International Cooperative Programme on Integrated Monitoring of Air Pollution Effects on Ecosystems (ICP IM) 22nd Task Force meeting, Westport, Republic of Ireland, May 8, 2014.

Explanatory notes to the agenda

- 1. Opening of the meeting
- 2. Approval of minutes of the 21st ICP IM TF in Obninsk, Russia, 2013.
- 3. Report from Chairman and Programme Centre

The ICP IM activities are described in more detail in the 23rd Annual Report 2014.

The Chairman and the Programme Manager presented the progress made by ICP IM during 2012/2013 at the Working Group on Effects (WGE) in September 2013. The work programme for 2014-2015 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. Protocols were accepted in December 2012 and now being implemented. There was a decision on revision of the Protocol on Heavy Metals.

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.

There is a 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, and recommended to seek further guidance from EB on information required for effects-based indicators to support future effects-based scenarios and related policy support. At the EB meeting in December presentations were made of the report on "Benefits of air pollution control for biodiversity and ecosystem services", "Guidance document" and TF Health reported on the projects REVIAAP and HRAPIE. The review report on ICP evaluation was accepted and measures for implementation taken looking on efficiencies and cooperation.

The reports and meeting documents can also be found at the document pages of the EB: http://www.unece.org/index.php?id=33605

Report on the work within the Working Group on Strategies and Review focussed on the review of the Convention structure and the workplan for 2014-2015.

The chair of the EMEP steering body provided information on EMEP actions and noted the revised Guidelines for reporting emissions. Increased cooperation between EMEP and WGE has started and a joint workplan for 2014-2015 was developed. For 2015 there is planned a joint EMEP and WGE meeting.

In 2013, there was a joint session between the EMEP SB and WGE. There were seven presentations made related to outcomes of the Saltsjöbaden V workshop, progress related to the GAINS model, a guidance document on health and environmental improvements, information on HM and POPs effects modelling, ozone and PM supporting modelling and mapping work, presentation of the biodiversity and ecosystem services report and outline of past and planned joint assessment reports by EMEP and WGE. Such reports should be aimed for national and international policymakers.

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.

The report from the ICP evaluation recommended streamlining the work and improving collaboration between the ICP:s. Such intentions should now be implemented. 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.

Structure of work will be fairly traditional during 2014 but changes in meeting structure will be implemented in 2015 when EMEP and WGE should have a joint meeting in September and Working Group on Strategies and Review (WGSR) will meet in December. The EB meeting will then be later in spring or early summer 2016. This means, there will be no meeting of the EB 2015.

The draft 2014-2015 Workplan for the implementation of the Convention on Long-range Transboundary Air Pollution was discussed and plans for several years programme was desired and should be considered by the ICPs. The joint workplan between EMEP and WGE has been prepared and it considers 2014-2015 and related issues will be discussed in this meeting.

EMEP and WGE homepages should have a common portal.

EB has highlighted the importance of black carbon and particles to the Convention, especially related to the health impacts.

Highlights from the ICPs;

ICP Forests; the database was updated and evaluations carried out. Mosses and epiphytic lichens were found to be good bio-indicators on nitrogen effects,

- ICP Waters; noted on ecosystem services of freshwaters and mentioned economic impacts related to fish and also impacts on tourism, culture, biodiversity and aesthetics, It was also noted effects of chemical recovery in water, enhancing limnic biodiversity
- ICP Materials; recent exposure and trend analysis showed small improvements in corrosion and soiling and noted also that black carbon contributes to soiling of materials,
- ICP Vegetation; reported on a pilot study on mosses as biomonitors of POPs and also on mosses as indicators on nitrogen and heavy metal deposition with transfer of coordination of future inventories on mosses to the Russian Federation,
- 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. 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; elaborated the work on indicators of nitrogen impacts on biodiversity with dissemination of the results in several policy relevant documents. WGE also invited the Modelling and Mapping programme to update the critical loads manual and make it available on the website,
- TF Health; concluded that adverse effects from air pollution has strengthened and that effects occur at air pollution concentrations lower than those in the 2005 WHO air quality guidelines. It was also stressed the desired improvements of monitoring and modelling effects in the EECCA countries,
- JEG presented progress in dynamic modelling in particular with respect to nutrient nitrogen, ozone and interactions between climate change and air pollution. Models should be used in assessment of time scales of damage and recovery.

Updating of scientific and technical knowledge

The Chairman of WGE drew attention to the pollutant specific topics presented in the 2013 Joint report, the technical reports of the ICPs and additional supporting documents such as for ICP IM the Annual Report 2013. WGE noted with satisfaction the IM Annual Report and mentioned especially the report on biodiversity data and CL-exceedances and on soil-vegetation dynamic modelling. Also the report on S and N budgets was noticed. Further, the progress report on heavy metal base line approach and the scientific heavy metal paper were mentioned. ICP IM also contributed to the 2013 Joint report and the 2013 "Benefits of air pollution control for biodiversity and ecosystem services"; ECE/EB.AIR/WG.1/2013/14.

The joint report highlighted the achievements of the 2012-2013 workplan period supporting the results of the Convention work with policy interests. The report highlighted impacts of air pollution on human health, effects of black carbon (soot) on materials, summarized benefits of air pollution control on biodiversity and ecosystem services, reported decreasing depositions of heavy metals, exceedances of critical loads for acidification, effects of ozone on ecosystem services and biodiversity, improvements of biodiversity in freshwater systems, nitrogen impacts on terrestrial vegetation ecosystems and carbon budgets of forest stands under a changing climate.

ICP IM submitted the 22^{nd} Annual report 2013 and also the technical document ECE/EB.AIR/WG.1/2013/9 to the WGE.

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 project.

The workplan for 2014-2015 was adopted with EB recommendations for harmonizing as much as possible the workplans and cooperation between WGE and EMEP. It had also earlier recommended that the workplan items would be the basis for programme financing from the trust fund.

Information from national effects-oriented activities was presented from four countries, i.e. Germany, France, Norway and Switzerland, giving exchange information on national work and such activities would become regular activities for WGE.

Financing is presently on a fairly stable level but in a decreasing trend and for 2014 the funds will be reduced. Rather important though, is the scarce resources in the UNECE secretariat that are unfortunate. For the programmes the essential support provided from Parties to the WGE effects oriented activities was appreciated, especially the amount of voluntary contributions by lead countries, countries and organisations hosting coordinating centres and organizing meetings. No binding commitments on support are included but voluntary contributions are welcomed.

Election of WGE officers; Re-election of The Chair Mr. Peringe Grennfelt, Sweden and vice chairs Mr. Jesper Bak (Denmark) and Mr. C. Nagl (Austria), Ms. Gudrun Schuetze (Germany) and Ms. Sonja Vidic (Croatia), Ms. Sabine Augustin (Switzerland) was elected.

Next WGE is scheduled for 18-19 September 2014 and this would be meeting No. 33.

Notes from the WGE Extended Bureau meeting

The chairman of ICP IM participated in the Extended Bureau meeting in Geneva on March 26-28, 2014. The Chair Peringe Grennfelt led the meeting and also the EMEP SB Chair Ms. Sonja Vidic participated as now being vice Chair of WGE. The first half day was a joint meeting between WGE bureau and EMEP SB. It was then planned for a joint meeting back-to-back with the WGE meeting in September (September 17).

The joint EMEP SB and WGE Extended Bureau meeting on March 26 was chaired by CLRTAP EB Chair Mr. Martin Williams. He presented organisational issues related to EMEP and WGE with suggestion on a joint meeting in September 2015. He also mentioned the importance of the ICPs monitoring to continue and that the scientific work should be enhanced as well as streamlining reporting in closer cooperation for the ICPs and between EMEP and WGE.

The homepages of WGE and EMEP could be harmonized and all the homepages of all the Convention bodies should be updated and improved.

New reports were discussed and one should be a joint report between EMEP and WGE called the Assessment report 2016. Also national reporting was brought forward. For longer time

perspective two years workplan 2014-2015 was implemented. The meeting structure for 2015-2016 is changed (mentioned earlier).

The outline of the Assessment report as scheduled by EMEP was presented with the following content;

- 1. Introduction
- 2. Global perspective on air pollution
- 3. Scientific understanding for the modelling process
- 4. Measurements and trends
- 5. Evaluation of trends
- 6. Projections
- 7. Towards long-term sustainability

This plan was later discussed in the WGE Extended Bureau meeting and suggestions for alterations were brought up and also a partly new concept with 5-6 questions from which the answers could form the report. Preparations continue.

In the following two days, the WGE Extended Bureau meeting continued with the introduction of new participants and changes in the ICPs. Already in September Heleen de Wit took over the ICP Waters PC lead from Brit-Lisa Skjelkvåle. Futher, there was a change in co-chair for ICP Materials from Italy where Mr. Pasquale Spezzano replaces Stefan Doytchinov. ICP Forests PCC has moved from Hamburg to the Thünen Institute for Forest Ecosystems in Eberswalde, Germany and Mr. Martin Lorenz steps down in favour for Mr. Walter Seidling as head of PCC.

From EB meeting in December was reported the appreciation of the presented reports and especially mentioned was the common reports from WGE "Biodiversity and Ecosystem service report", "Guidance document" and TF Health reports on projects REVIAAP and HRAPIE. TF Health also reported on higher values for pre-mature deaths and that 80% was related to cardiovascular diseases.

The report on ICP evaluations was approved and the realization and implementation should now be considered. Work within the ICPs should be efficient and with enhanced collaboration. Also national activities of the ICPs could benefit from more cooperation. For ICP IM collaboration should be discussed with ICP Waters concerning trends evaluation (item 8) and together with ICP Forests and update of the "Cause-Effects harmonization report (de Vries et al., 2002)" (item 8). Further recommendations on activities under item 8.

CLRTAP Workplan

There is a new two year workplan. This include a number of items and one is to prepare a report on priority activities with motivations related to the CLRTAP Long-term strategy; to be reported August 1, 2014.

The Joint report for WGSR should present important results with policy relevance. This could include outreach to EECCA and SEE countries, long-term trends, nitrogen, biodiversity and new perspectives. One page prepared for 31 May, 2014.

Further, there should be a common policy related report by EMEP and WGE to WGSR in 2015 and EB 2016.

Preparations for WGE 2014 follow ordinary outline with a short Joint report highlighting results from workplan items and showing the policy relevance. There will be a first half day jointly with EMEP and WGE (September 17) followed by the WGE meeting on September 18-19, 2014.

Cooperation with other bodies within the Convention should increase, especially with groups such as TFIAM (Task Force on Integrated Assessment Modelling), TF HTAP (The Task Force on Hemispheric Transport of Air Pollution), CIAM and TFRN (Task Force on Reactive Nitrogen) and also to EU; where could be mentioned the NEC directive and other open organizations such as UNFCCC, IPCC, CBD, UNEP.

Next Extended Bureau meeting is planned for 17 September 2014.

ICP IM activities

The ICP IM activities in 2013/2014 included work on S and N budgets for IM sites, relations between vegetation changes and CL-exceedance, progress on base line heavy metal approach and common items such as outreach and activities (ECE/EB.AIR/WG.1/2013/9). The document can be found on:

http://www.unece.org/index.php?id=32278

Meetings:

- The Chairman Lars Lundin represented the ICP IM programme at the 29th ICP Forests Task Force meeting in Belgrade, Serbia on May 27-31, 2013.
- The Chair Lars Lundin and the Programme Manager Martin Forsius participated in Saltsjöbaden V meeting, 24 26 June 2013, in Gothenburg, Sweden
- Martin Forsius took part in the LifeWatch/Horizon 2020 Conference in Rome, Italy, 3-6 September 2013.
- UNECE WGE Extended Bureau meeting with joint meeting with EMEP SB, 11 September 2013 in Geneva, Switzerland.
- Lars Lundin and Martin Forsius represented ICP IM in the Working Group on Effects (WGE) 32nd meeting in Geneva, Switzerland, 12-13 September 2013.
- Maria Holmberg took part in the VSD+ meeting in Wageningen, the Netherlands, 9-10 October 2013.
- Martin Forsius represented ICP IM in the 21st ILTER Annual Coordinating Committee Meeting in Seul and on Jeju Island in Korea, 5-12 October 2013.
- Maria Holmberg attended the fourteenth meeting of Joint Expert Group on Dynamic Modelling (JEG) in Sitges, Spain, 28-31 October 2013.
- Jussi Vuorenmaa represented the ICP IM programme at the ICP Waters 29th Task Force meeting in Český Krumlov, Czech Republic, 1-3 October 2013.

- Martin Forsius took part in the third annual ExpeER (Experimentation in Ecosystem Research) meeting in Montpellier, France, 13-14 November 2013.
- Martin Forsius, Lars Lundin and Jussi Vuorenmaa participated in the EnvEurope Final Conference arranged in conjunction with the LTER-Europe Annual Conference in Rome, Italy, 26-29 November 2013.
- Martin Forsius represented ICP IM in the LTER/Horizon 2020 meeting in Vienna, Austria, 13-14 February 2014.
- Lars Lundin represented ICP IM in the joint EMEP SB and WGE Extended Bureau meeting on March 26, 2014 and in the WGE Extended Bureau meeting on March 27-28, 2014; both in Geneva.
- Maria Holmberg took part and represented ICP IM in the 24th CCE Workshop and 30th Task Force Meeting of the ICP M&M in Rome, Italy, 7-10 April 2014.

The Programme Centre received the 2012 data from most IM sites, data are now stored in the new ICP IM database; further on item 5.

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 2013 (mentioned above).

The Programme Centre prepared the ICP IM contribution to the WGE 2013 Joint report (ECE/EB.AIR/WG.1/2013/3).

The Programme Centre prepared the ICP IM 22nd Annual report 2013 and also the technical document ECE/EB.AIR/WG.1/2013/9 submitted to the WGE in 2013. Included in the reporting were the workplan items:

Final report on relations between vegetation changes and CL-exceedance. Dirnböck, T. and Grandin, U. 2013.

Progress report on base line heavy metal approach. Bringmark, L. et al., 2013.

Sulphur and nitrogen input-output budgets at ICP Integrated Monitoring sites in Europe; Vuorenmaa et al., 2013.

Further workplan items for 2014 and priority topics will be discussed under items 6,7 and 8.

4. 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. Matters of discussion with ICPs are partly derived from the ICP IM workshop on May 7.

At the WGE Extended Bureau meeting in Geneva on March 27-28, 2014, 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 ICPs and work; see also item 3 report from Extended Bureau meeting, 7 and 8.

- (i) The long-term strategy was adopted by EB in December 2011.
- (ii) Workplan items and workshop events have been updated,
- (iii) Medium term workplan for ICP IM has plans for the year 2014 and 2015 which will be covered under items 6, 8 and 9; technical report in item 7 submitted June 30, 2014,
- (iv) Co-operation between WGE and EMEP with a joint meeting 17 September 2014,
- (v) Update of the Guidance report for WGE with NECD contribution, April 2014
- (vi) Preparations of the 33rd 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,
- (vii) Financial issues with EB review; funding from Trust Fund for the nearest coming years seems fairly stable but in a decreasing trend.

5. 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 23rd Annual Report 2014.

Most of the National Focal Points have submitted the results from 2012 to the Programme Centre. These data are incorporated into the IM database.

The following sixteen countries have continued data submission to the ICP IM data base during the period 2009 - 2013: Austria, Belarus, Canada, the Czech Republic, Estonia, Finland, Germany, Italy, Latvia, Lithuania, Norway, the Russian Federation, Spain, Sweden, United Kingdom and Ukraine. Canada will deliver the missing data from CA01 in 2014. Ukraine re-established site UA01 in 2013. Norway included an additional site NO03, Langtjern in 2013. Ireland re-established site IE01 in 2012 and will provide data in 2014. Presently the number of ICP IM sites with on-going data submission, data for at least part of the period 2008 – 2012, is forty-six. Most of the sites are European. An overview of the data reported internationally to the ICP IM database is given the Annual report 2014.

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.

6. Reports to be prepared/finalized in 2014

ICP IM reports:

- a) 23rd 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 2014 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 2014. The meeting is expected to discuss the content of the report and decide about the presentation to WGE.
- b) Report and scientific paper on mass balances and indicators for sulphur and nitrogen in catchments. A report will be included in the 23rd Annual Report.
- c) Progress report on dynamic vegetation modelling at ICP IM sites will be included in the 23rd Annual Report.

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

- d) Further elaboration and update of Guidelines for reporting effects which could relate to the EC NECD. This links Guidelines and future target settings 2020 and 2050. Indicators included are acidity, eutrophication, ozone and heavy metals but also biodiversity change and in relation to climate change impacts. Empirical critical loads should be developed and results on indicators are related also to the CLRTAP Long-Term strategy.
- e) To prepare a summary report on policy relevant results from ICP IM; a combined work of the ICP IM PC and the IM chair.
- f) Comparison of activities across continents and regions; outreach and hemispheric view will relate to 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 7) and September 2014 (e-f).

7. New template for WGE and WGSR reporting

Activities and results are now to be reported following a 12 items structure and replace the official technical reports. Report by June 30, 2014. 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.

8. Considerations in perspective of more efficient organization

Recommendations on further ICP common activities are;

- 1. Common webpage
- 2. Develop a meta-data base

- 3. Improve visibility. Common issue for EMEP and WGE.
- 4. One page information sheet on how the different parts of the WGE are connected.
- 5. Harmonised methods communicate that we are using but also making sure that this is the case. Intercalibrations across ICPs.
- 6. Thematic workshops; e.g. trends, ozone, nitrogen, biodiversity.
- 7. Open science workshops.
- 8. Thematic reports.
- 9. Improve collaboration within countries.
- 10. Long-term item: Develop harmonised database for centres.

Preparations for a potential joint ICP Waters and ICP IM report on trends. The TF should discuss possibilities and also that this might be an item for a joint ICP report for 2015.

Considerations on the update of the Cause-effects report with ICP Forests to be further discussed at the ICP Forests TF.

9. 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). Presentations of some of these topics are made during the IM workshop on May 7 and under item 4 and 8. 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; http://www.unece.org/environmental-policy/treaties/air-pollution/meetings-and-events.html

LTER-Europe:

The European LTER network (European Long-Term Ecosystem Research Network) is developing rapidly (http://www.lter-europe.net/). Many of the LTER-Europe sites include ICP IM sites so there is a need to discuss means of further cooperation. The Programme Centre will provide some background information on the topic.

LTER Europe is connected to the international programme ILTER and it has its annual meeting in Chile on December 1-8, 2014; Annual ILTER meeting, 2014 & All Scientists Meeting of the Americas.

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.

Many ALTER-Net related conferences will be carried out 2014 and are presented on the ALTER-Net (www.alter-net.info).

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. Presentations of some of these topics are made during the IM workshop on May 7, 2014. 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. Decisions on further work should be reflected in the work plan 2014-2015 and longer term planning for the WGE.

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

Discussion/proposals on new tasks:

- (i) New challenges for the Convention work is the relations climate change, biodiversity and land-use. Targets for increased use of biofuel would add effects on ecosystems. Air pollution is one pressure on ecosystems but additional are the impacts from socioeconomical drivers. Evolving programmes for increasing pressures need to be addressed. Plans for coming years are expected and could be related to the tentative plans of the ALTER-Net II programme, ExpeER project and LifeWatch.
- (ii) Other matters arising from the workshop May 7. Technical matters and progress in these fields will be discussed.

10. Work plan 2014-2015

The meeting is expected to decide on the work plan for 2014/2015 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 |
|---|---|---|
| Joint Report 2014 of the ICPs, TF Health and Joint Expert Group on Dynamic Modeling | WGE 2014 | UNECE Secretariat, WGE Bureau and ICP IM Programme Centre |
| Finalisation of 23 st Annual Report 2014 | June 2014 WGE 2014 | Programme Centre NFP contributions |
| Progress report on dynamic vegetation modelling at ICP IM sites | June 2014 WGE 2014 | NFPs of Austria and Sweden, in cooperation with Programme Centre |
| Report and scientific paper on mass balances and indicators for sulphur and nitrogen in catchments | June 2014 WGE 2014, end of 2014 (paper) | IM Programme Centre, in cooperation with NFPs |
| Reporting of ICP IM results to WGE and WGSR according to new 12 point structure | 30 June 2014 | ICP IM Programme Centre and Chairrman |
| Reporting of activities common to all ICPs, the Task Force on Health and the Joint Expert Group on Dynamic Modelling (see item 6 above) | WGE 2014 | Programme Centre and Chairman according to instructions of the UNECE Secretariat |
| Submission of quality controlled results for year 2013 to Programme Centre | December 1st 2014 | 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). (See items 8 and 9 above) | According to decisions at the TF meeting | According to decisions at the TF meeting |
| Cooperation with external organisations (International Long Term Ecological Research Network, LifeWatch, GEO BON). Progress reports | Task Force 2015 | Programme Centre and NFPs |
| Inter laboratory comparisons under leadership of ICP Waters, ICP Forests and EMEP | Decided later | Voluntary activities of the National Focal Points |
| Develop concepts for multi pollutant – multi effect relationships (NO _x , O ₃ , acidity, heavy metals, POPs, etc). Progress reports/contributions to Annual Report | Task Force 2015 | Voluntary activities at National Focal Points |
| Report and scientific paper on long-term trends in ecosystem effects of sulphur, nitrogen and heavy metals | Task Force and WGE 2015, end of 2015 (paper) | Programme Centre in cooperation with NFPs |

| Report on dynamic responses on vegetation changes in relation to nitrogen | Task Force and WGE 2015 | NFP of Austria and Sweden and Programme Centre, in collaboration with NFPs and ICP M&M |
|---|-------------------------------|--|
| ICP IM Task Force meeting 2015 | | |
| ICP IM Annual Report 2015 | Task Force and WGE 2015 | Programme Centre in collaboration with NFPs |

11. 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: http://cordis.europa.eu/

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.

- 12. Next Task Force meeting
- 13. Other business
- 14. Conclusion and end.