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OECD Short-Term Economic Statistics Expert Group

STESEG TASK FORCE ON TIMELINESS AND BENCHMARKING

SUMMARY OF TASK FORCE OUTPUTS AND RECOMMENDATIONS FOR FUTURE WORK

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1. This document is submitted to the Expert Group under item 5 of the draft agenda.

2. The Expert Group is invited to:

NOTE the work program that was developed and outputs produced by the task force as summarised in the body of the document

CONSIDER the conclusions of the task force and recommendations for possible future work outlined in paragraphs 18 and 19.

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SUMMARY OF TASK FORCE OUTPUTS AND RECOMMENDATIONS FOR FUTURE WORK

a. Background

1 The Short-Term Economic Statistics Expert Group (STESEG) taskforce on timeliness and benchmarking was formed as an outcome of the first meeting of the STESEG in June 2002. The taskforce was asked to pursue a number of broad themes (see paragraph 9 of: [Future Work of the Expert Group from June 2002 Meeting , doc](#)) related to the use of benchmarking techniques and improving the timeliness of short-term economic statistics (STES).

2 The taskforce consisted of representatives from the OECD, IMF, Statistics Sweden, Statistics Italy, Statistics Denmark, US Bureau of Labour Statistics, Statistics Netherlands, Korean National Statistical Office, Federal Statistics Office of Germany & the Czech Statistical Office.

b. Work program

3 The initial task for the group was to develop a work program to pursue specific issues related to the broad themes identified at the June 2002 meeting. The taskforce agreed on eight priority areas of work which are summarised in Table 1. The group was very productive, producing a large amount of output as indicated in Table 1, and through supporting each others work by providing comments. Also, taskforce members identified a number of background papers written by their organisations in the past that were relevant to the work program of the taskforce.

Table 1: Taskforce work program and outputs

Work program task	Outputs from task force members
1. Produce a table showing the current timeliness of production and labour indicators for countries involved in the task force, indicating where improvements have been made in the last 5 years, and where improvements are planned within the next year.	OECD produced a table covering some key production and labour indicators for task force member countries which was used to support other analyses.
2. Choose a set of indicators where there is a large difference in timeliness between countries participating in the TF, and use this as a case study to determine reasons behind the difference.	Italy, Sweden & the OECD have prepared a case study analysing the differences in methods used for retail trade statistics in Italy, Sweden and the U.S. The paper makes conclusions on best practices for improving timeliness.
3. Identify where improvements in timeliness for certain indicators have been made in recent years (or are planned within the next year), and outline how this was (will be) achieved.	Sweden has produced a paper on their recent improvement in timeliness for retail trade statistics. Denmark has produced two papers describing their improvements in timeliness of STES.
4. Confront issues of timeliness versus accuracy, e.g. choice of reference dates, use of sub-samples for early estimates, revision policies and / or analysis etc.	Korea has produced a comprehensive paper analysing the timeliness and accuracy of different indicators in Korea, US, Japan & the EU.

Table 1 cont. : Taskforce work program and outputs

Work program task	Outputs from task force members
5. Develop a framework to assess tradeoffs between timeliness and accuracy of STES. Of relevance is the impact of user needs and how these can be taken into consideration in assessing this tradeoff (with due regard for the impact of revisions on cyclical analysis).	IMF has produced a general paper on this topic. OECD has outlined a framework to assist countries in improving the timeliness of STES, covering all aspects of the statistical production process.
6. The use of modelling techniques and flash estimates. Identify methods currently in place (or planned), the issues involved in their development and how their use has (will) improved timeliness.	Netherlands has produced a paper on their research on this topic. The BLS has produced a paper on incorporating model based estimates and benchmarking. Germany has produced a paper explaining their current use of these methods and ongoing research.
7. The relevance of using benchmarking techniques for different types of short-term economic statistics. For example, is it worth the cost involved for a particular indicator if its main purpose is to provide information on short-term effects rather than for the analysis of a long time series?	IMF has produced a paper on this topic.
8. Propose a standardised definition of 'benchmarking' for STES. Presentation of alternative techniques for benchmarking STES. Consideration of whether National Accounts aggregates should be used and / or National Accounts benchmarking methods should be used for consistency purposes.	This issue was not covered in detail, although the BLS paper for task 6 covers alternative methods for benchmarking STES to some extent.

c. Summary of papers produced by taskforce members

4 A brief summary of each of the papers prepared by the taskforce, which address the work program tasks as described in Table 1, is provided below. The papers have been grouped under broad headings which summarise the common themes of the papers.

Operational initiatives to improve timeliness

5 Statistics Denmark has summarized improvements in timeliness made since 1996, for STES based on both survey data and administrative records. Initiatives undertaken to improve relations with respondents and estimate response burden are also described.

6 A second paper by Statistics Denmark describes their work on the integration of electronic questionnaires and optical scanning in the data collection process to assist in improving timeliness, efficiency and the services they provide to respondents.

7 The paper by Statistics Sweden describes how recent improvements in timeliness have been made for their retail trade statistics. An explanation of changes made to the statistical production process are outlined, including the use of technology, examination of estimates based on lower response and assessing the likely available of data from businesses at an earlier timepoint.

Methodological developments to improve timeliness and use benchmarking techniques

8 The paper by the Federal Statistics Office of Germany explains their use of, and research into, model based estimation methodologies (which also incorporate survey data for the current period) to produce preliminary estimates of several STES e.g. CPI, retail trade, GDP, industrial production and service industries. The paper also discusses the issue of revisions between preliminary and final estimates.

9 The paper by Statistics Netherlands describes their current research which aims to improve timeliness in the industrial production index through the use of sophisticated estimation methodologies. Three methods are researched, the first involves estimation based on lower response rates through improving current approaches to respondent imputation, and the second is an investigation of sub-sampling. The third method involves redesigning the compilation process to start with a set of 'expected values' (at respondent or meso aggregate level) based on information from business tendency surveys or other related indicators. These expected values are substituted with reported data when received. Preliminary estimation could be performed at any time and would essentially be a combination of 'nowcasting' and standard estimation. The aim of the research is to find the method which enables production of the earliest preliminary estimates with the smallest average revisions when compared to final estimates.

10 The paper by the US Bureau of Labour Statistics (BLS) describes the production of sub aggregate estimates using sophisticated modelling techniques (using a combination of survey and administrative data) to reduce the variability caused by small sample sizes. These model based estimates are then benchmarked to survey estimates on an annual basis. However there is a problem with the current method in that estimates of movement between the benchmarked series and the first estimate of the model based series each year (i.e. between December and January) can be misleading, and also the current model based estimation method does not perform well when economic shocks occur (e.g. the fast onset of recession). To address this problem, the BLS are investigating a method of 'real time benchmarking', which incorporates aggregate benchmarks into the model based estimation process on a monthly basis, and addresses the key problems with the current technique.

11 This paper could be useful to countries facing resource constraints, provider burden problems, or needing to improve the timeliness of aggregate estimates. Smaller sample sizes would aid these initiatives, (smaller sample sizes may not affect the accuracy of the aggregate estimate very much), and estimates using modelling techniques similar to those described in the BLS paper could possibly be used to produce reliable estimates for sub-aggregates.

Findings from comparisons across countries

12 A joint paper by the OECD, Statistics Sweden and ISTAT presents a comprehensive case study on retail trade statistics in the US, Italy and Sweden. Methods used in each aspect of the statistical production process are compared to assess the impact these may have on the timeliness and accuracy of estimates produced. Conclusions are drawn on methods which can assist in improving the timeliness of STES in general, with due regard to the different external influences faced by different countries.

13 The paper by the Korean National Statistical Office provides detailed information on the timeliness of STES in Korea and how this compares with the US, Japan and the Euro Area. In areas where Korea has the timeliest STES in comparison to other countries (e.g. CPI, PPI & Merchandise Trade) possible reasons for this are presented. The paper also looks at which STES in Korea have both preliminary and final releases and analyses the revision process – which includes a comparison with the EU and US. The paper highlights the different approaches used internationally for the revision process and recommends establishing international guidelines on revisions policy.

Frameworks to assist future work

14 The primary paper from the OECD proposes the development of a framework which would cover all aspects of the statistical production process for STES, and identify different methods within each process which could assist in improving timeliness, together with associated techniques to avoid or minimise losses in accuracy. This would provide national statistical organisations (NSOs) with a range of options for improving timeliness, and facilitate their assessment of which options best suit their particular circumstances for different STES. The paper outlines the possible content of such a framework which would be constructed as a multi dimensional web based product, with each successive dimension providing more detail on specific methods for improving timeliness within various statistical production processes.

15 The paper emphasises that developing such a framework would require a substantial resource contribution from the international statistical community, and therefore the STESEG is requested to carefully consider whether this is worthwhile.

16 A paper from the IMF discusses timeliness, accuracy and reliability as quality dimensions of STES, and attempts to define each, including how these criteria are accounted for in the IMF data quality assessment framework (DQAF). Improvements in production processes are recognised as providing opportunities to improve timeliness, accuracy and reliability, but only up to a certain point. The importance of the different perspectives of users is emphasised, and the paper proposes a concept for assessing improvements in the timeliness of preliminary estimates (in days) in comparison to the expected loss in accuracy, measured as the size of the revision between preliminary and final estimates.

17 A second paper from the IMF provides a general definition of benchmarking and describes the different forms it can take for different statistics e.g. national accounts, indices, level estimates. It considers the appropriateness of benchmarking STES to more reliable less frequent (e.g. annual) statistics under a range of different circumstances. In general, benchmarking is recommended where possible, and the advantages of this are outlined, especially in relation to indicators used in the compilation of the national accounts.

d. Conclusions from the taskforce and recommendations for future work

18 The taskforce outputs as described above represent significant progress on many important issues and will serve as good references for other countries intending to work on similar issues or facing similar challenges. The papers describe contemporary good practices in reorganising statistical processes to improve timeliness without losses in accuracy, and in the development of more sophisticated estimation methodologies to support the production of accurate preliminary estimates. Also, the benefits of benchmarking are outlined together with recommendations on where benchmarking techniques should be used for STES. Therefore, in regards to the outputs of the taskforce produced thus far, the STESEG is asked to consider:

- are there any individual outstanding issues on this topic which should continue to be pursued by the taskforce;
- how should the material produced by the taskforce be utilised or made more accessible (e.g. by publishing the meetings proceedings, etc.)

19 The paper proposing the development of a framework to assist NSOs in improving the timeliness of STES represents the main element of future work that should be considered by the STESEG. All other work performed by the taskforce thus far would contribute to such a framework, together with related work

undertaken in other foray, either currently or in the past. Members of the STESEG are therefore asked to consider:

- whether the proposed framework to assist NSOs in improving the timeliness of STES is worth developing, and if so the role STESEG should take in overseeing this work;
- the quantity of resources that could be contributed by NSOs and international statistical agencies to this task.