

The Italian communication campaign “I Do Not Take Risks - Earthquake”

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(Received: December 2, 2015; accepted: February 8, 2016)

ABSTRACT “Io Non Rischio - Terremoto (INR-T)” (“I Do Not Take Risks - Earthquake”) is an Italian communication campaign created and promoted by the Italian Department of Civil Protection (DPC), the National Association for Public Assistance (ANPAS), the Italian Institute of Geophysics and Volcanology (INGV), and the Network of the University Laboratories of Seismic Engineering (ReLUIS). The rationale behind the campaign is that preventing or at least reducing the dangers associated with earthquakes is everyone’s interest and duty. Learning how to do so, through an effective diffusion of information on seismic risk, fosters collective and individual responsibility, while encouraging active participation on the part of citizens. The INR-T campaign aims to promote a culture of seismic risk prevention, starting by training volunteers involved in civil protection activities, so that they can effectively and continuously help and encourage the public to take a more active role in seismic risk reduction. This paper describes the INR-T campaign and the activities that have led to an increasing number of involved volunteers and members of the public reached since the first edition (2011), until the fourth edition (2014).

Key words: civil protection, seismic risk mitigation, social vulnerability, communication activities, volunteers, ordinary citizens.

1. Introduction

A suite of preventive actions can be carried out to mitigate natural risks working both by reducing physical vulnerability (technical actions) with respect to the specific natural hazard at hand, and by enhance social capacity (cultural actions) of the involved community (the general public, authorities, professionals, etc.). While the concept of physical vulnerability is largely established in the scientific community dealing with risk management (assessment and

mitigation), this is not the case for the concept of social capacity. On this subject, an extensive discussion can be found in Kuhlicke and Steinführer (2010), where the following general definition is provided: “By social capacity we mean all the resources available at various levels (e.g., individuals, organizations, communities) that can be used to anticipate, respond to, cope with, recover from and adapt to external stressors (e.g., a hazardous event). These resources include skills, knowledge, social networks as well as institutions, structures and knowledge of how to elicit and use them”.

Even if the assessment and reduction of structural vulnerability remain the main objectives to be pursued in an effective policy of risk mitigation (e.g., Masi and Vona, 2012; Calvi, 2013), building social capacity helps to increase the risk perception and awareness of people, and therefore their capacity to adapt to and cope with natural hazards (Masi *et al.*, 2014). Seismic risk perception, communication, and regulation are extremely topical issues worldwide, and they will be even more so in the future. In this framework, in 2011, the first edition of “Io Non Rischio - Terremoto (INR-T)” (“I Do Not Take Risks - Earthquake”) campaign was devised and carried out.

The INR-T campaign is targeted at ordinary citizens and, for this reason, it is carried out in the squares of the towns where they live and work. The campaign is particularly aimed at adults, selecting as its main target the head of the family in his/her role of homeowner and person responsible for the safety of his/her house and family.

It should be noted that experience shows that the adult population can be the social group most in need of such a campaign in terms of psychosocial attitudes. In fact, children and young people have more frequent opportunities to face the problem of seismic risk (e.g., through emergency exercises at school), and generally they are endowed with greater psychological resources than adults to adapt and cope with emergencies. In addition, within a community, the understanding of an emergency situation can be improved and the adaptive capacities further developed through the discovery of cultural, religious and material traces of past earthquakes.

The INR-T campaign was created and promoted by the Italian Department of Civil Protection (www.protezionecivile.it), the National Association for Public Assistance (www.anpasnazionale.org) representing the voluntary sector, the Italian Institute of Geophysics and Volcanology (www.ingv.it), and the Network of the University Laboratories of Seismic Engineering (www.reluis.it) representing the scientific community.

In the following, some information about the four leading partners of the campaign is explained briefly, mainly to show their complementarity in terms of role and expertise.

The Civil Protection Department (DPC) has resided in the offices of the Presidency of the Council of Ministers since 1982. It has a guiding role, in agreement with regional and local governments, in the prevention, forecasting, and monitoring of risks and intervention procedures nationwide. The department coordinates the response to natural disasters, catastrophes, and other events whose intensity and extent require a response involving extraordinary powers and means. Moreover, also in agreement with regional governments and local authorities, DPC works to set up rules and guidelines concerning risk prevention to cope with disasters and minimize damage to people and property. It promotes drills, national and international training projects, and activities that help promote the culture of civil protection.

The National Association for Public Assistance (ANPAS) is a national-level independent movement whose activities revolve around volunteer work. It is active in 19 out of 20 Italian regions, and currently represents about 870 associations of citizens throughout Italy. ANPAS is

involved daily in services ranging from emergency medical care and transportation, to social programs, healthcare programs, and disaster prevention and relief. 90,000 active volunteers and 400,000 members make ANPAS the largest volunteer association in Italy, representing an effective format and resource for those who want to work towards a more proactive and caring society. Currently, almost 750 member associations have requested accreditation to develop national civil service programs and place up to 1,000 civil service volunteers in various areas, including the following: medical care and transportation, social services for children, care of the elderly and disabled people, disaster relief, environmental protection, international aid programs, and promotion of social solidarity.

The Italian Institute of Geophysics and Volcanology (INGV) was meant to gather all scientific and technical institutions operating in the fields of geophysics and volcanology and to create a permanent scientific forum in the Earth sciences. The main mission of INGV is the monitoring of geophysical phenomena in both the solid and fluid components of the Earth. INGV is devoted to 24-hour countrywide seismic surveillance, real-time volcanic monitoring, early warning, and forecast activities. INGV operates in close coordination with the Ministry of University and Research and with Civil Protection authorities, both at the national and local levels. It also cooperates with the Ministry of Environment, the Ministry of Education, the Ministry of Defense, and the Ministry of Foreign Affairs when undertaking large research programs of national and international relevance. Finally, INGV pays special attention to education and outreach through publications for schools, scientific exhibitions, and dedicated Internet pages.

The Network of the University Laboratories of Seismic Engineering (ReLUIS) is a nonprofit interuniversity consortium with the purpose of coordinating seismic engineering activities in Italian university laboratories. ReLUIS performs its role by providing scientific, organizational, technical, and financial support to the associated universities (Basilicata, Naples, Pavia, Trento), as well as promoting their participation in scientific and technological activities in the seismic engineering area, in accordance with national and international research programs. Further, it acts as the scientific partner and adviser of various governmental, regional, and local agencies, as well as public and private institutes, to achieve tangible objectives concerning seismic vulnerability and risk assessment and mitigation. Specifically, it acts as a DPC Competence Centre in the field of seismic risk and, in this role, it also coordinates the largest Italian research program, funded by DPC, on seismic vulnerability and risk.

The present paper reports the main features of the INR-T campaign, describing the main phases of its development from the first pilot edition in 2011 to the 2014 edition.

2. The communication campaign

The first edition of the INR-T campaign was held on October 22 and 23, 2011 in the main squares of nine Italian towns located in high-seismicity zones. A selected group of volunteers (about 30 individuals) was first trained by experts from DPC, ANPAS, INGV, and ReLUIS on basic concepts concerning seismic hazard, vulnerability, seismic risk, and communication procedures. Then, in turn, they trained other volunteers, widening the number of participants in a cascade process of knowledge diffusion to the population. During the first event, 120 volunteers (about 13 volunteers for each town) provided information and distributed brochures,

while answering citizens' questions about the possible ways individuals can help mitigate seismic risk. As a consequence of the positive feedback and results of the 2011 campaign, a second edition was held in October 2012 and extended to about 100 town squares throughout Italy. In the second edition of the INR-T campaign, more than 1,500 trained volunteers from 12 different national civil protection associations were involved. Continuing in the same way, the third (2013) and fourth (2014) edition of the campaign took place in more than 200 Italian municipalities, mainly located in areas classified as high- and medium-seismicity zones, involving about 3,000 trained volunteers. In addition, during 2012, the INR-T campaign was implemented during the seismic swarm that affected the Pollino mountain range (at the border of the Basilicata and Calabria regions, southern Italy) starting in October 2010. The Civil Protection offices, at the national and regional levels, undertook several initiatives to help people cope with the swarm and to prepare for large events that could occur in the future. The citizens of Basilicata and Calabria reacted well during the main shock of the swarm (M 5.0, October 26, 2012), demonstrating that the preparedness and communication activities carried out during the seismic swarm played an important role in building and enhancing a positive public response to mitigate seismic risk (Masi *et al.*, 2014).

The positive results achieved during the Pollino experience and the encouraging response of citizens and volunteers during the first editions of the INR-T campaigns clearly showed that a new way of communicating was being created and, especially, that volunteers could effectively reach ordinary citizens in such a process. Furthermore, this proved to be a very good starting point to launch an integrated campaign, including other natural risks with the same branding and communication tools. Specifically, the "I Do Not Take Risks - Tsunami" campaign was added in 2013, and the "I Do Not Take Risks - Floods" campaign kicked off experimentally in 2014.

Volunteers are the main actors of the INR campaigns, starting with the concept that the most effective way to defend ourselves from a risk is to know about it. Such knowledge, in order to be useful, usually entails a level of in-depth analysis that can hardly be conveyed with a simple radio or TV advert. Ideally, a citizen should have the opportunity to talk with somebody who is able to explain to the citizen what he/she needs to know about earthquakes, tsunamis, and other risks, maybe meeting him right where he/she lives. In the INR-T campaign, volunteers also participated in the development of risk-prevention actions. In fact, ordinary citizens, serving as volunteers, inform other citizens with simplicity, treating them as equals serving as living examples by not only teaching prevention, but practicing it. The volunteers involved in the campaign generally live in the places the campaign reaches out to, and their permanent presence emphasizes that prevention should be practiced, not only in an emergency, but every day. Moreover, volunteers often know of, and spend time with, vulnerable population groups (e.g., older, marginalized, or disabled people), who generally have the most exposure to risk and the least access to other communication campaigns (e.g., web campaigns).

The campaign process includes three main phases: i) a first phase defining the campaign messages and the preparation of informative material, ii) a second phase related to the training process, and iii) the last phase, which consists of a two-day information campaign carried out in the main square of each involved town.

2.1. The training process

Each communication, information, and education process is necessarily a cascade process. Within the INR-T campaign, such a process has been applied to train volunteers and to disseminate information to citizens. The basic idea is related to the subsidiarity principle that a central authority should have a subsidiary (that is, a supporting) function, performing only those tasks that cannot be performed effectively at a more local level. Subsidiarity is the organizational guiding principle of the Italian civil protection approach. The same principle has been applied to the INR-T campaign by training volunteers operating in their own towns and letting them deliver the campaign message. These local volunteers know the specific issues affecting their territory, and know the local people they need to contact.

As already said, a cascade process was set up in the training phase, starting with the first edition of the campaign. The first step of the training phase of volunteers is devoted to first-level trainers, who hear experts, mainly from DPC, ANPAS, INGV, and ReLUIIS, deal with risk and communication concepts. Consequently, in a second step, those first-level trainers deliver the basic concepts of risk and communication to other volunteers within each local association.

During the first edition of the campaign, in 2011, each local association selected 12 to 15 volunteers who would later meet with citizens during the days of the campaign (among them there were 3 volunteers who had participated in the first-level training phase). At this stage, the 3 volunteers, directly trained by technicians, scientists, and risk communication professionals, conveyed the acquired knowledge to another 12 colleagues from the same voluntary organization and town. Their knowledge level was verified through practical simulations of the campaign. Thereafter, each volunteer was ready to meet citizens.

The lessons learned during the first year of the campaign, as well as the need to enlarge the number of volunteers to be trained to reach out to an increasing number of towns, required some changes in the training process, as described in the following.

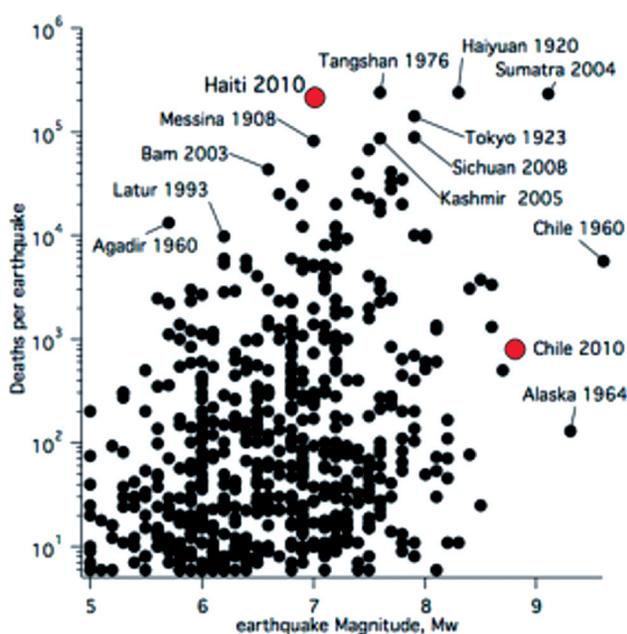


Fig. 1 - Earthquakes with the same magnitude can cause completely different consequences, depending on the capacity of the community at hand (adapted from Bilham, 2009).

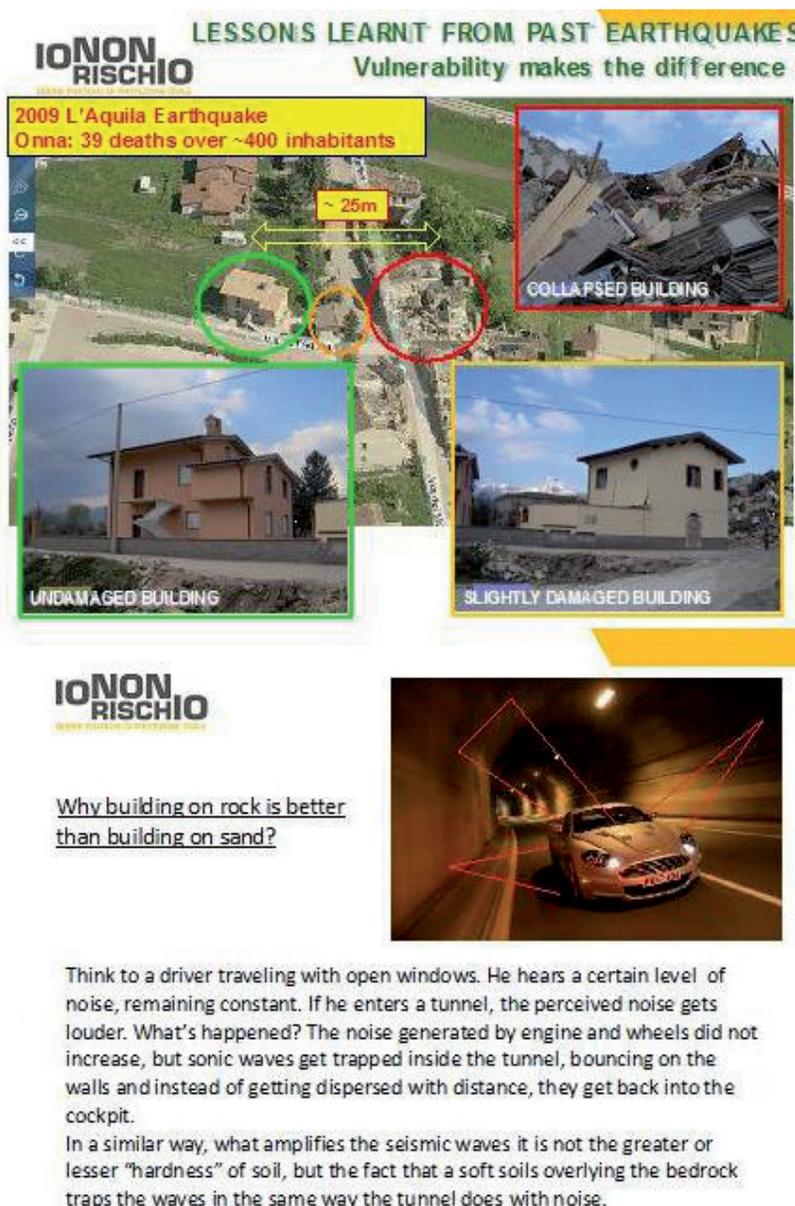


Fig. 2 - Example of the slides used during the activities to train volunteers within the INR-T campaign.

Starting with the 120 volunteers trained in the first edition, the number of trained volunteers reached nearly 4,500 in 2015 (fifth edition). The scientific community contributes to the campaign through the DPC Competence Centres for seismic risk: INGV and ReLUIS. Researchers train volunteers, conveying to them basic concepts of seismic risk through language and knowledge that are as simple as possible. As an example, one of the basic concepts is that “*Earthquakes do not kill people, buildings do!*”. In fact, during the training, researchers explain graphs such as the one reported in Fig. 1, which shows that earthquakes with the same magnitude can cause completely different consequences depending on the vulnerability and exposure of the involved community. As an example, the events identified by the red markers

show that, despite the higher magnitude, the earthquake that occurred in 2010 in Chile ($M \approx 9.0$) caused far fewer deaths than the 2010 Haiti earthquake ($M \approx 7.0$).

In the same way, during the training, researchers teach the basic concepts concerning seismic hazard and vulnerability, using simple patterns and images, such as those in Fig. 2.

2.2. The communication tools: informative materials and setting up of the square

During the weekend dedicated to the INR-T campaign, information stands are set up in the main square of each selected town. In Fig. 3, pictures show volunteers working during the two days of the campaign.

The volunteers distribute informative materials and answer citizens' questions on the possible ways to reduce seismic risk. The informative materials are the result of a long research and language-simplification effort carried out by a team involving members of the scientific community, risk managers, and communication experts. The intention was to find the best balance among information completeness, clarity, and usefulness. Currently, the informative materials consist of a leaflet and a card.

The leaflet (Fig. 4a) deals with prevention aspects. It explains in clear language what the citizen needs to know in order to reduce the effects of an earthquake, describes some simple measures that everyone can carry out at home, and provides some suggestions about more technical measures requiring the support of an expert technician.

The card (Fig. 4b) deals with emergency measures. It contains simple, useful information for families on what to do during and right after an earthquake. The card can be hung on a wall or a door in plain sight so that the proposed suggestions can be promptly and automatically applied in the case of an event.

With respect to the stands and the square arrangement, the main elements are the so-called Totem, the Time Line, and some gadgets mainly intended to attract children (Fig. 5).

The Totem is the centre of each set-up: it is an installation composed of colorful, illustrated, inexpensive stacked boxes containing games and interactions revolving around seismic risk.



Fig. 5 - A typical view of the square of a town involved in the INR-T campaign (on the left), on the right an example of the Totem.

The games and interactions stimulate and improve communication between volunteers and citizens.

The Time Line is a long cord hanging between the top of the Totem and the top of the informative stand and contains a collection of pictures and documents (newspaper and magazine cuttings, historical reports, etc.) about earthquakes that have affected the town or its local region starting in the distant past and continuing to recent times.

A series of balloons with the campaign color and logo are typically used to decorate the informative stands. Really, the balloons, as well as puppets (see Fig. 5, on the left) and other games, frequently become an effective way to accommodate families, because children are easily attracted by them: volunteers give a balloon to each child and, in the meantime, they have an opportunity to talk to the parents about the campaign.

3. Overview of past editions of the INR-T campaign

3.1. The 2011 edition: the pilot project

The initiative was created in 2011 thanks to a successful cooperation among institutions, volunteers' associations, and the scientific community, as specified in the previous sections. The first edition of the INR-T campaign was held on October 22 and 23, 2011 in the squares of 9 Italian towns located in a high-seismicity zone (Fig. 6).



Fig. 6 - The nine Italian towns of the first INR-T campaign (2011).



Fig. 7 - The first group (2011 INR-T campaign) of volunteers trained by researchers and DPC officials.

A selected group of volunteers (only ANPAS civil protection volunteers participated in the town squares during the first edition) was first trained by experts from DPC, ANPAS, INGV, and ReLUIIS on basic concepts concerning hazard, vulnerability, seismic risk, and communication procedures (Fig. 7 shows the first group of volunteers trained by researchers and DPC officials). Then, in turn, they trained other volunteers, widening the number of participants in the process of knowledge diffusion to the population. During the 2011 campaign, 120 volunteers provided information, illustrated materials, and answers to citizens' questions on possible ways for individuals to mitigate seismic risk.

3.2. The 2012 edition: the campaign becomes nationwide

As a consequence of the positive feedback and results of the 2011 campaign, a second edition was held on October 13 and 14, 2012, and extended to about 100 towns throughout the country (Fig. 8).

In the second edition of INR-T campaign, the main actors were also the volunteers, in this case more than 1,500 trained volunteers from 12 different national associations working in civil protection. As for the training of volunteers, in a first phase, more than 300 volunteers were trained by experts from DPC, INGV, ReLUIIS, and ANPAS, among which some are the authors of this paper. Later, these volunteers trained an additional 1,200 volunteers, all committed to the process of knowledge diffusion under the supervision of a selected group of "senior" volunteers (the ones trained during the 2011 edition of the campaign). The training process ended on September 2012 when several meetings with all the volunteers were held to verify that the training method had been effectively followed. The main topics of the training program were historical seismicity and its recollection, seismic hazard, vulnerability of the building stock, and, finally, the role of institutions, volunteers, and citizens in the mitigation of seismic risk.

3.3. The 2013 and 2014 editions: not only earthquakes

The third (2013) and fourth (2014) editions of the campaign took place in more than 200 Italian municipalities, mainly located in areas classified as high-seismicity zones (Fig. 9), and involving about 3,000 trained volunteers.

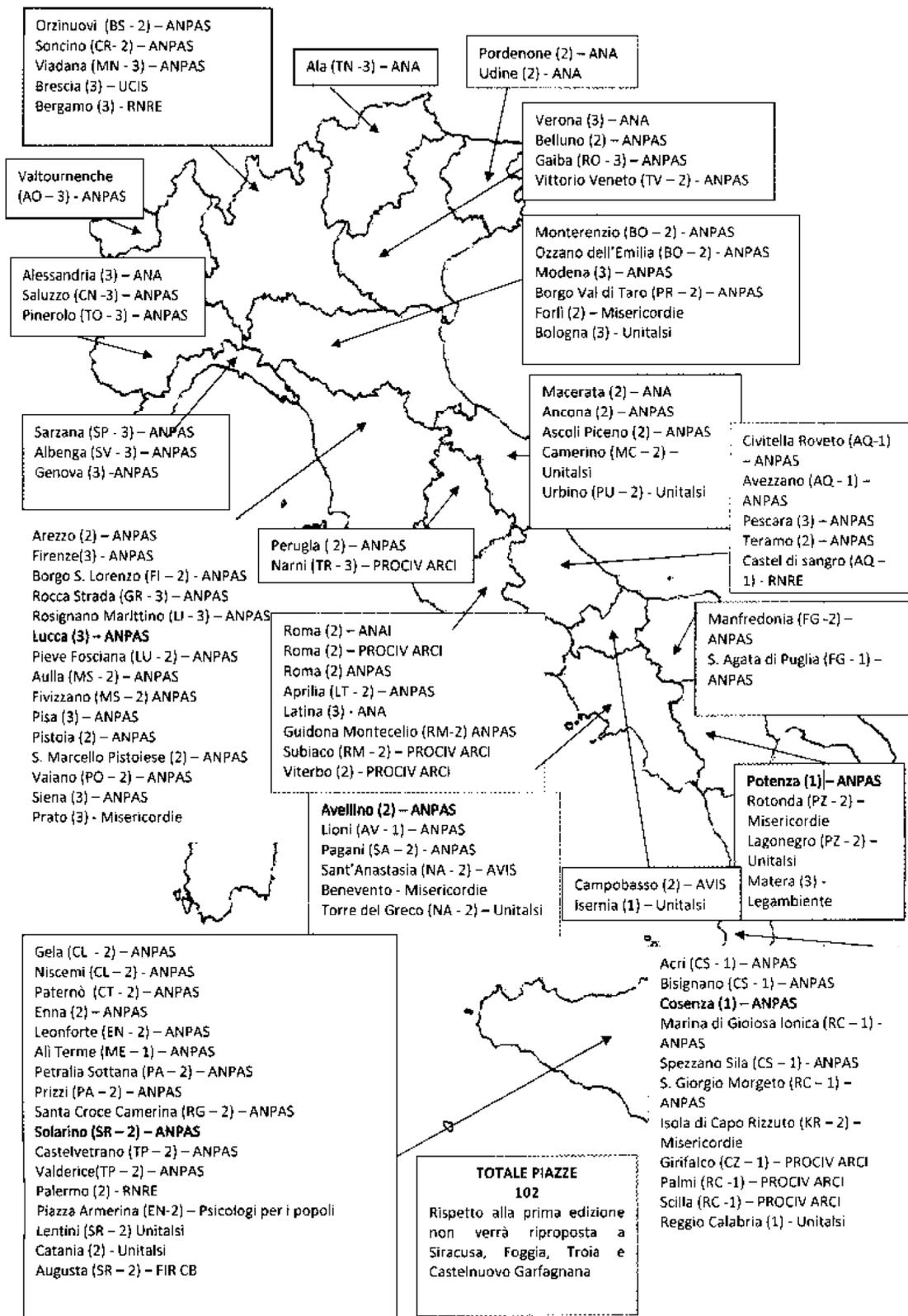


Fig. 8 - The second edition of the INR-T campaign (2012), with about 100 involved towns.

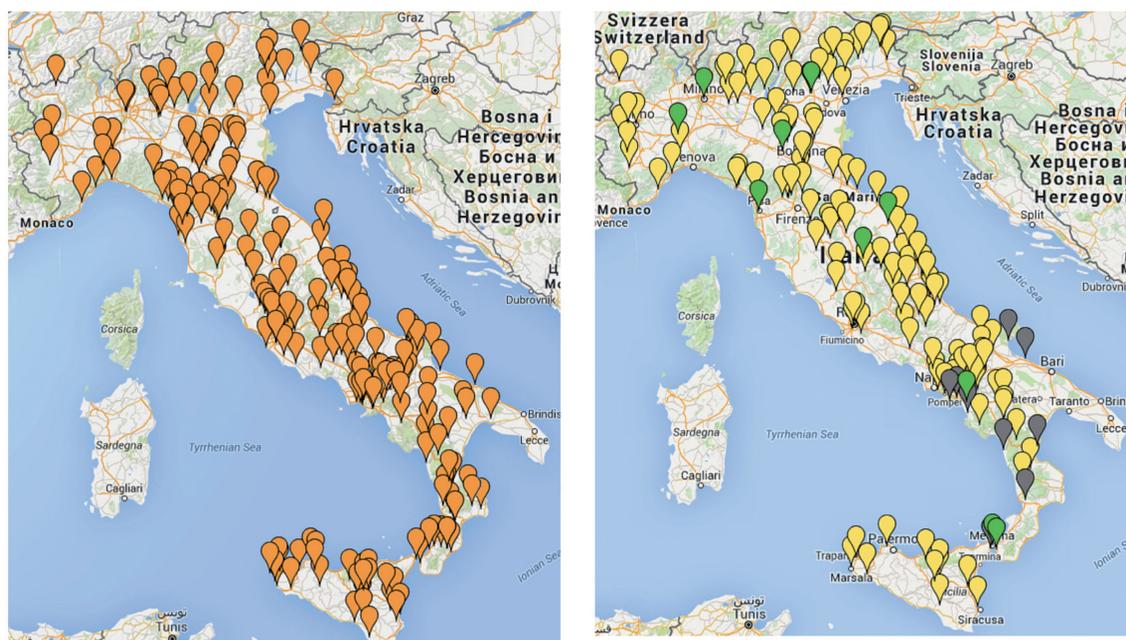


Fig. 9 - Towns involved in 2013 (on the left) and 2014 (on the right) campaigns.

Specifically, the 2013 campaign was held on September 28 and 29 in more than 200 municipalities throughout Italy. About 3,500 volunteers of the local sections of 21 national associations of civil protection were in the squares to make their fellow citizens aware of seismic risk, thus promoting their active role in the risk prevention process. In addition to the campaign devoted to earthquake risk, in more than 20 squares in Calabria, Campania, Puglia, and Sicily, the initiative “I Do Not Take Risks - Tsunami” was held at the end of October to inform citizens about tsunami risk.

In 2014, the campaign on earthquake and tsunami risk was held in two phases due to weather problems, that is on June 14 and 15 in about 220 squares, and on October 11 and 12 in about 150 squares of Italian towns located in almost every Italian region. On October 11 and 12, ten town squares hosted also events devoted to flood risk. The 2014 campaign was held under the *High Patronage of the President of the Italian Republic*, confirming the broad social value given to the initiative.

3.4. The numbers of the INR-T campaign

INR started in 2011 and, currently (2015), the campaign is planned in more than 400 squares. From 2011 to 2014, more than 5,300 volunteers representing the local sections of 21 different national organizations of civil protection volunteers have been trained. In total, during the first 4 years, more than 900,000 citizens have been contacted, and 314 Italian towns have been involved. In 2014, about 400,000 people were contacted regarding seismic, tsunami, and flood risks by 3,200 volunteers at more than 200 information points located in a number of squares across the national territory. More than 41,000 unique visitors have gone to the official website of the campaign (www.iononrischio.it) and 177,000 pages and 83 photo galleries have been

published online. In the virtual town squares of the social networks, the official Facebook page of the campaign collected more than 4,100 "Likes" and about 100,000 people were reached through published posts, more than 500 were followed on Twitter, and about 900 photos were published on Instagram.

4. Final remarks

The experience of the first 4 years of the INR-T campaign confirms that risk communication and awareness are crucial to building social capacity and to help citizens effectively cope with natural hazards. An effective form of communication to enhance the social capacity of a community involves local civil protection volunteers, who know both the territorial framework and the needs of fellow citizens.

During the campaign, the civil protection volunteers meet their fellow citizens in the squares, in the same towns in which they live and work, to talk about the risks of the territory and make themselves available for any possible questions and clarifications that come up after the campaign. Whether providing assistance during an emergency, medical aid in ambulances, social services, or communication activities for risk prevention, civil protection volunteers dedicate their time and their cultural and personal training to their neighbors, especially to those in greatest need. Within this context, making citizens more aware of natural risks is extremely important, because being prepared helps the community to deal better with possible emergency situations. Demonstrating the value of the path taken this far is the citizens' growing appreciation and interest, which is confirmed by the messages and comments left in the town squares as the following: *"Information represents the best way to limit damage"*, *"I don't take risks, because I know that the hand of a civil protection volunteer is always there, to reach out to whoever is in need"*, *"These events should take place more often, we citizens want to be informed!"*, *"Information means prevention and helps to make people's lives safer. Thank you for the services of prevention and for the solidarity"*.

The first 4 years of the campaign offered several lessons, of which the main ones are the following:

- it is possible to take advantage of increased awareness and risk perception to push more people toward short- and long-term risk mitigation measures;
- civil protection volunteers can be a very effective means for reaching a large sector of the population, provided that volunteers are carefully trained;
- expectations about earthquake prediction raised by the media without any scientific support proved to be the most difficult issue to be tackled: to overcome this bias, risk education in when no emergency is underway is absolutely essential.

Looking at the future of the campaign and taking advantage of the main lessons learned in the previous editions, the training process was substantially modified during 2015. This change is aimed at ensuring a further enlargement of the campaign in such a way that the trainers could not only train the 12 colleagues from the same municipality, but they could become the trainers of all volunteers coming from a larger geographical area, irrespective of their town or organization. As a result of this change, a network of selected volunteers, named "INR trainers", was created. Almost 70 volunteers from all over Italy have been selected through a public

competition held among the volunteers who were already involved in at least one of the past editions of the campaign. The selected volunteers attended a six-day course in Rome, after which they were equipped with a “training kit” made up of educational material (generally PowerPoint presentations) to be used in the training of second-level volunteers. The INR trainers have become responsible, first, for training groups of volunteers from an assigned geographical area and, second, for checking their acquired knowledge. The last step of the training phase consists of the organization, a few weeks before the campaign, of regional meetings among members of INR partners, trainers, and some volunteers from all the towns involved (more than 400 towns in 2015). These meetings have been scheduled for the volunteers to exchange experiences from past events and to ensure that members of the INR partners meet the town square volunteers before the campaign takes place. The 2015 campaign activities, which were carried out in more than 400 squares on October 17 and 18, are being recorded and the relevant data are still being processed.

Acknowledgements. The INR-T campaign is due to the work of quite a lot of people, and the authors wish to thank all of them for their passion and, above all, for the example they set. The authors are particularly grateful to all the civil protection volunteers and all the members of DPC, ANPAS, INGV, and ReLUIS involved in the campaign.

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