

# *Public Procurement: costs we pay for corruption*

Identifying and Reducing  
Corruption in Public  
Procurement in the EU



The research study “Identifying and reducing corruption in public procurement in the EU” has been commissioned by the **European Commission**, represented by the European Anti-Fraud Office (OLAF), and conducted by **PwC EU Services** and **Ecorys**, with the support of the **University of Utrecht** between March 2012 and June 2013 on behalf of the European Commission.

**Monica Macovei**, MEP, Member of the Committee on Budgetary Control and the Special Committee on Organised Crime, Corruption and Money Laundering, provided additional feedback on parts of the research approach, preliminary results and drafts of the final report.

An external expert panel, experts from the European Court of Auditors and the OECD as well as experts from PwC, Ecorys and the University of Utrecht reviewed (parts of the) drafts of this final report.

This Brochure contains information on the key findings of the study as well as simplified tables on the methodology used to estimate the costs of corruption and the sectors covered.

For detailed information on the study and its findings, please consult the OLAF website: [http://ec.europa.eu/anti\\_fraud/policy/preventing-fraud/index\\_en.htm](http://ec.europa.eu/anti_fraud/policy/preventing-fraud/index_en.htm)



Universiteit Utrecht

**ECORYS**  
NKF is a member of the  
ECORYS group



---

# Table of content

---

<b>8 Member States and 5 sectors to estimate the costs of corruption in public procurement</b>	<b>04</b>
<b>Findings in brief</b>	<b>05</b>
<b>Direct costs due to corruption in public procurement</b>	<b>06</b>
<ul style="list-style-type: none"><li>• Probability of corruption</li><li>• Costs of corruption</li><li>• Types of corruption</li></ul>	
<b>Positive practices identified</b>	<b>10</b>
<b>Negative practices identified</b>	<b>11</b>
<b>Honest procurement for honest pay: the way forward</b>	<b>12</b>
<ul style="list-style-type: none"><li>• Procurement process</li><li>• Audits and (self) evaluation</li><li>• Law enforcement</li><li>• Policy research</li></ul>	
<b>A comprehensive methodology to estimate the costs of corruption</b>	<b>13</b>
<b>Our specialists</b>	<b>16</b>

# 8 Member States and 5 sectors to estimate the costs of corruption in public procurement

The economic significance of public procurement in Europe is considerable: in 2010 a total of € 2 406 billion - or around 20% of EU GDP - was spent by governments, the public sector and utility service providers on public works, goods and services. Not all areas of public expenditure are covered by public procurement rules. However, public procurement worth **€ 447 billion** (19% of this total expenditure) was published in the Official Journal and the TED-database in 2010. The TED-database is an important pillar of the study and the amounts and percentages mentioned below (table 1) refer only to this part of public procurement.

The study **Identifying and reducing corruption in public procurement in the EU** is **quite innovative**. Thanks to a newly developed methodology, for the first time it is possible to estimate the costs of corruption affecting public procurement in the European Union. Its potential has been tested in 8 Member States (France, Hungary, Italy, Lithuania, the Netherlands, Poland, Romania and Spain) within 5 sectors of the economy:

The study defines corruption as **the abuse of power for private gain**. Given that corruption and collusion frequently occur in tandem and have ultimately the same effect - a public contract is awarded on the basis of unfair competition - both corruption and collusion are taken into account in this study.

## **Corruption generates public losses.**

In this study, **the focus is only on the direct material costs of corruption**: the immediate monetary consequences for national (including regional and local) budgets and, when EU funds are involved, the EU budget. The public loss investigated is the estimated monetary amount lost to corruption due to **ineffectiveness** (meaning that a project does not (fully) reach its objectives) or **inefficiency** (meaning that the outputs of a project are inconsistent with the inputs, e.g. project costs are higher than market prices or project outcomes are of inferior quality).

€ 447  
billion

- Road & rail
- Water & waste
- Urban/utility construction
- Training
- Research & Development



## *Findings in brief*

- The **direct public loss** encountered in **corrupt** and **grey cases** (cases with weaker indications of being corrupt) analysed amounts to 18% of the overall project budgets concerned, of which **13% can be attributed to corruption.**
- Such direct public losses in corrupt/grey cases are typically a result of:
  - Cost overruns;
  - Delays of implementation and/or;
  - Loss of effectiveness (including inferior quality and questionable usefulness).
- The overall share of budgets lost to corruption tends to be **higher in smaller projects** than in larger projects, however **overall amounts lost are obviously higher in large projects.**
- In relative terms, the highest direct public losses are encountered in corrupt **training projects** (44% of budget volume lost in projects affected), followed by all other sectors (29% in urban/utility construction, 20% in road & rail, 16% in water & waste and 5% in Research & Development).

# Direct costs due to corruption in public procurement

## Probability of corruption

The methodology allows for the probability of corruption to be estimated for product groups. The study concludes that the product groups with the highest probability of corruption are the staff development services **(23-28%)** and construction of waste water plants **(22-27%)**.

The probability of corruption is estimated to be lower for railway track construction materials and supplies **(15-19%)**, as well as for construction works for highways **(11-14%)**, radiotherapy, mechanotherapy, electrotherapy and physical therapy devices **(11-14%)** and (airport) runway construction works **(11-13%)**.

## Costs of corruption

The methodology allows for an estimate of the direct costs of corruption in the 5 sectors.

Taken together, the **overall direct costs of corruption in public procurement in 2010** for the five sectors studied in the 8 Member States is estimated to amount € 1.4 to € 2.2 billion.

## Case 1

**A public administration published a tender for the construction of two buildings.**

**The winning company received € 600 000 to provide technical advice and control. At the same time, other private companies had presented offers to do this work for € 400 000. The cost overrun is estimated at 50% above the norm price (€ 600 K/€ 400 K).**

**Table 1**

Direct costs of corruption in public procurement		
Sector	Direct costs of corruption (in million €)	% of the overall procurement value in the sector in the 8 Member States
Road & rail	488 - 755	1.9% to 2.9%
Water & waste	27 - 38	1.8% to 2.5%
Urban/utility construction	830 - 1 141	4.8% to 6.6%
Training	26 - 86	4.7% to 15.9%
Research & Development	99 - 228	1.7% to 3.9%

Direct costs of corruption in public procurement for selected sectors in the Member States studied (2010), in million Euros and in percentages of the overall procurement value.





### ***Types of corruption***

During the course of the study, **4 main types of corrupt practices** in the 96 corrupt/grey cases were encountered:

- ***Bid rigging:*** the contract is 'promised' to one contractor, with or without the consent of the public official issuing the tender. Bid rigging takes the form of bid suppression, complementary offers, bid rotation and subcontracting.
- ***Kickbacks:*** the public official demands, or is open to, a bribe which will be accounted for in the tendering process, including administrative processes.
- ***Conflict of interest:*** the public official has personal interests in the winning company.
- ***Other – including deliberate mismanagement/ignorance:*** the public official has not properly carried out checks or followed procedures where this is required and/or tolerates/ignores overt deliberate mismanagement by a contractor.

## Case 2

### *Three companies bid for a research project of € 1.7 million.*

*The winning bid came in at only € 180 below the budget limit. Later, the public official modified the contract extending the original contract duration of 3 years with another 3 years, making the project investment period last twice as long. Consequent action by the public authority had to be also delayed.*

**Table 2**

Type of corruption by sector				
Sector	Bid rigging	Kickbacks	Conflict of interest	Deliberate mismanagement
Urban/utility construction	19	14	11	3
Road & Rail	10	8	4	1
Water & Waste	15	6	3	0
Training	1	3	2	1
Research & Development	12	4	2	0
Total*	57	35	22	5
Type of corruption by Member State				
France	6	3	5	1
Hungary	9	2	4	0
Italy	12	3	4	0
Lithuania	11	2	1	1
Netherlands	0	0	1	0
Poland	10	6	2	1
Romania	4	8	4	1
Spain	5	11	1	1
Total*	57	35	22	5

Types of corruption by sector and by Member States (number of cases, based on 96 sample cases). \*Certain cases displayed multiple types of corruption, which explains why the number of observations (119) exceeds the total number of cases (96).



Overall, the study estimates that **bid rigging** is found in almost half (48%) of practices and most present in **Water & Waste** and **Research & Development** projects. Bid rigging is encountered more frequently in **Hungary, Poland, Lithuania** and **Italy**.

**Kickbacks** are encountered in about 1 in 3 cases. This practice appears to be equally spread across all sectors. Kickbacks are the most frequent form of corruption encountered in **Spain** and **Romania**.

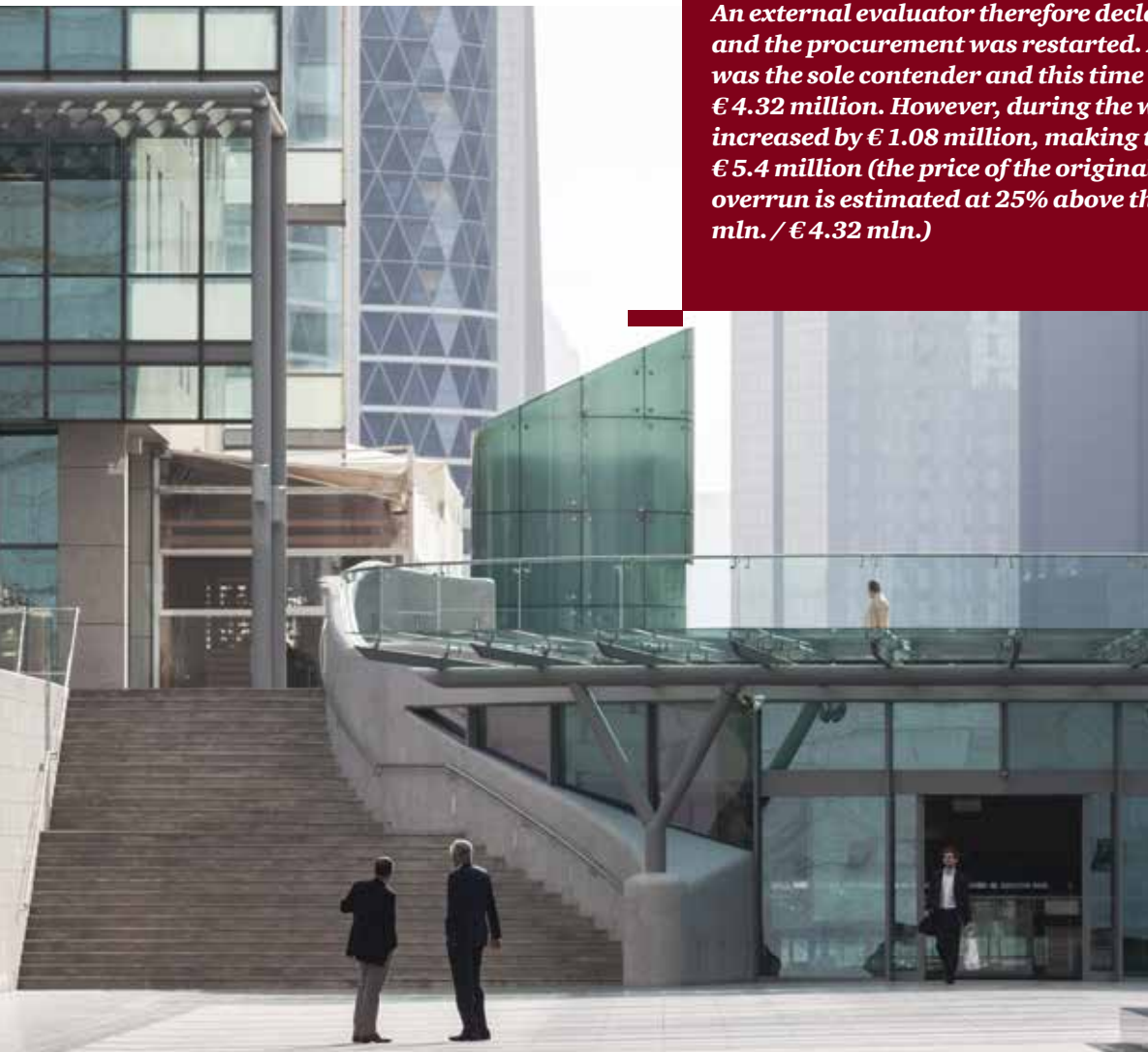
**Conflict of interest** practices were encountered in around 20% of cases and across all sectors, though slightly more frequent in the **Training and Urban/utility construction** sector.

**Deliberate mismanagement** was encountered on average in 4% of all practices.

### Case 3

#### *Procurement for the reconstruction of a historic city centre was given a budget ceiling of € 4.32 million.*

*The only bidder submitted an offer for € 5.4 million. An external evaluator therefore declared the bid invalid and the procurement was restarted. Again the same bidder was the sole contender and this time with a winning offer of € 4.32 million. However, during the works the costs were increased by € 1.08 million, making the costs of the project € 5.4 million (the price of the original offer). The cost overrun is estimated at 25% above the norm price (€ 5.4 mln. / € 4.32 mln.)*





## Positive practices identified

The methodology developed in this study provides the very first estimates of the scale of corruption in this area. **More research on ways to measure effectiveness of instruments and practices** to prevent, detect and investigate corruption is thus recommended. Therefore it is difficult to draw clear-cut conclusions on the effectiveness of anti-corruption measures and programmes since there is –even with these study results – too limited factual knowledge about the scale of corruption or changes in corruption levels in public procurement.

Nonetheless, the study allows practices to be identified that in theory can have a positive impact. **The main positive practices identified** in this study that can also help to prevent and detect the identified strong predictive **red flags** are:

- **Independent audits and evaluations** performed according to EU-wide audit and evaluation standards.
- **Optimal transparency** in the entire public procurement process.
- The administrative data on **tenders, bidders, projects and contractors are collected and stored** in a structured way, available for controls, investigations and analyses.
- **Proper screening** of contractors and beneficiaries, especially their ultimate beneficiary owners.

**More research on ways to measure effectiveness of instruments and practices to prevent, detect and investigate corruption is recommended.**

- **Corruption risk management** that not only focuses on the **contractors**, but also on **subcontractors** and others involved in the proper execution of the contract.
- Specialised, **well-trained public procurement staff** who share their expertise and market intelligence across Member States' borders.

A few outcomes of the benchmark of the public procurement systems of the Member States are in particular relevant for policy development. This study has detected room for improvement in all Member States, especially when it comes to the detection of corruption in public procurement via data-collection and data-analysis and the use of corruption-indicators.

- Only three Member States (Slovakia, Slovenia and Spain) report that their e-procurement platforms contain a **model** designed for the **detection** of corruption.
- Although there are central and/or local databases for public procurement in the majority of the 27 Member States<sup>1</sup>, half of the Member States (Austria, Bulgaria, Cyprus, Estonia, Finland, France, Ireland, Lithuania, Portugal, Slovakia, Slovenia, Spain and Sweden) **analyse such data on unusual patterns**.
- In Bulgaria, Estonia, Latvia, Malta, Poland, Romania, Slovakia, Slovenia and Spain **indicators, extracted from actual corruption cases**, are shared with all staff in relevant government agencies.

1. The study was conducted before Croatia joined the EU.



## *Negative practices identified*

- The context of corruption in **public procurement is fragmented**. There are many very different actors involved in the consecutive stages of public procurement and in the prevention, detection and investigation of corruption. None of these actors has fighting corruption in public procurement as its sole or main task.
- **There are no authorities at national or EU-level that link or integrate all data on public procurement**, relevant for the prevention, detection and investigation of corruption.
- With regards to EU Structural Funds, the internal systems of **Managing, Certifying and Audit Authorities** set up in Member States -to prevent, detect and correct irregularities and suspected fraud, and recover amounts unduly paid- are **not always designed for the detection of corruption**, and evaluators of these programmes do not always focus specifically on it.

# Honest procurement for honest pay: the way forward

*The most important recommendations to all EU and national authorities responsible for public procurement and the prevention, detection and investigation of corruption, based on this study, are:*

## **Procurement process**

- Increase the **transparency** of public procurement through public availability of documents and data on public procurement.
- Contracting authorities should make all necessary efforts to ensure that public procurement is **market-based**, generating a sufficient (but not necessarily maximum) amount of tenders.
- Invest in **professional and centralised procurement organisations**. Ensure that procurement officers are well-trained, experienced and adequately paid, including regular screening and job-rotation of this staff.

## **Audits and (self) evaluation**

- Develop and implement **adequate tools and methods** for audits and evaluations to acknowledge and signal the presence of corruption.
- Review in performance audits and evaluations the **substance of projects** rather than check procedural compliance, for example through performance-based monitoring and evaluation.
- Extend the focus in performance audits and evaluations from the actual procurement to the **preparation and implementation stage**.
- Develop and implement at EU level more and better **monitoring, detection, analysis, and reporting technology** to fight fraud and corruption, and make these available to Member States.

## **Law enforcement**

- Establish **competent and independent investigative agencies** focusing on the investigation of corruption in public procurement.
- **Share information and intelligence** on public procurement at national level, between Member States and with central EU institutions such as OLAF, Europol and Eurojust.
- Invest in good functioning systems for whistle-blowers, including proper protection of **whistle-blowers**.

## **Data collection**

- Ensure a **central collection of public procurement data**, also explicitly driven by the objective to prevent, detect and investigate corruption in public procurement.
- Develop **central collection of meaningful, accurate and detailed statistics on corruption in public procurement**, to help increase the overall understanding of corruption and the effect of counter measures, and allow for EU comparison and analysis, as well as for national, tailored policies and interventions.
- **Add data fields in the central procurement databases** (including TED) that could hint at red flag situations with respect to corruption in public procurement, and ensure that they are filled out in a timely and complete way.

## **Policy research**

- Expand this pilot to **other sectors and Member States**.
- Explore the **indirect effects of corruption** in public procurement, as this will most likely reveal other connections between corruption, the economy and society as a whole.
- Invest in research on ways to **measure causality and the effectiveness of instruments** and practices to prevent, detect and investigate corruption.

# A comprehensive methodology to estimate the costs of corruption

The comprehensive methodology in this study is above all an econometric methodology based on four stages that build on each other – as presented in Figure 1.

The study distinguishes **4 categories of cases** in public procurement in the context of corruption:

- **Corrupt cases** with a final ruling or a validated confession of one of the parties involved,
- **Cases with strong indications** of being ‘corrupt’,
- **Grey cases** with weaker indications of being corrupt,
- **Clean cases** with no indications of being ‘corrupt’.

## StageIV - Test on procurement database(-s)



## StageIII - Apply to representative sample



## StageII - Estimate the public loss due to corruption



## StageI - Build a corruption-probability model



**Figure 1**

Overview of the comprehensive methodology to estimate the costs of corruption in public procurement

**27 indicators** – or red flags (*table 3*)– have been identified based on a thorough analysis of **96 corrupt/grey cases** and **96 clean cases** in 5 sectors and 8 Member States.

**The 27 indicators** have been subsequently **applied on randomly selected procurement projects** in the studied sectors within the particular product groups to assess the probability and costs of corruption.

## 27 red flags

**Table 3**

### 27 red flags for corruption in public procurement

1 Strong inertia in composition of evaluation team	15 Award contract has new bid specifications
2 Conflict of interest for members of evaluation team	16 Substantial changes in project scope/costs after award
3 Multiple contact points	17 Connections between bidders undermines competition
4 Contact office not subordinated to tender provider	18 All bids higher than projected overall costs
5 Contact person not employed by tender provider	19 Not all/no bidders informed of the award and its reasons
6 Preferred supplier indications	20 Award contract and selection documents are publicly (e.g. online) available
7 Shortened time span for bidding process	21 Inconsistencies in reported turnover/number of staff
8 Accelerated tender	22 Winning company not listed in Chamber of Commerce
9 Tender exceptionally large	23 No EU funding involved
10 Time-to-bid not conform to the law	24 No public funding from Member States
11 Bids after deadline accepted	25 Awarding authority not filled in all fields in TED
12 Number of offers	26 Audit certificates by auditor without credentials
13 Artificial bids	27 Negative media coverage
14 Complaints from non-winning bidders	

Overview of the 27 red flags assembled – including assumptions about patterns of corruption





**Contact our expert team**

If you have any questions about the study “Identifying and reducing corruption in public procurement in the EU” or would like to discuss any of these topics further, please reach out to us:

**Rudy Hoskens**

Partner

Tel: +32 2 710 43 07

email: rudy.hoskens@be.pwc.com

**Ine Lejeune**

Managing Partner, PwC EU Services EEIG

Tel: +32 92 68 83 00

email: ine.lejeune@be.pwc.com

**Wim Wensink**

Senior Manager

Tel: +31 6 51 59 21 96

email: wim.wensink@nl.pwc.com

This brochure has been created by PwC EU Services as a simplified summary of the study “Identifying and reducing corruption in public procurement in the EU” for communication purposes. This study was commissioned in 2011 by the European Commission’s anti-fraud office - OLAF. As such, PwC EU Services does not accept any liability nor responsibility towards any third parties. The information contained in this brochure is of a general nature and is solely for guidance on matters of general interest. This brochure is not a substitute for professional advice on any particular matter. No reader should act on the basis of any matter contained in this brochure without considering appropriate professional advice.

PricewaterhouseCoopers provides industry-focused assurance, tax, and advisory services to build public trust and enhance value for its clients and their stakeholders. More than 180,000 people in 158 countries across our network share their thinking, experience and solutions to develop fresh perspectives and practical advice.  
© 2013 PwC EU Services EEIG. All rights reserved

