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**Report of the meeting on climate change related statistics for  
producers and users****Note by the secretariat***Summary*

This document presents the outcome of the Meeting on Climate Change Related Statistics for Producers and Users, which took place from 19 to 20 November 2012 in Geneva. The meeting explored user demand for climate change related statistics and took stock of what national statistical offices are doing in the area. The meeting was comprised of four sessions discussing: (a) what do we mean by climate change related statistics?; (b) user needs and data gaps; (c) good practices of national statistical offices in providing climate change related information; and (d) key directions for future. The conclusions of the meeting will provide input to a report that will be prepared by a United Nations Economic Commission for Europe Task Force on Climate Change Related Statistics.

## I. Introduction

1. The Meeting on Climate Change Related Statistics for Producers and Users was held in Geneva, Switzerland, on 19-20 November.
2. Participants from the following countries attended the meeting: Albania, Armenia, Belgium, Canada, Egypt, Finland, France, Georgia, Germany, Ireland, Italy, Japan, Kyrgyzstan, Luxembourg, Mexico, Netherlands, Norway, Poland, Republic of Moldova, Slovakia, Ukraine, United Kingdom, Sweden and Switzerland.
3. Representatives of the following international organizations attended the meeting: Directorate-General on Climate Action of the European Commission (DG CLIMA), European Environment Agency (EEA), Eurostat, International Labour Office (ILO), United Nations Framework Convention on Climate Change (UNFCCC), United Nations Industrial Development Organization (UNIDO), World Bank, World Meteorological Organization (WMO) and World Health Organisation (WHO). In addition, a non-governmental organization, Carbon Brief, took part.
4. The meeting was chaired by Mr. R. Smith of Statistics Canada. At the beginning of the meeting, the chair presented the goals and work plan of the Task Force (TF) on Climate Change Related Statistics, which was set up by the Conference of European Statisticians in November 2011.

## II. First session – What do we mean by climate change related statistics?

5. The session was organized by Ms. J. Hass of Statistics Norway. The session was based on a paper by the TF discussing the scope of climate change related statistics (CCS) from the viewpoint of the following models and frameworks:
  - (a) DPSIR-model (Driving Forces-Pressures-State-Impacts-Responses);
  - (b) Impact, mitigation and adaptation perspective;
  - (c) Framework for the Development of Environment Statistics (FDES) including its links with the International Panel on Climate Change (IPCC) Schematic framework representing anthropogenic drivers, impacts and responses;
  - (d) Natural capital approach.
6. The paper presented, as a starting point, a working definition of the scope of climate change related statistics. According to that *the scope of “climate change related statistics” includes environmental, social and economic data that measure the human causes of climate change, the impacts of climate change on human and natural systems, the efforts of humans to avoid its consequences as well as their efforts to adapt to those consequences that are unavoidable. When focused on the point of view of official statistics, the scope excludes statistics that measure state of climate and climate change directly (such as precipitation data) that may not be collected within the boundaries of the national statistical systems.* The following points were raised concerning the scope of CCS:
  - (a) Two different scopes can be defined: (i) the scope of CCS and (ii) the scope of NSO activities in it;
  - (b) The scope of CCS needs to be wide to capture the relevant issues: climate change has wide-ranging impacts on the environment and on society. Climate change analysis, therefore, requires extensive information on various issues;

(c) The scope of CCS can include data often produced outside the NSS, for example weather data, typically in the remit of meteorological services;

(d) While the scope of CCS can be wide, what national statistical offices (NSOs) and the national statistical systems (NSSs) can do within the scope of CCS should be well focused, based on their current strengths in producing official statistics;

(e) Defining the core CCS would be helpful. The areas closely linked to CCS, as identified in the paper by the TF, are nearly identical to the statistical domains from where data are derived for the emission inventories. These areas can be combined to form the core CCS;

(f) The scope of CCS as seen by the different models and frameworks is overlapping. The scope can be defined using elements from the different models and frameworks without having to choose between the frameworks;

(g) The complexity of the scope definition has to be met with step-wise implementation of improvements in the NSSs;

(h) We cannot always distinguish the impact of climate change from the impact of climate variability, for instance when analysing the intensity and frequency of natural hazards. Thus, climate variability should be included in the scope of CCS.

7. To define CCS in the context of official statistics, the following points were raised:

(a) NSOs and NSSs produce a considerable quantity of data relevant for climate change. They form a global statistical community which provides a network for developing internationally comparable statistics and standards. Thus, NSOs could contribute more to the development of CCS. However, forecasting and analysing cause-effect relationships in climate change are not tasks of the statistical system;

(b) NSOs need guidelines on how to take into account the needs of climate change analysis in official statistics that are originally collected for other purposes;

(c) Statisticians should be more aware of the data needs of emission inventories. Otherwise changes in statistical production may make data less useful. For example, industrial production is increasingly measured using sales data, instead of the volume of production. Sales are not so relevant for the emission inventories;

(d) The use of the existing statistical data for climate change analysis needs to be promoted by NSOs. It would help to reduce duplication of work if other agencies knew what data NSSs already have and thus would not collect them again. To this end, the TF should identify the existing data in the NSSs that are relevant for CCS;

(e) Politicization of climate change research and data provision has to be avoided. Involving NSOs in the compilation can help to prevent political interference due to the strong professional independence of NSOs in most countries.

8. The session organizer concluded that the scope of CCS needs to remain broad, while remaining relevant. The scope cannot include everything in the statistical systems, but it has to be wide enough to inform statisticians about the relevance of their statistical area to climate change. Although the scope of CCS should be broad, the TF has to identify a narrower focus of activities for the NSS to improve their contribution.

### **III. Second session – User needs and data gaps**

9. The second session was organized by Mr. R. Smith of Statistics Canada. The session discussed user needs for and current data gaps in climate change related information.

10. In the first presentation, Mr. R. Hossain of WHO underlined the fact that indicators should be well designed – what we measure is what we get. We should not only talk about climate change, but also about climate variability and its impacts. Some recent initiatives aim to bring together climate observations and scientific climate research: (i) the Group on Earth Observations (GEO) is building a Global Earth Observation System of Systems (GEOSS); and (ii) the Global Framework for Climate Services (GFCS) aims to improve access to scientific information on the state of climate. Mr. Hossain emphasized the need to combine data between different data sources and producers. To be useful, statistics should also be available at a detailed geo-referenced level so that population, social and economic data can be linked with climate information. More statistics would be needed on how climate change and climate variability affect water quality and quantity as well as human health.

11. Mr. R. Fernandez of EEA presented user needs from an emission inventory perspective. Mr. Fernandez recommended that NSOs study the emission inventory review reports to see how they could help to improve the quality of data. Emission inventory compilers need to access to all relevant data. NSOs are in a good position to monitor and evaluate the quality and availability of activity data underpinning emission estimates. The richness of data collected by NSOs can also be used as verification and quality assurance tool of the activity and emission estimates reported in emission inventories. NSOs could also work with inventory compilers to develop faster estimates of emissions; currently the time lag is T-2 years. Inventory reviews usually call for quality improvements in transparency of methodology, accuracy of estimates, data consistency over domains and time, comparability and completeness. Improvements are also needed in particular sectors of inventories. About 80 % of emissions come from energy, so the quality of the energy balance is crucial. Timely socio-economic data would be needed for trend analysis and NSOs could contribute to analysing emissions by economic sectors. NSOs should be part of the national emission inventory system, with the main objective to ensure and improve the quality of emission inventories. Formalising institutional relations also provides certainty about the roles and responsibilities of each institution.

12. Ms. V. Pendolovska of DG CLIMA presented data needs stemming from the European Union (EU) climate policy. Ms. Pendolovska started with the fact that in the EU there is robust information on emissions, based on internal legal requirements, including a verification regime for the Emissions Trading System. However, it would be helpful to link climate information with economic data to be able to have an integrated analysis and draw more policy attention to these issues. Statistics needed for analysing climate change also concern green growth and sustainable development, environmental subsidies and taxes, employment and turnover in green sectors as well as the financial support and technology transfer between countries. The EU is currently preparing an Adaptation Strategy (to be finalized in 2013) which requires data on costs of adaptation investment, climate-related morbidity and mortality, and environmental protection expenditure related to climate proofing, i.e. preparing against climate change.

13. Needs for new data in climate change analysis were addressed by Ms. R. Webster of the Carbon Brief. The Carbon Brief is a non-governmental organization (NGO) monitoring the way in which climate related data are used in the media. Ms. Webster presented examples of cases where the term climate change and the available data were misused by the media to create appealing headlines or to serve particular interests. Sometimes data are taken out of context, wrongly interpreted or not explained. Ms. Webster called for data that has a quality stamp showing where the data come from, how they have been produced and how they should be interpreted. NSOs could have a role in improving communication of information about climate issues.

14. Mr. D. Kull of the World Bank highlighted data needs with regard to climate risks. Mr. Kull emphasized in particular the usefulness of (i) organizing climate information according to a results framework; (ii) measuring the core part of CCS regularly and (iii) having a more open data policy towards climate researchers. A notable data gap exists in the area of impacts of and responses to climate change. Data on resilience of people, economic systems and ecosystems are needed. More CCS are needed, particularly on economic and non-economic losses, changes in household income levels, population dependent on subsistence farming and access to reliable water supply. In addition to statistics, the World Bank currently uses many qualitative measures of resilience.

15. The following issues were raised in the discussion:

(a) Analysis of user needs may not necessarily lead to defining the ideal set of CCS. Users do not always know to ask for what is not yet available;

(b) The users of CCS can be divided into categories: those who know what they want, those who need guidance; and those unknown, i.e. the general public, who want to have information that is easy to use. NSOs need different approaches for communication with the different user categories;

(c) No agency can respond to all user needs for climate change information, but providing a single access point to CCS would be helpful. Currently, CCS are scattered across different organizations and are not easy to find;

(d) Some of the scientific climate data are difficult to use and understand. Lack of clarity can lead to data misuse or misinterpretation. NSOs could have a role in disseminating and communicating CCS;

(e) Climate change analysis would benefit from access to detailed geo-referenced data, but confidentiality limits data availability. NSOs need to develop their capacity in geo-referencing and spatial statistics and find ways to enable research and statistical activities that link climate data with other statistical datasets;

(f) Some emerging data needs were mentioned in the discussion, including household energy consumption; financial aid related to climate change targeted at developing countries; data on resilience, vulnerabilities and estimates of population at risk; and indicators that include causality assumptions, such as mortality due to heat waves;

(g) In light of the scarce resources of NSOs, the first step in responding to user needs would be to better organise the existing data. As a second step, the existing statistics, their quality and usefulness for climate change analysis should be improved. Finding out what kind of new statistics users would need and developing these statistics is a longer term challenge;

(h) A core set of CCS should be defined and provided as official statistics regularly;

(i) Emission inventory compilers have very specific data needs; the TF should make concrete proposals for responding to these needs separate from the recommendations concerning users of other CCS;

(j) The questions to answer are: (i) what exactly needs to be measured; (ii) what can be improved by NSSs and (iii) what should be included in the NSOs' mandate.

16. The session organizer underlined the importance of being able to link different data sets and improve data coherence. The cross-sectional nature of climate information calls for close cooperation of NSOs with other institutions and the scientific community involved in measuring climate change. NSSs should take a more active role in disseminating CCS. As a first step, the existing data should be structured and made more easily accessible for users.

What touches people's daily lives should be the focus of work. The problem is how to satisfy the sophisticated data needs, for example for specific sectoral and geographical data.

#### **IV. Third session – Good practices of national statistical offices in providing climate change related information**

17. The third session was organized by Mr. J. Mackintosh of the United Kingdom Department of Energy and Climate Change. The session contained a series of country presentations on compiling emission inventories and other CCS.

18. In the first presentation, Ms. R. Pipatti of Statistics Finland conveyed the lessons learned by one of the few NSOs acting as the national authority for the emission inventory. The advantages of an NSO coordinating the work include: (i) close collaboration with energy and other source statistics; (ii) well-developed quality assurance methods; and (iii) the possibility for detailed comparisons with confidential source data, e.g. on waste, industrial production and environment. A major advantage is that no additional data collection is needed for the emission inventory in Finland. On the other hand, the NSO cannot publish company-specific information, unlike other compilers. There are several areas for improvement. Energy statistics should be produced more frequently for the purposes of emission inventories. Furthermore, the fact that compilation rules, coverage and classifications of emission inventories differ from those of official statistics increases the workload due to the need to reclassify and recompile existing data.

19. In his presentation, Mr. E. de Alba of the National Institute of Statistics and Geography (INEGI) explained how the infrastructure of the NSS of Mexico has been designed to support production of CCS. The new General Climate Change Law mandates INEGI, as an independent state organization, to integrate CCS into a Climate Change Information System and generate a set of key indicators. This set includes data on emissions; atmospheric conditions; vulnerability of human settlements, infrastructure and coastal areas; average sea level; costs of climate change and Green Net Domestic Product; soil quality and carbon content and biodiversity protection, adaptation and management. The forthcoming Information System is tentatively planned to structure CCS around six pillars: climate system; emissions and sinks; mitigation; vulnerability; adaptation and green engines. The spatial statistics produced by INEGI will play a crucial role in future climate indicators.

20. Ms. L. Dibra of the Ministry of Environment presented Albania's method for building capacity for compiling emission inventories. In the previous inventory rounds, data availability and quality presented a barrier to developing the accuracy of the inventory. Albania is now setting up official institutional arrangements for emission inventory compilation. This requires decisions on methodologies and emission factors, finding data sources, setting up networks and a framework for management and quality assurance. The current legislation does not oblige data providers to submit their data for emission inventories, but amendments are underway. In addition, the NSO is expected to increasingly contribute to the emission inventories in the future, after development of energy statistics and energy balance in line with EU requirements. Ms. Dibra called for development of the capacity and involvement of official statistics in emission inventory compilation and provision of data for climate change analysis.

21. The current state of producing statistical data on climate change in the Kyrgyz Republic was presented by Ms. K. Orozbaeva of the National Statistical Committee of Kyrgyzstan. The NSO currently produces CCS on air pollution and ozone depletion; state of climate including emissions; energy; transport and waste. In total, eight government agencies produce some climate change indicators. The challenge is that a unified national

system to monitor climate does not yet exist. Consistent databases of environmental statistics should be developed to promote the use of these data in decision making. Ms. Orozbaeva underlined the need for training and capacity building for statisticians and users.

22. Mr. J. Cabeça of Eurostat discussed the relation of official statistics, emission inventories and CCS in the European context. Eurostat works together with DG CLIMA and the EEA to improve the quality of emission inventories. Eurostat is exploring the use of monthly statistics (available at T+45 days) to produce earlier estimates of CO<sup>2</sup>. It has also explored the possibility to use production statistics (PRODCOM, available at T+6 months) for more timely estimates for industrial processes, but has faced problems caused by confidentiality and the fact that sales data are replacing production data. In addition, the length of time series is not always sufficient, for example for analyzing the drivers of emissions. Further to providing input data for the emissions inventories, Eurostat and NSOs produce air emissions accounts linking air emissions with economic activities generating them. The different coverage of emission inventories poses challenges: whereas air emission accounts include (i) residents of the national territory and (ii) units operating abroad (rest of the world), emission inventories include only the first category and non-resident units that impact the national territory. Bridging items incorporated in the air emissions accounts questionnaire explain these differences. Eurostat is also involved in developing statistics on material flow accounts, environmental goods and services, taxes, protection expenditure and energy accounts. Mr. Cabeça called for closer engagement of the global statistical community with the agencies active in climate issues nationally and internationally.

23. Ms. E. Brinksma of Statistics Netherlands presented their methods in compiling estimates of emissions on a quarterly basis (at T+45 days) to respond to the demand for more rapidly available environmental data. The NSO releases quarterly emission estimates together with GDP figures to broaden the notion of welfare and promote awareness of environmental issues. The release focuses on the changes in emissions of six key sectors of the economy. The figures are compiled according to the resident principle, and are thus comparable with economic statistics, but differ from emission inventories. Additional data collection is not needed: data are derived from monthly energy statistics, quarterly national accounts and some other existing sources of data on air traffic, days below a temperature of 18 degrees, etc. The data quality is high, but good communication is necessary about the difference in coverage compared with emission inventories.

24. The challenges of statistical systems in contributing to climate change analysis with CCS were presented by Mr. L. Koltola of Statistics Finland. Mr. Koltola remarked that a large part of the necessary data for analysing climate change is available in the NSSs, but needs to be developed to fit the data needs for climate information. This requires changes in the current infrastructure and capacity of NSOs, such as balancing between detailed data needs and confidentiality; building capacity to produce geo-referenced data; learning new methods of spatial statistics; improving the ability to match data from multiple sources; reconciling different classifications, quality assurance principles and compilation guidelines; adjusting organizational structures to support production of cross-sectional CCS; building substantive knowledge in climate issues and launching closer networking with organizations involved in climate issues.

25. The following points were raised in the discussion:

(a) Several data users and emission inventory compilers called for closer involvement of NSOs in collecting, compiling and disseminating CCS with partner agencies;

(b) National legislation should make provision for the right to collect and access data needed for emission inventory compilation. The legislation should facilitate effective

cooperation between agencies and grant the possibility to exchange the required data in line with the national statistical law;

(c) The quality of emission inventories clearly benefits from an institutionalised data collection and compilation process and a clear division of responsibilities. Often the NSO is assigned with the responsibility to carry out calculations that require the use of detailed data available within the NSS. Inventory compilers could also be considered as part of the official statistical system to facilitate access to the required data. This would require their adherence to the standards of official statistics;

(d) NSOs need to follow up on new data requirements stemming from the Kyoto Protocol, especially concerning activity data, energy statistics and energy balance. New requirements on energy statistics are expected from UNFCCC shortly;

(e) Different agencies produce CCS for varying purposes – the work lacks coordination and direction. NSOs usually have a coordination role of the national statistical system. Expanding this coordination role to the production of CCS would be useful for improving data availability and quality;

(f) Countries develop climate change indicator sets for policy purposes. This work should be internationally coordinated to achieve comparability across countries;

(g) Further harmonization of classifications and methods between CCS and official statistics should be explored. In many cases, however, the differences stem from the original purposes for which the statistics were developed;

(h) Production of CCS requires reconciliation of data derived from several sources. Accomplishing this would necessitate strengthening the capacity of NSOs in linking datasets produced by various organizations;

(i) The TF recommendations need to take into account countries which are less advanced in CCS and which, for instance, do not yet compile emission inventories;

(j) A first tangible action could be to increase NSOs' involvement in disseminating climate information, for example through statistical yearbooks or providing access to climate data via their websites.

26. The session organizer concluded that the participants called for strong involvement of NSOs in emission inventory compilation. Legislation has a crucial role in supporting production of emission inventories and other CCS. The country experience highlighted that the production of CCS would benefit from overall coordination of work both nationally and internationally. Many of the challenges countries face in developing CCS are linked to underdeveloped institutional setting or unclear division of work between organizations. Closer cooperation between the statistical community and other producers of CCS would assist in avoiding duplication of work and reducing costs. The low and middle income countries are often most severely struck by climate change. At the same time, their capacity to produce the relevant climate information is often low. Exchange of current practices and mutual support among countries would be helpful. The TF should consider all different environments where data are produced when drafting the recommendations for NSOs.

## **V. Fourth session – Key directions for future**

27. The panel discussion was organized by Ms. V. Pendolovska of DG CLIMA. The panel discussed key directions for the future in developing climate change related statistics in the national statistical systems. The panel consisted of Mr. C. Blondin of WMO, Mr. J-F. Halleux of UNFCCC, Mr. R. Fernandez of EEA, Ms. R. Pipatti of Statistics Finland and Ms. L. Bratanova of UNECE. The first question concerned NSOs' contribution to emission

inventory compilation and the second their role in CCS in general. The main conclusions of the panel discussion and the following open discussion are listed under each question.

**A. How can national statistical offices better organise themselves to contribute to the emission inventory compilation process?**

28. **NSOs should be part of the national system of greenhouse gas emission inventories in all countries, and this should be established through official agreements.** NSOs' involvement can be beneficial since their existing role in the collection of economic, social and environmental statistics would reduce the need for additional data collection, help to improve data quality and enable linking of emissions with particular sectors of the economy. NSOs usually enjoy high public trust as professionally independent producers of statistics. This is particularly important for CCS which are often politically and economically sensitive. Countries that are just building up the inventory system should involve the NSO from the beginning to avoid creating burdensome and overlapping data reporting systems.

29. **NSOs should be proactive in reaching out and improving communication with emission inventory compilers.** Well-functioning communication channels are a key to bridging the gap between statisticians and the emission inventory system. NSOs and inventory compilers should meet to discuss how the emission inventory system works and how the NSS can contribute. Information on what data are needed would help NSOs to better organize their work related to climate issues and would optimise the data for the purposes of emission inventories.

30. **NSOs should review the existing reporting systems for CCS and emission inventories to identify any duplicated processes and to move towards multipurpose data systems serving various user needs.** The existing data pool of NSSs is not used to its full potential for climate change analysis. Parallel and sometimes duplicate reporting exists, for example energy data reported both in energy statistics and emission inventories. This leads to unnecessarily high costs of data collection and additional burden for respondents. Production of emission inventories and other CCS would benefit from coordination with the NSO.

31. **NSOs should be active in improving coherence of emission inventories and official statistics where possible.** New areas for using common tools, terminology and definitions can be identified in cooperation with the emission inventory compilers. For example, NSOs should be more aware of how the activity data are used in the inventories to be able to take into account the related data needs.

32. **NSOs should actively follow up on the meetings of the Conferences of the Parties (COP) to be able to prepare for forthcoming data requirements.** Whereas a more active role of NSOs would enhance the quality of emission inventories in several countries, the delicate negotiation process of the Kyoto protocol needs to be respected. NSOs should, therefore, rely on existing frameworks and existing data rather than on building something new or parallel to the emission inventories. NSOs can add value to the process by assessing data availability and feasibility of requirements related to the Kyoto protocol, and by preparing themselves for new data requirements, for example regarding the flexibility mechanisms.

**B. What could be the key recommendations for the future emerging from this meeting?**

33. **NSOs should start improving their contribution to climate change analysis based on their core competencies**, for example, in provision of data for research and other producers of CCS, linking climate information with other statistical data and harmonizing methods, concepts and classifications, etc. Taking on new tasks involves respect for the traditional role of NSOs: they do not usually compile forecasts or make judgements about cause-effect relations. The improvements should be implemented in steps: by first organising the existing data, secondly improving the quality and usefulness of data and exploring needs for new statistics after that (such as data on resilience, risks and vulnerabilities to climate change). In the longer term, a set of regularly produced CCS should be developed to be part of official statistics.

34. **NSOs should have a role in disseminating climate information to make it more accessible and easy to use, even when the information is not produced by the NSO.** Scientific climate information is often complex and difficult to communicate and understand. Communicating statistics is the core business of statistical offices. NSOs should create a dissemination platform or a portal for CCS to bring together at least the regularly produced CCS. Through the portal NSOs could disseminate their existing statistics with relevance to climate change and provide access to CCS produced by other organizations and research.

35. **The key for improving CCS is to improve communication at all levels and to establish a clear institutional setting for producing CCS.** Closer collaboration within a country, between countries and among international organizations could bring the work forward. The dialogue between users and producers of climate information should continue. Nationally improving communication between emission inventory compilers and the NSO is particularly important. International organizations, for their part, should work closer together to harmonize data requirements and collection. In some cases, national legislation related to CCS needs to be reviewed with the aim to clarify division of work, support cooperation between agencies and ensure access to the required data.

36. **The need to change existing frameworks of official statistics to serve climate change data needs has to be examined.** For instance, CCS may require changes in the System of National Accounts in some future revision, so as to strengthen the links between emission trading systems (the carbon market) and national accounts.

37. **New solutions are needed in NSSs for dealing with confidentiality issues to ensure a better response to climate data needs.** Climate change analysis can benefit from detailed, often geo-referenced, data and the possibility to combine data.

38. **The organizational structure of NSOs may require modernizing to support production of CCS that cuts across the statistical system.** Traditionally, the organizational structure of NSOs is set up to produce different economic and social statistics, rather than multi-domain statistics such as CCS and other environmental statistics. Modernizing statistical production may also release resources that can be used to meet new user needs related to climate change.

39. **A new kind of expertise will be required from statisticians producing CCS.** Traditionally, statisticians have been professional data managers specialised in narrow societal issues. CCS require the understanding of natural science and knowledge that cuts across many societal issues.

40. **The international statistical community and NSOs should invest in building capacity and knowledge required for CCS in all countries.** The need for reliable,

comprehensive and objective CCS is increasing, but countries have different levels of capacity for reporting climate change information: some provide emission inventory data and others do not. NSOs have extensive experience in effective statistical capacity building that should be gradually enlarged to include climate issues.

41. The session organizer concluded by thanking the panel and all the meeting participants for the many practical ideas to be considered in the further work of the TF. The meeting gave substantive input for drafting recommendations and identifying practical steps for future work by national statistical offices.

## **VI. Conclusions and the way forward**

42. The chair thanked the meeting participants for their active contribution to the meeting. The chair noted the need to continue dialogue with a larger group of users and producers of CCS in the further work of the TF on climate change related statistics. The TF will consider how to further engage the meeting participants in the work, and may invite them in the near future to consult the TF.

43. The meeting provided useful input for drafting recommendations to NSOs. A final agreement over the definition of the scope of CCS was not reached, but there was a general understanding that the scope definition should be practical and not cover everything included in the statistical systems.

44. One of the main conclusions was the need to clearly define the role of NSOs and the role of all the players in the national systems for emission inventories.

45. International organizations offered their support as facilitators for involving national statistical offices more closely in CCS. Seeking high level support for the work in countries needs to be further considered by the TF.

46. The meeting provided important input that will be taken into account in the final report of the TF. The final report will include concrete recommendations and will identify priorities for NSOs in support of developing CCS. It also aims to improve the awareness of data needs of the greenhouse gas emission inventories towards the NSSs. The preliminary findings will be consulted widely before the final report is presented to the Conference of European Statisticians, tentatively in April 2014.

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