Executive summary

1. The Third International Seminar on early warning and business cycle indicators, held from 17 to 19 November in Moscow, Russian Federation, was organized by the United Nations Statistics Division (UNSD), the Statistical Office of the European Communities ( Eurostat ), Statistics Netherlands and the Federal State Statistics Service of the Russian Federation (Rosstat). The seminar was hosted by the Higher School of Economics.

2. This seminar was part of a series of three international seminars initiated by UNSD and Eurostat in February 2009. The series has the purpose to formulate an international statistical response to the economic and financial crisis for improved monitoring of the rapid and systemic changes in the global real economy and the financial markets and the impacts on vulnerable countries and population groups.

3. The purpose of this third seminar was to follow up on the findings of the first two seminars held in Ottawa, Canada in May 2009 and Scheveningen, The Netherlands in December 2009, which discussed the statistical and analytical aspects of early warning indicators for the measurement of economic and financial vulnerabilities and tracking changes in economic activity.

4. Following the work areas identified during the Scheveningen seminar, this third seminar was organized around five themes, namely, i) flash estimates of gross domestic product; ii) the role of composite indicators in tracking business cycles; iii) the role of tendency surveys in tracking economic trends; iv) a data template for short-term economic indicators; and v) communication and dissemination of indicators. Between the Scheveningen and the Moscow meeting, working groups had already started to work on issues in these areas.

5. Each theme was introduced in a plenary session outlining the scope of work intended to be covered by the working groups that had been formed and already achieved progress. In the plenary sessions, participants could provide general comments on the individual work programmes and indicate connections between the different areas that need to be considered. Separate break-out sessions allowed the working groups to consider these comments and further continue the work in their respective areas with a view of clearly identifying outputs and timelines. During a final plenary session, the outcome of the break-out sessions was discussed and final recommendations formulated.

6. Participants to the seminar were welcomed by Mr. Leonid Gokhberg, First Vice-Rector of the National Research University - Higher School of Economics (HSE); Mr.
Keynote addresses were given by Mr. Alexey Ulyukaev, First Deputy Chairman of the Central Bank of the Russian Federation, Mr. Andrey Klepach, Deputy Minister of Economic Development of the Russian Federation and Mr. Vyacheslav Krymov, Minister of Economy, Moscow Region, who highlighted the importance and use of short-term indicators using specific examples of recent economic development in the Russian Federation. The general need for harmonization of approaches was underlined by all speakers during the opening session.

Following the opening of the seminar, UNSD reported on the general progress of the statistical response by the global statistical community on the financial and economic crisis and the purpose of the seminar. Eurostat reported on recent European work in this area, including the “Europe 2020” initiative and a system of macro-economic, budgetary and structural surveillance.

The session on Flash estimates of GDP highlighted the main issues related to rapid estimates, in particular of GDP, as well as the progress and debates generated around these topics in the past months. Flash estimates of GDP are part of a sequence of estimates associated to GDP characterized by the different amount of basic information required in the compilation, the prominence given to the different aspects of quality, in particular the trade-off between timeliness and accuracy, and the technical approaches used in deriving the different statistical products.

The session on business cycle composite indicators (BCCIs) highlighted important aspects of the BCCIs through presentations and discussions. While participants acknowledged the practical utility of BCCIs in the early warning system, the question of whether national statistical offices should be involved in the production of BCCIs remained a key point of discussion. Already carried out work for the compilation of a handbook to develop a normative standard on BCCIs was acknowledged.

The session on tendency surveys demonstrated the usefulness of sentiment indicators in providing an early warning of changes in economic activity and underlined the need for harmonization of approaches in this area. Existing guidelines prepared by the European Commission and the Organization for Economic Co-operation and development, were confirmed to serve as basis for future harmonization work in combination with the global survey on sentiment indicators, recently carried out by the working group.

The session on data template and analytical indicators provided an overview of the work carried out since the first seminar in the series in seeking agreement for an international data template for short term economic statistics and indicators along with the metadata for the purpose of early detection of vulnerabilities and turning points, along with assessing the availability and relevance of the supporting statistical methodology for each indicator in the data template. A key part of the session was dedicated to the development of data hubs for centralizing the information collected in the template.

The session on communication and dissemination discussed latest development of standards and issues in this area and reviewed in particular the development of recent visualization tools to aid in the dissemination of statistics. Apart from technical aspects, the
question of how to engage new media in the effective and timely dissemination of statistics was a main part of the discussion.

14. Based on additional discussions in the break-out sessions and the final plenary session, the following recommendations were made:

   i) Produce a glossary of rapid estimates terminology and a handbook on rapid estimates;

   ii) Produce a handbook on business cycle composite indicators;

   iii) Establish a global inventory of practices used for composite indicators;

   iv) Produce a handbook on tendency surveys, based on existing guidelines by EC and OECD;

   v) Finalize the data template and harmonize it with other existing initiatives, like the PEEI, and to produce a supporting handbook;

   vi) Create procedures for the collection and dissemination of the data template based on a standardized technology (such as SDMX);

   vii) Promote the creation of single access data hubs in countries;

   viii) Produce a handbook on best practices in visualization guidelines;

15. As there is potential overlap between these outputs, any handbooks or documents produced should be produced in a coordinated manner.


Session 1. Opening

17. Participants to the seminar were welcomed by Mr. Leonid Gokhberg, First Vice-Rector of the National Research University - Higher School of Economics (HSE); Mr. Alexander Surinov, Head of the Federal State Statistics Service (Rosstat); Mr. Paul Cheung, Director, United Nations Statistics Division (UNSD); and Mr. Roberto Barcellan, Head of Unit, Statistical Office of the European Communities (Eurostat). Mr. Cheung noted the importance of economic early warning indicators for risk analysis and mitigation of economic crises for developed and developing countries, alike. He said that an early warning system adds a burden on official statistics so this seminar must show the practical value of these systems to governments. Mr. Cheung stressed the need for this third and last seminar in the series on early warning and business cycle indicators to provide recommendations to governments on how to mainstream rapid estimates into official statistics by producing handbooks and guidance. The other speakers noted the importance of international harmonization in producing rapid estimates and highlighted the importance of coordinated economic statistical systems, such as the Principal Global Indicators, and the need for coordination to extend to more countries in order to provide information in the face of economic crises.
18. Mr. Alexey Ulyukaev, First Deputy Chairman of the Central Bank of the Russian Federation highlighted the need for rapid GDP estimates, especially when economies such as Russia face an external shock, as when the South East Asian crisis in 1997 affected the Russian economy. In response to this crisis a committee in Russia was set up to monitor the impacts and measure GDP on a monthly basis. Mr. Ulyukaev argued that, since the next crisis will come at some point, countries need to balance speed and quality of data to provide necessary information and indicated that Russia will aim to further produce monthly GDP estimates and urged an international consensus on monthly GDP estimates.

19. Mr. Andrey Klepach, Deputy Minister of Economic Development of the Russian Federation explained how statistics are a tool used to improve economic analysis. He described how the Ministry had predictions that a crisis would happen at the end of 2008, but that the predictions did not foresee the severity of the crises. The Ministry had calculated monthly GDP since the 1990s, but he suggested that Rosstat take over this responsibility as part of their economic statistics programme. He also elaborated on accounting problems for a fast GDP estimate specific to the Russian situation and specific industries. The need to combine many existing indicators was discussed, while pointing out that many of the existing indicators are not leading indicators and react only months after the start of the crises. An additional difficulty is that in the past no real cycles existed in the Russian economy (e.g. around the 1998 crises) and that the current crisis is part of the first “real cycle”.

20. Mr. Vyacheslav Krymov, Minister of Economy, Moscow Region highlighted that Russia is a federation and depends on state statistics. Mr. Krymov suggested that developing early warning indicators in such a system is important but will require more resources. He indicated that three types of databases are maintained, namely on economic indicators, on the system of forecasting and on object-oriented indicators. He indicated that measurements show that the Moscow region has grown back to 2008 level in July 2010 as a sign of strong recovery.

21. Discussions in Session 1 continued with Mr. Barcellan reporting on recent European experiences with macroeconomic monitoring and surveillance. Europe has embarked on two initiatives, the “Europe 2020” initiative and a system of macro-economic, budgetary and structural surveillance, both to serve policy purposes. The “Europe 2020” initiative includes five headline targets – employment, research and development, climate change/emissions, education, and poverty. As such the initiative establishes three priorities: smart growth, sustainable growth and inclusive growth linked to these headline targets. The concrete targets are being measured by statistical indicators. The system of macro-economic, budgetary and structural surveillance establishes a set of tools to strengthen EU governance.

22. Mr. Ivo Havinga, Chief of the Economic Statistics Branch, United Nations Statistics Division then reported on recent developments in macroeconomic monitoring. He noted that short term data often exists but is not easily accessible to those who need the information on a timely basis, and there where data gaps exist in rapid estimates. The practical benefits of rapid estimates need to be conveyed.

23. Following the updates by Mr. Barcellan and Mr. Havinga, Mr. Gyu Don Jung, Director General, Economic Statistics Bureau, Statistics Korea, appraised the seminar of the development of a business cycle tracer. In Korea, Mr. Jung noted, ten indicators are produced on a monthly basis. The indicators span a broad range of sectors and the tracer is publicly available as an animated web tool.
Session 2. Flash GDP

24. Session 2 on Flash GDP was chaired by Mr. Roberto Barcellan, Head of Unit, Price Statistics – Purchasing Power Parities, Eurostat.

Presentations

25. Mr. Barcellan recalled the main issues related to rapid estimates, in particular of GDP, as highlighted in the Ottawa and Scheveningen seminars as well as the progress and debates generated around these topics in the past months. Starting from the relevance of the GDP, he pointed out as the flash estimate of GDP is part of a sequence of estimates associated to GDP characterised by the different amount of basic information required in the compilation, the prominence given to the different aspects of quality (first of all the trade-off between timeliness and accuracy) and, in a cause effect chain, the technical approaches used in deriving the different statistical products.

26. The financial and economic crisis has produced an impact on statistics by pointing out the need for statistical information going beyond GDP and complementing it with other macroeconomic indicators more or less directly related to GDP. Recent developments of dashboards (The Netherlands, Eurostat, the G20 Korean dashboard) aimed to give an answer to the increasing demand for rapid information on coordinated sets of key macroeconomic indicators. Within Eurostat the Principal European Economic Indicators (PEEIs) are evolving in this direction, as well as the first level of the template promoted by the United Nations Statistics Division as follow-up of the Ottawa-Scheveningen-Moscow seminars and the first level of the Principal Global Indicators as set up by the Inter-Agency Group on Economic and Financial Statistics. The dashboard approach, as proposed, has the advantage to be flexible and adaptable to diverse and evolving information needs by simply varying its composition.

27. From a traditional macroeconomic point of view, information on prices, national accounts, labour market statistics, short-term economic and financial statistics and external trade seems to represent the minimum amount of statistical information necessary to understand the developments of the economy.

28. In relation to the GDP rapid estimates, the dashboard and its dynamic evolution can offer the possibility to understand the context of a specific rapid estimate (through the interconnections with the key macroeconomic indicators and selected GDP components), its accuracy (through the sequence of revisions), the prediction abilities of forecasts and leading indicators. Moreover, the structure of the statistical information can be associated to a pyramid conveying a key message on the statistical production process by visualising the dependencies in the statistical chain and highlighting the causes and effects that qualify the final products (quality of the final product depends on the quality of the input used to compile it).

29. The session was completed by a discussion on contributed papers on country experiences in Flash estimates of GDP. Vladimir Popov - UN Development Policy and Analysis Division - discussed four country contributions on: Flash Estimates of GDP: Russian Experience; Measurement of Flash Indicator of Macroeconomic Inflation (Russia); Quarterly GDP Estimation in China; and Developing Early Warning Indicators in Oman. The authors of the Russian and Chinese papers briefly introduced their papers and highlighted the main results.
Discussion

30. Due to time constraints, only a short discussion took place with focus on defining the dashboard and the different typologies of statistical products. The need for a glossary on rapid estimates was confirmed, as well as for establishing an international cooperation for defining the guidelines and the strategic short-, medium- and long-term objectives in this area. The idea of a handbook on rapid estimates was supported as well as the methodological developments and the collection of best practices (through dedicated seminars and/or knowledge sharing). Finally, the role of communication on rapid estimates (creating a "culture" of rapid estimates) was also emphasised.

Outcome

31. Rapid estimates are important statistical products fit for different purposes (nowcasts, flash estimates and advanced/preliminary estimates). For each of these statistical products, basic information and methodology needs to be qualified. A standalone rapid estimate of GDP is not sufficient to get a picture of the short-term movements of the economy and should ideally be considered within a set of rapid estimates of key macroeconomic indicators (the dashboard approach).

32. Rapid estimates are the outcome of a statistical production process. Rapid estimates for a set of key macroeconomic indicators require therefore a coherent approach within the national statistical production process. Coherence is also necessary among the different typologies of rapid estimates and their sequence of releases. Coherence strengthens the role of rapid estimates as an instrument to provide an encompassing picture of the short-term evolution of the economy.

33. A communication strategy is paramount to sustain the role of rapid estimates and to enhance their understanding by users.

Session 3. Business Cycle Composite indicators

34. Session 3 on composite indicators was chaired by Mr. Geert Bruinooge, Deputy Director General, Statistics Netherlands.

Presentations

35. Mr. Geert Bruinooge gave an overview of the work progress of the working group on business cycle composite indicators (BCCIs). He reported that a number of teleconference meetings were being held in 2010 to discuss the strategy and roadmap for the international work in the area of BCCIs. He put forward a proposal to compile a handbook and to form a technical expert group. He further stated that a draft annotated outline of the handbook, a note on the relevance and practical utility and a draft questionnaire for the global assessment on BCCIs had been developed to provide a basis for relevant discussions in the seminar.

36. Mr. Martin Weale, External Member, Monetary Policy Committee, Bank of England, presented his research on the role of leading indicators on banking crisis and recessions. His research provided evidence for interdependency between recessions and banking crises that were driven by common underlying factors. He mentioned that banking sector capital, liquidity ratios and the current account deficit were useful predictors of banking crises. He
further suggested that sharp falls in OECD leading indicators of GDP growth help predict recessions, as did movements in real house price inflation and declines in banks’ liquidity ratios. He concluded by stating that although models in his paper tend to over-predict recessions and banking crises, they still provide policymakers with useful information on changing risks of crises and recessions.

37. Mr. Kajal Lahiri, Distinguished Professor of Economics, University of Albany, presented his research on the usefulness of the transportation services index (TSI) in giving early signals on recessions. He showed that the TSI was roughly coincident with the onset of growth slowdowns and recoveries from recessions, and it outperformed other coincident indicators in dating troughs of the US business cycle. He concluded that transportation output could be included as part of coincident indicator systems in giving early signals for the turning points of the economy.

38. The session was completed by discussions on contributed papers on country experiences in BCCIs, where Mr. Gian Luigi Mazzi, Head of Section, Euroindicators, Eurostat, was the discussant. The first paper discussed Mexican experiences in tracking business cycles. Mr. Mazzi explained the new system of composite indicators (SCI2) developed by the National Institute of Statistics and Geography (INEGI) in Mexico, which used the OECD methodology and was based on the growth cycle approach. He noted that leading indicators in the system were able to provide a direction of the economic trend in the short term but not in magnitude, and that INEGI is working on the rapid estimate of GDP to complement the information. He also stressed the importance of simultaneous monitoring of classical and growth cycle in tracking business cycles. Overall, he indicated that SCI2 is a nicely designed system.

39. The second paper discussed Russian experiences on cyclical indicators. Mr. Mazzi explained the qualitative comparisons of different coincident and leading indicators presented in the paper. He noted that the paper was interesting and some composite cycle indicators do contain useful leading information. He proposed that more efforts could be put on the construction and calibration of leading indexes.

40. The third paper discussed the Indian experiences in constructing composite leading indicators to track GDP growth. Four models were proposed in the paper and Mr. Mazzi indicated that they supplied useful information for forecasting GDP two months ahead of time. He also suggested that further improvements could be achieved by examining more leading indicators. He finally stressed the need to identify more series for determining reference cycle turning points since the Indian economy is continually evolving and far too complex to be summarized in a single reference series.

41. The author of the forth discussed paper, *Early Warning Indicators to Predict Financial Crises* in the context of Bank of International Settlement research, briefly introduced his paper and highlighted the main results. The paper stressed the importance of long series of financial data such as cross-border banking data as early warning indicators.

Discussion

42. The plenary discussion focused on whether national statistical offices (NSOs) should be involved in the design and production of BCCIs. Some of the participants expressed reservations about including BCCIs as part of the core programme of NSOs because of its analytical nature and credibility issues. The peculiarity of countries made it difficult to define
a core set of component statistics. Some suggested that NSOs should be involved, as official statisticians have technical expertise and discipline to govern the quality and enhance the usefulness of the indicators. The importance of educating the public about the design and uses of BCCIs was pointed out. Some participants shared the opinion that producing BCCIs would enhance the relevance of the NSOs to meet society needs.

**Outcome**

43. Important aspects of the BCCIs were shared through presentations and discussions. The decision whether NSOs should be involved in the production of BCCI rested on the condition of each country and no common position was reached. However, participants acknowledged the practical utility of BCCIs in the early warning system, and agreed that NSOs should improve their understanding and be involved in the production of component statistics of BCCIs. Participants also agreed that the compilation of a handbook to develop a normative standard on BCCIs can serve this purpose.

**Session 4. Tendency Surveys**

44. Session 4 on Tendency Surveys was chaired by Mr. Shyam Upadhyaya, Chief Statistician of United Nations Industrial Development Organisation (UNIDO).

**Presentations**

45. An overview of the work programme of the working group on tendency surveys was presented by Mr. Ralf Becker, Chief, Industrial and Energy Statistics Section, UNSD. Sentiment indicators, as covered by the work of this working group, are 100% survey-based indicators, obtained by transforming qualitative survey responses into a single time series indicator. The surveys themselves are referred to as tendency surveys. Many organizations from both official statistics and private organisations conduct tendency surveys. Currently, many different practices are used to conduct tendency surveys and compile sentiment indicators in these organisations, although the European Commission and the Organisation for Economic Co-operation and Development (OECD) have provided guidelines for tendency surveys that are followed by many of their respective member countries. The working group has conducted a world-wide survey of tendency survey practices to assess the level of harmonization across the globe.

46. An overview of the history and current efforts in harmonization of business and consumer tendency surveys was presented by Mr. Gyorgy Gyomai, OECD. Tendency surveys began in the early 20th century and were first conducted by business associations and Chambers of Commerce. Harmonization steps were first taken by the Directorate General for Economic and Financial Affairs (DG ECFIN) of the European Commission in 1961, establishing a standard framework for such surveys in the 1970s. The OECD subsequently worked with the European Commission to adapt this system for use by a wider group of countries. Much of the early development and recent improvements in business tendency surveys is due to the activities of the Centre for International Research on Economic Tendency Surveys (CIRET), augmenting the regular workshops co-organized by DG ECFIN and OECD on tendency surveys.

Two recent guidelines on tendency surveys have been prepared by the OECD (2003) and the European Commission (2006). The EC handbook is a very specific, implementation oriented guideline, while the OECD handbook is wider in scope to allow for use by a larger group of
countries. All these efforts focused on tendency surveys because they are cheap, light surveys, the response burden is low, and they are timely. Since they do not have to follow a fixed framework, such surveys have the ability to mix different types of questions (e.g. perception type, measure type, descriptive type etc.). Since some of the series provide advance warning of changes in aggregate economic activity, the tendency survey releases are widely monitored, and have a proven track record as market movers. Harmonization of these surveys will be useful for aggregation of survey results across countries and will improve the quality of the surveys by using time tested questions.

47. Following these overview presentations were two paper presentations that focused on the usefulness of tendency survey data. Mr. Martin Weale presented a paper titled “Qualitative Business Surveys: Signal or Noise?” Qualitative surveys are of interest because they are very timely and qualitative data generally match well the later reported quantitative data (based on turnover data provided by firms). For such comparisons to be made more easily, the sampling frame for tendency surveys should be consistent with official statistics sources. Mr. Weale also indicated that a panel approach would have advantages, as it would in addition allow tracking the changes of opinion of reporting units. He reviewed data from tendency surveys and official statistics for non-crisis and pre-crisis periods (2004 and 2008) and illustrated the signals that these series send. While the main conclusion was that consistency between the forecasts by tendency surveys and actual measured data exists, the question of when to use what indicator to predict a turning point remains.

48. Mr. Michael Graf, KOF Swiss Economic Institute, discussed whether business tendency surveys can be used to improve output gap estimates. The output gap is defined as the relative deviation of observed GDP from the potential GDP. While real GDP is already difficult to obtain or estimate in real time, estimates for potential GDP (which is an inherently unobservable variable) are even more difficult, with revisions that are often as large as the gap itself. Results from Mr. Graf’s study show that business tendency surveys do provide information for each revised estimate of the output gap.

49. An overview of four additional papers on country experiences with tendency surveys was provided by Mr. Teck Wong Soon, Singapore Department of Statistics. The papers discussed were: Practice of Business Tendency Surveys In Russia: Methodology Aspects and Possibilities for Early Warning of Economic Activity Changes, The Introduction on Business Climate Survey in China, Research Study of Business Cycle and Early Warning Indicators for the Economy of Hong Kong and Construction of Cyclical Indicators for Ukraine on the BTS Basis. Russia has adopted harmonized international practices in their tendency surveys, with the surveys being carried out by Rosstat, while development of methodology and data analysis is carried out by HSE. The Ukraine is also using harmonized indicators and has found that for each industry sector their tendency survey indicators coincide well with the level of economic activity in that sector. Indicators from tendency surveys are used for modelling GDP, exchange rates and industrial output. China conducts a business climate index that correlates and predicts GDP. Hong Kong has a number of composite indicators of high quality and high frequency. The experiences from these four countries show that qualitative survey information provides relevant, leading indicators of economic activity.

Discussion

50. A short discussion followed the presentation on tendency surveys. Russia noted that the tendency surveys they conduct provided early signals of economic crisis in both 2008 and 1998. The surveys generally provide information one quarter in advance of other economic
data, especially for retail trade. Russia is now looking to create one indicator from five sectors in which they conduct tendency surveys. Ukraine commented that agriculture sentiment indicators should not be included in an aggregated indicator because of quality concerns.

Outcome

51. Participants in general confirmed the importance and utility of tendency surveys, especially the leading indicator quality of these surveys. Participants also agreed that tendency surveys should be a part of official statistics, although they stressed that the many private organisations that conduct tendency surveys are a valuable part of tendency survey landscape and should continue conducting their high quality surveys. More discussion in the breakout session should focus on a new international handbook for tendency surveys.

Session 5. Data template and analytical indicators

52. Session 5 on data template and analytical indicators was chaired by Mr. Ales Capek, Head of Unit, Key indicators for European policies, Eurostat.

Presentations

53. Mr. Ales Capek opened the session by giving a short introduction on the importance of the data template in providing information on statistical data and in dissemination.

54. Mr. Ivo Havinga gave an overview of the programme of the working group on data template and analytical indicators. The objectives of the working group on data template and analytical indicators are: first, to seek agreement for an international data template for short term economic statistics and indicators along with the metadata for the purpose of early detection of vulnerabilities and turning points; second, to review the availability and relevance of the supporting statistical methodology for each indicator in the data template; third, to explore the feasibility of national central data hubs; and finally, to apply a strategic approach with diagnostic tools for data assessment.

55. Mr. Havinga recommended the international data template of short term economic indicators be based on the System of National Accounts (SNA) and be able to illustrate main dimensions of economic development. He proposed a three-tier structure: Tier 1 corresponds to an international core set of statistics; Tier 2 corresponds to strategic indicators in detailed levels such as sectoral accounts and new indicators; and Tier 3 corresponds to country specific indicators. He stressed the importance of reference metadata for data assessment and harmonization of compilation of statistics, and recommended a standardised metadata format based on the Special Data Dissemination Standard (SDDS) and Statistical Data and Metadata Exchange (SDMX). He pointed out that the United Nations Knowledge Base on Economic Statistics represented the first inventory of existing guidance and best practices, including for the economic and financial indicators of the international data template. Regarding the strategic assessment of the strengths and weaknesses of the national statistical system on short term indicators, he suggested the use of diagnostic tools developed for national accounts and supporting economic statistics. He added that national centralized data hubs to be built for the internationally recommended data template should adhere to international statistical and dissemination standards based on SDMX metadata structure and provide a single access point for a country. The creation of the national hubs for a national statistical system will reflect the vision to be instrumental in establishing harmonized data collection and dissemination practices and in improving international comparability of short term statistics.
56. Mr. Werner Bier, Deputy Director General Statistics, European Central Bank, discussed the political legitimacy of the national data hub exercise in the G20 context, and presented the role and challenge of official statistics in multilateral surveillance and policy coordination. He stated that uncoordinated national policy responses to a global financial and economic crisis are insufficient and can even be counterproductive. Therefore, specific economic and financial indicators suitable for national policies must be complemented by comparable indicators that are timely available at the international level. He called upon official statistics to support multilateral surveillance in a world of increasing economic interdependencies among main economies and argued that the international and national statistical authorities have the technical and organisational means to master this challenge by close cooperation. He pointed out that in addition to an agreed medium- to longer-term vision for official statistics, limited pilot exercises are needed in the short-term to exercise and prove effective international cooperation. He argued that the coordinated implementation of the Principal Global Indicators (PGI) and the data template for a core set of short-term economic indicators are such short-term pilot exercises that provide clear and stable reporting requirements (in terms of detail, frequency and timeliness)

57. Mr. Havinga presented the United States’ experiences of cyclical indicators on behalf of Ms. Carol Moylan, Bureau of Economic Analysis (BEA). The presentation stated that the BEA and other statistical organizations produce a broad set of analytical indicators to be used by US policy makers, and demonstrated the performance of these analytical indicators in the last recession. It further offered an insight in the creation of pre-arranged groups of pre-selected short-term indicators for specific sectors (such as the housing sector) in assisting the user to better be informed using the leading, lagging and coincidence properties of the indicators.

58. The session was completed by a discussion on contributed papers by India, Brazil and India on country experiences in developing national data hubs, where Mr. Eduardo Nunes, the President of Brazilian Institute of Geography and Statistics (IBGE) was the discussant. Mr. Nunes summarized countries’ experiences by stating that developing a data template for a core set of short term indicators is crucial for countries to produce comparable statistics and for macroeconomic surveillance. The combination of the data template with a business cycle tracer could be a good option to integrate the macroeconomic template with a tool for monitoring key indicators. He pointed out that the Indian and Brazilian papers stressed the importance of coordination of national statistical systems to avoid duplicated efforts, and recommended developing an international data hub to collect the proposed data from each country and to facilitate dissemination of comparable national short term statistics. He indicated that the Korean Statistical Office has already a real experience of coordination of national production of statistics, even by creating a specific law (Statistics Act) and a portal to National Statistics to put key statistics in an integrated database.

59. On the issues of development of national data hubs, Mr. Nunes stated that the three papers approach the issue from different angles that are complementary to each other. India presented the SDDS as an experience of an existing data hub and suggested that information from the SDDS be extended by other indicators provided by National Statistical Institutes in an international data hub, to be implemented by the UNSD. Brazil also made reference to the SDDS as a good implementation experience, as well as a national data hub which already exists. Korea presented its very good experience in building an integrated database. Mr. Nunes suggested that the use of existing systems as national data hubs seems to be the most rational recommendation, as the case of the SDDS shows. But the question is still open on the
indicators that are not in the SDDS and are produced by statistical institutes and other government agencies.

60. Mr. Nunes therefore proposed the necessity of strong coordination and institutional arrangement. Experiences of South Korea and the European Union on building data hubs show that it is not an easy task to centralize, standardize, harmonize, and make national and international data comparable and available for the users in a regular way. He pointed out that without support and guidance there are risks for countries of doing a large amount of work without achieving expected results. He concluded that with the support and the experience from both UNSD and Eurostat, the NSO would cooperate with the other domestic producers of statistics to develop a simple framework for centralizing data to define which institution would host information, determine how data would be received, recommend optimal frequency of data and standardize the metadata template.

61. On the issues of geospatial information disseminating and sharing at local, national and global level in a coordinated way, Mr. Nunes recommended the Spatial Data Infrastructure (SDI) that allows the use of geospatial information for many applications in an efficient and flexible way. The proposed data hubs could be another kind of portal based on SDI, similar to the one developed by South Korea. Each national data hub could have a simple structure containing dynamic databases to facilitate the construction of an updated macroeconomic template data.

Discussion

62. Participants re-iterated their support for the incremental approach in the development of the international data template and national data hubs. It was further pointed out that about 130 countries did not have a centralized data hub and therefore work needs to be done to improve the situation. Some countries expressed concerns that the amount of data requested by international agencies to be put in the template tends to increase over time. It was affirmed to countries that the main focus of the exercise is not on creating new statistics, but on coordination and strengthening of national capacity to organize and disseminate existing statistics.

Outcome

63. The proposals to develop the standardised international data template for short-term economic indicators and its metadata, a knowledge base with supporting methodological guidance and country practices, the national central data hubs and the diagnostic tool for data assessment were well received and supported by countries.

Session 6. Communication and dissemination

64. Session 6 on communication and dissemination was chaired by Mr. Eagambaram Narayanan, Deputy Director General, Central Statistics Office, India.

Presentations

65. Mr. Gabriel Gamez, Regional Adviser, Statistics Division, UNECE presented the latest development of standards and issues on dissemination and communication in the UNECE region. He provided references to existing standards endorsed by the Bureau of the Conference of European Statisticians in the area of data communication and dissemination.
He stressed the importance of engaging with media and journalists, and emphasized the need to embrace new communication approaches, such as data visualization tools, social network sites and Google, so that statistics can be communicated more effectively to the public and society.

66. Mr. Floris van Ruth, Senior Researcher, Short-term Economic Statistics, Statistics Netherlands presented the importance of constructing indicator sets and visualization tools in data communication and dissemination. He explained the three distinct functions of data accessibility, monitoring and analysis in terms of information content, complexity, capabilities and benchmarking. He emphasized the need to disseminate and visualize different types of indicator sets for different purposes and functionality. He further gave practical demonstrations on different visualization tools used in Statistics Netherlands to serve different purposes on data collection, description, summarization and analysis. Mr. van Ruth concluded by reminding the audience of common pitfalls for data visualization. Visualization is not an end in itself, but a tool to achieve a given objective, and the objective should be clear to avoid any confusion of purpose. There is also a tendency to opt for “eye candy” visualization tools that are not fit for purpose and this should be avoided.

67. The session was completed by a discussion on contributed papers by Morocco, Chile, Indonesia and China on country experiences in communication and dissemination strategies for short term official statistics, where Mr. Geert Bruinooge was the discussant. Mr. Bruinooge summarised the four countries’ institutional arrangements of the national statistical system, dissemination policy, time-lag of main economic indicators, ongoing work on dissemination, and issues and challenges. He pointed out that the common issue is in increasing focus on the improvement of data timeliness, services improvement to users, and the use of release calendars and websites for dissemination. He emphasized the importance to have all statistical output available on websites for free and stressed the value of allowing micro-data access for users. He further added the need to embrace the use of new media and technology such as Twitter, Smart-phones and You-tube in dissemination. He concluded by raising needs to improve the statistical literacy of the public and the ability in storytelling by official statisticians.

Discussion

68. Some of the participants indicated that the coverage of statistical outputs on the web is limited and called for an improvement on this issue. The challenges of engaging new media and technology was also brought up as participants indicated that search engines, such as Google, apart from simply showing statistics, also provide alternative means to produce statistics. It was emphasized that NSOs have the responsibility to monitor the quality and timelines of disseminated statistics. Attention was also drawn to the issue of dissemination strategies for macroeconomic surveillance. Participants indicated that dissemination and visualization tools are transferable to other countries, allowing strengthening of countries’ capacity in dissemination, but noted that the context of analysis, including the selection of indicators, will be different among countries.

Outcome

69. The session concluded that there is a need to improve the timeliness of main economic indicators and the coverage of statistical outputs on the web. Moreover it was recognised that the visualisation tools are good instruments in reaching a broader set of users and in explaining the information the statistics contain.
Session 7. Break-out sessions of individual working groups

Break-out session 1: Flash GDP estimates
Chair: Roberto Barcellan, Eurostat

70. After an initial clarification of the definition of rapid estimates (the group identified rapid estimates in nowcasts, flash estimates and advanced/preliminary estimates produced by national statistical systems), the breakout session went through a guided lively brainstorming on the key issues associated with rapid estimates, in particular of GDP.

71. The participants of the breakout session further confirmed the importance to have a glossary on rapid estimates and principles to be referred to in their compilation (glossary and handbook) and discussed the proposed outlines of both documents.

72. The glossary will provide: a definition of the different rapid estimates, their purpose, methodological considerations (techniques to be used in the compilation with reference to best practices and practices to be avoided), information contents (including quality elements) and reference to main actors.

73. The Handbook will be organised along the following chapters
   I. Introduction: purposes of the handbook, general framework and context, broad definition of rapid estimates, link to the glossary.
   II. Rapid estimates: definition of the different typologies of rapid estimates, their characteristics and their purposes.
   III. Methodological aspects and information contents: compilation techniques associated to the different typologies of rapid estimates; information input to be used in the compilation of the different rapid estimates.
   IV. Quality aspects: timeliness, accuracy, reliability.
   V. Rapid estimates in the statistical production process: sequence of rapid estimates products and their role in the production process.
   VI. Target indicators for rapid estimates: identification of the key short-term indicators suitable for rapid estimates; with emphasis on GDP.
   VII. Dashboard: combination of rapid estimates for key macroeconomic indicators for monitoring the evolution of the economy.
   VIII. Communication: how to disseminate rapid estimates and make users aware of the characteristics of these products.

74. The group highlighted the relevance of a sequence of statistical products associated with rapid estimates (nowcasts, flash estimates and advanced/preliminary estimates) and the importance to complement the rapid estimates of GDP with rapid estimates of other key macroeconomic indicators (among which Consumer Price Index, Industrial Production Index, unemployment/employment, key GDP components). The idea of the dashboard, as already
implemented in some countries (e.g. the Netherlands), was considered as the ideal target for providing a meaningful and complete picture of the evolving path of the economy.

75. Participants stressed also the need to base the rapid estimates approach on transparency, on an adequate communication strategy, on creating expectations in relation to the sequence of rapid estimates products and their availability (release windows for rapid data) and on a step by step approach adapted to the status of national statistical systems.

76. The suggested way forward pointed to a coordinated approach at international level to rapid estimates, including:

   a. drafting the Glossary (end 2011);
   b. collecting and consolidating the information on the availability of rapid estimates at national level;
   c. drafting the Handbook on rapid estimates (end 2012);
   d. setting up an expert group on rapid estimates;
   e. setting up national implementation plans (for those countries that want to produce rapid estimates) – giving appropriate consideration to resource constraints;
   f. strengthening national building capacity;
   g. promoting communication on “rapid estimates”.

**Break-out session 2: Business Cycle Composite indicators**

**Chair:** Geert Bruinooge, Statistics Netherlands

77. The chairman opened the session by presenting the proposed annotated outline of the handbook on business cycle composite indicators (BCCIs), which was developed during discussions in the working group in the months leading up to the meeting. The proposed handbook comprises the following chapters, which then formed the basis of the discussion in the session.

   I. Introduction and definition
   II. Some historical and theoretical consideration on the construction of Business
   III. Data availability, frequency and adjustment techniques
   IV. Variables selection techniques
   V. Indicators to measure cyclical movements
   VI. Indicators to detect turning points
   VII. Indicators to measure economic growth
   VIII. Validation of Business Cycle Composite Indicators
   IX. (Annex) Global Inventory/Survey of Business Cycle Composite Indicators
78. The working group has produced an annotated outline of the handbook that lists out suggested contents and key points for each chapter. It is available at http://unstats.un.org/unsd/nationalaccount/workshops/2010/moscow/AC223-S72Bk2.pdf

79. The relevance and utility of the handbook on BCCIs was discussed. Currently there is no internationally agreeable standard and guidance on the design and compilation of BCCIs and therefore the initiative to compile a handbook will be useful to fill in the gap. The handbook is intended to assist countries that plan to set up a more comprehensive system of BCCIs by providing methodological foundations and practical guidance on individual steps and elements of the compilation process. It also serves the needs of producers of short term statistics and analytical users by making them aware of the statistical methods and techniques employed in the construction of composite indicators.

80. Participants agreed that the handbook is useful in promoting the development of best practices. Some participants pointed to the difficulty of compiling BCCIs based on the same component statistics set and comparable across countries, but acknowledged that the handbook will provide a useful function to compare and standardise methods. While some participants expressed reservation for NSOs to be directly involved in the compilation of BCCIs, they pointed to the fact that the existing short-term statistics alone are not adequate for business cycle measurement and BCCIs are able to complement these statistics to assess the short-term changes in the economy. Finally, participants acknowledged the added value of official statisticians in the process of defining and compiling BCCIs. They pointed out that NSOs have technical expertise on data and the discipline to set up governance mechanisms to monitor the quality of BCCIs.

81. Since the outline of the handbook had been discussed in virtual meetings before the seminar, discussion during the break-out session focused on the actual content of the chapters.

82. Chapter 1 of the handbook defines the scope and target audience of handbook. It is intended to provide a step-by-step guidance on compilation, quality assurance framework, communication and dissemination, and a brief overview on different types and classification of BCCIs.

83. Chapter 2 outlines the historical and theoretical considerations on the construction of BCCIs. It was stressed that the scope of this chapter is confined to the review of the historical (not present) methods and development of BCCIs.

84. Chapter 3 focuses on data-related issues. It deals with issues when a long time series and appropriate price indexes are not available, and discusses problems related to seasonal adjustment, missing data, and lack of information at desired frequency. Participants confirmed the importance of having quality long time series for the robustness of BCCIs. The chair suggested the issue of the unavailability of price index may not be worth a separate sub-section on its own, and it was proposed to merge this sub-section either into the introductory part or an annex. There was a lively discussion on whether to treat outliers as noise or to adjust for it and this issue will be brought to the proposed expert group. On missing data, participants suggested that in addition to the standard imputation techniques used by NSOs, time series techniques can be used to correct for missing data. Finally, participants agreed that the comparison of different seasonal adjustment procedures should be outside the scope of this chapter.
85. Chapter 4 focuses on the variable selection techniques and presents a large number of possibilities so that compilers can have the right choice. Participants stressed the importance of the distinction between data selection methods and data reduction methods, and stated that the use of subjective approaches should be avoided. Co-integration in the state-space model was suggested to be included as one of the data reduction methods in the chapter. Finally, it was recommended to add a note to indicate that techniques included in this chapter are still developing even though they are state-of-the-art at the present time.

86. Chapter 5 and 6 address specific statistical and data issues in cyclical movement measurements and turning point detections respectively. Some participants recommended putting the dashboard in this chapter, but others expressed reservation on this aspect. Participants reiterated that the use of subjective approaches should be avoided. It was also agreed that the sequence of chapters should be re-ordered so that the chapter defining the reference cycle appears before the explanation of the choice of target variables.

87. Chapter 7 focuses on indicators to measure economic growth. The facilitators indicated that the decision whether to introduce this chapter in the handbook depends on whether this issue is addressed in the working group on rapid estimates, but recommended to continue to work on this chapter to ensure the continuity of the development work. Participants noted the importance of a glossary to standardize terminology.

88. Chapter 8 addresses issues on validations of BCCIs. Participants stressed the importance to validate and evaluate BCCIs, but recommended that the chapter indicate that the development of validation procedures is still ongoing. It was suggested that validation include stability testing across the vintage and on the parameters using Chow’s test. Participants stated that it is important to address the issue of revision and re-estimation of parameters. Finally, participants suggested that the chapter put forward a recommendation on estimation strategy.

89. A proposal for a global assessment to deepen the existing inventory on composite indicators and to survey country practices was put forward for consultation. Participants recommended a two-tier approach to collect information from countries. To maximize response rate, a short closed-form questionnaire would be sent to countries first to collect basic information, followed by a more detailed follow-up questionnaire if further information is needed. It was also suggested that the questionnaire be sent to NSOs as the focal point.

90. Participants raised the concern that the handbook seems to focus on setting normative standards, and suggested that it is important to have a handbook that is able to make specific recommendations and address practical issues in the compilation process. The chairman responded by re-affirming that the handbook is a practical guide to countries, and examples will be provided in the handbook. The handbook will not only provide information for all available options, but also specific recommendations on a particular model/method that is reliable to implement at country level.

**Final conclusion**

91. It was agreed to recommend development of a handbook on BCCIs. A technical expert group on business cycle composite indicators should be formed in 2011 for the overall management of the handbook compilation.
92. A roadmap was formulated, where the first draft of the handbook is expected to be completed at the end of 2011. The drafted handbook would be circulated to countries and experts in 2012, with final submission in 2013.

93. The annotated outline of the handbook was endorsed; positive and valuable feedbacks were received. They will form the basis for future discussion and development work on the handbook.

94. The launching of a global survey to collect country basic information and best practices in the field of the compilation and presentation of BCCIs was recommended.

**Break-out session 3: Tendency Surveys**

**Chair:** Gian Paolo Oneto, Istat, Italy

95. In the months before the seminar, a global survey on methods used in tendency surveys and for calculating sentiment indicators was carried out by UNSD in cooperation with the European Commission and the OECD. The break-out session started with a presentation of the results of the global survey.

96. Participants agreed to the statements on relevance and utility of a handbook on tendency surveys and confirmed the need for such guidance at the international level.

97. An outline of a handbook on tendency surveys was presented, based on existing handbooks by the European Commission and the OECD. The discussion confirmed that the EU and OECD handbooks should serve as a basis for the handbook produced by the working group. The outline discussed covered the following chapters:

1. Introduction
   a. Qualitative versus quantitative data
   b. Developments in tendency surveys
   c. Information collected in tendency surveys
   d. Use of tendency surveys

2. Sample Design
   a. Survey frame
   b. Sampling
   c. Contacts with respondents
   d. Periodicity and timeliness

3.1. Questionnaire Design
   a. General instructions
   b. Layout of the questionnaire
   c. Choice of questions

3.2. Standard “Harmonised” Questionnaires
   (Covering harmonized questions: item selection, wording, type of question (past change, future change, judgement))
   a. Business tendency surveys
   b. Consumer surveys
   c. Investment surveys
   d. Innovation surveys
4. Data Processing, Quality and Analysis
   a. Measurement and processing errors
   b. Conversion of multiple-choice questions into quantitative time series
   c. Measurement scales
   d. Aggregation and weighting
   e. Seasonal adjustment

5. Data Dissemination and Publication
   a. Metadata
   b. Publication procedures

6. Use of Tendency Survey Results
   a. Nowcasting and forecasting macroeconomic aggregates
   b. Confidence and sentiment indicators: how to synthesize the information contained in tendency surveys
   c. Applications of tendency surveys in business cycle analysis and turning points’ dating and detection

Annex (Online)
   a. Global assessment of country practices
   b. Sample questionnaires

98. Participants stressed that the handbook on harmonization practices should allow for flexibility in adopting survey practices to the specificities of country situations. As such, harmonization should not require uniformity in survey implementation. However, deviation from the guidelines should be done carefully. For example, country specific questions can be added to the survey but they should follow the harmonized questions because a change in question order can change the results of the survey.

99. It was also agreed that guidance should be provided on how to compare and combine qualitative and quantitative information.

100. The handbook should stress that both seasonally and non-seasonally adjusted data should be published (and, if desired, seasonally adjusted data as well). In this context the question on whether seasonal adjustment should in some cases be embedded in the survey questions or whether it should always be done afterwards by the survey-conducting office was discussed.

101. Weighting procedures need to be explained in more detail than is currently available in the EU and OECD handbooks.

102. Private organisations (and NSOs) that run tendency surveys must transparently provide information on their survey and data aggregation methodologies.

103. Mr. Graff, discussed a number of background papers submitted for this session, with the main view of how official statistical offices should approach tendency surveys. The review of some approaches in the papers related to consumer surveys and business surveys led to the recommendation by participants that the proposed handbook should also show some typical applications of tendency surveys.
Mr. Oneto discussed the issue of mainstreaming tendency surveys in official statistics. An important issue to remember is that official statistics follow strict codes of practice. The question of whether to move the tendency surveys into the official statistics must thus be brought to a higher level of statistical authority within the appropriate levels of governance. If such an inclusion is considered, the statistical system has to devise channels to open discussion with producers outside the official statistical framework. Some participants indicated that this may be a difficult task and that they have encountered problems in engaging private compilers.

Country experiences were presented from Sweden, Indonesia, Ukraine and Russia.

Sweden runs a flash indicator for business sentiment twice a year, establishing an early indicator for business cycle of large enterprises. The survey is very light (covering only three questions) and is conducted by phone with 320 enterprises in 18 industries.

Indonesia runs an agricultural tendency survey on a quarterly basis. Three agencies were carrying out such surveys in the past, but since 2001 the statistical office and the central bank work together on the collection, even though the methodology and results are still different. The third agency, a private research institute, operates independently. The results of the survey are mixed. Quarter 1 and quarter 4 results do not match agricultural GDP. Another shortcoming of the survey is that it only covers agricultural firms. Households, which comprise a large portion of agricultural GDP, are not included in the survey. During the discussion, the issue of strong seasonal factors in agriculture and how to reflect them in the survey (and survey results) was brought up.

The Ukraine also runs an agricultural tendency survey on a quarterly basis since 1997. The survey covers firms with more than fifty employees and covers about one thousand agricultural companies. The survey contains three sets of questions with various frequency: constant questions (included in each survey), special questions concerning Ukrainian problems (short period or irregular) and special questions concerning separate phenomena, such as situation with investment of enterprises, creation of enterprise groups, shadow activity etc. (one or two times a year for a few consecutive years). Correlation between the survey results and agricultural GDP are not as good as expected.

In Russia, six organizations conduct business tendency surveys. The Gaidar Institute for Economic Policy (IEP) runs a high frequency survey partly because of their close relationships with a large number of the survey respondents. The survey is voluntary and produces the most informal index. Their survey results were a leading indicator for the Russian crisis in 2008, when at critical times the indicators were produced on a sub-weekly basis.

Based on the presented country practices, it was agreed that agricultural surveys should be reviewed in more detail. However, it may not be practical to include agriculture in the handbook because of the mixed results that such surveys provide. A decision has to be made after further studies.

Ms. Rosa Ruggeri-Cannata, Eurostat, presented on issues of terminology related to tendency surveys and on future research issues. In addition to the observed differences in methodology among compilers of sentiment indicators, terminology issues also play a major role and need to be addressed in any future guidance. It was suggested that, given connections to other working groups, a common glossary could be considered. Future research issues
include a more detailed discussion of seasonal adjustment and alternative quantification methods. Questions related to seasonal adjustment include: should seasonal adjustment or just a data smoothing be used; choice of the most opportune seasonal adjustment method; whether revise seasonally adjusted surveys data; whether to adjust balances or components.

**Final conclusion**

112. Participants generally endorsed the proposal of developing a handbook on tendency surveys to improve harmonization among surveys carried out and to facilitate moving the tendency surveys into the area of official statistics. The modified outline of the handbook was approved as shown above. The inclusion of the agricultural sector in tendency surveys requires future research. Seasonal adjustment issue may form the core for follow-up work.

**Break-out session 4: Data Template**

**Break-out session 4: Data Template**
**Chair:** Ales Capek, Eurostat

113. Following a brief introduction of the agenda of the breakout session, the discussion during the break out session concentrated mainly on the harmonisation of the various international, regional and sector specific initiatives (e.g. industrial statistics) with the international data and metadata template moderated through the three international seminars. The discussion also took into account the implementation and use of a minimum core set of short term and annual indicators to improve data collection and strengthen national statistical capacity in national accounts and economic statistics. In addition, a detailed discussion took place on the visualisation tools proposed to support the communication around the short term indicators on the information contained in short term statistics collected through the minimum indicator sets.

114. The discussion around the international data and metadata template was introduced through the presentation by Artur Andrysiak on the proposed core set of economic indicators for the ESCAP region and by Shyam Upadhyaya on the proposed UNIDO template on strategic indicators for industrial statistics.

115. It was confirmed that also in the ESCAP region, the economic statistics and in particular short term economic statistics had not received a lot of attention. Many countries in the region still lack the basic capacity to produce economic and financial indicators on a timely basis. So far the main focus has been on the strengthening of MDG indicators. Under the aegis of the ESCAP Committee on Statistics, a technical advisory group was created, which is responsible for the drafting and implementation of an action programme on economic statistics. The core set of economic indicators covering statistics with annual and infra annual periodicity has been formulated to set an achievable target that all ESCAP countries should aspire to compile and disseminate by 2020.

116. The presentation of a core set of indicators for industrial statistics reflected on the need for short term frequency covering of a range of indicators on output, prices, employment, etc. Moreover, the need was expressed for standardization of metadata and weighting methodology for regional and global aggregates.

117. User needs for more timely data are the main driver for the various statistical initiatives in developing a core set of short term economic indicators. Moreover, other
initiatives around minimum economic and financial indicator sets were mentioned such as the work done by the Inter-Agency Group on Economic and Financial Statistics (IAG) on the Principle Global Indicator (PGI), by other regional commissions such as UNECE, and ECLAC and other specialised UN agencies such as the FAO for the global strategy for agricultural and rural statistics. Although the data templates are structured somewhat differently, these international, sectoral and regional templates do demonstrate a lot of overlap with the internationally recommended template. There where differences occur, it was understood to meet specific needs and motivations.

118. As a general principle, it was argued that a common structure and scope for an internationally accepted data template for short term indicators would significantly enhance its public utility and relevance. Moreover, such a template should be all inclusive and be applicable to all countries, irrespective of the level of development.

119. The members of the IAG present in the breakout session (ECB, Eurostat, IMF and UNSD) agreed in principle to strive for full harmonisation between the PGI's and the international data template to improve the international comparability of the short term statistics. Regarding the other regional and sectoral initiatives, it was agreed to seek a process of harmonisation and where possible coordination in the implementation at country level will be explored including adopting of common diagnostic tools and SDMX metadata descriptions.

120. Furthermore, it was recognised that differences in priorities in the selection of the indicators from the template for their implementation might occur. These priorities should be based on regional and national assessments of the statistical capacity. However, where possible, the further alignment of the implementation strategies and programmes should be promoted.

121. The internationally recommended template should set a single vision for a minimum set of official statistics on short term economic and financial indicators. With this in mind, the internationally recommended data and metadata template should be completed along with a supporting statistical handbook submitted to the plenary session of the international seminar. The handbook should describe the short term indicators, their periodicity and timeliness, their reference to normative guidance and policy relevance, their metadata structure and their strategy and tools for implementation. Also guidance should be provided in creating national data hubs with single access points.

122. The discussion on the visualisation tools to improve the communication on the information contained in the short term statistics was introduced by a presentation of Floris van Ruth, Statistics Netherlands. In further promoting the visualisation tools, it was proposed to develop a central repository for web applications developed by Statistics Netherlands and other statistical institutes. This repository should provide ideas and inspirations for smart disseminations. The repository will also have hyper links to those visualisation tools operating on the website of national and international organisations.

123. A separate work stream was envisaged in 2011 to develop a handbook with best practices on the visualisation tools in addition to the central repository.

Final conclusion
124. Participants generally endorsed the proposal of drafting an accompanying handbook for the international data template and providing guidance to pilot countries to establish national data hubs with single access points for their national statistical system. A central repository of web applications for visualisation tools should be developed along with handbook of best practices.

Session 8 and 9. Reports of Working Groups, Strategy and Roadmap

125. Session 8 was chaired by Mr. Eduardo Nunes. Session 9 was co-chaired by Mr. Geert Bruinooge and Mr. Ivo Havinga. In session 8, each of the four working groups presented the discussions of their breakout sessions and recommendations for each working group. Session 9 allowed participants to discuss the recommendations and agree upon a strategy and roadmap for future work.

Working Group 1 Recommendations – Rapid Estimates

126. The recommendations for working group 1 – flash GDP estimates – were to produce a glossary of rapid estimates terminology and a handbook on rapid estimates. A glossary was proposed because there is confusion on the various terminology used in conjunction with rapid estimates, e.g. nowcasting, flash estimate, etc. A glossary should provide definitions, methodological considerations and best practices. Quality elements (e.g. accuracy) should also be included in the glossary. The handbook on rapid estimates should provide needed guidelines as there currently exist no systematic global guidelines for rapid estimates. An expert group could be formed in early 2011 to produce the final handbook by end of 2012.

127. The question of which countries will be targeted was raised. Many countries already produce flash estimates and it is not clear which of the remaining countries would be able to do this as part of this process.

Working Group 2 Recommendations – Business Cycle Composite Indicators

128. The recommendation for working group 2 – business cycle composite indicators (BCCIs) – was to produce a handbook on business cycle composite indicators. The handbook would include eight chapters discussed in the breakout session as well as an annex. The annex would consist of the results of a global inventory of practices used for composite indicators. An expert group could be formed in early 2011 (including academia, NSOs and national research institutes) to produce the final draft of the handbook by end of 2012.

The OECD noted that it has a handbook on BCCIs and would like to cooperate on the outputs of this working group. They also have a beta version of software for BCCI creation and can contribute the software code to the benefit of this WG.

Working Group 3 Recommendations – Tendency Surveys

129. The recommendation for working group 3 – tendency surveys – was to produce a handbook on tendency surveys. The handbook should focus on harmonizing two existing handbooks by EC and OECD and should be applicable to all countries. An expert group could be formed in early 2011 (including academia, NSOs and national research institutes) to produce the final draft of the handbook by end of 2012.
130. KOF supports the handbook and offered to contribute to the handbook by writing chapters on topic areas in which they have expertise.

**Working Group 4 Recommendations – Data Template**

131. The recommendations for working group 4 – data template – were to finalize the data template and harmonize it with other existing initiatives, like the PGI, and to produce a supporting handbook. It was proposed to structure the data template in three tiers, which are: one – an international core set of statistics that is coordinated with the PGI, two – strategic indicators at detailed level, depending on availability, and three – indicators important for individual countries. A set of procedures for the collection and dissemination of the data template based on a standardized technology (preferably the SDMX) should be created in order for the data template to feed into a data hub. A single access data hub is a desirable outcome for countries, wherein the data hub will be a country level single access point for data in the data template. The production of a handbook on best practices in visualization guidelines was proposed. An expert group could be formed in early 2011 (including academia, NSOs and national research institutes) to produce the final draft of the handbook by end of 2012.

132. The data template should be flexible enough to accommodate additional data series as appropriate. Possible extensions of the data template using a common structure with sectoral perspectives such as for agriculture and rural statistics and industrial statistics should be considered. The issue of how national data hubs with single access points should be developed needs to be worked out based on experiences with pilot countries.

**General Comments for Working Groups**

133. As there is a degree of overlap in the work of all the working groups, any handbooks or documents produced should be produced in a coordinated manner and there should be coherence between the books. For example, if a glossary is developed, it should include terms for all areas covered by the working groups.

**Next Steps**

134. The next steps to follow up on the recommended actions for the working groups are:

   a. Confirmation of commitment by countries and organizations, preferably in writing, to actively participate in expert groups to provide input to the recommended outputs for each working group.

   b. Seek guidance from the Statistical Commission in 2011 on the proposals made at this meeting, including:

      1. Work on the proposed handbooks;

      2. Work on data template and data hubs;

      3. Review of progress in these areas at the end of 2011.
Session 10. Closing Session

135. In their closing remarks, Alexander Kevesh, Rosstat, Geert Bruinooge, Statistics Netherlands and Ales Capek, Eurostat, expressed their support for the work carried out during this seminar and indicated that they look forward to further supporting the work on short-term economic indicators as the recommendations move forward to the United Nations Statistical Commission.

136. Mr. Ivo Havinga outlined the preparatory work for the Statistical Commission 2011, recapped the strategy and roadmap of future work. Furthermore, he indicated that to prepare for the Statistical Commission, the Secretary-General’s Report on Short-term Economic Indicators must be drafted based on the recommended international program of work of the four working groups moderated through the three international seminars (Ottawa, Scheveningen and Moscow). Confirmations of commitment by countries to actively participate in selected expert groups are also needed. He further express the expectation that the Commission would like to be appraised in future sessions of the Commission of the status of progress on the work on handbooks related to short-term statistics and the national and international consultations on the implementation of short-term indicators based on an internationally acceptable data template.