



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-second Programme Task Force held on 8 May 2014 in Westport, Republic of Ireland

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. Mr D. Dodd from the Environmental Protection Agency, Republic of Ireland opened the meeting on May 7, during the Workshop and presented the CLRTAP related work carried out in Ireland.
- 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-five participants attended the ICP IM Task Force meeting and the Workshop. Participants from the following Parties to the Convention attended the meeting: Austria, Canada, the Czech Republic, Finland, Germany, Republic of Ireland, Italy, Norway, the Russian Federation, Spain, Sweden and the Netherlands. The ICP Waters and ICP Modelling and Mapping programmes were represented and the Vice Chair of the WGE was also 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 7 May 2014 (Presentations of the Workshop & Task Force online, please see: http://www.syke.fi/en-

<u>US/Research</u> <u>Development/Maintaining ecosystem services and biodiversity/Monitoring/Integrated Monitoring/ICP_IM_Meetings/ICP_IM_Workshop_and_Task_Force_presenta(29330)</u>

List of presentations also in Annex I.

II. Minutes of 21st ICP IM TF

5. The Task Force approved the Minutes of the 21st ICP IM Task Force Meeting in Obninsk, Russian Federation, 2013.

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. http://www.syke.fi/download/noname/%7B5361EB58-5047-415E-8D36-EC5387C0D863%7D/98990

and corresponding presentation: http://www.syke.fi/download/noname/%7B11494712-06E6-4FAC-BA31-F4919EC71E9D%7D/99444

Some of the information is also available in chapter 1 of the (draft) 23rd Annual Report (AR) 2014.

IV. Reports from WGE and other ICPs

7. Mr Lundin covered the notes from the last WGE meeting as well as the WGE "Extended" Bureau meeting (for details, see Explanatory notes (link above) part three: 'Updating of scientific and technical knowledge' and 'Notes from the WGE Extended Bureau meeting'). This subject was also covered in the following presentation by Ms. Schütze.

Some additional points mentioned were:

- CLRTAP evaluation of ICPs in 2013 and the recommended streamlining of work and improvement of
 collaboration between the ICPS. Stronger scientific content and connections to EMEP and WGE were
 stressed.
- Joint two year Workplan for EMEP and WGE 2014-15.
- Changed meeting structure: EMEP & WGE in September 2015; WGSR December 2015; EB late spring or early summer 2016. No EB in 2015.
- Common portal for EMEP and WGE.
- 8. Ms. G. Schütze (Germany), Vice Chair of WGE reported recent developments under the UNECE CLRTAP and WGE including:
 - Three latest Protocols from negotiations to ratification and implementation
 - Amendments to the Gothenburg Protocol Guidance document (GD) on health and environmental improvements using new knowledge, methods and data including 11selected indicators
 - Other recent developments (overview) New parties to EMEP, action plan for EECCA countries, National reporting (exchange of experience) in main bodies (EMEP, WGE, WGSR)
 - 2014 15 workplan for the implementation of CLRTAP (new structure): outline by areas of activities rather than individual bodies/groups
 - In the ICP evaluation it should also be mentioned desired enhanced feedback from WGSR and EB to WGE reports
 - Assessment Report 2016 (between EMEP and WGE) on the Convention's achievements and future prospects was discussed and awaiting the final outline.
 - Presentation of WGE at the EB 32 12/2013 3 presentations in addition to the report of the WGE
 Chairman: 1) Guidance document on health and environmental benefits (CCE); 2) Recent evidence of
 health aspects of air Pollution (TF Health/WHO); 3)Biodiversity and ecosystem services (ICP
 Vegetation; ICP IM contributed)

Ms. Schütze also covered matters arising from the 32nd WGE meeting, especially:

II. Matters arising from recent meetings of the Executive Body and its subsidiary bodies

III. Recent results and updating of scientific and technical knowledge

IV Further development of the effects-oriented activities

V Information on the review of the ICPs

For details, please see: $\frac{http://www.syke.fi/download/noname/\%7BA669986B-EE83-4D6B-A8E8-CAFB972C0951\%7D/99445$

9. Mr. G. Skotte (Norway), Chair of ICP Waters presented the activities and plans of the ICP Waters programme. Mr. Skotte described the programme aims, the previous Task Force Meeting (Cesky Krumlov, Czech Republic, October 2013), recent article 'Trends in Surface Water Chemistry in Acidified Areas of Europe and North America from 1990 to 2008' showing a clear improvement in water quality. He also mentioned an up-coming report 'Water chemistry in Europe and North America' and other recent reports, data harmonization and other activities planned for 2014/2015. Mr. Skotte also presented a Norwegian case study 'Comparison of CLTRAP and WFD (Water Framework Directive) approach to protect surface waters from acidification'.

The next ICP Waters TF meeting will be held October 4-6 in Grimstad, Norway.

Mr. Skotte, on behalf of ICP Waters, invited for a closer cooperation between ICP Waters and ICP Integrated Monitoring, to be further discussed at the next ICP Waters TF meeting.

For details please see: http://www.syke.fi/download/noname/%7B9C90A45D-3F43-47B1-863F-364018E85894%7D/99446

10. Mr. M. Posch (the Netherlands), representative of the ICP Modelling and Mapping (M&M) programme covered the recent activities in the programme. He mentioned the new call for data for (updated) Critical Loads due to: change in EMEP deposition grid now ~28 km²; requests for update by some NFCs (due to improved national knowledge; new (policy-driven) emphasis on biodiversity.

Joint activities on dynamic modelling were presented during the Workshop Session IV: Vegetation and soil modelling, (see presentations under Session IV on page: http://www.syke.fi/en-US/Research Development/Maintaining ecosystem services and biodiversity/Monitoring/Integrated Monitoring/ICP_IM_Workshop_and_Task_Force_presenta(29330)

Data submission and database status

11. Ms. S. Kleemola (Finland) 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 2009 – 2013: Austria, Belarus, Canada (will deliver missing data in 2014), the Czech Republic, Estonia, Finland, Germany, Italy, Latvia, Lithuania, Norway (included an additional site in 2014), the Russian Federation, Spain, Sweden, Ukraine, and United Kingdom. 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. Republic of Ireland has re-established a site and will deliver data. Altogether thirteen countries submitted data for the year 2012, so far.

The Programme Centre requested National Focal Points to submit 2013 data by 1st December 2014, using same procedure as earlier.

The launch of a new web-portal of Finnish Environment Institute (SYKE) was mentioned (www.syke.fi/en-US). ICP IM web pages (including the Manual as web pages, not PDF) were transferred to the new portal, new short address http://www.syke.fi/nature/icpim.

Ms. A. Kukhta (Russian Federation) informed of a Russian translation of the ICP IM manual, a link to this translation (PDF version) will be available from the ICP IM pages.

Mr. M. Forsius (Finland) Programme Manager stressed the importance of reporting especially the data relevant to the on-going evaluations and scientific work.

V. Reports to be prepared/finalized according to Convention Workplan

- A. Convention 2014-2015 workplan items specific for ICP IM
- 12. The workplan items specific for ICP IM will be reported to the 33rd session of the Working Group on Effects in September 2014. They will be presented orally in the salle and activities will also be reported to WGE and WGSR according to a new template. Results are also summarized in the ICP IM AR 23 (2014).
 - (i) Progress report and on dynamic vegetation modelling at ICP IM sites
- 13. Ms. M. Holmberg (Finland) gave a presentation on this topic in the workshop on 7 May. Progress report is also included as a chapter in the Draft Annual Report 2014. Modelling is carried out as a joint exercise between the Programme Centre and several National Focal Points and other institutes and contributions from ICP M&M and ICP Forests. A report and a scientific paper are planned for 2016.

Presentation, please see: http://www.syke.fi/download/noname/%7BFE8A5F5B-B25D-4A69-965D-E1DBD5AF7C63%7D/99412

- (ii) Report and scientific paper on mass balances and indicators for sulphur and nitrogen in catchments
- 14. Mr. J. Vuorenmaa (Finland) presented the work which forms the basis on formulating the results into the 23rd Annual Report of ICP IM during the workshop on 7 May. A scientific paper on mass balances is planned

for the end of 2014.

Presentation, please see: http://www.syke.fi/download/noname/%7BDC76CA59-A2C8-4DE0-ADCB-186248D96373%7D/99420

- B. Convention 2014-2015 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 33rd session of the Working Group on Effects in September 2014.
- 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 could relate to EC NECD. 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 WGSR). This will be prepared by the Programme Centre together with the chairman.
- iii) Report on priority activities with motivations related to the long-term strategy of LRTAP. The Programme Centre and chairman according to the instructions of the UNECE secretariat.

(i) 23rd 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 23rd Annual Report 2014, invited interested NFPs to submit additional contributions (short National reports) and/or corrections by the 20th of June 2014 and requested the Programme Centre to finalize it for submission to the 33rd session of WGE on 18-19 September 2014. National contributions will be included as Annexes to the Annual Report.

VI. New template for WGE and WGSR reporting

18. Activities and results are to be reported following a 12 items structure and replace the official technical reports. Report is due June 30, 2014. In addition there can be unofficial reports such as the ICP IM AR where workplan items can be presented.

A recommendation for the ICPs is to include country reports. These can be included in the Annual Report (see above).

VII. Considerations in perspective of more efficient ICP organization

- 19. The following recommendations for common ICP activities were discussed:
 - 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. Harmonized 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.

Possible areas of cooperation between ICP IM and Waters were discussed. The possibility of common/back-to-back TF meetings was discussed. It was suggested to have a joint scientific workshop or conference and that common WGE/ICP items could be handled together and more technical and special issues for each ICP in separate short (half day) sessions. All of these ideas will be further processed and dealt with at upcoming TF meetings of both ICP programmes. A common trend report was also discussed and agreed, it was included in the Workplan for 2015. Programme Centre will send the requested data to ICP Waters.

Task Force agreed to go forward with the update of the Cause-effects report with ICP Forests, but is waiting for the response from ICP Forests TF meeting.

VIII. Co-operation with other bodies and activities

A. Other ICPs and Convention bodies

20. 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.

Work with ICP Waters was discussed under previous point (point 19).

Co-operation in VSD modelling with ICP M&M is on-going (see point 13). Contribution from NFPs and other participating institutes is essential to the work.

B. LTER-Europe, LifeWatch

21. Mr. Forsius told about the LTER-Europe's plans to include a joint proposal under Horizon2020 compiled by Mr. M. Mirtl. Managers of the sites which belong to both IM and LTER should sign an agreement that data can be used in the project. NFPs should contact the national LTER leader in this matter.

C. Other external projects/organisations

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

Mr. M. Vana (Czech Republic) informed that black carbon and continuous greenhouse gas measurements are carried out at the CZ01 site.

IX. Workplan 2014/2015 including tentative plans for 2016

23. The Task Force agreed on workplan of ICP IM for 2014/2015.

Activity	Time-frame	Responsible	
Joint Report 2014 of the ICPs, TF	WGE 2014	UNECE Secretariat, WGE Bureau	
Health and Joint Expert Group on	(due May 31, 2014)	and ICP IM Programme Centre	
Dynamic Modeling			
Finalisation of 23 rd Annual Report	WGE 2014	Programme Centre,	
2014	(comments &	NFP contributions	
	National Reports by		
	20 June 2014)		
Progress report on dynamic	WGE 2014	NFPs of Austria, Sweden, Germany	
vegetation modelling at ICP IM sites		in cooperation with Programme	
- chapter in AR 2014		Centre	

Report and scientific paper on mass balances and indicators for sulphur and nitrogen in catchments - chapter in AR 2014	WGE 2014, Paper by end of 2014	IM Programme Centre, in cooperation with NFPs
Reporting of ICP IM results to WGE and WGSR according to new 12 point structure	(due 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	WGE 2014, (due August 1)	Programme Centre and Chairman according to instructions of the UNECE Secretariat
Submission of quality controlled results for year 2013 to Programme Centre	December 1 st 2014	National Focal Points
Cooperation with other ICPs: points 1-4 1.Trend report together with ICP Waters	2015	Programme Centres of ICP IM & Waters, NFP contributions
2. Dynamic modelling together with ICP M&M	On-going	Programme Centres of ICP IM and M&M, NFP contributions
3. Potential cause effect report with ICP Forest	decision from ICP Forests TF meeting	Programme Centres of ICP IM & Forests, NFP contributions
4. Trend report common for all ICPs	2015 to be discussed in September 2014	Programme Centres of ICPs, NFP contributions
Inter laboratory comparisons under leadership of ICP Waters, ICP Forests and EMEP		Voluntary activities of the National Focal Points
- ICP Waters intercalibrations on- going, contact Heleen de Wit	On-going	
Cooperation with external organisations (International Long Term Ecological Research Network, LifeWatch, GEO BON) Progress reports from participants	Task Force 2015	Programme Centre and NFPs
Develop concepts for multi pollutant – multi effect relationships (NO _x , O ₃ , acidity, heavy metals, POPs, etc). - Progress reports/contributions to	Task Force 2015	Voluntary activities at National Focal Points
Annual Report Report and scientific paper on long-term trends in ecosystem effects of sulphur, nitrogen and heavy metals	Task Force and WGE 2015, Paper by end of 2015	Programme Centre in cooperation with NFPs
Report on dynamic responses on vegetation changes in relation to nitrogen Progress report 2015, paper & final report planned for 2016	Task Force and WGE 2015 (progress), 2016 (final & paper)	NFP of Austria, Sweden, Germany & 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

X. Financing

24. 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 last year.

XII. Next Task Force meeting

25. Mr Lundin informed that the next Task Force meeting will tentatively be held in Minsk, Belarus, in May 2015. The TF meeting approved the location and welcomed a meeting in Belarus.

XII. Other business

26. The participants were once again reminded to provide written comments and possible additions (short national reports) to the draft Annual Report by 20^{th} of June 2014.

XIII. Conclusion

- 27. The Chair expressed heartfelt thanks to participants and the host country and. Special thanks for the excellent arrangements to the local organisers team (Julian, Thomas, Jim and others) from the University College Dublin. The Task Force also noted the kind financial support to the meeting by the Irish Environmental Protection Agency.
- 28. The Task Force appreciated, in anticipation, next day's excursion arranged by the hosts.
- 29. Meeting closed.

Annex I

CONVENTION ON LONG-RANGE TRANSBOUNDARY AIR POLLUTION

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

22nd ICP IM Task Force Meeting & Workshop

The meeting is organized by University College Dublin (UCD), UCD Soil Science, UCD School of Agriculture and Food Science. The meeting venue is Hotel Westport in Westport, republic of Ireland.

I. Workshop on data assessments and evaluation methods for IM data Wednesday 7 May

9.00 – 9.10 Opening of meeting. David Dodd, Environmental Protection Agency, Ireland;

Lars Lundin, ICP IM Chairman

9.10 - 10.30 workshop

10.30 - 10.55 coffee break

10.55 - 12.30 workshop

12.30 - 13.30 lunch

13.30 - 15.00 workshop

15.00 – 15.25 coffee break

15.25 – 17.00 workshop and final discussion

ca. 17.00 closing

(15 minutes/presentation + 5 minutes for discussion)

17.00-19.00 a visit to the Brackloon ICP IM site

Session I: Introductory presentations from host country

David Dodd, Environmental Protection Agency, Ireland Overview of EPA activities under CLRTAP

Ted Farrell, University College Dublin (UCD), Professor (Emeritus) Forest soils Three decades of Irish forest monitoring.

Julian Aherne, Trent University, Canada Acidification and recovery of Irish ecosystems

Session II: Ecosystem processes and element budgets

Jim Johnson, University College Dublin (UCD)

Base cation fluxes and budgets under different harvest scenarios for Irish conifer forests

Jussi Vuorenmaa, Finnish Environment Institute (SYKE)

Mass balances for sulphur and nitrogen at ICP IM sites in 1990-2012

Ulf Grandin, Swedish University of Agricultural Sciences (SLU), Department of Aquatic Sciences and Assessment (presented by Lars Lundin and Thomas Dirnböck)

Effects on the ground vegetation after storm felling and bark beetle attacks at the Aneboda IM site

Session III: Long term trends

Martti Rask, Finnish Game and Fisheries Research Institute Responses to changes in air pollution and climate in Valkea-Kotinen ICP IM catchment - key findings over a 20 year period

Thomas Dirnböck, Environment Agency Austria Measured and modelled nitrogen fluxes at the ICP IM site Zöbelboden, Austria

Heleen de Wit, Norwegian Institute for Water Research (NIVA) Climate responses of lake ice and DOC export in a lake catchment: use of models and monitoring data

Session IV: Vegetation and soil modelling

Maximilian Posch, Coordination Centre for Effects (CCE)/ ICP Modelling and Mapping Overview of the VSD+PROPS dynamic soil-vegetation model

Thomas Scheuschner, ÖKO-DATA Strausberg Dynamic modelling on German ICP IM plots

Maria Holmberg, Finnish Environment Institute (SYKE) Progress report on dynamic vegetation modelling at ICP IM sites

II. Task Force meeting

Thursday 8 May 9.00 – 17.00

9.00 - 10.30 TF meeting

10.30 – 10.55 coffee break

10.55 - 12.30 TF meeting

12.30 - 13.30 lunch

13.30 - 15.00 TF meeting

15.00 – 15.25 coffee break

ca. 17.00 closing

19.00 Social dinner

Agenda

- 1. Opening of the meeting
- 2. Minutes of 21st ICP IM TF
- 3. Report from Chairman and Programme Centre
- 4. Reports from WGE and other ICPs
 - Gudrun Schütze, Vice Chair of the WGE Bureau Report from WGE
 - Gunnar Skotte, Norway, Chair of ICP Waters Recent activities of ICP Waters
 - Maximilian Posch, The Netherlands, ICP Modelling and Mapping Recent activities of ICP Modelling and Mapping
- 5. Data submission and database status
- 6. Reports to be prepared /finalized in 2014
- 7. New template for WGE and WGSR reporting.
- 8. Considerations in perspective of more efficient ICP organization
- 9. Co-operation with other projects/organization

- 10. Work plan 2014/2015
- 11. Financing/external applications
- 12. Next Task Force meeting
- 13. Other business
- 14. Conclusion and end

III. Excursion

Friday 9 May

09:00 Departure from Hotel Westport
Marine Institute talk and visit
Packed lunch at the Institute
Forest visits, research in the ForSite and SANIFAC projects
16:00 Arrival to Westport

Annex II List of participants:

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