

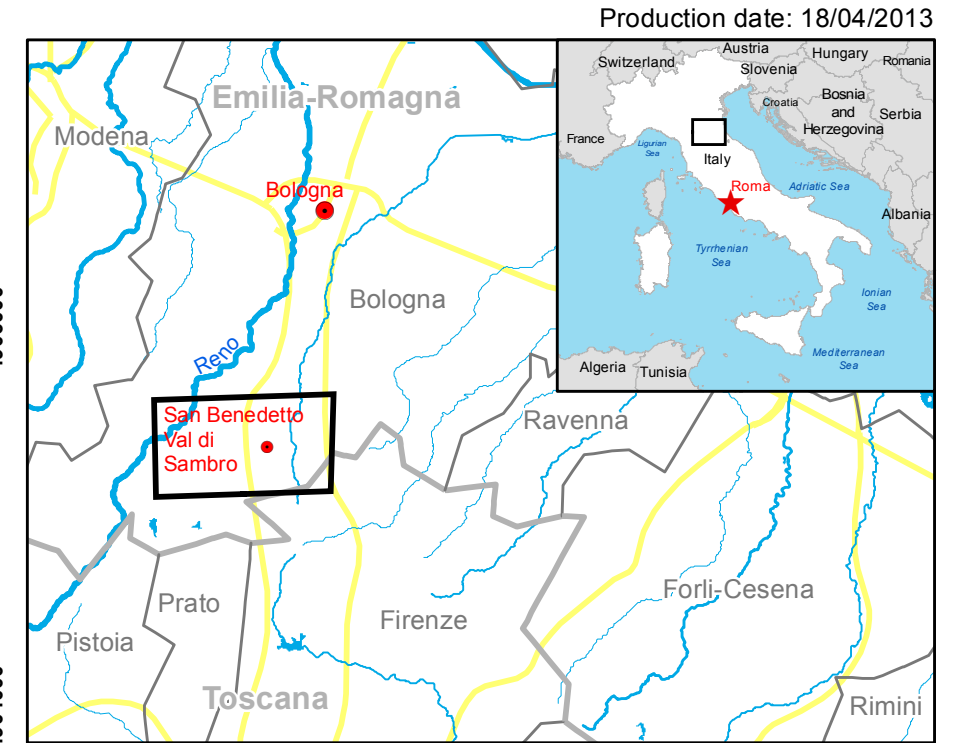
GLIDE number: N/A      Activation ID: EMSR-037  
Product N.: 02SanBenedettoValdiSambro\_V1

# San Benedetto Val di Sambro (BO) - ITALY

## Landslide - 11/04/2013

### Reference Map - Overview

## RESTRICTED USE



**Cartographic Information**

1:40000      Full color ISO A1, medium resolution (200 dpi)

0 0.75 1.5 3 km

Map Coordinate System: WGS 1984 UTM Zone 32N  
Graticule: WGS 84 geographical coordinates

**Legend**

General Information	Hydrology	Physiography
Area of Interest	River	Contour Lines and Elevation (m)
Populated Place	Stream	Transportation
Commercial	Lake	Station
Industrial	Point of Interest	Railway
Other or Unknown	Medical	Motorway
Recreational	Religious	Primary Road
Religious	Cemetery	Secondary Road
Residential		Local Road
Urbanized Multi-functional		Tunnel

Exposure within the Overview Area of Interest

Potentially Affected Population: 18350 Inhabitants  
Potentially Affected Built up areas: 891.3 ha

Commercial	1.8 ha	Religious	5.0 ha
Industrial	98.1 ha	Residential	773.4 ha
Other or Unknown	0.2 ha	Urbanized Multi-functional	10.8 ha
Recreational	2.0 ha		

**Map Information**

Following the extraordinary heavy rains of the last weeks in the Emilia-Romagna region, several landslides occurred. The landslides are spread throughout the region. A synthetic description of the situation is the following:

- 1400 landslide events till now; more are likely to occur;
- 60 people evacuated;
- 100-150 municipalities affected, spread over 11,000 km<sup>2</sup>.

The worst affected areas include the municipalities of Copiglio, Signatico and Boschetto, close to Tizzano Val Parma (Parma) and San Benedetto Val di Sambro (Bologna). The users of the map are Civil Protection authorities involved in field operations. The purpose of the map product is the support of emergency response activities.

**Data Sources**

Inset maps based on: Administrative boundaries (JRC, 2013, GISC0 2010, © EuroGeographics), Hydrology (CCM2 2007 © JRC), Transportation (Natural Earth, 2012), Settlements (OpenStreetMap, 2013).

Background imagery @ courtesy of AGEA (acquired in 2010, GSD 0.5 m, 0% cloud coverage).

Base vector layers based on Regione Emilia-Romagna datasets (settlements, http://dati.emilia-romagna.it/, approx. 1:5,000, extracted on 15/04/2013), Geoportale Nazionale (transportation and hydrology, http://wms.pcn.minambiente.it/IGN, approx. 1:15,000, extracted on 17/04/2013), OpenStreetMap and Geonames (approx. 1:10,000, extracted on 15/04/2013), refined by ITHACA.

Population estimates based on LandScan 2010 © UT BATTELLE, LLC.

Elevation data: EU-DEM (25 m posting).

All Data sources are complete and with no gaps.

**Dissemination/Publication**

RESTRICTED USE.

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 San Benedetto Val di Sambro (Bologna). These basic topographic features are derived from public datasets, refined by means of visual interpretation of pre-event aerial orthoimages © 2013 courtesy of AGEA (acquired in 2010, GSD 0.5 m, 0% cloud coverage).

The estimated geometric accuracy of this product is 5 m CE90 or better, from native positional accuracy of the background aerial orthoimage.


The estimated thematic accuracy of this product is 85% or better, as it is based on visual interpretation of recognizable items on very high resolution optical imagery.

Only the area enclosed by the Area of Interest has been analyzed.

Map produced on 18/04/2013 by ITHACA under contract 257219 with the European Commission. All products are © of the European Commission.

Name of the release inspector (quality control): e-GEDS (ODO).

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Landslide

- Civil Protection
- Response
- Reference Map - Overview
- Planning
- N/A
- 11-04-2013

