Close Encounters

(National consultations within the NEC Review Contract)

Zbigniew Klimont

International Institute for Applied Systems Analysis, Laxenburg, Austria

(klimont@iiasa.ac.at)

TFEIP 19-21 October, 2005, Rovaniemi, Finland
• IIASA’s RAINS model selected as one of the tools used within the EU NEC Review Contract,
• Continuation of CAFE consultations; similar format,
• Meeting with EU-25 countries’ experts and a number of industrial associations from March to November, 2005
Discussed subjects:
- Emissions (broad): national inventory vs. RAINS
- Emissions (detailed): various parameters used in calculation or needed for calculation in RAINS
- Activity data: national, international, RAINS, other models
- Costs: national, industrial, RAINS
- Projections (activities): national, industrial, RAINS
- Projections (emissions): national, industrial, RAINS, legislation
Selected findings (1)

- Varying interpretation of NFR categories in reporting emissions, for example:
  - 4D: Direct Soil (N-fertilizers, manure application, grazing)
  - 3D: Other (tons of things can be in or not)
  - Off-road – distributed in a number of NFR?

REASONS?:
1. National inventory systems
2. Available data
3. UNFCCC vs. UNECE interpretation
Selected findings (2)

• Varying methods used in estimation of emissions from specific NFR categories leads to significant differences, for example:
  – Paint use,
  – Solvent use activities (e.g., printing, adhesives, chemicals, etc.),
  – Evaporative emissions from liquid fuel distribution system,
  – Evaporative emissions from cars,
  – PM sources

REASONS?:
1. National inventory systems
2. Available data
3. Specific national experience
4. ‘Guidebook’ not up-to-date
5. Poor (not appropriate) representation of a specific activity in NFR
• Temporal changes not included for a number of NFR categories, for example:
  – Paint use,
  – Several solvent use sectors
  – Domestic combustion

REASONS?:
1. ‘Guidebook’ not up-to-date
2. Lack of data
3. UNFCCC does not require it
4. Lack of resources
Selected findings (4)

- Significant improvements/advancements in methods used for estimation of several NFR categories, for example:
  - Ammonia from agriculture,
  - Road transport,

REASONS?:
1. ‘Guidebook’ provides up-to-date information
2. Availability of data
3. UNFCCC reporting
4. Access to new approaches via the Expert Panels
Conclusions

- Consultations very useful but take a lot of resources,
- The modelling team served as a catalyst in few cases inspiring improvements (additional work),
- The modelling team served as a “exchange warehouse” between modellers-industry-national teams,
- Without such consultation it would not be possible to explain some of the differences,
- A number of differences (from country to country) in interpretation of reporting categories identified,
- A need for update of the ‘Guidebook’ identified,
- A need for regular verification/comparison/review programs identified,
- From the perspective of UNECE, lack of non-EU countries.