

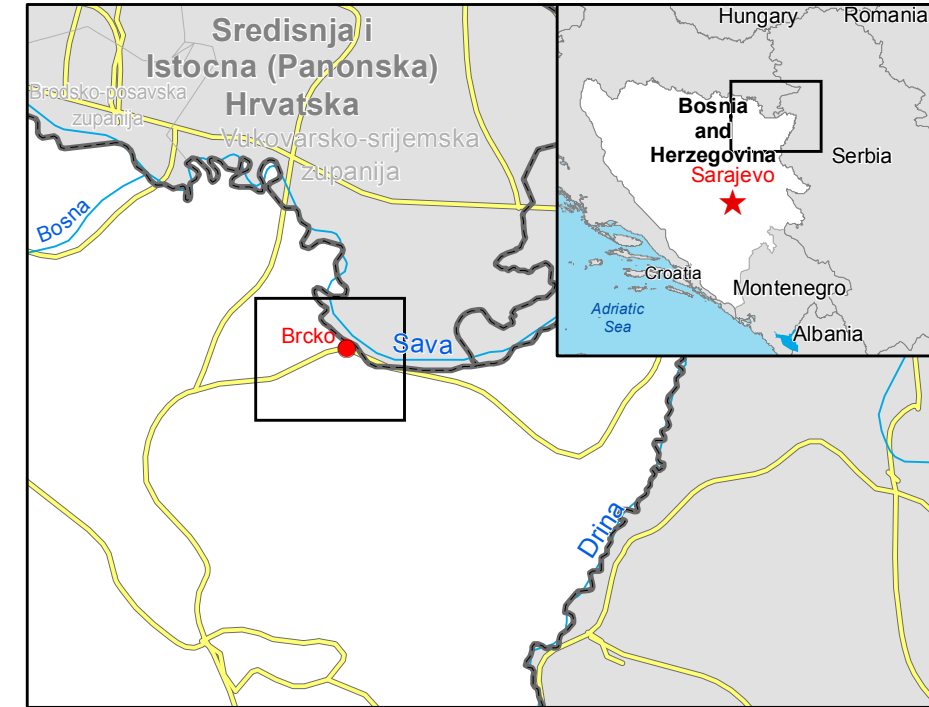
GLIDE number: FF-2014-000059-BIH

Activation ID: EMSR-087

Product N.: 06BRCKO, v1

**Brcko**  
**BOSNIA AND HERZEGOVINA**  
**Flood - 13/05/2014**  
Delineation Map - Overview

Production date: 22/05/2014



### Cartographic Information

1:30000

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

Crisis Information	Settlements	Transportation	Hydrology
Flooded Area (20/05/2014 9:44 UTC)	Residential Place	Bridge	River
<b>General Information</b>	Population	Crossing	Stream
Area of Interest	Cemetery	Primary Road	Canal
<b>Administrative boundaries</b>	Commercial	Secondary Road	Reservoir
International Boundary	Green Area	Local Road	River
Region	Industrial	Railway	
Province	Recreational	<b>Industry / Utilities</b>	
Municipality	Transportation	Quarry	
<b>Point of Interest</b>			

Consequences within the overview AOI on Bosnian Territory on 22/05/2014			
		Affected	Total in AOI
Flooded area	ha	287,6	
Estimated population	Inhabitants	800	850000
Settlements	Industrial	ha	391,0
	Commercial	ha	0
	Residential	ha	36,26
	Recreational	ha	0
	Transportation	ha	0
	Green Area	ha	22,65
Utilities	Cemetery	ha	0
	Quarry	ha	4,83
Transportation	Primary Road	km	11,3
	Secondary Road	km	10,1
	Local Road	km	78,8
	Bridges	2	2

### 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 BD © EJ-URC 2007), Settlements (GeoNames 2013), SP0T8 © Airbus Defence and Space 2014 (acquired on 22/05/2014 09:44 UTC, GSD 1.5 m, approx. 0% cloud coverage). Base vector layers based on OpenStreetMap © OpenStreetMap contributors, Wikimedia.org, GeoNames (approx.: 1:10,000, extracted on 20/05/2014), refined by GAF AG. Source information is included in vector data. Elevation data: SRTM (90 m posting) or EU-DEM (25 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 Brčko (BOSNIA AND HERZEGOWINA). These basic topographic features are derived from public datasets, refined by means of visual interpretation of pre-processed imagery from Google Earth® or BlackBridge (acquired on 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 imagery SPOT6 © Airbus Defence and Space 2014 (acquired on 22/05/2014 09:44 UTC, GSD 1.5 m). All rights reserved.

All satellite images have been radiometrically enhanced and orthorectified with RPC approach (using SRTM elevation data). The estimated geometric accuracy of this product is 35 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 within the Bosnian territory has been analyzed.

Map produced on 22/05/2014 by GAF AG under contract 257219 with the European Commission. All products are © of the European Commission.  
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Map products available at <http://emergency.copernicus.eu/mapping/list-of-components/EMSR08>

