Minutes from the kick-off meeting of EGTEI (Expert Group on Techno-economic Issues) held at ASIEM in Paris (France) – April 30, 2002

Participation

The workshop was attended by 35 experts from Belgium, Croatia, France, Germany, Italy, Norway, Poland, Spain, Sweden, Switzerland and UK as well as the UNECE secretariat, industry representatives (CEFIC, CONCAWE, EURELECTRIC, Eurometaux, UIC, CVIP), technical centers (EIPPCB, INERIS, RIVM, TNO, University of Stuttgart) and the Centre for Integrated Assessment Modelling (CIAM-IIASA).

Mr CHAUMAIN from ADEME chaired the meeting.
Mr RICO (from MATE) and Mr WICKS (from the EU) were excused.

Aim of the meeting

The aim of the meeting was to present and discuss the main tasks dedicated to the expert group, the working method and the planning of the work.

The minutes of the meeting will be presented at the 34th session of the Working Group on Strategies and Review which will take place on September 16-20, 2002 in Geneva.

Summary of presentations

6 presentations have been made to explain the context of the creation of EGTEI.
During the 6 presentations, the following main points have been emphasised (Slides of the different presentations are attached with the minutes of this meeting):

1. Objectives and purpose of EGTEI - Brinda WACHS (UNECE)

A brief presentation of the Convention on Long-range Transboundary Air Pollution and its Protocols and of the Parties participating to the Convention has been made.
5 protocols are into force: Geneva 84, Helsinki 85, Sofia 88, Geneva 91, Oslo 94,
2 protocols are not yet into force: Aarhus 98, Gothenburg 99.

Review and extension of protocols are priorities of the Convention. EGTEI has been created to give technical support to this process of review.
Main tasks mandated for EGTEI are as follows:
- Establish an expert group on techno-economic issues, led by France.
- Develop a software describing emission control options, their costs and their ranges of uncertainties.
- Validate the data and use the software in selected countries.
- Disseminate the software to Parties for application.

2. Work of EGTEI in the light of the overall time schedule - Bénédicte OUDART (CITEPA)

Integrated Assessment Modelling principles have been briefly presented. Techno-economic data are essential inputs in integrated assessment models. Their validity is a key issue.
A brief historical record concerning the creation of EGTEI has been done (from the workshop of Angers in 99 to the kick-off meeting of EGTEI).

Organization of the work:
- France is leading the project. Financial support is mainly brought by France but other supports would be welcomed.
- An International Expert Group gathering national experts, European organizations and industrials is created in order to provide IIASA with validated techno-economic data for cost-curve generation.
- This group will have strong interactions with EIPPCB (Sevilla), stakeholder countries, other programs (CAFÉ…). Output information (validated data) will serve as input for the RAINS model and will be used for the review of technical annexes of different existing protocols.

The tasks to be carried out in the scope of the project have been presented (refer to the slide).

Organization of the Techno-economic data updating process:
- National and industrial experts are invited to provide CITEPA and IFARE with the most recent information on emission reduction technique costs (reports, databases…) in order to complete a bibliography study.
- CITEPA and IFARE will elaborate a convivial software providing average European costs (default values) for emission reduction techniques for each type of emissions sources to be considered.
- A workshop for help to the use of the software will be organized.
- Parties will be invited to complete the database. Data will be validated. Data will be aggregated according to the RAINS format for the generation of costs curves.

Timetable for tasks:
Participants have to be aware of the tight time schedule for the work of the group.

3. Development of RAINS - Needs of IIASA - Priority activities - Janusz COFALA (CIAM-IIASA)

Costing methodology used in RAINS has been presented:
- Annual cost method, 4 % real interest rate, constant prices.
- Cost components: investment, fix operation and maintenance (O+M) and variable O+M costs.
- Costs parameters: common for all countries (e.g., capital investment) or country specific (labor, electricity, sorbents…).

RAINS model covers the entire Europe.
Cost curves are generated for the following pollutants: SO₂, NOx, VOC, NH₃ and PM.

After implementation of the current legislation in Europe, emissions of certain sectors will proportionally increase.
The following sectors are considered as a priority for IIASA because of the weakness of the data:
- wood combustion (PM),
- Industrial processes (stack emissions, fugitive emissions, PM control techniques),
- Construction and agriculture,
- Off-road mobile sources.

Cost data would be needed at the beginning of 2003, in order to run calculation with RAINS till the end of 2003 following the CAFE-requirements.

Presently, the model does not allow to retrofit already retrofitted installations. Due to some remarks and the requirement in some activities to go further in the reduction of some pollutants (for PM, most of combustion installations are already equipped but regulation requires to go further; for existing heavy duty vehicles, deNOx, particulate traps can be used) this new request could be taken into account.

4. Links with the programme of the Working Group on Strategies and Review - Richard BALLAMAN (WGSR)

The process of reviewing existing protocols has been presented.
Ratification and entry into force of the Gothenburg Protocol is expected for 2003.
Its reviewing could be scheduled in 2004 for 2015 or 2020 as target year.
Ratification and entry into force of the Aarhus Protocol is not planned yet.
Its reviewing could be scheduled in 2005 for 2015 or 2020 as target year.

Emission ceilings are imposed for each country but not the way to reach them. It is not yet known if there will be a new protocol or a Gothenburg protocol revision. But emission ceilings will be lowered.

Links between the Convention and CAFE: time allowed being very short, work duplication should be avoided.

5. Multi-Pollutant Multi-Effect Modelling of European Air Pollution Control Strategies – an Integrated Approach - Mr Stefan REIS (IER university of Stuttgart)

The presentation of the model has been made.
The goal is to provide results to UNECE and CAFE as well as other organisations.
This model is different from RAINS since it takes into account a larger number of pollutants (CO and green house gases CO₂, N₂O and CH₄) and considers also the global warming, secondary aerosols and urban air quality.
Results are expected at the end of 2003.

6. Results of the bibliography study and development of the software : Julien VINCENT (CITEPA) and Patrice GUYOMAR (IFARE)

CITEPA and IFARE have begun to work on the bibliography study and the development of the software. IFARE is in charge of NOx, SO₂ and PM/HM emissions from stationary sources. CITEPA is in charge of VOC emissions from stationary sources and of all pollutants for mobiles sources.

State of the nomination of national experts is as follows:
- Only 1/3 of the 48 Parties have nominated a national expert.
- Countries which did not nominate an expert should be officially recontacted.
Bibliographic study: The bibliography presently used has been given (document attached). Participants have been invited to provide the secretariat with new references on techno-economic issues.

Presentation of two examples: Use of decorative paints and vehicle refinishing.

Software development:
Software functions:
- Identification,
- Menu : choose the sector,
- Country specific data,
- Common Techniques…

The model is developed to be as simple as possible. The software MS ACCESS® has been selected. It will be made available as CD-version.

Discussions

During the meeting, different topics have been discussed following the presentations or as scheduled in the program at the end of the program. Main relevant topics are:

1 National experts’ role and task

The main task of national experts is as follows according to the understanding of the secretariat:
- Provide the secretariat with existing studies and data,
- Participate in the meetings to discuss the secretariat work and costs assessment.
- Collect data for their own country (default data will be available) and provide a country specific validated data base (knowing that they will be helped by the EGTEI Secretariat concerning the software use).

For the moment, the Parties are not mandated by UN to do the work. Consequently, this work has to be done by experts on a voluntary basis.

2 Work organisation

During the discussion, three types of proposals have been made in order to answer to the following question: how to work most efficiently?

a Proposal of the secretariat to split the EGTEI group into four sub-groups according to pollutants and/or emission sources.
- SO$_2$, NOx, VOC for stationary sources
- HM / PM for stationary sources
- NH$_3$
- Mobile sources

b Proposal of the Polish expert corresponding to the creation of one sub-group per task:
- Overview of the available data,
- Software development and dissemination,
- Data validation and uncertainties evaluation,
- Support to countries,
- Revision of technical annexes.
A steering group should also be created to clearly establish the responsibilities.

c Proposal for the creation of panels by sectors and not by pollutants.

The second proposal is probably due to a misunderstanding of the context of the creation of EGTEI. Clarification of EGTEI mandate has been made. Organisation and tasks to be carried out by EGTEI have already been set up and France is leading the group. This organisation has been accepted by UNECE. Responsibility and final decisions are dedicated to France. The second proposal can consequently not be accepted.

The last proposal has been accepted by the expert group and will be tested in a coming meeting to be held in Paris on June 14, 2002 on the “Waste Incineration Sector”.
(Remark: According to the secretariat it would be necessary in the future to group several activities together to avoid multiplying the number of meeting).

3. Aggregation of data

In the program developed by IFARE, costs data are elaborated with a quite high level of details. Examples given by CITEPA provide costs for different reference installations. According to IIASA, these data have to be aggregated in order to be taken into account in the RAINS Model.
The aggregation concerns the emissions sources (the SNAP is issued to generate cost) as well as costs defined for different reference installations. Sources considered by EGTEI are more disaggregated than sources considered in RAINS. Aggregation of some types of sources is necessary.
The process of aggregation has to be envisaged at the beginning of the work by EGTEI.

4. Costs of emission reduction techniques

Costs will be estimated according to the guidelines of EEA and the guidelines of EIPPCB. Transparency and homogeneity in the cost assessment are a key issue to be addressed by EGTEI.

5. New techniques

It has been recommended to include technologies in development (fuel cells for example).