

UNECE-FAO  
FORESTRY AND TIMBER SECTION**Third (3<sup>rd</sup>) meeting of the “UNECE/FAO Team of Specialists on  
monitoring sustainable forest management”***Engelberg, Switzerland, 4-5 November 2015****Meeting Report***

The meeting was chaired by Mr. Stein Tomter, Norway (Leader of the Team). Minutes were noted by the Secretariat. Mr. Stein Tomter, Norway opened the meeting and Mr. Roman Michalak Acting Chief of the UNECE/FAO Forestry and Timber Section addressed some welcomed the Team of Specialists on Monitoring Sustainable Forest Management (ToS) on behalf of the UNECE/FAO Forestry and Timber Section.

The list of participants is attached in Annex I. 30 experts from 19 countries and partner organizations took part in the meeting. Represented countries were Austria, Belarus, Croatia, Czech Republic, Estonia, Finland, France, Hungary, Italy, Lithuania, Netherlands, Norway, Poland, Russian Federation, Slovakia, Spain, Sweden, Switzerland, United States of America. Representatives from Forest Europe, the European Environment Agency (EEA), Eurostat, ICP Forests, the Joint Research Center of the European Commission and UNECE/FAO Forestry and Timber Section participated in the meeting.

**Item 1. Adoption of the Agenda.**

The Agenda (Annex II) was adopted.

**Item 2. Special presentation to celebrate 30 years of ICP Forests, Michael Köhl, ICP Forests.**

Mr. Michael Köhl (University of Hamburg Department of Wood Science, Section World Forestry) gave a presentation via skype on 30 years of ICP Forests. In his presentation Mr. Köhl recalled the history of the International Cooperative Programme on Assessment and Monitoring of Air Pollution Effects on Forests (ICP Forests). The main causes of the forest dieback of the 1980ies were successfully identified and appropriate measures taken. Consequently, the critical load for acidity developed very positively with very few exceedances in the current assessment, while exceedance for nitrogen was still widely common in exposed plots in central Europe. He highlighted the importance of monitoring the health of the forests since this may provide helpful indication on why forests – in particularly exposed higher altitudes - are under stress today (forest decline).

Mr Köhl provided a short overview on how useful IP data are for scientific research and modeling forest growth and showcased some results. He finished his presentation by recalling that the ICP

Forests is a programme under the Convention on Long Range Transboundary Air Pollution which depends on funding from voluntary contributions to the Convention Trust Fund and from contributions of the Lead Country. At the moment member states have to finance their own monitoring activities. Mr. Köhl concluded his presentation with an outlook into the future. The monitoring activities under the ICP will be continued, ICP will actively participate in ecosystem research and international infrastructure networks and will lobby for sustainable financing of the monitoring and research activities.

The presentation can be found on the website of the meeting:

[www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS\\_Meeting/1-ICP-KOEHL.pdf](http://www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS_Meeting/1-ICP-KOEHL.pdf)

### **Item 3. Overview of the progress of work and developments related to forest inventory and reporting:**

#### **a. NFI in the United States, Brad Smith, U.S. Forest Service**

Mr. Brad Smith (USDA Forest Service), presented the national forest inventory on the United States. In his presentation he first highlighted specific requirements for forest inventories in very large countries. The US forest inventory for example applies hex cell grid, since it allows equal spacing of samples regardless of latitude. Once the base hexagon positioned over the conterminous United States it is subdivided into smaller hexagons (cells – about 2500 ha). The systematic grid allows flexible analysis using spatial layer overlays of the client's choice to summarize data. After the overview on the method applied, Mr. Smith highlighted some result of the current inventory, including forest ownership, forest health, forest fuel index, which is an important indicator for the expected intensity of forests fires as well as the historic development of forest cover in the US. Mr. Smith also provided an outlook on the future of forest inventory in the United States, highlighting the huge benefits arising from aerial image or satellite based inventory technology, such as Image Change Estimation (ICE) or Light Detection and Ranging (Lidar) which allow for a much higher precision of measurement in remote places. Urbanization is one of the major causes for forest loss in the United States, often caused by weak zoning planning. Monitoring Urban Land is now part of new national legislation and the future inventories will include urban tree monitoring. In concluding, Mr. Smith highlighted that future inventory might turn into a virtual forest inventory, relying much heavier on information technology, such as body-mount 3D cameras on plots or drones with cameras.

The presentation can be found on the website of the meeting:

[www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS\\_Meeting/2-USForestMonitoring-BRADSMITH.pdf](http://www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS_Meeting/2-USForestMonitoring-BRADSMITH.pdf)

#### **b. European National Forest Inventory Network (ENFIN) – objectives and activities**

Mr. Klemens Schadauer (Austrian Federal Research and Training Centre for Forests, Natural Hazards and Landscape), presented the objectives and activities of the European National Forest Inventory Network (ENFIN).

After introducing ENFIN at the beginning of his presentation, Mr. Schadauer highlighted the importance of national forest inventories (NFI). NFI's play a major role as national data providers and are part of national forest policy. In many countries generated by inventories are an important source for international forestry reporting. While forest inventories have now become widely applied (5 countries in the 1950ies, 35 in the first decade of the 21<sup>st</sup> century). However, most inventories developed at national level and reflect the particular need of policy makers and

decision makers at national level, creating big diversity of methods and definitions. In the following, Mr. Schadauer highlighted the approach by ENFIN to harmonize these NFI's. He underlined that the process of harmonisation is a bottom-up approach that begins in divergence and ends in comparability (quote from McRoberts). ENFIN is aiming at a unique set of common "reference" definitions, that will allow for the passage from an initial divergence to the final comparability. Harmonised data are then obtained through the application of "bridging functions" to local data. In the following Mr. Schadauer presented a few examples of "reference" definitions which were also the topic of two scientific publications.

After this overview about ENFN and NFI's in general, Mr. Schadauer focused on the Cost Action USEWOOD. This project aims at improving information and methodologies on the potential sustainable wood supply in Europe based on the NFI's, since they integrate ground data, remote sensing data and other geo-referenced data to derive estimates of forest attributes in general and particularly of sustainable wood supply. The project is composed of three working groups (WG):

WG1 *"Assessment and estimation techniques of state and changes in wood resources"*

WG2 *"Improving estimates of wood resources combining Remote Sensing and NFI field data"*

WG3 *"Predicting the wood resources and their use"*

Mr. Schadauer ended his presentation by highlighting the JRC Framework Contracts on "Tree Species Distribution", "European Harmonized Estimator", "European Forestry Dynamics Model", "Harmonized Biomass Estimation". The results of the computing coordinated by JRC indicates, that the modeling under the JRC Framework Contracts provide good results.

The presentation can be found on the website of the meeting:

[www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS\\_Meeting/3-ENFIN-SCHADAUER.pdf](http://www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS_Meeting/3-ENFIN-SCHADAUER.pdf)

### **c. Distributed integrated harmonized forest information for bioeconomy outlooks (DIABOLO)**

Ms. Tuula Packalen (Natural Resources Institute Finland (Luke)) presented the project "Distributed integrated harmonized forest information for bioeconomy outlooks" (Diabolo). Ms. Packalen highlighted in her introduction, that the EU forest policy is a complex puzzle of scattered, not coherent and coordinated sectorial policies. In addition to the complex image of the forest policies, the assessment of the biomass available (e.g. for energy use) vary considerably based on the methodologies and assessments used. She highlighted the European forestry dynamics model as an example for a harmonized tool for policy support.

The Diabolo project is aiming at:

- *strengthen the methodological framework for more accurate, harmonised and timely information from forest inventories and monitoring systems, to feed into EU information systems (SEIS, EFDAC);*
- *Support the development of EU policies and international processes relying on consistent forest information;*
- *Make innovative use of field collected data and EC space-based applications of Earth observation and satellite positioning systems.*

Ms. Packalen presented the partners and the partner involved in the DIABOLO project as well as the structure of the work packages (WP) and the specific objectives of DIABOLO:

- *Identify demands for and gaps in the provision of forest information (WP1);*
- *Develop new models for Europe-wide harmonised forest information (WP2);*
- *Improve the availability and quality of forest information and explore the combined use of NFI and Earth observation data to improve methods for delivering indicators on forest spatial patterns and their changes (WP3);*

- *Improve forest disturbance monitoring systems using new European satellite data, providing near real-time information on forest disturbance (WP4);*
- *Deepen insight into the sustainability of biomass supply and trade-offs with other ecosystem products and services, using the EFDM and GLOBIOM models (WP5);*
- *Increase the impact of the project outcomes by disseminating results through WP-specific end user panels and an international advisory group (WP6).*

Ms. Packalanen ended her presentation with a short overview on the expected impacts based on the harmonised information of DIABOLO:

- *Improved knowledge communication and information exchange between political decision makers and forest data providers;*
- *Knowledge transfer among NFIs, emerging NFIs;*
- *Strengthened capacity for assessing risks and monitoring forest disturbances using new Earth Observation data;*
- *Improved UN-ECE statistics that use NFI data;*
- *Better knowledge of Europe's forest resources, their availability and their sustainable future supply;*
- *Improved understanding of trade-offs between biomass supply and other ecosystem products and services;*
- *Harmonised and improved European estimation of biomass supplies;*
- *Improved coherence of support for forestry-related policies.*

The presentation was followed by a short Question and Answers session:

Eurostat commented that the Diabolo project seems to have very similar objectives like Eurostat.

Q: How will the information will be made available to the public?

A: (notes missing)

Q: Will it be possible to include sources other than forests included in the approach?

A: Yes, other sources are covered by IIASA Globebiom, which will cover agriculture and other landuse based on their data.

Q: Are there other ways foreseen to estimate volumes and flows?

A: Yes, there will be the possibility to consider the market demand at local level.

Q: Could the project contribute to improving statistics of the UNECE, Forest Europe or other relevant data collecting entities?

A: Indeed, Workpackages 2 and 3 will work on improved methodology e.g. indicator 6.10 and could improve estimation methods and estimates for multipurpose use of forests, including recreation.

The presentation can be found on the website of the meeting:

[www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS\\_Meeting/4-DIABOLO-SFM-PACKALEN.pdf](http://www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS_Meeting/4-DIABOLO-SFM-PACKALEN.pdf)

#### **d. The National Forest Inventory in the Russian Federation**

Mr. Andrey Filipchuk (All-Russian Research Institute of Silviculture & Forest Mechanization) presented the National Forest Inventory in the Russian Federation. In his introduction, Mr. Filipchuk presented the legislative and methodological background of the national forest

inventory. He highlighted the important role of forest strata (49 different have been determined, based on growth conditions, tree species compositions, age of the forest stocking) and presented the formulas applied to determine the number of plot level required. After presenting the features of a permanent plot Mr. Filipchuk showed thee field data measurement and registration equipment of the NFI which are used to enter the 117 different variables are assessed and measured on the permanent plots. He concluded his presentation by explaining that the NFI information is used by the federal state's authorities and administrations in the forestry and related sectors, authorities and administrations at regional level, and by local authorities and administrations responsible for forest management decisions. The scientific NFI results are also made available for non-governmental organisations and the public

The presentation was followed by a short Question and Answers session:

Q: Will the results of the current forest inventory provide information on the increment?

A: This information can only be retrieved after finalizing the next full cycle. The next rounds of inventory are planned to be conducted in 2020, 2022, 2024 but funding remains a huge challenge.

Q: What the Russian Federation will use the results for?

A: National level information and reporting to Forest Resources Assessment.

Will the method also as applied to remote areas, such as Siberia?

A: In remote areas, remote sensing is used for stratification, but not or measuring. In Yakutia, for example, the inventory used 100 sample plots for on the ground measurement.

The presentation can be found on the website of the meeting:

[www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS\\_Meeting/5-RussianFedNFI-FILIPCHUK.pdf](http://www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS_Meeting/5-RussianFedNFI-FILIPCHUK.pdf)

#### **e. EU Forest Accounts – a framework for valuation**

Ms. Marilise Wolf-Crowther (EUROSTAT) presented the current status of developing Forest Accounts at EUROSTAT and highlighted that they are a framework for valuation. At the beginning of her presentation Ms. Wolf-Crowther outlined that forest accounts fit to the System of Environmental-Economic (SEEA) Accounting Emerging Ecosystem Accounting (EEA). The system allows for directly or indirectly accounting of provisioning services, regulating services as well as cultural services of forests. After outlining the brief history and the current state of the Integrated Environmental and Economic Accounting for Forestry Ms. Wolf-Crowther presented the revised IEEAF questionnaire, which includes:

- *Economic aggregates of the forestry and logging industry;*
- *Up-to-date, complete estimates of EU wooded area and timber resources, covering all wood fibre;*
- *National accounts need the physical data as a basis for monetary estimates of value of cultivated wooded land, without the value of the trees, required as of 2017;*
- *Value of cultivated growing stock and timber removals;*
- *Physical and monetary supply and use of wood and non-wood forest products;*
- *Output of the forestry and logging industry by type (market, non-market, etc.) and institutional sector (households, non-financial corporations, government, etc.);*
- *Carbon stocks and flows of forest ecosystems' biomass and soil*

Ms. Wolf-Crowther continued her presentation by outlining the planned schedule for data collection as well as the potential future use of the data generated. Results from IEEAF data could be used to compare data from the Land Use and Cover Area Frame Survey – which are important for the carbon reporting on Land Use, Land Use Change and Forestry (LULUCF) to UNFCCC by the Member States and the EU. At the end of her presentation, Ms. Wolf-Crowther the “Knowledge innovation project” (KIP) for an integrated system for natural capital and ecosystem services accounting based on policies.

The presentation can be found on the website of the meeting:

[www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS\\_Meeting/6-EUForestAccounts-WOLFCROWTHER.pdf](http://www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS_Meeting/6-EUForestAccounts-WOLFCROWTHER.pdf)

#### **f. Revised pan-European indicators**

Ms. Elena Estrada (Forest Europe Liaison Unit Madrid), presented the revised set of pan-European indicators. In her presentation, Ms. Estrada recalled the milestones of the development of the pan-European criteria and indicators, before she focused on their development between 2003-2015. Ms. Estrada presented in detail the development of the revised set of indicators as they have been adopted by the Expert Level Meeting in June 2015 as they can be found in the Annex of the Madrid Ministerial Declaration. The revision of the set of C&I was guided by the following objectives:

- Provide a framework for dialogue and communication;
- Monitor, assess and report on the state and trends of forests and the forest sector
- Provide a framework for NFPs, policies and plans, laws and improve forest sector governance
- Provide information about forests and their use to other sectors, and global and regional initiatives and processes;
- Provide a framework to support the practical implementation of SFM.

The ELM developed a set of supportive and supplementary documents:

- Background information for the Updated pan-European Indicators for SFM;
- Relevant Terms and Definitions used for the Updated pan-European Indicators for SFM;
- Information paper: summary of the discussions and reflections.

The main differences between the updated set and the previous one are:

1. Structure of the set The tight linkage between the quantitative (measurable) and qualitative (policy and governance) indicators has been created;
2. Changes in titles of indicators and their descriptions checked Titles of indicators checked and improved when necessary – to improve communication and understanding of nominations – the descriptions were updated and modified;
3. New and transferred Indicators
  - a. 3 new indicators:
    - i. Forest land degradation;
    - ii. Forest fragmentation;
    - iii. Common forest bird species
  - b. 2 indicators transferred to qualitative indicators:
    - i. Forest management plan;
    - ii. Cultural values.

4. Relation to other areas/sectors Information improved for climate change and desertification issues, the value and payment of ecosystem services, forest certification and illegal logging.

Ms. Estrada finished her presentation by presenting the revised set of pan-European Indicators for SFM.

The presentation was followed by a short Question and Answers session:

Q: What is the status of the data and information on the Russian Federation.

A: The qualitative data of the CFRQ were available for the authors but the data in the output tables (quantitative data) only referred to 2010 data for the Russian Federation.

Q: Does the dataset contain information on increment.

A: These are available.

Q: What about cultural values in State of Europe's Forests?

A: Namely the example from Sweden, where the country attributed values to archeological sites on forest land showcased that the data in 9.11 are "pretty meaningless" due to lack of standard definition.

The presentation can be found on the website of the meeting:

[www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS\\_Meeting/7-EUIndicatorsSFM-ESTRADAWILKE.pdf](http://www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS_Meeting/7-EUIndicatorsSFM-ESTRADAWILKE.pdf)

#### **Item 4. Presentation of results and preliminary review on the process and results of the global and regional reporting 2015:**

##### **a. Global Forest Resources Assessment 2015**

Mr. Örjan Jonsson (FAO Rome) presented the results of the Global Forest Resources Assessment 2015. At the beginning of his presentation, Mr. Jonsson emphasized the good cooperation with partners at national level and in international organizations in data collection and the financial support provided by Canada, Finland, Japan, the United States of America and the European Commission. The Collaborative Forest Resources Questionnaire was the key tool for joint data collection. After that introduction, Mr. Jonsson provided an overview on how the world and with it the forest changed during the last 25 years. The total human population increased by 37% and production from agriculture increased by 40%, globally. Forest area decreased by 3.2%, leading to the first conclusion of "Forest area loss has been cut in half and is now less than one-tenth the rate of human population growth". The forest area loss or gain is not equally distributed and based on the results of the CFRQ the following conclusion was presented: "Forest area continues to expand in the temperate and boreal zones and contract in the tropics". Forest plantations are constantly increasing and account currently (7% of forest area) for almost twice of the share of forests than in 1990 (4% of forest area). Based on the observation, that forests today are more intensively measured, monitored and reported on led Mr. Jonsson to the last conclusion, that "Our capacity to manage forests for the long-term has never been stronger." At the end of his presentation, Mr. Jonsson gave a short summary on the expectations expressed by national correspondents regarding the future developments until 2030. Based on the question "What do

countries think will happen to your forest area by 2030?", 27% of countries expect it will decrease, while 73% of countries expect that the forest area will increase. Among those countries which expect a decrease, 21 countries expect a decrease of 65 million ha or 6% of their forest area, while correspondents from 52 countries expect a total increase of 144 million ha or 10% of their forest area.

The presentation was followed by a short Question and Answers session:

Q: Are forest fires reported?

A: Annual data on forest area burnt.

Q: Is remote sensing used to assess the forest area burnt?

A: Yes, forest fires are one aspect that can be tracked by analysing the canopy cover.

Q: Considering the excellent cooperation between four organizations on collecting data with the Joint Forest Sector Questionnaire (JFSQ), the Collaborative Forest Resources Questionnaire (CFRQ) is a good step but further work needed.

A: The JFSQ is an annual exercise collecting annual data and has therefore a certain routine in cooperation and communication. It may be possible to have a set of core variables being collected jointly on an annual basis.

The presentation can be found on the website of the meeting:

[www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS\\_Meeting/9-FRA15-JONSSON.pdf](http://www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS_Meeting/9-FRA15-JONSSON.pdf)

## **b. Forests in the ECE Region**

Mr. Christopher Prins (independent forest expert) presented the study "Forests in the ECE Region" which was prepared for the United Nations Forum on Forests 11. In the introduction, Mr. Prins explained that the study used the global objectives and split them into questions which can be answered in an objective way.

The global objective 1: *"Reverse the loss of forest cover worldwide through sustainable forest management, including protection, restoration, afforestation and reforestation, and increase efforts to prevent forest degradation"* was split up into the questions:

- Has forest cover expanded or declined?
- Are the forests expanding in terms of wood?
- What is the area of sustainably managed forest?
- How much "forest degradation"?

The global objective 2: *"Global objective 2: enhance forest-based economic, social and environmental benefits, including by improving the livelihoods of forest dependent people"* was split up into the following questions:

- Have economic benefits from ECE Forests increased or decreased?
- Have social benefits from ECE forests increased?
- Have environmental benefits from ECE forests increased?
- Have livelihoods of forest dependent people improved?
- Does the forest sector contribute to climate change mitigation?

The global objective 3: *"Increase significantly the area of protected forests worldwide and other areas of sustainably managed forests, as well as the proportion of forest products from sustainably managed forests"* was split up into the following questions:

- Has the area of forests protected for biodiversity conservation increased?

- Has the share of consumption of products from sustainably managed forests increased?

Global objective 4: reverse the decline in official development assistance for sustainable forest management and mobilize significantly increased, new and additional financial resources from all sources for the implementation of SFM

- What are the trends for official development assistance for SFM?
- What financial resources, from all sources, have been supplied for SFM inside the ECE region?

Mr. Prins continued his presentation with a set of Challenges and Opportunities for the ECE Region in implementing the Global Objectives. Before concluding, Mr. Prins also presented these following lessons learned:

- The Global Objectives do not facilitate monitoring and reporting;
- We used specific questions: would the approach work elsewhere?
- No specific enquiry was needed: existing international datasets may be used;
- A light approach, but with official review and consultation, combined flexibility, transparency and focus;
- No judgements attempted: readers draw their own conclusions;
- Regional approach complements other scales, can mobilise resources, expertise and regional bodies;
- The process helped to identify challenges and issues. It could help in formulating future instruments

The presentation can be found on the website of the meeting:

[www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS\\_Meeting/10-ECEForests-PRINS.pdf](http://www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS_Meeting/10-ECEForests-PRINS.pdf)

At 5 p.m. the chair informed the meeting participants that the meeting would continue at 10 a.m. the next day.

On 4 November 2015, the chair continued the meeting at 10 a.m.

Before continuing the meeting with Item 4, Roman Michalak, Acting Chief of the UNECE/FAO Forestry and Timber Section, together with Stein Tomter, leader of the Team of Specialists on Monitoring Sustainable Forest Management awarded Mr. Brad Smith with a certificate of appreciation. Mr. Smith has been one of the longest serving members of the team and Mr. Michalak thanked him for his support and contribution in the many activities as a team member and as national correspondent.

#### **Item 4. cont.**

##### **c. State of Europe's Forests 2015**

Ms. Myriam Martin (Forest Europe Liaison Unit Madrid) presented the report on "*State of Europe's Forests 2015*" (*SoEF*). In her introduction, Mr. Martin outlined, that the SOEF2015 report was at any stage, from the data collection, compilation and analysis and the compilation of the report a "Large scale and collaborative process".

C1. Forest resources and their contribution to Global Carbon Cycles

C2. Forest ecosystems health and vitality

- C3. Productive functions of the forests
- C4. Biological diversity in forest ecosystems
- C5. Protective functions in forest management
- C6. Maintenance of other socio-economic functions and conditions.

Ms. Martin summed up the presentation with the following conclusions;

1. Forest resources have increased steadily in countries reporting to the Forest Europe.
2. Forests show an adequate state of health and vitality, although threats may come from climate effects, which may accentuate biotic and abiotic damages;
3. Forest resources are an important economic asset in the region and have an essential socio-economic contribution through the provision of wood and non-wood products and services;
4. Forest are a reservoir of biodiversity and provide essential protective functions, and social services;
5. The forest sector is moving towards integrated multifunctional management, as required to balance the provision of a multiplicity of ecosystem services;
6. Forest policies and institutions have evolved positively to enhance conservation and protection of forests, and to ensure the provision of ecosystem services.

The presentation can be found on the website of the meeting:

[www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS\\_Meeting/8-StEF15-MARTIN.pdf](http://www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS_Meeting/8-StEF15-MARTIN.pdf)

## **Item 5. Forest Information System for Europe (FISE)**

Jesus San Miguel Ayanz (Joint Research Centre - JRC) presented the Forest Information System for Europe (FISE). FISE is established to be a common information point for forest related information in Europe. In his introduction, Mr. San Miguel Ayanz highlighted the importance of the European Forest Strategy (adopted in 2013) with its three objectives (i) coordination and communication, (ii) contribution to major societal objectives and (iii) improving the knowledge base. The presented project contributes to the third objective. The presenter outlined the set-up of the system and emphasized that JRC will develop several modules, e.g. on (1) forests and natural disturbances like fires and pests, (2) forest and the bio-economy, (3) forests and climate change and (4) forest and ecosystem services. The inter-service group on forestry will coordinate the different initiatives within the European Commission to support the collection/harmonization of forest information. These modules already exist in the current version of FISE and are being tested.

According to Mr. San Miguel Ayanz FISE should, at least, hold:

1. Information on-going EC initiatives on forests and forestry
2. Existing data on forest resources in the EU (and Europe), currently based on Forest Europe Criteria and Indicators data, and links to other forest related data (e.g. ESTAT).
3. Harmonized forest datasets developed through EC funding, including JRC Framework Contract, Horizon2020, LIFE+, Copernicus, etc.
4. Results and reports (or access to them) of EC financed projects regarding harmonized forest information
5. Links to existing EU forest related policies, through links to relevant DGs.
6. Links to relevant networks and initiatives related to the collection/analysis of forest information.

Mr. San Miguel Ayanz concluded his presentation with an outlook on further steps in the development of FISE:

- Prototype system openly available by the end of 2015
- Further development of the FISE database and metadata catalogue – INSPIRE compliance.
- Enhancement of FISE interface to provide quick access to forest information, data, models and tools

(EU Public License policy).

- Integration of LIFE+ projects results, Copernicus forest-related data layers
- Integration of Horizon2020 project results (models, data, etc. from - next 7 years Research Framework Program.
- Strengthening links with on-going projects/initiatives in the module areas of FISE (e.g. FAO, UNECE, Forest Europe)

A prototype of FISE will be available to the public in December 2015.

The presentation was followed by a short Question and Answers session:

Q: What are the plans for funding for the maintenance for system in future including adding new data?

C: Eurostat will make LUCAS and forest accounts data available for the FISE.

C: Forest Europe may consider revising employment data and definitions should be reviewed.

The presentation can be found on the website of the meeting:

[www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS\\_Meeting/12-FISE-SANMIGUELAYANZ.pdf](http://www.unece.org/fileadmin/DAM/timber/meetings/20151102/ToS_Meeting/12-FISE-SANMIGUELAYANZ.pdf)

## **Item 6. Presentation, review and the next steps of the pilot application of the System for Evaluation of Management of Forests (SEMAFOR).**

Mr. Christopher Prins presented a review and the next steps of the pilot application of the System for Evaluation of Management of Forests (SEMAFOR). In his introduction, Mr. Prins highlighted in his introduction and presentation on the background of the study, that assessment of advancement and progress towards sustainable forest management was one of the purposes of criteria and indicators of sustainable forest management. So far limited success and minimal policy impact as it have shown the previous cycles of data collection and reporting (e.g. SoEF 2007, 2011 or FRA 2005, 2010, 2015). At present one cannot answer in an objective and transparent way the important question « Are forests in [country X] managed sustainably? » SEMAFOR is the latest attempt to develop a method to address this issue.

After recalling the mandate and process, Mr. Prins highlighted the main features of the SEMAFOR study:

- All based on official, pre-existing data: no special reporting or enquiry;
- Based on pan-European criteria and indicators;
- For each indicator, scale-neutral parameters agreed (% , ratios, rates of change etc.);
- Distinction between « context », « assessment » and « background » parameters;
- « Warning levels » identified only for assessment parameters;
- If warning level exceeded, an « apparent area of concern » identified;
- Data sets reviewed by national correspondents, for accuracy, context and policy response;
- After dialogue, country sheets agreed and circulated to team members: they contain the final data and a discussion of the apparent areas of concern, as well as a list of missing data

He continued by outlining the main issues of the study. The first item he highlighted was the general approach, « areas of concern » and whether or not this approach was acceptable. He continued by presenting the pros and cons of a common threshold or warning level and whether a mixed approach would be possible. In general, the values of the warning levels are often set as a change in a « negative » direction. This bears the risk of implicitly assuming that the present situation is OK/sustainable and could be considered as a built-in bias towards the status quo. He

asked the audience, How to avoid this trap without imposing a single uniform vision of what constitutes SFM?

Mr. Prins concluded his presentation with a critical review whether SEMAFOR could have an impact. The approach provides detailed comprehensive, objective and transparent country sheets but is complex and without clear conclusions. In addition, developing common thresholds in a consensus based process would be an important step in defining SFM. Reaching consensus on a meaningful and quantified set of warning levels for a "SEMAFOR-type" assessment exercise would greatly improve transparency and credibility, but would pose significant problems, essentially at determining levels which were realistic in all relevant circumstances, but not so low as to be meaningless. The SEMAFOR process could support revision of C&I sets, identifying meaningful and measurable indicators – and those, which are not (and might be dropped).

The presentation was followed by a short Question and Answers session:

C: Data on employment are available in Eurostat and indicate stable employment.

Q: Could the tea urge the secretariat to not use "warning level" and suggest to rather use "threshold" or "median/average", or other rather softer appropriate wording?

A: This is a valid point. Many people were confused/worried about the terms "warning level" and "area of concern". New, less "threatening" terms must be found, and fully explained. The final version of the study will use other wording instead.

Q: Are there possibilities for review? E.G. Forest accessible for recreation- review by country – more flexibility needed e.g. forest ownership.

A: There will be some limited possibility for review and comments for the study and the secretariat will circulate the study with the team. The countries included in the report already provided feedback on the comments and these will be included in the final report.

C: Avoid finger-wagging, humiliation and simple

C: Taking an indicator-by-indicator approach, as in SEMAFOR, overlooks the vital balance element of SFM, and the fact that trade-offs must sometimes be made. Do we need to "bundle" the indicators by criterion or even across criteria?

C: In fact, to assess SFM, we need to be clearer about our conceptual framework. If you "assess", you must have a standard.

C: In fact, to assess SFM, we need to be clearer about our conceptual framework. If you "assess", you must have a standard.

C: It was suggested (by Valgepea and others) that national targets or similar should be shown alongside the recorded international parameters. If applied to the whole dataset, this could get complicated and very heavy, but it seems a good principle. It would imply another round of dialogue, asking the national correspondents to provide this information

C: Clearly the information on policies and instruments is necessary for assessing SFM. This should be incorporated into the pilot study asap. Ask LUM to supply them in easily usable form – but if they say No, use the published data.

C: There was concern that readers/users would not go the country sheets to look into the cases where the national values exceeded the “warning levels” (marked by an asterisk in the general tables). Try to find a way of bringing the national correspondents explanations into the table itself.

C: Need to make the national situations easier to understand, by using colours and graphs. Perhaps something based on the Swiss NFI Cockpit approach?

C: To avoid misunderstanding and confusion, the material presented at Engelberg should be circulated widely so that people can comment (by December), and remove the danger of suspicion based on ignorance

After the discussion, the team recommend that the SEMAFOR pilot study be presented to the Joint Working Party, alongside the team’s comments.

Mr. Prins summed-up the discussion and outlined the next steps as follows:

- Write up study, using materials shown, taking account of comments made (further comments until the end of 2015);
- Submit study to 38th Session Joint ECE/FAO Working Party on Forest Statistics, Economics and Management (23-24 March 2016, Geneva, Switzerland);
- Publish the pilot assessment as UNECE/FAO Discussion Paper;
- If so agreed, follow up with “full study”, after improvement of method, consensus on thresholds etc., aim at full participation, use new indicator set etc.).

#### **Item 7. Exchange of information on future meetings and activities; other matters.**

No decision was taken regarding next meeting of the ToS. It was agreed that the secretariat will discuss this with the team leader and deputy leaders and communicate this to the team in due time.

#### **Item 8. Closure of the meeting**

## ANNEX I - List of participants

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**UNECE-FAO  
FORESTRY AND TIMBER SECTION**

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**Third (3<sup>rd</sup>) meeting of the “UNECE/FAO Team of Specialists on  
monitoring sustainable forest management”**

*Engelberg, Switzerland, 4-5 November 2015*

**Agenda**

- Item 1. Opening and welcome (Switzerland, FAO, UNECE). Adoption of the Agenda.
- Item 2. Special presentation to celebrate 30 years of ICP Forests, Michael Koehl, ICP Forests.
- Item 3. Overview of the progress of work and developments related to forest inventory and reporting:
  - A. NFI in the United States, Brad Smith, U.S. Forest Service;
  - B. ENFIN – objectives and activities, Klemens Schadauer, ENFIN;
  - C. DIABOLO, Tuula Packalen, LUKE, Finland;
  - D. NFI in the Russian Federation, Andrey Filipchuk, Russian Federation;
  - E. EU Forest Accounts – a framework for valuation, Marilise Wolf-Crowther, EUROSTAT;
  - F. Revised pan-European indicators Elena Estrada, Forest Europe.
- Item 4. Presentation of results and preliminary review on the process and results of the global and regional reporting 2015:
  - A. “Global FRA 2015”, Örjan Jonsson, FAO Rome;
  - B. “Forests in the ECE Region”, Kit Prins;
  - C. “State of Europe’s Forests 2015”, Myriam Martin, Forest Europe LUM;
- Item 5. FISE, JRC Ispra
- Item 6. Presentation, review and the next steps of the pilot application of the System for Evaluation of Management of Forests (SEMAFOR).
- Item 7. Exchange of information on future meetings and activities; other matters.
- Item 8. Closure of the meeting.

**Meeting hours:**

Wednesday, 4 November 2015	10.00 – 13.00: Items 1, 2, 3
	14.00 – 17.00: Item 4
Thursday, 5 November 2015	10.00 – 13.00: Item 5 and 6
	14.00 – 17.00: Items 6 cont., 7 and 8

*Each session with a 30' coffee break*

**Venue:** Conference room “Vitznau”, Ramada Hotel, Engelberg, Switzerland