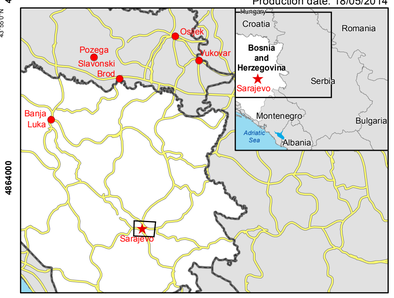
GLIDE number: N/A

Activation ID: EMSR-087
Product N.: 02, v1

Zenica
BOSNIA AND HERZEGOVINA
Flood - 13/05/2014
Delineation Map - Detail 02

Production date: 18/05/2014



Cartographic Information

1:32000

Full color ISO A1, medium resolution (200 dpi)

0 0,5 1 2 km

N

Grid: WGS 1984 UTM Zone 34N map coordinate system
Tick marks: WGS 84 geographical coordinate system

Legend

Crisis Information
- Flooded Area (18/05/2014)

General Information
- Area of Interest
- Sensor Footprint

Administrative boundaries
- Region
- Province

Settlements
- Populated Place
- Residential
- Green Area
- Industrial
- Recreational
- Transportation

Hydrology
- River
- Stream
- Lake

Point of Interest
- Educational
- Institutional
- Medical

Industry / Utilities
- Quarry

Transportation
- Bridge
- Helipad

Transportation
- Railway
- Runway
- Motorway
- Primary Road
- Secondary Road
- Local Road
- Aerodrome
- Heliport

Consequences within the detail AOI on 18/05/2014			Affected	Total in AOI
Flooded area		ha	13	
Estimated population		inhabitants	0	472498
Settlements	Industrial	ha	0	1916,7
	Residential	ha	0	39288,7
	Recreational	ha	0	165,1
	Transportation	ha	0	52,4
	Green Area	ha	0	614,0
	Quarry	ha	0	50,8
Transportation	Motorway	km	0	1,3
	Primary Road	km	0	48,6
	Secondary Road	km	0,3	75,3
	Local Road	km	0	564,9
	Railway	km	0	21,7
	Runway	km	0	3,8
	Bridge	No.	0	66
	Helipad	No.	0	2
	Aerodrome	ha	0	166,4

Map Information

On 13 May 2014, heavy rainfalls and widespread flooding hit large parts of Bosnia and Herzegovina. Heavy rainfall continued to affect large parts, in particular the region of Doboj and Zenica. The core users of the maps are Disaster Response Authorities involved in operations.

Data Sources

Inset maps based on: Administrative boundaries (JRC 2013, GISCO 2010, © EuroGeographics), Hydrology, Transportation (Natural Earth, 2012, CCM River DB © EU-JRC 2007), Settlements (Geonames, 2013).
RapidEye © Blackbridge (acquired on 23/10/2013 10:48 UTC and 21/03/2014 10:49 UTC, GSD 6,5 m, 0% cloud coverage), all rights reserved.
Landsat © USGS (acquired 06/05/2014), 30 m, 0% cloud coverage).
TerraSAR-X © Infoterra GmbH (acquired on 17/05/2014 16:42 UTC, GSD 5 m).
Radarsat-2 © MDA (acquired on 18/05/2014 05:09 UTC, GSD 15 m).
Base vector layers based on OpenStreetMap © OpenStreetMap contributors, refined by GAF AG. Source information is included in vector data.
Elevation data: SRTM (90 m posting). Height in meters above mean sea level.
Population data: Landscan 2010 © UT BATTELLE, LLC.
All Data sources are complete and with no gaps.

Dissemination/Publication

No restrictions on the publication of the mapping apply.
Delivery formats are GeoTIFF, GeoPDF, GeoJPEG and vectors (shapefile and KML formats).

Framework

The products elaborated in the framework of current mapping in rush mode activation are realized to the best of our ability, within a very short time frame during a crisis, optimising the available data and information. All geographic information has limitations due to scale, resolution, date and interpretation of the original data sources. The products are compliant with GIO-EMS RUSH Product Portfolio specifications.

Map Production

The present map shows basic topographic features such as transportation, hydrology and settlements in the area of Zenica (BOSNIA AND HERZEGOVINA). These basic topographic features are derived from public datasets, refined by means of visual interpretation of pre-event orthoimagery from RapidEye © Blackbridge (acquired on 23/10/2013 10:48 UTC and 21/03/2014 10:49 UTC, GSD 6,5 m, 0% cloud coverage).
Thematic layers, assessing the delineation of the event, have been derived from post-event images TerraSAR-X © Infoterra GmbH (acquired on 17/05/2014 16:42 UTC, GSD 5 m) and Radarsat-2 © MDA (acquired on 18/05/2014 05:09 UTC, GSD 15 m) Ltd. All rights reserved.
All satellite images have been radiometrically enhanced and orthocorrected with RPC approach (using SRTM elevation data).
The estimated geometric accuracy of this product is 45 m CE90 or better, from native positional accuracy of the background satellite image.
The estimated thematic accuracy of this product is 85% or better, as it is based on visual interpretation of recognizable items on high resolution optical imagery. Shadowed areas are zones of lower interpretation accuracy due to the poorer image radiometry.
Only the area enclosed by the Area of Interest has been analyzed.
Map produced on 18/05/2014 by GAF AG under contract 257219 with the European Commission. All products are © of the European Commission.
Name of the release inspector (quality control): GAF AG (ODO).
E-mail: rush@ems-gmes.eu

Map products available at http://emergency.copernicus.eu/mapping/list-of-components/EMSR087

Flood

- Civil Protection
- Response
- Delineation Map - Detail
- Planning
- Radarsat-2 © MDA
- 13-05-2014

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