Report to the Public Accounts Committee on

Government Procurement

April 2006



Table of contents

I.	Examination results	.5
II.	Preface	.8 .9
III.	Has government practised economy when buying goods and servicesA. Buying on SKI A/S framework contractsB. Cooperation between ministries on cross-government tendersC. Comparison of prices	12 17
IV.	Improving government procurementA. OrganisationB. Digitalised procurement processC. Procurement on the internetD. The skills of procurement staffE. Information on procurement	23 25 27 28
V.	Initiatives taken by the Ministry of Finance to improve government procurement	33
Appe	endix:	
1.	The audited government authorities	
2.	The audited goods and services	38

Page

The National Audit Office of Denmark issues this report to the Public Accounts Committee in accordance with section 17(2) of the Auditor General's Act, see consolidated Act No. 3 of 7 January 1997. The report is related to section 7 of the Fiscal Act. Section 8, the Ministry of Finance. Section 11, the Ministry of Economic and Business Affairs. Section 17, the Ministry of Justice. Section 19, the Ministry of Employment. Section 20, the Ministry of Science, Technology and Innovation. The Ministry of Education and section 28, the Ministry of Transport and Energy.

Report on Government Procurement

I. Examination results

1. According to the state accounts for 2004, the government purchased goods and services for some DKK 24 million. The actual expenditure is, however, much higher as for instance purchases made by independent authorities are recorded in the state accounts as grants and not purchases.

2. The Ministry of Finance has in recent years, as part of the efforts to improve the efficiency and quality of public services, launched several initiatives to improve the effectiveness of procurement activities. The initiatives concern the establishment of procurement policies, einvoicing, digitalised transactions and volume purchasing. The Ministry of Finance is of the opinion that these initiatives may contribute to reducing procurement costs.

3. Rigsrevisionen has with this report examined whether the public sector, through the initiatives launched by the Ministry of Finance, has made procurement more costeffective. To assess the effectiveness of procurement, Rigsrevisionen has addressed the following issues:

- Has the public sector practised economy when buying goods and services?
- Have the ministries utilised all opportunities available to them to improve procurement?
- Have the initiatives launched by the Ministry of Finance contributed to making procurement more cost-effective?

As part of the examination and based on a small sample, Rigsrevisionen compared the prices paid by government for specific goods and services. The examination also comprised public procurement processes and the framework regulations applying to government procurement. Rigsrevisionen's tests and assessments have also taken into consideration international experience within procurement planning.

Examination results

Since 2003, the Ministry of Finance has launched several initiatives to support the ministries in their efforts to improve procurement. Some ministries have on the basis hereof already taken initiatives to make their purchasing process more effective, others have not been as active.

On the background of the audit, Rigsrevisionen assesses that the ministries have not to the extent required followed-up on the measures taken by the Ministry of Finance. At the same time, Rigsrevisionen finds that there is still great potential for continued improvement of procurement efficiency. Based on international experiences, Rigsrevisionen points to areas where more should be done, if this potential is to be realised.

Government does not to the extent required practise economy when purchasing goods and services. The examination has demonstrated that the public authorities may achieve savings if they, to a larger degree than now, in advance commit to the purchase of a designated volume and standardise and coordinate procurement.

This assessment is based on the following:

- The examination has shown that the public authorities may achieve savings if they commit to buying a certain quantity through the Danish National Procurement Agency (SKI A/S). If SKI A/S also provides a better overview of prices and terms of framework contracts, then the public authorities will be in a better position to identify areas in which savings can be achieved.
- Several ministries have achieved better prices and terms of delivery by entering into cross-government tenders for goods and services. Rigsrevisionen finds that this model with advantage may be disseminated to more ministries and may be expanded to comprise more goods and services.
- Rigsrevisionen's price test showed that several ministries paid very different prices for entirely identical goods and services.

The ministries may improve their procurement capabilities through coordination of purchases, digitalisation of the purchase process and by focusing on the skills of the procurement staff. Access to relevant guidelines on procurement may also improve procurement.

This assessment is based on the following:

- Some ministries have appointed a group procurement officer whose responsibility it is to coordinate the ministry's procurement activities. Rigsrevisionen finds that more ministries with advantage may utilise the opportunity of coordinating their purchases, e.g. because international experience shows that better coordination of purchases saves costs.
- The ministries have not yet fully utilised the efficiency gains related to digitalising the purchase process and thereby cut transaction costs.
- More purchases made on the internet may increase ministry savings.
- Training of procurement officers is a significant prerequisite of achieving improvements in the area. Rigsrevisionen's examination has shown that training of procurement officers is not high on the ministries' priority list.
- The ministries may strengthen their position as buyers if purchases are recorded under common supplier and product codes to provide an overview of what is being purchased and at what prices.

Rigsrevisionen finds that the initiatives taken by the Ministry of Finance have contributed to making procurement more efficient.

This assessment is based on the following:

- Since 2003, the Ministry of Finance has launched several initiatives that have contributed to improving the effectiveness of government procurement. The means have been digitalisation of the purchase process and high volume purchases, upholding decentralised procurement responsibility in the ministries.
- The Ministry of Finance may strengthen the guidance of ministries within development of procurement policies and organisation of procurement activities.

- The Ministry of Finance has recommended the ministries to set goals and performance targets for procurement. The examination showed that the ministries and the individual entities under audit as of yet do not work systematically with goal and performance related management within procurement.
- The Ministry of Finance has informed Rigsrevisionen that the government in February 2006 decided to carry out a survey of government procurement. The survey is intended to map overall government procurement to allow identification of areas where joint purchases and renewal of framework contracts may be considered in order to cut procurement costs.

II. Preface

A. Background

4. According to the state accounts for 2004, the government purchased goods and services for some DKK 24 million. The actual expenditure is, however, much higher as for instance purchases made by independent authorities are recorded in the state accounts as grants and not purchases.

5. The Ministry of Finance has in recent years, as part of the efforts to improve the efficiency and quality of public services, launched several initiatives to improve the effectiveness of procurement activities. The initiatives concern the establishment of procurement policies, einvoicing, digitalised transactions and volume purchasing. The Ministry of Finance is of the opinion that these initiatives may contribute to reducing procurement costs.

6. Rigsrevisionen has examined and assessed whether the ministries, based on the Ministry of Finance's initiatives, have improved the effectiveness of procurement. Rigsrevisionen has, among other things, reviewed the prices which the government is paying for specific goods and services. Also transactions made under framework contracts have been reviewed. Finally, Rigsrevisionen has looked into and assessed government purchase processes. Rigsrevisionen's assessment is based on international experience within organisation of public procurement.

B. Objective and scope

7. The objective is to examine and assess whether government has organised procurement of goods and services effectively. Effective procurement depends on favourable supplier contracts, low transaction costs and optimum framework terms. Framework terms, for which in particular the Ministry of Finance is responsible, impact supplier contracts and the organisation of efficient procurement processes. Rigsrevisionen has addressed the following issues in order to assess the effectiveness of government procurement:

- Has the public sector practised economy when buying goods and services?
- Have the ministries utilised all opportunities available to them to improve procurement?
- Have the initiatives launched by the Ministry of Finance contributed to making procurement more cost-effective?

8. The examination covered purchases made on the government account nos 14 and 15 concerning purchases of goods and services. In 2004, this expenditure made up a total of DKK 24.3 billion, thus accounting for a significant proportion of total government expenditure, and outperformed only by payroll costs. Expenditure is, however, in fact substantially higher, as purchases made by, e.g. independent authorities are not recorded in government accounts as purchases but as grants.

The EU Commission has estimated total public procurement in Denmark in 2002 at some DKK 256 billion. This estimate includes purchases made by any entity subject to EU tender terms. Thus this figure includes also municipal purchases and purchases made by, e.g. the Danish Broadcasting Corporation, the Danish National Postal Services, Danish Rails, and supply companies like, e.g. the electricity companies.

9. Rigsrevisionen's examination has in particular been focused at procurement in the following ministries: The Ministry of Business and Economic Affairs, the Ministry of Justice, the Ministry of Employment, The Ministry of Science, Technology and Innovation, the Ministry of Education, and the Ministry of Transport and Energy. For each ministerial area, Rigsrevisionen involved the procurement section and a government agency/authority in the examination. The authorities selected will appear from appendix 1.

In addition, Rigsrevisionen reviewed all ministerial procurement policies and conducted interviews on the procurement function in all ministries. The people interviewed were responsible for procurement in the respective ministries i.e., a group procurement officer, a head of procurement, and a head of administration.

The audit covers the period 2003 - 2005.

10. Five central players are involved in securing the best possible framework terms for the ministries. The five players are: The department under the Ministry of Finance, the Danish Agency for Governmental Management, SKI A/S, the Competition Authority and the Public Contracts Appeals Board. **Box 1** contains a summary description of each of the five central players and their responsibilities in relation to procurement.

Box 1 Central players and their tasks

The department under the Ministry of Finance has the overall responsibility for the efforts to improve efficiency and quality of public services and thus also government's overall procurement and tender strategy.

The Agency for Governmental Management is in charge of:

- Administration and development of the rules governing financial management.
- Development and implementation of steps to improve efficiency, operation and development of Navision Stat (government accounting system).
- Consultancy and service provision to public authorities within, e.g. business process re-engineering.
- Implementation of cross-government digitalisation projects.
- Centrally coordinated framework contracts.

SKI A/S develops framework contracts on behalf of central and local government. The purpose of setting up framework contracts is partly to achieve better prices and partly to reduce transaction costs in connection with EU tenders, as only SKI A/S and not each individual authority puts the contracts up for tender. SKI A/S is co-owned by the Ministry of Finance (55 per cent) and the National Association of Local Authorities (45 per cent).

The Competition Authority is the administrator of EU's tender rules and the tender act and is the official complaints board for domestic and foreign tenders.

The Public Contracts Appeals Board is an independent and administrative appeals body, a court-like appeals board. The decisions made by the board may, with a few exceptions be brought before a court, but they cannot be brought before another administrative authority.

The Public Contracts Appeals Board has not been involved in the examination, as this has not encompassed an examination of whether the ministries invite the tenders they are required to by law or whether the ministries have considered which contracts to put up for tender and which to perform internally.

C. Methodology

11. Rigsrevisionen has carried out the following subsurveys:

- *Price test:* Rigsrevisionen compared the prices of some 528 purchases made by the 12 entities in the survey in 2004. The purchases were distributed on 112 items and services, cf. appendix 2.
- *Interviews:* Rigsrevisionen interviewed relevant staff of the 12 entities, cf. appendix 1.
- *Telephone interviews*: Rigsrevisionen conducted interviews with the persons responsible for procurement in all 19 ministries.
- *Review of tender and procurement policies*: The review included an assessment of the quality of the ministries' tender and procurement policies.
- *International comparisons*: Rigsrevisionen also examined the strategic approach to procurement in other countries, in particular in Sweden, Norway, the Czech Republic, UK and Canada.

In addition, Rigsrevisionen interviewed relevant staff of the department of the Ministry of Finance, the Agency for Governmental Management, SKI A/S, and the Competition Authority. Rigsrevisionen also reviewed relevant documents, including legislation and guidelines.

12. A draft of the examination was presented to the ministries involved and overall they agreed with the conclusions drawn. The ministries' comments are incorporated in the report.

III. Has government practised economy when buying goods and services

Rigsrevisionen's comments

Government does not to the extent required practise economy when purchasing goods and services. The examination has demonstrated that the public authorities may achieve savings if they, to a larger degree than now, in advance commit to the purchase of a designated volume and standardise and coordinate procurement.

This assessment is based on the following:

- The examination has shown that the public authorities may achieve savings if they commit to buying a certain quantity through the Danish National Procurement Agency (SKI A/S). If SKI A/S also provides a better overview of prices and terms of framework contracts, then the public authorities will be in a better position to identify areas in which savings can be achieved.
- Several ministries have achieved better prices and terms of delivery by entering into cross-government tenders for goods and services. Rigsrevisionen finds that this model with advantage may be disseminated to more ministries and may be expanded to comprise more goods and services.
- Rigsrevisionen's price test showed that several ministries paid very different prices for entirely identical goods and services.

A. Buying on SKI A/S framework contracts

13. One way of getting value for money is aggregation of purchases on few suppliers in return for scaled discounts. Volume purchases are mainly done on framework contracts. A framework contract is an agreement between a customer and a supplier, according to which the customer may buy goods or services at a fixed price and on fixed delivery terms. Many of the framework contracts used by government have been negotiated by SKI A/S and both central and local government may use the services of SKI A/S. In 2005, SKI A/S had around 50 live framework contracts.



14. **Figure 1** shows the development in government's use of SKI A/S framework contracts from 1999 to 2004.

Source: Data from SKI A/S.

15. Figure 1 shows that public procurement on SKI A/S framework contracts increased from DKK 1,773 millions in 1999 to DKK 2,394 millions in 2004, i.e. procurement on framework contracts increased from around 8 per cent to around 10 per cent of total public procurement in that period.

A wider use of framework contracts is not the sole reason for the increased SKI A/S turnover, as also the quality of purchase data provided by suppliers to SKI A/S in 2004 and 2005 was considerably better than in the past. The financial platform of SKI A/S is provided by the suppliers who are charged an agreed percentage of the accumulated purchase sum on the framework contracts. The suppliers inform SKI A/S of the turnover on each framework contract but it is not possible for SKI A/S to check the correctness of the reported purchase data. In 2004 and 2005, SKI A/S was quite active in its efforts to make suppliers report the correct purchase data which, according to SKI A/S, explains part of the increase in turnover. 16. SKI A/S framework contracts are primarily suited for purchases of high volume standard items and this sets a natural limit to how much government can buy on the framework contracts. SKI A/S' total purchases for the public sector amounted to DKK 5.1 billion in 2004, and SKI A/S expects to reach DKK 8 billion in 2006. SKI A/S framework contracts are mainly dealing with high volume standard items and this releases time for the public procurement officers to focus on the purchase of complex, non-standardised goods and services. For some authorities, like e.g. the national police force, the purchase of goods and services in this category make up a considerable part of total purchases.

17. Government procurement on the individual framework contracts varied a lot. A few contracts were used frequently, but most were not used at all. In 2004, SKI A/S had some 55 contracts. Procurement on the 4 largest contracts accounted for approximately 50 per cent of contract bound procurement. 6 framework contracts were not used at all by government in 2004. The rather lopsided use of specific contracts seems to indicate that government does not need all of them. That the individual authorities are able to negotiate better deals with the suppliers may be the reason why some contracts are not being used at all.

18. SKI A/S operates with 2 types of framework contracts: One with no obligation to buy, and one requiring the customer to purchase a certain quantity over a specified time period.

Generally, however, SKI A/S framework contracts do not contain any obligation to buy. SKI A/S has informed Rigsrevisionen that prices charged on framework contracts with no obligation to buy are identical with the discount list prices. As list prices are typically slightly above market rates, prices indicated in framework contracts are very often identical with the market rate without a discount. Some public authorities therefore negotiate lower prices and better terms than can be achieved by SKI A/S. According to the interviews conducted by Rigsrevisionen, more authorities/agencies said that they were able to negotiate better deals than SKI A/S. Furthermore, Rigsrevisionen's price test showed that there was no difference between the prices in SKI A/S' framework contracts with no obligation to buy and the prices charged in connection with orders placed directly with the supplier. Thus framework contracts with no obligation to buy do not imply savings in the form of lower prices. However, this type of contract does have a positive impact on transaction costs, as procurement on framework contracts is exempt from EU tendering requirements.

SKI A/S has pointed out that it aims to set up framework contracts with obligation to buy very large quantities. However, the public sector demands framework contracts with no obligation to buy. Some authorities use the SKI A/S to avoid inviting tenders and thereby achieve transactional savings.

19. Rigsrevisionen has carried out a price test of the purchases made by 12 government agencies/authorities in 2004 within 12 categories of goods and services on SKI A/S framework contracts. Rigsrevisionen has calculated the average of the prices charged for selected goods and services, cf. appendix 2. Subsequently, this average price has been compared with the prices charged in the SKI A/S framework contracts with obligation to buy. The results of this test will appear from table 1.

Goods/services	Average prices compared to SKI A/S framework contracts with obligation to buy
	%
Battery	+17
Ink/toner cartridge	+35
Letter file, A4	+20
El bulb, low energy	+42
Hotel accommodation ¹⁾	+22
Ballpoint pen	+37
Copying paper, A4, white, 80 g/m ² , 500 sheets	+29
¹⁾ Hotel accommodation rates are without obligation to b	uy.

Table 1. Difference between the prices paid by government and the prices charged in SKI A/S framework contracts with obligation to buy

Note: The numbers in the table are rounded off and represent an average of the price differences identified within each of the categories. E.g., the ink cartridge price difference of 35 per cent represents an average of the price differences between HP 51642A no. 14, HP 51645A no. 45, etc.

The average prices have not been weighted with the volume purchased, as Rigsrevisionen has not had the opportunity to work out the actual volume of goods and services purchased by the 12 audited authorities.

Table 1 shows that the public sector averagely paid between 17 per cent and 42 per cent more for a product than if they had used the SKI A/S framework contract with obligation to buy. The percentages calculated in table 1 do not indicate the savings potential. For instance, the sample does not include all purchases of goods and services made by the 12 authorities, but only a nonrepresentative selection of the authorities' procurement in general.

The Ministry of Finance has informed Rigsrevisionen that the government in February 2006 decided to carry out a survey of government procurement. The survey is intended to map overall government procurement to allow identification of areas where joint purchases and renewal of framework contracts may be considered in order to cut procurement costs.

20. When new framework contracts are set up, SKI A/S calculates the savings compared to the previous contracts. Total savings related to the use of framework contracts are, however, not calculated. Thus SKI A/S cannot provide documentation that their framework contracts produce better prices and delivery terms than can be achieved by the ministries in direct negotiations with suppliers.

During the interviews, several of the authorities mentioned that it was difficult to locate the most competitive prices in the SKI A/S framework contracts. The reason is the vast number of suppliers and types of contracts within the various groups of goods and services. Further, SKI A/S does not work out cross sectional price overviews.

SKI A/S has set up framework contracts with many suppliers in very different markets and comprising a high number of specific items. At the same time, prices are adjusted currently – even daily sometimes – which makes it difficult to get an overview of prices. SKI A/S has launched various initiatives to eliminate this problem, including improvement of the possibility to view the most recently updated prices in SKI A/S' internet catalogue and on the public electronic procurement portal, DOIP. 21. Rigsrevisionen's examination has demonstrated that government has not in full utilised the possibilities of volume purchasing on framework contracts:

- Several of the ministries have not to the extent required in advance committed to a certain quantity on SKI A/S framework contracts; not even if it would have been possible and economically advantageous. This means that there is scope for savings in this area. However, the amount of savings cannot be determined on the basis of this survey.
- SKI A/S does not work out cross-government price overviews of individual goods and services which make it difficult for the authorities to identify potential savings areas.

B. Cooperation between ministries on crossgovernment tenders

22. Rigsrevisionen has examined to which extent the ministries coordinate procurement activities and conduct cross-government tender activities. The benefits of coordinating procurement are partly to capitalise on volume and partly to minimise transaction costs related to tenders.

23. According to Rigsrevisionen's examination, 5 ministries have established a "Steering Committee for Cross-Government Procurement Coordination". Under the auspices of the steering committee, several ministries committed part of their purchases in 2004 and 2005 in connection with the SKI A/S' closing of 8 new framework contracts. In addition, 11 and 7 ministries, respectively, have worked together to invite tenders for cleaning and security services. The cross-government tenders concern goods and services in areas, where SKI A/S has no framework contracts.

24. In 2003, SKI A/S established a government procurement forum, SKI Forum, formalising the cooperation between ministerial procurement officers. The purpose of SKI Forum is, amongst other, to make the government's procurement volume visible and thereby utilise its position in the market as a major customer. SKI Forum holds 4 annual meetings. Rigsrevisionen is of the opinion that SKI Forum is an excellent initiative which may contribute to making procurement more costeffective. Rigsrevisionen estimates that the implementation of more cross-government tender activities may secure better prices and terms for the public sector.

Cross-government tenders for cleaning and security services are initiated by SKI Forum in connection with the cross-government tender coordination scheme which SKI A/S originally established and is currently facilitating. SKI A/S has been kept up to date on the tender development and the final results of the tenders have been communicated to SKI Forum. The experience gained with cross-government tender activities is encouraging. Participating ministries have collected and committed their purchases on framework contracts. The Ministry of Economic and Business Affairs has informed Rigsrevisionen that compared to previous contracts, the prices achieved in connection with the implementation of the first coordinated tenders, were 18 per cent lower on cleaning services and 31 per cent lower on security services,

C. Comparison of prices

25. Reducing the number of suppliers and brands of goods and services will add volume to government's purchases and increased volume will create opportunities to land better deals. At the same time, the quality of goods and services provided will become more consistent.

26. Rigsrevisionen has interviewed procurement staff in the ministries to determine the level of standardisation within procurement of goods and services. 5 ministries stated that they had standardised procurement to a wide extent. 10 ministries stated that they had standardised procurement to a certain extent, and 4 ministries stated that procurement activities had only to a very limited extent or not at all been standardised.

Rigsrevisionen's interviews with the 12 selected authorities showed that the Ministry of Justice and the Ministry of Economic and Business Affairs had prioritised the reduction of the number of suppliers and had come far in their efforts to standardise procurement. Still, the interviews also revealed continued potential for standardisation of procurement in the government as a whole. This result was confirmed by Rigsrevisionen's price test, from which it appears that the authorities purchase a wide range of basically identical products, but are paying very different prices for them. E.g. the price of different brands of batteries varies by 65 per cent. Differences in quality account for part of the difference. It became clear that standardising to fewer products in order to be able to place high volume orders may result in large savings.

27. Rigsrevisionen has examined the differences in prices paid by 12 government authorities for entirely identical goods and services, i.e. goods and services of the same brand and with identical features, cf. appendix 2. The 12 government authorities spent a total of some DKK 500 million on the selected goods and services in 2004, equalling approximately 7 per cent of the authorities' total purchases. The results of the price test are not indicative of the total procurement volume of the audited authorities or government as a whole, as the test includes only a selection of specific goods and services. Rigsrevisionen has carried out the test to get an idea of the price variations. Moreover, the exact savings potential cannot be determined on the basis of the test results.

As part of the test, Rigsrevisionen has calculated the average price paid by the government authorities and subsequently compared this average price with the lowest price paid for the product or service. The result of this analysis will appear from **table 2**.

(weekdays), etc.

Goods/services	Average price compared to lowest price	
Guus/seivices	%	
Newspapers	+7	
Battery	+10	
Ink/toner cartridge	+14	
Letter file, A4	+18	
El bulb, low energy	+3	
Hotel accommodation	+9	
Ballpoint pen	+12	
Copying paper, A4, white, 80 g/m ² , 500 sheets	+3	
Note: Certain services are not included in the table as they are not directly comparable. The numbers in the table are rounded and reflect an average of the price differences found within each type of product and service. E.g. the newspaper price difference of 7 per cent represents the average of the price differences recorded when buying Berlingske Tidende (weekdays), Berlingske Tidende (weekend), Politiken		

Table 2. Difference between average price and lowest price paid for identicalgoods and services

28. Table 2 shows that the average price paid for a product or service by the government authorities in

Rigsrevisionen's examination was between 3 per cent and 18 per cent higher than the lowest price charged for a similar product or service.

29. Rigsrevisionen also calculated the difference between the lowest and highest price paid by the authorities for identical goods and services. The result will appear from **table 3**.

Table 3. Difference between highest and lowest price paid for identical goods and	
services	

Goods/services	Highest price compared to lowest price	
Guus/services	%	
Newspaper	+27	
Battery	+38	
Ink/toner cartridge	+48	
Letter file, A4	+62	
El bulb, low energy	+6	
Hotel accommodation	+33	
Ballpoint pen	+36	
Copying paper, A4, white, 80 g/m ² , 500 sheets	+7	
Note: Certain services are not included in the table as they are not directly comparable. The numbers in the		

Note: Certain services are not included in the table as they are not directly comparable. The numbers in the table are rounded and reflect an average of the price differences found within each type of product and service. E.g. the newspaper price difference of 27 per cent represents the average of the price differences recorded when buying Berlingske Tidende (weekdays), Berlingske Tidende (weekend), Politiken (weekdays), etc.

Table 3 shows that the difference between the lowest and highest prices paid for identical goods and services varied from 6 per cent to 62 per cent in the selected product groups. E.g. the price paid for el bulbs and copying paper varied by 6 per cent and 7 per cent, respectively, whereas the price variance within letter files and toner cartridges was 62 per cent and 48 per cent, respectively.

30. The government authorities have provided price documentation in the form of vouchers. All prices are related to 2004. There may be various reasons for the price differences; some authorities re-negotiated their contracts in the course of the year and achieved better prices, and some goods and services were purchased on special offers.

Overall, it should be noted that the variances in price do not reflect any actual savings potential. Yet, the variations do indicate, in the opinion of Rigsrevisionen, that some procurement officers perform better than others when closing contracts and/or buying on framework contracts. For instance, the examination showed:

- One government authority purchased the same type of batteries from 2 suppliers, but was charged twice the price by one of the suppliers. Both types of batteries were purchased on a SKI A/S framework contract which was in force for the entire period. Similarly, 2 authorities used SKI A/S framework contracts to purchase identical batteries. One authority was charged 164 per cent more than the other.
- The same supplier sold identical ballpoint pens to 2 authorities at different prices. One ballpoint pen was sold on a SKI A/S framework contract at half the price paid by the other authority which bought directly from the supplier.

62 per cent of the goods and services examined were purchased directly, i.e. not on framework contracts, despite the fact that all the authorities involved had access to contracts, covering the majority of the examined goods and services.

• One government authority was charged 3 different rates for a standard room in the same hotel. The highest rate charged was 179 per cent up on the lowest rate. Another institution was charged 3 different rates in another hotel where the highest rate paid was 75 per cent up on the lowest. According to the authority, insufficient focus on the SKI A/S hotel agreement was the reason for the difference in rates paid.

31. The examination revealed several examples of price differences related to non-use of framework contracts, missing focus on what had been paid earlier, insufficient overview of current market prices including also what other government authorities' are paying for identical products and services.

Rigsrevisionen finds that the comparison of prices of selected goods and services indicates that government authorities are paying very different prices for the same goods and services. The authorities could achieve better value for money when procuring goods and services.

IV. Improving government procurement

Rigsrevisionen's comments

The ministries may improve their procurement capabilities through coordination of purchases, digitalisation of the purchase process and by focusing on the skills of the procurement staff. Access to relevant guidelines on procurement may also improve procurement.

This assessment is based on the following:

- Some ministries have appointed a group procurement officer whose responsibility it is to coordinate the ministry's procurement activities. Rigsrevisionen finds that more ministries with advantage may utilise the opportunity of coordinating their purchases, e.g. because international experience shows that improved coordination of purchases saves costs.
- The ministries have not yet fully utilised the efficiency gains related to digitalising the purchase process and thereby cut transaction costs.
- More purchases made on the internet may increase ministry savings.

- Training of procurement officers is a significant prerequisite of achieving improvements in the area. Rigsrevisionen's examination has shown that training of procurement officers is not high on the ministries' priority list.
- The ministries may strengthen their position as buyers if purchases are recorded under common supplier and product codes to provide an overview of what is being purchased and at what prices.

A. Organisation

32. Rigsrevisionen has examined how procurement has been organised in the 12 government authorities.

33. Centralising procurement of the individual authority and within a ministry's remit may constitute an efficiency potential. E.g. centralisation may result in:

- Volume purchasing at more competitive prices.
- Increased management focus on procurement.
- Professional procurement. Increased commercial and legal competency.
- Improved negotiation skills.
- Joint contact to suppliers and large public procurement agencies like, e.g. SKI A/S.

In this context, centralised procurement means that the majority of purchases are coordinated by a central procurement function, whereas individual purchases may be made either centrally or locally. The Ministry of Finance has established that centralised procurement produces savings of 10 per cent in the form of reduced prices. The EU Commission has documented savings related to centralised procurement and a more professional approach to procurement. The Ministry of Finance has not worked out any guidelines, providing directions on how the ministries should organise procurement.

34. Of the 12 government authorities included in Rigsrevisionen's examination, 10 had centralised

procurement and 2 were predominantly operating decentralised.

35. The opportunities to centralise procurement are not utilised to the same extent on ministerial level. 2 of the 6 ministries in the examination had appointed a group procurement officer, whose task it was to coordinate purchases in the ministerial area, contribute to the development of commercial skills and increase knowledge-sharing. 4 ministries had not appointed any procurement officer and thus did not have the benefits of centralised coordination of purchases. The procurement officers in the 2 ministries were placed in the department and in an agency, respectively. A procurement officer placed in an administrative community or attached to a department is more readily recognised as a procurement officer acting on behalf of the entire group. Further, the mere presence of a procurement officer in an organisation may also help raise management's awareness of procurement activities.

36. Central government, and in particular the 19 ministerial departments, is located within a relatively small geographical area. To a wide extent, the various departments and agencies all use the same goods, services and equipment. It would therefore be possible to expand the cooperation and coordinate procurement of selected goods, services and equipment in order to make procurement even more cost-effective. In Canada, the better part of government procurement is coordinated by a central purchasing organisation, cf. **box 2**.

Box 2 Centralised procurement in Canada

The Canadian state buys goods and services worth around DKK 67 billion every year (12.7 billion Canadian dollars in 2002). A central procurement agency (Public Works and Government Services Canada, PWGSC) is responsible for the coordination of purchases accounting for 80 per cent of this amount. Procurement takes place on specific agreements and framework contracts. The remaining 20 per cent of government's procurement activities are in the hands of the individual ministries which may not enter contracts exceeding DKK 130,000 (25,000 Canadian dollars). However, these contracts may not overlap PWGSC's framework contracts. This distribution of work ensures that the individual ministries may make small and special purchases, whereas the state can utilise the economies of scale related to the large, standardised purchases, making up 80 per cent of total procurement. 37. Rigsrevisionen's overall assessment is that improving the efficiency of procurement, and thereby also the utilisation of the gains potential in the individual ministerial areas, will require further considerations as to whether the organisation of the respective areas is geared for economies of scale. At the same time, the ministries should support and promote cross-ministerial initiatives whenever possible.

B. Digitalised procurement process

38. Rigsrevisionen has examined to what extent government authorities have utilised the opportunities of digitalising the procurement process from the moment the purchase order is filled in until the goods are received, stocked, and the invoice booked and paid. **Figure 2** shows a digital purchase and invoicing process.

Figure 2. The digital purchase and invoicing process



Digitalised purchasing process

As per February 1st 2005, all public authorities are required by law to be able to receive and send invoices electronically, cf. Act on Public Payments, consolidated act no. 1203 of 27 December 2003. In addition, it should be possible to exchange invoices between public authorities digitally. All other transactions in the procurement process may be implemented manually, but according to circular no. 9608 of 20 December 2002 concerning government procurement, they should be digitalised if considered economical.

39. The Danish Agency for Governmental Management has left it to external suppliers to develop systems, which support the procurement process. To secure that such systems are available, the Danish Agency for Governmental Management monitors the market and publishes information on systems that may support the procurement process. It appears from material published in June 2003 that the agency knew of 3 systems which could handle the purchasing process from the point of purchasing order to authorisation of invoice.

The Ministry of Employment has mentioned that etrade and e-invoice are currently being introduced, but suppliers of procurement systems have taken long to document that the systems function in practise and on different platforms. Furthermore, the ministry regrets that is has been left up to the individual authorities to decide if and how they want to digitalise the procurement process.

40. Rigsrevisionen's interview survey showed that only one of the 12 government authorities participating in the survey had digitalised the entire procurement process from the point of purchase order to payment of invoice. However, several of the other authorities were working on the implementation of systems that would further digitalise the process. How far three of the government authorities have come with the digitalisation efforts will appear from **box 3**.

Box 3

Examples of digitalisation projects in selected government authorities

Banedanmark (railway enterprise, operating and developing the Danish state railway network)

Banedanmark's internal procurement and internal trade activities are based on a SAP platform. The system allows for a purchase order to be filled in electronically at any location in the country and subsequently be sent to a procurement officer placed in a central procurement function.

The National Commission of the Danish Police

The National Commission of the Danish Police has decided to implement an electronic workflow system to support its procurement process. The system is expected to be put into operation in the spring of 2006, and it will be able to handle all work routines in connection with procurement including the subsequent activities pertaining to accounts, i.e. purchase orders, receipt of invoice, receipt of goods, authorisation, payment and book-keeping.

The system also supports the National Commission of the Danish Police's procurement of goods and articles to be delivered to one of Denmark's 54 police districts in that the invoice will be forwarded electronically to the respective police district which will sign for the receipt of the goods and return the invoice electronically to the National Commission of the Danish Police for further processing.

The department of the Ministry of Economic and Business Affairs

This department is e-procuring certain categories of goods and articles, i.e. flights, hotel accommodation, office supplies and consumables/data ancillary products through the suppliers' electronic purchasing portals. Furthermore, the department uses "InfoFlow", which is an electronic invoice distribution and authorisation system. The Ministry of Economic and Business Affairs is currently launching a project on the implementation of e-procurement. The objective is to professionalise procurement even further, including easier and faster achievement of documented gains, better overview of categories of goods/articles, compliance with contracts, and an opportunity to review and weed out among suppliers and products. Finally, the e-procurement project is supposed to ensure automatic generation of accounts of purchase transactions.

41. All 12 government authorities were in compliance with the statutory requirement of being able to receive and send invoices electronically, but most of the authorities made prints of the invoices, and then had them authorised and booked manually in, e.g. Navision Stat (finance system used by central government). The examination showed that generally, the ministries had not fully utilised the opportunities of digitalised procurement. Thus the potential to reduce transaction costs has not been utilised.

C. Procurement on the internet

42. In addition to improving the work processes related to the actual procurement process, digitalisation also provides an opportunity to create purchase orders directly on an e-trade platform. Rigsrevisionen has examined to what extent, the authorities make purchases on the internet.

43. In recent years, purchasing through e-trade portals like, e.g. Gatetrade.net, DOIP and KMD has become easier. Today, the procurement process and the purchase of goods/articles through e-trade portals are closely connected. To use the portals effectively, government authorities need to specify which purchase contracts procurement officers should use. If the framework of eprocurement has been determined, then buyers will have the opportunity to compare the prices offered by the different suppliers and they will get access to a complete catalogue of suppliers and price lists.

44. The interviews conducted by Rigsrevisionen shed light on the extent to which the selected government authorities use the internet for procurement. The survey showed that:

- 2 government authorities buy on the internet on a large scale.
- 4 government authorities buy on the internet to some extent.
- 6 government authorities only buy on the internet to a limited extent.

In connection with Rigsrevisionen's price test, it was established that only 4 per cent of the selected purchases were implemented digitally.

45. Rigsrevisionen's telephone interviews with the procurement staff in all 19 ministries showed, that 2 ministries trade on the internet to a wide extent, 13 ministries trade on the internet to some extent, whereas 4 ministries only trade on the internet to a limited extent. The telephone interviews also made it clear that the ministries primarily purchase office supplies and IT equipment on the internet and only rarely other types of goods. Rigsrevisionen is aware that the goods best suited for internet trading are standard articles which are easy to describe in an electronic product catalogue.

46. Rigsrevisionen's survey showed that a few ministries, e.g. the Ministry of Transport and Energy had embraced the new technology and implemented many purchases on the internet, whereas other ministries did not utilise the opportunities in full. This means that central government does not achieve the price and process gains which, in the opinion of Rigsrevisionen, are related to digitalisation and e-trading.

D. The skills of procurement staff

47. Rigsrevisionen has reviewed the skills of the procurement staff to assess whether the ministries are in general focused on securing that the necessary skills are available.

48. There are no general requirements to the competency of procurement staff and no qualifying training in government procurement is available.

49. Rigsrevisionen's examination showed that with the exception of The Danish Patent and Trademark Agency, none of the 12 agencies participating in the interview survey had worked out job profiles for their procurement staff. Several of the procurement officers had no qualifying education relevant to procurement, but had practical experience with procurement tasks. Finally, several of the authorities' procurement officers' knowledge of EU and

national tender regulation was not sufficient to warrant that tenders were indeed invited for all contracts subject to public tendering.

50. Rigsrevisionen's examination indicates that the government's procurement officers lack competencies in several areas, as will appear from the following 3 examples:

- EU rules on public supply contracts are complicated, and the ministries quite frequently buy legal assistance in connection with tendering.
- Digitalising the procurement process opens up for substantial efficiency gains, but it also requires adjustments of established business processes. Opposition in organisations against the implementation of these adjustments may delay or even brake efforts to achieve efficiency gains. It is therefore important that government procurement officers have the professional skills necessary to implement these changes and adjustments.
- Contracts with a value below the EU threshold, which do not have to comply with the EU tender requirements, are often awarded in direct negotiations between buyer and supplier. Therefore, it is important for the buyer to have the skills necessary to conduct negotiations of this nature.

The Ministry of Economic and Business Affairs has mentioned that the tendering process in itself, because it, e.g. requires fewer direct negotiations, may help ensure that professional suppliers do not have an advantage over inexperienced buyers. The ministry has also noticed that consultancy services purchased by among others government suppliers in connection with tendering are used for the technical description of the tender and the commercial wording of the contract. Expenditure to secure that tender regulations are complied with often represent only a small part of total consultancy costs.

51. The Danish Purchasing & Logistics Forum, which is an association of procurement and logistics officers, provides qualifying certification programmes within procurement. Rigsrevisionen has in connection with the telephone interviews established that none of the ministries knew if their procurement officers had had such training. The majority of the ministries did not know either that such training was available.

52. Rigsrevisionen's examination has demonstrated that development of procurement expertise is not generally considered a focus area by the ministries. Rigsrevisionen finds it important that the ministries' group procurement officers and centrally located procurement staff in large agencies and authorities, with responsibility for the organisation of procurement processes and large procurement activities, have the expertise either to carry out a given task themselves or to decide that external consultants should be involved. At the same time they should possess the professional expertise required to implement new technology and change ineffective business routines.

Rigsrevisionen does not consider it a problem that small scale procurement is carried out by staff with no special qualifications within procurement, as long as they have practical experience with and talent for procurement.

E. Information on procurement

53. Keeping records of what is being purchased, from whom and at what price is one element of the procurement process. Records of this nature provide the information required to make sound procurement decisions in the future. Rigsrevisionen has therefore examined whether the ministries keep separate records of procurement.

54. The examination showed that ministerial heads of procurement did not have an overview of total procurement in their ministerial area, because they did not have access to surveys of what had been purchased, where and at what prices. These data were not available because the various authorities within a ministerial area do not operate with the same supplier codes and the ministries do not record purchases on product codes.

That government's central heads of procurement do not have an overview of total procurement within their specific area, has the effect that suppliers have access to more information than procurement officers. This leaves government in a weakened negotiating position which allows a supplier to sell the same type of goods to different government authorities at different prices and on different delivery terms.

55. Overviews of all the suppliers serving a ministerial area can be put together, if unambiguous supplier codes are used across authorities. Supplier codes already exist, as all businesses are registered under a company number.

To get an overview of the nature of the goods and services that are being purchased, unambiguous product codes should be used across government departments. Unambiguous product codes are, e.g. contained in the UNSPEC code which is managed by the UN and is used by, e.g. the e-procurement system Gatetrade.net a/s. Thus pre-conditions of providing the ministries with an overview of suppliers and products purchased are in place.

The Ministry of Employment has in this connection stated that joint minimum requirements to level of registration and data formats should be agreed.

56. The individual authority has access to produce reports in Navision Stat's procurement module. These reports may support procurement staff in their daily work. The Agency for Governmental Management has developed a data warehouse superstructure "Olivia" to Navision Stat which contains all registrations made by authorities in Navision Stat in one database. On the basis of this data warehouse, the individual authority may produce more advanced reports. The authorities using "Olivia" may, for instance, generate reports where the authority's procurement activities are broken down on suppliers and internal charts of accounts.

57. Rigsrevisionen's interview survey showed that only one of the 11 government authorities used "Olivia" to produce relevant procurement information. Rigsrevisionen's examination also showed that in most authorities, periodic information on procurement was restricted to budget control activities in connection with general budget management. A few departments, i.e. the Ministry of Justice, the National Police Force and the Ministry of Science, Technology and Innovation, had in addition to the above worked out periodic information on the development in costs. Finally, Rigsrevisionen's examination showed that none of the authorities had access to information on procurement costs.

58. Rigsrevisionen's examination has shown that the ministries do not register their procurement under joint supplier and product codes within their respective ministerial area. This means that they do not have access to relevant information on their purchases which could, for instance, be useful when negotiating with suppliers and setting up joint volume purchases.

V. Initiatives taken by the Ministry of Finance to improve government procurement

Rigsrevisionen's comments

Rigsrevisionen finds that the initiatives taken by the Ministry of Finance have contributed to making procurement more efficient.

This assessment is based on the following:

- Since 2003, the Ministry of Finance has launched several initiatives that have contributed to improving the effectiveness of government procurement. The means have been digitalisation of the purchase process and high volume purchases, upholding decentralised procurement responsibility in the ministries.
- The Ministry of Finance may strengthen the guidance of ministries within development of procurement policies and organisation of procurement activities.
- The Ministry of Finance has recommended the ministries to set goals and performance targets for procurement. The examination showed that the ministries and the individual entities under audit as of yet do not work systematically with goal and performance related management within procurement.
- The Ministry of Finance has informed Rigsrevisionen that the government in February 2006 decided to carry out a survey of government procurement. The survey is intended to map overall government procurement to allow identification of areas where joint purchases and renewal of framework contracts may be considered in order to cut procurement costs.

A. The Ministry of Finance's procurement strategy

59. Rigsrevisionen has examined whether the Ministry of Finance, within the framework of EU's directives and the regulations of the EU Treaty, has laid down a strategy for government procurement.

60. The government's modernisation programme describes several measures to improve the public sector and among them government procurement. The Ministry of Finance has in the period 2002 - 2005 launched more initiatives in support of the ministries' efforts to improve the efficiency of procurement. The initiatives are described in **box 4**.

Box 4

Initiatives launched by the Ministry of Finance in 2002 – 2005 concerning government procurement

- Each ministry should work out a purchasing policy from which it should appear how the ministry will make procurement more efficient, cf. circular no. 9608 of 20 December 2002 on government procurement.
- Increased focus on coordinated purchasing, volume buying and use of SKI A/S's framework contracts in order to reduce costs by implementing one large tender rather than many small tenders, cf. "Improving Efficiency and Quality of Public Services" from 2003..
- SKI A/S was in 2002 reorganised and a new strategy was laid down, focusing on setting up fewer and more favourable framework contracts.
- The Agency for Governmental Management has developed a digital selfevaluation tool, "Development model for efficient procurement", which is at the free disposal of heads of procurement.
- The ministries should digitalise the procurement process when considered economical, cf. circular no. 9608 of 20 December 2002 on government procurement.
- Electronic market portal, DOIP, operated by Gatetrade.net a/s.
- E-invoicing since 1 February 2005 all public authorities have been able to issue and receive e-invoices, cf. the Ministry of Finance's consolidated act no. 991 of 7 October 2004.
- Increased use of credit cards, so that small purchases can be made by credit card, cf. circular no. 9644 of 26 November 2004.

The Ministry of Finance provides guidance to the ministries. The Finance Ministry's strategy is therefore primarily aimed at clarifying the ministries' responsibilities for procurement, supporting efforts to digitalise procurement and pointing to the opportunities within volume buying.

61. Each ministry is required to work out a purchase policy from which it should appear how the ministry is going to make its procurement activities more efficient, cf.

circular no. 9608 of 20 December 2002 on government procurement. Against this background, Rigsrevisionen has reviewed the ministries' purchase policies. In its guideline "Improving Efficiency and Quality of Public Services" from 2003, the Ministry of Finance indicates what a purchase policy could include. The ministries' purchase policies should determine which authorities they affect, the policy should form part of the ministries' efficiency strategy and it should be translated into an action plan.

62. Rigsrevisionen's review showed varying quality of purchase policies. Most of the policies described the purpose, the authorities affected by the policy, the organisational anchoring and the objectives of procurement activities. However, not all the ministries had worked out an action plan to implement the policy as required by circular no. 9608 of 20 December 2002 on government procurement. Furthermore, not all ministries had planned how to inform procurement staff of the policy and only a few ministries had worked out a plan to follow-up on the respective ministries' procurement activities.

63. Rigsrevisionen's examination has demonstrated that since 2003, the Ministry of Finance has launched several initiatives focused on a decentralisation of government procurement to the ministries, digitalisation of the procurement process and promotion of volume buying. These initiatives have all contributed to improving the cost-efficiency of government procurement.

The Ministry of Finance has guided the ministries in connection with their procurement initiatives. However, this guidance has apparently not been sufficient to secure the quality of the ministries' purchase policies. Neither has it significantly raised management's awareness of procurement.

The Ministry of Finance has informed Rigsrevisionen that the government in February 2006 initiated an analysis in order to make government procurement more cost efficient, cf. item 19.

B. Performance targets set for government procurement

64. Rigsrevisionen has examined the performance targets set for cost efficiency of procurement.

65. The Ministry of Finance has not fixed any targets for procurement improvement activities. In the UK and Canada, government departments are working towards savings targets of £23 billion and 2.5 billion Canadian dollars, respectively over five years. In England, the targets have been set for each individual ministerial department and in Canada they have been determined for Public Works and Government Services (PWGSC), which is the body coordinating all major government purchases.

66. It is difficult to estimate the gains related to procurement improvements. Savings achieved on a framework contract can be calculated on the basis of the discount achieved compared to the market price. However, the market price is not always unambiguous and may fluctuate over time. The Office of Government Commerce in the UK has therefore worked out a guideline for calculation of such gains. Still, the guideline does not warrant that calculated savings reflect actual savings, as some uncertainty is connected to the actual market prices.

67. The Ministry of Finance has recommended the ministries to set goals for the improvement of procurement. All the purchase policies include procurement objectives. However, the nature and number of objectives vary from one ministry to another. The objectives represent a balancing of different considerations, the use of framework contracts, development of collaborative alliances and development and nursing of supplier relations etc.

68. The Ministry of Finance has recommended the ministries to make their objectives operational by transforming them into concrete targets in an action plan, cf. circular no. 9608 of 20 December 2002 on government procurement. 4 of the 6 ministries in Rigsrevisionen's examination had not worked out such action plans and the remaining 2 ministries' action plans included only a few

targets in the form of key figures. None of the ministries in the examination had worked out performance targets for savings achieved in connection with improvement of procurement.

69. In conclusion, this examination has demonstrated that neither the ministries nor the individual government authorities have worked systematically with performance management in relation to procurement. Setting performance targets for ministries and government authorities, e.g. in performance-based contracts and executive employment contracts may support the requirements to relevant management information and increase management's focus on cost-effective procurement.

Rigsrevisionen 6 April 2006

Henrik Otbo Auditor General

/Henrik Berg Rasmussen

Appendix 1

The audited government authorities

The government authorities' purchases made within 12 categories of goods and services were audited through an analysis of 528 transactions made in 2004. In 2004, the authorities spent DKK 7.3 billion on account nos 14 and 15. This amount accounts for 30 per cent of total procurement spend. In the table below, procurement spend in 2004 has been broken down on the 12 audited government authorities.

Audited government authorities

	Spend 2004 ¹⁾	Share of total procurement spend	Share of goods and services in the price test ²⁾
	DKK millions	%	/o
The National Labour Market Authority ³⁾	2,153	8.9	0.6
Banedanmark [railway enterprise, operating the Danish state railway network]	1,874	7.7	13.3
The department of the Ministry of Employment	166	0.7	10.2
The department of the Ministry of Justice	38	0.2	42.1
University of Copenhagen	757	3.1	7.1
The Patent and Trademark Office	33	0.1	33.3
The Police and Public Prosecutor's Office	1,745	7.2	4.6
The Danish Educational Research Centre	6	0.02	25.4
The department of the Ministry of Transport and Energy	51	0.2	28.1
The department of the Ministry of Education	273	1.1	17.5
The department of the Ministry of Science, Technology and Innovation	122	0.5	7.0
The Department of the Ministry of Economic and Business Affairs	48	0.2	30.4
Total	7,265	29.9	7.3

¹⁾ Purchases on account nos 14 and 15 include remuneration at fixed rates, e.g. subsistence allowances paid to employees. Therefore, the amounts indicated in this column do not represent the actual savings potential.

²⁾ The price test includes the authorities' procurement of newspapers/magazines, office supplies, hotel accommodation expenditure, stationery/photo copying paper. All numbers are estimated as not all the government authorities are able to calculate this expenditure accurately.

³⁾ Of the DKK 2,153 millions spend in 2004, the DKK 1,844 millions are related to the appropriation for jobcreation programmes.

Note: All numbers in the table have been rounded off.

Source: Rigsrevisionen's price test.

Appendix 2

The audited goods and services

The table below shows the goods and services that were included in the price test. The goods and services in the test were selected because they were comparable across government departments/authorities and not because they represented high volume purchases.

12 main categories	112 identical goods and services
Newspaper, subscription, unit price.	Berlingske Tidende (weekdays) Berlingske Tidende (week-end) Berlingske Tidende (annual subscription) Jyllandsposten (weekdays) Jyllandsposten (week-end) Jyllandsposten (annual subscription) Politiken (weekdays) Politiken (week-end) Politiken (annual subscription)
Battery	24A-S2 LR03 AAA Duracell Plus MN2400, LR03, AAA Energizer, E92-LR03, industrial, AAA Energizer, LR03, AAA (ultra+) GP Alkaline, LR03 24A AAA Industrial LR03 AAA Panasonic AAA ultra (LR03) Procell 2400 LR03 15A-S20 LR6 Alkaline AA LR06-4 Duracell Ultra M3 MN1500, LR06AA Energizer, E91-LR6, industrial, AA Energizer, Ultra+ AA GP Alkaline, LR6 15A AA Industrial LR06 AA Panasonic AA ultra (LR6) Procell 1500 LR06
Ink/toner cartridge, black	HP51645A no. 14 (850c) HP51645A no. 45 HP51645AE (750c) HPC4092A (1100) HPC4182X (8100) HPC6615DE no. 15 (840c) HPC6656A (5550) HPC8061X (4100) HPC9720A (4600) HPQ1338A (4200)
Letter file, A4	A4 50 mm Bantex 70 mm Bantex 80 mm Bantex 80 mm Impega
El bulb	23 W 230 V E27 8 W E27 Ambiance Globe 16 W E27 Biax reflector 11 W E27 Biax TM Extra mini 9 W E27 Dulux EL 15 W E27 Dulux Iow energy, 20 W E27 Dulux, 16 W E27

12 main categories	112 identical goods and services
	Dulux, 8 W E27 Master PL Electronic 11 W E27 Master PL Electronic 15 W E27 Navatronic 15 W E27 PL-E Pro 11 W E27 PL-E Pro 8 W E27 Softtone low energy, 16 W E27 Softtone low energy, 20 W E27 Standard mat 60 W E27
Hotel accommodation – standard room including breakfast	Danmark Opera 71 Nyhavn Kong Arthur Kong Frederik Phoenix Radisson SAS Sophie Amalie Bretagne Hindgavl Slot Højslev Kro Munkebjerg Nørre Vinkel Hotel & Golfcenter Quality Australia Best Western Odense Congress Center Radisson SAS
Building services, maintenance of the interior, including service van and mileage	Electrician, qualified Electrician, apprentice Painter, qualified Carpenter, qualified Carpenter, apprentice Plumber, qualified
Consultancy per hour including mileage	It implementation, analyses and meetings It implementation, installation and test It development, analyses and meetings It support, analyses and meetings Personal development, analyses and meetings Accounts and financial management, analyses and meetings
Photo copying paper, white, A4, 80 g/m ²	A4 Basic Opti Koncept DataCopy Future lasertech HP Office Impega Luxe white Multicopy original Optigraph Optitext Pro Xerox Business Xerox Premier
Ballpoint pen	Bic Atlantis Bic Clic M10 F Pilot BL-G2 05 Pilot BP-S Matic Pilot Explorer roller pen extra fine Pilot H-175 0,5 Uni Ball Micro UB120 0,2 mm
Seminars	1,5 day at a seminar including food and accommodation Day course including lunch
Business card	Business card, colour and logo
Source: Rigsrevisionen's price test.	