



UNECE CONVENTION ON LONG-RANGE TRANSBOUNDARY AIR POLLUTION

International Cooperative Programmes on Integrated Monitoring of Air Pollution Effects on Ecosystems

26th ICP IM Task Force Meeting, Warsaw, Poland, 9 May 2018

Explanatory notes to the agenda

1. **Opening of the meeting**
2. **Approval of the agenda**
3. **Approval of the minutes from the 25th ICP IM Task Force, Uppsala 2017.**

The minutes were distributed by mail to all participants, and are available on the ICP IM web site at the programme centre: <http://www.syke.fi/download/noname/%7B34474C77-EE16-4BBF-AFE1-302E2CE8D578%7D/128406>.

4. **Activities during 2017/18**

The ICP IM activities in 2017/2018 included work on S and N input and output budgets for IM sites, dynamic vegetation modelling, the Annual ICP IM Report No 26 and common items such as outreach and common activities.

Meetings:

- The former ICP IM Chair Lars Lundin represented ICP IM in the 33rd Task Force Meeting of ICP Forests in Bucharest, Romania, 15–18 May 2017.
- ICP IM Programme Manager Martin Forsius and Chair Ulf Grandin participated in the eLTER H2020 project annual progress meeting in Vienna, Austria, 7–9 June 2017.
- Ulf Grandin, Martin Forsius and Lars Lundin represented ICP IM in the Third Joint session of the Working Group on Effects and the Steering Body to EMEP in Geneva, Switzerland, 11–15 September 2017.
- Martin Forsius participated in the joint 25th annual ILTER meeting & LTER France meeting in Nantes, France, 2–6 October 2017.
- Martin Forsius, Ulf Grandin, Thomas Dirnböck and Maria Holmberg took part in the eLTER Conference organized back-to-back with the annual LTER Europe business meeting in Malaga, Spain from 28 November to 1 December 2017.
- Maria Holmberg and Thomas Dirnböck gave a joint presentation “Observing and modelling long-term effects of reactive Nitrogen in ecosystems” on 28 November 2017 at the Science Day of the eLTER Conference in Malaga, Spain.
- New Co-Chairs Ulf Grandin and Salar Valinia, and Martin Forsius represented ICP IM in the EMEP Steering Body and Working Group on Effects Bureaux meeting in Madrid, Spain, 19–21 February 2018.

- Martin Forsius participated in the Core team of eLTER (H2020), 1–2 March 2018, and the LTSER workshop, 4–8 March 2018, organized in Ktura, Israel.
- Ulf Grandin, Martin Forsius and Salar Valinia took part in the sixth "Saltsjöbaden" workshop in Gothenburg, Sweden 19-21 March 2018.
- Thomas Dirnböck (Austria) represented ICP IM in the 33rd Task Force of the ICP Modelling & Mapping meeting and Joint Expert Group on Dynamic Modelling in Bern, Switzerland, 18–20 April 2018.
- The twenty-sixth meeting of the Programme Task Force on ICP Integrated Monitoring was organized as a joint 2018 Task Force Meeting of ICP Waters and ICP Integrated Monitoring in Warsaw, Poland from May 7 to May 9, 2018.

The Programme Centre received the 2015 data from most IM sites, data are now stored in the ICP IM database; further on item 10.

Scientific work regarding priority topics has continued:

- The Programme Centre prepared the ICP IM contribution to the Joint Report 2017 of the ICPs, TF health and Joint Expert Group on Dynamic Modelling for the WGE (ECE/EB.AIR/GE.1/2017/3- ECE/EB.AIR/WG.1/2017/3).
- Scientific paper: “Long-term changes (1990–2015) in the atmospheric deposition and runoff water chemistry of sulphate, inorganic nitrogen and acidity for forested catchments in Europe in relation to changes in emissions and hydrometeorological conditions“ (J. Vuorenmaa et al. 2018) was finalized and was published in Science of The Total Environment.
- Scientific paper: “Modelling study of soil C, N and pH response to air pollution and climate change using European LTER site observations” (M. Holmberg et al.). Manuscript submitted to VSI: ILTER special issue in STOTEN: “Detecting and explaining natural and anthropogenic changes by making use of large extent, long-term ecological research facilities of the international long-term ecosystem research (ILTER) network”.
- ICP IM has contributed to the Joint Report on mercury in the aquatic environment (Joint report together with ICP Waters) (Braaten et al. 2017).
- ICP IM participates in a joint coordinated exercise on dynamic modelling together with other ICPs (Joint Expert Group on Dynamic Modelling, JEG DM). Priority in the ICP IM work is given to site-specific modelling activities and development/testing of new methodologies for assessing the connections between air pollution and climate change.

5. Work plan and future work priorities

a. Reports to be prepared /finalized in 2018/19

According to the ICP IM work plan, ICP IM will produce the following reports:

2018: Scientific paper on long-term trends in atmospheric deposition and runoff water chemistry of S and N compounds at ICP IM catchments in relation to changes in emissions and hydro meteorological conditions

2018: Scientific paper on dynamic modelling on the impacts of future deposition scenarios on soil and water conditions in ICP IM catchments

2019: Report on dynamic modelling on the impacts of deposition and climate change scenarios on ground vegetation

2019: Scientific paper on the relationship between critical load exceedances and empirical ecosystem impact indicators

b. Co-operation with other ICP:s and organisations

The EU NEC directive:

The EU has approved the new directive on national emission ceilings (2016/2284), and the Article 9 and Annex V of the directive contains instructions on reporting of ecosystem effects. Work of the ICPs is directly referred to. Member States must report by 1 July 2018 the location of the monitoring sites and associated indicators used for monitoring air pollution impacts. By 1 July 2019 Member States must report the first set of monitoring data measured at these sites.

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.

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.

c. Ongoing and future research projects and cooperation

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; <http://www.epbrs.org/>. Decisions on further work should be reflected in the work plan 2018-2019 and longer term planning for the WGE.

The EMEP Steering Body and Working Group on Effects Bureaux Meeting in February 2018, recommended the ICP IM task Force to discuss how IM can make further use of EMEP data.

d. General discussion: Future work under the Convention (Salar Valinia)

- The ongoing review of the Long Term Strategy (LTS) objectives, recommendations from the Policy Review Group to the WGE, and those ICP's activities in line with the recommendations
- The commitments to be met by the ICP/TF according to the mandates.

6. 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.

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/>.

The NFPs may report on any progress in this field.

7. Data submission and database status

Will be presented by Sirpa Klemola. The Programme Centre will present the current status of the database for the meeting. A detailed description is given in the 27th Annual Report 2018. Most of the National Focal Points have submitted the results from 2016 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 2012–2017: Austria, Belarus, the Czech Republic, Estonia, Finland, Germany, Ireland, Italy, Lithuania, Norway, Poland, the Russian Federation, Spain, Sweden, Switzerland and Ukraine. Poland rejoined the network and included several sites in 2017.

The number of sites with on-going data submission for at least part of the data is 44 from sixteen 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 possibilities to expand the programme to more countries, as well as ways to support the national ICP IM work.

8. Next Task Force meeting

Main issue for ICP IM Task Force is if we want to continue to have joint TF meetings with ICP waters.

9. Other business

10. End of meeting