TFMM meeting, November 2009



#### **Institute for Environment and Sustainability**



# Eurodelta

# Outcome of the September meeting

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#### Main points of discussion



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#### All scenarios are finalized for 7 countries & 1 region

- sector grouping scenarios
- Atlantic, North sea and baltic sea scenarios
- Zoom scenarios (land vs. sea based reductions)

#### Reports due by end 2009

- Sectoral SRR (including all countries)
- Shipping emission reductions (zoom + Europe)

Simulations from the two Spanish groups (Tech. Univ. Madrid - R. Borge and R. San Jose) have gone through first screening (2000 base case)

Discussion on Eurodelta follow-up → under the TFMM umbrella



#### **ED Main objectives so far**



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# Evaluation against measurements and comparison of SRR based on 1999 & 2001 meteo base years

- identify sources of model variability
- benchmarking of the EMEP model
- estimate model uncertainties

# Efficiency of sectoral SRR (vs. Proportional approach)

### Efficiency of shipping emission reductions

- zooming studies in Athens and Marseille (impact of spatial resolution)
- Land vs. sea-based emission reductions



**ED: Plans for next phase (2010)** 



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#### Validation based on recent base year:

- With a finer spatial resolution (≤ 20 km), adding the vertical dimension to the analysis
- Using high resolution datasets (meteo, emissions, land use...)
- Validation against the EMEP & AIRBASE Monitoring data (EMEP meas. Campaigns, other data?)

### Focus on the following processes:

- Vertical model structure and spatial resolution
- PM speciation Secondary organic aerosols
- Quantification of biogenic emissions and impacts



#### **ED: Plans for next phase**



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# 2011 and beyond

- Study the capacity of models to operate in "back-casting" mode (e.g. 2009 → 2004 with 2009 models)
- Air quality modeling in support to policy

# Steering Group: JRC, EMEP, TFMM, CONCAWE

# **Kick-off meeting**

- Date to be fixed (end 2009?)
- Decision on common input data (meteorology, BC...)?
- Decision on the organization of the simulations & scenarios & timeplan



#### **ED: Plans for next phase**



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# Exercise is open to everybody

(intent to be received before the end November)

#### Resources:

- Concawe contribution for meeting organization
- Expected collaboration with TFMM (e.g. observations)
- Intercomparison Exercises (JRC)

#### Links to AQMEII initiative:

 Although scopes are different, complementarities might be found (data, choice of base year...) to avoid duplicating work for modeling teams



# **EURODELTA** exercise



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And more info on....

http://aqm.jrc.it/