

COORDINATOR'S MESSAGE

Welcome to the first newsletter of the **Know your city, Reduce seismic risk through non-structural elements** (KnowRISK) project. A part of the publicity actions planned for this project is the publication of a periodic electronic newsletter that is aimed at presenting the KnowRISK on-going activities and results. In this 1st issue we present a summary of the project, its goals and tasks, the latest news about meetings and workshops, and work that is in progress.

[Mário Lopes]



Overview

The KnowRISK project's main goal is to provide local communities access to expert knowledge on reduction of non-structural seismic risk and protection solutions. Scientific knowledge is turned into practical knowledge to be used by citizens and to engage communities in disaster risk reduction. This project was awarded a grant from the European Union (ECHO) and is being coordinated by Instituto Superior Técnico (IST) of Lisbon. KnowRISK project duration is two years, between 1 January 2016 and 31 December 2017.

PROJECT STRUCTURE



Added Values

Portfolio, Practical Guide and Video

KnowRISK risk communication initiatives rely on specific tools that can be used by a wide range of stakeholders: a Portfolio for building stakeholders, managers and professionals, and a Practical Guide for citizens. The Portfolio will help identify non-structural elements in building stock that may cause harm to occupants and reduce buildings' functionality, and provide economic and socially feasible solutions to reduce such risks. The Practical Guide is a tool to raise awareness among citizens on the need to reduce non-structural vulnerability highlighting which are the Do-It-Yourself solutions and which are those requiring expert intervention.

Shaking table tests on a full scale bedroom took place at LNEC, in Lisbon. The tests are intended to simulate the seismic action that leads to the toppling or movement of common furniture in most homes. Earthquake mitigation techniques to secure items and other elements were tested to assess their effectiveness as self-protection against non-structural damage that occurs during an earthquake. These tests will result in an awareness action film, to publicize and communicate protective actions and measures relating to non-structural elements and components.

Amatrice Field Mission



Norcia partially damaged by the 30th October earthquake



Aerial view of Amatrice



A KnowRISK mission, comprising members of IST and INGV visited the region of Amatrice in October and December. The IST team visited Norcia on 26th October, a few hours before the earthquakes of that day. They had a meeting with the Sindaco (mayor) of Norcia, during which they discussed the reasons for the good performance of the Norcia housing stock during the 24th August earthquake, and the seismic strengthening that had been performed during the last 4 decades.

ENGAGEMENT

Schools are a main target of KnowRISK communication actions. Playing a central role at the community level, they are places where different social groups normally converge. **Know your school: be safe!** are the participatory campaigns that engage public in risk communication. They stand on a dialogic approach where experts (researchers and local civil protection officials) collect inputs to tune their actions, while the public participation (students, teachers and their surrounding community) reinforce active citizenship.

SCHOOLS ACTIONS in Italy and Portugal

Know your school: be safe! in Italy

It started in the Spring of 2016 and it is an on-going action that will involve more than 2.000 students living in La Spezia, Milano, Varese, and Catania. A new learning strategy, based on Situated Learning Episode, EAS, was implemented to risk communication. It is a flipped up teaching approach where homework is for learning and skills, and classwork is for reworking and understanding. The KnowRISK-EAS is peculiar: it starts and ends with two different focus groups where students and teachers meet researchers and fire brigades to rework, restructure concepts and to come up with appropriate behaviors towards non-structural vulnerability.

Know your school: be safe! in Portugal

It started on October 2016 and will finish in March 2017. It involves 120 students from two schools in the Alvalade pilot area. The activities comprise: 1) Ex ante and Ex post surveys; 2) Ten classes to teach concepts about seismic risk and non-structural protective measures to 11-14 years old students; 3) Final workshop dedicated to the entire school, parents and local authorities and community.

Know Your School: be safe!



The KnowRISK EAS for Italy

The protocol included Ex ante and Ex post surveys

Preparation	T ₀ Focus Group	Expert support	Problem solving
Activity	Home work	Students	Learning by doing
Debriefing	T ₁ Focus Group	Expert support	Reflective learning

Protective behaviour model for Portugal

Knowledge

Dialogue

Vision of consequences

Development of competences



MEETINGS: 2ND GENERAL MEETING

The Osservatorio Etneo, INGV Sezione di Catania, hosted the 2nd General Meeting of the KnowRISK project from 15 to 16 December 2017 (<http://www.ct.ingv.it/knowrisk2016/>). Participants discussed engineering and seismological scenarios in the three pilot areas. Indeed, an in-depth debate was also devoted on ways to implement efficient strategies for risk communication. Experts' attention focused on barriers that hinder adoption of preventive measure, even when they are low-cost and easy to implement.

The meeting had the patronage of the town of Noto - a UNESCO cultural heritage site - where the participants of the meeting had a field trip on December 17th. The old town Noto was totally destroyed by a M 7.3 earthquake on January 11th 1693 that caused 60000 casualties. Extended abstracts of the meeting are published on an open access journal: MISCELLANEA INGV, ISSN 2039-6651, 33.

<http://istituto.ingv.it/l-ingv/produzione-scientifica/miscellanea-ingv/>



Credits photo by Alfio Amantia

KnowRisk

Catania

PORTUGAL

ITALY

ICELAND

DISSEMINATION EVENTS

Talks | Comunicação de Risco. Quando Lisboa Treme – de 1755 à Cidade Resiliente

Date(s): 28 January 2016

Location: Lisbon, Portugal

KnowRISK involvement: standard dissemination

Website: <http://www.cm-lisboa.pt/cidade-resiliente>

EGU General Assembly 2016

Date(s): 17-22 April 2016

Location: Vienna, Austria

KnowRISK involvement: project presentation + standard dissemination

Website: <http://www.egu2016.eu/>

[The 3 presentations of the project - one PICO and two posters - received great appreciation, as the number of worldwide visitors was particularly high. Attendees had their expertise in several fields: seismologists, engineers, experts in communication, filmmakers, and architects]

Sísmica 2016 - 10º Congresso Nacional de Sismologia e Engenharia Sísmica

Date(s): 20-22 April 2016

Location: Azores, Portugal

KnowRISK involvement: standard dissemination

Website: <http://sismica2016.azores.gov.pt/>

ScienzAperta

Date(s): 12-13 May 2016

Location: Milan, Italy

KnowRISK involvement: project presentation + standard dissemination

People: 10 classes with more than 200 students

Website: <http://scienzaperta.rm.ingv.it/>

ScienzAperta

Date(s): 16-21 May 2016

Location: Catania, Italy

KnowRISK involvement: project presentation + standard dissemination

People: 12 classes with more than 500 students and several other visitors

Website: <http://scienzaperta.rm.ingv.it/>

ICUR2016 - International Conference on Urban Risks

Date(s): 30 June-2 July 2016

Location: Lisbon, Portugal

KnowRISK involvement: standard dissemination

Website: <http://www.ceru-europa.pt/icur2016/>

35rd General Assembly of the European Seismological Commission (GA ESC)

Date(s): 4-11 September 2016

Location: Trieste, Italy

KnowRISK involvement: project presentation + standard dissemination

Website: <http://www.35esc2016.eu/>

Sons do Vale_Sustentabilis

Date(s): 11 September 2016

Location: Lisbon, Portugal

KnowRISK involvement: project presentation + standard dissemination

Website: <https://www.facebook.com/sonsdovalesustentabilis/?fref=ts>

TutelaSpezia

Date(s): 1-2 October 2016

Location: La Spezia

- a) KnowRISK involvement: lectures to elementary school students with a scientific story-telling activity (PROTEGO 2016);
 - b) the participated exhibition "Non aver paura! Gioca e impara a convivere con la natura" with hands on activities and scientific fairy tales;
 - c) the conference "Risk is a choice, are you aware?".
- a) and b) in collaboration with Ordine Regionale dei Geologi della Liguria and fiabeefrane from Viareggio.

Website: <https://www.facebook.com/tutelaspezia/photos/a.485439121638538.1073741828.484087525107031/61293955888493/?type=3>;
https://tutelaspezia.files.wordpress.com/2016/10/tutelaspezia_comunicatostampa_1.pdf;
http://www.speziafiere.it/index.php?option=com_content&view=article&id=386:tutelaspezia&catid=22:calendario-completo-2016&Itemid=72

La Settimana del Pianeta Terra

Dates:

- a) 16/10/2016 Playdecide: terremoti, comunicare l'emergenza, Ferrara.
<http://www.settimanaterra.org/node/1981>
- b) 17-22/10/2016 Rischio sismico e ambientale: tra conoscenza e mitigazione, Lerici (La Spezia) with the scientific games for schools "Trova il senso... con il rischio" <http://www.settimanaterra.org/node/2067>
- c) 18-19/10/2016 Tra terremoti e dissesto idrogeologico: un paese di pericoli, Varese with scientific games for schools and excursion in collaboration with Parco Campo dei Fiori <http://www.settimanaterra.org/node/2069>

Location: Varese, Ferrara and La Spezia

KnowRISK involvement: T₀-Focus group, Lecture activity, hands-on laboratory and a role game (playdecide)

Website: <http://www.settimanaterra.org/>

Bimbi per bimbi

Dates: October-November 2016

Location: Viareggio and Fivizzano

- a) 11/11/2016 at "Jenco" school of Viareggio
- b) 20/11/2016 a Fivizzano (MS) "Terremoto in Piazza" together with Settore Sismica della Regione Toscana

KnowRISK involvement: Lecture activity, hands-on laboratory

Website: <https://fiabeefrane.com/>;
<https://fiabeefrane.com/2016/09/24/bimbi-per-bimbi/>

The schools' security day

Dates: 22 November 2016

Location: La Spezia

National event by the Ministry of Education MIUR (Ministero dell'Istruzione, dell'Università e della Ricerca)

KnowRISK involvement: KnowRISK EAS at "J. Piaget" school of La Spezia

Website: http://www.istitutocomprendivo6laspezia.it/pvw/app/SPME0045/pvw_sito.php?sede_codice=SPME0045&from=-1&page=1979591;
http://www.istitutocomprendivo6laspezia.it/pvw/app/SPME0045/pvw_sito.php