



United Nations Economic Commission for Europe (UNECE)  
**Convention on Long-range Transboundary Air Pollution**

**Working Group on Effects (WGE)**

**International Cooperative Programme (ICP) on  
Integrated Monitoring of Air Pollution Effects on Ecosystems**

Minutes of the twenty-seventh Programme Task Force held on June 4-6 2019 in Helsinki, Finland

1. The meeting was organized jointly with the International Cooperative Programme on Assessment and Monitoring of the Effects of Air Pollution on Rivers and Lakes (ICP Waters). The meeting arrangements were carried out by the ICP IM Programme Centre and the meeting was financed by the Finnish Ministry of the Environment. Meeting was attended by 54 experts from the following Parties to the Convention on Long-range Transboundary Air Pollution (CLRTAP): Armenia, Austria, Canada, Czech Republic, Estonia, Finland, France, Georgia, Germany, Italy, Latvia, Lithuania, Norway, Poland, Russian Federation, Spain, Sweden, Switzerland, United Kingdom and United States of America. The Chair of ICP Modelling and Mapping was also present and Co-Chair of ICP IM and the representative of the CLRTAP Secretariat participated remotely. The list of participants is attached as Annex I.
2. Mr. U. Grandin, Co-Chair of ICP IM and Ms. H. de Wit, Chair of ICP Waters welcomed all participants and opened the Joint Task Force meeting.
3. Mr. M. Forsius from ICP IM Programme Centre and Finnish Environment Institute (SYKE) welcomed the participants to Helsinki and Finland.
4. The joint Task Force adopted the agenda of the meeting (Annex II) including the full list of presentations.
5. Reports
  - a) Mr. K. Olendrzynski from the CLRTAP Secretariat (participated remotely) presented the structure of the UNECE Convention on Long-Range Transboundary Air Pollution and an update on recent and planned activities. He presented the status of ratification of the recent protocols and the review process for the amended Gothenburg Protocol. He also presented the role of Working Group on Effects (WGE), and gave an update on priority areas of the LRTAP.  
[Link to the detailed presentation of Mr. Olendrzynski](#)
  - b) Mr. S. Valinia, Co-Chair of ICP IM (participated remotely) presented the status of the new WGE web portal ([presentation](#)).
  - c) Mr. U. Grandin, Co-Chair of ICP IM presented the current issues, achievements & priorities in ICP IM Programme for 2019-2020. These issues were covered in more detail in the separate ICP IM TF session ([presentation](#)).
  - d) Ms. H. de Wit, the new Chair of ICP Waters, presented the current issues in ICP Waters Programme. A special mention was made of the new leader of the ICP Waters Programme Centre, Kari Austnes. Ms. de Wit thanked all Focal Centres of their co-operation and welcomed the new Focal Centres: Armenia, Georgia and Spain. She presented the 2018-2019 Workplan and recent publications from the programme, on-going trend assessment and possible thematic reports for 2020-2021 ([presentation](#)).

## 6. Thematic Sessions

For details of all the presentations see [Thematic sessions](#).

### e. NEC directive

Special thematic session on NEC directive was included. Links to presentations are included below:

- Ms. K. Austnes, Norway gave the [introductory presentation on NEC directive](#)
- Ms. M. Rogora, Italy gave the presentation [NEC Directive in Italy: implementation steps, with a focus on freshwaters](#)

The Task Force discussed the NEC directive. In general the ICPs were not happy with the draft evaluation on the reported NEC sites, but welcomed that the authors had responded to the criticism in the revised version of the report. The Task Force also discussed the reporting template and concluded that it will be difficult to make any assessment on environmental status and trends from the mandatory reporting variables. It was recommended that the ICPs address this together and prepare comments on the WGE level and feedback will also be given to the Commission at least during the next round of NEC reporting.

### f. Critical loads and modelling

Ms. A. James, the new Chair of ICP Modelling & Mapping together with Mr. T. Scheuschner, Germany gave a presentation CCE and ICP M&M common vision and future activities. Ms. James informed that chairing of the Task Force is (still) located at INERIS, France, but the Coordination Centre for Effects (CCE) is now located in Dessau-Roßlau, Germany. Ms. James and Mr. Scheuschner presented the recent CCE activities during transition and the common vision of future TF – CCE – NFC collaboration ([presentation](#)).

## 7. Common sessions of ICP Waters and ICP IM, [all presentations](#)

- Mr. S. Valinia gave the presentation [Long term strategy and the potential review of Gothenburg protocol](#)
- Ms. K. Austnes presented the [Future plans of ICP Waters](#)
- Mr. M. Forsius presented the [Future plans of ICP IM](#). More details on the ICP IM work were covered at the separate meeting below.

More detailed notes from the Joint TF meeting will be available in the meeting report of ICP Waters (to be included on web pages of ICP Waters, see <http://www.icp-waters.no/> )

## 8. Separate Task Force Sessions

*Below notes from the short separate Task Force meeting of ICP IM.*

### **Separate ICP IM Task Force**

- I. Mr. U. Grandin, Co-Chair of ICP IM opened the meeting.
- II. The TF approved the agenda.
- III. The TF approved the [Minutes from 26<sup>th</sup> ICP IM Task Force, Warsaw 2018](#).
- IV. Mr. Grandin presented the activities during 2018/19

Part of this information is also available in chapter 1 of the 28<sup>th</sup> Annual Report (AR) 2019 and in the [presentation](#). Detailed info is found in the [annotated Agenda](#).

- ICP IM was represented at 12 international meetings
- 4 scientific papers
- ICP IM Programme Centre contributed to 2018 Joint WGE report
- IM participated in a joint coordinated exercise on dynamic modelling together with other ICPs

- The Task Force approved the assignment and welcomed Ms. Karin Eklöf as new responsible person for Hg and HM issues

Mr. Grandin presented the Work Plan for 2018-2020

Three scientific papers/ reports have already been published:

- workplan item 1.1.1.28  
Vuorenmaa et al. 2018, STOTEN  
Long-term trends in atmospheric deposition and run-off water chemistry of S and N compounds at ICP Integrated Monitoring catchments in relation to changes in emissions and hydrometeorological conditions.
- workplan item 1.1.1.29  
Holmberg et al. 2018, STOTEN  
Dynamic modelling on the impacts of future deposition scenarios on soil and water conditions in ICP Integrated Monitoring catchments
- workplan item 1.1.1.30  
Dirnböck et al. 2018, Env. Res. Letters  
Dynamic modelling on the impacts of deposition and climate change scenarios on ground vegetation

One planned scientific paper (2019) is in progress

- workplan item 1.1.1.31  
Relationship between critical load exceedances and empirical ecosystem impact indicators

V. The Task Force broke up to discussion groups and discussed and gave recommendations on the following points:

- Content of the new WGE web site. What should be mandatory to report for an overview of IM sites on the web site?
- Continued and intensified work on ecosystem effects from mercury and other heavy metals is a prioritised area. In which ways could ICP IM contribute with knowledge, data and research/assessment?
- In what ways could ICP IM increase its 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).
- In what ways could ICP IM increase its cooperation with EMEP (which is one priority in the CLRTAP Work Plan)?

VI. Work plan and future work priorities

- New WGE web page  
The Task Force decided that all ICP IM sites should report the basic set of meta-variables that was asked for in May 2019 by the working group behind the development of the new WGE web portal. On a longer time frame additional descriptive data could be added to the basic set and it was also recommended that IM sites would be included in ILTER's database DEIMS for cross referencing.
- Reports to be prepared/finalized in 2019/20
  - Report/scientific paper on the relationship between critical load exceedances and empirical ecosystem impact indicators. Responsible: Programme Centre and NFPs of Austria and Sweden.
  - Report/scientific paper on HM trends in concentrations and fluxes across ICP IM sites in Europe. Responsible: Programme Centre and individual researchers.
  - Scientific paper on the impacts of catchment characteristics, climate and hydrology on N processes. Responsible: Programme Centre and individual researchers.
  - 2020: Scientific paper on the recovery in the epiphytic lichen community in the IM catchments, after the decrease in S deposition. Responsible: NFP Sweden.
- Suggested items for Work Plan 2020-2022
  - Report/scientific paper on state and effects of mercury and heavy metals at the IM sites.

- Scientific paper on effects in vegetation from climate change and air pollution
- Scientific paper on the recovery in the epiphytic lichen community after the decrease in S deposition.
- Report/scientific paper on continued work on N impacts and exceedance of critical load.

VII. The Task Force discussed financing the ICP IM work and possible external applications.

VIII. Ms. S. Kleemola (ICP IM Programme Centre) described the status of data reporting to the Programme Centre. The following sixteen countries have continued data submission to the ICP IM data base during the period 2014–2018: Austria, Belarus, the Czech Republic, Estonia, Finland, Germany, Ireland, Italy, Lithuania, Norway, Poland, the Russian Federation, Spain, Sweden, and a site on Crimean peninsula. Presently the number of ICP IM sites with on-going data submission, data for at least part of the ‘data period’ 2013–2017, is forty-nine ([presentation](#)).

The Programme Centre requested National Focal Points to submit 2018 data by 1<sup>st</sup> of December 2019, using same procedure as earlier.

IX. The Task Force agreed unanimously that 2020 meeting should again be a Joint meeting with ICP Waters but there was no decision on the host country yet. Some NFPs have been contacted for possibilities for hosting next year’s meeting.

X. The Task Force approved the draft Annual Report 2019 and invited NFPs to provide written comments by June 24<sup>th</sup> 2019 and to submit additional contributions (short National Reports). If you wish to include a National Report but you can’t meet this deadline, please contact Ms. Kleemola.

The Task Force thanked the host country and the local organizers for the excellent arrangements.

XI. The Co-Chair U. Grandin ended the 27<sup>th</sup> ICP IM Task Force meeting.

## Annex I



### Agenda for the joint Task Force meeting of ICP Waters and ICP Integrated Monitoring, 4-6 June 2019

Meeting Venue: Fabianinkatu 26, Helsinki, room 115 (ground floor)

#### Time schedule

4 June	Tuesday	registration 8.30-9.00, meeting starts at 9.00, closing ca. 17.00 Transportation at 18.00 from Hotel Helsinki, Dinner at 19.00
5 June	Wednesday	meeting starts at 9.00, closing ca. 17.00
6 June	Thursday	excursion from 9.00 to ca. 14.00

1. **Opening of the joint meeting and introductions** (Chairs ICP IM and ICP Waters)
2. **Meeting welcome by the hosts and organisers** (Martin Forsius, SYKE, ICP IM)
3. **Adoption of the agenda** (Chairs ICP Waters and ICP IM)
4. **General information about the meeting and excursion** (Sirpa Kleemola, Jussi Vuorenmaa)
5. **Reports**
  - a. Structure of the Convention and recent CLRTAP activities (Krzysztof Olendrzynski, Secretariat)
  - b. Reports from Working Group on Effects and the Bureau (Martin Forsius)
  - c. The new WGE web portal, status report (Salar Valinia)
  - d. Current issues ICP IM (Chair ICP IM)
  - e. Current issues ICP Waters (Chair ICP Waters)
6. **Thematic sessions**
  - a. Acidification and recovery
    - i. Is there a need for a revision of the chemical acidification criteria in the Nordic countries? Jens Fölster, Sweden
    - ii. Contrasting responses of two neighbouring lake ecosystems in the English Lake District to acid deposition, Don Monteith, UK
    - iii. Atmospheric depositions - lysimetric waters - waters of a lake in the Valdai Hills, Dimitry Baranov, Russian Federation
    - iv. Trends in surface water chemistry. The upcoming trend report - preliminary results. Øyvind Garmo, Norway
    - v. Long term water chemistry trends in small boreal lakes in southern Finland relative to sulphur and nitrogen deposition. Lauri Arvola, Finland
  - b. Climate change and land use
    - i. Forest disturbance effect on soil nutrients and lake chemistry - Plešné Lake, Filip Oulehle, Czech Republic
  - c. Heavy metals and POPs
    - i. Trends and source apportionment of atmospheric heavy metals in Finland, Katriina Kyllönen, Finland

- ii. Archived invertebrate samples show LT-decline in Hg: caused by decline in S deposition? Heleen de Wit, Norway
  - iii. Trends in elements speciation in Imandra lake and small lakes of the Kola Peninsula, Marina Dinu, Russian Federation
  - iv. Estimating the re-emission of Hg from soil to atmosphere in ICP IM catchments. Karin Eklöf, Sweden
- d. Biodiversity
    - i. Major disturbances test resilience at a long-term boreo-nemoral forest monitoring site, James Weldon, Sweden
    - ii. Functional diversity of benthic invertebrates, Gaute Velle, Norway
    - iii. N deposition and bryophyte responses in boreal background forests, Maija Salemaa, Finland

d. NEC Directive

- i. Introductory presentation, Kari Austnes, Norway
- ii. The National Emission Ceilings Directive: Insights from Italy. Michela Rogora, Italy
- iii. Discussion

e. Critical loads and modelling

- i. CCE and ICP M&M common vision and future activities. Alice James, France, and Thomas Scheuschner, Germany

f. Nitrogen and element budgets

- i. Water quality on Georgian rivers and lakes, Marine Arabidze, Georgia
- ii. Air Quality Monitoring and Information Dissemination in Armenia, Arpine Gabrielyan, Armenia
- iii. Response from call for data on Nitrogen, ICP IM, Jussi Vuorenmaa, Finland
- iv. Discussion on N issues and potential ICP IM/Waters collaboration

**7. Common sessions of ICP Waters and ICP Integrated Monitoring for report and discussion of work plan items**

- a. Adoption of the new Long-term strategy and what does it mean? Salar Valinia, Sweden
- b. Chemical and biological inter-calibration
  - i. Biological intercalibration – Gaute Velle, Norway
  - ii. Chemical intercalibration – Cathrine Gundersen, Norway
- c. Thematic reports of common interest
  - I. Future plans ICP Waters – Kari Austnes
  - II. Future plans ICP IM – Martin Forsius/Ulf Grandin

**8. Next Task Force meeting**

**9. End of joint TF meeting**

**Separate Task Force meetings will follow immediately after the ending of the joint meeting.**

**Agenda – ICP Waters Task Force:**

1. Mandate and workplan
2. Status and progress
3. Current and planned reports
4. Database and homepage
5. Biological intercalibration, chemical intercomparison
6. NEC Directive
7. Other issues
8. Proceedings, evaluation of the meeting
9. Adoption of the minutes

**Agenda – ICP IM Task Force**

1. Opening of the meeting
2. Approval of the agenda
3. Approval of the minutes from the 26th ICP IM Task Force meeting
4. Activities during 2018/19 - Information
5. Discussions – break out groups, 1 hr.
6. Work plan and future work priorities
7. Financing/external applications
8. Data submission and database status
9. Next Task Force meeting
10. Other business
11. End of meeting

## Annex II

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