Department
for Environment
Food & Rural Affairs

UK Feedback – EU composite mapping and links to e-Reporting
FAIRMODE Plenary 2016

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EU composite mapping

- Upload webpage http://aqm.jrc.ec.europa.eu/index.aspx

- Core datasets requested
  - Annual mean maps (NO2, PM10)
  - Year 2012 or another recent year
  - Meta data
  - Format ASCII or GeoTiff

- Additional underlying data requested ("useful" but "not mandatory")
  - DELTA-Assessment data (DTL) - include the modelling data, the monitoring data and the start-up configuration file
  - Delta - Emission data (EMS) - the total emissions per macro sector and precursors for the region covered by the map

- But the aims of the exercise need to be clarified…

UK e-Reporting

- UK e-Reporting submissions are **publically available** and provide the inputs requested (excluding emissions):
  - Year 2013 or 2014 are available from EIONET, see http://cdr.eionet.europa.eu/gb/eu/aqd

Model outputs

- UK modelled outputs are delivered as data flow e1b under e-Reporting:
  - For 2013 (2013-v0 submission) annual mean background NO2 see http://cdr.eionet.europa.eu/gb/eu/aqd/e1b/envu_czcg/no22013bk_etrs89.tgz/manage_document
  - For 2013 (2013-v0 submission) annual mean roadside NO2 see http://cdr.eionet.europa.eu/gb/eu/aqd/e1b/envu_czcg/no22013rs_etrs89.tgz/manage_document
  - For 2013 (2013-v0 submission) annual mean background PM10 see http://cdr.eionet.europa.eu/gb/eu/aqd/e1b/envu_czcg/pm102013gbk_etrs89.tgz/manage_document
  - For 2013 (2013-v0 submission) annual mean roadside PM10 see http://cdr.eionet.europa.eu/gb/eu/aqd/e1b/envu_czcg/pm102013grs_etrs89.tgz/manage_document

Output formats

- Data files for the UK e-Reporting submission are already formatted as ASCII grid for 1 km background modelled concentration maps so fit the specification requested for the WG1 composite mapping exercise.

- Shapefiles have been used for the UK e-Reporting submission for traffic locations, and are available for the pollutants requested.

- We recommend consistency of formats requested to reduce effort and ease linking to e-Reporting. Vector formats should be allowed in addition to raster to avoid exclusion e.g. Shapefiles for UK traffic locations.

Metadata

- Model metadata is also provided in data flow D under e-Reporting:
    - For 2013 (2013-v0 submission), see http://cdr.eionet.europa.eu/gb/eu/aqd/d/envu_c0za/
    - In terms of the model meta tags requested through the Delta database submission system these are also largely compatible with the specification for model meta data submission in data flow D under e-Reporting.

- We recommend greater flexibility in FAIRMODE model meta tags to improve consistency with e-Reporting e.g. model name and version

Database

Add new model

Model meta tags

Model name:	
Release version:	000
Country:	
Region/city:	
Model type:	Select an item... ▾
Map reference:	EPSG-
Data assimilation:	None ▾
Output frequency:	Select an item... ▾
Pollutants:	☐ O3 ☐ PM2.5 ☐ PM10 ☐ NO2
Documentation link:	

Reference period - DELTA dataset only

Day start:		Select a month .. ▾
Day end:		Select a month .. ▾

Reference year

Year:	(yyyy)

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Additional data

- DELTA-Assessment data (DTL)
    - How would these be used?
    - Extra effort required to prepare Delta configuration files
    - Measurement datasets used for model calibration are included with the UK e-Reporting submissions:
        - For 2013 (2013-v0 submission) see http://cdr.eionet.europa.eu/gb/eu/aqd/e1b/envu_czcg/E1b_GB_ModellingObservations.xml/manage_document

- Delta - Emission data (EMS)
    - How would these be used?
    - Not part of e-Reporting submissions and are not in the public domain and require extra effort to prepare

Recommendations

- There is **added value in linking the FAIRMODE activities to e-Reporting** and **acquiring data for the years 2013/2014**
  - 2013 was the first year of submission via the e-Reporting system and Member States are investing heavily in the development of this system

- **We can avoid duplication of effort** and **potential for inconsistency** in the future
  - We recommend making it possible for the user to import e-Reporting datasets from EIONET where these have been published to reduce effort
  - We recommend greater flexibility in FAIRMODE model meta tags to improve consistency with e-Reporting
  - We recommend extending format requirements to allow vector formats e.g. Shapefile format used for UK traffic locations, to improve consistency.
  - We recommend meta data to be included with EU composite mapping layers to aid understanding, including links or location of the datasets (e.g. e-Reporting or FAIRMODE source) for transparency