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EXECUTIVE BODY FOR THE CONVENTION ON
LONG-RANGE TRANSBOUNDARY AIR POLLUTION

Working Group on Effects
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FUNDING OF THE EFFECT-ORIENTED ACTIVITIES

Note prepared by the Bureau of the Working Group on Effects
in collaboration with the secretariat

Introduction

1. At its twenty-first session, the Executive Body for the Convention reminded Parties of its decision 2002/1 on the financing of core activities (ECE/EB.AIR/77/Add.1, annex I). It took note of the contributions made to the core activities' Trust Fund in 2003, both those in cash and in kind made directly to programme centres, and welcomed the payments for earlier years.
2. In particular, the Executive Body requested the secretariat to inform Parties of their recommended contributions to meet the 2004 budget, inviting them to make contributions as agreed in decision 2002/1. It also urged all Parties which had not yet done so to consider providing voluntary contributions to the Trust Fund for financing core activities without undue delay. Furthermore, it noted with appreciation the essential support provided to the Convention and its bodies by lead countries, countries hosting coordinating centres and those organizing meetings, as well as countries that funded activities of their national focal centres/points and the active participation of national experts.

Documents prepared under the auspices or at the request of the Executive Body for the Convention on Long-range Transboundary Air Pollution for GENERAL circulation should be considered provisional unless APPROVED by the Executive Body.

3. In keeping with decision 2002/1, the Executive Body decided to adopt, for the core activities not funded by EMEP, a budget for 2004 of US\$ 2,085,750 (EB.AIR/2003/5, table 7) and a provisional budget for 2005 and 2006 of US\$ 2,152,700. The contributions made to the Trust Fund and the use of those contributions are summarized in chapters I and II below.

4. The Bureau of the Working Group on Effects has prepared a detailed draft budget for the costs of core activities in 2005 (table 1) and suggested a provisional budget for 2006 and 2007 of US\$ 2,152,700. It has drawn up for approval by the Working Group the international coordination priorities of the effect-oriented activities for 2004/2005 (see chap. III below).

I. VOLUNTARY CASH CONTRIBUTIONS TO THE TRUST FUND IN 2003 AND 2004

5. The voluntary cash contributions towards partially financing the essential coordination of the effect-oriented activities paid to the Trust Fund in 2003 and 2004 (as of 15 June 2004) are presented in tables 2 and 3, respectively. In addition to the cash contributions earmarked for individual programmes, the tables show in the column "EOA-GEN" the non-earmarked cash contributions for the effect-oriented activities, in the column "CIAM" the contributions allocated to the Centre for Integrated Assessment Modelling, in the column "T. contr." the total contributions from individual countries to the Trust Fund for the year, in the column "PYC" the past years' contributions during the year, and in the column "Rec.contr." the recommended contributions from individual countries to the Trust Fund for the year.

6. The Extended Bureau decided at its meeting in March 2004 to recommend showing the contributions in cash and in kind in separate tables. In accordance with this decision, the voluntary contributions in kind towards partially financing the essential coordination of the effect-oriented activities paid to the Trust Fund in 2003 are presented in table 4. No contributions in kind were recorded for 2004 (as of 15 June 2004).

7. In addition to the voluntary contributions in cash and in kind shown in tables 2, 3 and 4, and to the substantial contributions made by the lead countries of the programmes and by the countries hosting the programme centres directly to the centres, a number of Parties also provided additional support to the effect-oriented activities by hosting task force meetings, workshops and/or expert meetings.

II. USE OF VOLUNTARY CASH CONTRIBUTIONS IN 2003 AND 2004

8. The use of earmarked and non-earmarked cash contributions in 2000, 2001, 2002, 2003 and 2004 (as of 15 June 2004) is presented in table 5. The non-earmarked cash contributions to the Trust Fund enabled significant amounts, compared to earlier years, to be used in 2004 for supporting the activities not covered by the EMEP Protocol. The line "Substantive reporting" represents (i) funds provided in 2001 to the programmes as partial compensation for the expenses that they previously incurred while preparing the report on Trends in the Impacts of Long-range Transboundary Air Pollution; (ii) funds provided in 2003 to cover the costs of a consultant's assistance in preparing the draft of the 2004 substantive report on the review and assessment of air pollution effects and their recorded trends; and (iii) funds provided in 2004 to cover the costs of a consultant's assistance in finalizing the 2004 substantive report.

9. As in previous years, the basis for the use of voluntary cash contributions to the Trust Fund was provided by formal contracts. They were drawn up for performing specified tasks (approved by the Bureau of the Working Group) within a given time period and concluded between UNECE and the institutes nominated as the programme (coordinating) centres for the International Cooperative Programmes (ICPs) and the Centre for Work on the Health Effects of Air Pollution. The main tasks included in these contracts in 2003/2004 are listed below. In addition to these tasks, all programme centres provided updates of their contributions to the 2004 substantive report in this period.

10. The tasks for the Programme Coordinating Centre for ICP on Assessment and Monitoring of Air Pollution Effects on Forests (ICP Forests) at the Federal Research Centre for Forestry and Forest Products, Hamburg, Germany, were to:

(a) Continue to carry out the functions of the Programme Coordinating Centre for ICP Forests to provide information on changes in forests under actual environmental conditions (in particular air pollution, including acidifying and eutrophying deposition, as well as other stresses), and with new knowledge on cause-effect relationships;

(b) Continue with activities related to international cross-calibration courses on crown condition assessment; evaluate and upscale results from level II to level I data; to present 2004 results on its web site;

(c) Calculate and map deposition based on measurements at 500 intensive monitoring plots;

(d) Prepare a plan for further evaluation of relationships between depositions, tree growth and crown condition, as well as of the calculations of critical loads and of dynamic modelling;

- (e) Prepare a contribution on the assessment of spatial and temporal variation of sulphur and nitrogen depositions at intensive monitoring plots to the technical report on forest condition in Europe;
- (f) Prepare and publish the technical report on forest condition in Europe in 2004;
- (g) Draft a report on the assessment of ambient air quality, in particular ozone concentrations, and of ozone injury in forests;
- (h) Update the methodological manual of ICP Forests;
- (i) Document the results of the further assessment of ground vegetation in forests;
- (j) Coordinate intercalibration courses and laboratory intercomparisons to ensure data quality;
- (k) Prepare a 10-page executive report on forest condition in Europe, to be submitted to the Working Group on Effects at its twenty-third session.

11. The tasks for the Programme Centre for ICP on Assessment and Monitoring of Acidification of Rivers and Lakes (ICP Waters) at the Norwegian Institute for Water Research, Oslo, were to:

- (a) Continue to carry out the functions of the Programme Centre for ICP Waters to provide information on the state of surface water ecosystems and their long-term changes, with respect to the regional variation and impact of selected air pollutants, and including effects on biota;
- (b) Collect and process 2002 data, and to continue management of the ICP Waters database; draft a report on the in-depth evaluation of biological recovery; continue chemical intercalibration activities, including heavy metals; continue biological intercalibration activities; maintain the ICP Waters Internet home page;
- (c) Organize and carry out chemical intercomparison and biological intercalibration;
- (d) Prepare a manuscript on trends in surface water chemistry and links to biological recovery;
- (e) Prepare a progress report on biological dynamic modelling;
- (f) Prepare a draft assessment report on persistent organic pollutants (POPs) in biota in surface waters;
- (g) Prepare an eight-page report on biological recovery at ICP Waters sites, to be submitted to the Working Group on Effects at its twenty-third session.

12. The tasks for the Main Research Centre for ICP on Effects of Air Pollution on Materials, including Historic and Cultural Monuments, at the Swedish Corrosion Institute, Stockholm, were to:

(a) Continue to carry out the functions of the Main Research Centre for ICP Materials to provide quantification of the multi-pollutant effects on the corrosion of selected materials under different environmental conditions;

(b) Prepare a draft report on developing dose-response functions based on the results of the multi-pollutant and multi-assess projects;

(c) Draft a report on the plan for the new network of tet sites and the programme for trend exposure;

(d) Prepare a six-page report on the recent corrosion trends and measurements of particulates and HNO₃ for the multi-pollutant programme, to be submitted to the Working Group on Effects at its twenty-third session.

13. The tasks for the Programme Coordination Centre for ICP on Effects of Air Pollution on Natural Vegetation and Crops (ICP Vegetation) at the Centre for Ecology and Hydrology, Bangor Research Unit, Bangor, United Kingdom, were to:

(a) Continue to carry out the functions of the Programme Coordination Centre for ICP Vegetation to provide information on the effects of air pollutants (in particular ozone) and other stresses on natural vegetation and crops;

(b) Prepare the report on the analysis of factors influencing the concentrations of heavy metals in mosses;

(c) Prepare the contribution to the ICP Vegetation Annual Report 2004 on the analysis of ICP Vegetation clover biomonitoring data (1996-2002);

(d) Prepare a scientific paper on predicting the impacts of ambient ozone on crop production in Europe in 2010;

(e) Prepare an eight-page report on the scientific background to the revised critical levels for ozone, to be submitted to the Working Group on Effects at its twenty-third session.

14. The tasks for the Programme Centre for ICP on Integrated Monitoring of Air Pollution Effects on Ecosystems (ICP Integrated Monitoring) at the Finnish Environment Institute, Helsinki, were to:

(a) Continue to carry out the functions of the Programme Centre for ICP Integrated Monitoring to provide information on the observed and predicted state of ecosystems and their long-term changes with respect to the regional variation and impact of selected air pollutants;

(b) Prepare the final manuscript of a scientific paper on proton budgets at ICP Integrated Monitoring sites;

(c) Prepare for publication the thirteenth Annual Report 2004 of ICP Integrated Monitoring;

(d) Prepare a four-page report on heavy metal and nitrogen studies at ICP Integrated Monitoring sites, to be submitted to the Working Group on Effects at its twenty-third session.

14. The tasks for the Coordinating Center for Effects for ICP on Modelling and Mapping of Critical Levels and Loads and Air Pollution Effects, Risks and Trends (ICP Modelling and Mapping) at the National Institute for Public Health and the Environment, Bilthoven, Netherlands, were to:

- (a) Continue to carry out the functions of the Coordination Center for Effects for ICP Modelling and Mapping to provide scientific and technical support by developing methods and models for calculating critical loads and levels and for applying other effect-based approaches, producing maps of critical loads and levels and their exceedances, and other risk parameters related to potential damage and recovery;
- (b) Prepare the training session on dynamic modelling in Prague, 13-15 October 2003;
- (c) Prepare a new call for critical loads and dynamic modelling data to national focal centres envisaged at the end of October 2003;
- (d) Process the results of the 2004 call for data on critical loads;
- (e) Produce a 2004 status report on these results, including the national focal centre reports;
- (f) Prepare a seven-page report on the data for the update of the critical loads database and its extension to dynamic modelling variables, to be submitted to the Working Group on Effects at its twenty-third session.

15. The tasks for the Centre for Work on the Health Effects of Air Pollution for the joint Task Force on the Health Aspects of Air Pollution of World Health Organization's (WHO) European Centre for Environment and Health (ECEH) (Task Force on Health) and the Executive Body at the WHO/ECEH, Bonn, Germany, were to:

- (a) Plan and implement the activities of the Task Force on Health to provide collated and assessed data and available knowledge on the health effects of long-range transboundary air pollution;
- (b) Prepare a preliminary report on the health effects of exposure to particulate matter from long-range transboundary air pollution;
- (c) Draft a report on the analysis of health impacts of ozone from long-range transboundary air pollution;
- (d) Prepare an eight-page report on the modelling and assessment of health impacts of particulate matter and ozone from long-range transboundary air pollution, to be submitted to the Working Group on Effects at its twenty-third session.

**III. PRIORITY TASKS FOR 2004/2005
(TO BE PARTIALLY FINANCED BY THE TRUST FUND)**

16. ICP Forests:

- (a) Continue to carry out the functions of the Programme Coordinating Centre;
- (b) Ensure the continuation of large-scale crown condition assessment (level I) and intensive monitoring (level II);
- (c) Assessment of critical loads (with ICP Modelling and Mapping and the United States Department of Agriculture's Forest Service);
- (d) Further development of data management and evaluation strategy.

17. ICP Waters:

- (a) Continue to carry out the functions of the Programme Centre;
- (b) Update critical loads of surface waters at monitoring sites;
- (c) Trends and links to chemistry in biological recovery;
- (d) Assessment of persistent organic pollutants (POPs) in aquatic biota.

18. ICP Materials:

- (a) Continue to carry out the functions of the Main Research Centre;
- (b) Statistical evaluation of results from the multi-pollutant exposure programme;
- (c) Apply programme results for mapping areas with an increased risk of corrosion;
- (d) Threshold levels for the effects of particulate matter on materials.

19. ICP Vegetation:

- (a) Continue to carry out the functions of the Programme Coordination Centre;
- (b) Analyse the extent and trends of ozone damage to vegetation (crops and (semi-) natural vegetation);
- (c) Study interactive impacts of ozone and nitrogen on crops and (semi-) natural vegetation;
- (d) Monitor the deposition of heavy metals using (semi-) natural vegetation and mosses, including preparing for and conducting the "European heavy metals in mosses survey".

20. ICP Integrated Monitoring:

- (a) Continue to carry out the functions of the Programme Centre;
- (b) Prepare a report/paper on observed trends in sulphur and nitrogen fluxes;

(c) Estimation of cumulative nitrogen deposition and its effects (with the Coordination Centre for Effects);

(d) Calculation of critical loads using monitoring site data.

21. ICP Modelling and Mapping:

(a) Continue to carry out the functions of the Coordination Center for Effects;

(b) First results of large-scale dynamic modelling related to acidification and nutrient nitrogen;

(c) Further development of risk assessment methodologies and robustness assessment;

(d) Evaluation and harmonization of ecosystem data, including base cation deposition and land cover maps (with all ICPs, EMEP and other organizations).

22. Task Force on Health:

(a) Continue to coordinate the activities on the assessment of the possible health effects and dose-response relationships for selected air pollutants;

(b) Develop a methodology to include morbidity estimates in quantification of health impacts of particulate matter and ozone;

(c) Review new scientific findings allowing improved assessment of health risk of heavy metals from long-range transboundary air pollution;

(d) Support the health risk assessment of (new) POPs considered by the Working Group on Strategies and Review.

Table 1.
2005 ESSENTIAL COORDINATION COSTS FOR CORE ACTIVITIES NOT FUNDED THROUGH THE EMEP PROTOCOL
(in thousands of United States dollars)

Activities	ICP Forests; PCC	ICP Waters; PC	ICP Materials; PMRC	ICP Vegetation PCC	ICP Integrated Monitoring; PC	ICP Modelling and Mapping; CCE	TF Health Aspects	CIAM ^{1/}	Subtotal Activities
Monitoring and assessment	140	60	70	30	75				375
Dose-response		60	75	75	40				250
Critical loads and levels	45	35	70	55	30	135			370
Dynamic modelling	35	40	35	20	80	140			350
Database management	85	65	60	70	75	35			390
Total ICPs, TF and CIAM	305	260	310	250	300	310	115	240	2090^{2/}

^{1/} Centre for Integrated Assessment Modelling: International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria.

^{2/} Subject to 3% programme support costs, i.e. US\$ 62,700.

Table 2. 2003 voluntary cash contributions towards financing the core activities under the Convention (in US\$)

	ICP F	ICP W	ICP M	ICP V	ICP IM	ICP M&M	TF H	EOA-GEN	CIAM	T.contr.	PYC	Rec.contr.
Armenia												93
Austria	2,360									2,360		44,186
Azerbaijan												187
Belarus												887
Belgium								46,093	6,585	52,678	132,774	52,678
Bosnia and Herzegovina								164	23	187		187
Bulgaria								531	76	607		607
Canada								12,477	1,782	14,259		
Croatia	202							1,593	228	2,022		1,820
Cyprus								875	125	1,000		1,773
Czech Republic	1,500							8,288	1,184	10,972		9,472
Denmark								30,579	4,368	34,947		34,947
Estonia	262							409	58	729		467
Finland	1,585									1,585		24,356
France												301,695
Georgia												233
Germany	27,705									27,705		455,808
Greece	1,475									1,475		25,149
Hungary	675							4,666	667	6,007		5,599
Iceland												1,540
Ireland								12,003	1,715	13,718		13,718
Italy												236,314
Kazakhstan												1,306
Kyrgyzstan												47
Latvia												467
Liechtenstein	80									80		280
Lithuania								676	97	773		793
Luxembourg	130									130		3,733
Malta												700
Monaco								164	23	187	182	187
Netherlands												81,093
Norway	1,695	30,116								31,811		30,141
Poland	2,115									2,115		17,637
Portugal	450									450		21,556
Republic of Moldova												93
Romania	555									555		2,706
Russian Federation												55,990
Serbia and Montenegro												933
Slovakia	770							2,464	352	3,586		2,006
Slovenia								3,307	472	3,779		3,779
Spain								17,500	2,500	20,000		117,521
Sweden	3,970									3,970	3,970	47,907
Switzerland	3,365							35,295	5,042	43,702		59,443
The FYR of Macedonia												280
Turkey												20,530
Ukraine												2,473
United Kingdom												258,302
United States								8,750	1,250	10,000		
European Community											67,478	66,883
TOTAL CONTR.	48,894	30,116						185,832	26,547	291,389	204,404	2,008,500

Table 3. 2004 voluntary cash contributions towards financing the core activities under the Convention (in US\$) (as recorded on 15 June 2004)

	ICP F	ICP W	ICP M	ICP V	ICP IM	ICP M&M	TF H	EOA-GEN	CIAM	T.contr.	PYC	Rec.contr.
Armenia												97
Austria								36,576	5,225	41,801		45,885
Azerbaijan												194
Belarus												921
Belgium												54,704
Bosnia and Herzegovina												194
Bulgaria												630
Canada								33,513	4,788	38,300		
Croatia												1,890
Cyprus												1,841
Czech Republic								8,607	1,230	9,836		9,836
Denmark												36,291
Estonia												485
Finland												25,293
France	17,985									17,985		313,298
Georgia												242
Germany												473,339
Greece												26,116
Hungary												5,814
Iceland								1,377	197	1,574		1,599
Ireland												14,245
Italy												245,403
Kazakhstan												1,357
Kyrgyzstan												48
Latvia								438	63	500		485
Liechtenstein												291
Lithuania												824
Luxembourg												3,876
Malta												727
Monaco								166	24	189		194
Netherlands												84,212
Norway		31,116						27,978	3,997	63,091		31,301
Poland												18,315
Portugal												22,385
Republic of Moldova												97
Romania												2,810
Russian Federation												58,144
Serbia and Montenegro												969
Slovakia								1,823	260	2,083		2,083
Slovenia												3,925
Spain												122,041
Sweden												49,749
Switzerland												61,729
The FYR of Macedonia												291
Turkey												21,319
Ukraine												2,568
United Kingdom												268,237
United States												
European Community												69,455
TOTAL CONTR.	17,985	31,116						110,476	15,782	175,359		2,085,750

Table 4. 2003 voluntary contributions in kind towards financing the core activities under the Convention (in US\$) (as of 15 June 2004)

	ICP Materials	ICP Vegetation	ICP Integrated Monitoring	ICP Modelling and Mapping	Task Force on Health	TOTAL CONTRIBU- TION
Netherlands				81,093		81,093
Sweden	105,402		19,763			125,165
Switzerland					18,096	18,096
United Kingdom		209,677	16,129			225,806
TOTAL	105,402	209,677	35,892	81,093	18,096	450,160

Table 5. Use of voluntary cash contributions to partially fund the effect-oriented activities in 2000, 2001, 2002, 2003 and 2004 (in US\$) (as of 15 June 2004)

Contributions	Earmarked					Non-earmarked				
	2000	2001	2002	2003	2004 ¹	2000	2001	2002	2003	2004 ¹
ICP Forests	84,000	66,000	75,700	76,200	52,000			20,300	15,000	45,000
ICP Waters	16,000	17,000	1,200	33,300	34,000			20,300	15,000	45,000
ICP Materials		70,000	6,700					20,300	15,000	45,000
ICP Vegetation	34,500							20,500	15,000	45,000
ICP Integrated Monitoring		13,000	700					20,300	15,000	45,000
ICP Modelling and Mapping	114,700	45,000	4,700	37,600				20,300	15,000	45,000
Task Force on Health								20,000	15,000	45,000
Substantive reporting							93,500		4,500	25,000 ²
Total	249,200	211,000	89,000	147,100	86,000		93,500	142,000	109,500	315,000

¹ Committed but not yet debited from Trust Fund.

² Including estimated costs for consultancy work, report layout, printing and delivery.