



**6th JOINT UNECE Task Force & EIONET  
Workshop on Emission Inventories and Projections  
ROVANIEMI, FINLAND  
19 – 21 OCTOBER 2005**



**Combustion & Industry expert panel**

**Plans for 2004/2005, Expert Panel on Combustion and Industry**

No.	Description	By whom	By when	Status
1	Input EFs and recommendation from analysis of BREFs to chapters	Carlo Trozzi	Jan-Feb 05 (1st draft)	OK a lot of chapter
2	Complete the primary Ni Chapter	Pieter van der Most and RIVM	Most of the work already done, Pieter to sent final version	Posponed
4	Consultations on the possible use of the IPCC EFDB (with changes)	JRC, IPCC, EEA	mid 2005	OK
5	Prioritisation of chapters considering PM, POPs and IPCC needs	Panel	Link-tables comments and commitments by end Nov. 04	OK
6	Prepare a first draft of the solvents chapters, have a meeting to discuss them	Carlo Trozzi, Riccardo DeLauretis	By mid-2005	Postponed
7	Agreed to accept a supplementary table with proposals for extensions of NFR	Zig Klimont, Vigdis Vestreng	End of October 04	OK
8	Use output of ESPREME and other projects to update EF's and recommendations on HM in the Guidebook	Stefan Reis, Sergey Kakareka	Next TF meeting	Postponed
9	Scientific Workshop on HM's	Stefan Reis	Together with next TF meeting	OK

Rovaniemi (Finland), 19-21 october 2005



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**Input EFs and recommendation from analysis of BREFs**

- B3311, Cement
- B3312, Lime
- B3314, Glass Production
- B3318, Mineral wool
- B3321, Paper-mill Industry (Drying Processes)
- B462, Paper Pulp (Kraft Process)
- B463, Paper Pulp (Acid Sulphite Process)
- B464, Paper Pulp (Neutral Sulphite Semi-Chemical Process)



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**PCB and HCB chapters**

- **SOURCES OF HEXACHLOROBENZENE EMISSION**
- **SOURCES OF POYCHLORINATED BIPHENYLS EMISSION**
  
- **Date: August 2005**
- **Authors: Sergey Kakarek  
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**priorities for updating the EMEP/Corinair emission inventory  
guidebook with respect to particulate matter**

- **In January definition of priorities for updating the EMEP/Corinair emission inventory guidebook with respect to particulate matter**
- **The highest priority for updates is suggested for:**
  - **Combustion in energy and transformation industries,**
  - **Combustion in manufacturing industries,**
  - **Processes in iron and steel industries,**
  - **Off-road mobile sources and**
  - **Small scale outdoor combustion of residential waste.**
- **Some unclassified sources should also have high priority.**
- **Update of emission factors and size distribution has the highest priority, then follows the chemical speciation.**



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**Priority in update the emission inventory guidebook**

- **The following activities are general across all the sectors:**
  - **Review of the availability of new or update emissions factors (review of the original source, verify of new sources are available, update emission factors)**
  - **Verify and insertion of all emission factors information coming from IPPC BREF**
- **The following table provides an overview of available methodologies and their status and priority with respect to updates.**



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**Priority in update the GB (1)**

	Is there a GB chapter?	The methodologies need inserted/update?	Do emission factors need inserted/update?	If yes, please specify for which pollutants?	Priority
B111 Combustion Plants as Point Sources	Yes	No	Yes	HM	High
B112 Combustion Plants as Area Sources	Yes	No	Yes	HM	High
B114 Gas Turbines	Yes	No	No		(1)
B132 Petroleum and/or Gas Refining Plants Combustion plants	No	No	No		(2)
B136 Petroleum and/or Gas Refining Plants Process Furnaces	Yes	No	No		
B142 Solid Fuel Transformation Plant Combustion plants	No	No	No		(2)
B146 Solid fuel transformation plants <i>Coke Oven Furnaces</i> <i>Coke Oven (Door Leakage and Extinction)</i>					
B152 Coal Min., Oil/Gas Extr., Pipeline Comp.	No	No	No		(2)
B216 Small Combustion Installation	Yes	No	No		

- (1) Gas Turbines are also included in B111 and B112 (the EFs are different!), the chapter can be eliminated, integrating in B111 and B112 its contents.
- (2) Must be deleted! B111, B112 chapters contain reference to the SNAP codes declared here as “without methodology”



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**Priority in update the GB (2)**

	Is there a GB chapter?	The methodologies need inserted/update?	Do emission factors need inserted/update?	If yes, please specify for which pollutants?	Priority
B331 Sinter plant	Yes	No	Yes	Main	Low
B332 Reheating furnaces steel and iron	Yes	No	Yes	Main	Low
B3319 Bricks And Tiles	Yes	No	Yes	SOx, Pb	High
B3323 Magnesium Prod.(Dolomite Treatment) Nickel Production (Thermal Process) Enamel Production	No	No	No	?	Low
B414 Stor. and Handling of Prod. in Refinery	Yes	No	No		Storage of crude oil needs to be included (medium)
B422 Blast Furnace Charging	Yes	Yes	Yes	VOC	Medium
B423 Pig Iron Tapping	Yes	No	Yes	SOx	Medium
B424 Solid Smokeless Fuel	Yes	Yes	Yes	SOx, NOx	Low
B426 Basic Oxygen Furnace Steel Plant	Yes	Yes	Yes	SOx, NOx, CO, VOC	Low
B432 Ferro Alloys Silicium Production Magnesium Production Nickel Production Allied Metal Manufacturing Galvanizing Electroplating Other	No	Yes	Yes	All (particularly for Ferro Alloys and Silicium)	Medium



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**Priority in update the GB (3)**

	Is there a GB chapter?	The methodologies need inserted/update?	Do emission factors need inserted/update?	If yes, please specify for which pollutants?	Priority
B443 Ammonia Ammonium Sulphate Ammonium Nitrate Ammonium Phosphate NPK Fertilisers Urea Carbon Black Titanium Dioxide Graphite Calcium Carbide Production Chlorine Production Phosphate Fertilisers Stor. & Handling of Inorg.Chem. Prod. Other	No	Yes	Yes	Carbonium Compounds and NH3 for Ammonia; NH3 for Ammonium compounds and Fertilisers	Medium
B453 1,2 dichloroethane Ethylene Oxide Formaldehyde Storage & Hand. of Org. Chem. Prod. Glyoxylic Acid Halogenated Hydrocarbons Production Pesticide Production Production of Persistent Organic Comp. Other (Phytosanitary...)	No	Yes	Yes	VOC	Medium
B454 Vinylchloride	Yes	Yes	Yes	VOC	Medium
B455 1,2 Dichloroet.+Vinylchlor.(Bal,Proc.)	Yes	Yes	Yes	VOC	Medium





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**Priority in update the GB (4)**

	Is there a GB chapter?	The methodologies need inserted/update?	Do emission factors need inserted/update?	If yes, please specify for which pollutants?	Priority
B461 Chipboard Lime (Decarbonizing) Batteries Manufacturing Extraction of Mineral Ores Other (Incl. Asbestos Products Manuf.)	No	No	No	VOC	low
B4618 Limestone and Dolomite Use	No	Yes	Yes	?	Low
B4619 Soda Ash Production and Use	No	Yes	Yes	SOx, NH3, H2S	High
B480 Production of Halocarbons and Sulphur Hexafluoride	No	Yes	Yes	VOC	High
B541 Liquid fuel distribution (ex. gasolines)	No	Yes	Yes	VOC	High
B551 Gasoline Distribution	Yes	Yes	Yes	VOC	Medium
B561 Gas Distribution Networks	Yes	No	No		
B570 Geothermal Energy Extraction	No	Yes	Yes	H <sub>2</sub> S, CO <sub>2</sub>	High
B610 Manufacture of automobiles Car repairing Construction and buildings (except item 060107) Domestic use (except item 060107) Coil coating Boat building Wood Other industrial paint application Other non industrial paint application	Yes	Yes	Yes	VOC	High
<i>NEW</i> Leather refining (paint)	No	Yes	Yes	VOC	Medium-High
B623 Electronic Components Manufacturing Other Industrial Cleaning	No	Yes	Yes	VOC	Medium-High



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**Priority in update the GB (5)**

	Is there a GB chapter?	The methodologies need inserted/update?	Do emission factors need inserted/update?	If yes, please specify for which pollutants?	Priority
B631 Polyester Processing Polyvinylchloride Processing Rubber Processing Pharmaceutical Products Manufacturing Paints Manufacturing Inks Manufacturing Glues Manufacturing Adhesive, Magnetic Tapes, Films and Photographs Manufacturing Textile Finishing Leather Tanning Other	No	Yes	Yes	VOC	High
B641 Glass Wool Enduction Mineral Wool Enduction Application of Glues and Adhesives Domestic Use of Pharmaceutical Products Other (Preservation of Seeds,...)	No	Yes	Yes	VOC	High
B643 Printing Industry	Yes	Yes	Yes	VOC	High
B647 Underseal Treatment and Conservation of Vehicles Vehicles Dewaxing	Yes	Yes (unders.)	Yes (unders.)	VOC	Medium



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**Priority in update the GB (6)**

	Is there a GB chapter?	The methodologies need inserted/update?	Do emission factors need inserted/update?	If yes, please specify for which pollutants?	Priority
B648 Domestic Solvent Use (Other than Paint Application)	Yes	Yes	Yes	VOC	High
B451 Anaesthesia Refrigeration and Air Conditioning Equipments Using Halocarbons Refrigeration and Air Conditioning Equipments Using Other Products than Halocarbons Foam Blowing (Except 060304) Fire Extinguishers Aerosol Cans Electrical Equipments (Except 060203) Other	No	Yes	Yes	VOC	Medium
B923 Flaring in Oil Refinery	Yes	Yes	Yes		Low
B924 Flaring in Chemical Industries Incineration of Waste Oil	No	Yes	Yes	All	Low
B940 Managed Waste Disposal on Land Unmanaged Waste Disposal on Land Other	No	Yes	Yes	VOC, CH4	High
B970 Open Burning of Agricultural Wastes (except Stubble Burning)	Yes	No	No	VOC, NOx, CO	Medium
B992 Incineration of Carcasses	No	Yes	Yes	All	High
B9103 Sludge Spreading	Yes	Yes	Yes	NH3, CH4, VOC	Low
B9105 Compost Production from Waste	Yes	Yes	Yes	CH4, VOC	Average
B9106 Biogas Production Other Production of Fuel (RDF,...)	Yes	No	No	CH4, VOC	Average



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<b>No.</b>	<b>Description</b>	<b>By whom</b>	<b>By when</b>
1	Complete input EFs and recommendation from analysis of BREFs to chapters	Carlo Trozzi	Jun-Jul 06 (draft)
2	Prepare a first draft of the solvents chapters, have a meeting to discuss them	Carlo Trozzi, Riccardo de Lauretis	By end-2006
3	Review the chapter on Small combustion installation especially with emphasis on Mercury and HMs	Dilara Panagiota (JCR)	Jun-Jul 06 (draft)
4	Complete the primary Ni Chapter	Pieter van der Most and RIVM	Jun-Jul 06 (draft)
4	Cooperate with EC PM tender winner in update PM Efs and activity classification	Panel	Jun-Jul 06 (draft)
5	Cooperate with industry (CONCAWE and others to define) to update emission factors especially for VOCs, PM, HMs and POPs	Panel	Jun-Jul 06 (draft)
6	Update emission factors of selected activities in the GB	?	?
7	Resolution of ambiguous definition of processes & combustion in SNAP and GB	Carlo Trozzi	Jan 06 (draft)