

Decision 2019/12

Revised mandate for the Meteorological Synthesizing Centre-West

The Executive Body,

Recalling the provisions of article 9 and other relevant provisions of the Convention on Long-range Transboundary Air Pollution,

Recalling also the provisions of the Protocol on Long-term Financing of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP Protocol),

Noting that the Meteorological Synthesizing Centre-West has been in operation since 1979 – the beginning of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP) – as one of the three cooperating international centres of EMEP,

Recalling the terms of reference for the international EMEP centres (EB.AIR/GE.1/8, annex IV), adopted at its fourth session (ECE/EB.AIR/10),

Recognizing the Centre's contribution to the scientific assessment of past trends and current status in air pollution throughout the United Nations Economic Commission for Europe (ECE) region and to the evaluation of the implementation of the Protocols to the Convention,

Acknowledging the support provided by the Meteorological Synthesizing Centre-West to the Parties to the Convention and EMEP, among other things, through the following actions:

- (a) Continuously maintaining and promoting the development of modelling tools essential for the verification of the impact of the actions taken on pollutants emission reduction and the assessment of transboundary air pollution fluxes in the ECE region;
- (b) Providing the Centre for Integrated Assessment Modelling with source/receptor matrices computed annually to feed the Greenhouse Gas and Air Pollution Interactions and Synergies (GAINS) model;
- (c) Extending the EMEP model to the global scale to support assessment of source/receptor relationships between regions in the Northern hemisphere;
- (d) Contributing to the evaluation of emission data reported by the Parties, implementing gridded emission inventories in the EMEP model and evaluating its performances against observations;
- (e) Contributing to the elaboration of assessment reports and trend analyses of air pollution concentrations and deposition in the EMEP domain over the past 40 years;
- (f) Investigating methodologies to build up linkages between regional and local air pollution patterns;
- (g) Supporting the sharing, use and evaluation of EMEP models as tools for the assessment of air pollution transport and deposition at the national and regional levels by the Parties.

Recognizing the need to update the mandate of the Meteorological Synthesizing Centre-West to ensure its consistency with the provisions of the amended Protocols to the Convention, as well as its strategic priorities as set out in the following documents:

- (a) The long-term strategy for the Convention on Long-range Transboundary Air Pollution for 2020–2030 and beyond (decision 2018/5, annex);
- (b) The 2016 scientific assessment of the Convention;¹

¹ See Rob Maas and Peringe Grennfelt, eds., *Towards Cleaner Air: Scientific Assessment Report 2016*

(c) The policy response to the 2016 scientific assessment of the Convention (ECE/EB.AIR/WG.5/2017/3 and Corr.1 and ECE/EB.AIR/2017/4).

Noting that the annual costs of the centres cooperating within EMEP for the activities appearing in the work programme of the Steering Body of EMEP are covered in accordance with the EMEP Protocol, from contributions by the Parties to the Convention on the basis of the annual EMEP budget approved by the Executive Body upon the recommendation of the Steering Body to EMEP:

1. *Notes with appreciation* the hosting of the Meteorological Synthesizing Centre-West by the Norwegian Meteorological Institute;
2. *Adopts* the revised mandate of the Meteorological Synthesizing Centre-West as contained in the annex to the present decision, which includes the key objectives and functions of the Centre to be carried out on an ongoing basis, whereas additional activities and specific tasks and associated deliverables to be carried out in a shorter time frame will be included in the biennial workplans for the implementation of the Convention;
3. *Decides* that the Centre is responsible for communicating with national experts, for maintaining an up-to-date web page that includes information on its work, and for other organizational arrangements in accordance with the biennial workplan;
4. *Decides* that the Centre is responsible for carrying out the work assigned to it in the biennial workplans approved by the Executive Body, and reporting thereon, as well as for keeping other relevant bodies apprised of its work.

Annex

Revised mandate for the Meteorological Synthesizing Centre-West

1. The Meteorological Synthesizing Centre-West will continue to provide scientific support to the Convention on atmospheric modelling of photochemical compounds, sulphur, nitrogen and particulate matter.
2. The Centre reports on its activities and deliverables to the Steering Body to EMEP.
3. The functions of the Centre are to:
 - (a) Perform model simulations to trace progress towards the emission controls under existing Protocols and support the design of new or revised Protocols, when necessary;
 - (b) Provide: annual assessment of transboundary air pollution fluxes inside the EMEP area; and source-receptor matrices, air concentrations and deposition fields for the EMEP domain for photochemical compounds, sulphur, nitrogen and particulate matter for the most recent year where emissions are available. Update historic model runs when necessary to keep consistency with previous years;
 - (c) Maintain the EMEP/Meteorological Synthesizing Centre-West model as “state-of-the-art”. Evaluate results of the EMEP/Meteorological Synthesizing Centre-West model using EMEP data, as well as measurement data from other networks and projects; Improve methodologies (including multiscale modelling) and understanding of processes, parametrizations, emissions and linkages to climate and vegetation impacts;
 - (d) Facilitate the use of the EMEP/Meteorological Synthesizing Centre-West model by Parties, for example, by maintaining an updated open source code on the web and providing training courses for EMEP/Meteorological Synthesizing Centre-West model users;
 - (e) Provide annual country reports with model products and web access to model results, including data on high temporal resolution and source-receptor matrices, for use in air quality assessment by Parties;
 - (f) Provide support and facilitate involvement of Parties in Eastern Europe, the Caucasus and Central Asia, for example, by providing country reports in Russian, target

(Oslo, 2016) and United States Environmental Protection Agency and Environment and Climate Change Canada, *Towards Cleaner Air: Scientific Assessment Report 2016 – North America* (2016).

country participation in EMEP/ Meteorological Synthesizing Centre-West model training courses, provide support on the use of EMEP data and tools;

(g) Collaborate with EMEP centres and task forces and the Working Group on Effects on: (i) interpretation, evaluation and assessment of measured and modelled air pollution, including intercontinental transport; (ii) evaluation and improvement of emission inventories; (iii) use of EMEP/Meteorological Synthesizing Centre-West model results in integrated assessment; and (iv) risk of air pollution damage to vegetation and health;

(h) Continue cooperation with the Baltic Marine Environment Protection Commission and the Commission for the Protection of the Marine Environment of the North-East Atlantic on nitrogen deposition to sea areas, with a specific focus on shipping emissions; explore options for cooperation between EMEP and European Union programmes such as the Copernicus Atmosphere Monitoring Services, focusing on regional assessments. Support Arctic Monitoring and Assessment Programme in modelling of short-lived climate pollutant impacts; collaborate with the Aerosol Comparisons between Observations and Models and the Aerosol Chemistry Model Intercomparison Project within phase 6 of the Coupled Model Intercomparison Project on the climate impacts of short-lived climate pollutants;

(i) Carry out other tasks assigned to it by the EMEP Steering Body and the Executive Body.