

# **TRANSPORT EXPERT PANEL AGENDA**

Dublin, 24/10/2007

Leaders: R. De Lauretis, P. Dilara, L. Ntziachristos

1. Announcements with regard to EP leadership (Leon Ntziachristos)
2. Presentation of draft Non-Road chapters (John Norris)
3. Funding possibilities within the Guidebook Revision project (John Norris)
4. Revisions of the road-transport chapter in 2007 (Leon Ntziachristos)
5. JRC plans for transport methodologies (Panagiota Dilara)
6. Update on the COPERT/TREMOVE Fleets project (Leon Ntziachristos)
7. Requirements for the EP Web-Page (All)
8. Issues related to the Maritime/Aviation (Riccardo De Lauretis)
9. Priorities for the 2008 Workplan (All)
- 10.AOB

## Minutes of the meeting

1. Penny Dilara from the Joint Research Centre of Ispra was added as co-chair of the transport expert panel, while Zissis Samaras left the post of co-chair after many years of contribution. Penny Dilara will follow in particular the methodologies to estimate emissions from the non-road mobile machinery; Leonidas Nziachristos continues to be responsible for road transport and Riccardo De Lauretis for aviation and maritime transportation.
2. John Norris from AEAT presented the main contents and structure of the draft non-road chapters. The chapters have been received by the co-leaders of the panel only one week before the meeting and there was no sufficient time to analyse them in details. In November a limited number of experts of the task force will have the opportunity to revise the chapters and to supply preliminary comments. The whole Task Force will be asked to comment on the chapters in early 2008. The presentation of AEAT have been focused on:
  - Structure of the sectoral chapters: the transport sector is included in the 1.A.2., 1.A.3, 1.A.4 and 1.A.5 NFR category codes. In 1.A.3 also pipeline compressors are included. As a consequence of that five chapters will be prepared essentially on the basis of their NFR code.
  - All four draft chapters for the non road transport sectors are already available on the web side of the guidebook update project. Access to them is restricted to a few experts for the moment, since they are in a starting stage. .
  - For what concern navigation, aviation and railways transportation, similar approaches to estimate emissions are suggested in the chapters. Tier 1 suggested methodology refers firstly to the fuel usage, while Tier 3 requests basic information regarding trips, such as km/tonnes stratified by technology (power based), and are hence journey based. Tier 2 emission estimates are also journey-based but are calculations assuming average power unit technology mix.
  - A key category based decision tree/flow is included in the chapters to give guidance in the choice of the methodology to be used. The decision on the methodology to be adopted is taken by the party on the basis of the relevance of the category, if is key or not, and of the data available in the country, in line with the IPCC guidelines.
  - Other non-road equipment are characterised to be decentralised, to be variable sources of emissions and to the fact that they are often not very significant. In consideration of that, the Tier 1 approach should be based on the fuel usage, avoiding double counting checking that it is not already accounted for in the road transport sector. Alternative methods could be used e.g. starting from the land use for crops statistics to estimate the number of tractors, or using index of productions and of construction activities as proxy variables to reconstruct the emission trends.
  - Emission Factors availability: for the Aviation sector available EFs seems to be good for Tier 2 and Tier 3 methodology but they are not for Tier1; but they could be easy calculated as weighted average of the more disaggregated ones. Distance tables could be included in the algorithm to improve the estimates. For the navigation sector EFs seem to be good enough for Tier1; Tier 3 methodology are available from EU shipping study while Tier 2 could be derived from the aggregation of Tier 3. For the other sources in the Tier 1 some errors occurred in the guidebook, especially in Table 8.2 and 8.7, and they should be corrected. Tier 2 and Tier 3 aim the use of normative limits. The proposal to be included in the 2008 work plan in regards to the Guidebook update project, is that the EP

co-leaders will distribute the draft chapters together with additional information from the consultant on the main gaps in the actual guidebook.

3. Concerning the possibility to fund some technical sectoral experts in cooperating to the preparation of the guidebook, the consultants ensure that travel reimburses are possible. It should be decided quickly if there are experts that could be part of the project to prepare the chapters. Time and budget are limited. It could be useful to identify the priorities where expert could be funded to contribute to the Guidebook.
4. In September the road transport chapter of the guidebook has been updated. The work has been developed in the framework of the ETC/ACC topic centre activities funded by the EEA. Improvements have been done and included in the chapter especially in regards to: providing PM elemental carbon emission factors as well as emission factor for natural gas equipped buses; estimating the increase/decrease of emissions due to the use of biodiesel (where NO<sub>x</sub> emissions seem to be higher and PM lower with respect to the use of diesels), including the revision of CO<sub>2</sub> calculation; distinction of primary NO<sub>x</sub> emission in NO and NO<sub>2</sub>; revision of EURO4 emission factors for diesel passengers cars; introduction of percentage emission reductions for future emission standards (EURO5 and EURO6 expected to enter in force respectively in 2010 and 2015); a new methodology for the calculation of evaporation losses; PM emission factors for Diesel Particulate Filter equipped vehicles; revised methane emission factors in line with IPCC; correction of N<sub>2</sub>O and NH<sub>3</sub> emission factors and hot/cold emissions for these last three pollutants. The software will be also updated (except the inclusion of future standards). For what concern GHG emissions, the differences in 1990 should be limited because the major modifications regard the EURO1- EURO4 vehicles. For EURO4 emission factor results and some of the ammonia, methane and N<sub>2</sub>O EFs come from the ARTEMIS project; improvements regarding PM issues come from the Particulates project and the other improvements from other project. HM information coming from ESPREME will be included in the Guidebook and in the software when they will be available. Bio ethanol has been addressed; the effect on emissions should be minimum, but no consistent information is currently available. The updated guidebook chapter is available on the web since October (version August 2007).
5. JRC plans for transport methodologies: in JRC a group of 15 people coordinated by Panagiota Dilara is working on air quality and transport issues; laboratories for PC, HDV (on/off road), motorcycles and fuel emission estimates are available. An expert meeting will be organised on 19<sup>th</sup> November to discuss the new issues and to prioritise the research work needed. A long list of priorities is already put together and will be discussed in the meeting in more detail. More than 40 experts have been invited. Some work on validation of COPERT emission factors with the use of real-life measurements is going on in the JRC. Other research work is planned especially for non road transport. It was decided to extend the JRC meeting with an extra half day on the 20<sup>th</sup>, where the Guidebook update of the transport chapters will be discussed in detail with few experts..
6. A DG environment project is under development for all EU27 plus Norway, Switzerland, Turkey and Croatia, to collect and provide activity information coherent with REMOVE and COPERT structure, to make projection in the future and examine different policies with different cost for the whole Europe. Data on fleets are collected and checked and comparison with international statistics are in course. The cooperation of the national experts has been requested with official invitation letters to submit data to the project and several experts have already responded. The project ends in April 2008 and results will become publicly available.

7. Web page update: suggestions are requested to improve the web page of the Expert Panel. The EP co leader will try to update more frequently the web page for that concern information regarding meeting and conferences possibly of interest to the expert panel.
8. Aviation and maritime: some methodological improvement and suggestion for the update of the Guidebook have been presented with a focus on the work developed in ICAO/CAEP, as draft aviation guidelines and new EF tables, and for maritime the work already finalised in the MEET project, updated by ENTEC in 2002; ICAO papers are available on the web site: <http://www.icao.int/icao/en/env/>. The relevance of the aviation and maritime issues especially in the UNFCCC framework and their possible inclusion in the Emission Trading scheme has been enhanced. Main outcomes of the meeting on international aviation and maritime emissions held in Oslo in October 2007 have been reported; the minutes and presentations of the meeting could be downloaded on <http://www.eionet.europa.eu/training/bunkerfuelemissions> and the IISD report and photos at <http://www.iisd.ca/YMB/sdosl/>. A recommendation to the new EMEP centre to improve the data availability from the International Organisation especially for Aviation and Maritime has been approved by the expert panel to be included in the final conclusion of the TFEIP.
9. The priorities for the 2008 work plan are presented in the following table.

### Workplan for 2007/2008, Expert Panel on Transport

No.	Description	By whom	By when
1	Provide input to the revision of the relevant zero-order drafts guidebook chapters	LAT, APAT, JRC	November 2007
2	Participate to the JRC workshop and transfer the requests for Guidebook update to the participating experts	LAT, APAT, JRC	November 2007
3	Provide priorities list for the long-term development of transport emission inventories taking into account the common JRC-EEA WP 2008 in this field	LAT, APAT, JRC, EP transport	Beg. 2008
4	Organise meeting of the Panel at the beginning of the Review	JRC	1 <sup>st</sup> week of March
5	Review relevant updated Guidebook chapters	EP transport	March 2008
6	Cooperate with the new EMEP data-centre in defining the request of data and parameter to the international organizations (EUROCONTROL, IMO, etc) in order to secure the data needed for inventory compilers, especially for the maritime and aviation emission estimates	APAT	
7	Provide ideas/requests for the maintenance plan of the new Guidebook	LAT, APAT, JRC	
8	Provide a new Transport Expert Panel web-page hosted by the JRC and regularly update it	JRC, LAT, APAT,	
9	Revision of the Road Transport Chapter (Snap 0701 to 0706)  COPERT 4	LAT	Final version on the web of the TFEIP  Final version on the web of LAT; possible updates on the basis of the ongoing work and of the suggestions and remarks of the users

Source: Leonidas Ntziachristos, Riccardo De Laurentis, Panagiota Dilara