



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-first Programme Task Force held on 22 May 2013 in Obninsk, Russian Federation

**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. Director General, Mr. V. Shershakov from the Research and Production Association 'Typhoon' in Obninsk (<http://www.typhoon.obninsk.ru/english/main.htm>) opened the meeting on May 21, during the Workshop.
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-eight participants attended the ICP IM Task Force meeting and the Workshop. Participants from the following Parties to the Convention attended the meeting: Austria, Belarus, the Czech Republic, Finland, Germany, Norway, the Russian Federation, Spain, Sweden and Ukraine. The ICP Waters programme was represented and the Chairman of LTER Europe was present (for list of participants, see Annex II).
4. The meeting noted the results from the workshop on data assessment and evaluation methods (for integrated monitoring data), which was held on 21 May 2013 (presentations of the Workshop on 'old' IM web pages available till the end of August 2013) (<http://www.environment.fi/default.asp?contentid=435139&lan=en&clan=en>). A list of presentations in Annex I.

**II. Minutes of 20<sup>th</sup> ICP IM TF**

5. The Task Force approved the Minutes of the 20<sup>th</sup> ICP IM Task Force Meeting in Kaunas, Lithuania, 2012.

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

6. Mr. Lundin presented the programme activities since the last Task Force meeting, (for details, please see part three of the Explanatory notes and corresponding presentation. Main part is also presented in chapter 1 of the (draft) Annual Report). ([http://www.syke.fi/en-US/Research\\_Development/Ecosystem\\_services\\_and\\_biological\\_diversity/Monitoring/Integrated\\_Monitoring/ICP\\_IM\\_Meetings](http://www.syke.fi/en-US/Research_Development/Ecosystem_services_and_biological_diversity/Monitoring/Integrated_Monitoring/ICP_IM_Meetings)).

**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 (EB) meeting (for details, see Explanatory notes (link given above) part three: 'Updating of scientific and technical knowledge' and 'Notes from the WGE

Extended Bureau meeting').

WGE 2012 meeting in September 2012, main points:

- CLRTAP Strategy now agreed
- Revision of Protocols in December 2012
- Outreach and translations
- Joint report and Impact assessment report, <http://www.unece.org/index.php?id=24661>
- Biodiversity issues enhanced
- Joint work between EMEP and WGE
- EB decided on an evaluation of the ICPs in 2013. Important words on direction are: scientific, streamlining, communication, dissemination
- EB has included black carbon under the Convention especially addressing health effects
- Next WGE meeting 12-13 September 2013

Extended bureau in February 2013, main points:

- The work within the Convention is foreseen to change and it relates to CLRTAP Long-term strategy.
- Evaluation of the ICPs to be reported to EB in December 2013.
- Harmonisation of the EMEP and WGE homepages.
- New reporting: Common country reports, joint scenario report and a biodiversity and ecosystem service report and brochure.
- New meeting: Saltsjöbaden 5 in Gothenburg, Sweden on 24-26 June, 2013 and one in India February 2014.

8. Ms. H. de Wit (Norway) represented the ICP Waters programme and presented the activities and plans of the ICP Waters programme (presentation on web). She described the programme aims, the previous Task Force Meeting (Pallanza, Italy, 8-10 October 2012), retirement of Chairperson Ms. B. Kvaeven, recent and up-coming reports and manuscript on trends. The next ICP Waters TF meeting will be held in Cesky Krumlov, Czech Republic, 1-4 October 2013.

9. Mr. T. Scheuschner (Germany), made informal statements from the ICP Modelling and Mapping (M&M) programme. Joint activities/co-operation between IM and M&M on Biodiversity modelling were discussed.

## **V. Data submission and database status**

10. Ms. S. Kleemola described the status of data reporting to the Programme Centre (presentation on web). The following fifteen countries have continued data submission to the ICP IM data base during the period 2008 – 2012: Austria, Belarus, the Czech Republic, Estonia, Finland, Germany, Italy, Latvia, Lithuania, Norway, the Russian Federation, Spain, Sweden, United Kingdom, and Canada (a bit behind in data delivery). Presently the number of ICP IM sites with on-going data submission, data for at least part of the period 2007 – 2011, is forty-four. Ireland has re-established a site and will deliver data in 2013. Altogether twelve countries submitted data for 2012, so far.

The Programme Centre requested National Focal Points to submit 2012 data by 1<sup>st</sup> December 2013, using same procedure as earlier.

The launch of two new web-portals of Finnish Environment Institute (SYKE) were mentioned ([www.syke.fi/en-US](http://www.syke.fi/en-US)) already and later ymparisto.fi, which will replace the previous portal environment.fi. IM web pages (including the IM Manual) will be transferred to a new portal. The old direct link will be changed later this year. (Comment from Sirpa) New short address is NOW available <http://www.syke.fi/nature/icpim>

## **VI. Results of the 2012 workplan items**

### *A. Convention 2012 workplan items specific for ICP IM*

11. The workplan items specific for ICP IM will be reported to the 32<sup>nd</sup> session of the Working Group on Effects in September 2013. They will be presented orally in the salle and also with a short summary in the 2013 IM Technical Document (2013 results on Monitoring/Modelling) and summarized in the ICP IM AR 22 (2013).

(i) Report and scientific paper on relations between biodiversity and CL-exceedances

12. Mr. M. Mirtl (Austria) gave a presentation on this topic in the workshop on 21 May. Final report on relations between vegetation changes and CL-exceedance prepared by T. Dirnböck (Austria) and U. Grandin (Sweden) is included as a chapter in the Draft Annual Report 2013 based on a scientific article on this topic submitted in April 2013.

(ii) Progress report and scientific paper on base line heavy metal approach

13. Mr Lundin presented this topic in the workshop on 21 May. The first draft of the progress report on base line heavy metal approach by Bringmark et al. is included in the (draft) Annual Report. This report summarises the main findings of the scientific article "Trace metal budgets for forested catchments in Europe - Pb, Cd, Hg, Cu and Zn" (Bringmark et al. 2013).

(iii) Progress report on mass balances for sulphur and nitrogen at ICP IM sites

14. Mr. J. Vuorenmaa (Finland) presented the work which forms the basis on formulating the results into the 22<sup>nd</sup> Annual Report of ICP IM during the workshop on 21 May (presentation is available on web). A report and a scientific paper on mass balances are planned for 2014.

*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 32<sup>nd</sup> session of the Working Group on Effects in September 2013.

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).* This will be prepared by the Programme Centre together with the chairman.

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. Mr Lundin will contact parties which have dropped out of the ICP IM programme to re-establish their participation in the programme. Ukraine participated in the Task Force meeting and will re-establish a site in the ICP IM Network.

(i) 22<sup>nd</sup> 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 22<sup>nd</sup> Annual Report 2013, invited interested NFPs to submit additional contributions (short National reports) and/or corrections by the 17<sup>th</sup> of June 2013 and requested the Programme Centre to finalize it for submission to the 32<sup>nd</sup> session of WGE on 12-13 September 2013. National contributions will be included as Annexes to the Annual Report.

## VII. Co-operation with other bodies and 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. Co-operation in VSD modelling with ICP M&M was discussed at the meeting. It was also noted that the NFPs role as contributors is essential in the work. IM Programme Centre will contact ICP M&M in this matter. Also the possible common work with ICP Waters on mass balances was discussed.

### B. LTER-Europe, LifeWatch

19. Mr. M. Mirtl, Chairman 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 (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 have the IM site connected to LTER infrastructure, if this was not already done. A list of national LTER contact persons is available at the LTER-Europe web-site, Countries already participating in the LTER network were urged to check their metadata.

### 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. The NFPs were encouraged to present results from studies on new scientific topics at the next ICP IM workshop 2014,

## IX. Workplan 2013/2014 including tentative plans for 2015

22. The Task Force agreed on workplan of ICP IM for 2013/2014.

Activity	Time-frame	Responsible
<b>Joint Report 2013 of the ICPs, TF Health and Joint Expert Group on Dynamic Modeling</b>	WGE 2013	UNECE Secretariat, WGE Bureau and ICP IM Programme Centre
<b>Finalisation of 22<sup>nd</sup> Annual Report 2013</b>	June 2013 WGE 2013	Programme Centre, NFP contributions by 17 <sup>th</sup> June
<b>Report on relations between vegetation changes and CL-exceedances</b>	June 2013 WGE 2013	NFPs of Austria and Sweden, in cooperation with Programme Centre
<b>Report on mass balances for sulphur and nitrogen at ICP IM sites</b>	June 2013 WGE 2013	IM Programme Centre, in cooperation with NFPs
<b>Progress report on base line heavy metal approach</b>	June 2013 WGE 2013	NFP of Sweden and Programme Centre
<b>Activities common to all ICPs, the Task Force on Health and the Joint Expert Group on Dynamic Modelling (see item 6 above)</b>	WGE 2013	Programme Centre according to instructions of the UNECE Secretariat

<b>Submission of quality controlled results for year 2012 to Programme Centre</b>	December 1 <sup>st</sup> 2013	National Focal Points
<b>Cooperation with external organisations (International Long Term Ecological Research Network, LifeWatch, GEO BON). Progress reports</b>	Task Force 2014	Programme Centre and NFPs
<b>Inter laboratory comparisons under leadership of ICP Waters, ICP Forests and EMEP</b>	Decided later	Voluntary but recommended 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 2014	Voluntary activities at National Focal Points
<b>Report and scientific paper on mass balances and indicators for sulphur and nitrogen in catchments</b>	Task Force and WGE 2014	Programme Centre in cooperation with NFPs
<b>Report on dynamic modelling on vegetation changes in relation to N</b>	Task Force and WGE 2014	NFP of Austria and Programme Centre, in collaboration with NFPs and ICP M&M
<b>ICP IM Task Force 2014</b>	May 2014	Chairman, Programme Centre and NFP of Ireland
<b>ICP IM Annual Report 2014</b>		Programme Centre in collaboration with NFPs
<b>Report and scientific paper on long-term trends in ecosystem effects of S, N</b>	Task Force and WGE 2015	Programme Centre, in cooperation with NFPs
<b>Report on heavy metal impacts</b>	Task Force and WGE 2015	Programme Centre, in cooperation with NFPs

## X. Financing

23. 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 likely be at the same level as in recent years.

## XI. Next Task Force meeting

24. Mr Lundin informed that the next Task Force meeting will tentatively be held in Westport, Ireland May 7-9, 2014.

## XII. Other business

25. The participants were once again reminded to provide written comments and possible additions (short national reports) to the draft Annual Report by 17<sup>th</sup> of June 2013.

## XII Conclusion

26. The Chair expressed heartfelt thanks to participants and the host country and the Research and Production Association 'Typhoon'. Special thanks for the excellent arrangements to the local organisers team (Anna, Yury, Sergey, Katja and others) from Institute of Global Climate and Ecology

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

28. Meeting closed

## Annex I

### CONVENTION ON LONG-RANGE TRANSBOUNDARY AIR POLLUTION

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

#### 21<sup>st</sup> ICP IM Task Force Meeting & Workshop

Research and Production Association "Typhoon", Obninsk city, the Kaluga Region, Russian Federation

#### **I. Workshop on data assessments and evaluation methods for IM data**

##### **Tuesday 21 May**

9.00 – 9.10 opening of the meeting (Shershakov Vyacheslav, General Director of the Research and Production Association "Typhoon" (Russian Federation); Lars Lundin, ICP IM Chairman)

9.10 – 10.30 workshop

10.30 – 10.55 coffee-break

10.55 – 13.00 workshop

13.00 – 14.00 lunch

14.00 – 15.15 workshop

15.15 – 15.40 coffee-break

15.40 – 17.00 workshop and final discussion

ca. 17.00 closing

(15 minutes/presentation + 5 minutes for discussion)

#### **Welcome from host country**

Vyacheslav Shershakov, Russian Federation

#### **Session I: Introductory presentations from host country**

Ruslan Borodin, Russian Federation

Experience of using a long-range atmospheric dispersion model

Robert Sandlerkiy, Russian Federation

Ecological monitoring in Central Forest State Nature Biosphere Reserve

#### **Session II: Biodiversity**

Heleen de Wit, Norway

ICP Waters: 30 years of biodiversity trends in European fresh waters

Michael Mirtl, Austria

Nitrogen deposition affects forest floor vegetation across Europe - evidence from long-term monitoring

Alexey Pchelkin (presented by Anna Kukhta), Russian Federation

Variability of organisms and the environmental monitoring

Margarita Kocherga, Vera Ableeva, Russian Federation

Organization and direction of research at Oka-Terrace State Reserve

### **Session III: Long-term trends**

Alexander Minin, Russian Federation

Phenological tendencies in the Russian plain nature during last decades

Jussi Vuorenmaa, Finland/ICP IM Programme Centre

Sulphur and nitrogen input-output budgets 1990-2010 at ICP IM sites in Europe

Ekaterina Pozdnyakova, Russian Federation

Monitoring and Assessment of coniferous forest damage on ICP IM sites in Russia

### **Session IV: Element budgets and ecosystem processes**

Heleen de Wit, Norway/ICP Waters

Effects of acid deposition on freshwater ecosystem services - a recent report from ICP Waters.

Milan Vána, Czech Republic

New climate related measurement activities at station CZO1 Košetice

Sergey Paramonov, Russian Federation

Results of the ICP IM abiotic part in Russia

Lars Lundin, Sweden

Trace metal budgets for forested catchments in Europe - Pb, Cd, Hg, Cu and Zn

Martin Forsius, Finland/ICP IM Programme Centre

Modelling of critical loads at ICP IM sites in Europe and relations to impact indicators

## **II. Task Force meeting**

### **Wednesday 22 May 9.00 – 17.00**

9.00 – 10.30 TF-meeting

10.30 – 10.55 coffee-break

10.55 – 13.00 TF-meeting, closing of the meeting

13.00 – 14.00 lunch

14.00 – 15.30 TF-meeting

15.30 – 16.00 coffee-break

16.00 – 18.30 excursion to the Saint-Paphnutius monastery, Borovsk city

19.00 reception

### **Agenda**

1. Opening of the meeting
2. Minutes of 20<sup>th</sup> ICP IM TF
3. Report from Chairman and Programme Centre
4. Reports from WGE and other ICPS

Heleen de Wit, Norway/ICP Waters

Recent activities of ICP Waters

Thomas Scheuschner, Germany/ICP Modelling and Mapping  
Recent activities of ICP Modelling and Mapping

5. Data submission and database status
6. Reports to be prepared /finalized in 2013
7. Co-operation with other ICPs and external projects/organizations: LTER-Europe, ALTER-Net, LifeWatch, FutMon, Natura 2000
8. Other future work priorities
9. Work plan 2013/2014
10. Financing/external applications
11. Next Task Force meeting
12. Other business
13. Conclusion and end

### **III. Excursion**

Thursday 23 May

start 9.00, end ca 16.00

Return to Moscow (Vnukovo, Sheremetyevo airports)



Annex II

**List of participants of the ICP IM Task Force and Workshop May 21-23, 2013**

	<b>Name</b>	<b>Country</b>	<b>Organization</b>
1.	Lars LUNDIN	Sweden	Swedish University of Agricultural Sciences, Sweden
2.	Forsius MARTIN	Finland	Finnish Environment Institute P.O. Box 140 FI-00251 Helsinki, Finland
3.	Sirpa KLEEMOLA	Finland	Finnish Environment Institute, P.O. Box 140 FI-00251 Helsinki Finland
4.	Jussipekka VUORENMAA	Finland	Finnish Environment Institute P.O. Box 140 FI-00251 Helsinki Finland
5.	Hubert Schulte-BISPING	Germany	Büsgen-Institute, Soil Science of Temperate Ecosystems dep., Büsgenweg 2, D-37077 Göttingen, Germany
6.	Thomas SCHEUSCHNER	Germany	ÖKO-DATA Strausberg, Hegermühlenstr.58, D-15344 Strausberg, Germany
7.	Helene Angeles De WIT	Norway	Norwegian Institute for Water Research, Gaustadalléen 21, 0349 Oslo, Norway
8.	Pavel KRÁM	Czech Republic	Czech Geological Survey, Klárov 3, Prague, Czech Republic
9.	Milan VANA	Czech Republic	Czech Hydrometeorological Institute, Kosetice Observatory, 394 22 Kosetice, Czech Republic
10.	Michael MIRTL	Austria	Environment Agency Austria (EAA)
11.	Reet TALKOP	Estonia	Analysis and Planning Department Keskkonnaministeerium/Ministry of the Environment, Tallinn, Estonia
12.	Raúl Bermejo ORDUNA	Spain	Universidad de Navarra. Irunlarrea 1, 31008 Pamplona, Spain
13.	Anatoliy Srybniy	Belarus	Berezina biosphere reserve
14.	Vladimir Lapchenko	Ukraine	Karadag reserve, monitoring station
15.	Anna Koukhtha	Russia	Institute of Global Climate and Ecology (IGCE) <a href="mailto:anna_koukhtha@mail.ru">anna_koukhtha@mail.ru</a>
16.	Yury Buyvolov	Russia	Institute of Global Climate and Ecology (IGCE) <a href="mailto:ybuyvolov@gmail.com">ybuyvolov@gmail.com</a>
17.	Sergey Paramonov	Russia	Institute of Global Climate and Ecology (IGCE) <a href="mailto:ofm@mail.ru">ofm@mail.ru</a>
18.	Boris Latyshev	Russia	Institute of Global Climate and Ecology (IGCE)
19.	Ekaterina Pozdnykova	Russia	Institute of Global Climate and Ecology (IGCE) <a href="mailto:katemukudori@mail.ru">katemukudori@mail.ru</a>
20.	Sergey Gromov	Russia	Institute of Global Climate and Ecology (IGCE) <a href="mailto:gromov.igce@gmail.com">gromov.igce@gmail.com</a>
21.	Aleksander Minin	Russia	Institute of Global Climate and Ecology (IGCE) <a href="mailto:aminin@pochta.ru">aminin@pochta.ru</a>
22.	Vyacheslav Scherschakov	Russia	Research and Production Association 'Typhoon' <a href="mailto:post@typhoon.obninsk.ru">post@typhoon.obninsk.ru</a>
23.	Ruslan Borodin	Russia	Research and Production Association 'Typhoon' <a href="mailto:post@typhoon.obninsk.ru">post@typhoon.obninsk.ru</a>
24.	Robert Sandler'skiy	Russia	Tsentr'al'nolesnoy biosphere reserve (Central Forest biosphere reserve)
25.	Vera Ableeva	Russia	Background Integrated monitoring station „Oka Terrace biosphere reserve“
26.	Irina Priputina	Russia	The Institute of Physical and Biological Problems in Soil Science, Russian Academy of Sciences <a href="mailto:v_35_6@rambler.ru">v_35_6@rambler.ru</a>
27.	Elena Berezenko	Russia	Prioksko-Terrasniy biosphere reserve <a href="mailto:ptz@danki.ru">ptz@danki.ru</a>
28.	Vasiliy Sobolev	Russia	Interpreter,

