

# **System of methodological audits in CZSO**

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## **Summary**

A final review of the system of methodological audits in the Czech Statistical Office is presented. The audits were proposed in May 2003 and they were held in CZSO from September 2003 to December 2008. The main goal of each methodological audit was to explore the adequacy of used methodological possibilities, principles, tools and practices, and correspondence between standards and practice of EU statistical service. The first cycle comprised of altogether 23 audits in different CZSO departments. The Auditing Group usually consisted of 3 external and 2 internal experts, who prepared the final report according to a general scheme. The report was then discussed by the Top Management, Head of the Auditing Group and Director of the relevant Department. Finally, the time schedule of further steps was prepared and monitored. Thus, the final reports were used for further improvement of the quality level of Czech Statistics. A short SWOT analysis is presented, taking into account the results of the first cycle of audits. The first round of methodological audits in CZSO was reviewed by the Czech Statistical Council and found to be satisfactory. Based on the gained experience, the second round of methodological audits in CZSO is prepared.

## **Introduction**

The core business of any National Statistical Institute (NSI) is statistics, therefore methodological audits are clearly important for good performance of every NSI. In this contribution we introduce a final review of the system of methodological audits in the Czech Statistical Office. These audits were proposed in May 2003 and they were held in CZSO from September 2003 to December 2008. The main goal of each methodological audit was to explore the adequacy of used methodological possibilities, principles, tools and practices, and correspondence between standards and practice of EU statistical service. The first cycle comprised of altogether 23 audits in different CZSO departments. The Auditing Group usually consisted of 3 external and 2 internal experts, who prepared the final report according to a general scheme. Top Management discussed final report in detail. Clear conclusion follows as a time schedule of further steps, which were continuously monitored. The final reports were successfully used for further improvement of the quality level of Czech Statistics.

## **Reasons for establishment of the methodological audits in CZSO**

Some problems in the outputs of CZSO were detected after the devastating flood in 2002. New Top Management of CZSO was established in May 2003. Among the first goals, it was to recognize the status quo in key statistical areas. Methodological audits were proposed by Jiří Křovák, 1<sup>st</sup> vice-president of CZSO, directly in May 2003. General principles of methodological audits, competences and liabilities of auditors, expected outputs of audits (minimal range of final report) were worked out. Czech Statistical Council agreed to Principles of the system of methodological audits subsequently.

## **Initiation of the first cycle of audits**

After setting up the framework and the aim of the methodological audits, their general methodology was developed by Prof. Stanislava Hronová (Image 1 - University of Economics, Prague). She laid the foundations of used methodology and introduced it into practice. She also successfully led 6 Auditing Groups. Prof. Jaroslav Jílek (Image 2 - University of Economics, Prague) took part in 6 methodological audits in the process and he led 4 of them. Complete list of all audits see Table 1.

**Image 1 Professor Stanislava Hronová, leader of six Auditing Groups**



**Image 2 Professor Jaroslav Jílek, leader of four Auditing Groups**



### **The goal of methodological audit**

The goal of methodological audit is to explore adequacy of used methodological possibilities, principles, tools and practices, correspondence between standards and practice of EU statistical service. Of course, the conclusions and suggestions from final report could be used for further improvements and also as a defence against groundless attacks of yellow journalism or against incurable complainer.

### **Description of roles in methodological audits**

President of CZSO approved the Audit assignment, members of the Auditing Group, time schedule of further steps after the Final report had been discussed by Top Management. The Vice-president monitored the formation of the Auditing Group, approved bonus payment for external auditors. The directors of the departments where the Audits were held prepared basic documentation in advance. In the beginning this step presented a problem, especially in the first Audits. The departments did not expect so demanding requirements. The experts knew the used systems in detail (including their limitations and constraints) and did not trust that somebody from outside could find a real opportunity

for an improvement. It was important to induce directors and the cooperating experts from their departments to prepare a sufficiently detailed documentation. This documentation was a necessary condition for successful work of Auditing Group and every Head of Auditing Group requested it. The Secretary of Auditing Group cooperated on improvement of the method of methodological audits and operated as an inter mediator between Auditing Group and Department, helped with solving all incurred problems.

### **Aim of final report**

A methodological audit is a management tool, therefore the aim was to prepare a final report which complied to all requests of management. It had to be concise and apposite, describing quality dimensions and assessment including the proposal of further steps.

### **Verified practice and selected items from General scheme of final report**

The Auditing Group usually consisted of three external and two internal experts. They worked for three months, studied the documentation, asked for further details, discussed the responses and then they led a half-day discussion on the details with the experts from the Department. At the end they prepared a Final report, which was discussed by the Top Management, as mentioned above. A general scheme of the Final report included besides other points:

- 1) Audit assignment including a rough time-schedule
- 2) Correspondence between standards and practice of EU statistical service
- 3) Satisfaction of users needs (statistical outputs)
- 4) Assessments, that means sufficiency of written methodology documentation, quality dimensions of output (like in EUROSTAT quality report) and benchmarking
- 5) Suggested further actions and improvements (including miscellaneous opinions of auditing group members).

**Table 1 List of methodological audits**

<b>Order</b>	<b>Name of audited Statistics</b>
1	Quarterly National Accounts
2	Industrial Production Index
3	Construction Statistics
4	Annual National Accounts
5	Quarterly survey as a support of GDP preliminary estimate
6	Annual Structural Survey
7	Consumer Price Statistics
8	Agricultural, Construction and Services Prices Statistics
9	Labour and Earning Statistics
10	Household Budget Survey
11	Environmental Statistics
12	Industrial Prices Statistics and External Trade Prices Statistics
13	External Trade Statistics
14	Tourism Statistics
15	Agricultural Statistics
16	Public databases
17	Population Statistics
18	Statistics on Public Health and Safety at Work
19	Retail Trade Statistics
20	Information Society Statistics
21	Energy Statistics – production of electricity and other energy sources, energetic balances
22	R&D and Innovation Statistics
23	Statistics of Financial, Governmental and Non-profit Organisations

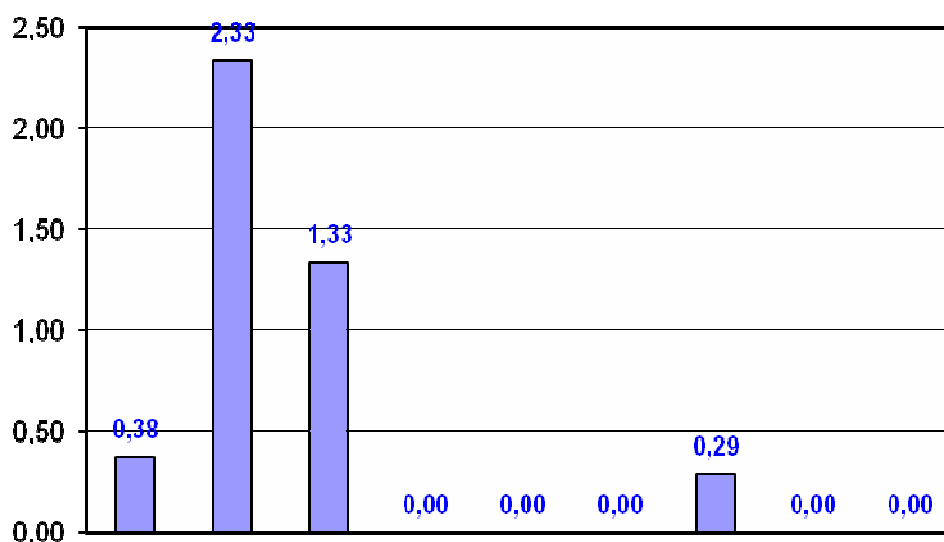
## Auditors during the 1st round of methodological audits – short overview

During the first round altogether 120 auditors (some of them asked repeatedly) worked in Auditing Groups. Actually it was 92 persons, namely 60 external experts and 32 experts from CZSO. Among them there were 14 University Professors, one senator of the Parliament of Czech Republic, specialists from other national institutions and financial sphere: Czech National Bank, Ministry of Finance, Ministry of Industry and Trade, Ministry of Labour and Social Affairs, Ministry for Regional Development, Customs Administration of the Czech Republic, and Czech Moravian Confederation of Trade Unions.

## Assessment of the audit outcome

Although the measurement of the outcome is difficult, we tried to find a sententious indicator. After the 14<sup>th</sup> methodological audit we defined such indicator by the ratio of significant findings to findings of lower significance. The result was dependent to some extent on the strictness of each Auditing Group. Therefore, Graph 1 presents only rough information. But it is clear that there were five perfect methodological audits among the last six ones.

**Graph 1 Ratio of significant findings to findings of lower significance in methodological audits finished in 2007 and 2008**



## From 15th to 23rd methodological audit

### Short SWOT analysis

#### Strengths

- Detailed and deep analysis of audited statistical segments
- Final reports reveal possibilities of improvement

#### Weaknesses

- Audits are time consuming and demanding for the auditors as well as CZSO experts
- Costs on external experts

### **Opportunities**

- Exploitation of recommendations of auditors for quality improvement
- Opportunity for increasing motivation of CZSO employees by bonuses for departments that have passed the audit successfully

### **Threats**

- Abuse of significant findings in the Final reports
- Breach of confidentiality during the auditing process

### **Conclusions**

On 27<sup>th</sup> March 2009 the Czech Statistical Council evaluated the first round of methodological audits to be satisfactory and highly appreciated the work of Auditing Groups and Audited Departments. Reports from the second round, when the gained experience will be exploited, are anticipated. Arrangements for the second round of methodological audits are almost completed.

### **Acknowledgements**

I would like to thank all experts and collaborators from CZSO who were involved in the audits during the five-year period. I would like to express my deep appreciation of the help from two professors of University of Economics, Prague, especially to Prof. Stanislava Hronová, who contributed to the successful start of the auditing cycle in a decisive way, and to Prof. Jaroslav Jílek who led the audits perfectly. Unfortunately, he died two years ago.