Economic Commission for Europe

Executive Body for the Convention on Long-range Transboundary Air Pollution

Draft workplan for the implementation of the Convention for 2014-2015

1. At its 31st session in December 2012, the Executive Body proposed that a draft 2014-2015 workplan be prepared by the Bureau of the Executive Body with the secretariat (ECE/EB.AIR/113, para. 47). In response to this request, the secretariat had prepared a first draft outline of the 2014-2015 workplan for the consideration by the Bureau at its meeting on 3 May 2013. The "policy" and "compliance" related parts of the draft workplan had also been considered by WGSR at its 51st session on 30 April – 3 May 2013, and the Implementation Committee at its 31st meeting on 22-24 May 2013, respectively.

2. Following these meetings, the secretariat was requested to produce a revised draft for circulation to all Parties. Parties are requested to send their comments on the version as enclosed by 20 August 2013 to the secretariat at air_meetings@unece.org.

3. The outcome of the discussion on the recommendations by the ad-hoc group of experts on the implementation of the long-term strategy (ECE/EB.AIR/2012/15) at the WGSR session has been taken into account in the preparation of this revised draft. The workplan will be further elaborated following its review by the Bureau and Parties, and with the input by all respective bodies. Substantive details received from the scientific bodies have now been integrated into the enclosed version following agreement on its proposed structure. Due consideration has been given to the comments by several representatives of the Parties that the length of the workplan be shortened and some sections be presented in a more succinct, aggregate manner.

4. The workplan translates the vision, objectives and strategic approaches as set in out in the Long-term Strategy for the Convention on Long-Range Transboundary Air Pollution (Decision 2010/8, see ECE/EB.AIR/106/Add.1) into a biannual workplan for the period 2014-2015. Its structure builds on the primary needs of the Convention and its Parties, relating to five main areas: science, policy, compliance, capacity building and communication and outreach. For each area, an introduction captures a short description and objectives of the activities and the main intended outcome of the activities in line with the long-term strategy. A table presents the specific activities planned and the ~~main responsible body~~lead body. The main responsible bodies, i.e. the Executive Body and its subsidiary bodies, function within the framework of their mandates.

5. This approach of structuring the workplan allows Parties to assess the work of the different subsidiary bodies and its deliverables in light of meeting the Convention's needs to ensure progress in realizing the vision set out in the long-term strategy. This approach takes account of the recommendation by the ad hoc group of experts on the Action Plan for the implementation of the long-term strategy for the Convention that "*The Executive Body and its Bureau should give more attention to developing and scrutinizing work plans to provide better focus for targeting the Convention's priorities and ensuring appropriate outputs*" (ECE/EB.AIR/2012/15, para 7).

6. The full implementation of the activities in the workplan will require resources in addition to those provided under the EMEP Protocol. Therefore, Parties are invited to support the Convention's activities in 2014–2015, particularly those not covered by the EMEP Protocol, by contributing to the Convention's trust fund, by financing activities

directly and by making in-kind contributions. Parties are also invited to take the lead in supporting the specific activities substantially.

1. Science

7. In line with the priorities set out in the Long-term Strategy for the Convention, science-based decision making and the effects-oriented approach will remain an essential component ~~and strength~~ of the Convention and the links between science and policy development will be retained and further strengthened. ~~Science and monitoring have an important role to play in the evaluation and assessment of the effectiveness of policies and Protocols.~~ User-friendly effect indicators and cost-benefit assessments are important to policy, politicians and the public and will be further developed. The science related work in the period 2014-2015 will aim to address the remaining and emerging challenges identified in the long-term strategy (e.g. PM, tropospheric ozone, critical loads exceedances, linkages between air pollution, climate change and biodiversity). It will also aim to further integrate the various elements covered by the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP) and the effects-oriented activities. This integration will be demonstrated through common/joint outcomes/deliverables like assessment reports, country reports, joint website, capacity building or responses to the needs of Parties. Many of the scientific tools developed under the Convention, such as integrated assessment modelling, are used by other stakeholders and will continue to be further developed.

8. The main goal of atmospheric and effects monitoring (table 1, 1.1) is to provide relevant data and to analyze air pollutant concentrations and depositions and their adverse effects on human health and ecosystems, damage to crops and materials. In general, the monitoring provides the information on the status and long-term trends of the environment in time and across the ECE region. ~~The monitoring underpins the knowledge of the environment and how it responds to environmental pollution. Environmental monitoring also provides evidence to validate critical loads, critical levels and dose-response functions and provides input to modelling and mapping.~~

9. The main goal of the work on dose response and critical loads/critical levels (table 1, 1.2) is to provide comprehensive information that gives a measure of damage or potential damage caused by air pollution to various ecosystems including Natura 2000 protected areas and agricultural areas. ~~Dose response functions, critical loads and critical levels provide input for modelling and mapping of the air pollutant effects.~~

10. The main goal of the atmospheric and effects modelling activities (table 1, 1.3) is to support the implementation of protocols to the Convention by providing the modelling tools necessary for the assessment of abatement policies. The modelling provides predictive capacity and enables the development of effective policies. It also helps to compile and evaluate information on transboundary air pollution exchange and assists the implementation of the EMEP monitoring strategy. ~~Temporal and spatial effects modelling and mapping enable extrapolation of damage over time and across the ECE region.~~ This work provides direct input to integrated assessment modelling and assessment of the hemispheric transport of air pollution.

11. The main goal of further developing national emission inventories (table 1, 1.4) is to improve their quality, transparency, consistency and completeness. Parties are supported with their emission reporting requirements under the Convention and its protocols. Methodologies are being developed to evaluate emission data and projections, reporting problems are identified and resolved. Reporting requirements, to the extent possible, are constantly being harmonized with other bodies, in particular the United Nations Framework Convention on Climate Change (UNFCCC) and the EU National Emission Ceiling (NEC)

Directive. Estimated emissions and their projections provide direct input to integrated assessment modelling and a basis for the review of compliance.

12. The main goal of integrated assessment (table 1, 1.5) is to carry out science-based evaluation and assessment of the effectiveness of policies (past and future ones) and Protocols (a strategic priority of the Convention). ~~The main tools for the integrated assessment are the environmental assessment and the i~~Integrated assessment modelling (IAM)~~. IAM~~ is carried out to analyze scenarios on cost-effective reduction of acidification, eutrophication, tropospheric ozone, human exposure to PM and ozone, and short-term regional radiative forcing. IAM covers: (a) abatement options for reducing sulphur, nitrogen oxides, ammonia, non-methane volatile organic compounds (NMVOCs), methane, primary PM, organic and black carbon and carbon monoxide, including structural measures in energy, transport and agriculture, as well as their costs; (b) projections of emissions; (c) assessments of the atmospheric transport of substances; and (d) analysis and quantification of environmental and health effects and benefits of emission reductions.

13. The main goal of the work on hemispheric transport of air pollution (table 1,1.6) is to develop a fuller scientific understanding of the intercontinental transport of air pollution across the Northern Hemisphere, its impacts on health, ecosystems and climate, and the linkages between regional air pollution and global change. The activities include collaboration with international bodies, programmes and networks, both within and outside the ECE region, with related interests. The work is organized around six themes: model development and evaluation, source attribution and source/receptor analysis, impacts of air pollution on health, ecosystems and climate, impact of climate change on air pollution, global emissions inventories and projections and distributed data network and analysis tools.

14. ~~A key factor to strengthening the relevance of the Convention as a leading regional agreement in addressing the remaining and emerging transboundary air pollution challenges in the twenty-first century is the achievement of i~~Increased ratification and implementation of, and compliance with the three latest and recently amended Protocols (para 17 (a) of the Long-term Strategy) is a priority. Parties to the Gothenburg Protocol adopted decision 2012/3 setting out a procedure for adjustments to emission reduction commitments or inventories for the purpose of comparing total national emissions with them, decision 2012/4 on its provisional application, and decision 2012/12 on the Guidance for adjustments under the 1999 Protocol to Abate Acidification, Eutrophication and Ground-level Ozone to emission reduction commitments or to inventories for the purposes of comparing total national emissions with them (table 1, 1.7).

Table 1

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
1.1	**Atmospheric and effects monitoring**			
1.1.1	Assist Parties in implementing the EMEP monitoring strategy (2010-2019); strengthen activities in regions with inadequate monitoring activities. Evaluate site representativeness, support Parties in the establishment of new monitoring sites, re-	Strengthened monitoring activities and implementation of the EMEP monitoring strategy	CCC	covered by EMEP mandatory contributions and Norway

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
	locations or impact of local emission changes on long-term trends through provision of advice, support letters and site visits as necessary			
1.1.2	Revise and develop further the methodologies to be applied in monitoring atmospheric composition change; harmonize with other international standardization bodies like CEN, WMO etc. as appropriate; update the EMEP manual chemical speciation of particulate matter (PM) (inorganic and elemental/organic carbon), nitrogen oxides, volatile organic compounds, aerosol properties, methane, mercury monitor.	Updated EMEP manual	CCC	covered by EMEP mandatory contributions and Norway
1.1.3	Arrange laboratory intercomparisons for variables required by the EMEP monitoring strategy, link results of these with the usage and interpretation of data originating from participating institutions	Results presented at CCC website and/or in technical reports	CCC	covered by EMEP mandatory contributions and Norway
1.1.4	Training courses related to measurement activities, quality assurance and quality control. Organize a workshop in cooperation with European Union (EU) Aerosols, Clouds, and Trace gases Research InfraStructure Network (ACTRIS) and other projects, and/or training at CCC depending on the needs	Increased quality and of air pollution measurements; Improved databases with measurements results	CCC	covered by EMEP mandatory contributions and Norway
1.1.5	Carry out quality assurance and quality control, handle and store for the long term the observation data reported by Parties	Reports on EMEP observation data, CCC website database (http://ebas.nilu.no/)	CCC	covered by EMEP mandatory contributions and Norway
1.1.6	Interpret and assess the observation data, interact	EMEP status reports, CCC and Task Force	CCC	covered by EMEP

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
	with EMEP modelling centres on data use, assess temporal and spatial trends. Coordinate the EMEP Joint report on PM	on Measurements and Modelling websites		mandatory contributions and Norway
1.1.7	Update and further develop database to comply with emerging international standards, provide access to data for collaborating organizations, reduce time delay to access observations, improve statistical routines and output	On-line access to data provided via http://ebas.nilu.no/	CCC	covered by EMEP mandatory contributions and Norway
1.1.8	Develop improved reporting templates for meta data documentation and dissemination. Provide training and assistance to Parties on data reporting	New templates presented at CCC website	CCC	covered by EMEP mandatory contributions and Norway
1.1.9	Ensure strong links with scientific groups involved in level2 and level3 measurement activities, plan an intensive measurement campaign in 2015	Publication of peer reviewed papers from EMEP intensive measurement periods	CCC	covered by EMEP mandatory contributions and Norway
1.1.10	Provide support to Parties and groups under the Convention through participation and input to relevant meetings, representing EMEP	Linkages with effects oriented monitoring activities. Linkages between EMEP monitoring obligations and other monitoring obligations with complementary objectives, including linkages with activities on local air quality, short lived climate forcers (SLCF) and long lived greenhouse gases	CCC	covered by EMEP mandatory contributions and Norway
1.1.11	Foster outreach activities. Participate in and interact with monitoring efforts and data assessments external to the Convention, including the EU Directives, European Environment Agency,	Contribution to and visibility in a variety of different reports from other organizations, bodies, programmes and projects	CCC	covered by EMEP mandatory contributions and Norway

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
	WMO-Global Atmosphere Watch, the Helsinki Commission (HELCOM), OSPAR Commission, Arctic Monitoring and Assessment Programme (AMAP), Stockholm Convention, Acid Deposition Monitoring Network in East Asia (EANET), Global Earth Observation System (GEOSS)/COPERNICUS (European Programme for the establishment of a European capacity for Earth Observation)			
1.1.12	Analyze past trends in air pollutant concentrations. Coordinate tests of model ability to reproduce past trends in air pollutant concentrations	Report/publication of the results of the first phase of the EURODELTA3 modelling exercise (model evaluation)	TFMM	Covered by France and WMO
1.1.13	Exchange views and experiences on EMEP monitoring, modelling, trend analyses, needs for complementary data etc. during annual Task Force meetings	Recommendations to national measurement and modelling teams and for EMEP centres. Examples of good practices on national and international scales. Annual summary report to EMEP Steering Body (SB) with policy-relevant messages and recommendations	TFMM	Covered by France and WMO
1.1.14	Take actions to (i) further implement the Guidelines on Reporting of Monitoring and Modelling of Air Pollution Effects (ii) enhance the involvement of countries in the Eastern Europe, the Caucasus and Central Asia and (iii) cooperate with programmes and activities outside the ECE region and provide information on them	Annual reports to sessions of the Working Group on Effects and to the Executive Body	ICPs/ Task Force on Health /Joint Expert Group on Dynamic Modelling	covered by the respective lead countries and recommended contributions

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
1.1.15	Contribute to the annual joint report of ICP/Task Force on Health/Joint Expert Group on Dynamic Modelling	Annual joint reports with policy-relevant messages and recommendations to WGE and EB	ICPs/Task Force on Health /Joint Expert Group on Dynamic Modelling	covered by the respective lead countries and recommended contributions
1.1.16	Quantify multi-pollutant effects on the corrosion and soiling of selected materials under different environmental conditions	Report on trends in pollution, corrosion and soiling 1987-2012	ICP Materials	covered by Sweden and recommended contributions
1.1.17	Quantify multi-pollutant effects on United Nations Educational, Scientific and Cultural Organization (UNESCO) cultural heritage sites	Updated report on inventory and condition of stock of materials at risk at UNESCO cultural heritage sites	ICP Materials	covered by Italy and recommended contributions
1.1.18	Identify the state of surface water ecosystems and their long-term changes with respect to the regional variation and impact of selected air pollutants including effects on biota	Report on trends in surface water chemistry and biology up to 2011; ecosystem response to emission reductions	ICP Waters	covered by Norway and recommended contributions
1.1.19	Identify changes in biodiversity and climate in surface water ecosystems	Report (to be decided at the next Task Force meeting in October 2013)	ICP Waters	covered by Norway and recommended contributions
1.1.20	Collect, assess and carry out integrated evaluation of comprehensive and comparable data on nitrogen critical load exceedance on tree defoliation	Report on nitrogen critical load exceedance on tree defoliation	ICP Forests	covered by Germany and recommended contributions
1.1.21	Collect, assess and carry out integrated evaluation of impact of air pollution and climate change on forest growth	Report on impact of air pollution and climate change on forest growth	ICP Forests	covered by Germany and recommended contributions
1.1.22	Evaluate impact of nitrogen deposition on tree diseases	Report on impact of nitrogen deposition on tree diseases	ICP Forests	covered by Germany and recommended contributions
1.1.23	Assess impact of nitrogen deposition on~~and~~ nitrate leaching into the	Report on nitrogen deposition and nitrate leaching into the	ICP Forests	covered by Germany and recommended

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
	groundwater	groundwater		contributions
1.1.24	Evaluate (semi-)natural vegetation and crops as indicators of potential ozone damage to ecosystems	Annual report on supporting evidence for ozone impacts on vegetation	ICP Vegetation	covered by UK and recommended contributions
1.1.25	Review interacting effects of co-occurring pollutants (ozone and nitrogen) and climatic stresses on vegetation	Report on the interacting effects of co-occurring pollutants (ozone and nitrogen) and climatic stresses on vegetation	ICP Vegetation	covered by UK and recommended contributions
1.1.26	Assess impacts of air pollution deposition to vegetation in countries in EECCA/SEE region and in South-East Asia	Report on air pollution deposition to, and impacts on vegetation, in EECCA/SEE countries and South-East Asia	ICP Vegetation	covered by UK and recommended contributions
1.1.27	Review contribution of rising background ozone levels in Europe to impacts on vegetation	Report on the implications of rising background ozone for vegetation in Europe	ICP Vegetation	covered by UK and recommended contributions
1.1.28	Develop further the flux-based approach for setting critical levels of ground-level ozone for vegetation. Update the dose-response functions	Updated chapter 3 of the Manual on Methodologies and Criteria for Modelling and Mapping Critical Loads and Levels; and Air Pollution Effects, Risks and Trends,	ICP Vegetation	covered by UK and recommended contributions
1.1.29	Carry out preparatory work for the European moss survey 2015/2016	Annual progress reports on preparations for European moss survey 2015/16 (HM, nitrogen and POPs)	ICP Vegetation	covered by UK and recommended contributions
1.1.30	Evaluate long-term trends in ecosystem effects of sulphur, nitrogen and heavy metals	Report and scientific paper on mass balances and indicators for sulphur and nitrogen in catchments	ICP Integrated Monitoring	covered by Finland, Sweden and recommended contributions
1.1.31	Evaluate long-term trends in ecosystem effects of sulphur,	Report on heavy	ICP Integrated	covered by Finland,

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
	nitrogen and heavy metals	metal impacts	Monitoring	Sweden and recommended contributions
1.1.32~~1~~	Determine and predict the state of ecosystems and their long-term changes with respect to the regional variation and impact of selected air pollutants, with special attention to effects on biota, and a special focus on monitoring the state of catchments and other ecosystems	~~Report and scientific paper on mass balances and indicators for sulphur and nitrogen in catchments~~ Report on dynamic modelling on vegetation changes in relation to N	ICP Integrated Monitoring	covered by Finland, Sweden, Austria ~~the Netherlands~~ and recommended contributions
1.1.33	Determine and predict the state of ecosystems and their long-term changes with respect to the regional variation and impact of selected air pollutants, with special attention to effects on biota, and a special focus on monitoring the state of catchments and other ecosystems	Report and scientific paper on long-term trends in ecosystem effects of S, N	ICP Integrated Monitoring	covered by Finland, Sweden and recommended contributions
1.1.34~~2~~	Develop further the methodologies for assessment of direct and indirect effects of long-range transboundary air pollution on human health	Report on update of methods for quantification of health burden of air pollution	Task Force on Health	covered by Germany, Switzerland and recommended contributions
1.1.35~~3~~	Collect and analyze the evidence on health impacts of ozone and particulate matter (including black carbon)	Updated data on the evidence on health impacts of ozone and PM	Task Force on Health	covered by Germany, Switzerland and recommended contributions
1.2	**Dose response and critical loads**			
1.2.1	Analyze and compile the responses by National Focal Centres (NFCs) to the 2012 call for data and contributions to a dedicated CCE report addressing (a) dynamic modelling of abiotic and biotic changes in European Nature Information System (EUNIS) habitat classes and	Annual reports to sessions of the WGE and EB	Coordination Centre for Effects, Task Force of ICP Modelling and Mapping~~ICPs/Task Force on Health/Jint~~	covered by the Netherlands, France, NFCs ~~and recommended contributions~~

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
	(b) tentative applications on a regional scale.		~~Expert Group on Dynamic Modelling~~	
1.2.1 bis	Training courses/workshops before each call for data, related to objective of calling, content of the data and modality to determine data requested	Increased quality of data requested by CCE to NFCs and the extended capabilities of NFCs	Coordination Centre for Effects	covered by the Netherlands and recommended contributions
1.2.2	Make progress on identification and use of biodiversity endpoints and indicators.	Preliminary application of the endpoints and indicators at European scale	ICP Modelling and Mapping	covered by the Netherlands, France, NFCs
1.2.3	Foster collaboration between NFCs, CCE and habitat experts on evaluation and reporting on effects of air pollution with emphasis on nitrogen deposition on protected areas. Exchange information and experiences on collaboration between NFCs and habitat experts at annual Task Force meetings	Increased collaboration between NFCs, CCE and habitat experts	ICP Modelling and Mapping	covered by the Netherlands, ~~and~~ France, NFCs
1.3	**Atmospheric and effects modelling**			
1.3.1	Develop new emissions gridding system for new EMEP area in finer resolution (0.1 deg x 0.1 deg long/lat). Collect and control emissions data reported by countries. Identify data gaps. Harmonize data from other sources (JRC, IIASA) with the EMEP system. Perform expert estimates for remaining areas	Base emissions grids for selected pollutants in geographical coordinates (0.1x0.1). Provision of gridded data for selected pollutants in this resolution for "new" EMEP area	CEIP	covered by EMEP mandatory contributions ~~and Austria~~
1.3.2	Calculate air concentrations and deposition fields and source-receptor matrices for the EMEP domain for 2012 and 2013 for: (i) photochemical compounds, sulphur, nitrogen and PM, and (ii) POPs and heavy metals. Assess trends and source receptor relationships	Annual status reports to EMEP SB, including model performance analysis. EMEP country reports with associated EMEP model data	MSC-W MSC-E	covered by EMEP mandatory contributions and Norway

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
	in the new grid. Analyze model performance. Assess the new grid.	Assessment report on the new EMEP grid based on cooperative efforts with Parties		
1.3.3	Generate data on ecosystem-dependent deposition of HMs and POPs and analyze the results. Prepare HM (lead, cadmium and mercury) and POPs emissions and meteorological data for 2012 and 2013 for regional and global modelling and for fine scale simulations on the new EMEP grid. Assess air pollution levels for secondary priority HMs.	Estimates and analysis of transboundary pollution to marginal seas and the Arctic. Technical note "Assessment of pollution levels of HMs in selected countries"	MSC-E	covered by EMEP mandatory contributions
1.3.4	Global scale modelling in the latitude-longitude projection. Pilot estimates of contribution of global anthropogenic and secondary sources (re-emission and wind re-suspension) to Hg and POP pollution in the EMEP domain for 2012 and 2013.	Technical report on modelling in the new EMEP grid (latitude-longitude projection): progress and challenges. Web data on contribution of global anthropogenic and secondary sources of Hg and POPs.	MSC-E TFHTAP	covered by EMEP mandatory contributions
1.3.5	Annually update the database for source-receptor matrices and status run results. Make annual release of EMEP and GLEMOS open source codes.	Web access to database and model source codes	MSC-W, MSC-E	covered by EMEP mandatory contributions and Norway
1.3.6	Collate national EMEP data in unified web presentation. Provide web access to datasets/model calculation results in high temporal resolution (hourly) for use in air quality assessment by Parties	Access to information and data for use in air quality assessment by Parties	MSC-W	covered by EMEP mandatory contributions and Norway
1.3.7	Bi-annual training course for EMEP model users. Present the EMEP model and instructions to facilitate the usage of model products. Provide a platform for a discussion on further EMEP	Facilitated use of the EMEP model by Parties	MSC-W	covered by EMEP mandatory contributions and Norway

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
	model development with partners and users of EMEP model products			
1.3.8	Develop further methodologies for modelling. Improve the understanding of processes, parameterizations, emissions and linkages to climate:	Annual note on EMEP model updates based on EMEP intensive campaigns and other scientific information	MSC-W	covered by EMEP mandatory contributions and Norway
	(i) Investigate the role of dynamic climate sensitive emissions (nitrogen oxide, ammonia, VOCs, methane) for future effectiveness of the Gothenburg Protocol for reducing levels of ozone, PM and nitrogen deposition	Assessment report on climate impact on achieving the Gothenburg Protocol goals	MSC-W	covered by EMEP mandatory contributions and Norway
	(ii) Calculate SLCP forcing for Gothenburg Protocol implementation. Evaluate uncertainty in black carbon forcing	Status report on SLCP forcing originating in EMEP domain (for black carbon, methane, ozone);	MSC-W	covered by EMEP mandatory contributions and Norway
	(iii) Investigate interaction of Hg and POPs with atmospheric aerosols; Perform simulation of Hg dispersion in the environment with focus on aqueous ecosystems; Refine model parameterization of wind re-suspension and re-volatilization of HMs and POPs and investigate the influence of climate change on secondary emissions; Analyse uncertainties of heavy metal and POP emissions and modelling results for the EMEP domain	Sections in technical reports	MSC-E	covered by EMEP mandatory contributions
1.3.9	Communicate scientific developments, model and methodology improvements, data and products. Develop and introduce a web content management system with new IT functionalities for better access to EMEP programme products and news. Develop and maintain	New web interface to EMEP and to technical documentation; EMEP website available in Russian, Near real-time concentration and deposition data on heavy metals and	MSC-W, MSC-E	covered by EMEP mandatory contributions and Norway

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
	EMEP website in Russian to facilitate access to information by EECCA countries.	POPs for 2013-2014 (2 months delay); Web access to annual data		
1.3.10	Perform model simulations to support the assessment of the EU Thematic strategy on air pollution, Gothenburg Protocol, HTAP, UN-SLCP reduction policy and to inform the Arctic Council , HELCOM and OSPAR	Database of EMEP simulations and annual explanatory note on model simulations	MSC-W	covered by EMEP mandatory contributions and Norway
1.3.11	Develop and validate models for the simulation of ecosystem responses; Carry out biomonitoring to detect natural changes, in particular to assess integrated effects of air pollutants and climate change	Report on dynamic modelling on vegetation changes in relation to nitrogen deposition	ICP Integrated Monitoring	covered by Finland and recommended contributions
1.3.12	Develop further dynamic modelling of acidification and nutrient nitrogen, including the interactions between climate change, air pollution and biological responses	Annual reports on progress in dynamic modelling	Joint Expert Group on Dynamic Modelling	covered by Sweden and the UK~~Italy~~
1.4	**Emission inventories**			
1.4.1	Compile reported emission data, import into the CEIP database. Evaluate timeliness and completeness, analyze emissions, projections and gridded data	Annual status reports to EMEP SB. Contribution to assessment report(s)	CEIP	covered by EMEP mandatory contributions ~~and Austria~~
1.4.2	Maintain and improve EMEP/CEIP database system and CEIP website. Adjust the database system according to new reporting requirements and reporting formats (WebDab, RepDab). Develop formats for presentation of emission data. Provide support to Parties and the general public by posting data in real-time.	Online access to updated information and instructions for reporting, reported data (Web/Dab), results of emission reviews and other relevant information	CEIP	covered by EMEP mandatory contributions ~~and Austria~~
1.4.3	Develop a long-term strategy for the review of emission	Annual status country reports,	CEIP	covered by EMEP

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
	data. Carry out annual quality control of submitted inventories by Parties to the Convention. Communicate the results to the Parties. Improve/develop new tests for emission checking	assessment country reports and CEIP/EEA inventory review report with summary information		mandatory contributions ~~and Austria~~
1.4.4	Manage centralized in-depth review process, including preparation of long term plan. Maintain the roster of inventory experts. Set up two review teams annually. Develop templates. Communicate with reviewed countries. Develop tools for reviewers and web space for communication and data exchange between teams	Annual centralised in-depth review of emission inventories. 10 country review reports with findings and recommendations	CEIP	covered by EMEP mandatory contributions ~~and Austria~~
1.4.5	Carry out compilation, quality assurance and quality control of reported gridded and Large Point Source data, make expert estimates for missing data. Make [annual][every 5 years] gridding of emission data for 13 pollutants and re-gridding for historical emissions	Annually updated web-based data sets of gridded data for 13 pollutants for use by modellers for current reported year plus update of selected years	CEIP	covered by EMEP mandatory contributions ~~and Austria~~
1.4.6	Harmonise the new EMEP gridding system with revised Common Reporting Format (CRF) 2015 under UNFCCC	Revised emission reporting templates as annexes to emission reporting guidelines. Updated RepDab	CEIP	covered by EMEP mandatory contributions ~~and Austria~~
1.4.7	Develop further the EMEP/EEA air pollutant emission inventory guidebook. Update the Maintenance and Improvement Plan for the Guidebook	Updated Maintenance and Improvement Plan. Updated chapters of the EMEP/EEA air pollutant emission inventory guidebook	TFEIP	subject to availability of resource (no estimate given)
	Develop guidance on compiling fine time-scale emissions inventories and pollutant speciation	Guidance chapters for inclusion in the EMEP/EEA air pollutant emission inventory guidebook	TFEIP	subject to availability of resource ($30,000)
1.4.8	Exchange information on national and international	Annual summary report to EMEP SB	CEIP,	covered by UK Finland

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
	activities on emission inventories and projections at annual Task Force meetings	with policy-relevant messages and recommendations	TFEIP	and EU
1.4.9	Training course on elaboration of the emission inventories for black carbon	Facilitated use of the EMEP/EEA handbook on emission inventories for black carbon and an increased quality of emission data for black carbon	CEIP TFEIP	covered by EMEP mandatory contributions
1.5	**Integrated assessment**			
1.5.1	Update and further develop the GAINS model with new information on emission data (the 2010 emission inventories), on emerging technologies (provided by TFTEI and TFRN), on ecosystem impacts, ozone fluxes and health impacts of NOx, and downscaling ammonia deposition to protected areas Interact with Parties (meetings, consultations, workshops) on input data to the GAINS model	Technical notes on: (i) downscaling ammonia deposition to protected areas; (ii) implementation of new information on ecosystems impacts; (iii) improved modelling of ozone fluxes and (i) implementation of health impacts of nitrogen dioxide.	CIAM	covered by EMEP mandatory contributions, Austria and International Institute for Applies Systems Analysis (IIASA)
1.5.1 bis	Training course for the Parties on input data to the GAINS model".	Facilitated use of the GAINS model by Parties	CIAM	covered by EMEP mandatory contributions
1.5.2	Analyse implications of EU policy proposals on air quality in the LRTAP region. Analyze effectiveness of hemispheric control strategies.	Two annual status reports to EMEP SB	CIAM	covered by EMEP mandatory contributions, Austria and IIASA
1.5.3	Increase informal scientific and technical cooperation on~~linkages with~~ global scale scenarios and issues (climate, nitrogen, energy, transport, food production) in cooperation with TFHTAP, IPCC,~~-~~ INI, TFRN UNEP and CCAC	Global emission scenarios. Technical notes on: (i) Cost-effectiveness analysis; (ii) Impact of changes in hemispheric ozone on cost-effective emission reductions	CIAM	covered by EMEP mandatory contributions, Austria and IIASA

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	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
		in Europe Emission scenarios for mercury		
1.5.4	Increase linkages with local scale air pollution and cost-effective local measures, including co-benefits (congestion, healthy lifestyles, reduced heat stress)	Technical notes on: (i)Downscaling of changes of long-range transboundary air pollution to hot spots (ii)Analysis of (cost-) effectiveness of local vs. national vs. international measures (iii)Alternative agricultural scenarios.	CIAM	covered by EMEP mandatory contributions, Austria and IIASA
1.5.5	Provide support to Parties and other scientific groups in line with the priorities of the Convention's long-term strategy	New annexes to Guidance documents on national nitrogen budgets Contribution to the updated handbook on emission inventories for black carbon Contribution to the Joint EMEP-WGE Assessment Report	CIAM i~~I~~n cooperation with TFRN, TFEIP and other bodies	covered by EMEP mandatory contributions, Austria and IIASA
1.5.6	Communicate and disseminate scientific developments, model and methodology improvements, data and products through the TFIAM website	Web access to datasets, models and results	CIAM	covered by EMEP mandatory contributions, Austria and IIASA
1.5.7	Exchange information on national and international integrated assessment activities at annual Task Force meetings	Annual summary report to EMEP SB and WGSR on activities and policy-relevant messages and recommendations	TFIAM	partially covered by Netherlands and Sweden; 10 000 for travel support to EECCA participants
1.5.8	Workshop on linking geographical scales	Report to TFIAM	TFIAM	host country to be determined (tbd)
1.5.9	Workshop on cost-effective	Report to TFIAM	TFIAM/TF	host country

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
	global strategies		HTAP	tbd
1.6	**Hemispheric transport of air pollution**			
1.6.1	Improve scientific understanding of the intercontinental transport of air pollution in the Northern Hemisphere through atmospheric modelling at spatial scales from regional to global	Ensemble of 2008-2010 global and regional modelling base and sensitivity simulations (2014). Report/publication on model-to-model and model-to-observation comparisons (2015)	TFHTAP	covered by the US, EU and in-kind contributions from national experts
1.6.2	Workshop on methods for assessing the health, ecosystem and climate impacts of regional and transported air pollution in cooperation with the WGE and similar expert groups from South and East Asia (2014)	Improved methods for assessing health, ecosystem and climate impacts due to air pollution in ECE and other regions	TFHTAP	covered by the US, EU and in-kind contributions from national experts
1.6.3	Evaluate the availability of mitigation strategies for air pollution in the Northern Hemisphere. Assess implications for health, ecosystem, and climate impacts	Report/publication on future emissions scenarios (2014) and associated impacts on air quality, deposition, health, ecosystems and climate (2015)	TFHTAP	covered by the US, EU and in-kind contributions from national experts
1.6.4	Analyze intercontinental transport of air pollution. Formulate policy-relevant messages~~ and recommendations.~~	Annual summary report to EMEP Steering Body with policy-relevant messages (2014-2015)	TFHTAP	covered by the US, EU and in-kind contributions from national experts
1.6.5	Update and further populate Hemispheric Transport of Air Pollution (HTAP)-OBS database in support of the needs of the TFHTAP	HTAP-OBS database	CCC	covered by EMEP mandatory contributions and Norway
1.6.6	Complete in 2014 and possibly revise in 2015 HTAP2 modelling database ~~phase II~~. Provide IT infrastructure to hold a harmonized HTAP modelling database; Provide free access to the database.	HTAP2 modelling database; new web access; IT tools for task force members	MSC-W	covered by EMEP mandatory contributions and Norway

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
1.7	**Adjustment procedure**			
1.7.1	Reviews applications for adjustments to emission reduction commitments or inventories and any supporting documentation submitted in accordance with Decision 2012/3, 2012/4 and 2012/12 by experts	Expert assessments submitted to the EMEP Steering Body	EMEP Steering Body/CEIP	Estimates to be provided by CEIP/TFEIP and covered by Parties applying for the adjustment procedure
1.7.2	Consider expert assessments of the applications for adjustments to emission inventories or commitments and make recommendations to the Executive Body	Recommendations to the EB	EMEP Steering Body	
1.7.3	Provide support to the implementation of the adjustment procedures under the Gothenburg Protocol as laid out in Decision 2012/3 and Decision 2012/12	Implementation of decision 2012/3, and decision 2012/12	Secretariat	- ~~tbd~~

2. Policy

15. In line with the priorities set out in the Long-term Strategy for the Convention, the policy related work in the period 2014-2015 will aim to foster the implementation of the Convention and its three most recent Protocols~~, the Protocol on Persistent Organic pollutants, the Protocol on Heavy Metals and the Gothenburg Protocol~~, and their recent amendments, throughout the ECE region, with a particular emphasis on the countries in Eastern Europe, the Caucasus and Central Asia as well as Southeast Europe. It will also aim to address ~~important policy priorities including~~ linkages with climate change, biodiversity and other cross-sectoral considerations, notably the linkages between nitrogen and human diet, water ecosystems, and biodiversity. Cooperation will be established and maintained with regional and global organizations addressing ~~pertinent~~ cross-sectoral issues such as biodiversity, ecosystems, agriculture, food and climate change. The implementation of the Convention's protocols will be strengthened through the exchange of information and good practices on policies, legislation and measures as well as technology. The development and dissemination of guidance documents and materials to increase the knowledge and awareness of BAT, as well as the exploration of new approaches and abatement measures, including the development of an integrated approach for controlling nitrogen pollution will further support the implementation of the protocols~~, notably those that were recently amended: Protocols on POPs, Heavy Metals and the Gothenburg Protocol~~.

Table 2

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
2.1	**Exchange of information and review/development of strategies and policies**			
2.1.1	Exchange information on national, sub-regional and regional policies and strategies for the control of major air pollutants, in accordance with article 8 of the Convention, including exchanging experiences and best practices on policies, strategies and measures to implement the Convention's Protocols and their amendments at sessions of WGSR. Provide a platform for sharing information on the challenges faced by countries in EECCA and SEE in the accession to the Convention's three recently amended Protocols and the implementation of their commitments	Collection and analysis of information on strategies and policies for air pollution abatement throughout the ECE region, presented to WGSR	secretariat	~~tbd~~30,000
		Recommendations to EB for further strengthening the ratification and implementation of the Convention's Protocols and amendments to them	Working Group on Strategies and Review	-
2.1.2	Organize high-level Meeting on Actions to Promote Improved Air Quality in the ECE countries of Eastern Europe, the Caucasus and Central Asia	Increased awareness among policy-makers in the EECCA region of the benefits of ratification and implementation of the Convention's protocols; strengthened commitment to actions for accession to the Protocols	Coordinating Group for EECCA, secretariat	110,000 (30,000 provided by the Russian Federation)
2.2	**Techno-economic issues**			
A.	**Development and promotion of Guidance documents**			
2.2.1	Workshop/event to promote awareness and understanding of the Guidance document on control techniques for emissions of sulphur, nitrogen oxides, volatile organic compounds and particulate matter (including PM10, PM2.5 and black carbon) from stationary sources, notably	Increased awareness of the control techniques for emissions from stationary sources in EECCA countries	Task Force on Techno-Economic Issues (TFTEI; proposed to be established by WGSR; yet to be approved by	15,000 in addition to partial coverage from contribution by France ~~tbd~~

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	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
	with EECCA countries in 2014		EB)	
2.2.2	Develop guidance document on control techniques for emissions of sulphur, nitrogen oxides (NOx), volatile organic compounds (VOCs) and dust (including PM10, PM2.5 and black carbon) from mobile sources and its translation into Russian	Draft guidance document incl. executive summary submitted for adoption by the EB	TFTEI	~~tbd~~ 47,000 in addition to partial coverage from contribution by France and European Commission
2.2.3	Workshop in 2015 to promote awareness and understanding of the Guidance document on control techniques for emissions of sulphur, nitrogen oxides (NOx), volatile organic compounds (VOCs) and dust (including PM10, PM2.5 and black carbon) from mobile sources"	Increased awareness of the control techniques for emissions from mobile sources in EECCA countries. The responsible body should be TFTEI with resources to be determined	TFTEI	~~[~~15,000 (indicative)
2.2.4	Workshop in 2014 to promote the application of the Guidance Document on best available techniques for controlling emissions of heavy metals and their compounds	Increased capacity to apply BAT to implement the Protocol on Heavy Metals	Task Force on Heavy Metals (2014)	covered from contribution by Norway ~~tbd]~~and Germany
2.2.5	Workshop in 2015 to promote the application of the Guidance Document on best available techniques for controlling emissions of POPs	Increased capacity to apply BAT to implement the Protocol on POPs	TFTEI	15,000
B.	**Collection and analysis of data, further development of methodologies**			
2.2.6~~4~~	Develop a techno-economic tool as evolution of the methodologies for evaluating costs in the Large Combustion Plants (LCPs) Sector~~Develop a techno-economic tool as evolution of the ECODAT database and methodologies for evaluating costs in~~	Availability of tools for estimating the costs of implementing BAT and the Protocols' requirements in different sectors	TFTEI	~~[~~covered by France [and Italy] ~~and Italy]~~

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	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
	~~different sectors~~			
2.2.7~~5~~	Analyse the available Gothenburg GAINS scenarios to estimate the technical upgrade to be implemented by EECCA countries to comply with the Gothenburg Protocol. Organize workshop/ bilateral consultations for verification of the analysis and estimates with EECCA	Analyses/estimates of the technical upgrade needed for compliance by EECCA countries with the Gothenburg Protocol verified with the countries	TFTEI	8,000 in addition to partial coverage from contribution by Italy~~tbd~~
2.2.8~~6~~	Collect and provide up-to-date data for cost modelling for BAT; conduct workshop with IIASA experts as necessary	Updated data for electricity production and iron and steel sectors provided to CIAM for inclusion in GAINS; Updated cost data for BAT reference documents for selected sectors (e.g. electricity)	TFTEI	covered by France~~tbd~~
2.2.9~~7~~	Examine costs and benefits of ammonia emission abatement measures to improve the understanding of health climate and environment related linkages for nitrogen	Cost data on the effectiveness of ammonia emission abatement measures provided to CIAM	TFRN	~~Tbd~~covered by UK
2.2.10~~8~~	Annual Task Force meetings to exchange information on techno-economic issues and network	Meeting reports to WGSR with policy-relevant messages and recommendations	TFTEI	8,000 (travel) in addition to partial coverage from contribution by France and Italy ~~covered by France and Italy~~
2.2.11~~9~~	Explore abatement techniques for further reducing heavy metals emissions[1]	Report to WGSR	TFTEI as of 2015	covered by France~~tbd~~

[1] Requires the provision of relevant experts.

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	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
2.2.12~~0~~	Explore the new approaches and abatement techniques for further reducing POPs emissions	Report to WGSR	TFTEI as of 2015	30,000
2.2.13	Serve as a regional clearinghouse of control technology information for primary emissions of NOx, SO2, VOC and PM, including SLCPs, heavy metals and POPs ~~and make this information publicly available~~	Public availability of information on for primary emissions of NOx, SO2, VOC and PM, including SLCPs, heavy metals and POPs	TFTEI	covered by France~~tbd~~
2.3	**Nitrogen**			
A.	**Development and promotion of Guidance and reference documents**			
2.3.1	Prepare the publication on ammonia emission~~s~~ mitigation and disseminate	Publication on Guidance document on Preventing and Abating Ammonia Emissions from Agricultural Sources	TFRN	~~Tbd~~covered by UK
2.3.2	Prepare and disseminate the publication on nitrogen budgets with its annexes. Organize workshop to improve awareness and understanding	Publication on Guidance Document on national nitrogen budgets; Improved understand of national nitrogen budgets	TFRN	25,000 (workshop) in addition of coverage of publication by the UK ~~tbd~~
2.3.3	Update the ECE Framework Code for Good Agricultural Practice for Reducing Ammonia, including taking account of the relevant EU Best Available Techniques Reference BREF documents	Executive Summary with key messages and update submitted to EB in 2014, extended version of publication available in 2015	TFRN	Covered by UK, Denmark Canada, Czech Republic and Germany ~~tbd~~
B.	**Development and refinement methodologies and new approaches**			
2.3.4	Develop multi-pollutant approaches. Organize	Draft report on integrated	TFRN	25,000 (workshop

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	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
	workshop.	approaches for nitrogen emission abatement policy		in addition to coverage of development of document by UK, Denmark and in-kind contribution by authors~~tbd~~
2.3.5	Continue to provide technical information on making and using nitrogen budgets and estimating nitrogen emissions	Draft indicators submitted to the EB in 2015;	TFRN	Covered by UK with support from CIAM~~tbd~~
		Framework for establishing nitrogen budgets, nitrogen compounds and nitrogen use efficiency submitted to EMEP		
2.3.6	Collect and assess information from national focal points regarding their experiences, in developing and implementing an integrated approach at Task Force meetings and workshop(s) on implementation of Gothenburg Protocol, in partnership with other regional nitrogen organizations	Workshop and annual Task Force reports to WGSR with policy-relevant messages and recommendations	TFRN	50,000 (EECCA attendance and workshop) and addition to partial coverage from contribution by the UK and Denmark ~~partially covered from contribution by UK~~
C.	**Outreach to other communities, regions and cooperation with other organizations**			

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	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
	~~Develop and apply indicators of biodiversity targets in cooperation with the Convention on Biological Diversity and the International Nitrogen Initiative~~	~~Nitrogen indicators in relation to biodiversity provided to the CBD for inclusion in Aichi target monitoring process~~	~~TFRN~~	~~[covered by contribution from GEF]~~[2]
2.3.7				
~~2.3.8~~	International framework for nitrogen management linking CLRTAP activities with other conventions at a global scale.~~Develop nitrogen indicators and mitigation techniques (in the context of sustainable production)~~ including~~and~~ understanding of linkages of air, water, climate and biodiversity targets in liaison with the UNEP Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) and the Global Partnership on Nutrient Management	Input to the implementation of a global research programme of the nutrient cycle, in cooperation with the GPA, setting ECE analysis into the global context	TFRN	[covered by contribution from GEF][3]
2.3.8	Develop and apply indicators of biodiversity targets in cooperation with the Convention on Biological Diversity and the International Nitrogen Initiative	Nitrogen indicators in relation to biodiversity provided to the CBD for inclusion in Aichi target monitoring process	TFRN	[covered by contribution from GEF][3]
2.3.9	Provide nitrogen-use indicators (e.g. nitrogen use efficiency) related to multiple indicators of environmental quality including water quality	Nitrogen use indicators for selected transboundary water basins, provided as a	TFRN	[covered by contribution from GEF][3]

~~[2] Subject to funding availability.~~

[3] Subject to funding availability.

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	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
		contribution to the study on the water-food-energy-ecosystem nexus prepared in framework of ECE Water Convention~~]~~		
2.3.10	Provide technical information on the effects of human diets on nitrogen use and emissions	European Nitrogen Assessment special report on the relationship of human diet, the nitrogen cycle and environmental impacts in 2014	TFRN	Partially covered from contribution by the UK, in addition to in-kind contribution from the Netherlands and other authors~~tbd~~

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3. Compliance

16. In accordance with the Long-term strategy "the work of the Implementation Committee will be given a very high priority and the compliance mechanism will be improved" (LTS para 16 b). Any submission or referral made under paragraph 3 (b) of the Implementation Committee's functions (ECE/EB.AIR/53, annex III, annex) will be dealt with as a priority. In this regard, the Committee will continue to review the progress made by the Parties in response to decisions taken by the Executive Body based upon the Committee's recommendations, as well as the need for possible additional measures for dealing with non-compliance on a case-by-case basis. The secretariat will, in line its enhanced role as per Executive Body Decision 2012/25 "when it becomes aware of possible non-compliance by a Party with any of its obligations, (…) promptly request the Party concerned to furnish necessary information about the matter. If there is no response or the matter is not resolved within three months or such longer period as the circumstances of the matter may require, the secretariat shall bring the matter to the attention of the Committee" (para 5, Decision 2012/25, ECE/EB.AIR/113/Add.1). On the basis of information provided by the secretariat, the Committee will evaluate the reporting by Parties on their emission data. The Committee will continue its dialogue with appropriate bodies and experts, with a focus on improving communication with the technical bodies under the Convention.

Table 3

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
3.1	**Review of compliance by Parties with their obligations under the Protocols to the Convention**			

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	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
3.1.1	Review compliance with reporting obligations: periodic review of compliance with Parties' reporting obligations, based on emission data submitted to EMEP and available in the emission database WEBDAB	Overview of national inventory data for each of the 7 Protocols; Draft trend tables with emissions data per pollutant submitted to the secretariat; Revised data/tables upon request	CEIP	covered by EMEP mandatory contributions
		Notes on reporting obligations submitted to IC twice a year; Draft recommendations on reporting for consideration by IC	secretariat	covered from contribution by Norway
		Review of information submitted by the secretariat; Recommendations submitted to the EB	IC	
3.1.2	Consider submissions and referrals: consideration of any submission or referral of possible non-compliance by an individual Party with any of its obligations under a given Protocol.	Emission data tables and updates provided to the secretariat	CEIP	covered by EMEP mandatory contributions
		Analysis of information provided by CEIP; Communication with Parties in potential non-compliance; Referrals; Note on emission exceedances by Parties; Overview of communications with Parties submitted to the IC twice a year; Correspondence with Parties	secretariat	covered from contribution by Norway
		Submissions and referrals by the secretariat reviewed at 2 annual meetings; decisions on additional information to be requested from Parties in potential non-compliance; Recommendations on	IC	

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	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
		non-compliance submitted to the EB		
	Review recommendations contained in IC report	Decisions on non-compliance	EB	-
3.2	**In-depth reviews of specific obligations**			
3.2.1	Carry out in-depth reviews of specified obligations in an individual protocol at the request of the Executive Body	Report to the EB	IC	
3.2.2	Support to in-depth reviews	Review documentation provided to IC	secretariat/ consultancy	15,000 (indicative)
~~3.3~~	**~~Systemic issues of non-compliance~~**			
~~3.3.1~~	~~Consider systemic issues of non-compliance that have been identified in the course of the work on compliance~~	~~Background paper on systemic issues on non-compliance submitted to the EB~~	~~IC~~	

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4. Capacity building to promote ratification and implementation in Eastern Europe, the Caucasus, Central Asia and Southeast Europe

17. A viable future for the Convention depends upon positive and vigorous participation by the Parties in all parts of the region, an on ensuring its extensive geographical coverage. Capacity building measures and activities will be aimed to achieve increased ratification and implementation of and compliance with the three Protocols and "more active involvement of a greater number of Parties in the work of the Executive Body and the subsidiary bodies, including in the work of their bureaux, as well as in the technical and scientific groups" (para 17 (a) and 16(a, n) of the Long-term Strategy). The activities will also support the implementation of the revised Action Plan for Eastern Europe, the Caucasus and Central Asia (ECE/EB.AIR/WG.5/2007/17). They will also aim to further raise the political profile of the Convention in the region of South-Eastern Europe, Eastern Europe, the Caucasus and Central Asia; to raise awareness among decision-makers of those countries on environmental and health effects of air pollution, pollution abatement measures and their high benefit-to-cost ratio.

Table 4

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
4.1	Promote ratification of the Convention and its EMEP Protocol, the Protocol on POPs, the Protocol on Heavy Metals and the Gothenburg Protocol through workshops and advisory services to support the development of National Action Plans for ratification and implementation of the Convention's protocols, cost benefit analysis for ratification and implementation and identification of emission reduction targets and base year emission levels	National Action Plans in countries of Central Asia	secretariat	300,000 (indicative) Partially covered from contribution by the EU, Switzerland and Norway
		Cost and benefits analyses	secretariat	50,000 (indicative) Partially covered from contribution by the EU and Norway
		Setting of emission reduction targets and base year emission levels for countries in the region	secretariat	50,000 (indicative) Partially covered from contribution by the EU and Norway
4.2.	Increase cooperation and information exchange between the countries and the EMEP scientific centres to expand emission inventories, monitoring and modelling activities in the region	Collection, processing and reporting of monitoring data in accordance with the EMEP monitoring strategy	secretariat, EMEP centres	100,000 (indicative) Partially covered from contribution by the EU, Norway and Switzerland
		Emission inventories developed in EECCA countries in accordance with the Emission Reporting Guidelines and the EMEP/EEA Emission Guidebook	secretariat, EMEP centres	50,000 (indicative) Partially covered from contribution by the EU, Norway and Switzerland
4.3	Strengthen the participation of South-Eastern Europe,	Participation of representatives of	secretariat	300,000 (indicative)

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
	Eastern Europe, the Caucasus and Central Asia in the work of the Executive Body and its subsidiary bodies by providing travel support	countries with economies in transition in the sessions of the EB, its subsidiary bodies and other relevant meetings		Partially covered from contribution by the EU, Norway and Switzerland
4.4	Support the countries in Eastern Europe, the Caucasus and Central Asia in implementing the Gothenburg Protocol through a workshop on application of low emission approaches	Approaches for managing reactive nitrogen in industry and agriculture developed in the context of local conditions; barriers to improved implementation identified	TFRN	[covered by contribution from GEF][3] ~~tbd~~
4.5	Workshop on the transboundary transport of heavy metals and POPs in EECCA countries	Information to support ratification and implementation of the protocols on POPs and heavy metals	MSC-E	covered by EMEP mandatory contributions
4.6	Workshop on critical loads, critical levels and mapping	Increased capacity in EECCA/SEE countries to estimate exceedances of critical loads and levels and damage to ecosystems from air pollution	ICP Modelling and Mapping	40,000 (indicative)

5. Communication and outreach

18. Communication activities will be undertaken to highlights the work and benefits of the Convention. "The bodies under the Convention should also actively contribute to an extensive and user-friendly communication strategy and system that highlights the work and benefits of the Convention. This communication strategy will in particular help to increase the visibility of the Convention and raise political awareness of pollution issues in countries of Eastern Europe, the Caucasus and Central Asia and South-Eastern Europe" (para 16k). Outreach activities will be undertaken to maintain the visibility of the Convention on the international scene, to foster cooperation between regional agreements around the world, and ~~also~~ as a bridge between regional and global action. Cooperation with other regions and fora on intercontinental air pollution issues will be pursued.~~Enlarged cooperation at strategic policy level with other regions and the global community on intercontinental air pollution issues will be actively pursued.~~

Table 5

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
5.1	Raise public awareness of the Convention throughout the ECE region and beyond through press releases, publication of leaflets, articles and other materials as necessary; Disseminate relevant information provided by the Convention's scientific bodies; Manage ECE website as the main channel for communication to the public	Increased availability of communication materials and increased public awareness about the Convention, availability of information on air pollution issues in a user-friendly manner on the website	secretariat	
5.2	Raise awareness on air pollution, its environmental and health effects, as well as on abatement measures, the Convention and its protocols among the countries of EECCA through translation of relevant documentation and communication materials in Russian, and the further development and maintenance of the website in Russian as relevant	Availability of information materials in Russian; increased awareness of the Convention in EECCA countries	secretariat	60,000 (indicative) Partially covered from contribution by the EU, Norway and Switzerland
5.3	Maintain contacts and foster linkages, as relevant, with other regional and global organizations in particular those addressing issues of importance for air quality (WHO, WMO, UNEP, UNFCCC, IMO, Stockholm Convention, CBD, the Arctic Council, the EANET, the Malé Declaration); Help develop ~~i~~ links for collaboration and sharing of data and information	Coordinated approach and synergies in addressing air pollutants, cooperation with other international organizations, formal or informal, leading to improved understanding, information or data exchange	secretariat	~~tbd~~15,000 (travel)
5.4	Reach out to other regions through participation in key regional and international events and processes, including the Global Atmospheric Pollution Forum, to raise awareness and foster cooperation ~~Reach out to other regions through participation in key regional and international events and processes; use of regional and international cooperation~~	Improved awareness of the Convention's role in addressing regional air pollutants and lessons from that experience that could be used by international efforts in other regions or contexts~~Improved awareness of the~~	secretariat	15,000 (travel)~~tbd~~

	Activity description/objective	*Expected outcome/deliverable*	*~~Main responsible body~~Lead body*	*Resource requirements (in US$)*
	~~arrangements, including the Global Atmospheric Pollution Forum, to raise interest in the Convention, support to relevant events organized by others~~	~~Convention's role in addressing regional and global air pollutants incl. black carbon and tropospheric ozone; contribution to governance of air quality at global level~~		
5.5	Promote awareness of the Convention and foster linkages, as relevant, with other ECE multilateral environmental agreements and programmes, incl. environmental policy, transport, sustainable energy, housing and land management, forestry	Improved awareness by other ECE programmes about the Convention and the linkages between air pollution and relevant cross-sectoral issues	secretariat	