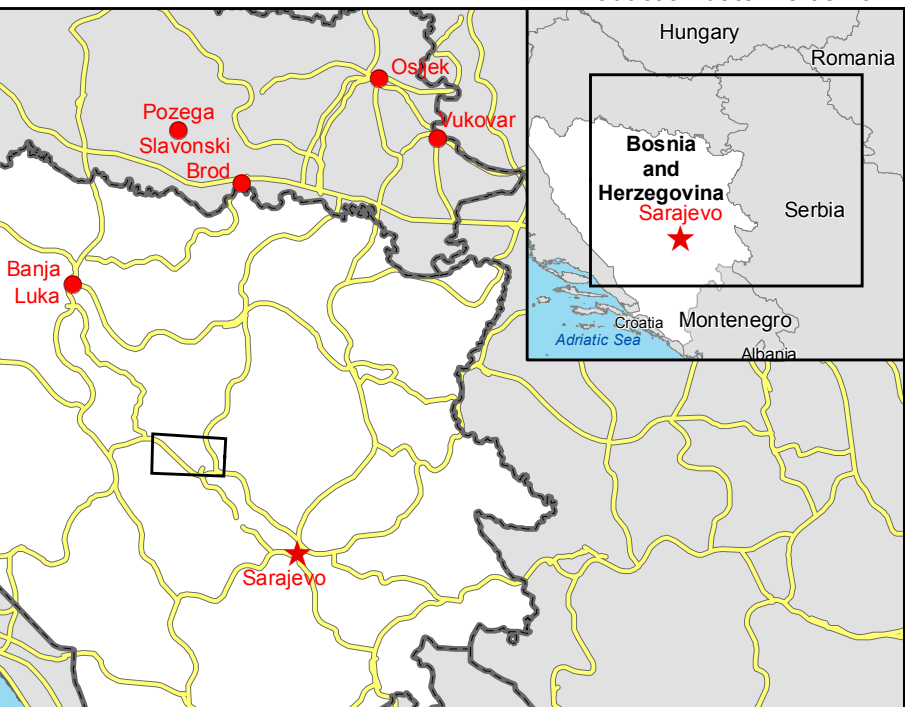


**Zenica**  
**BOSNIA AND HERZEGOVINA**  
**Flood - 13/05/2014**  
Reference Map - Detail 01      Production date: 18/05/2014



**Cartographic Information**

1:45000      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**

  - Area of Interest
  - Sensor Footprint
- Administrative boundaries**

  - Province
- Point of Interest**

  - Medical
- Settlements**

  - Populated Place
- Residential**

  - Commercial
  - Green Area
  - Industrial
  - Recreational
  - Urbanized Multi-functional
- Industry / Utilities**

  - Quarry
- Transportation**

  - Bridge
  - Railway
  - Primary Road
  - Secondary Road
  - Local Road
- Hydrology**

  - River
  - Canal
  - Lake

Exposure within the detail AOI			
Estimated population		inhabitants	246106
Settlements	Industrial	ha	1120.9
	Commercial	ha	5.7
	Recreational	ha	11184.6
	Urbanized Multifunctional	ha	63
	Green Area	ha	457.6
		ha	42.3
Utilities	Quarry	ha	134.6
Transportation	Primary	km	73.5
	Secondary	km	69.3
	Local Road	km	454.7
	Railway	km	21.9
	Bridge	No.	61.0

**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, GISC0 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 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.

**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-vent orthorectified imagery 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): s-geos (GDO).  
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 - Detail
- Planning
- RapidEye © Blackbridge
- 13-05-2014