

Wge

**CONVENTION ON LONG-RANGE
TRANSBOUNDARY AIR POLLUTION**

***International Cooperative Programme on Modelling and Mapping
of Critical Loads and Levels***

and Air Pollution Effects, Risks and Trends

DRAFT CHAIR's REPORT

of the

***25th CCE Workshop and the 31st meeting of the
Programme Task Force***

20 – 23 April 2015 in Zagreb, Croatia

*Draft preliminary document,
to be finalised with NFCs
contributions.*

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1. INTRODUCTION

52 delegates from the following 19 countries participated to the meeting: Austria, Belgium, Canada, Croatia, Czech Republic, Denmark, France, Germany, Italy, Norway, P.R. China, Poland, Russia, Slovakia, Spain, Sweden, Switzerland, The Netherlands, United Kingdom.

The ICP Vegetation, the ICP Waters, the ICP Forests, the ICP Integrated Monitoring, the Joint Expert Group on Dynamic Modelling, the Coordination Centre for Effects (CCE) and the European Topic Centre for Biodiversity of the European Environment Agency were also represented. The list of participants is attached as Annex 1.

TF decisions were reviewed by the participants during the meeting. Presentations and posters were made available on the ICP M&M website (www.icpmapping.org).

Ms Solveg Kovac, from the Ministry of Environment and Nature Protection, welcomed the participants to the meeting. She outlined the role of the Ministry and research institutes that are involved in different activities related to the implementation of the Convention but also stressed that she hoped that these activities would be further developed in spite of general resource constraints. Ms Kovac stressed that some resources have been allocated specifically to modelling and mapping work for the period 2015-2017, and hoped that it should help revive this line of work. She thanked the Meteorological and Hydrological Service of Croatia for taking the initiative and organising the meeting, and wished the participants a successful and productive meeting.

Ms Sonja Vidic then welcomed the participants on behalf of Meteorological and Hydrological Service of Croatia. She acknowledged that the work on effects has been neglected in Croatia for many years and needs to be developed and better coordinated to be in line with efforts carried out under the EMEP programme. She hoped that this workshop helps boosting the effects oriented work in Croatia and welcomed Croatian colleagues that responded to the invitation, and participate in the meeting in such a number.

Ms Anne Christine Le Gall, ICP M&M Chair, presented the organisation of the workshop and task force meeting. She indicated that the discussion would focus on the results of the 2014-2015 call for data and on the development of effect-based work, including the combined effects of nitrogen and ozone on ecosystems. The last sessions of the meeting would be about collaboration and organisation issues within the LRTAP Convention.

The TF adopted the minutes of 2014 meeting without modifications. Minor modifications were announced to the Agenda of the 2015 meeting (annex II).

Mr Jean-Paul Hettelingh, head of the Coordination Centre for Effects, could not attend the meeting for health reasons. The Task Force expressed its best wishes for a good and full recovery.

Mr Vladimir Jelavic, head of the environment division and sustainability development of the EKONERG, presented the earlier work carried out on critical loads in Croatia.

This work started in 1997. At that time, acidification was important in Croatia and negotiations were on going with neighbouring countries (such as Austria). In 1999, research was well supported by different institutions, including industry and carried out in collaboration with forestry institution. Mr Jelavic dedicated his presentation to Jakob Martinovic, without whom the critical loads in Croatia may not have been calculated. The third contribution of Croatia in 2004 concerned the eastern part of Croatia (which was covered by one EMEP grid cell). In 2007–2008, the focus in Croatia was on improved water management. There were discussions to appoint a focal point for ICP Waters but this has not yet been settled. There are proposals for adding water

monitoring sites. Active participation to ICP MM was in period 1997 – 2009. New funding may be possible within the *Plan for protection of air, ozone and mitigation of climate change for period 2013-2017 of Republic Croatia* that calls for active participation in LRTAP activities, particularly related to Gothenburg protocol needs.

2. SCIENTIFIC SESSIONS (CCE WORKSHOP)

Work plan item 1.2.1

Discussions were organised in three scientific sessions as listed below, together with the summaries of the presentation provided by the participants. These sessions were concluded by an overview discussion summarised at the end of this section.

2.1. RESULTS OF THE CALL FOR DATA 2014 2015

Session chair: Anne Christine Le Gall.

Presentations were given by Jaap Slootweg, Max Posch and Janet Mol.

Summary of the discussion on the call for data

At its 33rd session (Geneva, 17-19 September 2014) the Working Group on Effects “...requested the CCE to organise the new Call for Data and report its results to the thirty-first meeting of the ICP Modelling and Mapping Task Force to be held in Zagreb (Croatia) in 2015 and to the Working Group at its thirty-fourth session” (para. 45; ECE/EB.AIR/WG.1/2014/2).

This ICP M&M task responds to the requirements of the LRTAP Long-term strategy (ECE/EB.AIR/WG.5/2010/17) and of the work plan 2014-2015 as adopted by the Executive Body in December 2013 (work plan item 1.2.1). The biodiversity indicators designed here are developed so that they can be used in integrated assessment modelling.

The 2014-2015 call for data aimed at:

- Adapt the critical load database to the 0.50° x 0.25° and 0.1° x 0.1° longitude-latitude grids, used by EMEP, to ensure compatibility of the European critical loads database with these new EMEP grid resolutions.
- Offer the possibility to NFCs to update their national critical load data on acidity and eutrophication.
- Apply novel approaches to calculate nitrogen and sulphur critical load functions taking into account their impact on biodiversity. National Focal Centres (NFCs) were encouraged to use the Habitat Suitability Index (HSI) agreed at the 2014 ICP M&M Task Force meeting in Rome.

12 countries responded to the call and updated their acidification and eutrophication critical loads. These updates did not generate important changes of the critical loads maps at European scale. However, the updated critical load data is now compatible with the new deposition grid used under the Convention.

It was agreed that both computed and empirical critical loads (for eutrophication and acidification) could be used to update of the European critical load database. In case both values were available/provided for one ecosystem, the minimum of the two would be used. The updated European critical load database held by CCE was considered to be suitable for use in integrated assessment modelling.

Only 3 countries submitted biodiversity critical loads, but several expressed their intention to continue working towards a submission at a later date.

It was agreed that NFCs could update, and if necessary correct, their critical load submissions by 18th May 2015. National reports may be received by the CCE by the 1st June (although it would be preferable that they were sent together with updates of critical load data).

Several parties requested a Call for Data for biodiversity-based critical loads for 2015/2017, covering aquatic ecosystems and terrestrial ecosystems. Such a call for data would be a step further on the way to have biodiversity based critical load available for policy support in 2020.

Thanks to the large amount of work done by NFCs and the CCE, research work on biodiversity based critical loads has noticeably progressed. It is to be further pursued. In particular, the steps from HSI to biodiversity critical loads need further investigation. Therefore, present results may be used for testing as well as for scenario calculations (such as in Eclaire project). However biodiversity data from this submission will not be used for policy applications.

Parties emphasized the importance of continued support for the CCE to enable the continuation of this work essential for effects-based integrated assessment.

Discussions concluded that different nitrogen indicators such as N deposition, C/N ratio, N availability may be used in modelling. Ultimately, for the policy support, the nitrogen parameter has to be linked to nitrogen deposition for policy applications.

The Task Force recognised the progress made in assessing and modelling the effects of nitrogen on ecosystems. Further monitoring and modelling of plant diversity in relation to nitrogen deposition are encouraged so that relevant information may be provided to support air quality policies as well as nature policies.

Follow up of the 2015 Call for Cata

Discussions during the Task Force and the CCE workshop highlighted the importance of accompanying the development of national databases for biodiversity critical loads by a new Call for Data. Considering the absence of immediate policy deadlines and the amount of work required for the expected developments, it was agreed that the WGE would be encouraged to issue a Call for Data in 2015 for a delivery of results in spring 2017. An interim goal for 2016 will be proposed so that the overall work load can spread over the 15 to 18 month period of the call.

Summaries of presentations, as submitted by their authors to the ICP M&M chair.

The PROPS vegetation model: New developments, Janet Mol

An update of the PROPS model, which predicts probabilities of plant species occurrences, was presented. This statistical model is based on relevés with measured soil parameters like pH and C/N. Updating PROPS involved an increase of the databases used, and fitting the model with new parameters. A method to enhance the number of species was presented. The probability of plant species occurrences is now a function of pH, C/N, N deposition, temperature and precipitation. The model is still in a testing phase, but will be available soon.

2.2. NATIONAL AND NFC CONTRIBUTIONS TO EFFECT-BASED WORK UNDER THE CONVENTION (CALL FOR DATA), ECLAIRE AND OTHER RESEARCH PROGRAMMES Session chair: Mr Max Posch.

Presentations were given by Ed Rowe, Thomas Scheuschner, Simon Rizzetto, Bas Clabbers, Filip Moldan and Kari Austnes, Lukas Kohli, Reto Meier, Tobias Roth.

A planned presentation by Christopher Clark (USA) could not be given due to lack of working internet connection with the US.

Summaries of presentations, as submitted by their authors to the ICP M&M chair.

Deriving N & S Critical Load functions from thresholds set using empirical Critical Loads, Ed Rowe et al.

Deriving biodiversity-based CL functions requires definition of a critical threshold for a biodiversity index, HQI_{crit} . The MADOC-MultiMOVE model was calibrated for seven example sites using biogeochemical data held by the UK NFC, and run forward under deposition scenarios corresponding to three CL combinations ($N=0$, $S=CL_{maxS}$; $N=CL_{minN}$, $S=CL_{maxS}$; $N=CL_{empN}$, $S=0$). The mean of the three HQI values obtained was assumed to be HQI_{crit} , and used to calculate CL functions with respect to N and S.

Critical load assessment and potential links with sustainable habitat conservation, Thomas Scheuschner

Several parameters of the classical Critical Load SMB equations already include parameters with potential links to biodiversity models. A method was shown which describes the linkage between CL parameters ($Nle(acc)$ and $ANClc(crit)$) and C/N and base saturation derived by the BERN model. This approach was applied at national scale in Germany, compared with the classical Critical Load results and is proposed as method to derive Critical Load for biodiversity using the SMB approach.

Predicting vegetation composition in French forests under two atmospheric deposition scenarios using two modelling approaches, *Simon Rizzetto et al.*

The French NFC has provided CL data for CLmaxS, CLminN, CLmaxN, CLnutN in response to the call for data 2015. Corresponding maps have been updated using the new 0.1° x 0.05° EMEP grid. CLbdiv were not delivered yet since the ecological model used to calculate critical loads of biodiversity needs calibration for various ecological factors. During these last months, we have worked at calibrating ForSAFE geochemical model outputs using data from the French ICP Forest sites (n=102), on one hand, and the Veg model parameters by developing key functions based on Ecoplant measured database (14000 phytoecological relevés), on the other hand. This important work of calibration is a necessary step to reach the two main following objectives : i) to spatialize CLbdiv using simulated species abundance considered individually and into ecological functional groups and ii) to calculate a Habitat Suitability index for French ecosystems. The simulations will take into account various combinations of nitrogen deposition and climate change scenarios by 2100 applied on common and protected ecosystems (N2k and national protection status). These objectives are planned to be achieved by next year.

Nitrogen and Natura2000: Dutch approach for dealing with this Challenge, *Bas Clabbers*

The work of the ICP M&M is also relevant for other purposes outside the CLRTAP, such as Natura2000. In the Dutch integrated approach to nitrogen, the combined effects of the projected trends in nitrogen depositions of existing emission sources, ecological restoration measures and the projected depositions of new economic activities on Natura2000 sites are ecologically assessed. With this integrated approach can be ascertained that the integrity of Natura2000 sites is not adversely affected by new economic activities, even when the nitrogen depositions are above the CLs. AERIUS is a user-friendly online tool that calculates nitrogen depositions at resolution of a hectare and combines these results with geographically explicit information on habitat types and their CLs. More information can be found at www.aerius.nl/en

Comparison of the methodologies to calculate critical loads at lakes in Norway and Sweden: Choice of organisms to protect, choice of protection criteria and trade-offs between air pollution and forestry, *Filip Moldan and Kari Austnes*

Swedish and Norwegian NFCs for M&M presented comparison of the methods used to assess critical loads of acidity at lakes at the two countries. The Swedish method gives systematically lower critical loads than Norwegian method. The main difference in the methodology is in the calculation of the ANC_{limit}. In the Norwegian method ANC_{limit} is a function of the pre-industrial base cation concentration with lower ANC_{limit} of 0 µeq/l and upper limit of 50 µeq/l, which is sufficiently high to support healthy brown trout population. Also the Swedish method relates ANC_{limit} to pre-industrial chemical status, but it aims at water chemistry suitable to fish and to littoral invertebrates and it does not have neither upper nor lower threshold; the ANC_{limit} could be set much higher than 50 µeq/l at lakes with historically high ANC and it allows negative ANC_{limit} at lakes with historically very low pH and ANC. As a follow up of the method comparison the two NFCs will explore possibilities to homogenise their methodologies.

Effects of N-deposition on temporal changes in plant diversity in Swiss habitats, *Lukas Kohli et al.*

We explored for six habitats the relation of N deposition (2007) and temporal change over the last decade (2001-2013) in total species composition (turnover). N-deposition was usually negatively related to changes in species richness and to changes in numbers of oligotrophic species. On the other hand N-deposition was often positively related to changes in numbers of eutrophic species and to turnover.

New exposure-response relationships for nitrogen impacts on mycorrhiza and epiphytic lichens, *Reto Meier et al*

New results were presented about exposure-response relationships for nitrogen deposition effects on mycorrhiza in Swiss beech forests and for ammonia impacts on epiphytic lichens. The evaluation of soil profiles of 15 Swiss beech forest plots along a nitrogen deposition gradient showed a decrease in ectomycorrhizal species richness and root mycorrhization with increasing N deposition. Evaluation of lichen data collected over many years by several Swiss cantons showed a decrease in occurrence of nitrophobic lichens with increased NH₃ levels, supporting the current UNECE annual Critical Level for protecting lichens and bryophytes of 1 µg NH₃/m³.

Nitrogen deposition and multi-dimensional plant diversity at the landscape scale, *Tobias Roth*

Studies relating atmospheric N deposition to plant diversity are usually restricted to small plots of high conservation value. In the presented study we used data from 1 km² plots. We found that high atmospheric N deposition was associated with low values of six measures of plant diversity. The weakest negative relation to N deposition was found in the traditionally measured total species richness. The strongest relation to N deposition was in phylogenetic diversity, with an estimated loss of 19% due to atmospheric N deposition as compared with a homogeneously distributed historic N deposition without human influence, or of 11% as compared with a spatially varying N deposition for the year 1880, during industrialization in Europe. Because phylogenetic plant diversity is often related to ecosystem functioning, the results suggest that atmospheric N deposition threatens functioning of ecosystems at the landscape scale.

2.3. COMMON ICP M&M, ICP-VEGETATION AND FP7-ECLAIRE SESSION: N-IMPACTS ON PLANT SPECIES DIVERSITY INCLUDING INTERACTIONS BETWEEN N AND O₃

Session chair: Mr Wilfried Winiwater and Mr Harry Harmens.

Presentations were given by Wilfried Winiwater, Harry Harmens, Seraina Bassin, Isaura Rabago, Wim de Vries, Ed Rowe, Harald Sverdrup and Gert Jan Reinds.

ECLAIRE policy scenarios of cost-optimized options for vegetation protection, *Wilfried Winiwarter*

Progresses on integrated modelling with GAINS within the ECLAIRE project were presented. The GAINS system now successfully tested biodiversity indicators (habitat suitability) and compare with other endpoints (eutrophication, human health). The analysis shows opportunities of common implementation of measures – with current TSAP discussion optimizing for human health (YOLL gap closure of 67%) a considerable part of biodiversity related emission reduction is already captured. According to test data (no country information included), for relatively little additional effort, gap closure of biodiversity CL exceedance can arrive at interesting levels of 67-75%.

Ozone and nitrogen interactions: from processes to ecosystem impacts, *Harry Harmens*

The progress made in component 3 of the EU Framework Programme 7 project ECLAIRE showed clear evidence of separate effects of ozone and nitrogen on many ecosystem processes. The direction of interactions depends on the process and relative concentration of ozone and deposition of nitrogen. At the highest ranges of ozone concentrations and nitrogen deposition in Europe ozone reduces the potential growth enhancing effects of nitrogen and the relative effects of ozone are greater at higher than at lower nitrogen deposition.

Conclusions regarding O₃ x N interactive effects on soil N and C in subalpine grassland, *Seraina Bassin*

- The major part of deposited N was **taken up and stored in plants**, while soil pools remained unaffected. N-induced **increase of sedges** prevented the ecosystem from acquiring features of eutrophication (N leaching, accelerated N cycling)
- **Ozone increased microbial N** pools and **N stabilized in soil** by 8%. This accumulation of soil organic matter was probably due to **increased leaf and root turnover rates** in combination with altered decomposability (higher content of phenolic compounds).
- Interactive effects of O₃ x N are predominant in **roots** probably due to shifts in species composition & species-specific responses in root traits

Ozone, nitrogen and climate effects on annual Mediterranean pastures biodiversity and structure, *Isaura Rabago et al.*

Annual pastures are a common landscape in Mediterranean European countries. These pastures present a high biodiversity and their ecophysiology and annual species composition are controlled by soil water availability. Open Top Chamber experiments were carried out to study the interactive effects of O₃ and N fertilization on a simplified annual community, composed of six representative species, and field measurements were collected during five years to understand the influence of climatic conditions on the pasture development. Ozone induced an overall decrease in the community Gross Primary Production (GPP) due to a global reduction of the canopy CO₂ exchange and an increase of the ecosystem respiration. These effects caused a decline of the total yield of the pasture. At species level, a high heterogeneous response to O₃

and N of the component species and important interactive effects between O₃ and N were found. In general, O₃ reduced the fertilization effect of nitrogen on pasture biomass while nitrogen mitigated ozone effects. However these effects were species specific, and depend on the parameter analysed and the levels of N and O₃. Ozone effects in annual pastures are well related with the stomatal ozone flux uptake. Thus, interactions between future climatic conditions and ozone are expected: increasingly arid conditions in the future will reduce the absorbed O₃ flux and its potential effects. Also, drought will favour the presence in the pasture of species more tolerant to ozone but more responsive to nitrogen, increasing the importance of N effects. The heterogeneous responses of the annual species to N, O₃ and climate and the interaction among these factors draw a complex alteration of the competition relationships among species, potentially affecting the structure and biodiversity of the community.

Ecosystem-scale trade-offs between impacts of ozone and reactive nitrogen, *Ed Rowe et al.*

Two effects for which there is consistent empirical evidence were incorporated into the MADOC model: reduced productivity; and reduced resorption of N from leaves before senescence. Ozone could be said to mitigate the effects of N, in that productivity increases are often damaging to biodiversity. However, direct effects of ozone on biodiversity are mostly unknown, and the combination of ozone and N pollution increases environmentally damaging N loss fluxes.

2.4. SUMMARY OF THE SCIENTIFIC DISCUSSIONS

After the presentations, a general discussion highlighted the following points:

- Biodiversity is worth protecting as it is an unknown treasure for the future: we may not have any specific use for it now, but it may provide us essential information in the future as many examples show.
- Biodiversity is threatened by air pollution, and in particular exceedance of nitrogen deposition, leads to homogeneous vegetation over Europe, currently leading to the loss of some sensitive species.
- It is now acknowledged that ecosystem services are directly linked to a good biodiversity status.
- ICP M&M focusses on biodiversity at the request from the Convention Executive Body and the Convention's Long - Term Strategy. The focus on biodiversity is, however, also of use for policies such as Nature protection policies. The development of biodiversity indicators will also allow parties to deliver required information as requested by the Habitat Directive.
- For the purpose of science as well as policy support, impacts of air pollution on biodiversity are to be considered at local, national and regional (UNECE) scale.

It was suggested that illustrations of impact on biodiversity of past, averted and predicted emissions may be produced. Efforts to explain uncertainties were encouraged so that, for instance, limits on interpretations of maps could be identified.

ICP M&M work focusses on modelling and therefore relies strongly on other ICPs for field, laboratory and exposure experiments as well as and long term (more than 3 years...) monitoring. Those activities provide essential information for establishing dose-response relationships used in models as well as for calibrating and validating them. Such activities are missing in some parts of the UNECE regions, increasing the uncertainties in the modelling approach. Presentations and discussions highlighted strong evidence for nitrogen and ozone impacts on vegetation, also showing that these pollutants sometimes worked in synergistic or antagonistic manners. Collaboration between ICP Vegetation and ICP Modelling and Mapping will be continued in order to better understand and model the simultaneous impacts of nitrogen and ozone on plants and on biodiversity. It was noted that there is, at present, not enough evidences to show direct links between ozone and changes in biodiversity.

It was suggested that the following technical issues may be tackled in the modelling approach followed by the ICP M&M:

- Include the effects of phosphorous in modelling critical loads / biodiversity;
- Effects of climate change (temperature, humidity, seasonality, pollutant peak concentrations...) on modelling biodiversity change;
- Improve the typical species lists for habitats across Europe. This may be based on Bioscore data and would benefit to assessment for protected areas, such as Natura 2000 in Europe.
- Adjustment of $[N]_{crit}$ in area with high water flux;
- Effects of light in dynamic vegetation modelling
- The choice of a reference situation (where and when were / will be the ecosystems in good ecological conditions that we are aiming for).

It was emphasized that the difference in time scales between the effects of climate change (century) and the effects of air pollution could make it difficult to integrate their effects in a single approach.

In relation to integrated assessment modelling, it was underlined that policy measures that protect human health (that therefore are focusing on urban areas) do not necessarily give a high level of protection to ecosystems. However, it was shown that additional low cost measures were available that may lead to substantial protection of rural areas. The nature and the effects of such measures should be identified.

Training session

A 2-hour training session was held by the CCE addressing (NFC-) specific modelling and mapping issues.

The training session started with a presentation of updated versions of the soil vegetation models. It allowed informal exchanges between NFCs and the CCE. It provided the opportunity to the CCE for hands on technical assistance on the tools.

It was agreed that the new version of the PROPS model would be made available.

The session was well received and the help for NFCs, who are just starting with dynamic modelling, was appreciated.

3. SESSIONS RELATED TO THE CONVENTION WORK PLAN

3.1. COLLABORATION IN 2015-2016 UNDER THE LRTAP CONVENTION

Traditionally at ICP M&M meetings, this session gives an opportunity for other ICPs to present their work that is relevant to the ICP M&M community so that exchange of data and information is facilitated. In this session, two reports, the WGE Trends Report and the Convention's Scientific Assessment Report were presented. They are collaborative work within the WGE and between EMEP and WGE.

The Trends Report was presented by Heleen de Wit (ICP Waters), who coordinates its preparation. This report is to describe trends observed in monitoring activities or modelled by groups under the WGE. The ICP M&M TF supported the idea of including trends in pollutants concentrations in air and their deposition in this report. This information has been asked from EMEP colleagues. The report was well received by the participants. It is expected to be finalised by September 2015.

The Convention's Scientific Assessment Report was presented by the ICP M&M chair on behalf of its main editor, Rob Maas (TFIAM chair). Key messages have been compiled and drafting groups have produced initial text after a launching meeting in Oslo (Norway) in January 2015. The publication of this report is planned for 2016, with a presentation at the Eighth Environment for Europe Ministerial Conference in Batumi Georgia in June 2016 (UNECE Environment for Europe, <http://www.unece.org/env/efe/welcome.html>) (Work plan item 1.9). A draft of this document is to be distributed to the Parties by the end of 2015. One of the aims of this report is to enhance the visibility of the work done under the Convention. NFCs are encouraged to highlight its messages to their funding ministries.

Presentations on ICPs activities were given by Heleen de Wit for ICP Waters, by Filip Moldan for ICP Integrated Monitoring (on behalf of Lars Lundin) & the Joint Expert Group on Dynamic modelling) and by Harry Harmens for ICP Vegetation.

Mr. Harry Harmens (Chair ICP Vegetation, UK) pointed out on two glossy brochures available as pdf on ICP Vegetation web site "Changing ozone profiles in Europe: implications for vegetation" and "Climate change and reactive nitrogen as modifiers of the responses of vegetation to ozone pollution".

Added to the Agenda, a presentation on the European Environment Agency habitat map for Europe was given by Luboš Halada (EEA, European Topic Centre on biological diversity). This map is publicly available <http://projects.eionet.europa.eu/eea-ecosystem-assessments/library/draft-ecosystem-map-europe>. It is based on Corine Land Cover, ecosystems identified by their EUNIS code (level 2) at a resolution of 100m for 39 countries in Europe. It has been finished in 2014.

3.2. UPDATE OF THE MAPPING MANUAL

An update of the Mapping Manual has been undertaken in 2014. It is coordinated by Ms AC Le Gall, partly funded by Germany (with in kind contribution of France, the Netherlands, UK, Sweden, Norway). All chapters were made available to NFC prior to this meeting on the ICP M&M website. The Chair informed the TF that there were still some modifications to be done on Chapter 6 (dynamic modelling), e.g. a description of the VSD+ model could be added.

Moreover, Chapter 2 is a detailed description of modelling atmospheric concentrations and depositions. It has been simplified from the 2004 version of the Mapping Manual but one option would be to shorten it even further and to refer the reader to EMEP websites. The Task Force considered that:

- On available updated chapters, comments from 5 countries have been received (Belgium, France, Norway, Germany and Switzerland). These comments have been made available on the ICP M&M website prior to the meeting (except Germany's as they arrived too late for being posted). As could be expected from such a review, there were different levels of comments:
 - Some comments concerned the formatting or small editing mistakes: they will be corrected without further discussion.
 - Some comments concerned the formulation: the commenting authors agreed to provide more suitable text that will be included in the 2015 version of the Manual.
 - Some comments concerned the critical load and level calculation methodology (for instance on the following topics: Acceptable leaching of Nitrogen; Aluminium criteria: Critical Bc to Al ratio, Critical base saturation; Organic acid adjusted ANC limit): These more fundamental comments will be discussed in small groups of experts and/or NFCs that will provide text and references that will be proposed for inclusion in the Mapping Manual at the latest at the 2016 ICP M&M TF meeting.
- This text will be kept in track change mode in a "draft chapter" until its adoption by the ICP M&M Task Force.
- Chapter 2 remains under review. The only suggestion expressed was that a description of mapping pollutant air concentration and deposition should remain in the Manual.
- Comments concerning Chapter 3 will be reviewed by ICP Vegetation.
- Within 2 weeks, new text is drafted to include minor NFC comments and to include a description of VSD+. Chapters will be updated on the ICP M&M website.
- NFCs send comments on any of the 8 chapters to anne-christine.le-gall@ineris.fr until the 22th June.
 - Small comments (formatting, editing mistakes, minor formulation changes) will be corrected without further discussion.
 - Comments concerning the critical load and level calculation methodology (for instance on the following topics: Acceptable leaching of Nitrogen; Aluminium

criteria: Critical Bc to Al ratio, Critical base saturation; Organic acid adjusted ANC limit) will be discussed in small groups of experts and/or NFCs. These groups will provide text and references that will be proposed for inclusion in the Mapping Manual at the latest at the 2016 ICP M&M TF meeting.

- Final version is submitted at the WGE in September 2015.
- If approved by the WGE, the translation of the 2015 Mapping Manual is requested to the Convention Secretariat (who had informed the WGE that it has reserved funding for this purpose).
- The date of the last update should be shown on each page of the Manual.
- It was also agreed that for comments that had been received, proposals for new text would be prepared by different expert groups as listed in the table below.

Topic	Experts from
Nitrogen immobilisation	Germany
Acceptable leaching of Nitrogen	CH and selected other experts
Aluminium criteria: Critical Bc to Al ratio	
Weathering	Formulation from Germany
Critical base saturation	

The Task Force appreciated the progress on the update of the Mapping Manual and decided that for any future update of the Mapping Manual:

- In the future, any comment that may require a modification of presently recommended critical load calculation methodology will be discussed by an expert group. This committee of experts is to submit updated text with supporting references to the ICP M&M Task force for discussion and, when relevant, adoption (by WGE if required).
- Adopted text is included in an updated Mapping Manual, which then becomes the official Mapping Manual and is kept online on the ICP M&M web site.

Future translations to Russian of the updated version of the Manual will be dependent on available funding. Translations of updates will be considered if major or numerous changes are included in the official version of the Manual.

3.3. NEWS FROM THE CONVENTION

The ICP M&M chair informed the Task Force participants of a number of changes in the Convention:

New Officers of the Convention Bodies have been elected on September or December 2014:

- Chair EB: Anna.Engleryd@naturvardsverket.se
- Chair EMEP: Laurence.rouil@ineris.fr

- Chair TF measurement and modelling: Augustin.colette@ineris.fr

EB wishes to promote the Convention and the implementation of its protocols

- Air pollution is high on UNEP and WHO agendas
- Promotion to parties outside UNECE is encouraged

WGE Chair encourages ICPs to open their meeting to “new” scientists to stimulate the work and to increase visibility. Also the feasibility of a WGE web portal is being discussed.

The set up of a **common portal** is being requested by the WGE Chair. This point is a follow up of the 2013 WGE audit. The intention is to facilitate the exchange of data within the Convention and to increase the visibility of the scientific work done under the WGE. A small workgroup has been formed to assess the feasibility of such a portal. Two of its members (Jesper Bak and Filip Moldan) informed on progress and indicated that their task was to assess whether a portal such as the EMEP portal could be set up for the WGE and to check which meta-data (i.e. a description of data available in WGE groups) could be made available on a WGE portal. The Task Force underlined that the requests for data availability should follow the Convention data rules (EB decision 2006/1).

3.4.2016 – 2017 WORK PLAN ISSUES CONCERNING WGE AND ICP M&M

The Chair informed that a new work plan for 2016-2017 was being designed. The planning followed is:

- December 2014: EB requested input from all bodies
- Mid June 2015: Proposals from bodies to be compiled by secretariat
- Sept 2015: Discussion at WGE and EMEP meetings
- December 2015: Discussion and formal decision at EB meeting

The LRTAP Assessment Report has provided one opportunity to compile potential topics for short to long term research and tool development needs. Such a list has been prepared by Peringe Grennfelt, chair of WGE and had been distributed to NFCs prior to the meeting. The 2016 – 2017 work plan items for ICP M&M were discussed and it was agreed that the following items would be proposed:

1. Maintain and update (inter alia through calls for data) when necessary the European critical load database, website and produce documents (i.e. reports and mapping manual) as requested by WGE.
2. Continued development of models for biogeochemistry of nitrogen and carbon in ecosystems, including biodiversity and terrestrial carbon sequestration in relation to climate change, taking into account potential limitations by other nutrients (eg phosphorous).
3. Investigate synergies and trade-offs between air pollution, climate and nature policies as well as synergies between local and global policy measures and their effects.

However, the Task force expressed its concern over the financial situation of several NFCs as well as of the CCE. The realisation of the workplan items above is strongly dependant on the funding situation of the CCE. They may not be completed if CCE financing situation is not consolidated in the coming years. Via its modelling the ICP M&M synthesizes information gathered by other ICPs and prepares it for use in integrated assessment modelling. As such, ICP M&M, its NFCs and the CCE, play a key role in the development and the assessment of the LRTAP effect-based air pollution control policies.

3.5.2014 - 2015 WORK PLAN AND REPORTING TO WGE

Via the work plan (document **ECE/EB.AIR/122/Add.2**), EB requests WGE¹:

WGE Reports:

- To prepare an annual joint report with clear policy-relevant messages and recommendations (work plan item 1.1.11).
- To “assess scientific and policy outcomes within the Convention over the past few decades, including scientific understanding, trends and achievements under the Gothenburg Protocol, and outline future” (Work plan item 1.9).
- To report scientific findings of policy relevance according to a template prepared by EB (Work plan item 1.1.12²) and on annual scientific activities (for ICP M&M Work plan item 1.2.1).

Organisation of work:

- To improve integrated working and reporting. To foster integrated/thematic assessments, combining the work and output of different subsidiary bodies (Work plan item 1.8.1).
- To set priorities for monitoring and other collection of data by Parties in view of policy needs (work plan 1.1.1).
- To explore ways to combine/merge the activities of some of the ICPs (e.g., ICP Integrated Monitoring, ICP Forests, ICP Waters) (Work plan item 1.8.3).
- To develop “common standards” for all ICPs and a portal approach to enable integrated assessments and to assist the Parties in their implementation of air pollution strategies (Work plan item 1.8.2).

Outreach:

- To enhance the involvement of countries in Eastern Europe, the Caucasus and Central Asia (workplan item 1.1.10).

¹ The list below is a selection of items common to several ICPs/TF. Actions specific to ICPs and not involving ICP M&M are not mentioned here.

²http://www.unece.org/fileadmin/DAM/env/documents/2013/air/eb/Informal_document_n_18_Proposed_Template_for_reporting_by_Task_Forces_and_Expert_Groups_to_CLRTAP_subsidary_bodies.pdf

- To cooperate with programmes and activities outside the ECE region and provide information on them to the Executive Body (Work plan item 1.1.10).

In 2015, ICP M&M and the CCE respond to the Convention work plan by:

- Contributing to the annual WGE Joint Report (Coordination: P. Grennfelt, WGE Chair, September 2015, Work plan items 1.1.11 and 1.8.1) with highlights of ICP M&M contribution to trends and assessment reports and a description of progress on HSI.
- Preparing ICP M&M technical official report to the WGE (ECE/EB.AIR/WG.1/2015/10 report): This document is to describe scientific and organisational advances under the ICP M&M (Work plan items 1.1.12, 1.1.10, 1.1.11). This document will not be translated in the official languages. It will cover the result of the call for data, an update on the use of the HSI and a summary of the ICP M&M inputs in the assessment and trends reports.
- Contributing to the Trends Report (2015, Work plan items 1.1.11, 1.8.1 and 1.9). This document is a collaborative work under the WGE and is compiled by Heleen de Wit. It illustrates and analyses the evolutions of air pollution effects as observed or modelled by the WGE ICPs and TF.
- Contributing to the Trends Report (2015, Work plan items 1.1.11, 1.8.1 and 1.9). This document is a collaborative work under the WGE and is compiled by Heleen de Wit. It illustrates and analyses the evolutions of air pollution effects as observed or modelled by the WGE ICPs and TF.
- Preparing the 2015 Trends Report (2015, Work plan items 1.1.11, 1.8.1 and 1.9). This document is a collaborative work under the WGE and is compiled by Heleen de Wit. It illustrates and analyses the evolutions of air pollution effects as observed or modelled by the WGE ICPs and TF.
- Preparing the 2015 Trends Report (2015, Work plan items 1.1.11, 1.8.1 and 1.9). This document is a collaborative work under the WGE and is compiled by Heleen de Wit. It illustrates and analyses the evolutions of air pollution effects as observed or modelled by the WGE ICPs and TF.

[Tapez une citation prise dans le document ou la synthèse d'un passage intéressant. Vous pouvez placer la zone de texte n'importe où dans le document. Utilisez l'onglet Outils de zone de texte pour modifier la mise en forme de la zone de texte de la citation.]

3.6. NFC TOUR DE TABLE

NFCs were requested (kindly) to provide the chair of the ICP M&M with a short written description (10-15 lines) of their activities in writing. Contributions are expected by 22nd June and should be sent to Anne-christine.le-gall@ineris.fr. They will thereafter be compiled into an annex to the present report.

3.7. MEETINGS OF INTEREST TO ICP M&M

The chairwoman presented a list of upcoming meetings of relevance to ICP M&M. They included:

- Meetings of the LRTAP Convention³ :
 - ICP, TF Health, JEG DM meetings
 - EMEP and WGE meetings: 14 – 18 September 2015, Geneva
 - WGSR and EB Meetings: 15-18 December 2015, Geneva

³ Detailed information at : <http://www.unece.org/environmental-policy/conventions/envlrtapwelcome/meetings-and-events.html#/0/0/0/28088/10034>

- And meetings outside the convention
 - 9th International acid rain meeting, Rochester, USA, 19 – 23 October 2015 (<http://acidrain2015.org/>)

4. CLOSURE OF THE MEETING

The decisions listed in the minutes were presented to the participants, discussed and modified according to discussion.

Finally the chairwoman and the representative of the CCE thanked the hosts of the meeting for the excellent organisation of the meeting, the quality of the venue and for raising the level of participants' knowledge on Zagreb and its history during a pleasant excursion.

The chairs of the sessions, their speakers and the meeting participants were acknowledged and thanked for providing opportunities for discussions and for improving the community modelling capacity, little by little, step by step, so that tools for policy makers are made available to support air as well as nature policies.

Germany offered to host the 2016 CCE workshop / ICP M&M Task Force meeting in Dessau. It will be held at about the same period (1st fortnight of April), from Tuesday morning to Friday lunchtime.

5. ICP M&M TASK FORCE RECOMMENDATIONS TO THE WORKING GROUP ON EFFECTS, DISCUSSED AT THE TF 31ST MEETING, ZAGREB, 21-23 APRIL 2015

The following recommendations have been agreed upon during the meeting and may not be modified, except, if requested, at the next ICP M&M TF meeting.

The ICP M&M Task force recommends that:

- NFCs can update their response to the 2014-2015 call for data until 18th May 2015. National reports shall be sent by the 1st June 2015 the latest.
- The critical loads for eutrophying nitrogen in the European Critical Load Database can be empirical or calculated critical loads. If both values are available for the same site, the minimum value will be used for integrated assessment, unless otherwise specified by an NFC in its data submission.
- The 2015 updated European Critical Load Database for acidification and eutrophication will be submitted to the WGE for approval for use by LRTAP bodies and for European policy support.
- Biodiversity critical loads submitted in 2015, based on the Habitat Suitability Index, may be used for testing, for research purposes (eg scenario analysis in Eclaire project), but will not be used for policy support at Convention level.
- The 2015 CCE status report may only be published as pdf due to financial constraints.
- A call for data on biodiversity critical loads is to be issued in 2015, with a delivery date in 2017 to allow NFCs sufficient time to develop such data, with interim results to be discussed in 2016.
- NFCs are encouraged to continue their work on critical load methodologies, inter alia in collaboration with other NFCs.
- The Mapping Manual is to be submitted to the WGE in September 2015 in the version made available to the NFCs for their review at the end of June 2015.
- If the WGE approves the 2015 Mapping Manual, its translation to Russian will be requested to the Secretariat.
- Any future needs for update in the Mapping Manual may be included in the Manual by following procedure:
 - Text to be changed is proposed by experts to the ICP M&M Chair.
 - If a consensus on the change is obtained at the following ICP M&M Task Force, the agreed change is submitted to WGE and, once agreed upon, included in the official Mapping Manual version available at the ICP M&M web site.

- New translations to Russian are to be carried out when/if updates are major or numerous.
- The Task Force proposes the following items for its 2016 – 2017 workplan items:
 1. Maintain and update (inter alia through calls for data) when necessary the European CLd database, website and produce documents (ie reports and mapping manual) as requested by WGE.
 2. Continued development of models for biogeochemistry of nitrogen and carbon in ecosystems, including biodiversity and terrestrial carbon sequestration in relation to climate change, taking into account potential limitations by other nutrients (eg phosphorous).
 3. In collaboration with EMEP/CIAM, investigate synergies and trade-offs between air pollution, climate and nature policies as well as synergies between local and global policy measures and their effects.

The TF underlines that the realization of these items will be dependent on the financial situation of the CCE and NFCs.

- NFCs and their collaborative institutions are requested to check whether their names and addresses are fully and correctly listed on the ICP M&M site (<http://icpmapping.org/NFCs>).

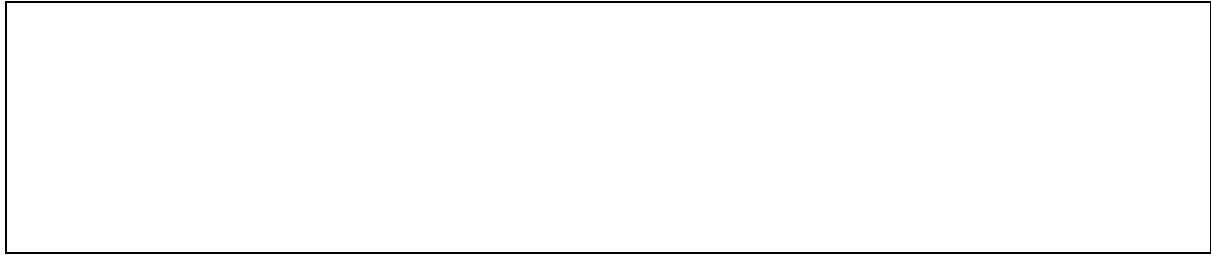
6. ANNEXES

6.1.TOUR DE TABLE

Austria
Belgium
Czech Republic
Denmark
Finland
France

Germany
Ireland
Italy
Netherlands
Norway
Russia
Slovakia

Spain
Sweden
<p><i>Swedish NFC responded to the 2014/2015 call for data by submitting re-gridded critical loads for acidity and empirical critical loads. Methodology to calculate critical loads of acidity was compared to methodology used in Norway and in-depth analysis of differences was undertaken in co-operation with Norwegian NFC. Results of the Swedish-Norwegian analysis were submitted to CCE as a part of the Swedish national report. The level of NFC funding from Swedish EPA has been in 2015 kept at the same level as in 2014, and thus even NFC work capacity and level of ambition. The NFC continues to chair JEG DM. The NFC has on national level frequent contacts with IP IM Programme Centre, internationally the NFC has frequent contacts with Programme Centre for ICP Waters, not the least in connection with production of the "Trend report" co-ordinated by ICP W. Through JEG DM the NFC is in touch with several other Convention bodies (ICP Forests and Vegetation, EMEP, the secretariat and more) and with several NFCs. Swedish NFC has also volunteered to form together with Danish NFC and with representative of ICP Forests a small ad hoc group to investigate possibilities to create a common portal to access data collected within WGE. This work will be reported at the next WGE meeting in September 2015.</i></p>
Switzerland
United Kingdom
USA



6.2. LIST OF PARTICIPANTS TO THE MEETING

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<p>Chris Field NERC/UK Environment Agency/Manchester Metropolitan University, School of Science and the Environment E418 John Dalton Building, Manchester Metropolitan University, Chester Street, Manchester, M1 5GD +00447810326744 c.field@mmu.ac.uk</p>	<p>Jane Hall Centre for Ecology and Hydrology Environment Centre Wales, Deniol Road, Bangor, Gwynedd LL57 2UW +44 (0) 1248 374511 jrha@ceh.ac.uk</p>
<p>Harry Harmens Centre for Ecology & Hydrology Environment Centre Wales, Deiniol Road, Bangor, Gwynedd LL57 2UW +44 1248374500 hh@ceh.ac.uk</p>	<p>Ed Rowe Centre for Ecology and Hydrology Environment Centre Wales, Deiniol Road, Bangor, Gwynedd LL 57 2UW +44 7774580247 ecro@ceh.ac.uk</p>

6.3.FINAL AGENDA OF THE MEETING

UNECE Convention on Long-range Transboundary Air Pollution

Working Group on Effects

**International Cooperative Programme
on Modelling and Mapping
of Critical Levels & Loads and Air Pollution Effects,
Risks and Trends (ICP M&M)**

Final Agenda

**25th CCE Workshop and 31st Task Force Meeting
on assessments of impacts of air pollution, and interactions
with climate change, biodiversity and ecosystem services**

Monday 20 – Thursday 23 April 2015

Zagreb, Croatia

Sponsored by:

**Meteorological and Hydrological Service of Croatia
French National Institute for Industrial Environment and Risks (INERIS)
Dutch Ministry of Infrastructure and the Environment
Coordination Centre for Effects (CCE) at RIVM, The Netherlands**

MONDAY, 20TH APRIL 2015

Opening of the 25th CCE workshop and 31st TF and Key Note Session

Chair: Sonja Vidic

8:00 - 8:30	Registration, coffee and mounting of posters	
8:30 - 8:45	Welcome	Solveg Kovac
8:45 - 9:00	Objectives of the workshop and Task Force	Anne-Christine Le Gall/ Max Posch
9:00 - 9:45	Review of critical load mapping and modelling activities in Croatia and the past submissions to Call for Data	Vladimir Jelavić, Delfa Radoš

Topic 1: Results of the Call for Data 2014-2015

Chair: Anne-Christine Le Gall

9:45 - 10:15	2014-2015 Call for Data results	Jaap Slootweg & Max Posch
10:15 - 10:35	Revised European Critical load Database	Max Posch
10:35- 11:00	Coffee break and Poster session in the presence of poster authors	
11:00-11:20	The PROPS Vegetation model: New Developments	Gert Jan Reinds, <u>Janet Mol</u> , Luc Bonten, Wieger Wamelink, Jan-Cees Voogd
11:20-11:40	Critical Loads derived from the PROPS model	Max Posch
11:40 - 12:30	Discussion TF Conclusions and recommendations for Topic 1	Anne-Christine Le Gall
12:30 - 14:00	Lunch	

Topic 2: National and NFC contributions to effect-based work under the Convention (call for data), ECLAIRE and other research programmes

Chair: Maximilian Posch (each presentation to be followed by 5 minutes of discussion !)

14:00 – 14:15 (+5)	Deriving N & S Critical Load functions from thresholds set using empirical Critical Loads	Ed Rowe, Susan Jarvis, Jane Hall, Chris Evans, Pete Henrys & Simon Smart
14:20 – 14:35 (+5)	Critical load assessment and potential links to sustainable habitat conservation	Thomas Scheuschner
14:40 - 14:55 (+5)	Predicting vegetation composition in French forests under two atmospheric deposition scenarios using two modelling approaches	<u>Rizzetto S.</u> , Belyazid s., Gegout J.C., Kuhn E., Corcket E., Alard D., Nicolas M., Sverdrup H., Gaudio N., Probst A.
15:00 – 15:15 (+5)	Calculation of critical loads for Dutch Nature.	Arjen van Hinsberg, Janet Mol & <u>Gert Jan Reinds</u>
15:20 - 15:35 (+5)	Nitrogen and Natura2000: Dutch approach for dealing with this challenge and presentation of the AERIUS tool	Bas Clabbers
15:40 – 16:00	Coffee break and Poster session	

16:00 – 16:15 (+5)	Comparison of methodologies to calculate critical loads at lakes in Norway and Sweden: choice of organisms to protect, choice of protection criteria and trade-offs between air pollution and forestry	Filip Moldan and Kari Austnes
16:20 - 16:35 (+5)	Effects of N-deposition on temporal changes in plant diversity in Swiss habitats	Lukas Kohli, Tobias Roth, Nicolas Strebel, Beat Rihm, Beat Achermann
16:40– 16:55 (+5)	New exposure-response relationships for nitrogen impacts on mycorrhiza and epiphytic lichens	Lucienne de Witte ¹ , Martin Urech ² , Sabine Braun, Christian Schindler, Beat Rihm, <u>Reto Meier</u> , Beat Achermann
17:00-17:15 (+5)	Nitrogen deposition and multi-dimensional plant diversity at the landscape scale	Tobias Roth
17:20 - 17:35 (+5)	[Cancelled due to technical problems] Overview of recent progress on critical loads in the U.S.: Focus on terrestrial herbs, lichen, and trees	Christopher Clark (<i>via internet conferencing</i>)
17:40 - 18:00	Discussion	

TUESDAY, 21ST APRIL 2015

Topic 3: Common ICP M&M, ICP-Vegetation and FP7-ECLAIRE session: N-impacts on plant species diversity including interactions between N and O₃

Chair: Wilfried Winiwarter (until coffee break) / **Harry Harmens** (after coffee break)

8:30 - 8:50	ECLAIRE policy scenarios of cost-optimized options for vegetation protection	Wilfried Winiwarter, Nico Vellinga, Wolfgang Schöpp, Max Posch, Chris Heyes, Markus Amann
8:50 - 9:20	Ozone and N interactions: from processes to ecosystems impacts	Gina Mills, Katrina Sharps, <u>Harry Harmens</u> , Felicity Hayes, Chris Evans, Ed Rowe, Lisa Emberson, Patrick Büker, Mark Sutton et al
9:20 - 9:40	O ₃ x N interactive effects on soil N and C in subalpine grassland	<u>Sereina Bassin</u> , Matthias Volk, Jürg Fuhrer
9:40 - 10:00	Ozone, nitrogen and climate effects on annual Mediterranean pastures biodiversity and structure	<u>I. Rabago</u> , V. Bermejo, H. Calvete, S. Elvira, J. Sanz, I. González, H. García, F. Valiño, R. Alonso
10:00 - 10:20	Impacts of changes in nitrogen deposition, ozone exposure and climate change on carbon sequestration of European forests	<u>Wim de Vries</u> , Max Posch, Gert Jan Reinds, Luc Bonten, Dave Simpson
10:20 - 10:40	Ecosystem-scale trade-offs between impacts of ozone and reactive nitrogen	<u>Ed Rowe</u> , Felicity Hayes, Kasia Sawicka, Gina Mills, Laurence Jones, Filip Moldan, Sereina Bassin, Netty van Dijk, Chris Evans
10:40 - 11:10	Coffee break	

11:10 - 11:50	<i>Critical loads of nitrogen for forest ecosystems in view of impacts on vegetation and forest growth/carbon sequestration</i>	<i>Wim de Vries, Sabina Braun, Wilfried Winiwarter, Jean Paul Hettelingh, Enzai Du, Klaus Butterbach-Bahl</i>
11:50 - 12:10	<i>The ForSAFE- VEG model system. Field test in North America and Europe:</i> 1. Nitrogen concentrations in the soil 2. Ground vegetation change 3. Critical loads for USA and Sweden	<i>Harald U. Sverdrup, Salim Belyazid</i>
12:10 - 12:30	<i>Modelling the influence of climate change and atmospheric deposition on biodiversity indicators</i>	<i>Gert Jan Reinds, Max Posch, Janet Mol, Luc Bonten, Wieger Wamelink, Stephan Hennekens, Wim de Vries</i>
12:30 - 14:00	Lunch	
14:00 - 15:00	Discussion and Task Force Conclusions and recommendations on Topic 3	<i>Chair : Anne-Christine Le Gall</i>
Afternoon & evening	Social Event & Dinner	<i>Our host offers a guided tour around Zagreb of 2.5-3 h and a dinner starting at 20.00</i>

WEDNESDAY, 22ND APRIL 2015

Topic 4: Status of collaboration under LRTAP Convention		
Chair: Anne Christine Le Gall		
9:00 - 9:30	<i>A trend report with contributions from all ICPs and the Task Force on Health, currently entitled: "Trends in ecosystem and health responses to (reductions in) long-range transported pollutants"</i>	<i>Heleen de Wit</i>
9:30 - 9:45	<i>Status of the LRTAP-Convention Assessment report</i>	<i>Anne-Christine Le Gall, Rob Maas</i>
9:45 - 10:00	<i>ICP-W</i>	<i>Heleen de Wit</i>
10:00 - 10:15	<i>ICP-V</i>	<i>Harry Harmens, Gina Mills</i>
10:15 - 10:45	<i>JEG, ICP IM</i>	<i>Filip Moldan, Lars Lundin</i>
10:45 - 11:15	Coffee break and Poster session	
11:15 - 11:25	<i>EEA habitat map for Europe</i>	<i>Luboš Halada</i>
11:15 - 11:40	<i>Status of the revised Mapping Manual</i>	<i>Anne-Christine Le Gall</i>
11:40 - 12:30	<i>Discussion on</i> <ul style="list-style-type: none"> • Trends report (see also Workshop package) • Assessment report • Mapping manual 	
12:30 - 13:00	Task Force Conclusions and recommendations on Topic 4	<i>Chair : Anne-Christine Le Gall</i>
13:00 - 14:00	Lunch	

Topic 5: Training Session on (1) modelling and mapping issues

Moderator: Jaap Slootweg et al. (CCE and Alterra)

14:00 - 14:15	<i>Introduction</i>	<i>Jaap Slootweg et al.</i>
14:15 - 15:30	<i>Interactive discussions with NFCs on call for data software (incl. VSD-PROPS) and CCE/NFC issues</i>	<i>Jaap Slootweg et al.</i>
15:30 - 16:00	Coffee break	

THURSDAY 23RD APRIL 2015

Topic 6: ICP M&M workplan

Chair: Anne Christine Le Gall

9:00 - 9:20	<i>Summary of training session findings</i>	<i>Jaap Slootweg & Max Posch</i>
9:20 - 9:30	Task Force Conclusions and recommendations on Topic 5	<i>Chair : Anne-Christine Le Gall</i>
9:30 - 10:30	<i>News from the LRTAP Convention [As in previous years, the Tour the Table is replaced by your contribution in writing, e.g. addressing (1) NFC progress in relation to the call for data, (2) envisaged capacity for 2015-2016, (3) NFC planned work in the coming years]</i>	<i>Anne-Christine Le Gall</i>
10:30 - 10:50	Coffee break	
10:50 - 12:30	Draft ICP M&M contributions to WGE meeting technical document(s) for 33rd WGE session (Geneva, Sept. 2015) <i>Future meetings Adoption of the draft minutes of the meeting. Closure of the CCE WS and ICP M&M Task Force meeting</i>	<i>Anne-Christine Le Gall</i>
12:30 - 14:00	Lunch	

Posters

(POSTER SESSIONS ARE COMBINED WITH COFFEE BREAKS)

<i>Ground vegetation composition change in beech forest and highland grasslands of Eastern Serbia (in relation to atmospheric depositions, soil properties, temperatures and precipitation amounts)</i>	<i>Jelena Beloica</i>
<i>Overview of the results of the 2014-2015 call for data</i>	<i>Coordination Centre for Effects</i>
<i>Plant species diversity changes in forests of the Czech Republic in the last 15 years</i>	<i>Irena Skořepová</i>
<i>Critical Loads and Dynamic Risk Assessments: Nitrogen, Acidity and Metals in Terrestrial and Aquatic Ecosystems (Springer, Environmental Pollution Series, volume 25, in press)</i>	<i>Wim de Vries, Jean-Paul Hettelingh, Maximilian Posch (eds.)</i>
<i>To be confirmed</i>	
<i>Carry-on Posters (without announcement) are also invited !</i>	