



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 twentieth Programme Task Force held on 23 May 2012 in Kaunas, Lithuania

**I. Opening of the meeting**

1. Mr. L. Lundin (Sweden), Chair of the Programme Task Force on the International Cooperative Programme (ICP) on Integrated Monitoring of Air Pollution Effects on Ecosystems (IM), opened the Task Force meeting and welcomed the participants.
2. The Task Force adopted the agenda of the meeting (Annex I). Mr. Lundin reminded that the explanatory notes for the agenda and the draft annual report, circulated in advance in electronic form, contained additional details discussed in the meeting.
3. Twenty participants attended the ICP IM Task Force meeting. Participants from the following Parties to the Convention attended the meeting: Austria, the Czech Republic, Finland, Germany, Italy, Lithuania, Norway, the Russian Federation, Spain and Sweden. The ICP Waters and ICP Forests programmes were also represented and the LTER Europe coordinator was present (for list of participants, see Annex II).
4. The normal Workshop was not held this year but the results of the IM programme were presented in Session 7 of the IUFRO conference 'Biological Reactions of Forests to Climate Change and Air Pollution' attended by over 200 participants. Session 7 was organized jointly by the EU life+ project EnvEurope and ICP IM. It was called 'Environmental Quality and Pressures Assessment under Global Changes' and it was chaired by Lars Lundin and Alessandra Pugnetti, Italy. (presentations: <http://www.environment.fi/default.asp?contentid=412304&lan=en&clan=en>). A list of presentations also in Annex I.

**II. Minutes of 19<sup>th</sup> ICP IM TF**

5. The Task Force approved the Minutes of the 19<sup>th</sup> ICP IM Task Force Meeting in Rome, Italy, 2011.

**III. Report from Chairman and Programme Centre**

6. Mr. Lundin presented the programme activities since the last Task Force meeting, (for details, please see the Explanatory Notes on ICP IM web pages <http://www.environment.fi/download.asp?contentid=136240&lan=en> part 3 and chapter one in the Draft Annual Report).

**IV. Reports from WGE and other ICPs**

7. In the absence of a representative from the Working Group on effect, Mr Lundin covered the notes from the last WGE meeting as well as the WGE "Extended" Bureau meeting (for details, see Explanatory notes: <http://www.environment.fi/download.asp?contentid=136240&lan=en> part 3: 'Updating of scientific and technical knowledge' and 'Notes from the WGE Extended Bureau meeting').

8. Mr. R. Fischer (Germany), represented ICP Forests programme. He presented the progress report 2011-2012 of ICP Forests including: revision of the monitoring system and manual, data analyses on large scale (level I) and on forest ecosystem scale (presentation: <http://www.environment.fi/download.asp?contentid=136913&lan=en>). He specified the new web-pages of the programme ([www.icp-forests.net](http://www.icp-forests.net)) and the extended use and interest to the use of data from internal and outside groups.

9. Ms. B. Kvaeven (Norway), Chair of ICP Waters, presented the activities and plans of the ICP Waters programme (presentation: <http://www.environment.fi/download.asp?contentid=136711&lan=en>). She described the programme aims, status of participation in 2011, the previous Task Force Meeting (Sochi, Russia, 19-21 October 2011), reports since last meeting and up-coming reports. The next ICP Waters TF meeting will be held in Pallanza, Italy, 8-10 October 2012. Possible joint work on nitrogen between ICP IM and ICP Waters was discussed.

## V. Data submission and database status

10. Ms. S. Kleemola described the status of data reporting to the Programme Centre (presentation: <http://www.environment.fi/download.asp?contentid=136700&lan=en>). The following fifteen countries have continued data submission to the ICP IM data base during the period 2007 – 2011: Austria, Belarus, Canada, Czech Republic, Estonia, Finland, Germany, Italy, Latvia, Lithuania, Norway, Russian Federation, Spain, Sweden, and United Kingdom. Presently the number of ICP IM sites with on-going data submission, data for at least part of the period 2006 – 2010, is forty-four. Russia added one new site to the reporting. Altogether eleven countries submitted data for 2010, so far.

New input software is finalized, and nearly all 2008-2010 data received are now stored in the ICP IM data base. The Programme Centre requested NFPs to submit 2011 data by 1<sup>st</sup> December 2012, using same procedure as earlier.

## VI. Results of the 2011 workplan items

### A. Convention 2011 workplan items specific for ICP IM

11. The workplan items specific for ICP IM will be reported to the 31<sup>st</sup> session of the Working Group on Effects in September 2012. They will be presented orally in the salle and also with a short summary in the 2012 IM Technical Document (2012 results on Monitoring/Modelling)

#### (i) Updated report on mass balances for sulphur and nitrogen at ICP IM sites

12. Mr. J. Vuorenmaa (Finland) presented the draft version of the report, which is included as chapter 2 in the Draft Annual Report, and forms the basis on formulating the results into the 21<sup>st</sup> Annual Report of ICP IM. The work was presented in more detail during Session 7 (presentation: <http://www.environment.fi/download.asp?contentid=136710&lan=en>). Final report for 2013 Annual Report and a scientific paper will be prepared.

#### (ii) Report on relations between biodiversity and CL-exceedances

13. Mr. T. Dirnböck. (Austria) gave a presentation in Session 7, the work will also be described in the Annual Report; an outline was presented in the Draft (chapter 3). The first part of the report is a summary of vegetation review. The second part of the report presents the status of data collection and preliminary statistical analyses, additional data was included from LTER network and ICP Forests (presentation: <http://www.environment.fi/download.asp?contentid=136754&lan=en>). The work will continue and a scientific paper based on analyses is planned and final reporting will be done for the 2013 Annual Report.

#### (iii) Progress report on field monitoring and dynamic modelling using VSD model

14. A draft version of the progress report was prepared by Ms M. Holmberg (Finland) and Mr. T. Dirnböck. (Austria), and it is included as chapter 4 in the Draft Annual Report, and forms the basis on formulating the results into the 21<sup>st</sup> Annual Report of ICP IM.

*B. Convention 2012 workplan items common to all ICPs, the Task Force on Health and the Joint Expert Group on Dynamic Modelling*

15. The workplan items common to all WGE programmes will be reported to the 31<sup>st</sup> session of the Working Group on Effects in September 2012.

16. The Task Force entrusted the Programme Centre to submit necessary readily available data to the secretariat, based on the present Annual Report or earlier reports/data on:

i) *Further elaboration and update of Guidelines for reporting effects which relate to the CLRTAP strategy and workplan..* This will be prepared with coordination of the head of CCE and in cooperation with the chairman and the Programme Centre.

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.

ii) *Summary report on policy relevant results from ICP IM (to be included in Joint progress report of the ICPs for the WGE).* A First draft was prepared by Mr Forsius and it was commented by TF participants, Programme Centre will report to the WGE Chairman and the CLRTAP secretariat. This report includes results on

- input-output budgets of N and S
- relationships between the exceedance of critical loads and empirical impact indicators
- budgets and impacts of heavy metals

iii) *Comparison of activities across continents and regions; outreach and hemispheric view.* The Programme Centre will report on the ICP IM contributions to the CLRTAP secretariat.

The Task Force discussed the co-operation and outreach and agreed to contact countries which have dropped out of the ICP IM programme to re-establish their participation in the programme. Task Force also recommended the NFPs to seek co-operation with LTER-Europe Network.

(i) 21st Annual ICP IM report

17. The Programme Centre had prepared a draft version of the report, containing information on the status and progress of the Programme's activities. The Task Force approved in principle the 21<sup>st</sup> Annual Report 2012, invited interested NFPs to submit additional contributions (short National reports) and/or corrections by the 20<sup>th</sup> of June 2012 and requested the Programme Centre to finalize it for submission to the 31<sup>st</sup> session of WGE on 20-21 September 2012. National contributions will be included as Annexes to the Annual Report.

## **VII. Co-operation with other activities**

### *A. Other ICPs and Convention bodies*

18. The collaboration with other ICPs is expected to continue. Key tasks are analysis of long-term trends, calculation of critical loads and exceedances and dynamic modelling.

### *B. LTER-Europe, LifeWatch*

19. Mr. M. Mirtl, coordinator of LTER Europe, presented the status of the LTER network. The European LTER network (European Long-Term Ecosystem Research Network, <http://www.lter-europe.net/>) is a formal structure in LifeWatch programme (e-science and technology infrastructure for biodiversity data and observatories). Many of the LTER-Europe sites include ICP IM sites. The recommendation from the Task Force was for the NFPs to seek co-operation with LTER-Europe. And for the countries already participating in the LTER network to check their data.

C. *Other external projects/organisations*

20. The use of ICP IM data and participation of the Programme Centre and NFPs in various other projects was encouraged.

**VIII. Future work priorities**

21. Mr M. Vana presented information on black carbon from the Czech site Kosetice (presentation: <http://www.environment.fi/download.asp?contentid=136702&lan=en>)

**IX. Workplan 2012/2013 including tentative plans for 2014**

The Task Force agreed on workplan of ICP IM for 2012/2013.

<b>Activity</b>	<b>Time-frame</b>	<b>Responsible</b>
<b>Joint Report 2012 of the ICPs, TF Health and Joint Expert Group on Dynamic Modeling</b>	WGE 2012	UNECE Secretariat, WGE Bureau and ICP IM Programme Centre
<b>Finalisation of 21<sup>st</sup> Annual Report 2012</b> (deadline for material 20 June)	June 2012 WGE 2012	Programme Centre NFP contributions
<b>Report on relations between vegetation changes and CL-exceedances</b> (chapter in Annual Report)	June 2012 WGE 2012	NFPs of Austria and Sweden, in cooperation with IM Programme Centre
<b>Report on mass balances for sulphur and nitrogen at ICP IM sites</b> (chapter in Annual Report)	June 2012 WGE 2012	IM Programme Centre, in cooperation with NFPs
<b>Progress report on field monitoring and dynamic modelling using VSD model</b> (chapter in Annual Report)	June 2012 WGE 2012	NFP of Austria and Programme Centre
<b>Activities common to all ICPs, the Task Force on Health and the Joint Expert Group on Dynamic Modelling</b>	WGE 2012	Programme Centre according to instructions of the UNECE Secretariat
<b>Submission of quality controlled results for year 2011 to Programme Centre</b>	December 1st 2012	National Focal Points
<b>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).</b>	According to decisions at the TF meeting	According to decisions at the TF meeting
<b>Cooperation with external organisations (International Long Term Ecological Research Network, LifeWatch, GEO BON). Progress reports</b>	Task Force 2013	Programme Centre and NFPs
<b>Inter laboratory comparisons under leadership of ICP Waters, ICP Forests and EMEP</b>	Decided later	Voluntary activities of the National Focal Points
<b>Develop concepts for multi pollutant – multi effect relationships (NO<sub>x</sub>, O<sub>3</sub>, acidity, heavy metals, POPs, etc). Progress reports</b>	Task Force 2013	Voluntary activities at National Focal Points

<b>Report on heavy metal approaches</b>	Task Force and WGE 2013	NFP of Sweden and Programme Centre
<b>Report on biodiversity VSD modelling</b>	Task Force and WGE 2013	NFP of Austria and Programme Centre, in collaboration with NFPs and ICP M&M
<b>Interim report on links between indices and CL exceedances</b>	WGE 2013	NFP of Austria and Programme Centre, in collaboration with NFPs and ICP M&M
<b>Final report and scientific paper on trends and mass balances for sulphur and nitrogen at ICP IM sites</b>	June 2013 WGE 2013	IM Programme Centre, in cooperation with NFPs
<b>ICP IM 22<sup>nd</sup> Annual Report 2013</b>	WGE 2013	IM Programme Centre in collaboration with NFPs
<b>ICP IM Task Force 2013</b>	May 2013	
<b>Final report on field monitoring and dynamic modeling using VSD/VEG models</b>	Task Force and WGE 2014	NFP of Austria and Programme Centre, in collaboration with NFPs
<b>Report on impact of N deposition on biogeochemical &amp; biological indicators</b>	Task Force and WGE 2014	Programme Centre, in collaboration with NFPs

## **X. Financing**

22. The possibilities for the Convention's trust fund to partially support the international coordination work at programme centres of effects activities and integrated assessment modelling each year was noted. The support would be at the same level as in recent years.

## **XI. Next Task Force meeting**

23. Ms. A. Koukhta invited the Task Force meeting to be held in Russia in May 2013. More information will be available during summer.

## **XII. Other business**

24. The participants were once again reminded to provide written comments and possible additions (short national reports) to the draft Annual Report by 20 June 2012.

## **XII Conclusion**

25. The Chair expressed heartfelt thanks to participants and the host country. Special thanks for the excellent arrangements to Algirdas and Ingrida.

26. The Task Force appreciated, in anticipation, next day's excursion arranged by the Lithuanian hosts.

27. Meeting closed

## Annex I

### CONVENTION ON LONG-RANGE TRANSBOUNDARY AIR POLLUTION

#### International Cooperative Programme on Integrated Monitoring of Air Pollution Effects on Ecosystems

#### 20<sup>th</sup> ICP IM Task Force Meeting & Workshop Kaunas, Lithuania

#### I. Workshop as part of the Conference at the Aleksandras Stulginskis University, Tuesday 22 May

<b>Session 7 “Environmental Quality and Pressures Assessment under Global Changes”</b>				
<i>Chair persons: Lars Lundin and Alessandra Pugnetti</i>				
Organized by ICP IM and ENVeurope.				
No.	Time	Authors	Country	Title
1.	15:15 - 15.30	J.Vuorenmaa, M.Forsius, L.Lundin, S.Kleemola, A.Augustaitis, B.Beudert, H.A.deWit, C.D.Evans, J.Frey, I.Indriksone, D.S.Jeffries, P. Krám, M. Váňa	Finland and other ICP IM countries	Sulphur and nitrogen input-output budgets at ICP Integrated Monitoring sites
2.	15:30 - 15:45	R.Jakuš	Slovakia	The development of "supersite" plot and forest dynamic observations system in Polana mountains
3.	15:45 - 16:00	T.Dimnböck, U.Grandin	Austria, Sweden	Long-term vegetation responses at ICP IM sites in relation to deposition impacts
4.	16:00 - 16:15	M.Holmberg	Finland and other ICP IM countries	Empirical impact indicators agree with exceedances of critical loads
5.	16:15 - 16:30	S.Löfgren, M.Aastrup, L.Bringmark, H.Hultberg, L.Lewin- Pihlblad, LLundin, G.P.Karlsson, B.Thunholm	Sweden	Recovery of soil water, groundwater and streamwater from acidification at the Swedish Integrated Monitoring catchments

6.	16:30 - 16:45	G.Matteucci, M.Frenzel, M.Bascietto	Italy, Germany	Testing common monitoring and research parameters: the EnvEurope field exercise
7.	16:45 - 17:00	H.A.deWit, J.Blaszczak	Norway	Mercury in stream and wetland porewater in two Norwegian catchments

## **II. Task Force meeting, Wednesday 23 May, at Hotel Park Inn**

9.00 – 10.30 TF meeting  
10.30 – 10.55 coffee break  
10.55 – 12.30 TF meeting  
12.30 – 13.45 lunch  
13.45 – 15.15 TF meeting  
15.15 – 15.40 coffee break  
15.40 – 17.00 TF meeting  
ca. 17.00 closing

### **Agenda**

1. Opening of the meeting
2. Minutes of 19<sup>th</sup> ICP IM TF
3. Report from Chairman and Programme Centre
4. Reports from WGE and other ICPs
5. Data submission and database status
6. Reports to be prepared /finalized in 2012
7. Co-operation with other ICPs and external projects/organizations
8. Other future work priorities
9. Work plan 2012/2013
10. Financing/external applications
11. Next Task Force meeting
12. Other business
13. Conclusion and end

## **III. Sum-up day of the Conference at the University, Thursday 24 May**

## **IV. Post-conference trip to Aukstaitija National Park (IM site located there), Friday 25 May**

Annex II  
List of participants 20<sup>th</sup> ICP IM Task Force Meeting

	<b>Nationality</b>	<b>Surname</b>	<b>Name</b>	<b>Institute</b>	<b>E-mail address</b>
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4	Czech Republic	Vana	Milan	Czech Hydrometeorological Institute Observatory Košetice	milan.vana@chmi.cz
5	Finland	Forsius	Martin	Finnish Environment Institute (SYKE)	martin.forsius@ymparisto.fi
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7	Finland	Kleemola	Sirpa	Finnish Environment Institute (SYKE)	sirpa.kleemola@ymparisto.fi
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