





33rd Task Force Meeting of the International Co-operative Programme on Assessment and Monitoring of Air Pollution Effects on Forests (ICP Forests)

Bucharest, Romania, 18–19 May 2017

Final Minutes

Opening

- The 33rd Task Force meeting was hosted by the Romanian Ministry of Environment, Waters and Forests and the National Institute for Research and Development in Forestry "Marin Drăcea". It was attended by 57 delegates from 24 countries (see Annex II).
- 2 Mr Ovidiu Badea (Romania) opened the meeting and welcomed all participants. Mr Claudiu Zaharescu from the Romanian Ministry of Environment, Waters and Forests welcomed the Task Force to Bucharest and expressed his gratitude to the National Institute for Research and Development "Marin Drăcea" and the Programme Co-ordinating Centre (PCC) of ICP Forests for organizing both the 6th Scientific Conference, which was held the day before, and the 33rd Task Force Meeting. He provided an overview of Romanian forests and forest management.
- Ms Sigrid Strich (Germany), representing the lead country of ICP Forests, thanked the former chairman of ICP Forests, Mr Michael Köhl, for his chairmanship of more than 10 years, presenting him with a group photo from the Task Force Meeting in Garmisch-Partenkirchen in 2010 as farewell present. Mr Michael Köhl gave his farewell speech, calling to mind major events and developments of the ICP Forests programme during his chairmanship.
- The new chairman Mr Marco Ferretti expressed his sincere thanks to the ICP Forests lead country for trusting in him and giving him the opportunity to act as new chairman of ICP Forests. He also expressed his gratitude to his employer, the Swiss Federal Research Institute (WSL), for their support, thanked Mr Michael Köhl for his time as chairman, and will do his best to move the programme forward. The further meeting was then chaired by Mr Ferretti.

Item 1 Adoption of the agenda

5 The Task Force adopted the agenda and approved the minutes of the 32nd Task Force Meeting 2016in Luxembourg.

Item 2 Report of the Programme Co-ordinating Centre (PCC)

6 Mr Walter Seidling (Head of PCC) reported on activities of the PCC since the last Task Force Meeting. He reminded the Task Force that all documents from the WGE and its programmes can be

found on the UNECE website¹. Mr Seidling listed all meetings of ICP Forests, other ICPs and the European Commission, which members of the PCC had attended.

Mr Seidling informed about the updated **National Emission Ceilings (NEC) Directive** of the EU and respective PCC activities. In the discussion that followed, it was mentioned that the NEC Directive may be a chance for the ICP Forests monitoring to gain more influence and secure its financing within the countries. The Task Force was encouraged to contact their responsible ministries and offer their expertise in the further process. The new NEC Directive will depend on many key indicators in their Annex V that ICP Forests can already provide with their soil, soil solution, foliar, and ozone data. It was noted that the reporting period, however, differs to the State of European Forests reporting hence hindering synchronization.

Item 3 Publications issued by PCC

- 8 Ms Alexa Michel (PCC) presented the current draft of the **2017 Technical Report of ICP Forests**. For comments on the scientific chapters, she asked to contact the authors directly with her in CC. Ms Michel assured to discuss all comments with the respective authors and revise the report accordingly. For the timeline of the Technical Report, please refer to the ICP Forests website². After a question on missing information for correctly interpreting the trends in crown condition, Mr Nenad Potočić, Chair of the Expert Panel on Crown Condition, replied that he and his co-chair Mr Volkmar Timmermann were preparing a questionnaire to be sent to all countries to get that kind of information in future.
- Ms Michel presented a draft of the first ICP Forests Policy Brief titled "Action needed to further reduce ammonium deposition to European forest ecosystems" and informed about the briefs' intended general aims and audiences. Ms Michel encouraged the Task Force to send suggestions for future editions to her, with the only requirements being that the results are transnational, from ICP Forests data and/or plots and in line with the WGE objectives. She will then prepare a brief in co-operation with the authors, the Scientific Committee and the respective Expert Panel. There was no general rejection of this new publication format. Ms Michel assured to discuss with the authors of the first brief all comments made during the meeting. The next draft version of the brief will be sent to the chair of the EP Deposition to be circulated among the EP members and to the Scientific Committee.
- Mr Walter Seidling (Head of PCC) presented the **2016 Executive Report**. After discussing whether the Executive Report might be replaced by the new ICP Forests Briefs format in future, it was resolved that the Executive Report will be kept until further notice. For preparing the upcoming 2017 Executive Report it was decided to contact some of the presenters from the Scientific Conference and extract relevant findings as had been done in previous years. The need to distribute the Executive Reports or ICP Forests Briefs to a much larger audience, including environmental groups, politicians, and the EU, was acknowledged.

Item 4 Issues concerning WGE/CLRTAP

Ms Sabine Augustin (one of the vice-chairs of the WGE) provided an **overview of the work** and organisation of the LRTAP Convention, specifically of the WGE and the role of the ICPs. General research, development, and monitoring aims of the LRTAP Convention and specific priorities for 2010–2020 of the WGE are included in the convention text itself³ and the strategy of the WGE⁴. Ms

¹ www.unece.org/env/lrtap/welcome.html

² http://icp-forests.net/page/icp-forests-technical-report

http://www.unece.org/fileadmin/DAM/env/lrtap/full%20text/1979.CLRTAP.e.pdf

Augustin also referred to the effects-based approach of the air pollution abatement policy, pathways and tools, and the integrated assessment modelling tools RAINS/GAINS.

- Mr Walter Seidling (Head of PCC) listed all activities to meet the obligations of ICP Forests to the WGE and LRTAP Convention. He went over the items of the current **2016/2017 EMEP/WGE Workplan**, which is seen by the WGE as a tool for aligning activities of the ICPs with the needs of the Convention and for ensuring the assessment of ICP data in the context of more general science. The new format of the 2018–2019 Workplan, which is now in preparation, intends to include more concise tasks than in the past. All general activities of the programmes will be described in specific mandates of the ICP centres.
- Mr Seidling then presented a chart of the contributions to the Programme Co-ordinating Centre via the UNOG Trust funds. This year the funding by the countries was USD 103,000 in total (both earmarked, i.e. bound to ICP Forests, and non-earmarked, i.e. not bound to ICP Forests). The Programme Co-ordinating Centre is financed by this money, including costs for personnel, travel, and the printing of reports.
- It was asked whether the new **Minamata Convention on Mercury** will have an effect on ICP Forests. Ms Mihaela Paun from the Romanian Ministry of Environment clarified that this is a Convention regulating mercury in addition to CLRTAP, i.e. under CLRTAP complementing activities with those carried out under the Minamata Convention are encouraged; both Conventions have different decision making bodies and will not interfere with each other in decision-making.

Item 5 Reports of sister ICPs

Mr Lars Lundin (former Chairman of ICP Integrated Monitoring of Air Pollution Effects on Ecosystems) reported on ICP IM's results and achievements in the reporting period 2016–2017, cooperation with other ICPs, and future plans. At their last Task Force Meeting held together with ICP Waters in Uppsala a week prior to this meeting, Mr Lundin had announced his retirement. Mr Ulf Grandin (Swedish University of Agricultural Sciences) and Mr Salar Valinia (Swedish EPA) had taken his place and will both act as co-chairs. Until the end of his contract, Mr Lundin will still be active sharing the work as chairman. The next Task Force Meeting of ICP IM and ICP Waters will be held in Poland in May 2018.

Item 6 Outstanding manual updates (Parts I and II)

Mr Walter Seidling (Head of PCC) presented the proposed changes of Parts I and II of the ICP Forests Manual. It was proposed to include a definition of the Scientific Committee in Part I and add a statement that scientific publications are encouraged. Mr Seidling agreed to revise the manual according to the given suggestions. Both Manual parts were then adopted by the Task Force with the proposed changes as discussed and changes that had been sent to Walter prior to the meeting.

Item 7 Activities of the Expert Panels (EPs) and committees of ICP Forests

Mr Nenad Potočić, Chair of the **Expert Panel on Crown Condition and Damage Causes**, informed about the changes in the crown chapter of this year's Technical Report compared to previous reports. He summarized the results of the Photo ICC 2015 led by Mr Stefan Meining and asked the Task Force to encourage their experts on crown condition to take part in the upcoming Photo ICC in 2017. He also informed about the International Cross-Comparison Course 2017 in the

⁴http://www.unece.org/fileadmin/DAM/env/documents/2013/air/wge/Informal document no 18 Revised Long-term Strategy of the effects-oriented activities clean text.pdf

Czech Republic for central and northern Europe on June 6-9, 2017. Future tasks of the EP include: switching from letter to number coding for the list of species (Annex 3 of Manual Part IV), a questionnaire about the details of national training and calibration practices, the number of field teams and the possibility of their participation in the Photo ICC, improving the coding system for damage cause assessments until the next Manual update, developing the concept of the Technical Report by further merging defoliation and damage data, checking the validity of data in the database and the functioning of check routines, and restructuring the EP information on the ICP Forests website.

- Mr Tom Levanič, Chair of the **Expert Panel on Forest Growth**, summarized the EP Growth meeting in 2016, which had been the first meeting under his chairmanship. He hoped for a higher attendance of their next meeting, especially since clarifications of the manual were waiting for discussion. In 2014, 15 countries had sent data which are still being evaluated. He acknowledged the value of the ICP Forests growth data as proved by various data requests and analyses. Recently Ms Tanja Sanders (PCC) had asked the countries for volume information or respective functions to be included in the database. They also work on aggregated plot data for different time periods. Because Ms Vivian Kvist Johannsen had resigned as co-chair in May 2016, he will ask the Expert Panel by email to confirm Ms Tanja Sanders as new co-chair.
- Mr Stephan Raspe, Chair of the **Expert Panel on Meteorology, Phenology, and LAI**, provided an overview of the data submissions for the year 2015. During the last year, they finalized the work on the meteo layer I and gap filled and harmonized data for 1980 to 2014 working with the ERA-Interim datasets. The next EP meeting will be held in 2018 although the time and location have not been specified yet. Countries interested in hosting a joint EP meeting (together with the EP Growth and possibly the EP Biodiversity and Ground Vegetation) are kindly asked to contact Mr Raspe.
- Mr Raspe reported that Mr Stefan Fleck, Co-Chair of the Expert Panel on Meteorology, Phenology, and LAI, attended a joint meeting of eLTER and ICP Forests on the harmonization of LAI and productivity measurements. On additional slides made available online after the meeting, Mr Fleck informed about the finalisation of Parts VI (Phenology) and XVII (Leaf Area Measurements) of the ICP Forests Manual and the start of new pF-curve evaluations for Level II plots. Any additional submission of data on soil water retention for improvement of the aggregated forest soil database is welcome at this stage.
- Mr Marcus Schaub, Chair of the **Expert Panel on Ambient Air Quality**, presented an overall slightly decreasing trend in ozone concentrations across Europe and symptom occurrences from 2002 to 2014. A new ISI publication estimates hourly ozone concentrations based on passive sampling data, which is significant for ozone flux modelling. Mr Schaub reported on results from the 2016 Intercalibration Course in Braşov, Romania, and the 2017 EP Meeting in Zagreb, Croatia, and informed about new initiatives: A bio-indicator approach to assess ozone impact on vegetation using *Viburnum lantana* (*Vib*EurNET), Predicting ozone fluxes, impacts and critical levels on European forests (PRO3FILE), and Designing a quasi-experimental observational study to detect environmental effects on growth of European forests to be included in PRO3FILE. Clean data on ozone and ozone symptoms had recently been made available from the ICP Forests database. He invited the audience to the 2017 Intercalibration Course in Trento, Italy, 28-31 August 2017.
- Ms Liisa Ukonmaanaho, Co-Chair of the **Expert Panel on Foliage and Litterfall**, gave an overview of the EP's activities such as the manual update, data corrections, and evaluation projects. The Expert Panel had decided at their last EP Meeting in Zagreb, Croatia, to give a copy of the Foliar Level I data to the TRY database and to include more elements As, Cr, Co, Hg, and Ni as optional parameters in the ICP Forests monitoring for foliage and litterfall at no or only little additional costs. For the year 2015, 15 countries had provided litterfall data from 141 plots. A Technical Report on the last 19th Needle/Leaf Interlaboratory Comparison Test had been published. The registration deadline for the next test is July 10, 2017. This fall, Ms Ukonmaanaho will send corrected data to be verified

by the countries and then included in the ICP Forests database. Mr Alfred Fürst had resigned as Co-Chair of the Expert Panel on Foliage and Litterfall to become the new chair of the Working Group of QA/QC in Laboratories.

- 23 Mr Till Kirchner (PCC) expressed his astonishment at the EPs decision to give a copy of the Foliar Level I data to the TRY database as this is against the current ICP Forests data policy.
- Mr Bruno De Vos, Chair of the **Expert Panel on Soil and Soil Solution**, reported that during its last meetings, the EP had discussed if and how to include heavy metals of the forest floor and mineral soil in the manual and ICP Forests ring tests, and other initiatives for manual updates, including an alternative TIC method for determining calcium carbonate content, correction methods or conversion factors for exchangeable cation determination methods, and microwave digestion. Mr De Vos reported that merging the more recent Level I and Level II soil data with the old Forest Soil Condition databases was on the way but had been more work than expected.
- Mr De Vos suggested that all EPs store their working datasets, as prepared for papers, at the PCC as they had done with their soil solution databases, thereby making these datasets and well-described metadata available to the wider scientific community. He asked every country, which had not been present at the last Expert Panel meeting, for their national plans for future Level I and Level II soil surveys. For C stocks (Paris agreement) and other indicators (NEC, SoEFs) he recommended synchronizing national surveys towards a third pan-European forest soil survey (2020–2025). Upcoming tasks of the EPs on Soil and Soil Solution are among others the integration of the ICP Forests soil databases for Level I and Level II (09/2017), ICP Forests soil databases online documentation for SO and S1 (12/2017), analysis of heavy metals data in soil, forest floors, and soil solution (Level I and Level II plots, 12/2017). The next solid soil ringtest will be held in 2018, the next soil solution and deposition ringtest in 2019, and the next meeting of the heads of the labs (soil and water) in Pallanza, 7-8 September 2017. Labs are asked to also participate in the EMEP heavy metal ringtest. During the discussion it was clarified that foliar phosphorus (P) content is better for predicting plant available P than total P content from the soil databases.
- Ms Karin Hansen, Chair of the **Expert Panel on Deposition**, reported on the last EP meeting in Zagreb, ongoing 11 data evaluations and the latest 12 publications using ICP Forests deposition data. Work to come includes further scientific evaluations and publications, updating and expanding aggregated data and correcting data, especially with the help of Peter Waldner (NFC Switzerland), motivate NFCs to resubmit data and fill in sampling periods, updating the deposition manual, especially the part on canopy exchange models, contribute to a presentation by Mr Andreas Schmitz (Level II, Germany) at the next IUFRO conference in Freiburg, September 2017, and contribute to the Ecological Studies book on "Trends in Forest Ecosystems". The next EP meeting will probably be in spring 2019.
- Ms Hansen announced her resignation as EP chair and welcomed her successor Mr Arne Verstraeten from the Research Institute for Nature and Forest (INBO), Belgium. Mr Verstraeten thanked Ms Hansen for handing over a successful EP and gave a short introduction to his career/background and future contributions to the EP. He had been with the programme since 2007. Mr Peter Waldner was announced co-chair together with Mr Daniel Žlindra.
- Mr Nils König, Head of the **Working Group on QA/QC**, showed results from the foliar and the deposition and soil solution ring tests held during the last year. Although most labs showed good results, ways to further improve non-tolerable results in future will be discussed during the meeting of the heads of the labs in Pallanza, Italy, this fall. Current topics in this working group are the integration of heavy metals in the ring test programme and of the EMEP ring tests, new analytical methods and instruments, and changes and improvements in data submission. The upcoming ring tests are: 20th foliar ring test 2017/18 organized by Mr Alfred Fürst, 9th soil ring test 2018 organized by Ms Tamara Jakovljević, 9th deposition and soil solution ring test 2019 organized by Anna Kowalska.

- This was Mr König's last TFM after ten years as head of the working group. He will be followed by Mr Alfred Fürst. The Task Force gave Mr König a long applause for his outstanding work and commitment over the years.
- Mr Marco Ferretti, Chair of the **Quality Assurance Committee** (**QAC**), reported on committee activities in 2016-17, including the revision of the ICP Forests Manual, Parts I and II. He referred to the good progress in data quality in labs and the further need to extend the EP activities to advance data quality in field surveys such as improving data recording and sampling techniques. Future activities may include the organization of the Manual revision in 2020, QA/QC activities in field surveys which will be e.g. discussed during the intercalibration course of the EP AAQ in Trento, Italy, in August 2017. Mr Ferretti had become new Chair of ICP Forests and thus resigned from the position as QAC chair. The position is still open.
- 31 Mr Marco Ferretti, Chair of the **Scientific Evaluation Committee (SEC)**, presented achievements of the SEC since its instalment at the TFM in Copenhagen in 2011. These include the organisation of six ICP Forests Scientific Conferences with over 200 presentations and posters, leading to two special issues in the journals Forest Ecology and Management and Annals of Forest Science. He briefly went over the committee's activities 2016–17 and its general plans for 2017–18, including the continuation of scientific initiatives and networking within the ICP Forests community and the preparation of a joint, co-operative study.
- After Mr Ferretti's resignation, Ms Karin Hansen was named new SEC chair. She had been with the programme between 1994 and 1999 and again since 2006. Ms Hansen was chairwoman of the EP Deposition since 2010 from which she had just resigned. She will coordinate the SEC together with Mr Lars Vesterdal from the University of Copenhagen and they will present a suggestion for members of the committee at the next PCG meeting.

Item 8 Future developments of ICP Forests

- Mr Marco Ferretti, Chair of ICP Forests, started his presentation with figures and facts about the ICP Forests programme and stressed several changes in the physical, scientific, political and technical environment since its beginning in 1985. He then identified some key words for ICP Forests in the 21th century and elaborated on them: science, clear objectives, infrastructure and organisation, technical innovation, communication and outreach, connection and co-operation. He emphasized the importance of the long-lasting and large scale co-operation in this programme, the role and influence of the ICP Forests community in defining its future, announced an ICP Forests agenda as additional management tool and broadly described his future tasks as chair. He will prepare a draft of the new agenda, collect feedback at the next meeting of the Programme Co-ordinating Group in Berlin this fall, and present it at the next Task Force Meeting.
- During the discussion, it was asked to square the new agenda with the ICP Forests strategy, to invite young scientists also from other communities into the programme, and fill the gaps within Europe rather than becoming more global. Funding is still a serious concern in most participating countries, thus restoring connections at the European level may be key. New challenges need to be incorporated into the programme such as climate change. The expertise of ICP Forests lies in its field work, thus incorporating new techniques may not be suitable but offering co-operation may, e.g. with remote sensing groups. It was also suggested to make the data openly available and be straightforward about what we can and what we cannot achieve with this programme.
- On behalf of her colleagues Ms Anne Gnilke and Ms Tanja Sanders, Ms Anne-Katrin Prescher (PCC) gave a **presentation on the potential of remote sensing for intensive monitoring** based on a pilot study by the Thünen Institute in Germany. Surveys that could potentially take advantage of remote sensing are crown condition, growth, and phenology. Comparing different available non-

commercial satellite sensors, the SENTINEL 2A satellite data showed reasonable resolution to identify landscape structures and good coverage across Germany. To identify and separate single tree crowns, unmanned aerial vehicles were shown to be an available tool.

- Mr Till Kirchner (PCC) informed about some general problems and considerations concerning the **spatial representation of ICP Forests plots**. At the moment plots can just be represented by points and it is not possible to distinguish several locations for one plot. The highest precision of spatial representation according to the current data format is 1 geographic square-second. Coordinates of plot locations are shortened to geographic minutes when requested by external partners outside the ICP Forests community. This results in a spatial uncertainty of 1 geographic square-minute for a plot location (area of 1.2–2.6 km²), which does not allow the use of data for any remote sensing projects. Further information about spatial representation of plots can be found under: http://icp-forests.org/documentation/ExplanatoryItems/4.html.
- The Task Force then decided that the data model of the ICP Forests database will be revised to store coordinates uniquely in a new form. Coordinates will not be part of the reduced plot files anymore to avoid redundancies and inconsistencies. Introducing a new attribute "subplot" will allow distinguishing several positions per plot. A new attribute "location_protection" will allow deciding if external partners should gain access to full coordinates accurate to geographic seconds. Short coordinates will not be provided anymore when requesting ICP Forests data. For all plots having a protected location only the representing 1x1km grid cell will be provided. During the discussion, Mr Kirchner highlighted that sharing coordinates is an offer for countries that prefer this option; it is not mandatory. Mr Kirchner agreed to apply this not only to XY coordinates but also to altitude.
- Mr Manuel Nicolas (NFC France) gave a presentation on practical challenges that arise with monitoring forests over decades. He raised the following questions: How does long-term forest monitoring need to respond to changing political and societal interests? How to address bias caused by long-term forest dynamics and man-made disturbances? After forest renewal, how do we represent different age classes and increasing heterogeneity in general? Shall we start monitoring management practices? Mr Nicolas proposed to discuss plans for addressing these challenges for future monitoring, including strategical issues such as defining targets for the next decades, the general design while keeping continuous data series, and methodological issues such as updating the manual for young stands and a new manual for surveying forest management practices.
- During the discussion that followed, Mr Nicolas agreed to organize a discussion group which will design a questionnaire on how diverse these issues are already handled and documented in the different countries and for drafting a new part of the manual. A joint course of action was favoured by many within the Task Force. However, decisions are needed as soon as possible, especially guidelines for surveying young stands in replaced plots.
- 40 Mr Stefan Neagu (Romania) presented a **proposal to establish a roadmap for the ICPs European Research Infrastructure Consortium (ICP-ERIC)**. He listed the advantages and requirements and already established ERICs such as ICOS and LifeWatch.

Item 9 Internal data analyses and studies by external institutions

After Mr Walter Seidling (PCC) listed the ongoing ICP Forests projects in his presentation, it was clarified that the PCC contacts all data users to report on the progress of their project twice a year. Feedback, however, had been low. Information on the project, contacts, duration, however, is all available on the ICP Forests website. Referencing datasets may make it easier to trace publications with our data. EP chairs are asked to stay in contact with users of their data. This will be further discussed at the next PCG meeting.

- To increase the impact of the Scientific Conference, the PCC will inform all data users and other institutes dealing with forest science/monitoring about the annual Scientific Conference to a larger extent. All members of the Task Force are also asked to spread the word after receiving the first call to the ICP Forests Scientific Conferences. It is proposed to broaden the ICP Forests community and include researchers from different fields. In future a new ICP Forests website is planned. It may then also be possible to publish additional data from studies outside the traditional monitoring work on the website.
- Mr Arne Verstraeten gave a presentation on his last-minute finding on pollen distribution causing spring peaks in throughfall DOC in beech and common oak forests, which had been particularly visible in mast years. The detection of this relationship depended on the availability of long time series (18 years) and reflects again the importance of long-term monitoring for understanding forest ecosystems.

Item 10 Status and future developments of the data infrastructure

- Mr Till Kirchner (PCC) informed the Task Force that an overview of submissions is always available under: https://icp-forests.org/documentation/introduction/Submissions.html. He informed the Task Force that all changes of the data portal are prepared and tested to allow using CSV as data upload format. The old column-wise text format will be replaced as decided by the Task Force in 2016. Mr Till Kirchner will announce the exact date of the change during the next weeks. The Universal Translator will not be needed anymore with the new CSV format and will not further be updated.
- 45 Mr Till Kirchner also informed the Task Force about the following changes planned to improve the documentation of data:
- "Quality reports" provided with the data will document which "warnings" have been confirmed during the submission.
- A "free files archive" gives users access to documents uploaded in addition to the data forms.
 This can be photos (LA, PH, OZ) and "data accompanying reports". The "free files archive" is further described at http://icp-forests.org/documentation/introduction/Additional_sources.html
- A central data accompanying report per survey may help in the future to summarize and document known issues concerning the data which might not be obvious. The central data accompanying report will be provided to all users with each data download.

During the discussion, Mr Till Kirchner explained that it will also be possible to add additional information to future data provisions. Mr Bruno De Vos informed that the EP Soil will use the free files archive to add all soil manuals. Mr Marco Ferretti encouraged all EPs to do the same.

- 46 Mr Till Kirchner informed the Task Force that he will try to define unique data models over time for all surveys of the ICP Forests database. The change will not affect the manual. All changes will be discussed with the Expert Panels.
- 47 Mr Till Kirchner informed the Task Force that it is planned to create a new website. A first concept will be presented at the Task Force Meeting 2018. It may then also be possible to ask for keywords and surveys of interest during the registration of new members of the website.

Item 11 Co-operation with international organisations

48 Mr Walter Seidling (PCC) presented the different types of co-operation of ICP Forests. It was proposed to also work more closely with the European National Forest Inventory Network (ENFIN). In

some cases ICP Forests shares the infrastructure of monitoring plots with eLTER (Long-term Ecosystem Research in Europe) which is on the roadmap of the European Strategy Forum on Research Infrastructures (ESFRI). For Level II being on the ESFRI roadmap may be a chance for funding in the future. The ICP Forests plots may then be embedded in a larger area under eLTER and keep their methodology this way. Although ICP Forests with its manual and standardized monitoring is unique, it is not well represented in the eLTER community and its interests may become overlooked. ICP Forests cannot become an eLTER member. Therefore, it is strongly recommended that the members of the Task Force become active in their country and contact national LTER initiatives. In the meantime Mr Marcus Schaub (Chair of EP AAQ) will contact the LTER-Europe Chair Mr Michael Mirtl and ask him how ICP Forests can contribute. The need for a statement by ICP Forests positive to this process to be used in the different countries was regarded as beneficial at this stage. Until now there had been no conflicts with other funding opportunities. Mr Seidling reported that there is already an MoU draft since December 2013 between eLTER and ICP Forests with no progress in the last years.

Mr Seidling then reported on the state of the joint data evaluation with the ICP Integrated Monitoring. His abstract for the IUFRO 125th Anniversary Congress 2017 in Freiburg was accepted. Because of a general lack of resources available to work on it, he has, however, withdrawn it but will remain in contact with all participants for continuing this evaluation. There is a current co-operation between ICP Forests and ICP Vegetation on ozone and with the EMEP MSC-West. In future co-operation with the Global Forest Survey may also be an option. Although their main interest is working with National Forest Inventories (NFIs) on a broader scale, they seem to want to include intensive monitoring plots on different continents for a global approach. Ms Sabine Augustin recommended documents from the UNECE Ad Hoc Policy Review Group of Experts for recommendations on further collaborations⁵. Ms Mihaela Paun (Romania) suggested to link with the work of other UN Conventions, e.g. the United Nations Framework Convention on Climate Change and the United Nations Convention to Combat Desertification, as well as the newly approved UN 17 Sustainable Development Goals, which may conduce to raising the political profile of ICP Forests and attracting more funding.

Item 12 Any other business

- On behalf of the Latvian Ministry of Agriculture and the Latvian State Forest Research Institute "SILAVA", Mr Uldis Zvirbulis invited the Task Force to hold its 7th Scientific Conference and 34th Task Force Meeting in Latvia. He also encouraged the Task Force to send him suggestions for the excursion. The Task Force thanked Latvia for the kind invitation.
- On behalf of the Task Force, Mr Marco Ferretti (Chairman) and Mr Walter Seidling (Head of PCC) thanked the organizers from the host country Romania, especially Mr Ovidiu Badea, for their hospitality and the professional organisation and arrangements of the 33rd Task Force Meeting. Mr Ferretti then closed the meeting.

⁵ http://www.unece.org/fileadmin/DAM/env/documents/2015/AIR/WGSR/ E ece eb air wg 5 2017 3.pdf http://www.unece.org/fileadmin/DAM/env/documents/2017/AIR/WGSR/INFORMAL DOCUMENT 6 PRG integrated_final.pdf

http://www.unece.org/fileadmin/DAM/env/documents/2017/AIR/WGSR/17052017Table of PRG recommen dations.pdf

ANNEX I

Action Points

w
w
w
sly, starting
rted
cation of
reports
w
W
ng this fall
_

What?	Who?	When?
location.		
Data Unit: The data model will be revised to avoid	PCC	Before PCG
redundancies of coordinates.		
Data Unit: The data model will be revised to try to	PCC	Before PCG
define a unique structure of forms over time.		
Outreach: Develop new website	PCC	Starting this year
Establish kind of data catalogue for communication	PCC	
with other networks and collaboration		
Task Force Meeting and Scientific Conference		
Scientific Conference: Compile contacts in mailing list	PCC	December 2017
and send announcements of Scientific Conference to		
data applicants and authors of ICP Forests		
publications		
Scientific Conference: Spread announcements of	PCC	December 2017
Scientific Conference to other research communities,		
universities, research institutions		
TFM 2018: Start organising next Task Force Meeting	Uldis Zvirbulis, PCC	Starting now
in Riga/Latvia		

ANNEX II

List of Participants

No	Last name	First name	Institute	Country
1	Aktaş	Özlem	General Directorate of Forestry	Turkey
2	Apostol	Bogdan	National Institute for Research and Development in Forestry Marin Dracea	Romania
3	Apostol	Ecaterina	National Institute for Research and Development in Forestry Marin Dracea	Romania
4	Apuhtin	Vladislav	Estonian Environment Agency	Estonia
5	Augustin	Sabine	Federal Office for the Environment	Switzerland
6	Badea	Ovidiu	National Institute for Research and Development in Forestry Marin Dracea	Romania
7	Benham	Suzanne	Forest Research, Alice Holt Lodge	UK
8	Caisin	Valeriu	Forest Research and Management Planning Institute – ICAS Chisinău	Moldova
9	Carrari	Elisa	IPSP-CNR	Italy
10	Clarke	Nicholas	Norwegian Institute of Bioeconomy Research	Norway
11	De Marco	Alessandra	ENEA	Italy
12	De Vos	Bruno	INBO	Belgium
13	Dinca	Lucian	National Institute for Research and Development in Forestry Marin Dracea	Romania
14	Ferretti	Marco	Swiss Federal Research Institute WSL	Switzerland
15	Garcia	Hector	Research Center for Energy, Environment and Technology (CIEMAT)	Spain
16	González Abadías	Ana Isabel	Ministry of Agriculture and Fishing, Food and Environment	Spain
17	Gottardini	Elena	Fondazione Edmund Mach	Italy
18	Guerrieri	Rossella	Centre for Ecological Research and Forestry Applications	Spain
19	Hansen	Karin	IVL Swedish Environmental Research Institute	Sweden
20	Ingerslev	Morten	University of Copenhagen	Denmark
21	Karakaş	Ahmet	General Directorate of Forestry	Turkey
22	Kirchner	Till	Johann Heinrich von Thünen Institute	Germany
23	Köhl	Michael	Universität Hamburg	Germany
24	König	Nils	Northwest Forest Research Institute	Germany
25	Kristöfel	Ferdinand	Bundesforschungs- und Ausbildungszentrum für Wald, Naturgefahren und Landschaft	Austria
26	Landmann	Guy	Ecofor	France
27	Leca	Stefan	National Institute for Research and Development in Forestry Marin Dracea	Romania
28	Lech	Paweł	Instytut Badawczy Leśnictwa	Poland
29	Levanič	Tom	Gozdarski Inštitut Slovenije	Slovenia
30	Lundin	Lars	Swedish University of Agricultural Sciences	Sweden
31	Merilä	Päivi	Natural Resources Institute Finland	Finland
32	Michel	Alexa	Johann Heinrich von Thünen Institute	Germany
33	Neagu	Stefan	National Institute for Research and Development in Forestry Marin Dracea	Romania
34	Nicolas	Manuel	Office national des forêts	France
35	Öztürk	Sitki	General Directorate of Forestry	Turkey
36	Paun	Mihaela	Ministry of Environment	Romania

37	Pavlenda	Pavel	National Forest Centre	Slovakia
38	Popa	Ionel	National Institute for Research and Development in	Romania
			Forestry Marin Dracea	
39	Popova	Genoveva	Executive Environment Agency	Bulgaria
40	Potočić	Nenad	Croatian Forest Research Institute	Croatia
41	Prescher	Anne-Katrin	Johann Heinrich von Thünen Institute	Germany
42	Raspe	Stephan	Bavarian State Institute of Forestry	Germany
43	Schaub	Marcus	Swiss Federal Research Institute WSL	Switzerland
44	Seidling	Walter	Johann Heinrich von Thünen Institute	Germany
45	Seletković	Ivan	Croatian Forest Research Institute	Croatia
46	Silaghi	Diana	National Institute for Research and Development in	Romania
			Forestry Marin Dracea	
47	Sousa-Silva	Rita	AV Katholieke Universiteit Leuven te Leuven	Belgium
48	Šrámek	Vít	Forestry & Game Management Research Institute	Czechia
49	Stoichkova	Penka	Ministry of Environment and Water	Bulgaria
50	Strich	Sigrid	Federal Ministry of Food and Agriculture	Germany
51	Szepesi	András	Ministry of Agriculture	Hungary
52	Ukonmaanaho	Liisa	Natural Resources Institute Finland	Finland
53	Verstraeten	Arne	INBO	Belgium
54	Waldner	Peter	Swiss Federal Research Institute WSL	Switzerland
55	Zaharescu	Claudiu	Romanian Ministry of Waters and Forests	Romania
56	Zhiyanski	Miglena	Forest Research Institute	Bulgaria
57	Zvirbulis	Uldis	Latvian State Forest Research Institute "SILAVA"	Latvia

ANNEX III

Agenda of the 33rd Task Force Meeting of ICP Forests in Bucharest, Romania

National Institute for Research and Development in Forestry "Marin Drăcea" PCC of ICP Forests at Thünen Institute of Forest Ecosystems, Eberswalde, Germany

Monday, 15 May 2017 Welcome reception

Venue: Novotel Bucharest City Centre Hotel, Calea Victoriei 37B, Sector 1

18:00 Welcome reception

Tuesday, 16 May 2017 Full-day excursion, meeting place: entrance of Novotel City Centre Hotel

09:00 – 18:00 Excursion

Wednesday, 17 May 2017 Scientific Conference, venue: Novotel Bucharest City Centre Hotel

09:00 – 18:00 For conference schedule please refer to the Book of Abstracts available at the

registration desk or online at http://icp-forests.net/events/6th-icp-forests-

scientific-conference

Thursday, 18 May 2017 Task Force Meeting, venue: Novotel Bucharest City Centre Hotel

09:00 – 09:10 Opening by host and communication by lead country

Item 1 Adoption of the agenda/minutes

09:10 – 09:20 Adoption of meeting agenda, adoption of minutes 32nd TFM

Item 2 Report of PCC

09:20 – 09:40 Report on activities and progress since the 32nd TFM

Item 3 Publications issued by PCC

09:40 – 10:20 Draft of the Technical Report 2017;

Discussion on the thematic ICP Forests briefs;

Discussion on future Executive Reports

10:20 – 10:50 Coffee break

Item 4 Issues concerning WGE / CLRTAP

10:50 – 11:30 Realisation of the WGE Workplan 2016-2017, suggestions for the Workplan

2018-2019

Draft on "Executive Summary 2017" will be presented for discussion;

Financial statement, funding issues

Item 5 Reports of sister ICPs

11:30 – 12:00 ICP Integrated Monitoring, ICP Vegetation

12:00 - 13:00 Lunch

Item 6 Outstanding Manual updates (Part I and II)

13:00 – 13:30 Discussion and adoption

Item 7 Activities of the Expert Panels and Committees of ICP Forests

13:30 – 15:30 Reports by the chairs of Expert Panels, Quality Assurance Committee,

Working Group on Quality in Laboratories and of the Scientific Evaluation

Committee

15:30 – 16:00 Coffee Break

Item 7 Future developments of ICP Forests

16:00 – 18:00 Future settings and visions

19:30	Conference Dinner
Friday, 19 May 2017	Task Force Meeting (continued), venue: Novotel Bucharest City Centre Hotel
Item 8 09:00 – 10:00	Internal data analyses and studies by external institutions On-going studies based on ICP Forests data
Item 9 10:00 – 10:30	Status and future developments of the data infrastructure Overview on the database
10:30 - 11:00	Coffee break
11:00 – 11:30 11:30 – 12:00	Co-operations with international organisations Reports on co-operations and projects Further co-operation with other organisations: EANET, EEA, LTER
Item 11 12:00 – 12:30	Other business Task Force Meeting 2018
12:30	Closing of 33 rd Task Force Meeting