Central-Italy earthquake: emergency management

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2nd Scientific Seminar of the Disaster Risk Management Knowledge Centre
24th August 2016

Seismic event
3.36 am – Ml 6.0
299 people died

Four affected regions: Lazio, Marche, Umbria, Abruzzo
Epicentral municipalities: Accumoli, Amatrice (Rieti) Arquata del Tronto Montegallo (Ascoli Piceno) Norcia (Perugia)
Seismic events
26 October 19.10 – Mw 5.4
26 October 20.18 – Mw 5.9
30 October 7.40 – Mw 6.5
Four light injured people in Marche, 7 in Lazio and 17 in Umbria.

Four affected regions: Lazio, Marche, Umbria, Abruzzo
Epicentral municipalities: Norcia (Perugia), Castelsantangelo sul Nera, Visso e Ussita (Macerata)
Seismic events 18 of January
10.25 – Mw 5.1
11.14 – Mw 5.5
11.25 – Mw 5.4
14.33 – Mw 5.0

34 people died as a consequence of the heavy snowfalls

Four affected regions: Lazio, Marche, Umbria, Abruzzo
Epicentral municipalities: Montereale, Pizzoli, Capitignano, Campotosto, Cagnano Amiterno
Central Italy Earthquakes

**Overview**

- Deaths 299
- Injured 390
- Affected people in the area 500,000

**Regional cross border earthquakes**

**4 Regions affected:** (Lazio, Abruzzo, Marche, Umbria)

Since August nearly **60,000 shocks**

Estimated **damage and emergency measures costs 23.5 billion €**
Challenges

**FOUR** affected regions = a vast territory;
Need for coordinating 4 different systems
High number of **resources** mobilized to cover a wide affected area
Critical infrastructures (roads and electricity network)
**Access** and **logistics** in the area
Removal and disposal of **debris**
Local administrations **continuity**
**Vulnerability** of the territory (building codes, agricultural areas, hydrogeological risk....)
**Cultural** heritage
**Media** attention
Public and Private building/houses **assessment** (close to 200,000 requests)
**Three** main seismic events
**Long** sequence of seismic (and other) events
**Repeated and recurring situations!**
National coordination for the first emergency response
The Operational Committee met permanently until 28 August 2016
Search & rescue
Medevac
Sheltering people

25 camps set up by Regional and National Volunteers organizations

Now dismantled
After late October shocks, 1296 people have been hosted in temporary shelters.
Assistance to the population needing accommodation

From 24th of August to 31st of October 2016

From 1st November until End of January

Assisted population

End of January
GENERAL STRATEGY

USAR/Health response
Tents, Hotels, CAS, Container
Usable houses
SAE
Reconstruction

Hours/days
weeks
months
years
First organisational model

DiComaC – National Command and Control Centre
COR - Regional Operational Centre
CCR - Regional Coordination Centre
COM - Intermunicipal Operational Centre
COI - Intermunicipal Operational Centre
COC – Municipal Operational Centre
Today’s model

DiComaC

Marche
- SOUP Ancona
  - SOI FM e AP
  - SOI Macerata
- COC/Comuni
- COC/Comuni

Lazio
- Centro Operativo Intercomunale Borbona, Cittareale, Leonessa, Posta
  - COC/Comuni
- Centro Operativo Intercomunale Amatrice e Accumoli
  - COC/Comuni
- COC/Comuni

Abruzzo
- Centro Operativo Regionale
  - COC/Comuni

Umbria
- Centro Regionale PC Foligno
  - COAR NORCIA Norcia - Preci - Cascia - Monteleone di Spoleto
  - Altri COC/Comuni
  - COC Norcia - Preci - Cascia - Monteleone di Spoleto
The National coordination system on site
Direction of Comand and Control (Di.Coma.C.)

28 August 2016 Di.Coma.C. was established in Rieti at 12:00
Direzione di Comando e Controllo (DiComaC)

Coordination Unit
Logistics and assistance to the population
Planning and Technical Unit
Volunteers
Press and Communication
Health
Lifelines
Road network management
Emergency Telecommunications
ICT
Human Resources
Admin, financial and legal support
Post event damage assessment
Air cell
School
Cultural Heritage

Representatives of Fire Brigade, SSOO, Regions, ANCI, Parks Authorities, Miur, Mibact and Competences Centres
9 schools in different municipalities in the four regions using donations
Esempi danni alla rete viaria
Esempi danni alla rete viaria
The situation of roads network after the late shocks was quite critical. The extension of the network (15,300 km) and damages required a systemic approach in the evaluation of damages and identification of proper recovery measures.

**Implementing partner for road safety**

- 3,000 km assessed
- 622 sites visited
- 574 critical points identified
- 517 actions proposed

**PROGRAM FOR ROADS RECOVERY**

- 408 projects
- 389 mln €
Cultural heritage
DAMAGE INSPECTIONS ON HISTORICAL BUILDINGS

4500 DAMAGE INSPECTIONS ON 3785 CHURCHES, HISTORICAL PALACES, OTHER...
(52% DAMAGED BUILDINGS)
SAFETY COUNTERMEASURES ON IMMOVABLE CULTURAL HERITAGE

450 RELEVANT SAFETY COUNTERMEASURES ON HISTORICAL BUILDINGS (CHURCHES, HISTORICAL PALACES, MUSEUMS..)
SAFETY COUNTERMEASURES ON IMMOVABLE CULTURAL HERITAGE
13,000 recovered pieces from 329 buildings, 5,000 books, 2,600 m. archives.
13,000 RECOVERED PIECES FROM 329 BUILDINGS,
5,000 BOOKS,
2,600 m. ARCHIVES
Remarks

- The *position* of the ITA CPD in the governmental structure
- *Role* of ITA CPD
- *Legal* framework
- *Resilience* of the system
- Clear *leadership* in emergency and connections with local governments
- System allows a governance for *ordinary* tools using *extraordinary* means and put all the different actors in the position to work closely at their best.

Lessons learnt

- *Reinforce* the local emergency response basic capacities
- *Work on prevention and invest in retrofitting measures*
- Promote further Disaster risk awareness campaign
- Reinforce emergency and contingency planning
The struggle itself [...] is enough to fill a man's heart. One must imagine Sisyphus **happy**.

*Albert Camus*

*Le Mythe de Sisyphe.*

« essay of the absurde »