

COPERNICUS EMERGENCY MANAGEMENT SERVICE - MAPPING: COMPLETING THREE YEARS OF INITIAL OPERATIONS

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ABSTRACT:

The Emergency Management Service (EMS) – mapping is one of the first two operational services out of the six main thematic areas covered by Copernicus. Since April 2012 it provides timely and accurate geospatial information on disasters derived from satellite remote sensing and completed by available in-situ data and/or open sources. It is composed by three modules: Mapping in rush mode, supporting the emergency response; Mapping in non-rush mode, supporting the preparedness, prevention and recovery phases; Mapping Validation, checking the outputs of rush and non-rush for continuous improvement. The services are coordinated by the European Commission and implemented by contractual providers.

The rush and non-rush services are offered free of charge upon activation by authorized users and the output products are publicly available on dedicated portal. The service seeks synergy and coordination with similar existing mechanisms at national and international level.

The information generated by the service can be used as supplied (e.g. digital or printed map outputs) or further combined with other data sources (e.g. digital feature sets) to support geospatial analysis and decision making processes of emergency managers.

The service benefitted from several improvements addressed by operational experience, e.g. leaner workflow, satellite parallel tasking (in specific cases), anticipated delivery of a first available map, standardization of the symbology, systematic and open dissemination of the products and agreed access to reference datasets from the EU member states.

Until November 2014, the service covered more than one hundred rush activations including mayor events, e.g. refugee camps in Jordan (2013), floods in central Europe (June 2013), typhoon Haiyan in the Philippines (November 2013), floods in the Balkans (May 2014), agriculture assessment in the Gaza strip (July 2014); fifteen non-rush activations and four validation cases.

After three years, the European Commission is preparing the second phase of the service which shall start on February 2015. Further developments are included, e.g. better timeliness, enhanced and modular product portfolios and an aerial imagery component for selected activations as a complement to space sensors.

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