

German Red Cross Overview on Critical Communications – Integrated Command Centre (112) and Cooperation with German Aerospace Center



Public Safety Communication Europe



Bayerisches
Rotes
Kreuz

16TH PSCE CONFERENCE

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HOSTED BY BAVARIAN RED CROSS



Presentation by:

Uwe Kippnich (DE)



Bayerisches
Rotes
Kreuz

The Bavarian Red Cross

The International Red Cross and Red Crescent Movement, with its 187 National Societies, is the world's largest humanitarian network. The German Red Cross is part of this universal community, which started 150 years ago to deliver comprehensive aid to people affected by conflict, disaster, medical emergencies, or social hardship, guided solely by their needs. Around four million volunteers and members support the Red Cross in Germany alone. The **German Red Cross** has a federative structure.

The Bavarian Red Cross with the headquarters in Munich, is one of the regional branches. Voluntary communities – more than 180.000 volunteers
Medical Service - Mountain Rescue Service - Lifeguard Service



- Health and social care
- Disaster management and international cooperation
- First aid training
- Blood transfusion service / Blood bank
- Employee
 - **Supporting members: around 800.000**
 - **Staff: 24.000**
 - **Volunteers: around 180.000**
- **Totally 8 Mio. voluntary service hours per year**

More than 1.000.000 citizens in Bavaria support the Bavarian Red Cross, this is more than 10% of the population.

Bavarian Red Cross



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Current operations

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Germany: Red Cross volunteers support rescue operation after train collision in Bad Aibling

Published: 10 February 2016 13:57 CET



Passengers trapped in the wreckage of the two trains that collided near Bad Aibling received on-site assistance from the German Red Cross workers. They also offered psycho-social support to the families of the victims. /Josef Reisner

By Andreea Anca, IFRC



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Critical communication on the field



Command Truck



Command Centre



Onsite

- **Daily emergency**
All ambulances talk directly to the command centre
- **Multi Casualty Incidents (MCI)**
The onsite commander talks to the command truck (ct) and the (ct) to the command centre

Bavarian Red Cross Rescue Service

125.000 Volunteers

8 Integrated Command – Centre

22.000 Staff in total

73 organizational units

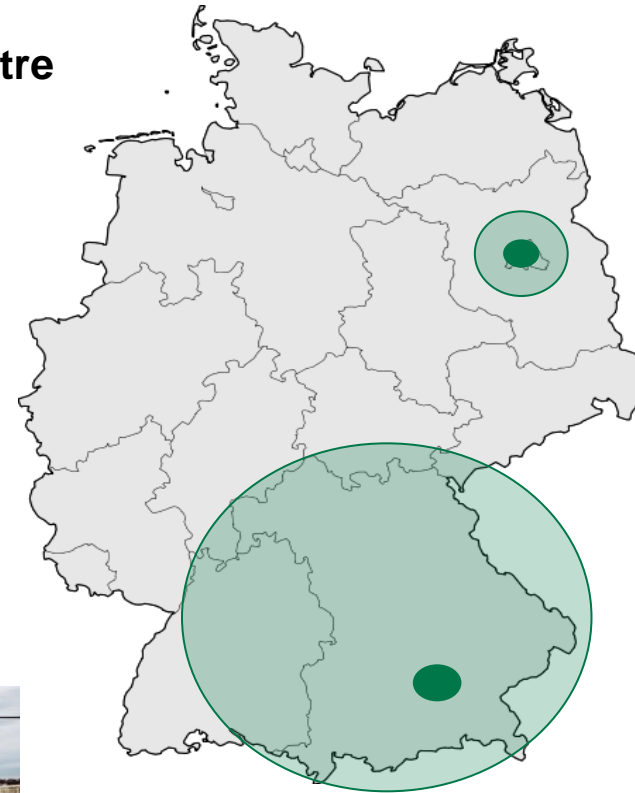
(legally non-independent – closely modelled on the administrative districts in Bavaria)

4.300 Staff Rescue Service RD

320 rescue stations

2 Rescue Helicopter

1.200 Ambulances

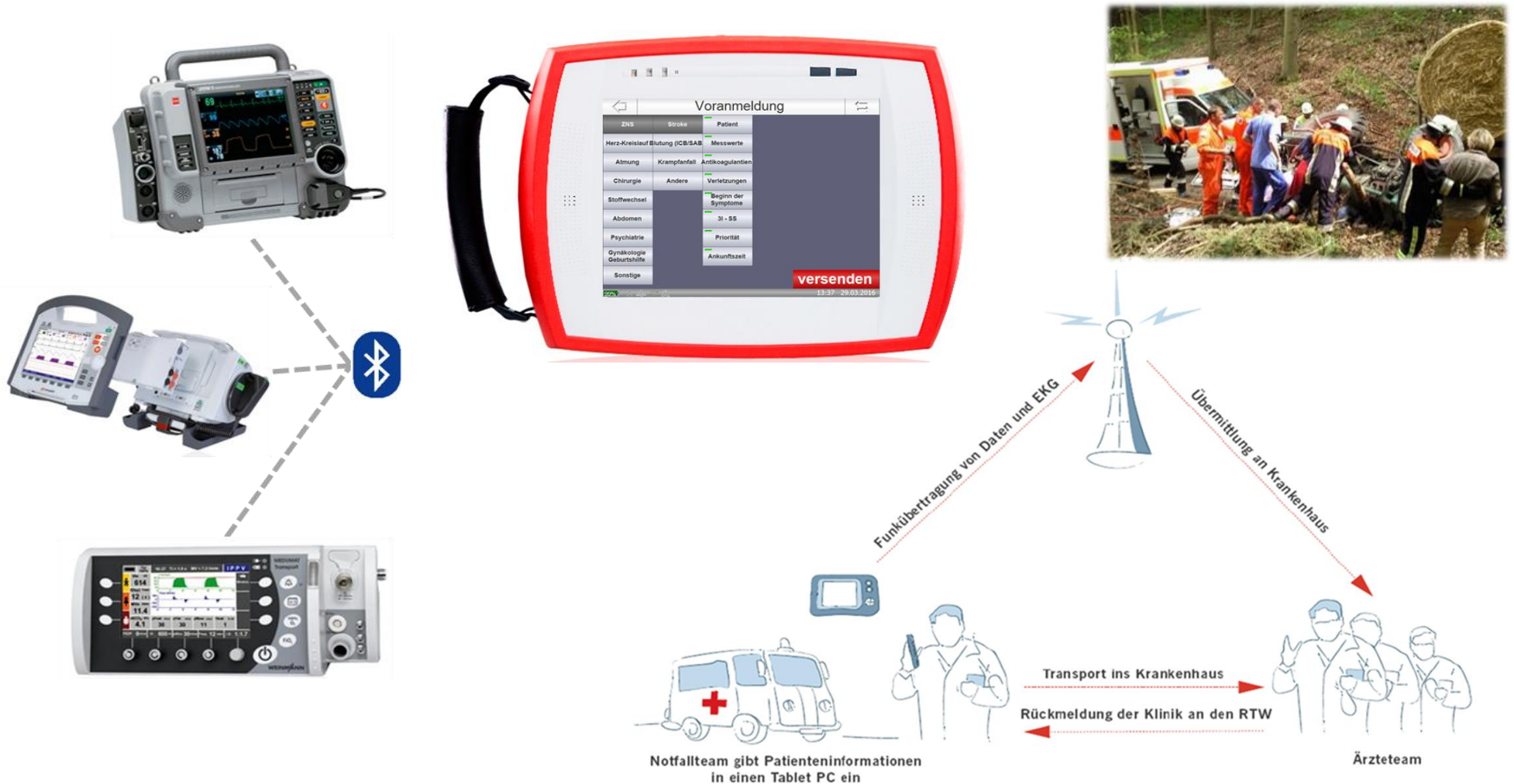


Red Cross Project Telematic 2

- Connection with hospitals
- Standard Operating Procedure
- Quality Management
- Disaster Management → E-Triage
-



Information/date communication management from the field to the hospital



Arrivalboard

NIDAarrivalboard			ZfM Zentrum für Telemedizin und Kritisches		medTV		16.01.2017 15:22			
Ankunft	Ereignis	Anmeldetext	Kreislauf	GCS	Intubiert	I-Status				
16:40	Alkohol / Drogen / Medika.	m Patient somnolent, st. alkoholisiert und unterkühlt im Park liegend vorgefunden	stabil	12	nein	ja				
16:15	BWS / LWS-Trauma	m Z. n. VU: Person angeschnallt, ca. 50km/h, Schmerzen BWS, spürt Beine beidseits nicht	instabil	7	ja	nein				
15:45	Stroke Angel 04:05	m Marcumar: nein 3ISS: 1 Verletzungen: nein								
14:42	Extremitätentrauma	w V. a. Schenkelhals re. Pat. über Teppich gestolpert. Schmerzen re. OS, re Bein verkürzt.	stabil	9	nein	nein				
14:10	Asthma / exazerbierte COPD	w seit mehreren Stunden Dyspnoe bei bekannter COPD	stabil	15	nein	nein				
13:22	akutes Abdomen	w Seit heute Morgen krampfartig anhaltende Abdominal Beschwerden	stabil	14	nein	nein				
12:55	Cardio Angel 07:17	m Stemi: ja Marcumar: nein	stabil	12	nein	nein				



- ✓ Direct information from the scene
- ✓ Digital data
- ✓ Better emergency room preparation

Project Telematic 2 - from paper to eHealth



NIDTracker

Alarmliste	Ankunft	Verdachtsdiagnose	Geschl. / Alter	Nachname, Vorname
	16.01.2017 12:05 NES 72-1	Rhythmusstörung	w 70	Wehner, Veronika
Details	16.01.2017 15:32 NES 72-1	Thoraxtrauma	w 60	Otis, Veronika
Protokollliste	16.01.2017 11:57 NES 72-1	Stroke Angel	m 60	Diller, Stefan
Archiv	16.01.2017 10:42	Cardio Angel	m 66	Mühlbauer, Klaus
Statistik	16.01.2017 11:27 NES 72-1	Extremitätentrauma	m 48	Müller, Jens
	16.01.2017 11:05	Cardio Angel	m 69	Schmitt, Andreas
	16.01.2017 10:37	Asthma / exazerbierte COPD	w 62	Tanqueröl, Amelie
	16.01.2017 10:24			hmidt
	13.01.2017 10:00			hie
	12.01.2017 14:00			
		Cardio Angel	m 49	Manier, Viktor

Visual display of medical information

Einsatz- und Reanimationsprotokoll Rettungsdienst Bayern

1. Daten-Zentrum

2. Notruf-Informationen, Anamnese, Befunde

3. Befunde

4. Anamnese

5. Vitalzeichen

6. EKG

7. Sonstige Befunde

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AKO SWI Bayern

1. Patientenzettel

2. Anamnese

3. Vitalzeichen

4. EKG

5. Sonstige Befunde

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Rescue Control Center



The Bavarian way to protect and save

Rescue Control Center (RCC)

If you need help, you have to call the 112. This is the number where you can find an emergency center in all country's of the European Union.



The Rescue Control Centers in Bavaria are located in 26 areas.

Eight of these Control Centers are under direction of the Bavarian Red Cross.

The Bavarian Red Cross is the biggest provider of Control Centers in Bavaria.



All the People who work in these Control Centers have a training as a Paramedic / EMT and a firefighter.

They use an program named „ELDIS III Bayern“.

This program is used to support dispatchers to coordinate fire brigades and rescue services.



Full redundant structure in operation of Control Center in case of black out.

The communication to emergency vehicles takes place by digital radio.



With this system, the Dispatcher can hold contact to the vehicles by voice or by SDS (Short Data Service).

Informations about the Place of use are transferred the emergency vehicle by „Telematik“.

The system in the Controle Center, sends the required informations to a small display placed in the vehicle.



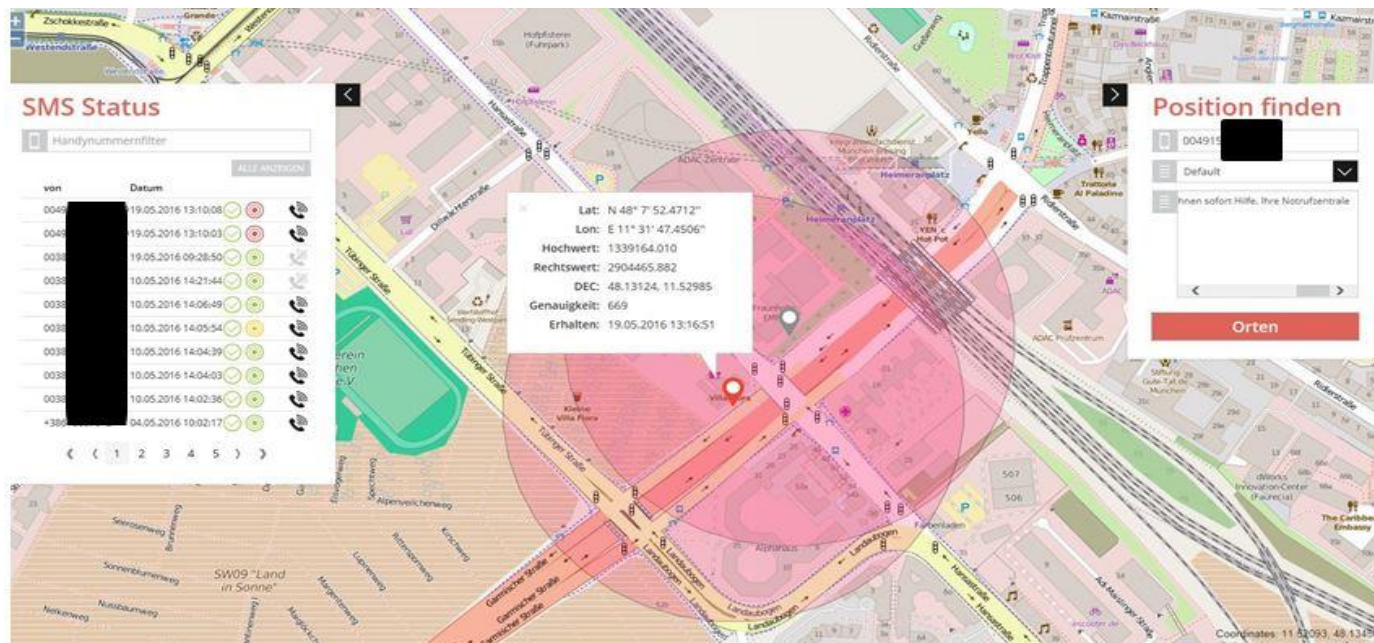
Vehicles of the ambulance service can be located by GPS. The position of the vehicles will show up at the Map of the dispatching system.



With this kind of GPS-Routing, the system knows all the time the nearest vehicle of the place of emergency.

The Rescue Control Centers of the Bavarian Red Cross uses an separate system to locate the callers cellphone.

The Dispatcher sends an SMS with an Internet-Link to the cellphone of the caller. The caller has to open this link. After that, the cellphone sends the GPS information to the Dispatcher and shows him the position.



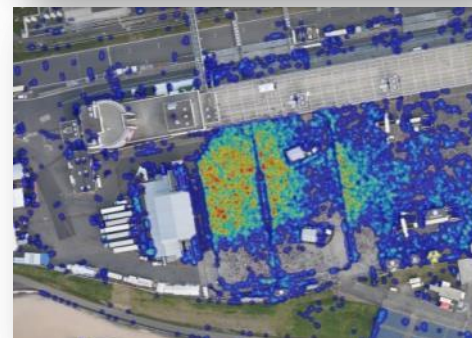
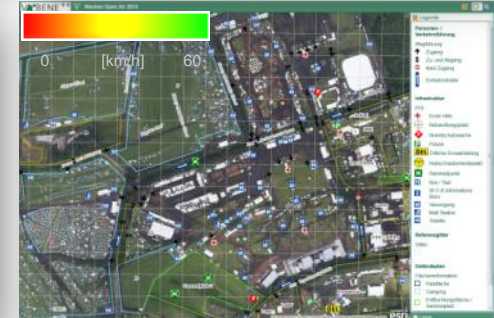
German Aerospace Center (DLR) – Research Areas

- Aeronautics
- Space Research and Technology
- Transport
- Energy
- Defence and Security
- Space Administration
- Project Management Agency



Traffic Management for Large Scale Events and Disasters

- Wide-ranging airborne monitoring for capturing of traffic state, people/ crowd movement and status of infrastructures
- Complementary ground-based ad-hoc traffic detection based on wireless technologies
- Reliable operational picture regarding traffic situation and prognosis + quality assessment
- Decision support for traffic management and rescue logistics



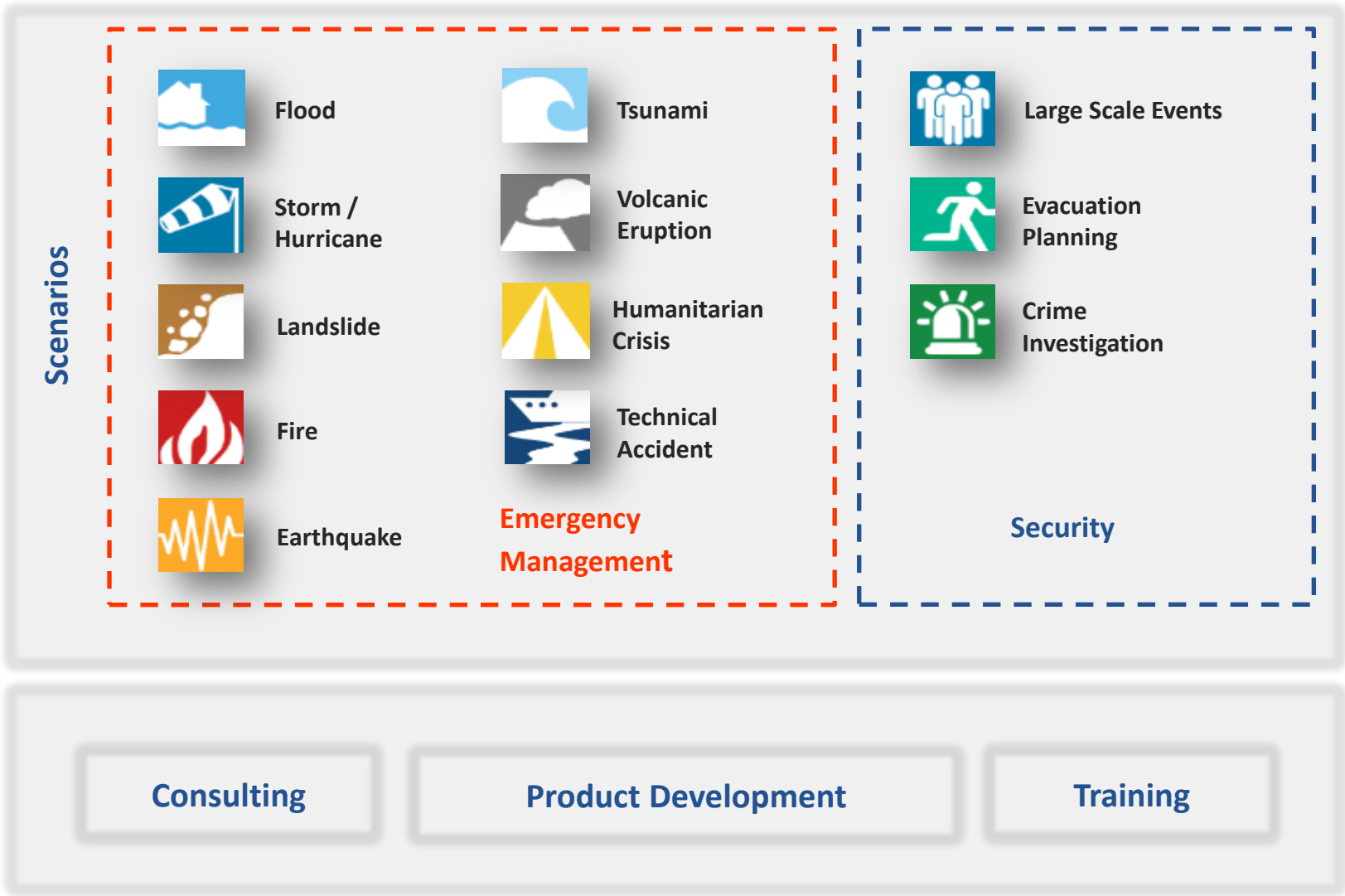
ZKI – Center for Satellite Based Crisis Information Szenarios

- Provides a **24/7** service for
 - Rapid mapping and damage assessment
 - Monitoring crisis situations
 - Reference mapping for disaster preparedness
- Supports the **International Charter „Space and Major Disasters“**
- Has a substantial focus on **research and development**

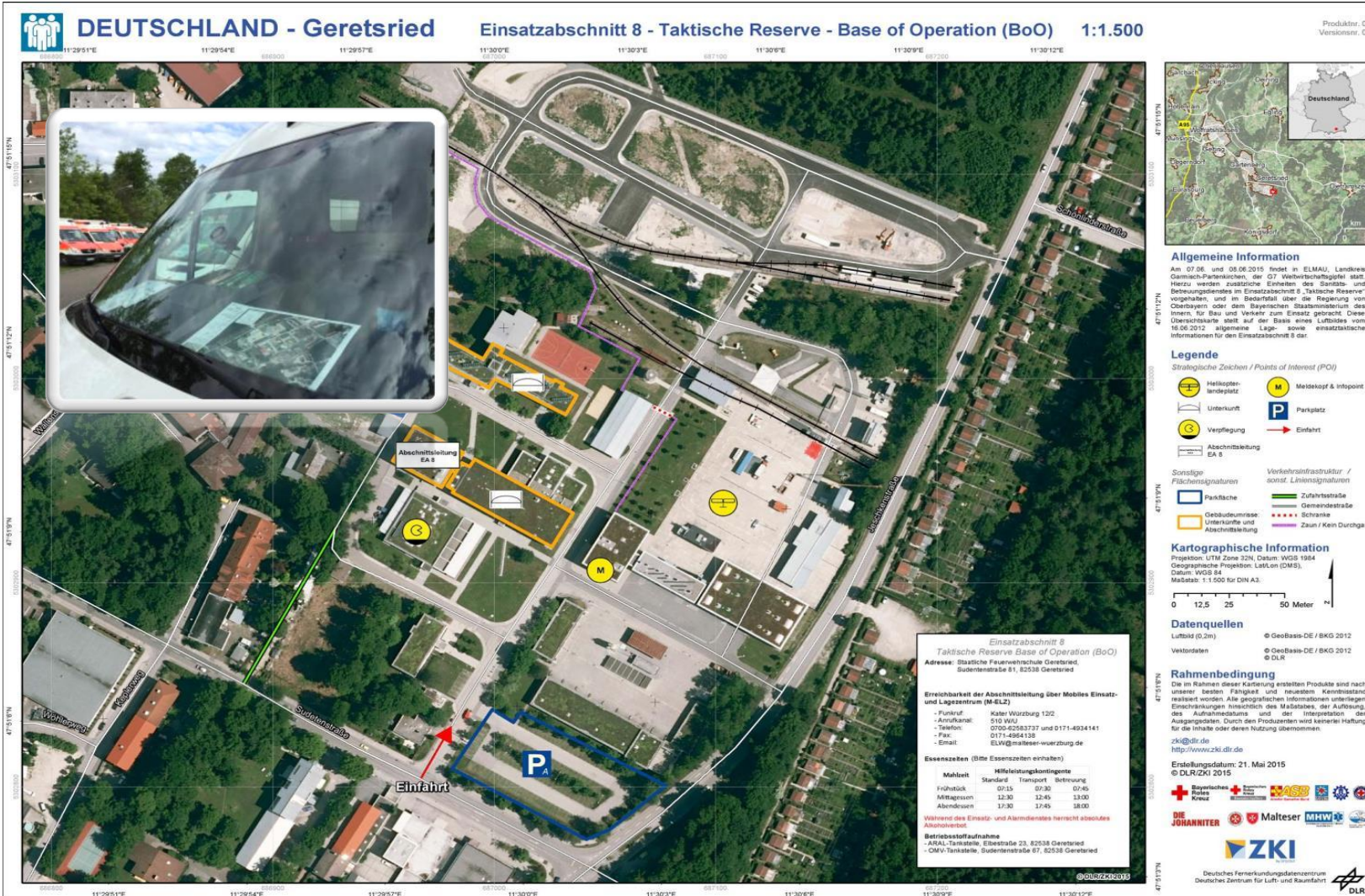


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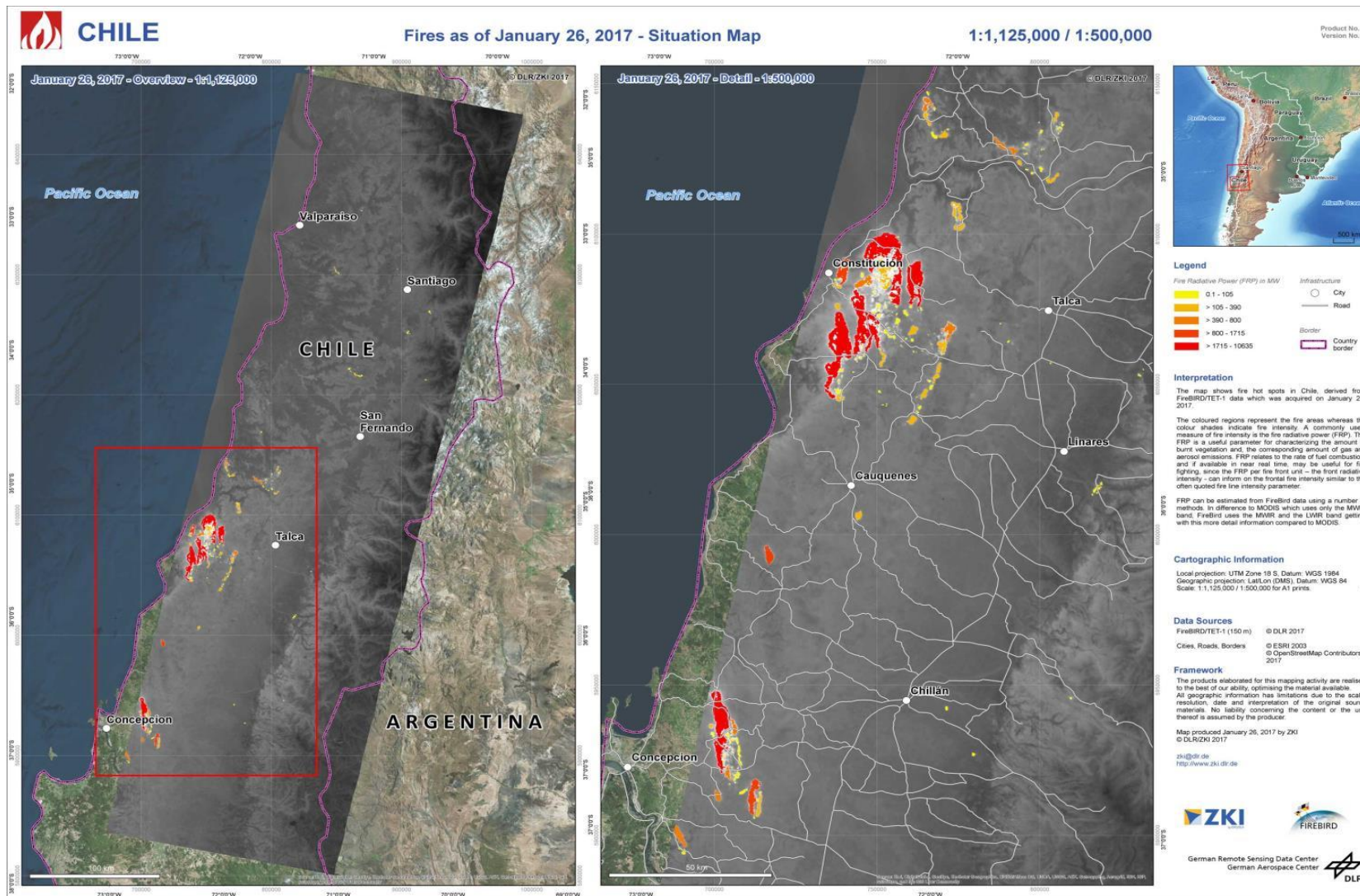


Base of Operation (BoO) G7 Summit, 7– 8 June 2015



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Chile – Fires January 2017



Nepal, earthquake on April 25, 2015

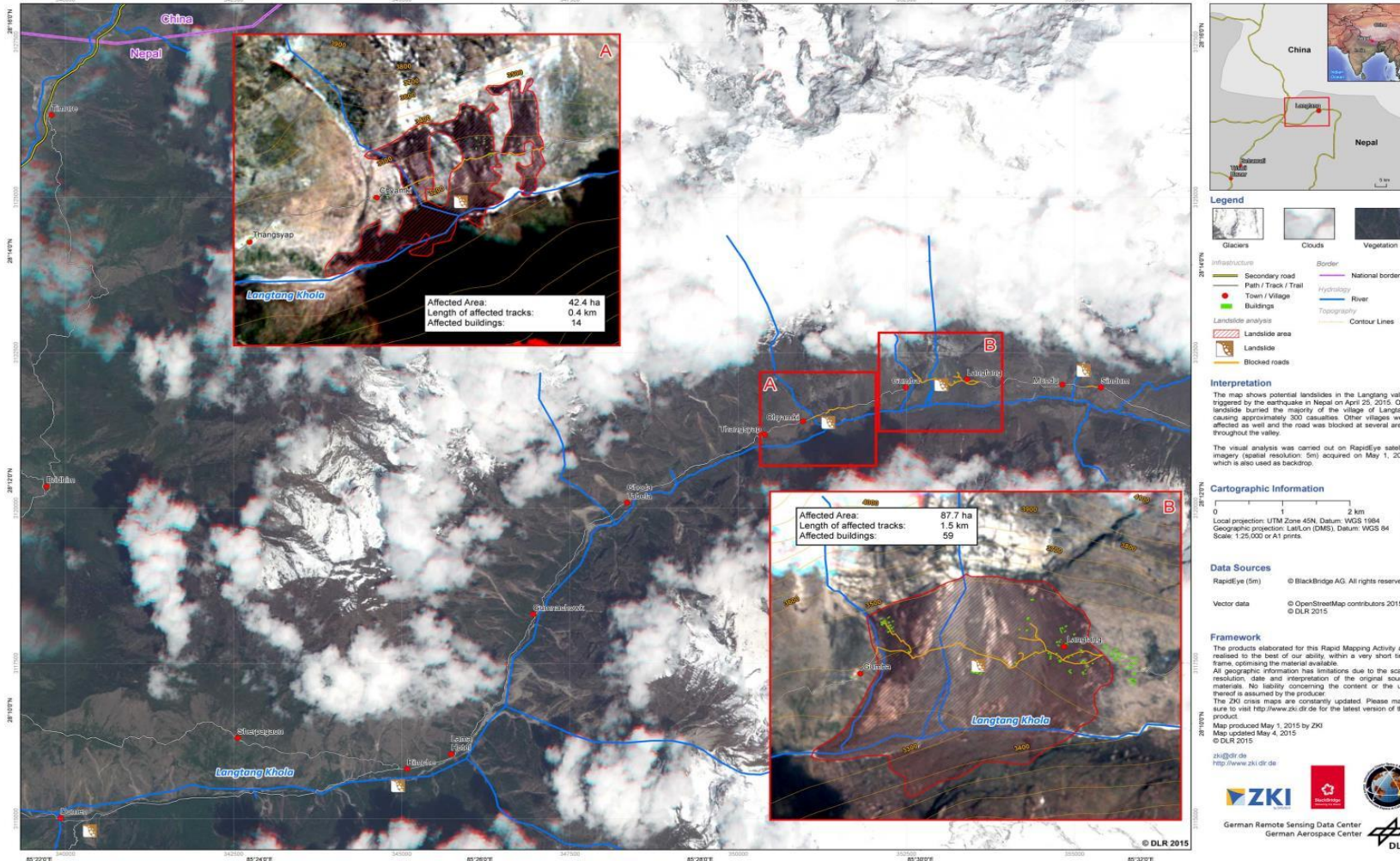


Nepal - Langtang

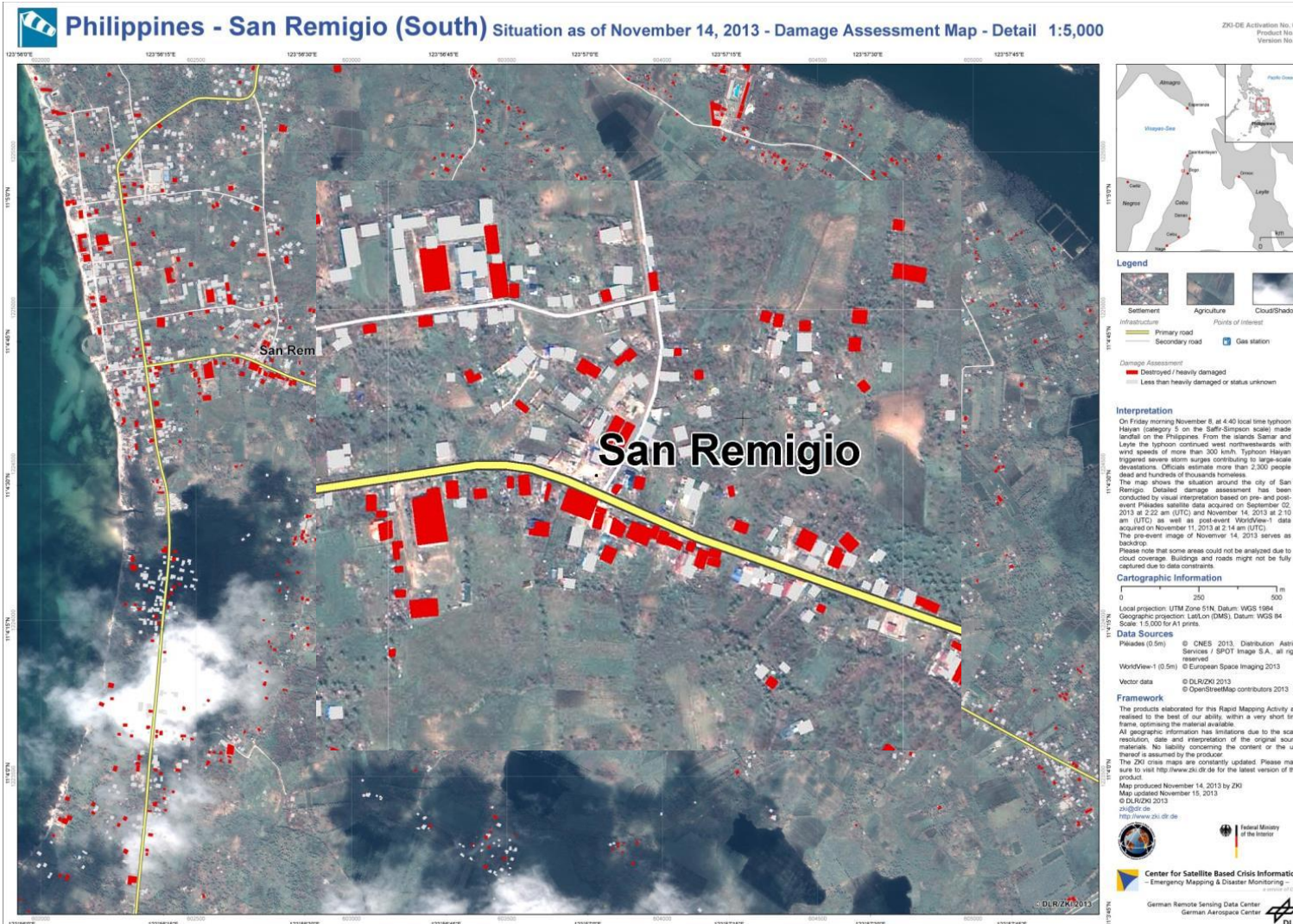
Earthquake caused landslides - Situation as of May 1, 2015 - Overview Map

1:25,000

Charter Call 630931
Product No. 01
Version No. 02



Typhoon Haiyan made landfall on Philippines



Bavaria is the most popular federal state in Germany. As a result of this popularity, the bavarian citys are growing much faster than somewhere else.



If somebody needs help, the Bavarian Red Cross will be there.



Uwe Kippnich

Coordinator Security Research
and Applied Telematic



Leonhard Stärk

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