

OECD SHORT-TERM ECONOMIC STATISTICS EXPERT GROUP (STESEG), 28 – 30 JUNE 2004

COMMENTS RECEIVED FROM COUNTRIES ON DATA PRESENTATION AND SEASONAL ADJUSTMENT

The focus of the 2004 meeting of the OECD Short-term Economic Statistics Expert Group (STESEG) to be held in Paris on 28-30 June will be discussion of draft documents containing recommendations from the task forces created at previous STESEG meetings arising from their work on: short-term indicators for services; data presentation and seasonal adjustment and; timeliness and benchmarking. These documents were forwarded to STESEG participants on 30 April 2004 with a request that written comments be provided by 10 May. The documents are available on the STESEG website at <http://www.oecd.org/std/steseg2004>.

This document presents comments received by the due date on the work of the Data presentation and seasonal adjustment task force and the draft Data and Metadata Reporting and Presentation Manual. Comments are provided for: Austria (Statistics Austria); China (National Bureau of Statistics); Czech Republic (CZSO); Finland (Statistics Finland); Germany (FSO); Italy (Bank of Italy); Italy (ISTAT); Luxembourg (STATEC); Netherlands (Statistics Netherlands); New Zealand (Statistics New Zealand); Norway (Statistics Norway); South Africa (Statistics South Africa); Sweden (Statistics Sweden); Switzerland (FSO); United Kingdom (ONS); United States (Census Bureau); United States (BLS); European central Bank.

AUSTRIA (Statistics Austria)

General Feedback

It is strongly emphasized to harmonise with ESTAT recommendations, which are an output of the ESTAT Working Parties of Short- Term- Statistics.

AD Paper "Presentation of seasonally adjusted series" / Recommendations

Relating to a working day adjustment procedure Statistics Austria prefers the term "working day adjusted" instead of "calendar adjusted". It specifies more exactly the type of adjustment.

It is evident, that if there are also other adjustments done the term "calendar adjusted" is applicable. The focus on disseminating just seasonally adjusted data is not recommended. Raw data are free from methodological differences of adjustment procedures.

The process of harmonising the different adjustment approaches is still in the beginning due to a lot of "philosophic" discrepancies amongst the experts.

AD "Draft data & metadata reporting & presentation manual"

As the importance of metadata is continuously growing, corresponding manuals are highly welcomed. An interesting discussion at the STESEG meeting is expected.

CHINA (National Bureau of Statistics)

Comments on data presentation and seasonal adjustment

Standard terminology for data presentation will facilitate avoiding ambiguous terms arising. The proposal about the terms “annual growth rate”, “year-on-year growth rate”, “quarterly growth rate” and “monthly growth rate” is explicit and advisable. The term “annualized” and “linear approximation of the annualized figure” should be used respectively when data derives from compounding and from multiplying.

In order to quickly identify the economic trend, sub-annual indicators should be made available in seasonally adjusted form. Most sub-annual time series show intra-year variations which recur regularly every year, therefore period-to-period growth rates on raw series are not very informative. With unadjusted data, changes in trend can only be estimated by year-on-year change. The press releases have not presented data in seasonally adjusted form by the national statistical office (National Bureau of Statistics of P.R.China) in china by now for some particular problems, for example, how to filter the effects of Chinese New Year (a moving holiday similar to Easter) remains unclear. But it is widely recognized in China that the growth rate on seasonally adjusted series can convey the most recent information contained in a time series and is a good way of presenting short-term changes.

Because the most common and useful analytical transformations on seasonally adjusted flow series are the period-to-period growth rates and the period-to-period changes in their levels, press releases presenting seasonally adjusted flow series should at the minimum provide the period-to-period change in levels and the period-to-period growth rate. But to present quarterly or monthly growth rate at annual rates, the year-over-year are preferable to annualized period-to-period growth rates. The reason is that annualizing the period-to-period growth rate may exaggerate the volatility of economic activity, while the year-on-year growth rate could comparatively facilitate identification of the cyclical movements of an indicator, though it does not react as quickly as the period-to-period growth rate. Moreover it could be more easily understood and is more commonly used by users and media.

The annualized semi-annual growth rates seem to be better than year-over-year ones in some circumstances, for they can react more quickly to current economic condition. But press releases presenting in such form is not necessary, for selecting semi-annual is subjective, and it is difficult to explain why semi-annual rates but not five-month or seven-month rates are used. Moreover, the term is not very easy to understand for the general public.

The year-on-year change should be calculated on raw data or data adjusted for calendar effects instead of seasonally adjusted data, for it is not affected by seasonality except for calendar effects. By various seasonal adjustment methods such as X-12-Arima and Tramo-Seats, the unobservable seasonal factors can be estimated but they can not be actually observed after all. Calculating year-on-year change on seasonally adjusted data may be inappropriate, at least dispensable.

Proposals for the definition of “seasonal variation”, “oscillation”, “trend” etc are reasonable. The seasonal adjustment should include all calendar adjustments, including those for trading-days, and variable holidays. Both seasonally adjusted data and the raw data of the main sub-annual indicators should be presented in press release.

For sub-annual data expressed in levels, seasonally adjusted figures should be presented in sub-annual form; i.e. seasonally adjusted sub-annual data expressed in levels should not be grossed up and presented in annual terms.

CZECH REPUBLIC (CZSO)

2. Data presentation and seasonal adjustment

All results are seasonally adjusted using the TRAMO-SEATS procedure. Both seasonally adjusted and raw series are published monthly or quarterly where available. Working days adjustment method is used where feasible too. The policy of the CZSO is to use a unique method of the seasonal adjustment for all processes, unless it is not in accordance with general recommendations and experiences (for labour market surveys the X-12-ARIMA method has been used). The TRAMO-SEATS method has been proved as flexible enough and is also broadly recommended in the CZSO.

The CZSO is trying to work out the general recommendations for the seasonal adjustment which consist of rules for the adjustment, such as the length of time series, number of regressors, using of direct and indirect method results, etc.

FINLAND (Statistics Finland)

1.1 General comments on the meeting papers and recommendations

The glossary of data and metadata reporting and presentation terms is very useful in the work of national agencies. The recommendations seem advantageous and cover mainly very important issues to take into consideration when publishing and disseminating statistics. The recommendations could be best utilised if a very brief summary of the recommendations accompanied with the glossary of terms could be extracted to a separate document with links to further details.

Statistics Finland has also endorsed Eurostat recommendations on publishing, revisions, seasonal adjustment and working-day adjustment of short-term statistics.

1.2 Seasonal adjustment – responding to recommendations

Statistics Finland is presently renewing seasonal adjustment in order to change over to TRAMO/SEATS – method. The method is to be adopted in short-term economic statistics not later than the year 2005. The change of method enables more extensive utilisation of seasonally adjusted data in accordance with the recommendations of STESEG working groups.

GERMANY (Federal Statistical Office)

C. Proposals for Standard Terminologies Relating to Data Presentation

Referring to proposal 2.5.1, what should be taken into account when examining the calendar effect is not only the month length effect (different lengths of the months, February in a leap year) but also the quarter length effects. If this is not done, quarterly short-term economic data cannot be included when taking account of the calendar effect.

In proposals 2.5.2 and 2.5.3, it should be taken into account that for component decomposition sometimes a "user-defined component" is used (e.g. by adding: "...as well as the calendar effects **and the effects of other user-defined variables** have been removed (user-defined component, e.g. taking into account holidays and weather factors)" and "The results of the extraction of the seasonal component, the calendar

effects component **and the user-defined component** from a time series. If neither seasonal nor calendar influences **nor influences due to user-defined variables** are present in the raw data").

The last sentence in 2.5.4 should be deleted because it is not generally applicable (for instance, it does not apply to determining the trend-cycle component by means of the seasonal adjustment method BV4.1).

D. Recommendations for the presentation of growth rates

Some of the calculations of growth rates as shown in the document are used by German official statistics, too. We support the OECD in its critical assessment of annualised growth rates that are based on just one comparative month. In the press releases on the indicators of index of orders received, turnover index, and production index, Germany regularly also publishes the two-month comparison with the two preceding months, as is proposed in the OECD paper. As regards the OECD statement that efforts should basically be concentrated on examining seasonally adjusted data, we would like to make some critical comments.

We do not agree to the general opinion (see section 3) that "the growth rate on seasonally adjusted series ... is the best way of presenting short-term development" and "percentage changes based on the trend-cycle component should be avoided". Seasonally adjusted figures and the trend-cycle component involve different advantages and disadvantages. For example, the rate of change on the previous period on the basis of seasonally adjusted figures quite frequently has a wrong algebraic sign, whereas generally the trend-cycle component correctly reflects the trend, except for the few cases of economic turning points. Also, there are fundamental differences regarding the correction of seasonally adjusted figures and of figures of the trend-cycle component when additional series data can be included in the analysis: Generally, the corrections of the trend-cycle component data are negligible after including three to four additional series data, whereas the results or effects of seasonal adjustments will become fully visible only after one year. In our opinion, the recommendation should be extended to include suitable methods regarding the publication of rates of change on the basis of the trend-cycle component. The recommendation might, for example, be based on what is practised in German statistics, that is, supplementing the rates of change based on the trend-cycle component by showing "bristle-shaped graphs" based on successive analyses (cf. enclosure).

E. Recommendations for the presentation of seasonally adjusted series

We almost entirely agree to the 12 recommendations drawn up by the OECD in the context of publishing seasonally adjusted data. We just would like to critically comment one item:

- Recommendation no. 2: For that variant, the designation "seasonally and calendar adjusted" should be used.

F. Draft Data and Metadata Reporting and Presentation Manual

We welcome the OECD activities in the context of drawing up a manual on data and metadata presentation. We consider this as an important step towards further harmonisation of data and metadata. Generally, the efforts to harmonise the contents of data descriptions should be supported because this is a prerequisite for data comparability. The draft manual offers users important information on how to deal with conceptual differences (e.g. different definitions of the same variables, seasonally adjusted data and data not seasonally adjusted). Other issues are the harmonisation of data supply and the improvement of data quality. In particular, we welcome the planned implementation of a "Data Sharing Model" with regard to data and metadata transfer (i.e. using common data stocks, granting international organisations the right to access national databases).

ITALY (Bank of Italy)

2) STESEG taskforce on data presentation and seasonal adjustment

2.1) Paper 1: Data presentation and seasonal adjustment (4 pages)

- I do find it useful the preparation of a manual. In particular it seems to me very important to focus on those reporting practices listed in section c.10, which represent crucial pieces of information in interpreting SA data.
- 2.3 – The word “ordered” in that definition can result ambiguous. Therefore, I would adjust the definition in the following way: “*A time series is a set of time-ordered observations on quantitative ...*”.
- 2.4 – The second part of the sentence (“*Trend can be view as these variations of very low frequencies*”) is either redundant (for an ordinary user) or too generic (for an expert). It could be modified to specify that one is referring to the frequency domain, for instance: “*In the frequency domain, trend can be viewed as those variations corresponding at very low frequencies*”.
- 2.5.3 – As in the previous remark, the last part of the proposed sentence refers to something which has to do with the analysis in the frequency domain.
- 2.5.4 – In the last sentence I would replace the word “*filtering*” by “*estimating and removing the...*”, in order to properly describe the sequence of actions actually undertaken.

2.2) Paper 2: Task Force Proposals for Standard Terminology Relating to Data Presentation (6 pages)

- 1.1.1 - Page 2. Since the expression “*year-on-year growth rate*” (y-o-y) is proposed for $[Q_t/Q_{t-4}-1]$ or $[M_t/M_{t-4}-1]$, one could also use, accordingly, the expressions “*quarter-on-quarter growth rate*” (q-o-q) and “*month-on-month growth rate*” (m-o-m) for $[Q_t/Q_{t-1}-1]$ and $[M_t/M_{t-1}-1]$, respectively. In my view the expression “*quarterly growth rate*” sounds too similar to “*annual growth rate*” and then it might result ambiguous (for instance, is one referring to the previous quarter or to the same quarter of the previous year, where in the latter case “*quarterly*” denotes just the frequency of data?).

2.3) Paper 3: Task Force Recommendations for the Presentation of Growth Rates (2 pages)

- I agree that y-o-y rates should be computed with reference to raw data or eventually to calendar adjusted data.
- With reference to the annualised rate of changes, if the use of 2-3 months rate of changes of SA data (my preference is for the 3-month percentage changes) is recommended, a possibility would be to present annualised data computed with reference to percentage changes at this same frequency. As stated in the introduction, this note takes the point of view of the “general public”. In my view for the

general public it would be rather problematic to interpret annualised SA monthly percentage changes, not only because they are extremely erratic but also because the general public would tend to compare these figures to y-o-y rates, and this proliferation of growth rates might confuse people.

2.4) Paper 4: Presentation of seasonally adjusted series (13 pages)

- Beginning of page 2: The purpose of the sentence “*Note that, whereas each of the best seasonal adjustment methods provides seasonal models that are valid for broad, but limited, classes of time series. For the great majority of series, however, only the most sophisticated techniques can produce adequately seasonally adjusted for most purposes*” is not clear in my view. First, “*broad, but limited*” seems to me contradictory. Second, X12-Arima and Tramo-Seats are quite sophisticated methods which can deal, to my knowledge, with most economic time series, at least with those more frequently used. Hence, to which methods the authors refer when they mention the “*most sophisticated methods*”?
- With reference to the issues discussed under Recommendation 4, I would also stress that Statistical Agencies, due to revisions in particular in the most recent SA figures, should publish backward SA data for the last periods (for instance for the previous 24 months). In case of major revisions the time series for the whole period should be made available. For instance this can happen with Tramo-Seats; substantial changes in the SA series are related to the selection of a different Arima model which capture the main characteristics of the raw time series, which can change as new observations become available.
- Recommendation 8: the arguments put forward in the paper to recommend the use of annualised semi-annual rates are convincing, though for some indicators the use of annualised quarterly rates could also be appropriate. For instance, according to our experience with the Italian SA CPI, the annualised 3-month changes represent a fair compromise between the need of detecting promptly the turning points in inflation and the problems raised by the irregular behaviour of the series. In other words, having stated that annualised monthly changes should be avoided, I would leave the flexibility to choose any other time lags to compute annualised percentage changes, according to the characteristics of the considered time series.
- With reference to Recommendation 10, it might not be trivial to add that when the producer of SA data provides information on the quality of the seasonal adjustment which has been performed (e.g. the M-statistics in X12-Arima), it should also specify how these tests should be interpreted (bounds, etc.), avoiding reference to papers which the general public might find it difficult to find.

2.5) Paper 5: Draft Data and Metadata Reporting and Presentation Manual (101 pages)

- I do find this manual very useful. In particular, it seems to me remarkable that it focuses on a few issues which, in spite of their importance from the users’ viewpoint, are rarely considered in detail in similar documents.
- In the following I will focus on a few specific issues covered in the manual which are not discussed in other STESEG documents.

- a) I do share the view stressed in the document that the possibility of accessing to metadata on the internet free of charge is extremely important; in particular, that would allow users to immediately realise whether for their purposes it is worth buying the data or not. Another (complementary) possibility would be to allow users to withdraw figures free of charge for a short period of time, for instance for two years (obviously not the most recent figures); before buying the data users could then assess whether these data fulfil their needs.
 - b) The great attention devoted in the document to the issue of the comparability across time of the time series in presence of breakdowns is extremely welcome. First, an obvious requirement is that metadata should allow users to understand if and how they can compare over time series characterised by major breakdowns, which can arise not to only from the implementation of different methodologies, but also from changes in the classification. Second, I think that it is extremely important to have a “contact person” for each type of data within each NSO, to which address all requests and specific questions.
 - c) A problem which is not mentioned in the manual but I think it is frequently met by users concerns the availability of data for the past in an electronic format. Sometimes important data are available in an electronic format only for the most recent years, whereas for the past they are only available in official publications, which might not always be easily accessible by all users. Therefore, a support should be given to a project aimed at encouraging NSOs to move most of data on an electronic format for a reasonably long period of time.
 - d) Partly related to the previous issue, for a few crucial indicators I think it would be very useful to have specific “historical databases”, to be used for comparative long-term analysis. A few time series, in fact, exist for a very long period of time within NSOs (100 hundred years or so), though they are not available in an electronic format and, sometimes, it is also quite difficult to find them in the official publications. This information can be extremely valuable for economists; obviously the analyst should be made aware of the likely breakdowns in the series.
 - e) The possibility that different international organisations publish data on the same phenomena which differ across them is appropriately mentioned in the paper and in my view the related recommendation should receive great attention.
- A general remark concerning the structure of the document is that in order to facilitate the reader, I would find it useful to have a final section summarising all the main recommendations.

ITALY (ISTAT)

Data Presentation and Seasonal Adjustment

As Istat has participated to the work of the task force and considers that both the background material, and the proposals and recommendations presented in the drafts reflect the consensus emerged in the task force itself, the comments on this topic are very limited.

Istat fully agrees with the contents of the documents “proposals for standard methodology relating to data presentation” and “recommendations for the presentation of growth rates”.

As for the specific point of the calculation of YoY changes on SA series (Presentation of growth rates, para. 1), we propose to consider a pragmatic approach: as a general recommendation YoY changes should be confined to raw and to calendar adjusted indicators and avoided for seasonally adjusted series, however YoY changes can be accepted when dealing with SA series of quarterly national account data, as the raw

version of such indicators are seldom presented and are utilised only for very specific purposes by professional users.

The recommendations concerning “Presentation of seasonally adjusted series” deserve, in our view, some adjustment and, in few cases, further discussion. In particular, the following remarks can be made about the current version of the paper:

There is an inconsistency between the discussion preceding Recommendation 3 (page 4) and the recommendation itself, about how to term series with no identifiable seasonal variations adjusted for calendar effects: as stated in the recommendation the series should be referred to as calendar adjusted series.

The question as to whether the annual total of sub-annual seasonally adjusted data should be independent of or identical to the annual total of sub-annual raw data was not settled in the discussion of the task force and this is why no specific recommendation on the point appears in the paper (pages 5 and 6). However, this is an important issue that should deserve a discussion in the STESEG meeting, exploring the scope for a specific recommendation.

The utilisation of annualized semi-annual growth rates was discussed at length in the task force without a clear agreement on embodying it in the final recommendations (in the current version it appears as Recommendation 8, page 10). Whilst the discussion of the problem put forward in the paper (par. 3.2 “The analytical transformations”) is perfectly fine, we pledge for dropping the Recommendation itself that we consider not suitable for the presentation of data to the public at large and the media.

The addition of Recommendation 12 at the end of the list (page 13) is rather odd as its wording replicates exactly Recommendation 7 and Recommendation 8.

LUXEMBOURG (STATEC)

2. TF ‘Data presentation and seasonal adjustment’

2.1 In order to offer comparable results, OECD countries should observe harmonized methods for data presentation. The conclusions of the working group should also be analysed by other organizations as Eurostat with the target to apply – if possible - the same rules and definitions as those degaged by the task force. The ‘OECD glossary of Statistical Terms’ should provide all the users (the general public, the informed users and the analytic users) with the main explanations of definitions and rules: clear terminologies in different publications must have obligatory the same meaning.

The proposals for standard terminologies relating to data presentation, the recommendation for the presentation of growth rates as well as the presentation of seasonally adjusted series represent a valuable input for later work in this area.

Luxembourg agrees with the presentation of annualised growth rates outlined in the paper on seasonal adjusted series and approves also that seasonal adjusted data should not be presented by year-on-year changes because this could mislead the users when comparing these growth rates to the growth rates calculated for unadjusted or only calendar adjusted data.

2.2. The ‘Manual on data and metadata reporting and presentation’ can become a high-grade resource for the statistical agencies and should be, as every methodological manual, be translated into French, the

second official OECD language. The compilation of this manual should be a continuous process and should therefore not end with a so-called *final version*. Even if some chapters or points in this manual are for the benefit of every statistician, they could be left aside, because they belong only widely speaking to the treated domain (e.g. minimisation of reporting burden, sampling and non-sampling errors, ...).

NETHERLANDS (Statistics Netherlands)

General remark: We consider these papers very useful and we are happy that these issues are tackled by the OECD.

Task force proposals for standard terminologies relating to data presentation

We are generally in agreement with the proposals.

Just some minor comments:

Par. 1.2.1, first dash: we had some difficulties in understanding this. In fact, we needed the definition of annualized growth rates from the OECD Glossary of Statistical terms in par. 1.2 to understand what is meant here. So, the definition from par. 1.2 should in our view be maintained (including the formula). One could amend it by leaving out the monthly rates.

The definition of “linear approximation of the annualized figure” may also need some reformulation (one could also include a formula here).

Presentation of seasonally adjusted series

This is also a very useful paper. Some comments:

Recommendation 3: this relates to series with no discernible seasonal variations. We feel that it may be appropriate to extend this recommendation to series where calendar effects are much larger than seasonal effects, or where it is very difficult to estimate seasonal effects.

Recommendation 4: this is where we would like to make a reservation. There is always an element of subjectivity in seasonal adjustment, and depending on the choices one makes, one can get very different outcomes. Seasonally adjusted series are therefore of a different order than the original series. This is not to say that SA series are not useful, but some caution (and a clear warning as regards its subjectivity) is called for and we would not recommend to focus on SA series as the general course of action. There are some examples where we would prefer to focus on the original series (and complement them with SA series).

What we miss in the paper is some reflection on the issue of possible inconsistencies in aggregation of SA data and how to deal with this.

Presentation of growth rates

We agree with the recommendations. Also here, it should be pointed out that seasonally adjusted series contain an element of subjectivity (see previous section).

NEW ZEALAND (Statistics New Zealand)

Paper 1 – Data presentation and seasonal adjustment

Paper 2 – Proposals for standard terminologies relating to data presentation

Statistics NZ agrees with the importance of standardising terminologies for ease of use and comparability.

1.4 *The moving average is not defined for the first p and the last f time series values. In order to compute the moving average for those values, the series must be backcasted and forecasted.*

This is not always the case as forecasting may not work well. Statistics NZ has available on the web site a paper relating to this. http://www.stats.govt.nz/domino/external/web/prod_serv.nsf/htmldocs/Effect+of+ARIMA+Forecasting

Recommendations:

1.1.1 – 2.5.4 Agree

Paper 3 – Recommendations for the presentation of growth rates

Statistics NZ does not make year on year comparisons of seasonally adjusted data. We feel that this can be seen as contrary to focusing on ‘short term developments’.

Recommendations:

1. Agree that seasonally adjusted estimates are preferred currently. However, we are investigating using trend estimates more (see presentation of seasonally adjusted data).
Agree that trend estimates, particularly at the end points, are more likely to be revised than seasonally adjusted estimates.
Disagree that seasonally adjusted estimates are the best indicators of turning points, as this assumes a low irregular/trend ratio.
2. Agree
3. Agree

Paper 4 – Presentation of seasonally adjusted data

Currently Statistics NZ media releases and publications containing short term econ statistics lead with seasonally adjusted movements. This is widely accepted by media and economists. However, at least one industry group would prefer actual data to be used.

Statistics NZ is working on time series guidelines that may result in more emphasis being placed on trend estimates. Part of the process of producing these guidelines will be consulting users to find out more about their use of data.

Recommendations:

1. Agree
2. Agree
3. Agree
4. This is current practice at Statistics NZ. However, as mentioned above we are currently investigating placing more emphasis on trend estimates.
5. Agree
6. Disagree. Statistics NZ media releases lead with movements in seasonally adjusted estimates, rather than change expressed in dollar values. This is because dollar value change can be misleading if not in context and can lead to confusion e.g. non technical users find the concept of seasonally adjusted dollars difficult to understand. However, where space permits this is included.
7. Agree
8. Agree

9. Agree. Statistics NZ appreciates the positive feedback about our seasonal adjustment FAQ web site. This web site was originally developed because of a lack of suitable international web sites. We would appreciate any feedback about the site and its content as we are always looking to improve it. Please email richard.penny@stats.govt.nz with suggestions.
10. Agree. In addition to this an indication of how often seasonal adjustment is reviewed would be useful. For example Statistics NZ reviews its seasonal adjustment of short term economic indicators annually.
11. Agree
12. Agree

Paper 5 – Draft data and metadata reporting and presentation manual

NORWAY (Statistics Norway)

Comments on the task force papers on standard terminology, growth rates and seasonal adjustment

- Provide comment on any aspect of the background material contained in the papers and in particular comment on any of the specific proposals or recommendations.

Agree with recommendations and proposals. Look for http://www.ssb.no/english/subjects/08/04/pii_en/ as an example of metadata on seasonal adjustment, also given in Annex 1.

In addition to the twelve recommendations listed in the paper <http://www.oecd.org/dataoecd/28/26/31620627.pdf> there is the question whether to make a direct or indirect adjustment. A direct adjustment is far the most common answer to this question but under special circumstances one can argue for an indirect adjustment which in this context means to compute seasonal adjusted series from more disaggregated series (seasonal adjusted). From a user point of view there are some advantages with indirect adjustment performed on aggregated series (typically totals), but professionally the recommendations are fairly clear - when performing seasonal adjustment it should be done directly on all aggregates. Should this be part of the recommendations?

Present their views on a small number of specific issues where the task force outlined a range of options/opinions or sought further input from STESEG. These issues comprise:

Justification and recommendations regarding the presentation of annualised growth rates outlined on pages 6-9 in the paper on “Presentation of seasonally adjusted series”;

Agree with both justification and recommendation

Your views and opinions on the discussion on the common practice of presenting year-on-year growth rates on seasonally adjusted series presented in para. 5 on page 1 of the paper “Task Force Recommendations for the Presentation of Growth Rates”.

Fully agree with the recommendations for presentation of growth rates.

For the "Draft Data and Metadata Reporting and Presentation Manual" STESEG members are particularly invited to:

Provide comment on the intended content of the proposed manual and identification of data and metadata reporting and to specify issues not currently included particularly those relating to annual statistics and/or social statistics.

No comment

Identify any specific relevant reference material on reporting and presentation issues prepared by either national agencies or international organisations which you believe would be of use in the preparation of the manual.

No comment

SOUTH AFRICA (Statistics South Africa)

B.1 Task Force Proposals for Standard Terminologies Relating to Data Presentation

The recommendations are sound and well researched.

Note: Stats SA doesn't presently adjust data for calendar effects.

B.2 Task Force Recommendations for the Presentation of Growth Rates

Stats SA presently comply with the first two recommendations, i.e.

- The rate of change with respect to previous period is presented using seasonally adjusted data, and
- The rate of change with respect to the same period of the previous year is applied to raw data.

There is a need for Stats SA to review the presentation of annualised growth rates as this is presently applied to only raw data.

B.3 Presentation of seasonally adjusted series

The recommendations are sound and well researched.

B.4 Draft Data and Metadata Reporting and Presentation Manual

No comment.

SWEDEN (Statistics Sweden)

Standard Terminologies relating to data presentation

STESEG Task Force on data presentation and seasonal adjustment

Comments on the proposals

Annual growth rate

Terminology OK.

Annualized growth rate:

Terminology OK.

Annualized monthly growth rates could be quite pedagogical if used with care (and based on trend estimations, if necessary), especially in graphs, where they can be presented together with year-on-year growth rates (which often can give somewhat different results, e.g. with different turning points). A number of graphs of this kind are accessible on the Statistics Sweden website, presenting GDP growth, industrial production (monthly data, growth rates based on trend cycle estimations) etc. We must bear in mind that annualizing a time series of growth rates merely means that it is rescaled. Therefore we suggest that no reference to its non-suitability should be inserted in the OECD glossary, but rather advice how it could (and should) be used.

Calendar or working day adjustment:

OK

Moving average

Definition OK. But it should be considered if there should be a reference to the fact that trend estimations should preferably be used, instead of moving averages.

Preliminary/provisional

Proposal OK. It is very difficult to obtain a distinct definition of preliminary/provisional, since there are a great variety of preliminary or provisional data (from flash estimates to figures that can be subject to revision after several years)

Definitions of cycle and oscillation, seasonal variation, time series and trend

We do not see the need of a definition of these terms that everyone can agree upon.

Inclusion of new terminologies in the glossary

Proposals OK.

Presentation of growth rates

STESEG Task Force on data presentation and seasonal adjustment

Rate of change with respect to previous period

We agree that growth rates, based on seasonally adjusted data, convey the most recent information in a time series. It should be pointed out, however, that there are very often considerable irregular movements in the series that seriously obscure “what is really happening” and make it very difficult or impossible to identify turning points. One way of avoiding this could be to utilize growth rates based on two or three month’s worth of values. This is certainly very transparent. But this means also that the most recent data are not fully utilized. We do not agree with the OECD opinion that trend-cycle estimations should not be used. Our advice is to use, in the right context (which could be e.g. graphical presentations, which do not present only the current developments), monthly or quarterly growth rates, if necessary based on trend-cycle estimations, in combination with other growth rates, e.g. year-on-year growth rate.

Rate of change with respect to the same period of previous year

This method of presenting growth rates shows what has happened during the last twelve months (or four quarters), not what happened the last period. It is late to detect turning points, and can under certain circumstances lead to very misleading conclusions. It demands (as do other methods) comments and highlighting of special effects and circumstances that effects the interpretation of the data.

The use of seasonally adjusted data for calculating year-on-year growth rates is difficult to justify. Raw or (when available) calendar adjusted data should be used.

Annualized growth rates

Annualizing monthly or quarterly growth rates is a convenient way of making these growth rates comparable to year-on-year growth rates, e.g. for inclusion of curves for both growth rates in a graph, but also for making monthly and quarterly growth rates comparable. It should be pointed out that annualizing does not mean that the development will change, just that the scale will be changed. Objections to annualizing growth rates must be seen as objections against using monthly or quarterly growth rates too. However, it seems appropriate to recommend that annualisation will be used only on the basis of time series with minor irregularities, which often means trend-cycle estimations for monthly figures.

Recommendations for presentation of growth rates

It seems that the effect of the irregular movements are underestimated in the paper – they often make it very difficult to interpret especially monthly data in a correct way, and especially in “small economy data”. The difficulties can be offset by using “rate of change based on two or three month’s worth of values”. But this growth rate could be accompanied by other growth rates, such as monthly/quarterly rate based on trend cycle estimations and year-on-year growth rate.

Year-on-year change: proposal OK.

Annualized seasonally adjusted figures: Data from a single month can be very misleading even if it is not annualized. Otherwise OK.

Presentation of seasonally adjusted series

STESEG Task Force on data presentation and seasonal adjustment

There are two sections of comments from Statistics Sweden. The first ‘general comments’ clarify the general view taken by Statistics Sweden on some of the issues discussed in the paper. The next class of comments, ‘comments on recommendations’ refers to the recommendations from OECD given in the paper.

General Comments

Seasonal adjustment (SA) have been widely discussed since about ten years. A great deal of work has been made on such thing as choice of filter, model-based or not model-based methods, software, timeliness, direct or indirect adjustment etc. The X-11-program is in use in England, Statistics Canada, X12 in the U.S. Tramo/Seats (TRS) in Spain, Italy and Sweden. There has been a task force on seasonal adjustment at the Eurostat since many years resulting among other things in the software DEMETRA. A different quality measure for seasonal adjustment as compared to the quality measure suggested in the OECD paper, is provided by the DEMETRA program. The recommendations taken

by Eurostat is that TRS should be used by the member states. The U.S. Census Bureau has implemented the model-based decomposition of SEATS into X12 (X12-SEATS) but a different model-based program for seasonal adjustment within the framework of 'structural time series model' is in progress at the Census Bureau.

In the light of the circumstances given above, it seems unwise and not the proper moment to come forward with strong recommendations as given by the OECD paper. When there is no general acceptance on the principles of seasonal adjustment, we do not believe that such recommendations should be given at present. The discussion on publication harmonization is welcome but the discussion should continue.

It also seems that the recommendations given to a large extent rely on the use of the X-11-ARIMA or X12 framework of fixed filter philosophy. Now, the properties of the output from any SA program depends to a large extent on the algorithms used and are quite different for different programs. For instance, the X-11 or X-12 filters produces SA series with a different signal/noise ratio than TRS.

Consistency between sub-annual SA series and raw series is referred to as 'time consistency' by Eurostat in their recommendations of SA. The recommendation for this property should be made in terms of its effect on the quality of SA. We do not follow the bench marking discussion and its link to SA. When bench marking is used to increase statistical quality of monthly estimates, there is no guarantee that benchmarking of SA series provide increased SA quality. If lack time consistency is considered as poor SA, why do we not include that in a quality measure of SA? We do not consider lack of time inconsistency as an indication of poor SA.

Comments on recommendations

We agree on recommendations 1-6, 8 and 9. We disagree or are not certain on the other recommendations. Some arguments are given below.

Recommendation 7.

TRS is since 1998 used for SA at Statistics Sweden for all national accounts series and will be implemented for all time series in the next years. SCB has started to publish annualized growth rates for some statistics. This can be made with quarterly or even monthly SA series when there is considerable quality control of the SA procedures. A growth rate of a SA value raised to a yearly level with high volatility should be an indication that there is something wrong with the SA procedure, e.g. unsuitable filter, wrong ARIMA-model, etc. Statistics Sweden use annualized growth rates for both quarterly and monthly series in graphs, e.g. for quarterly GDP, for a monthly indicator of GDP and also for some series on orders deliveries and industrial production. In such cases, the series can be downloaded. We think that the pro for making series with different period comparable is very attractive for the public. The argument against annualized growth rates given by the OECD-paper is not convincing. High volatility of such growth rates should be considered as an indication of poor SA. The philosophy taken by Statistics Sweden is to publish growth rates based on trend estimates in the presence of noisy series.

Recommendation 10

We agree that the quality of SA is important and also to provide some information (metadata) for the users. However, this is not easy. What is the reliability of SA series? Is it the revision of a SA estimate? Such revision could be explained by a revision of the original series but no change has

been made of the SA method. To separate the quality of SA and the quality of the original data is quite difficult especially for the general public.

Recommendation 11

We do not agree that such download of SA methodology to outside users is wise. SA is very difficult and should be made by experts on time series analyses. Downloading some specification parameters of a software does not help anybody.

Recommendation 12

See above comments on standard terminology and presentation of growth rates.

Draft data and metadata reporting and presentation manual

The initiative to compile a manual on data and metadata reporting and presentation must be strongly supported. Harmonization of reporting and presentation methods is very important to increase the interpretability of statistical data. The main focus is said to be on reporting standards. However, we recommend that stronger emphasis on presentation issues also should be taken into consideration. Time available has not made it possible to study the draft in detail and therefore we give no comments on the proposals, recommendations etc. included in the draft. Some of them have been commented upon in connection with the background material to the meeting. We assume that statistical offices will get further possibilities to examine the work under progress during the next year.

We support the initiative to include quality aspects and metadata in a more co-ordinated way than is usual, and to make references to activities carried out by other organizations. It is important for national statistical agencies to be able to report data and metadata in a standardized way to different international organizations. In the document time series and seasonal adjustment are explicitly mentioned, which is good, but work in these fields is going on at Eurostat too. Eurostat has also, for several years, been preparing a manual on quality reports. This can be seen as examples that indicate that international organizations should try to further develop and expand their co-operation.

SWITZERLAND (FSO)

2. Data Presentation and Seasonal Adjustment

Terminologies Relating to Data Presentation / Presentation of Growth Rates

A ce sujet, nous apprécions de pouvoir compter dans le futur sur une terminologie qui a été soumise à l'examen des experts et il serait fort utile de pouvoir en disposer une version traduite en français. Ceci nous permettrait de mieux évaluer la conformité de notre pratique nationale avec les recommandations proposées. Les deux papiers soumis pour examen ne donnent lieu à aucune objection de notre part.

Seasonal Adjustment (papier 4)

La première partie de la recommandation 12 demande de ne pas annualiser les taux de croissance mensuels ou trimestriels, mais de leur préférer les taux d'année en année (YoY). Nous remarquons que dans le papier no 2 (terminologie, proposition 1.2.1), il est déconseillé d'annualiser les taux mensuels, mais aucune

recommandation n'est faite au sujet des taux trimestriels. Ne faudrait-il pas harmoniser les recommandations des papiers 2 et 4?

La recommandation 12 suggère dans une 2e partie d'annualiser les taux semestriels. Cette 2e partie ne fait-elle pas double emploi avec la recommandation 8?

Dans le papier no 3 (présentation des taux de croissance), il est dit que les taux de croissance par rapport à la période précédente et les taux de croissance annualisés devraient être calculés sur la série désaisonnalisée. Ne faudrait-il pas le préciser aussi dans les recommandations 8 et 12?

Draft Data and Metadata Reporting (papier 4)

Dans le domaine de la transmission et la diffusion de données, il faut impérativement viser une plus grande harmonisation tant sur le plan international que national. Nous ne pouvons dès lors qu'appuyer l'initiative de l'OCDE de préparer un guide à ce sujet.

Le contenu du manuel nous paraît répondre à l'objectif poursuivi. Nous apprécions l'effort de prendre en considération les nombreux travaux déjà en cours et de travailler de commun accord entre les différentes organisations internationales. Certaines parties du document (par exemple le point 5.6.2) risquent néanmoins, par leur référence à la technique de l'élaboration statistique, de confondre l'utilisateur et de lui faire perdre de vue l'objectif premier du manuel. En bref, le manuel devrait se concentrer sur les problèmes qui se posent après conclusion de l'élaboration des résultats et éviter de revenir sur la méthodologie de calcul.

UNITED KINGDOM (ONS)

2. Task force Recommendations for the Presentation of Growth Rates

Paper 2: Task Force Proposals for Standard Terminologies Relating to Data Presentation (6 pages)
<http://www.oecd.org/dataoecd/28/24/31620592.pdf>

UK Comments:

The UK welcomes the proposals.

Paper 3: Task Force Recommendations for the Presentation of Growth Rates (2 pages)
<http://www.oecd.org/dataoecd/28/25/31620613.pdf>

UK Comments:

Annualised growth rates

STESEG recommendation: For annualised growth rates, data should only be annualised on the basis of seasonally adjusted and calendar adjusted time series which contain just minor irregularities. This means that annualising the growth rates of a single month can result in misleading signals. If special effects result in problems when annualising, the limited informative value of the annualised growth rates would have to be indicated separately.

The ONS does not currently publish annualised growth rates for any series. However, the Bank of England does publish annualised three month growth rates for some series.

We would certainly endorse the view in the paper that annualised the growth rate for monthly series could be misleading, as it exaggerates the volatility of the short-term growth rate. The same argument also applies to quarterly series which have high volatility. The discussion on producing graphs of annualised growth rates covering different time periods is very interesting, but it is probably not practical to produce such graphs as part of a press release in the UK. We would agree that annualised semi-annual growth rates would provide a more up-to-date picture of current economic conditions than year on year growth rates and would therefore be potentially useful. However, it is not clear that such a presentation would fit in with our press releases in the UK, especially as it would be difficult to explain how they should be interpreted and their limitations to the target audience of these publications. More specialist readers and analysts are able to calculate annualised rate from the published data if they deem them to be useful.

In summary, we have no evidence that users in the UK want ONS to publish annualised growth rates. We agree with Recommendation 7 in "Presentation of seasonally adjusted series" that year on year growth rates are preferable to annualised quarterly or monthly growth rates. We do not agree with Recommendation 8 as annualised semi-annual growth rates would not be readily understood by the readership of press releases. We would however agree that an explicit definition of "annualised rate of change" should be recommended and that this should be included in any publication that presents annualised growth rates.

We would accept the Task Force Recommendation given above.

Year on year growth rates

STEESEG recommendation: For rates of change with respect to the same period of previous year the Year-on-Year changes should be applied to the raw data and to data adjusted for calendar effects if the latter are available. Where necessary, special effects contained in the base period should be highlighted when presenting YoY (base effects).

ONS publication focus mainly on seasonally adjusted data. Nearly all press releases contain only seasonally adjusted data although the non-seasonal adjusted series are available through the website or on request. In these circumstances it would be a radical departure from current practices to base year on year changes on the raw data. In addition, the ONS does not normally make available calendar adjusted data. Adjustment for calendar effects is viewed as being part of the seasonal adjustment process. All series that have passed through the seasonal adjustment process are labelled as seasonally adjusted even in cases where the series was found not to be seasonal or subject to calendar effects (in which case the SA series and the NSA series are the same) or subject only to seasonal effects (in which case the SA series and the calendar adjusted series are the same).

It is arguable whether the YoY change in the raw data provides a more accurate picture of what is happening in the economy than the YoY change in the SA data. Where a series has moving seasonality and the two measures are thus likely to differ, the measure based on the SA data, where this effect has been removed, could be regarded as the better one.

In situations where different data sources have to be made coherent and consistent, for example in the compilation of national accounts, the balancing in the UK is carried out using seasonally adjusted data. Any balancing adjustments are fed back into the NSA wherever possible but some aggregate series, for instance GDP, only really exist in seasonally adjusted form. In these circumstances it is impractical and inaccurate to base YoY changes on the raw data.

On the basis of the above, we reject the Task Force Recommendation.

General growth rates

STESEG recommendation: For the rate of change with respect to previous period, seasonally adjusted data is the best way of presenting information about a time series (trend cycle and irregular movements) and of presenting short-term developments, even if the irregular component is relatively large. To deal with irregular movements that blur the trend the rate of change based on two or three months' worth of values " can be utilised. Percentage changes based on the trend-cycle component should be avoided if presenting current developments, since the trend-cycle values at the current end of the series are usually estimated by extrapolating the underlying trend of the recent past and therefore convey misleading information about the true current movement. though seasonally adjusted time series also are revised over time, they reveal sooner the cyclical movements at turning points than raw or trend-cycle series..

The ONS fully endorses the whole of this recommendation. Our current practice is in line with the recommendation.

Paper 4: Presentation of seasonally adjusted series (13 pages)
<http://www.oecd.org/dataoecd/28/26/31620627.pdf>

UK Comments:

The paper from Bernard Lefrancois and Catherine Mamay is an excellent discussion of the issues surrounding presentation and dissemination of seasonally adjusted series. The recommendations in the paper are well thought out and provide a good guide to best practice. Of the remaining recommendations not discussed above, the ONS would endorse all except for Recommendation 3. It is not our current practice to refer to series as calendar adjusted. As explained above, all series that have been put through the seasonal adjustment process are deemed to be seasonally adjusted, even in those cases where the series does not exhibit any seasonal behaviour. It is perhaps worth noting that most public holidays in the UK fall on a fixed day of the week so the calendar has less effect on the data than it does in most continental European countries.

Paper 5: Draft Data and Metadata Reporting and Presentation Manual (101 pages)
<http://www.oecd.org/dataoecd/28/27/31620635.pdf>

UK Comments:

The UK welcomes the development of this manual.

UNITED STATES (Census Bureau)

Data Presentation and Seasonal Adjustment

1. The Census Bureau is in general agreement with the Task Force's proposals for standard terminologies relating to the presentation of short-term economic data. The following comments are offered to the Task Force's proposals:
 - The Census Bureau uses terminology that differs from that recommended in Proposal 1.1 in describing changes from the previous year. In the case of monthly estimates, we present the data as "current month-to-current month a year ago." Similar terminology is employed in our quarterly surveys. This convention addresses the confusion that the Task Force notes when citing this as an "annual change."
 - With regard to proposals 1.31, 1.32, and 2.51, when the Census Bureau presents data, we explicitly state that the data are adjusted for seasonal variations, and holiday and trading-day differences.
 - Regarding 2.5.3, does this proposal also hold if the component series is being aggregated with other series that have a seasonal component and are adjusted?
 - The Taskforce's proposal would define "cycle" as those fluctuations in a time series that are longer than 1.5 years. Seasonal effects are annual fluctuations. We do not disagree with this terminology, but have we allowed some ambiguity in not accounting for fluctuations in a series of more than a year but less than 1.5?
2. Regarding the "Presentation of Seasonally Adjusted Series" by Lefrancois and Mamay, we offer the following comments:
 - Regarding Recommendation 1, the Census Bureau does not require that seasonally adjusted data be published for all series that exhibit some signs of seasonality. If a series shows some seasonal

behavior, but also signs that the adjustments may be unstable, we may adjust the series only for use in a composite or total series and not publish the adjustment for the individual series.

- The authors say that the “level of detail of the indicators to be adjusted should be chosen taking into account user demand and cost-effectiveness criteria.” We suggest adding the use of diagnostics in assessing the quality of the adjustment in Recommendation 1.
 - The reference to metadata on seasonal adjustment cited in footnote 18 originates from the Census Bureau, not the Bureau of Economic Analysis.
 - The Census Bureau will disseminate its input files to X-12-ARIMA on request. We do not advertise their availability, however. X-12-ARIMA is available for free, and with our specification files, users can run seasonal adjustments and do their own analysis. We have a Windows version of X-12 and some documentation for beginning users. We agree, however, this should not be expected from the general public.
 - The Census Bureau, in cooperation with the authors of SEATS, has written a beta version of a program called (temporarily) X-13-SEATS, and this would give one set of instructions that would compute X-11-, X-12-, or SEATS-type adjustments in one program. This new software should prove very helpful.
 - Finally, ARIMA, TRAMO, and SEATS are all acronyms and should be capitalized throughout the paper.
3. The Census Bureau agrees with the Task Force’s recommendations for the presentation of growth rates, except as noted below:
- We present “year-on-year” changes in two ways – not adjusted and adjusted to account for both seasonality and trading day effects. Applying only calendar effects to the raw data would introduce a third series for each data element – unadjusted, seasonally and calendar adjusted, and calendar adjusted only. We observe small differences in the seasonal effects of year-on-year changes. Thus, we believe this could be confusing to some of our less sophisticated users without adding appreciably to the analysis of change in the estimates.

UNITED STATES (Bureau of Labour Statistics)

1. STESEG Task Force on Data Presentation and Seasonal Adjustment

Comments on the taskforce proposals, including comments on the presentation of annualized growth rates and of year-on-year growth rates on seasonally adjusted series, are provided below.

Task Force Proposals for Standard Terminologies Relating to Data Presentation

As a general comment, the proposals seem useful and reasonable.

Section 1.1.1 and proposal:

The paper proposes “year-on-year” change as a standard. BLS would prefer “over-the-year.” Many if not most of the analysts at BLS would assume that year-on-year meant annual average-to-annual average, or, perhaps, December-to-December. Also, the analytic thought flowing from the phrasing “over-the-year” suggests “from one point in time (a month or a quarter) to one a year later.” The year-on-year phrasing suggests “from one full year to the next.”

Section 1.3:

Most seasonal adjustment practitioners in the United States area accustomed to the term “trading day adjustment” rather than “working day adjustment.” While it doesn’t affect the proposals, it would be clearer to include the term “trading day adjustment” somewhere in the section.

The section refers to “new recording practices” as something that may be addressed as a part of the “calendar adjustment.” This seems to be a substantive program change that should be addressed explicitly in its own right.

Section 2.1:

The word “economic” should be inserted in the terminology--...”cycle (in economic time series)”... Especially when using 1 ½ years in the definition, it would make sense to limit the term to economic time series.

This section uses the concepts of “expansion” and “recession.” These (especially recession) are specialized terms in business cycle analysis. One can conceive of economic time series that have cycles that are not the same as the business cycle in timing, frequency, or amplitude. (Indeed, some analysts have detected longer waves in time series that have good business cycle properties: Kondratieff (54 years), Kuznets (18 years), Juglar (9years) and Kitchin (4 years) cycles.) Perhaps more general terms—perhaps “expansion” and “contraction”—can be used.

Task Force Recommendations for the Presentation of Growth Rates

This paper also uses the term “year-on-year change” to describe the change between the current period and the same month or quarter in the previous year. BLS prefers using the term “over-the-year” change to present that concept. (Please refer back to comments on Section 1.1.1. in the paper on standard terminologies for data presentation.)

The paper takes a stand against the use of seasonally adjusted data to calculate over-the-year changes. From the presentation perspective, while we can accept their assertion that “(T)echnically it would not be incorrect to advise against the utilization of YoY [year-on-year] changes on seasonally adjusted data,” it has been BLS experience that in cases where the seasonally adjusted month (quarter) to month (quarter) changes are presented in the same analysis as an over-the-year change, the shift between seasonally adjusted and not seasonally adjusted bases creates more confusion than the increment in technical propriety gains in precision. The commenter stated interest in seeing cases where one’s qualitative judgment of economic conditions is materially affected by the differences in rate of change obtained from the two.

In the case of annualizing growth rates of monthly data, BLS practice is to use a minimum of 3 months of data before we present such a measure.

It was recommended that this paper could be combined with that by Lefrancois and Mamay, and that it emphasizes clarity to users, but at a price.

Recommendation 1: agree.

Recommendation 2: disagree. The purpose of seasonal adjustment is to allow valid comparisons across any time span. If we believe in our methods, calendar adjusted data are better than raw data and seasonally adjusted data are better than calendar adjusted data, even for 12-month intervals. In addition, it is highly inconvenient for analysts in or out of an agency to switch from adjusted to unadjusted data for lags of 12 or 24 months (4 or 8 quarters).

Recommendation 3: this is a weak recommendation. The discussion seems to argue against the suggestions in Lefrancois and Mamay. The paper gives no preparation for the “irregularities” and “special effects” which appear in the recommendation.

Paper on Presentation of Seasonally Adjusted Series

BLS feels that this paper provides a useful classification of data users and discussion of their needs. It also gives clear definitions of growth, and explains its recommendations on growth measures.

Section 3.1:

Recommendation 4: The discussion leading to the recommendation begins with the questions “Should the unadjusted data be presented...?,” but the recommendation does not address this specifically. In agreement with Recommendation 4, BLS emphasizes the seasonally adjusted data. However, BLS always makes available the unadjusted data. Many important users, especially from the academic community, want and prefer the unadjusted data. The recommendation would be strengthened by suggesting availability of the unadjusted data or at least acknowledging that many users want the unadjusted data.

Recommendation 5: Following this recommendation, the authors appropriately mention the fact that annual averages for unadjusted and seasonally adjusted series may differ. Wisely, they do not recommend forcing them to agree. Forcing agreement can introduce noise into the seasonally adjusted series.

Section 3.2:

The discussion of growth rate definitions and their properties is well done.

Page 8, paragraph 1. A suggested alternative wording for lines 6-8:

“As k increases...but they better reflect the growth $k/2$ periods before the current period. This is called a **phase shift**.”

Recommendation 7 is reasonable although it appears to be inconsistent with BLS practice on quarterly series. Likewise, Recommendation 8 is reasonable, although it might be hard to express when dealing with monthly data. (For example, is the proposal that we say “Over the six months ending in April, seasonally adjusted employment grew at a $x.y$ percent annual rate, about the same as the rate in the six months ending in March.”)

Section 3.3:

Paragraph 1: Rather than referring people to the website, we suggest including part or all of the description of the Fisher index.

Recommendations 11: The recommendation should be broader. Alternative language could be:

“...to enable outside users to carry out seasonal adjustment in a manner consistent with methods used by the agency for that statistical program.”

Recommendation 12 is not needed, as it repeats Recommendation 7 and 8.

EUROPEAN CENTRAL BANK

2. Task Force on data presentation and seasonal adjustment

A prerequisite for the monitoring of the short-term development of economic statistics is the availability of seasonally adjusted data. Especially for the compilation of seasonally adjusted data for the euro area as a whole, it has to be decided whether to aggregate seasonally adjusted country results or whether to derive them from seasonally adjusted raw euro area aggregates (“indirect” versus “direct” adjustment). Besides methodological aspects of seasonal adjustment, which were not covered by the mandate of the TF, issues of data presentation play an important role for all users of (seasonally adjusted) data. The guidelines for the harmonisation of current presentations of statistical results in press releases or other publications should focus on international comparability so that core information can be used most efficiently by the broad public. A full harmonisation of national practices seems unnecessary. For cross-country comparisons, the interested user should consult international sources (e.g. Eurostat, OECD, IMF).

Specific comments on the presentation of seasonally adjusted series:

For a better understanding of the performance of seasonal adjustment and its effect on the results national agencies and international organisations might be asked to:

explain their policy of seasonal adjustment in the context of permanent data production, e.g. use of concurrent or forecasted factors, application of standard specifications, the software used etc.

provide information for the most important adjusted series whether an additive or a multiplicative approach is applied and whether the series are adjusted directly or indirectly.

provide information for revised series to indicate whether the revision was due to changes in the raw data or a result of updating seasonal factors, e.g. by using flags.

To keep a balance between information for key indicators necessary for a sound understanding on the one hand and the burden of providing detailed metadata on the other, it has to be underlined that detailed metadata should only be provided for the most important statistics.

To grant a broad access to metadata information, the national agencies and international organisations might be asked to:

provide an English version of the metadata for key indicators made available to their users.

With regard to further work of the STESEG, the following topics might be considered:

The overall aim is to increase comparability of results; however, the presentation of results is just one aspect. A discussion of underlying methods and applied methodologies should not completely be ignored.

Some findings of the TF might be reflected in the OECD Glossary of Statistical Terms 1; e.g. moving average, calendar adjustment. Here, very beneficial work of the TF could result in a review of the existing entries in the glossary.

According to our experience, the applied adjustment of calendar effects is often not transparent and, consequently, leads to confusion of users. The data presentation guidelines should include this topic.