amount of work has to be done. In our case the data collection has been made by a group of former CBS students and one of their friends<sup>2</sup>. Using data crawling techniques they have collected data on all contracts during the period 2003-2008. In the present study we focus exclusively on the Danish contracts. In the awarded contracts we have information on the *authority* who is responsible for the tender, *the country of the authority*, *the country and region where the project is going to take place* (NUTS geographical codes), *the identity of the winner* (but not with CVR-number only name, address, telephone number and sometimes homepage), *the estimated price* (available at time of the contract notice), *the final awarded price*, *award criteria* (lowest price or most economic tender or not defined), *type of contract* (Works, Supply, Combined, Service), *Procedure* (open, restricted, negotiated without a call, negotiated with a call, accelerated, competitive dialogue, negotiated), *type of bid* (global tender, partial tender, global or partial tender, not defined), *number of bids*, *the industry* by CPV-codes.

## 4. The data set used for this analysis – some descriptives

One challenge of the database is that not all of these variables are available for each contract. Most supply contracts do e.g. not include value/price information and in other cases like the number of bids the information may simply be missing<sup>3</sup>.

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<sup>2</sup> We would like to thank Michael Friis, Richard Bundsgaard and Thomas M. Mathiesen for extraction of the data.

<sup>3</sup>The data was extracted by collecting information from the parts of TED called *data* and *current language*. We have later discovered that at least for Denmark this implies that in many cases the *number of bids* variable will be missing.

Also, in our analyses all counting variables and continuous variables are grouped to just three categories. These categories all have the form "high", "Medium" and "Small". The definition of the categories is performed by cutting at the lower and upper quartile, such that "Small" refers to values below the lower quartile and "High" corresponds to values above the upper quartile. By this definition half of the observations are found in the "Medium" category, which also could be considered as "Usual", "Typical" etc.

The variables we focus on here are: *Award criteria*, *number of bids*, *value*, *international* (A dummy for whether the winner comes from another country than the procuring authority), *procedure* (the type of procedure), *type of contract*

For the variable *number of bids* with less than four offers received are considered as "Small" while cases with more than 6 offers received are considered "High". By this definition the "Medium" category is restricted to the short interval from 4 to 6 received offers, but a large part of the cases are found in this category.

**Table 1: Descriptive statistics on the categorical version of *number of bids***

<i>Number of bids</i>			<i>Cumulative</i>	
	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>
<i>High</i>	139	4.97	139	4.97
<i>Medium</i>	393	14.07	532	19.04
<i>Missing</i>	2012	72.01	2544	91.05
<i>Small</i>	250	8.95	2794	100.00

**Table 2: Descriptive statistics on the *type of contract***

<i>Type of contract</i>			<i>Cumulative</i>	
	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>
<i>Works</i>	300	10.74	300	10.74
<i>Supply contract</i>	750	26.84	1050	37.58
<i>Service contract</i>	1744	62.42	2794	100.00

From this it must be concluded that too few contracts exist for categories 4, 5 and 6 of the negotiation procedure variable. Should they be set together with other categories or deleted? Moreover nearly 2000 contracts give no information for this variable.

**Table 3: Descriptive statistics on the *procedure***

<i>procedure</i>	<i>Frequency</i>	<i>Percent</i>	<i>Cumulative Frequency</i>	<i>Cumulative Percent</i>
0	315	38.99	315	38.99
1	402	49.75	717	88.74
2	57	7.05	774	95.79
3	26	3.22	800	99.01
4	6	0.74	806	99.75
5 or 6	2	0.25	808	100.00

The values are: 0: Open, 1: Restricted, 2: negotiated without a call  
3: negotiated with a call, 4: ccc, 5&6: ccc. Notice that 4,5,6 are not included in the analysis due to the small number of observations.

**Table 4: Descriptive statistics on the *award criterion***

<i>Award criterion</i>	<i>Frequency</i>	<i>Percent</i>	<i>Cumulative Frequency</i>	<i>Cumulative Percent</i>
1	478	17.11	478	17.11
2	2286	81.82	2764	98.93
8 & 9	30	1.07	2794	100.00

The values are: 1: lowest price, 2: The most economic tender, 8: not defined/not applicable. The last category is excluded from the analysis due to the low number of observations.

The value of the contract is categorized in the following way: First, the value is the total value of the contract i.e. for a partial tender the value is the sum of the sub contracts. Next the value variable is divided into 3 categories: small, medium and high where contracts with a total value less than < 2,400,000 DKK are considered "Small" and contracts with a total value larger than 18,500,000 DKK are considered "High".

The definition of the variables *number of bids* and *value* could of course be altered as it is very sensitive to the limits for "Small" and "High". Especially the definition of *number of bids* = "Small" for offers received < 4 gives too many in the category while a definition of offers received < 3 would give too many.

**Table 5: Descriptive statistics on the value**

<i>value</i>	<i>Frequency</i>	<i>Percent</i>	<i>Cumulative</i>	<i>Cumulative</i>
			<i>Frequency</i>	<i>Percent</i>
<i>High</i>	166	5.94	166	5.94
<i>Medium</i>	334	11.95	500	17.90
<i>Missing</i>	2128	76.16	2628	94.06
<i>Small</i>	166	5.94	2794	100.00

## 5. Results: two cases for analyses using as many variables as possible

Many observations unfortunately have missing values for *number of bids* and *value*. One problem is that contracts for 2008 are reported insufficiently in our data set as *number of bids* is actually in the TED database but they are recorded as missing. Only 22 contracts present information of both variables they cannot be included in the same analysis. Similarly the variables *procedure* and *value* unfortunately are only both available for 21 observations. For this reason the analysis is performed for two cases of variables included.

### Case A

For an analysis of the variables *award criterion*, *number of bids*, *international*, *type of procedure*, *type of contract* a total of 769 observations are available when missing values are excluded and the very rare categories for the procedure variables are also excluded.

### Case B

For an analysis of the variables *award criterion*, *value*, *international* and a total of 659 are available when missing values are excluded.

#### 5.1 Results for Case A

**Table 6: Results for Case A**

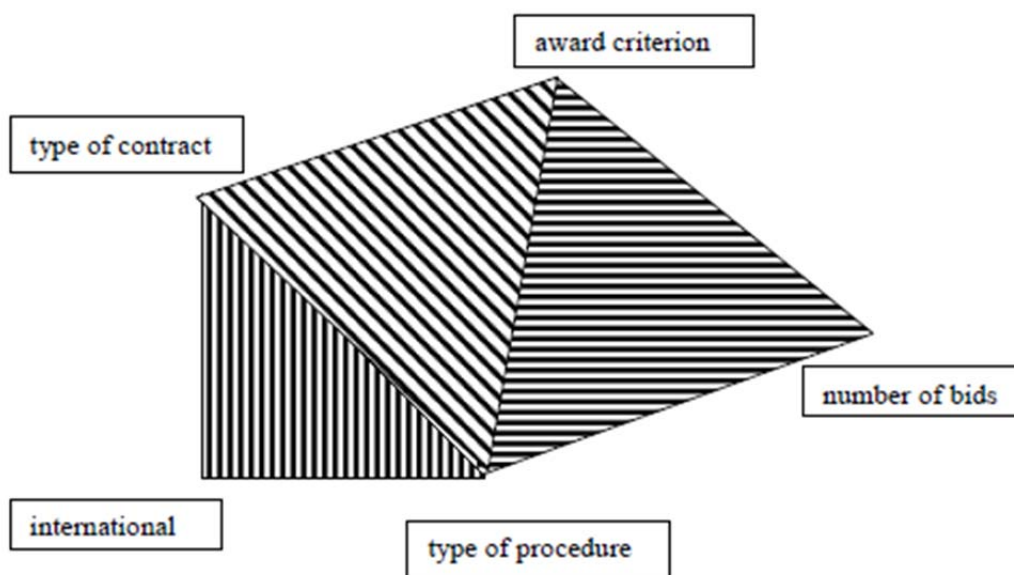
<i>Maximum Likelihood Analysis of Variance</i>			
<i>Source</i>	<i>DF</i>	<i>Chi-Square</i>	<i>p-value</i>
<i>Award Criterion</i>	1	5.20	0.0225
<i>procedure</i>	3	14.18	0.0027
<i>Award Criterion*procedure</i>	2*	0.94	0.6239
<i>Number of bids</i>	2	9.34	0.0094
<i>Award Criterion*number of bids</i>	2	4.21	0.1221
<i>Number of bids*procedure</i>	5*	19.44	0.0016
<i>Award Criterion*number of bids*procedure</i>	3*	12.10	0.0070

Maximum Likelihood Analysis of Variance			
Source	DF	Chi-Square	p-value
<i>international</i>	1	15.23	<.0001
<i>international*procedure</i>	3	11.96	0.0075
<i>Type of contract</i>	2	2.84	0.2423
<i>international*type of contract</i>	2	24.83	<.0001
<i>procedure*type of contract</i>	6	9.13	0.1664
<i>international*procedure*type of contract</i>	3*	13.20	0.0042
<i>Award Criterion*type of contract</i>	2	1.20	0.5488
<i>Award Criterion *procedure*type of contract</i>	4*	22.18	0.0002
<i>Likelihood Ratio</i>	24	22.99	0.5204

One of the combinations is impossible by definition: award criterion= Lowest price and procedure = 3 negotiated with a call. Moreover procedure = 3, negotiated with a call, is never seen in combination with a value of "High" for the number of bids. This means that some of the cells in the contingency table are empty. For this reason some estimated effects are marked by a star which means that the degrees of freedom for these effects are reduced accordingly.

The conclusion is that three three-factor interactions are significant, which gives a rather complicated dependence structure. The structure could be displayed as

**Graph 1: Relationships amongst important selected variables**



The three shadings of the triangles indicate that three factor interactions are present. These three factor interactions means that the dependence of two of the variables in a triangle is dependent of the value of the third variable. The diagram tells that *award criterion*, *type of contract* and *procedure* together form the axis of the dependencies in the table. One direct interpretation is that the two least connected variables are *international* and *number of bids* and they are independent conditioned upon the three other variables. *Number of bids* only dependent on *procedure* and on *award criterion*. The nationality of winner only depends on the *type of contract* and on *procedure*.

The most natural way to describe the third order interactions is to start by considering the various categories of activity. This is obvious as these values are not subject to any stochastic variation neither due to the procuring authority nor to the potential bidding companies. That is to analyze the dependence structure for each of the outcomes of the variable *type of contract* separately.

**Type of contract = 1 "Works"**

We have only 84 observations for this value.

Here *number of bids* and *international* are independent of the pair of *award criterion* and *procedure*. The dependence between *award criterion* and *procedure* is the obvious that award criterion = 1 (Lowest price) and procedure = 0 (Open) often is combined while award criterion=2 (Most economic tender) is chosen for the other various forms of negotiation (procedure= 2 or 3).

**Table 7: Results for "Work"**

<i>Maximum Likelihood Analysis of Variance</i>			
<i>Source</i>	<i>DF</i>	<i>Chi-Square</i>	<i>p-value</i>
<i>Award Criterion</i>	1	1.47	0.2247
<i>Procedure</i>	3	17.83	0.0005
<i>Award Criterion*procedure</i>	2*	14.95	0.0006
<i>Number of bids</i>	2	21.19	<.0001
<i>International</i>	1	14.93	0.0001
<i>Likelihood Ratio</i>	6	10.20	0.1163

<i>Analysis of Maximum Likelihood Estimates</i>					
<i>Parameter</i>		<i>Estimate</i>	<i>Standard Error</i>	<i>Chi-Square</i>	<i>p-value</i>
<i>Award Criterion</i>	1	-0.6666	0.5491	1.47	0.2247
	0	1.1037	0.6018	3.36	0.0667
	1	2.0441	0.6068	11.35	0.0008
	2	0.0406	0.4474	0.01	0.9277
<i>Award Criterion*procedure</i>	1 0	1.5895	0.6308	6.35	0.0117
	1 1	0.3063	0.5676	0.29	0.5894
	1 2	.	.	.	.
<i>Number of bids</i>	<i>High</i>	-0.3396	0.2042	2.77	0.0963
	<i>Medium</i>	0.7423	0.1629	20.78	<.0001
<i>international</i>	0	1.0202	0.2641	14.93	0.0001

### **Type of contract = 2 "Supply contract"**

Here we have 173 observations.

Here *award criterion* and *number of bids* are mutually independent and also independent of the pair *international* and *procedure*. The dependence between *award criterion* and *procedure* which was found for *type of contract* = works is not present for *type of contract* = supply.

The dependence between *international* (the winner being from another country) and *procedure* shows that the winner clearly is local Danish (*international* = 0) for *procedure* = 0 (open) while it is often non-Danish (*international*=1) for *procedure* = 3 (negotiated with a call). Contracts of the latter type may in general be larger and of a type that makes it more natural to call for international bids.

**Table 8: Results for "Supply"**

<i>Maximum Likelihood Analysis of Variance</i>			
<i>Source</i>	<i>DF</i>	<i>Chi-Square</i>	<i>p-value</i>
<i>Award Criterion</i>	1	35.70	<.0001
<i>procedure</i>	3	33.35	<.0001
<i>international</i>	1	1.67	0.1967
<i>international*procedure</i>	3	11.63	0.0088
<i>Number of bids</i>	2	2.37	0.3057
<i>Likelihood Ratio</i>	11	18.42	0.0724



<i>Analysis of Maximum Likelihood Estimates</i>					
<i>Parameter</i>		<i>Estimate</i>	<i>Standard Error</i>	<i>Chi-Square</i>	<i>p-value</i>
<i>Award Criterion</i>	1	-1.3728	0.2298	35.70	<.0001
<i>procedure</i>	0	1.0290	0.1974	27.18	<.0001
	1	0.4265	0.2101	4.12	0.0424
	2	-0.2104	0.2349	0.80	0.3703
<i>international</i>	0	0.2215	0.1716	1.67	0.1967
<i>international*procedure</i>	0 0	0.5715	0.1943	8.65	0.0033
	0 1	-0.0285	0.2105	0.02	0.8923
	0 2	0.0252	0.2352	0.01	0.9148
<i>Number of bids</i>	<i>High</i>	-0.1803	0.1254	2.07	0.1506
	<i>Medium</i>	0.1356	0.1065	1.62	0.2029

#### **Type of contract= 4 "Service contract"**

We have 512 observations of this type.

Here *award criterion* and *international* are mutually independent and moreover independent of the pair of *number of bids* and *procedure*. The dependence between the *number of bids* and *procedure* seems rather weak. However the last part of table 9 shows that the derived parameters for procedure = 3 (negotiated with a call) indicates that the number of bids is small for this procedure as expected.

**Table 9: Results for "Supply"**

<i>Maximum Likelihood Analysis of Variance</i>			
<i>Source</i>	<i>DF</i>	<i>Chi-Square</i>	<i>p-value</i>
<i>Award Criterion</i>	1	191.19	<.0001
<i>procedure</i>	3	102.59	<.0001
<i>Number of bids</i>	2	6.89	0.0319
<i>Number of bids*procedure</i>	5*	11.65	0.0400
<i>international</i>	1	179.35	<.0001
<i>Likelihood Ratio</i>	15	21.57	0.1197

<i>Analysis of Maximum Likelihood Estimates</i>					
<i>Parameter</i>		<i>Estimate</i>	<i>Standard Error</i>	<i>Chi-Square</i>	<i>p-value</i>
<i>Award Criterion procedure</i>	<i>1</i>	-1.0190	0.0737	191.19	<.0001
	<i>0</i>	1.1746	0.2748	18.27	<.0001
	<i>1</i>	1.6617	0.2734	36.94	<.0001
	<i>2</i>	-0.7066	0.2115	11.16	0.0008
<i>Number of bids</i>	<i>High</i>	-1.2582	0.5051	6.21	0.0127
	<i>Medium</i>	0.7215	0.2748	6.89	0.0087
<i>Number of bids*procedure</i>	<i>High 0</i>	0.8489	0.5198	2.67	0.1024
	<i>High 1</i>	0.6579	0.5160	1.63	0.2023
	<i>High 2</i>	0.3558	0.3381	1.11	0.2927
	<i>Medium 0</i>	-0.3969	0.2940	1.82	0.1771
	<i>Medium 1</i>	-0.0955	0.2864	0.11	0.7388
	<i>Medium 2</i>	.	.	.	.
<i>international</i>	<i>0</i>	1.0894	0.0813	179.35	<.0001

number of offers	procedure = 0 open	procedure = 1 restricted	procedure = 2 negotiated without a call	procedure = 3 negotiated with a call
High	0.8	0.7	0.4	-1.9
Medium	-0.4	-0.1	.	0.5
Small	-0.4	-0.6	-0.4	1.4

## 5.2 Analysis of case B

Now, the variable *international* is independent of all other variables. Whether the winning firm is Danish or not is independent of *award criteria*, *type of contract* and *value* (the value of the winning contract). The estimated coefficient for *international* simply tells us that most contracts are won by Danish companies.

**Table 10: Results for Case B**

<i>Maximum Likelihood Analysis of Variance</i>			
<i>Source</i>	<i>DF</i>	<i>Chi-Square</i>	<i>p-value</i>
<i>Award Criterion</i>	1	140.86	<.0001
<i>value</i>	2	2.80	0.2463
<i>Award Criterion*value</i>	2	10.75	0.0046
<i>Type of contract</i>	2	68.70	<.0001
<i>Award Criterion*type of contract</i>	2	19.22	<.0001
<i>value*type of contract</i>	4	63.04	<.0001
<i>international</i>	1	266.34	<.0001
<i>Likelihood Ratio</i>	13	15.32	0.2877

All two factor interactions among the variables *award criterion*, *type of contract* and *value* are significant, but the three factor interaction is insignificant. The three two factor interactions are described in the following three tables.

**Table 11: Award Criterion\*value**

<i>Parameter</i>		<i>Estimate</i>	<i>Standard Error</i>	<i>Chi-Square</i>	<i>p-value</i>
<i>Award Criterion*value</i>	<i>1 High</i>	-0.4100	0.1390	8.70	0.0032
	<i>1 Medium</i>	0.0943	0.0964	0.96	0.3279

The table shows that *Award Criterion* = 'Lowest price' seldom is combined with high values of the (winning) bid. As the log linear parameters sum to zero in all directions it then states that high values are usual combined with *Award Criterion* = 'Most economic tender'. For small values of the (winning) bid the award criterion is more likely to be lowest price. The meaning of this is that more concerns than just lowest price is present for contract of high value.

**Table 12 Award Criterion\*type of contract**

<i>Parameter</i>		<i>Standard</i>		<i>Chi-Square</i>	<i>p-value</i>
		<i>Estimate</i>	<i>Error</i>		
<i>Award Criterion*type of contract</i>	1 1	0.6036	0.1604	14.17	0.0002
	1 2	-0.5068	0.1166	18.88	<.0001

As seen from this table *award criterion* = 'Lowest price' is often seen for contracts of "works" but not for supply contracts. *Award criterion* = 'Most economic tender' is on the other hand overrepresented for "works" and less often seen for "supply contracts". As the two estimated parameters for *award criterion* = 'Lowest price' and *type of contract* = 'Works' and 'Supply' has a sum close to zero *type of contract* = "service contracts" is independent of *award criterion*.

**Table 13 value\*type of contract**

<i>Parameter</i>		<i>Standard</i>		<i>Chi-Square</i>	<i>p-value</i>
		<i>Estimate</i>	<i>Error</i>		
<i>value*type of contract</i>	<i>High 1</i>	1.5196	0.2038	55.61	<.0001
	<i>High 2</i>	-0.8859	0.1282	47.73	<.0001
	<i>Medium 1</i>	-0.8530	0.2639	10.45	0.0012
	<i>Medium 2</i>	0.5677	0.1448	15.37	<.0001

As both of these categorical variables have three categories the parameters should be read, keeping in mind that the values for *value* = 'Small' or *type of contract* = 'Service' is derived such that all sums should be zero. The table should then be extended (excluding standard deviations and reducing the number of digits presented).

**Table 14 full table for value\*type of contract**

value	Type of contract=		
	Works	Supply contract	Service contract
High	1.5	-0.9	-0.6
Medium	-0.9	0.6	0.3
Small	-0.6	0.3	0.3

This table shows that "works" contracts more often are of high value while supply contracts are of small or medium value. Service contracts are more equally distributed to value, but small and medium value contracts are most common.

## 6. Conclusion - future work

In the present study we explore the content and possibilities of the TED data base. Our experience with TED has shown that there are major challenges when extracting the data and that this process can probably be refined for future studies. Still our preliminary study of categorical data demonstrates that there are correlations and conditional correlations present amongst the variables. We definitely believe that it will be worth investigating these linkages more thoroughly in the future. Both research questions that relate to the internationalization of public procurement in the EU and also questions that relate to the types of procedure that are chosen can be analyzed in more detail due to the coverage of this database. Also the possibility of conducting studies that narrow the scope to e.g. specific countries or industries will be of interest to future studies.

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The data base: <http://ted.europa.eu/TED/misc/aboutTed.do>

**Appendix A: An example of an awarded contract showing the type of information and the way it is organized. (extracted from TED on 3 December 2012 in original language part).**

01/12/2012 S232 Member states - Service contract - Contract award - Negotiated procedure

[I.II.IV.V.VI](#)

**DK-Nakskov: programming services of application software**

**2012/S 232-381733**

**Contract award notice – utilities**

Directive 2004/17/EC

Section I: Contracting entity

**I.1)Name, addresses and contact point(s)**

Lolland Forsyning A/S  
Stavangervej 13  
Contact point(s): Lolland Forsyning A/S  
For the attention of: Line Mackenhauer  
4900 Nakskov  
DENMARK  
Telephone: +45 41781163  
E-mail: [lima@lollandforsyning.dk](mailto:lima@lollandforsyning.dk)

**Internet address(es):**

General address of the contracting entity: <http://www.lollandforsyning.dk>

**I.2)Main activity**

Production, transport and distribution of gas and heat  
Electricity  
Water  
Other: Spildevand

**I.3)Contract award on behalf of other contracting entities**

The contracting entity is purchasing on behalf of other contracting entities: no

## Section II: Object of the contract

### II.1)Description

#### II.1.1)Title attributed to the contract

Nyt fælles GIS/Anlægsregistreringssystem for forsyningsarterne spildevand, vand, fjernvarme og el.

#### II.1.2)Type of contract and location of works, place of delivery or of performance

Services

Service category No 7: Computer and related services

Main site or location of works, place of delivery or of performance: Nakskov.

DANMARK.

NUTS code DK022

#### II.1.3)Information about a framework agreement or a dynamic purchasing system (DPS)

#### II.1.4)Short description of the contract or purchase(s):

Den udbudte kontrakt vedrører et fælles standardsystem til GIS/Anlægsregistrering for forsyningsarterne spildevand, vand, fjernvarme, el (el-distribution, gadelys og kabler). Forsyningsområdet dækker Lolland Kommune, som har 50 000 indbyggere og et areal på 882 kvadratkilometer. Systemet skal omfatte værktøj til registrering og vedligeholdelse af anlægsdokumentation, til analyse, til at kigge på data, til brug for markpersonale samt til systemadministration. Der efterspørges web-klienter til analyse og datavisning samt mobile klienter til brug for markpersonale. Der skal være mulighed for automatisk udlevering af ledningsoplysninger i forbindelse med integration til Ledningsejerregisteret.

Der efterspørges et system, der implementerer Danva's danske standarder for datamodeller, DanDAS og DanVAND, eller tilsvarende. For forsyningsarterne vand og spildevand skal data, herunder TV-inspektioner og brøndrapporter, kunne ind- og udlæses via formaterne DanVand-XML og DanDAS-xml. Oplysninger om køb og implementering af DanDAS- og DanVand-datamodellerne kan findes på [www.danva.dk](http://www.danva.dk).

Leverancen omfatter følgende: konfigurering af systemet i henhold til Lolland Forsynings krav, konvertering af data fra de nuværende ledningsregistreringssystemer, afvikling på hosted hardware hos en driftsleverandør valgt af Lolland Forsyning, uddannelse af brugere samt vedligeholdelse og support i en 4-årig periode fra overtagelsesdagen.

Lolland Forsyning stiller en driftsplatform, herunder hardware, databasesoftware, datalagringskapacitet, sikkerhed m.v. til rådighed.

**II.1.5) Common procurement vocabulary (CPV)**

72212000, 72212222, 72212517, 72260000

**II.1.6) Information about Government Procurement Agreement (GPA)**

The contract is covered by the Government Procurement Agreement (GPA): yes

**II.2) Total final value of contract(s)**

**II.2.1) Total final value of contract(s)**

Value: 3 721 740,00 DKK

Excluding VAT

**Section IV: Procedure**

**IV.1) Type of procedure**

**IV.1.1) Type of procedure**

Negotiated with a call for competition

**IV.2) Award criteria**

**IV.2.1) Award criteria**

The most economically advantageous tender

**IV.2.2) Information about electronic auction**

An electronic auction will be used: no

**IV.3) Administrative information**

**IV.3.1) File reference number attributed by the contracting entity:**

**IV.3.2) Previous publication(s) concerning the same contract**



## **Contract notice**

Notice number in the OJEU: [2012/S 108-180028](#) of 8.6.2012

Section V: Award of contract

### **V.1) Award and contract value**

#### **V.1.1) Date of contract award decision:**

12.10.2012

#### **V.1.2) Information about offers**

Number of offers received: 3

#### **V.1.3) Name and address of economic operator in favour of whom the contract award decision has been taken**

Intergraph Danmark A/S  
Hørkær 12 A  
2730 Herlev  
DENMARK  
Telephone: +45 19362000  
E-mail: [jackie.sandgaard@intergraph.com](mailto:jackie.sandgaard@intergraph.com)  
Internet address: [www.intergraph.com](http://www.intergraph.com)

#### **V.1.4) Information on value of contract**

Total final value of the contract

Value: 3 721 740,00 DKK

Excluding VAT

#### **V.1.5) Information about subcontracting**

The contract is likely to be sub-contracted: no

#### **V.1.6) Price paid for bargain purchases**

Section VI: Complementary information

#### **VI.1) Information about European Union funds**

The contract is related to a project and/or programme financed by European Union funds: no

## **VI.2)Additional information:**

Den oplyste pris er incl. 4 års vedligeholdelse excl. optioner.

## **VI.3)Procedures for appeal**

### **VI.3.1)Body responsible for appeal procedures**

Klagenævnet for Udbud, Erhvervsstyrelsen

Kampmannsgade 1

1789 København V

DENMARK

E-mail: [klfu@erst.dk](mailto:klfu@erst.dk)

Telephone: +45 35291000

Internet address: [www.klfu.dk](http://www.klfu.dk)

### **Body responsible for mediation procedures**

Klagenævnet for Udbud, Erhvervsstyrelsen

Kampmannsgade 1

1789 København V

DENMARK

E-mail: [klfu@erst.dk](mailto:klfu@erst.dk)

Telephone: +45 35291000

Internet address: [www.klfu.dk](http://www.klfu.dk)

### **VI.3.2)Lodging of appeals**

### **VI.3.3)Service from which information about the lodging of appeals may be obtained**

Klagenævnet for Udbud, Erhvervsstyrelsen

Kampmannsgade 1

1789 København V

DENMARK

E-mail: [klfu@erst.dk](mailto:klfu@erst.dk)

Telephone: +45 35291000

Internet address: [www.klfu.dk](http://www.klfu.dk)

## **VI.4)Date of dispatch of this notice:**

28.11.2012