



Convention on Long-range Transboundary Air Pollution



Task Force on Emission Inventories and Projections (TFEIP)
European Topic Centre on Air and Climate Change (ETC-ACC) of the European
Environment Agency (EEA)

CAPACITY BUILDING WORKSHOP ON AIR EMISSION INVENTORIES

17-18 October 2005, Rovaniemi (Finland)

Organized under the LRTAP Convention / EIONET / Finnish Environment Institute
Sponsored by: Ministry of the Environment Finland, European Environment Agency, Ministry of
Environment Norway

Objective

This workshop is targeted toward national emission inventory experts from East European, Central Asia and Caucasus (EECCA) and Balkan countries that are preparing themselves for emission inventory compilation and emission data reporting under international conventions and to the Priority Data Flows of EEA. The aim of the workshop is to exchange ideas and information between the target countries, the Task Force on Emission Inventories and Projections and ETC-ACC experts on emission inventory tools and methods and to identify obstacles to reporting emission data.

Results

General

The workshop opened with general presentations, setting the stage for the inventorying work within the LRTAP convention. In the discussion following this, participants asked to explain the relations of emission inventorying under the LRTAP convention and the UNFCCC convention. They stressed the need to avoid duplications and inconsistencies.

There are good relations between the two conventions as several experts are involved in both. It was explained that the IPCC Guidelines and the EMEP/CORINAIR Guidebook are more and more harmonized and mutually citing each other. IPCC will concentrate on greenhouse gases and refer to the Guidebook for all other pollutants, whereas the Guidebook will not treat the greenhouse gases, but refer to the IPCC Guidelines.

National Systems

Two well developed national systems in EU countries (Sweden, Finland) and two systems less far developed systems (FYR of Macedonia and Ukraine) were presented. A lively discussion followed on the problems finding the resources and expertise, emission factors, activity data to compile a national emission inventory. It was concluded that an inventory does not to be perfect in one cycle. It is a cyclic process that allows for gradual increase in the inventory's quality.

Inventory tools and data

A number of informative presentations was given on general methods and tools used in emission inventory compilation. The participants discussed the usability of these tools. The meeting then split up in three parallel breakout groups (BOGs). Each group presented its conclusions in the plenary:

Institutional issues

Main obstacle in development of inventories is the lack of budgets and resources. Experts experience a low priority for air pollution inventories as compared by greenhouse gas emission inventories.

Expert teams are in many cases not very stable. International support and the political importance of the climate change convention makes it more developed in all countries. The group proposes to develop a closer link between the teams involved in the inventories for both conventions. In addition the experts could do more in convincing the official authorities in these countries of the importance for both the country and the international community of a well developed emission inventory systems.

Technical issues

Improving the inventories should be done, following a key source analysis. The participants asked for training and further development of the software tools available to them. They also requested facilities for data and expertise exchange, comparable to IPCC's EFDB. Also regional workshops on POPs, HMs and PMs could help to develop the national inventories and increase the exchange of experts between the countries. A number of documents are translated at different times and different countries. It was proposed to exchange these translations in order to share costs. Furthermore, training in selecting and using emission factors in various sectors and pollutants could be very helpful.

Many problems exist. The group was convinced that problems can be solved, but it takes time. They however cannot be solved if one does not start working on them.

Support and training

Countries have several problems, both institutional and technical. Software tools are in principle OK, but need maintenance.

The Guidebook needs more emission factors to be used in the countries present at this workshop. Several sectors and pollutants were identified where this was needed. A table comparing emission factors from different sources could improve the usability of the Guidebook. Transformation tables of units are needed.

Training on estimating and obtaining activity data is surely needed.

In overview, three main lines of problems were identified.

- *Institutional:*
 - In many countries it was felt that the countries could gain in better harmonization and co-operation between both systems at the national level; a similar situation exists at the international level; the countries' obligations to the conventions could probably also be better met if the conventions would better harmonize and learn from each others successes ("National Systems").
 - In many countries data flows from data owners (stat offices etc.) and inventory compilers is not well developed.

International advisors could support this.

- *Exchange of expertise and information*
 - (Regional) workshop on specific source categories or specific pollutants
 - Exchange of information via the Guidebook and electronic forums, comparable to the EFDB.
 - Translation co-ordination
- *Training and hands-on support*
 - Regional training workshops
 - Country visits

None of the problems can be solved by one workshop or one activity. It must be long term and co-ordinated actions from the different donors.

EEA could take a leading role in co-ordination and harmonization of the different donors active in supporting the countries in the Balkans and the EECCA countries.

Agenda

Day 1 (17th October, Monday)		
9:00 – 9:30	Registration.	
9:30 – 9:45	Opening of the workshop Introductory remarks / administrative issues: Chair, organizers, secretariat	Workshop Chair
	<u>Session 1: BACKGROUND</u>	
9:45 – 10:15	Background – Introducing the Convention: organizational structure / emission reporting obligations / compliance issues / Emission Reporting Guidelines / CAPACT project	Brinda Wachs Secretariat
10:15 – 10:45	Mandate and role of the Task Force and how it aims to assist Parties in constructing high quality inventories / harmonization issues (UNFCCC: IPCC, EC: NEC) / priority areas: POPs, HMs, PM / data quality assurance and inventory review programme	Kristin Rypdal, TFEIP Co-Chair
10:45 – 11:15	Questions and Answers	
11:15 – 11:30	Coffee	
	<u>Session 2: NATIONAL INVENTORY SYSTEMS</u>	
11:30 – 12:00	National inventory systems in the EU: some examples from Sweden and Finland; <ul style="list-style-type: none"> ○ How is the process managed? ○ How are data flows organized? ○ How is QA/QC ensured? ○ What resources are needed? 	Karin Kindbom (Sweden) and Kristina Saarinen (Finland)
12:00 – 12:30	National inventory systems in the Balkan and/or EECCA countries: some examples <ul style="list-style-type: none"> ○ Main challenges ○ How could TFEIP and ETC-ACC/EEA help? 	To be invited
12:30 – 13:00	Questions and Answers	
13:00 – 14:00	Lunch	
	<u>Session 3: INVENTORY TOOLS AND DATA</u>	
14:00 – 14:30	How to find activity data? <ul style="list-style-type: none"> ○ Fuel combustion and energy statistics ○ Stationary Sources ○ Mobile sources ○ Industrial Processes and Product Use ○ Agriculture and Forestry ○ Waste 	Katarina Marečkova, (UNDP)

14:30 – 15:00	<p>How to find emission factors?</p> <ul style="list-style-type: none"> ○ EMEP/CORINAIR Emission Inventory Guidebook ○ IPCC Guidelines ○ IPCC Emission Factor Database ○ United States Environmental Protection Agency (EPA) ○ Pollution Release and Transfer Registers 	<p>Justin Goodwin (AEAT Technology)</p> <p>Kristina Saarinen (Finland)</p>
15:00 – 15:30	<p>National emission inventory data and software tools</p> <ul style="list-style-type: none"> ○ COPERT (Specific sector expert system) ○ AE-DEM (national database) ○ LRTAP NFR and UNFCCC CRF (data transfer) ○ Webdab/Repdab (data review & publishing) 	<p>Tinus Pulles (TNO)</p> <p>Vigdis Vestreng (MSC-West)</p>
15:30 – 16:00	Questions and answers	
16:00 – 16:15	Coffee break	
16:15-16:30	<p>Objectives for Break Out Groups (BOGs)</p> <p>Explain the objectives and working mode for the three BOGs</p>	
16:30 – 18:00	<p>Three parallel BOGs)</p> <ol style="list-style-type: none"> 1. Institutional Issues 2. Technical issues 3. Support and Training 	

Day 2 (18th October, Monday)		
9:00 – 10:00	BOG discussions (cont.)	
10:00 – 10:30	Results of BOGs: Presentations by rapporteurs	
10:30-11:00	Discussion	
11:00-11:30	Coffee break. Workshop chair drafts recommendations	
11:30 – 12:30	Discussion and endorsement of workshop. recommendations	
12:30	Close of workshop	

Participants

Name	Surname	Country	Workplace
Branka	Andric	Serbia and Montenegro	Environmental Ambassadors of the Republic of Serbia
Milijana	Ceranic	Serbia and Montenegro	Republic statistical office of Serbia
Justin	Goodwin		ETC-ACC AEA Technology Environment
Valentina	Idrissova	Kazakhstan	Mazakh Research Institute for Ecology and Climate
Sergey	Kakareka	Belarus	Institute for Problems of Natural Resources Use & Ecology
Natalya	Kasymova	Uzbekistan	State Committee for Nature Protection, Republic of Uzbekistan
Karin	Kindbom	Sweden	Swedish Environmental Research Institute (IVL)
Natalija	Kohv	Estonia	Estonian Environment Information Centre
Slavko	Kostoski	Serbia and Montenegro	
Aleksandra Nestorovska	Krsteska	Macedonia	Ministry of environment and physical planning
Tamás	Lotz	Hungary	
Elo	Mandel	Estonia	Estonian Environment Information Centre
Katarina	Mareckova		UNDP
Linda Margery	Nordstrøm	Norway	Norwegian Pollution Control Authority (SFT)
Nebojsa	Pokimica	Serbia and Montenegro	
Tinus	Pulles		ETC-ACC, TNO
Azra	Rogovic	Bosnia & Herzegovina	Department of Environment Protection, Ministry of Foreign Trade and Economical Relations of Bosnia and Herzegovina
Kristin	Rypdal	Norway	CICERO
Kristina	Saarinen	Finland	Finnish Environment Institute
Chrysanthos	Savvides	Cyprus	Department of Labour Inspection, Ministry of Labour
Hlawiczka	Stanislaw	Poland	Institute for Ecology of Industrial Areas, Poland
Martin	Tais	Bosnia & Herzegovina	Federal Meteorological Institute
Valentina	Tapis	Moldova	
Nino	Tkhilava	Georgia	Ministry of the Environment and Natural Resources Protection of Georgia, Main department of Air Protection
Nora	Upmace	Latvia	Latvian Environment, geology and meteorology agency
Vigdis	Vestreng	Norway	Meteorologisk institutt
Brinda	Wachs		United Nations Economic Commission for Europe, Convention on Long-range Transboundary Air Pollution Secretariat