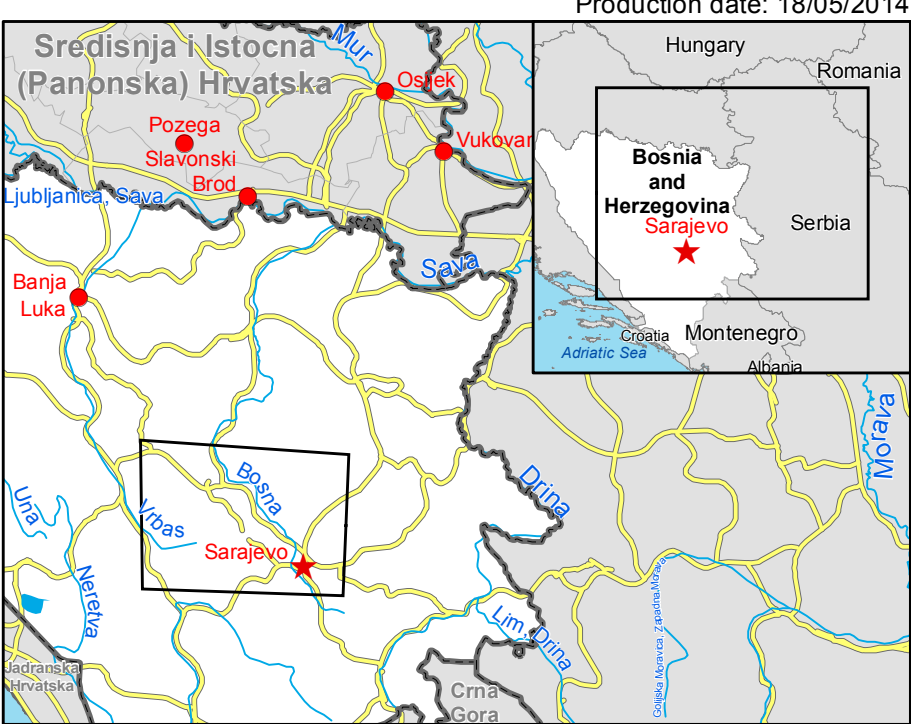


Zenica BOSNIA AND HERZEGOVINA Flood - 13/05/2014 Reference Map - Overview

Production date: 18/05/2014



Cartographic Information

1:125000 Full color ISO A1, medium resolution (200 dpi)



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

Legend

General Information		Recreational	Transportation
Area of Interest			Bridge
Sensor Footprint			Helpad
Administrative boundaries		Hydrology	
Region		River	Railway
Province		Stream	Runway
Populated Place		Canal	Motorway
Residential		Lake	Primary Road
Commercial			Secondary Road
Green Area			Local Road
Industrial			Aerodrome
		Extraction Mine	Helipad
		Quarry	

Exposure within the overview AOI			
Estimated population	habitant	100000	
Settlements			
Industrial	ha	3995.2	
Commercial	ha	8266.7	
Residential	ha	4571.6	
Recreational	ha	292.2	
Advanced Multifunctional	ha	692.4	
Transportation	ha	52.4	
Green Area	ha	73.4	
Utilities			
Extraction Mine	km	45.8	
Quarry	km	307.7	
Motorway	km	412.7	
Primary	km	224.2	
Secondary	km	139.8	
Local Road	km	3.8	
Railway	km	201	
Runway	km	2	
Bridge	km	196.4	
Helipad	km	196.4	
Aerodrome	km	196.4	

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 and 21/03/2014 10:49, GSD 6.5 m, 0% cloud coverage), all rights reserved.
Landsat 6 USGS (acquired 06/05/2014), 30m, 0% cloud coverage).
Base vector layers based on OpenStreetMap © OpenStreetMap contributors, refined by GAF AG. Source information is included in vector data.
Elevation data: SRTM (90m posting), Height in meters above mean sea level.
Population data: Landscan 2010 © UT BATTELLE, LLC.

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 6.5m, 0% cloud coverage).
All satellite images have been radiometrically enhanced and orthorectified with RPC approach (using SRTM elevation data).
The estimated geometric accuracy of this product is 45m 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): e-GEOS (ODO).
E-mail: rush@ems-gmes.eu

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

Flood

Civil Protection

Response

Reference Map - Overview

Planning

RapidEye © Blackbridge

13-05-2014