

Lisbon, 02 FEB. 2009

Ref: DIR/amh/OTR/WDR/2009/177

**Subject: Invitation to an open Workshop to define the technical links between CleanSeaNet and external oil spill models**

Dear Colleagues,

EMSA intends to integrate oil spill modelling functionality within CleanSeaNet (CSN). CSN will link to existing regional oil spill models which are operated and hosted by Member States. The aim is to provide users with a comprehensive tool to support decision making for pollution response (spill forecasting) and to link potential polluters to the identified spills (spill backtracking). CSN users will decide which models shall be linked to and used within CSN. For reasons of sustainability and to avoid duplication of effort, CSN will rely on oil spill models maintained by Member States who have the responsibility and technical capability to operate and update their national investment. These external models shall provide available oil spill drift and oil weathering predictions, using appropriate forcing terms for the CSN service area.

Data exchange protocols between CSN and the external models will allow CSN oil spill detections to initiate a model run. Model forecast and hindcast results will be returned to the Agency for visualisation and distribution to CSN users. Implementation will be through individual Service Level Agreements (SLA) with model operators at Member States. Furthermore the Agency expects modelling services to be provided through the GMES Marine Downstream Services; similar SLA's could also be agreed with these services. More information on EMSA's views on development of oil spill modelling can be found on the non-paper, published on 21 November 2008:

([http://cleanseanet.emsa.europa.eu/docs/public/NonPaper\\_EMASAs\\_view\\_on\\_ModellingI.pdf](http://cleanseanet.emsa.europa.eu/docs/public/NonPaper_EMASAs_view_on_ModellingI.pdf))

CSN shall undergo further development to enable the exchange of information between external models and CSN via well defined interfaces and protocols. These interfaces shall ensure that the oil spill information is available to the external models and that the model outputs are returned to the Agency where they will be visualised and combined with vessel traffic data and other information.

### **Objectives of the workshop**

This Workshop will address the major challenge to ensure that interfaces between the available oil spill models and CSN are defined appropriately. For this purpose the objectives of this Workshop are:

- Identify the best system architecture for the linking of the models with CSN
- Identify the input data necessary from CSN (e.g. spill location and area) and the users (e.g. time steps, oil properties) to run the model
- Identify the output data from the models to be further processed by CSN
- Identify the technologies to visualise the model outputs in CSN
- Outline the first technical specification of common interfaces (data exchange protocols and formats) between CSN and external oil spill models
- Define the roadmap of how to achieve the interface standards between the models and CSN

### **Preparatory information to be provided in advance of the Workshop**

Participants are requested to provide the following information in advance:

1. Model description in particular<sup>1</sup>
  - 1.1. the oil spill component (e.g. oil transport, drift, fate at sea surface and sub-surface, weathering, oil chemical and physical properties)
  - 1.2. the physical component (e.g. source of atmospheric forcing, Lagrangian/Eulerian mode, model area, predicted variables)
  - 1.3. the model results (e.g. length of forecast, how often is the model run, time step interval, resolution, model area, number of grid points, resolution)
  - 1.4. operational status (operational or pre-operational),
2. Input variables and parameterisation; what parameters are required to run the models?
3. Model data
  - 2.1. input data and formats
  - 2.2. output data and formats

(e.g. images, animations, database files, data tables, html, binary, ASCII, XML, shapefiles, KML, KMZ, NetCDF, OpenDAP).

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<sup>1</sup> EMSA already has some information from the SEPRISE Numerical and Forecasting Inventory and the Review of oil spill fate and trajectory models prepared by BMT (MarCoast WP 3200)

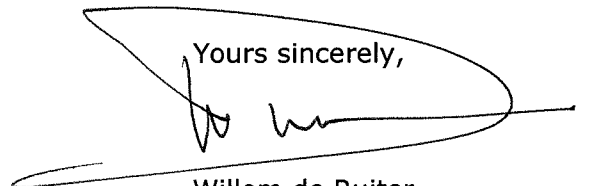
EMSA would appreciate if example in- and output files could be submitted.

4. OGC standards supported; Could the model results be distributed by a service such as a Georeferenced Web Mapping Service (WMS), Web Feature Service (WFS), Web Coverage Services (WCS)?
5. Proposal for information flow / data exchange between model and CSN. EMSA would appreciate to receive draft proposals on standard input/output mechanisms (formats and protocols).

To ease the comparison of the different models it would be appreciated if the same numbering structure as given above could be used for the submitted documentation. EMSA will respect any request regarding the confidentiality of the documentation.

This information should be sent by email to [Olaf.Trieschmann@emsa.europa.eu](mailto:Olaf.Trieschmann@emsa.europa.eu) and [Anne-Marie.Hayes@emsa.europa.eu](mailto:Anne-Marie.Hayes@emsa.europa.eu) before the 18<sup>th</sup> of February 2009.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'W. de Ruyter', enclosed within a large, hand-drawn oval shape.

Willem de Ruyter  
Executive Director

Annex I: Workshop agenda and registration

## **Annex I: Workshop agenda and registration**

- 09:00 Welcome
- 09:10 Overall architecture for development of oil spill modelling in CSN,  
Next steps for CSN 2<sup>nd</sup> Generation
- 09:30 MyOcean and CleanSeaNet
- 09:50 Summary of the analysis of available oil spill models
- 10:10 EuroGOOS view towards the advantages of this modelling approach
- 10:30 Introduction to Working Groups
- 11:00 Coffee break
- 11:20 Working Groups – Session I
- 12:30 Lunch
- 14:00 Working Groups – Session II
- 15:30 Coffee break
- 15:50 Presentation of Working Group Results
- 16:20 Draft roadmap for definition of interface standards
- 16:40 Roundtable - Final discussion
- 17:30 End of Workshop

### **Workshop registration**

Participants should register for this event at the following link:

[https://extranet.emsa.europa.eu/index.php?option=com\\_content&task=view&id=113&Itemid=191](https://extranet.emsa.europa.eu/index.php?option=com_content&task=view&id=113&Itemid=191)

### **Workshop location**

EMSA

Avenida Dom Joao II, Lote 1.06.2.5

1999-001 Lisboa

Portugal

Please follow this link for directions to EMSA: <http://www.emsa.europa.eu/end803.html>

**Please note that this is an open Workshop and therefore EMSA is unable to reimburse travel and daily allowance costs to Workshop participants.**