Laying the foundations for a sound risk communication strategy: the Italian Tsunami Alert Centre case

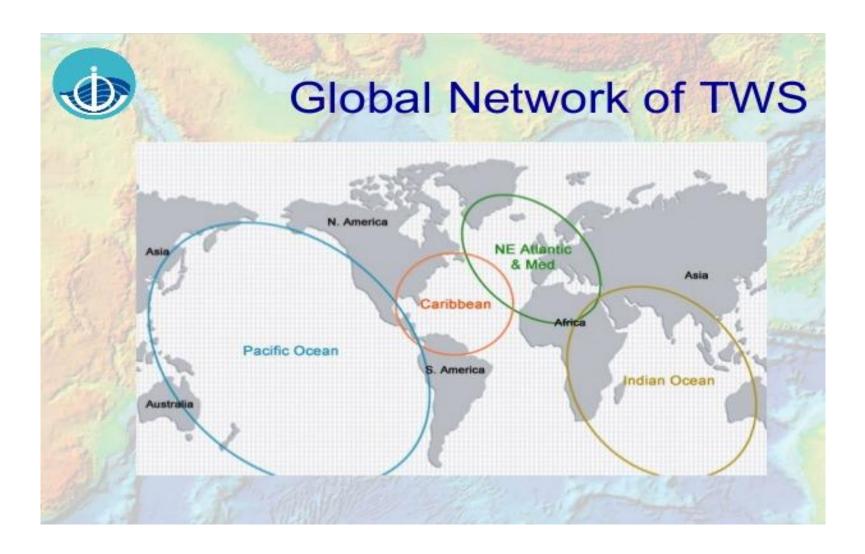
Andrea Cerase – Coris La Sapienza Alessandro Amato – Centro Allerta Tsunami INGV

DIPARTIMENTO
DI COMUNICAZIONE
E RICERCA SOCIALE

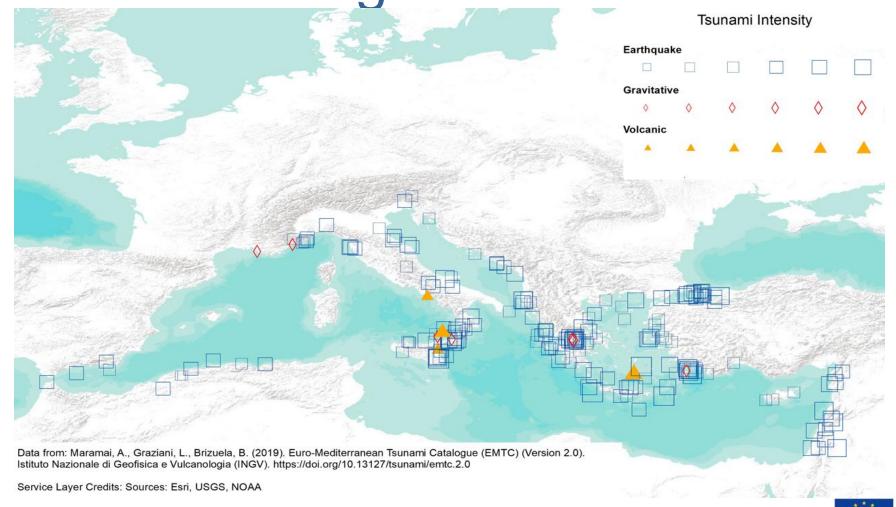








Tsunami in the Mediterranean:
a neglected risk

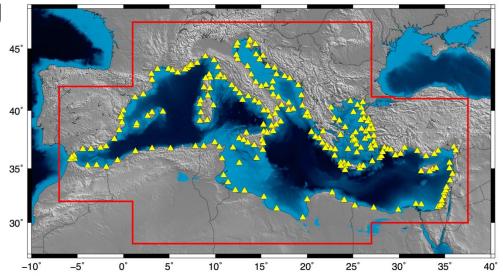




alerting system)

The Italian Centro Allerta Tsunami (CAT) @ INGV

National Tsunami Warning Center Tsunami Service Provider for NEAM countries Tsunami Focal Point for Italian authorities Part of SiAM (Italian



Italian Prime Minister Directive "SiAM" (February 2017)



Direttiva recante: "Istituzione del Sistema d'Allertamento nazionale per i Maremoti generati da sisma – SiAM"

IL PRESIDENTE DEL CONSIGLIO DEI MINISTRI

VISTA la legge 24 febbraio 1992, n. 225 recante: "Istituzione del Servizio nazionale della protezione civile" e successive modificazioni e integrazioni;

VISTO il decreto legislativo 31 marzo 1998, n. 112, recante: "Conferimento di funzioni e compiti amministrativi dello Stato alle regioni ed agli enti locali, in attuazione del capo I della legge 15 marzo 1997, n. 59" ed in particolare gli articoli 107 e 108:

VISTO il decreto-legge 7 settembre 2001, n. 343, convertito, con modificazioni, dalla legge 9 novembre 2001, n. 401, recante: "Disposizioni urgenti per assicurare il coordinamento operativo delle strutture preposte alle attività di protezione civile e per migliorare le strutture logistiche nel settore della difesa civile";

VISTI, in particolare, il comma 2, dell'articolo 5 del sopra citato decreto-legge n. 343/2001, ove è previsto che il Presidente del Consiglio dei Ministri predisponga gli indirizzi operativi dei programmi di previsione e prevenzione dei rischi, nonchè i programmi nazionali di soccorso e i piani per l'attuazione delle conseguenti misure di emergenza, nonché il comma 5 del medesimo articolo 5 ove è previsto che il Capo del Dipartimento della protezione civile rivolga alle amministrazioni centrali e periferiche dello Stato, delle Regioni, delle Province, dei Comuni, degli Enti pubblici nazionali e territoriali e di ogni altra istituzione ed organizzazione pubblica e privata presente nel territorio nazionale, le indicazioni necessarie al raggiungimento delle predette finalità;



Roma - Lunedì, 5 giugno 2017

DELLA REPUBBLICA I

SI PUBBLICA TUTTI

Main tasks:

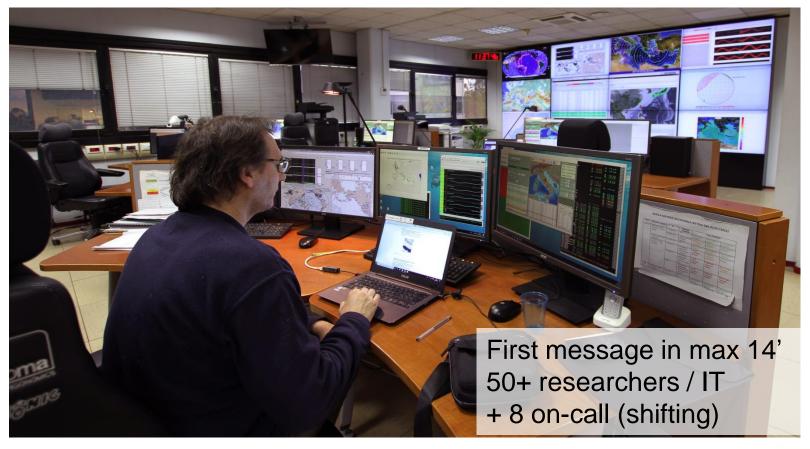
- Tsunami Warning: NTWC / TSP TWFP
- Tsunami hazard (S-PTHA)

Criticalities:

- "Rare" tsunami events in the Mediterranean
- Low attention by politics and decision makers
- Low awareness and preparedness



CAT-INGV in the monitoring room of the ONT in Rome - H24/7 Service



What if a small tsunami hits?



What is a strategy?

O→ 😂 strategy noun

BrE /'strætədʒi/ i(i); NAmE /'strætədʒi/ i(i)
(pl. strategies)

- 1 🜟 📀 [countable] a plan that is intended to achieve a particular purpose
 - the government's economic strategy
 - strategy for doing something to develop a strategy for dealing with unemployment
 - strategy to do something It's all part of an overall strategy to gain promotion.
 - → SEE ALSO EXIT STRATEGY

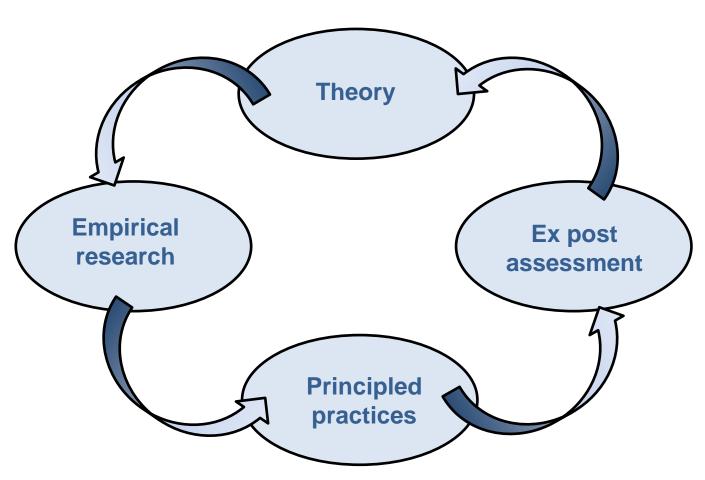


Starting from scratch

- Until mid-2018: no information available on Italian TWS operations
- Poor familiarity of populations with tsunamis (working hypothesis)
- Low risk perception (working hypothesis)
- Scarce availability of documents on tsunami in Italian
- Limited information from scientific and civil protection institutions
- Tendency to use a very technical language



From theory to «principled practices»



(Source: Cerase, 2017: 226)



Goals of the strategy

- Inform communication activities to the "best scientific knowledge"
- Make knowledge available to both citizens and the media through a plain and intelligible language
- Becoming a well-recognized and authoritative scientific source on tsunamis
- Counteracting fake news and rumors
- Avoid arbitrary and potentially harmful actions on behalf of communicators
- Promote the adoption of internationally recognized operating standards
- Encourage exchange between research institutions, agencies and individual researchers



From research to communication

- The research question is: what kind of data, knowledge and resources are needed to communicate effectively?
- Research as a mean to define WHAT should be communicated and HOW (integration between the scientific and communicative components)
- CAT-INGV communication ALWAYS lays on risk communication literature and research data along with wellknown best practices (e.g. TSP websites analysis)
- CAT-INGV launched a research on tsunami risk perception in Italy, to better understand public's needs and improve message effectiveness
- CAT-INGV also contributes to the activities of Working Group 4 (awareness) at IOC/NEAMTWS
- The research also includes the analysis of the legal profiles related to risk / emergency communication

Methods and techniques

- CaTi (Computer assisted Telephone interviewing)
- Pilot regions: Calabria and Apulia (> 3mln living in tsunami prone areas)
- Sample > 1000 interviews in 183 coastal municipalities
- Multi-method approach
- Goal: provide viable knowledge both for CAT DPC and Tsunami community in IOC-NEAM Region
- Research results may trigger a open discussion on risk and crisis communication strategies
- Following the Astarte research strategy, further developments may be implemented in other countries (comparative research)



Evidence from risk perception research

- Social imagery on tsunamis is dominated by TV footage of Sumatra and Tohoku events
- People hold that terms such as tsunami and maremoto are not equivalent (risk is differently characterized)
- Awaiting big catastrophic event, may let us lose sight of the risk posed by smaller (and probable) events.
- The danger from small tsunamis is almost totally neglected
- The level of knowledge depends very much on education, gender and knowledge sources
- The area affected by the 1908 tsunami and Tyrrhenian Calabria highlight some distinctive features that should be further analyzed



Sources, channels and related issues

- Television is the most used and influential channel
- Other broadcast media (books, radio, newspapers, cinema) are important but less so than television
- The Internet plays a much smaller role than expected (Censis, 2017, Istat 2017 and 2019)
- The role of social networks as a possible driver of knowledge should not be overlooked
- Institutional sources are little used to get information, although everyone expects them to be active for alerting in case of an event
- Overcoming the last mile means putting in place very different tools and channels: ICTs alone could be insufficient



Drafting key messages

Key messages were drafted by considering:

- research literature,
- good practices,
- guidelines and documents (UNISDR, IOC-UNESCO)

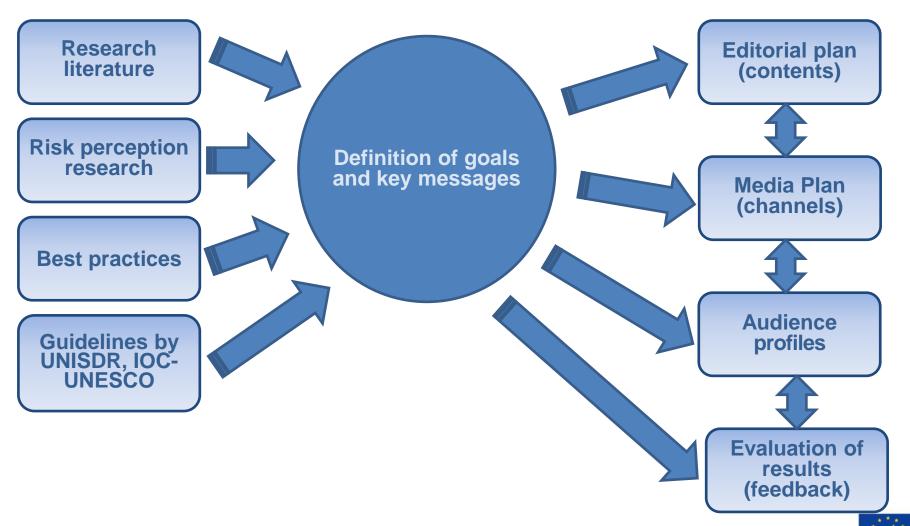
General assumptions and hypotheses have been empirically tested through research on tsunami risk perception

- "Tsunamis can also occur in the Mediterranean"
- " Even in the Mediterranean catastrophic events can occur"
- "Beware of small tsunamis: they are more frequent and can be very dangerous"
- "Basic knowledge on tsunami actually saves lives"





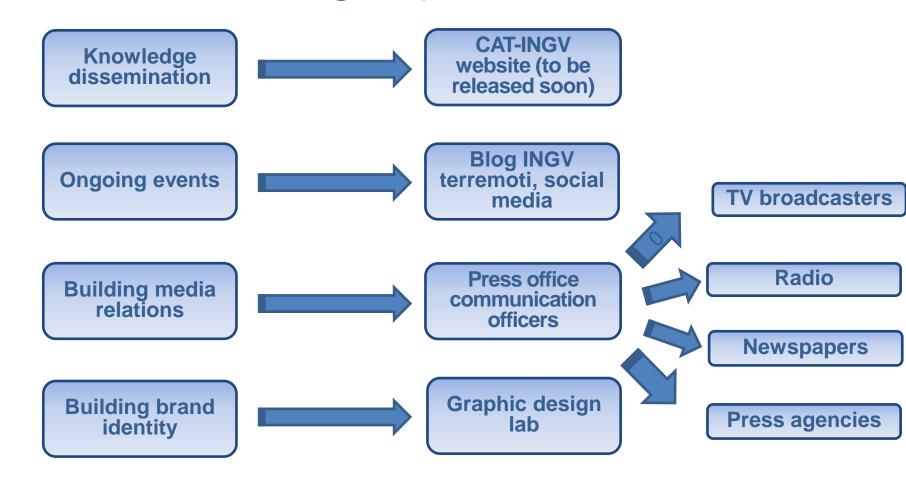
Building a risk communication strategy



Trento 21-22 October 2019

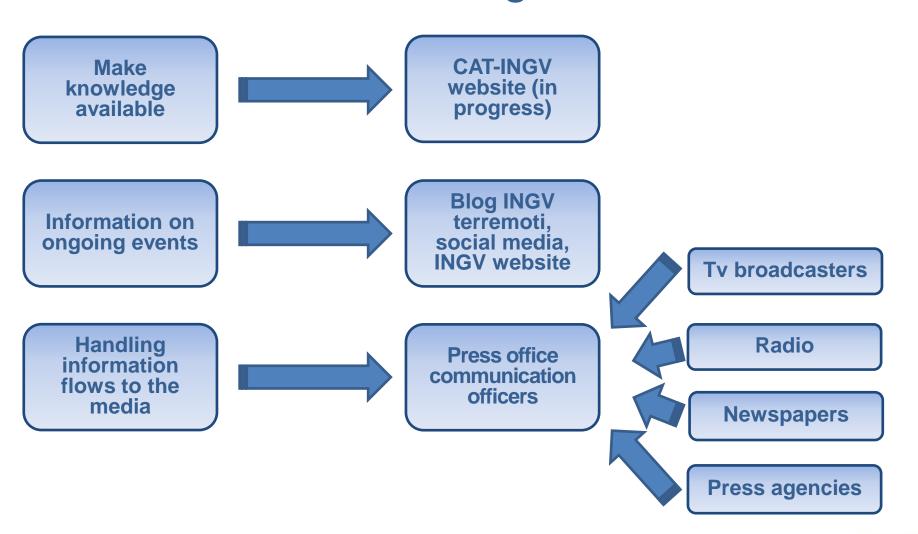
FRANCA - Flood Risk Anticipation and Communication in the Alps

Communicating in peacetime





Comunicating in a crisis



An open conclusion

- Tsunami risk communication: improve the way language is used (consider target education, avoid technical terms, use readability indexes).
- More information does not equate neither better understanding nor more effective risk mitigation
- Scientific and institutional sources should improve their communication
- Bear in mind what people actually know and understand
- Any message should provide information and suggest actions to be undertaken as to mitigate tsunami risk
- Making distinctions between scientific / risk communication would be a pointless exercise

