International Cooperative Programme on Integrated Monitoring of Air Pollution Effects on Ecosystems (ICP IM) 24th Task Force meeting, Asker, Norway, May 24-26, 2016.

Explanatory notes to the agenda

1. Opening of the meeting

2. Approval of minutes of the 23rd ICP IM TF in Minsk, Republic of Belarus, 2015.

3. Report from Chairman and Programme Centre

The ICP IM activities are described in more detail in the 25th Annual Report 2016.

The Chairman and the Programme Manager presented the progress made by ICP IM during 2014/2015 at the joint EMEP SB and Working Group on Effects (WGE) meeting in September 2015. The work programme for 2016-2017 was also presented. The WGE welcomed the plan for future work.

The Chairman of WGE noted the positive results of further co-operation between ICPs in view of the priorities of the Executive Body (EB). Special notice was put on the preparations regarding the updated long-term strategies of the Convention. The strategy was adopted by EB in December 2011 and implementation is in progress. The strategy will go through a mid-term review in 2016. Protocols were accepted in December 2014 and now being implemented. The Protocol on Heavy Metals was retrieved in August 2014.

The Long-term strategy involves procedures for more policy relevant information, ongoing sufficient monitoring and modelling, improved understanding of air pollution processes and trends and to provide the scientific background for effectiveness of protocols to meet the pollution impacts. Emphasis is put on joint outcomes from EMEP and WGE for policy oriented messages and further actions by Parties.

There is great interest and needs to have wider and closer cooperation with EECCA (Eastern Europe, Caucasus and Central Asia) and SEE (South East Europe) countries. However, in the slightly difficult financial situation there were limited possibilities for these countries to participate in the WGE session. Another problem was that all documents were not translated into French or Russian. Anyhow, new attempts to increase these activities were promoted. Special funds exist to improve participation as capacity building.

The chair of the WGE presented the WGE Joint report and a report on recent results and updating of scientific and technical knowledge including the suggested Workplan for 2016-2017. The Working Group and subsidiary bodies have maintained the work in spite of financial constraints. In fact, output has even increased. Reports have been directed towards societal needs and partly also delivered in direct request of the Convention. A joint report of WGE ICPs and EMEP was published and presented at the September EMEP/WGE meeting; *Trends in ecosystem and health responses to long-range transported atmospheric pollutants. deWit, H., Hettelingh, J-P. and Harmens, H (eds.) 2015. NIVA Report L.NR.* 6946-2015. 92pp. ICP IM contributed to sections on acidification, eutrophication and heavy metals.

A number of highlights in the Joint report relate to;

- *air pollution as being the main environmental to the burden of disease in the ECE region and annual health costs are estimated to USD 1.6 trillion,
- *health effects are more dependent on long-term exposure than pollution peaks,
- *ozone impacts have not changed over the period 1999 to 2010, background concentrations more important than peak concentrations
- *combined effects from ozone, nitrogen and climate difficult to estimate,
- * black carbon emissions now reported and together with the Arctic council an initiative has started,
- *more focus is put on hemispheric air pollution,
- *interest in heavy metals increase,
- *acidifying sulphur deposition has decreased but stored sulphur is now leached to surface waters and possibly delaying its recovery but improvements anyhow found both chemically and biologically,
- *inorganic nitrogen still retained in catchments and nitrogen effect oligotrophic species cover that decrease when CL are exceeded,
- *damage rates at cultural heritages decrease due to air pollution control

The reports and meeting documents can also be found at the document pages of CLRTAP: <u>http://www.unece.org/environmental-policy/conventions/envlrtapwelcome/convention-bodies/working-group-on-effects.html</u> and the ICP IM Programme Centre: <u>http://www.syke.fi/nature/icpim</u>

Further development of effects-oriented activities included an impact assessment in the context of hemispheric transport of air pollution. A presentation from the EMEP Task Force on Hemispheric Transport of Air Pollution reported progress in global emission estimates, emission scenarios and on global and regional model source-receptor calculations. This was directed to make analysis and engage experts outside the Convention countries.

It was also mentioned that a stronger scientific content and connections to EMEP and WGE are needed. Monitoring and modelling need to continue with good scientific focus in line with the CLRTAP Long-term strategy. Specific work will be brought up further on in the document and session.

The draft 2016-2017 Workplan for the implementation of the Convention on Long-range Transboundary Air Pollution has been settled. The joint workplan between EMEP and WGE has been prepared and related issues will be discussed in this meeting.

EMEP and WGE homepages should have a common portal. Currently, the UNECE changed the webpages and WGE content is not easily found. Possibly, an entrance through EMEP provides some information. Work is ongoing for the WGE webpage.

EB has highlighted the importance of black carbon and particles to the Convention, especially related to the health impacts. Methane is also now included.

Assessment of the impact of air pollution for ecosystem services and the loss of biodiversity in protected areas was carried out. In cooperation with WGE efforts have been made to estimate the loss of biodiversity due to excess nitrogen depositions as well as to monetize the damage to nature. Reduction of ammonia emissions remains an important challenge for air policymakers, and would not profit from decarbonisation of the energy supply.

The Assessment report for 2016 should support the policy report and include sections on what has been achieved by Convention work, what are the remaining problems, what is possible to achieve with further measures, institutional organisation and infrastructure and a wider cooperation with other international bodies. A hemispheric approach would be considered. The report includes long-term trends on the effect of pollutants to ecosystems, human health and materials. The report will be presented in Brussels in May and also in the Ministerial Conference "Environmental for Europe Conference" in Batumi, Georgia in June 2016.

4. Progress in WGE activities 2015

Highlights from the ICPs, TF Health and JEG;

- ICP Forests; the database has high priority and was updated and evaluations carried out. Nitrogen has negative effects on growth of pine and beech but positive on spruce. Lichens suffer from high N deposition,
- ICP Waters; presented recovery from acidification in surface water chemistry and also fresh water biology but effects of climate change are uncertain,
- ICP Materials; reported on trends in air pollution, corrosion and soiling showing a 50% decrease in corrosion since 1987 but in recent years poor further improvements,
- ICP Vegetation; reported on interaction with nitrogen and climate on ozone damages. Also observed is lower ozone peaks in summer but the average conditions stays unchanged,
- ICP IM; a strong decline is shown in sulphur deposition and stored S now being released to surface waters. Nitrogen still accumulates in the ecosystems and output is very low compared to input. At low CN ratios and N deposition exceeding critical loads there is risk for enhanced nitrogen leaching. For sites with exceedances of CL it has been observed biodiversity effects with negative trends on oligotrophic species. Also ongoing accumulation of heavy metals, especially Hg was mentioned,
- ICP M&M; reported on new calculations on CL exceedances and there is now also CL for biodiversity and new data is requested for 2015-2017. The special financial situation for CCE was mentioned,
- TF Health; concluded the importance of air pollution to human health and calculated costs related to air pollution and the importance to air pollution from domestic household heating. WHO Air Quality Guidelines will be updated,
- JEG presented progress in dynamic modelling for HM. Modelling for both terrestrial and aquatic biodiversity is ongoing. Extremes should be included in dynamic modelling. There will be a JEG meeting in Sitges in October.

5. Updating of scientific and technical knowledge

The Chairman of WGE drew attention to the pollutant specific topics presented in the 2015 Joint report, the technical reports of the ICPs and additional supporting documents such as for ICP Report No. 24, IM technical ICP IM. the Annual 2015. report is ECE/EB.AIR/WG.1/2015/9. WGE noted with satisfaction the IM Annual Report and mentioned especially the report on progress on dynamic vegetation modelling at ICP IM sites and the report on sulphur and nitrogen input-output budgets at ICP Integrated Monitoring sites in Europe 1990-2012.

The WGE Chair presented the further development on effects-related outreach activities to the total hemispheric region and mentioned especially contacts to SEE (Southeast Europe) and EECCA (Eastern Europe, Caucasus and Central Asia) countries. Outreach from IM include east European countries and is further linked to the work and collaboration with LTER Europe and EU projects.

Outreach concerned also the 8th Ministerial conference in Batumi, Georgia and that for the conference the problems with air pollution are specially mentioned. Further meetings are UNEA (UN Environmental Assembly) 2nd meeting in Nairobi in May, WHA (World Health Assembly) has a meeting in Geneva also in May and the EANET 2015 conference in Bangkok in November 2015.

It was also mentioned about the CLRTAP dissemination importance and cooperation with other organisations such as WHO, UNEP, UNFCC and CBD. UNEP has increased the attention on air pollution and "black carbon" and methane has significance in the policy work. The "Arctic council" (AMAP) contacted LRTAP on these issues and the minutes from a joint meeting was submitted.

The joint workplan was discussed and major items presented. It was mentioned that the document is demanding and comprehensive, perhaps needed, but hard to grasp. There would be a need for a condensed summary. By September there should be an updated 2016-2017 Workplan and preparations for 2018-2019 Workplan should start.

Financing is presently on a fairly stable level but in a decreasing trend and for 2016 the funds will be similar to 2015 (ECE/EB.AIR/WG.1/2014/4). Rather important though, is the scarce resources in the UNECE secretariat that are unfortunate. However, the decrease of the Trust Fund from 948120 USD in 2008 turned to 483475 USD 2015. Contracts with ICPs, TFH, etc. was 2012 664000 USD and is estimated 2016 to 477400 USD.

There will be a new module for financing in the coming years and it starts to be tested in EMEP.

Situation for CCE is financially problematic and the Netherlands intend to cut back totally after 2017. Problems were discussed at the meeting and there was a special meeting in Brussels on April 26. For the meeting it should be noted the high significance of the CCE work for CLRTAP and the link to policy dissemination.

Election of WGE officers; Re-election of The Chair Mr. Peringe Grennfelt, Sweden and vice chairs Mr. Jesper Bak (Denmark), Ms. Gudrun Schuetze (Germany), Ms. Sonja Vidic (Croatia), Ms. Sabine Augustin (Switzerland), Mr. Thomas Dirnböck (Austria), Mr. Nebojsa Redzic (Serbia) and Ms. Isaura Rabago (Spain) was re-elected.

Next WGE is scheduled for 13-16 September 2016 and this would be meeting No. 35.

6. Further notes from the WGE Extended Bureau meeting in March 2016

The chairman of ICP IM participated in the WGE Extended Bureau meeting in Geneva on March 14-17, 2016. The Chair Peringe Grennfelt led the meeting together with the EMEP SB Chair Ms. Laurence Rouil (France).

Important discussions concerned the joint report from EMEP and WGE, the Assessment Report; "*Scientific Assessment Report "Towards Cleaner Air*" was presented and includes a background and the international scope of air pollution. Work and measures are still needed concerning PM, N, HM, Ozone and POPs. Ammonium was specially mentioned as well as the beneficial policy achievements.

Progress by TFIAM in 2014-2015 was reported and the GAINS model was updated. It is now also used in SEE countries. Further content is related to biodiversity, and to decrease NH_3 and CH_4 emissions as these contribute to ozone damage.

Work within HTAP, Hemispheric Transport of Air Pollution, was presented and includes, in a hemispheric scale, health, ecosystem and modelling with interactions between air pollution and climate including ozone, atmospheric compounds, Hg and POPs. Also work within TF MM, measurement and modelling, addressed reduction in emissions over 20 years 1992-2012.

7. CLRTAP Workplan

There is a new two year workplan, currently 2016-2017 and start of the new two years 2018-2019 in progress. The CLRTAP aims at getting more visible and to achieve this one way is enhanced collaboration with other organisations and conventions such as WHO, UNEP, UNFCC and CBD. UNEP has already started on an enlarged geographical extent. Outreach should be encouraged.

Preparations for WGE 2016 follow ordinary outline with a short Joint report highlighting results from workplan items and showing the policy relevance. ICPs should report most relevant findings and present the policy relevance by June 1st. There will be a joint EMEP and WGE meeting in September and presentations will be made thematically. The programmes should also present the obligations and monitoring work content for the leading countries and the PCs by end of July. This is part of the mid-term revision of the CLRTAP strategy that is in operation to 2020, and also an update of the MoU.

8. ICP IM activities 2015-2016

The ICP IM activities in 2015/2016 included work on S and N in-/output budgets for IM sites, dynamic vegetation modelling, the Annual ICP IM Report No 24 and common items such as outreach and common activities (ECE/EB.AIR/WG.1/2015/9):

https://www.unece.org/fileadmin/DAM/env/documents/2015/AIR/EMEP/ECE_EB.AIR_GE. 1_2015_16_ECE_EB.AIR_WG.1_2015_9_ENG.pdf

Meetings:

- The Chairman Lars Lundin represented the ICP IM programme at the 31st ICP Forests Task Force meeting in Ljubljana, Slovenia, 20–22 May 2015.
- ICP IM Programme Manager Martin Forsius and Maria Holmberg participated in the eLTER H2020 kick-off meeting in Chania, Greece, 22–24 June 2015.
- Lars Lundin represented ICP IM in the First Joint session of the Steering Body to the EMEP and the Working Group on Effects in Geneva, Switzerland, 14–18 September 2015.

- Martin Forsius participated in the 23rd International Long-Term Ecological Research (ILTER) 2015 Annual Meeting in Rome and Science days in Central Italy 23–30 September 2015.
- Jussi Vuorenmaa represented the ICP IM programme at the 31st Task Force meeting of ICP Waters in Switzerland, 5–9 October 2015.
- Jussi Vuorenmaa took part in the Acid Rain 2015 Conference in Rochester, NY, USA, 19–25 October 2015.
- Martin Forsius participated in the eLTER H2020 project Core Team Meeting in Paris, France, 1–2 December 2015.
- Martin Forsius took part in the Joint Workshop between AMAP and LRTAP bodies in Potsdam, Germany, 15–17 February 2016.
- Filip Moldan represented ICP IM in the 26th CCE Workshop and 32nd Meeting of the ICP M&M Programme Task Force in Dessau, Germany, 19–22 April 2016.

The Programme Centre received the 2014 data from most IM sites, data are now stored in the ICP IM database; further on item 10.

Laboratories participating in the ICP IM Programme took part in the inter-comparison tests organised by ICP Waters, ICP Forests Expert panels and EMEP.

Scientific work regarding priority topics has continued:

The Programme Centre prepared the ICP IM contribution on common items for WGE reported in September 2015 (mentioned above).

The Programme Centre prepared the ICP IM contribution to the WGE 2015 Joint report (ECE/EB.AIR/WG.1/2015/3).

The Programme Centre prepared the ICP IM 24th Annual report 2015 and also the technical document ECE/EB.AIR/WG.1/2015/9 submitted to the WGE in 2015. Included in the reporting were the workplan items:

Progress report on dynamic vegetation modelling at ICP IM sites; Holmberg, M. and Dirnböck, T. 2015.

Progress report on trend assessment for bulk deposition, throughfall and runoff water chemistry and climatic variables at ICP IM sites in 1990-2013; Vuorenmaa et al., 2015.

Progress report on heavy metal trends at ICP IM sites; Åkerblom, S. and Lundin, L. 2015.

eLTER EU/H2020 research infrastructure project: relations to ICP IM activities; Forsius, M. 2015.

Further workplan items for 2016 and priority topics will be discussed under items 11, 12 and 13.

9. Reports from WGE and other ICPs

The representatives of the WGE, UNECE Secretariat and other ICPs participating in the IM TF meeting may report progress in their work under this item.

At the WGE Extended Bureau meeting in Geneva on March 14-17, 2016, key issues discussed were related to the WGE Joint report, combined workshop with EMEP, outreach activities and implementation of recommendations for the Convention organisation, especially the common EMEP and WGE homepage; see also item 6 report from Extended Bureau meeting, 12 and 13.

- (i) The long-term strategy was adopted by EB in December 2011 and is valid until 2020 but will be revised this year.
- (ii) Workplan items and workshop events have been updated,
- (iii) Medium term workplan for ICP IM for the years 2016 and 2017 decided and plans for 2018-2019 should start to form which will be covered under items 11, 13 and 14;
- (iv) Co-operation between WGE and EMEP with a joint meeting 14 September 2016,
- (v) Preparations of the 35th session of WGE, ordinary ICP activities will be given a short overview with main focus on common items and thematic scientific reporting, especially policy relevance of the ICP results,
- (vi) Financial issues with EB review; funding from Trust Fund for the nearest coming years seems fairly stable but in a decreasing trend.

10. Data submission and database status

The Programme Centre will present the current status of the database for the meeting. A detailed description is given in the 25th Annual Report 2016.

Most of the National Focal Points have submitted the results from 2014 to the Programme Centre. These data are incorporated into the IM database.

The following countries have continued data submission to the ICP IM data base during the period 2011–2015: Austria, Belarus, the Czech Republic, Estonia, Finland, Germany, Italy, Lithuania, Norway, the Russian Federation, Spain, Sweden, and Ukraine. Ireland re-established a site in 2012 and will report data later this year and Switzerland will include a new site in 2016. Poland has indicated interest to include one or more sites to the network. The number of sites with on-going data submission for at least part of the data years 2010–2014 is 40 from thirteen countries. Sites from Canada, Latvia and United Kingdom only contain older data.

The meeting is expected to discuss ways to improve the data reporting and criteria for participation in the programme, as well as ways to support the national ICP IM work.

11. Reports to be prepared/finalized in 2016

ICP IM reports:

- a) 25th Annual ICP IM report (AR)
 - The Programme Centre has prepared the draft version of the report. According to a previous decision of the ICP IM Task Force, the Annual Report should contain summarised information on the status and progress of the activities. Detailed results from data assessments should be presented in scientific papers and separate technical reports. The workplan items should be reported in the AR. The content of the Annual Report 2016 follows this concept. It is proposed to include country specific reports as annexes in the AR. The Annual report should be presented at the WGE meeting in September 2016. The meeting is expected to discuss the content of the report and decide about the presentation to WGE.
- b) Report on dynamic responses of vegetation changes in relation to nitrogen; (in AR: Dynamic modelling of soil and vegetation at selected ICP IM sites, Maria Holmberg, Thomas Dirnböck, et al.)
- c) Report on long-term trends of S and N effects; (in AR: Trend assessment for deposition and runoff water chemistry and climatic variables at ICP IM sites in 1990-2013-Interim report, Vuorenmaa et al.).

Activities common to all ICPs, the Task Force on Health and the JE Group:

d) Comparison of activities across continents and regions; outreach and hemispheric view will relate to HTAP, EECCA, SEE and LTER as regards ICP IM.

The Programme centre will report the ICP IM contributions to the common activities to the CLRTAP secretariat in the end of June (item 12) and September 2016.

12. ICP IM Technical reporting

Report by June 30, 2016. Still there could be unofficial reports such as the ICP IM AR where we may present workplan item results. ICPs should explore possibilities to include country reports.

13. Considerations in perspective of more efficient organization

Recommendations on ICP common activities from 2015 still valid are;

- 1. Updated WGE webpage perhaps with common EMEP and WGE entrance
- 2. Develop a meta-data base;
- 3. Improve visibility. Common issue for EMEP and WGE. Cooperation with other Conventions;
- 4. Harmonised methods communicate that we are using but also making sure that this is the case. Intercalibrations across ICPs;
- 5. Thematic workshops; e.g. trends, ozone, nitrogen, biodiversity;
- 6. Open science workshops;
- 7. Thematic reports. Here could be mentioned the presented Joint Trends report 2015;
- 8. To discuss the joint ICP Forests update of the "Cause effects report";
- 9. Improve collaboration within countries;

14. Co-operation with other ICPs and external projects/organizations: LTER-Europe, ALTER-Net, LifeWatch, Expeer, Natura 2000, etc.

UNECE activities:

The meeting is expected to discuss coordination of work and cooperation with other ICPs, particularly regarding dynamic modelling (all ICPs), cause-effect relationships in terrestrial systems (ICP Forests, ICP Vegetation), and surface waters (ICP Waters). Decisions on further work should be reflected in the future work plan.

Further quantification of policy-relevant effects indicators such as biodiversity change that should be linked to integrated modelling work may be related to CBD.

Expert panel on heavy metals. Activities now on low level and not included in the 2016 Assessment report but should be considered.

More meetings could be found on CLRTAP www-pages.

LTER-Europe:

The European LTER network (European Long-Term Ecosystem Research Network) is developing rapidly (<u>http://www.lter-europe.net/</u>). Many of the LTER-Europe sites include ICP IM sites so there is a need to discuss means of further cooperation. The research infrastructure project eLTER has received funding from the EU/H2020 programme, and will start during summer 2015. LTER Europe is connected to the international programme ILTER, and ILTER will have its annual meeting in 9-13 October 2016 in Kruger National Park in South Africa

The "uniqueness" relates to the fact, that it is the first global LTER conference not primarily focussing on national networks and their representatives.

One of the main motivations consists in your feedback to the "ILTER 2020 Survey" and the priorities you suggested regarding ILTER's activities and priorities:

- good and accessible data across sites for multiple analyses
- framework for scientific initiatives
- strong national networks with well-equipped sites,

ALTER-Net:

ALTER-Net; "A Long-term Biodiversity, Ecosystem and Awareness Research Network" (www.alter-net.info) ended the first phase in 2009 but continues in ALTER-Net II thereafter and first hosted by NINA in Norway but now by Finnish Environment Institute, SYKE, Finland. NFPs of ICP IM are involved in the project. This project is also related to the LTER and ILTER; "International Long-Term Ecological Research" (http://www.ilternet.edu/). ALTER-Net is also related to the preparatory work within ESFRI promoted LifeWatch infrastructure project (http://www.lifewatch.eu/). The meeting is expected to discuss the ICP IM vs. ALTER-Net connections.

Other future work priorities:

The meeting is expected to discuss inclusion of new tasks in the short-term or more long-term work-plan. Relations to the Long-time strategy should be considered. NFPs may give short progress reports about national achievements regarding new topics (e.g. multisite experiments, ecosystem services). The meeting is also expected to discuss what the role of the international ICP IM network should be in relation to multi-effects evaluations and global

change related topics, and how this work should be coordinated. Participation in the European biodiversity monitoring system should be noted. EPBRS activities should be followed; <u>http://www.epbrs.org/</u>. Decisions on further work should be reflected in the work plan 2018-2019 and longer term planning for the WGE.

The activity plans raised by the ICP evaluation group could be discussed.

15. Work plan 2016/2017

The meeting is expected to decide on the work plan for 2016 and further on, based on the discussion during the workshop and Task Force meeting. A preliminary suggestion prepared by the Programme Centre is presented below:

Activity	Time-frame	Responsible
ICP IM work plan 2016		
Joint Report 2016 of the ICPs, TF Health and Joint Expert Group on Dynamic Modeling	WGE 2016	UNECE Secretariat, WGE Bureau and ICP IM Programme Centre
Finalization of 25 th Annual Report 2016 (short National reports are welcomed)	WGE 2016 (comments and national reports by June 2016, date to be decided at meeting)	Programme Centre NFP contributions
Report on dynamic responses of vegetation changes in relation to nitrogen (chapter in AR 2016)	June 2016 WGE 2016	Programme Centre and NFPs of Austria and Sweden
Report on long-term trends of S and N effects (chapter in AR 2016)	June 2016 WGE 2016	Programme Centre, in cooperation with NFPs
Scientific paper on mass balances for sulphur and nitrogen in catchments (in review, to be finalized according to review comments received)	2016	Programme Centre, in cooperation with NFPs
Reporting of activities common to all ICPs, the Task Force on Health and the Joint Expert Group on Dynamic Modelling	WGE 2016	Programme Centre and Chairman according to instructions of the UNECE Secretariat
Submission of quality controlled results for year 2015 to Programme Centre	December 1 st 2016	National Focal Points
Cooperation with other ICPs, particularly regarding dynamic modelling (all ICPs), cause-effect relationships in terrestrial systems (ICP Forests, ICP Vegetation), and surface waters (ICP Waters).	According to decisions at the TF meeting	According to decisions at the TF meeting
Inter laboratory comparisons under leadership of ICP Waters, ICP Forests and EMEP	ICP F and ICP W 2016 on-going	Voluntary activities of the National Focal Points

ICP IM draft work plan 2017-2018		
ICP IM Task Force meeting 2017		
ICP IM Annual Report 2017	Task Force and WGE 2017	Programme Centre in collaboration with NFPs
Report on mercury in the aquatic environment; Joint Report together with ICP Waters	Task Force and WGE 2017	NFP of Sweden and Programme Centre, in co-operation with other NFPs and ICP Waters
Report on concentrations of heavy metals in important forest ecosystem compartments (to be combined with the mercury report above ?)	Task Force and WGE 2017	NFP of Sweden and Programme Centre, in co-operation with other NFPs and ICP Waters
Report on connections between calculated CL exceedances and observed impacts of N	Task Force and WGE 2017	Programme Centre in co-operation with NFPs Potential co-operation with ICP M&M
Cooperation with external organisations (International Long Term Ecological Research Network ILTER, LifeWatch, GEO BON). Progress reports	Task Force 2017	Programme Centre and NFPs eLTER EU-project activities
Develop concepts for multi pollutant – multi effect relationships (NO _x , O ₃ , acidity, heavy metals, POPs, etc). Progress reports/contributions to Annual Report OR presentations in Workshop	Task Force 2017	Voluntary activities at National Focal Points
Reporting of ICP IM activities to WGE	WGE 2017 and 2018	Programme Centre and Chairman
Scientific paper on long-term trends in the effects of S and N deposition	Task Force and WGE 2018	Programme Centre and NFPs

16. Financing/external applications

Financial support for the international coordination of effects-oriented activities under the CLRTAP is available through voluntary contributions to the Trust Fund. Tentatively a representative of the WGE Bureau will present information about the present situation regarding this funding.

Some key actions of the EU Horizon 2020 framework programme are open for research proposals. Such funding can be used for supporting research activities related to ICP IM, and the participating institutes are encouraged to look into the possibilities for joint applications. Information is available at: <u>http://cordis.europa.eu/</u>

Note also the Forest-based Sector Technology Platform (FTP) have a revised "Vision 2030 and Strategic Research and Innovation Agenda 2020 (SRA)".

The NFPs may report on any progress in this field.

17. Next Task Force meeting

18. Other business

19. Conclusion and end.