The role of traditional and social media
in emergency and post-emergency situations

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Mass media = major source of information for general public

Geretweet door Fukushima

Reuters Top News @Reuters · 14 mrt. 2011

FLASH: Reactor operator confirms fire near reactor building of Daiichi No.4 unit

Openen Beantwoorden Retweeten Favoriet Meer

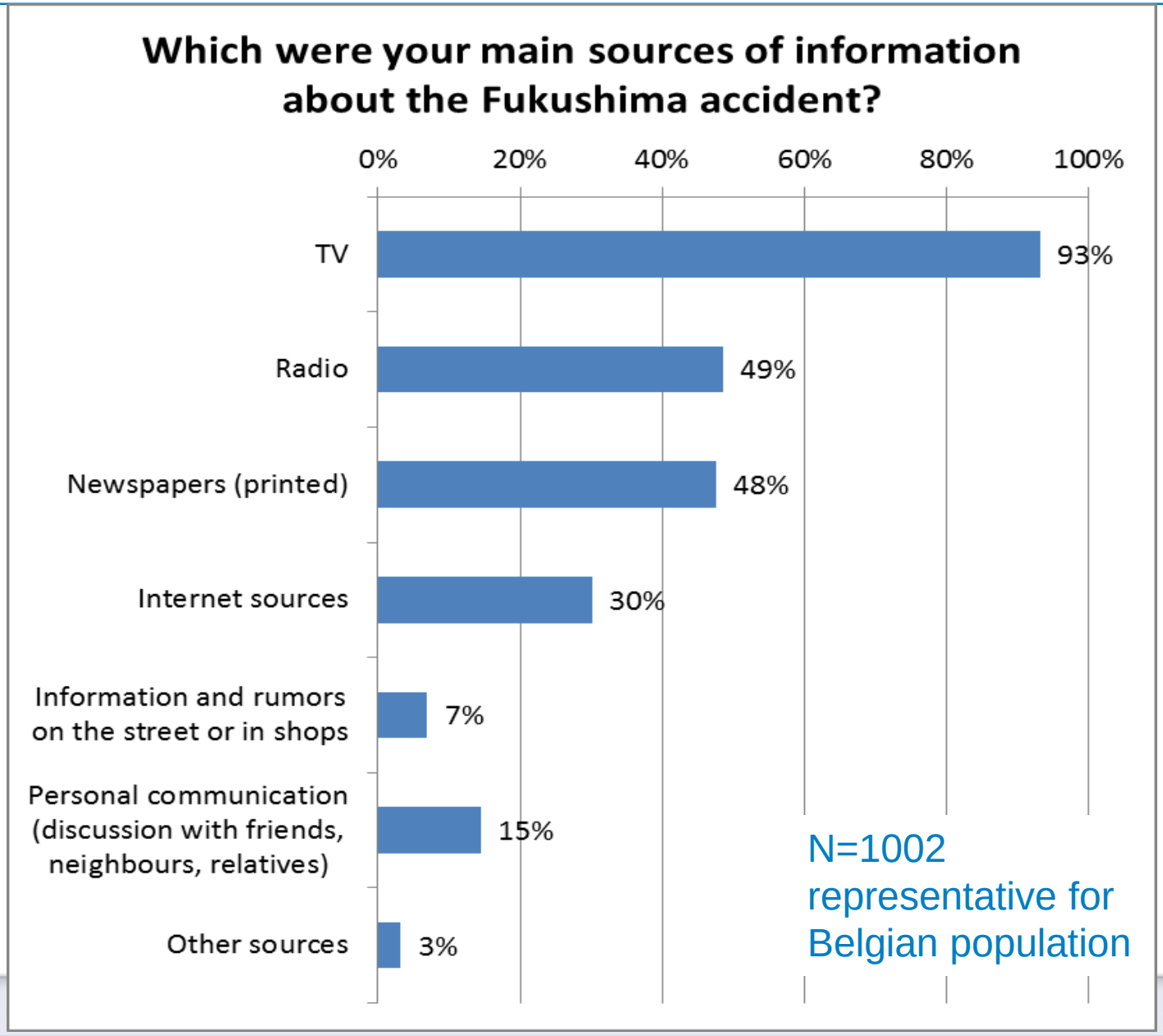
Geretweet door Fukushima

Breaking News @BreakingNews · 14 mrt. 2011

More on blast: Explosion may be more severe than previous incidents; containment vessel possibly damaged - nytimes http://nyti.ms/ecVU4i

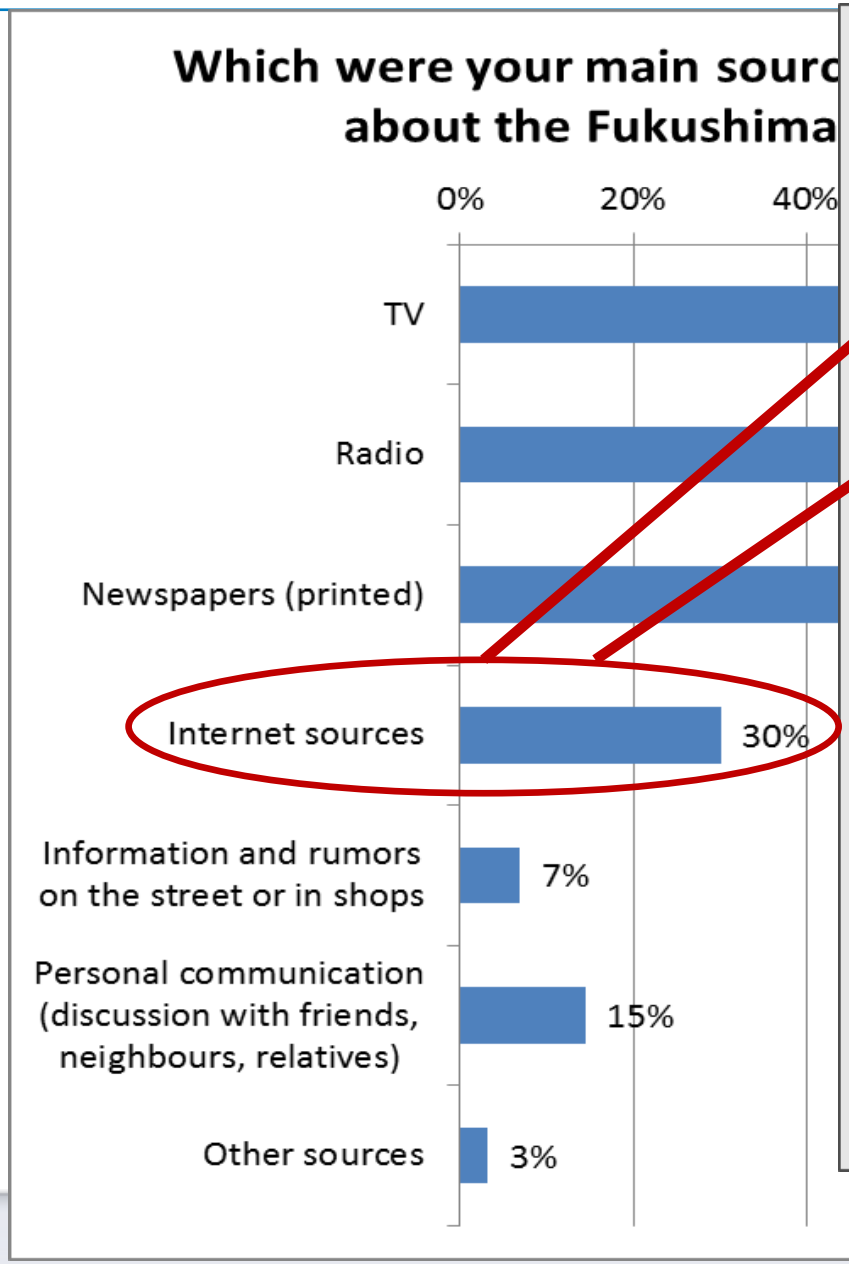
Openen Beantwoorden Retweeten Favoriet Meer

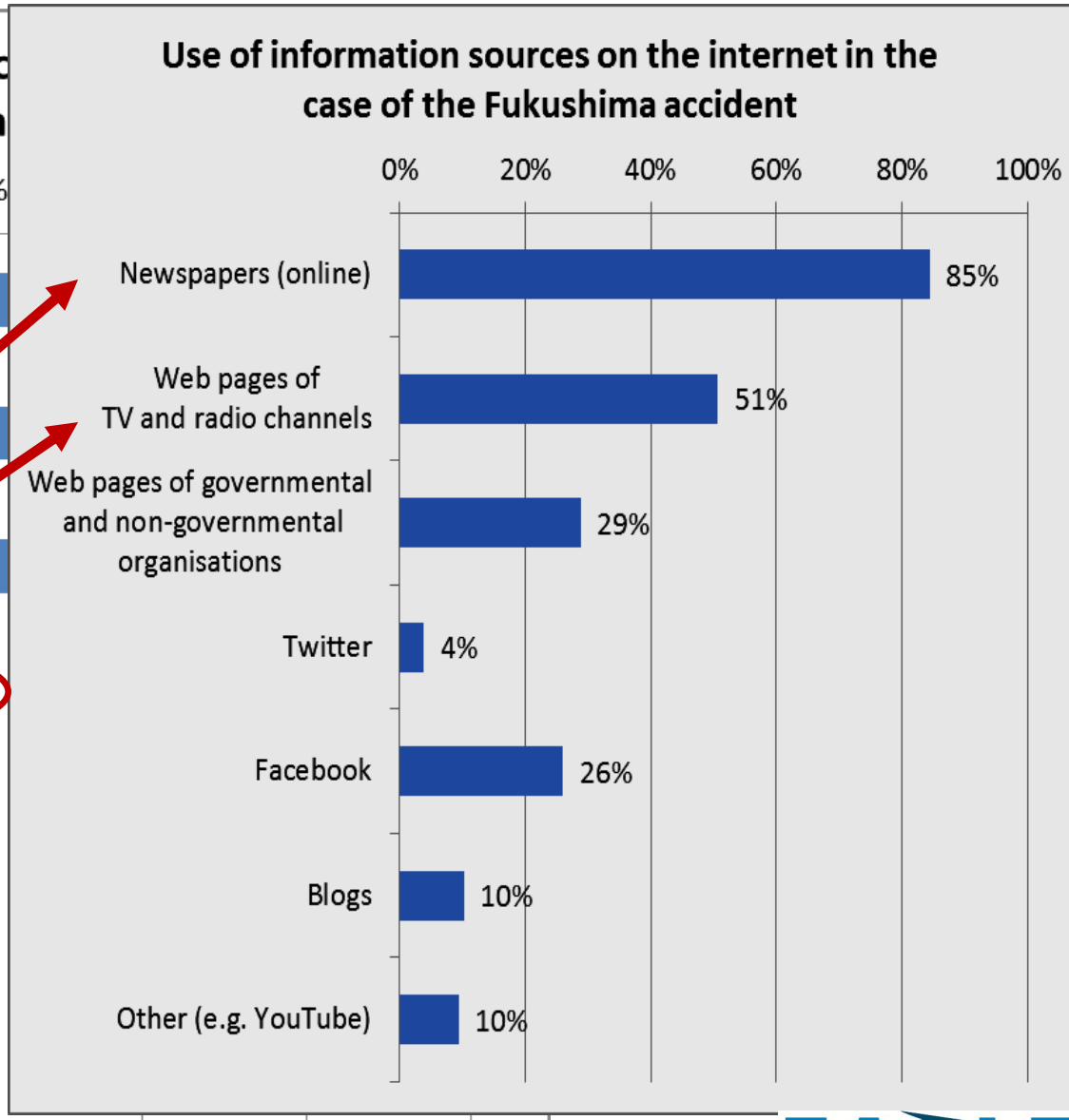
Importance of traditional media in nuclear emergencies



N=1002 representative for Belgian population

Importance of traditional media

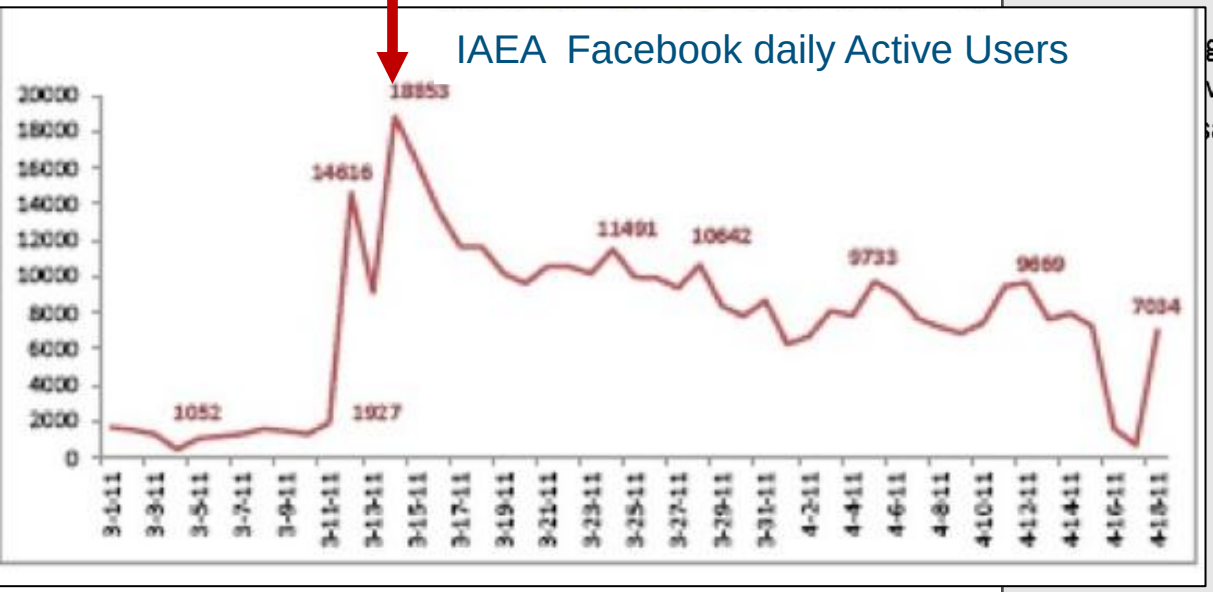




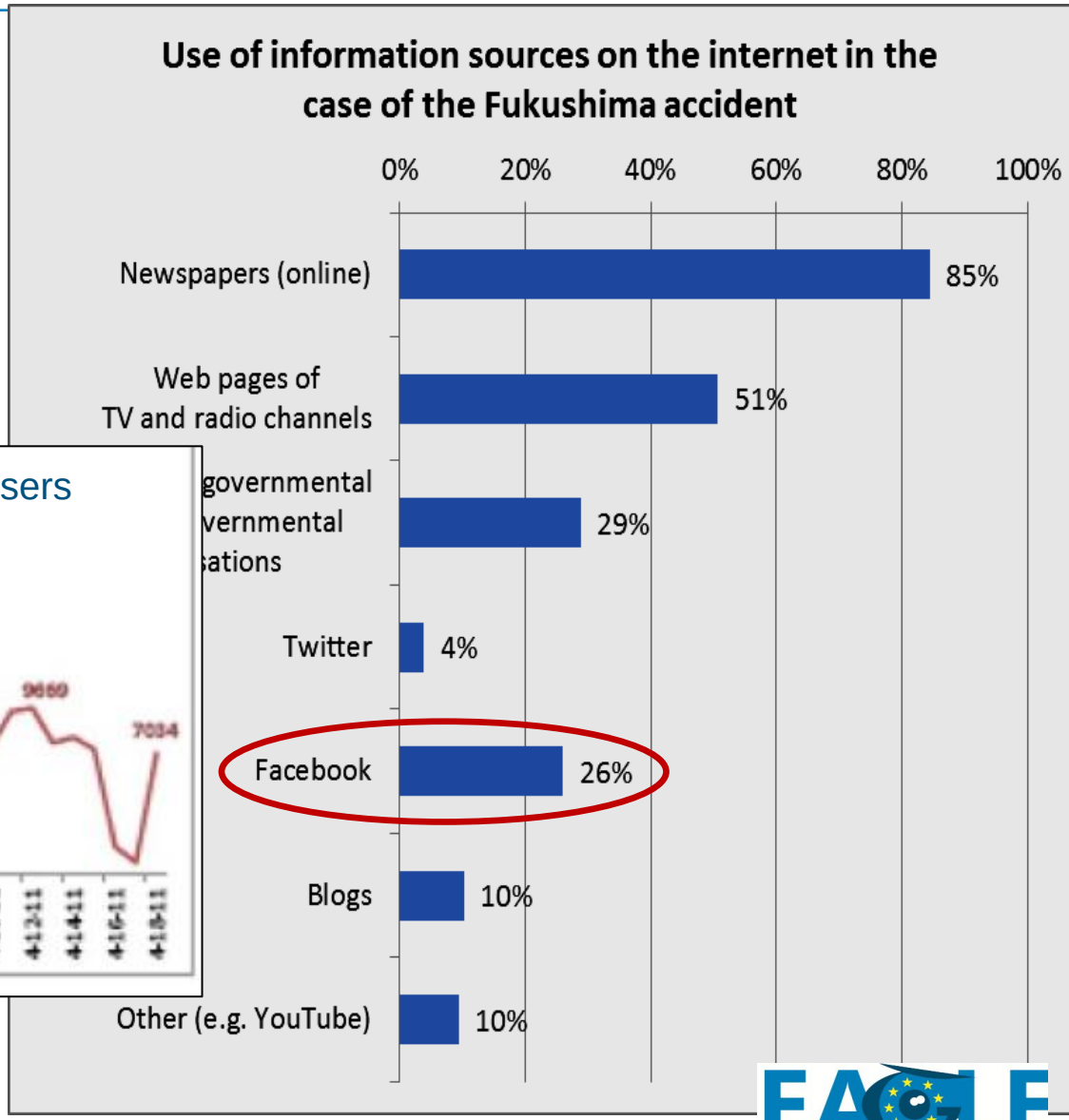
New media
New opportunities

18.853
viewers (15th of March)

IAEA Facebook daily Active Users



Source: IAEA, 2012



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New media
New opportunities

18.853
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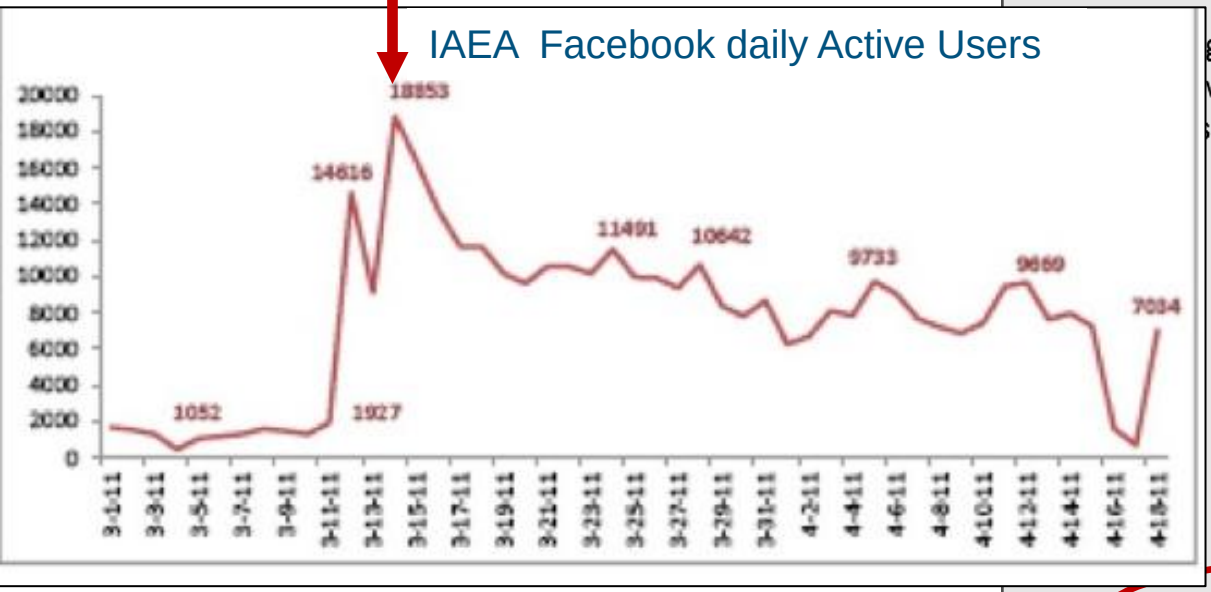
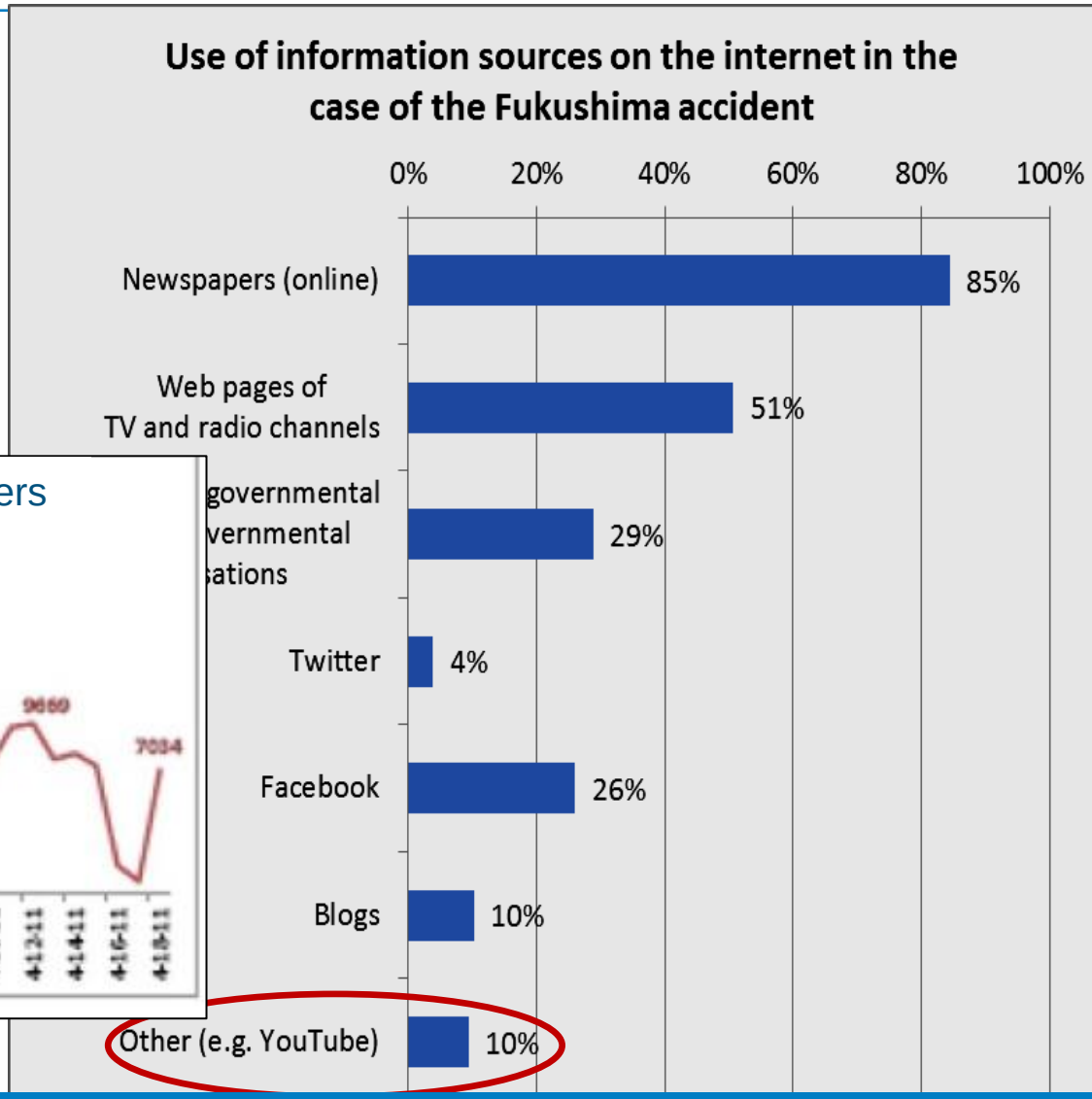
IAEA Facebook daily Active Users



Source: IAEA, 2012



Various “other” online sources were related to lower risk perception of the accident. (Vyncke et. all 2014)

The main conclusions

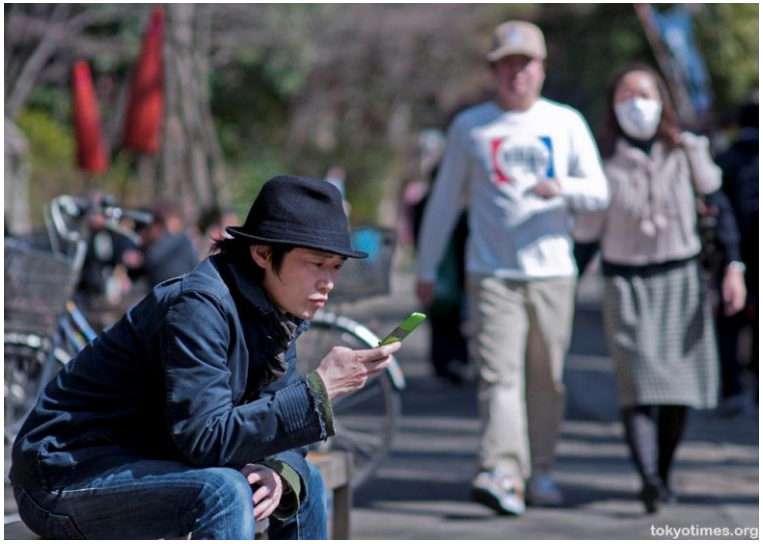
Communication with mass media during and after a nuclear emergency

CHALLENGE	OPPORTUNITY
different **motivations** and types of **process** applied by mass media and emergency management	the **power** of mass media to reach out to an audience with information important for compliance with protective actions

Communication is too often seen as a one-directional transfer of information from a source to a receiver

WP6.3 focused on the analysis of

- the use of traditional media
- the use of social media



in the context of the Fukushima accident

and in the perspective of the Aarhus Convention.

Quantitative and qualitative approach

Empirical study

Traditional media:

- Belgium
- Slovenia
- Italy
- Norway
- Spain

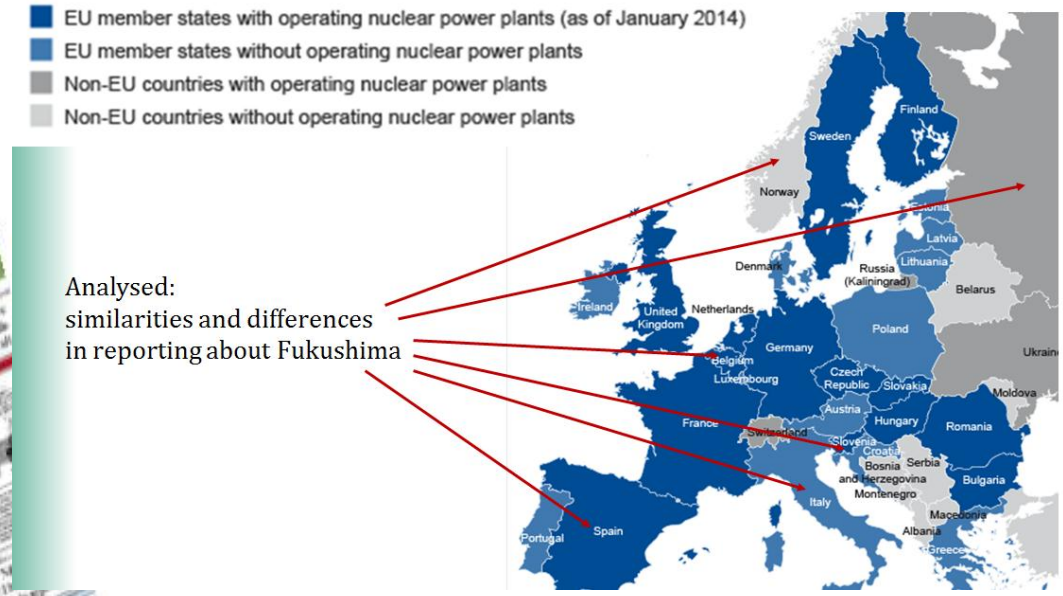
Social media:

- Norway, Belgium, Nederland

Russia

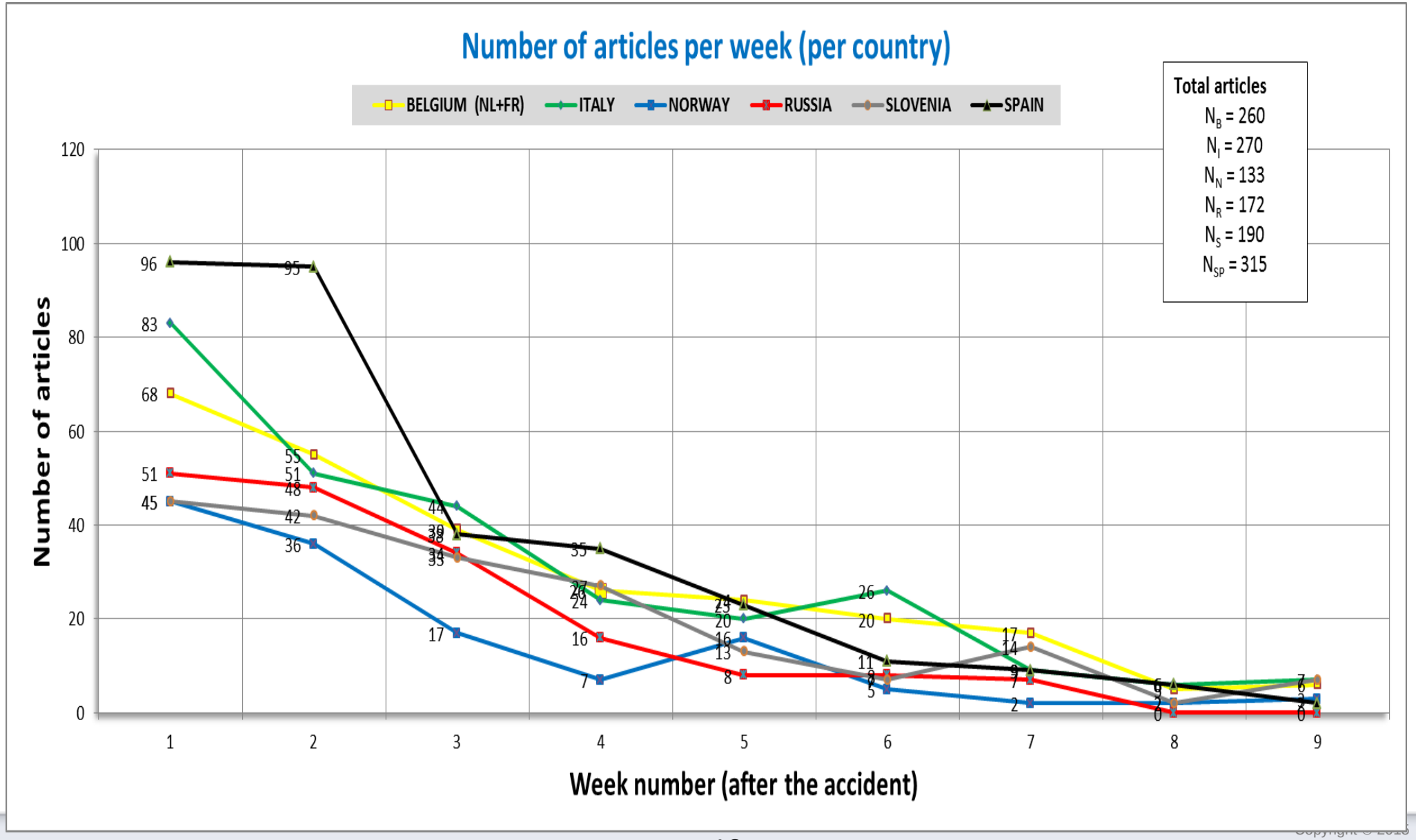
Analysis of reporting about Fukushima in six different countries

"Fukushima " and "nuclear"
March 11th - May 11th, 2011



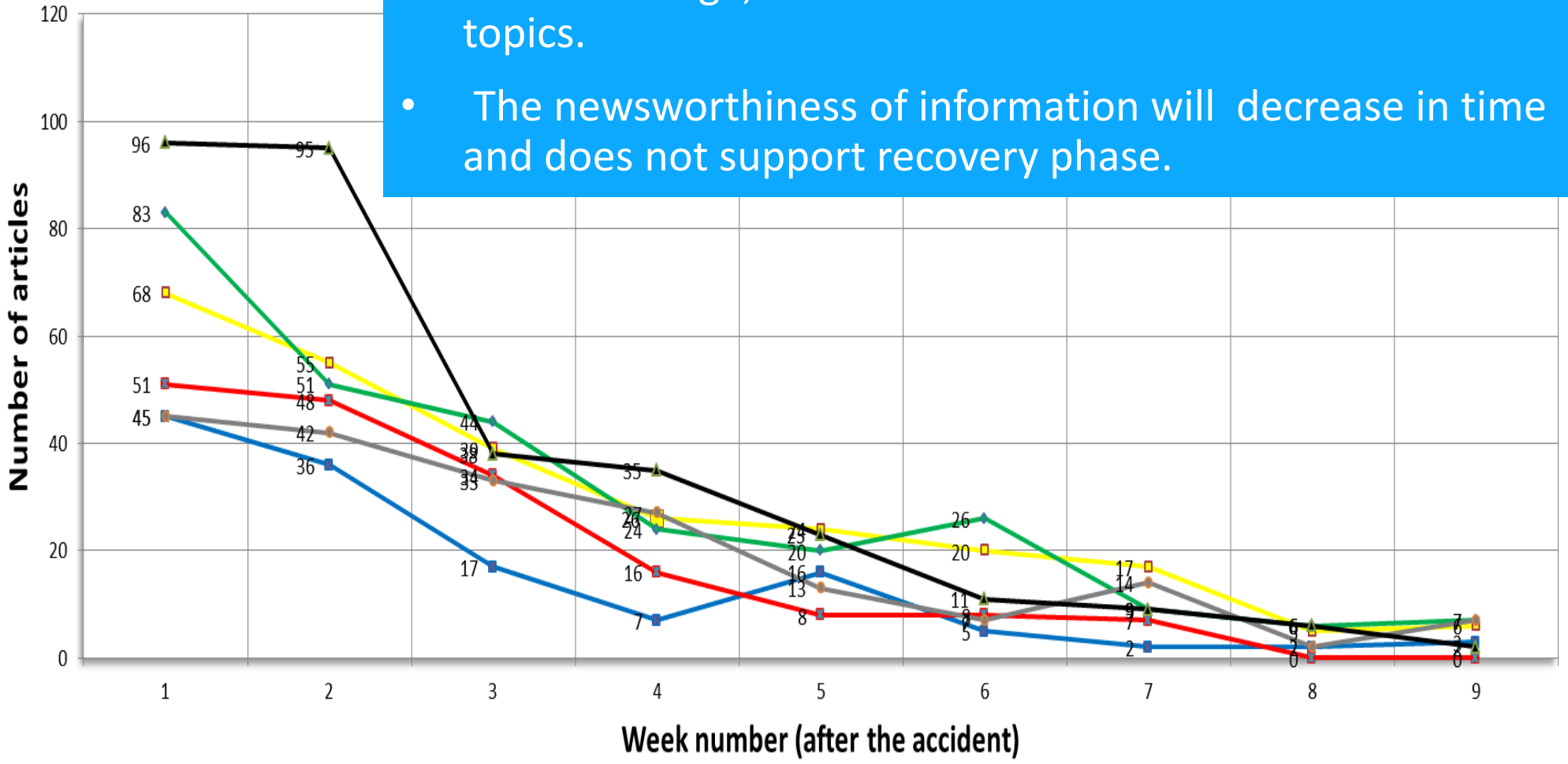
Analysed:
similarities and differences
in reporting about Fukushima

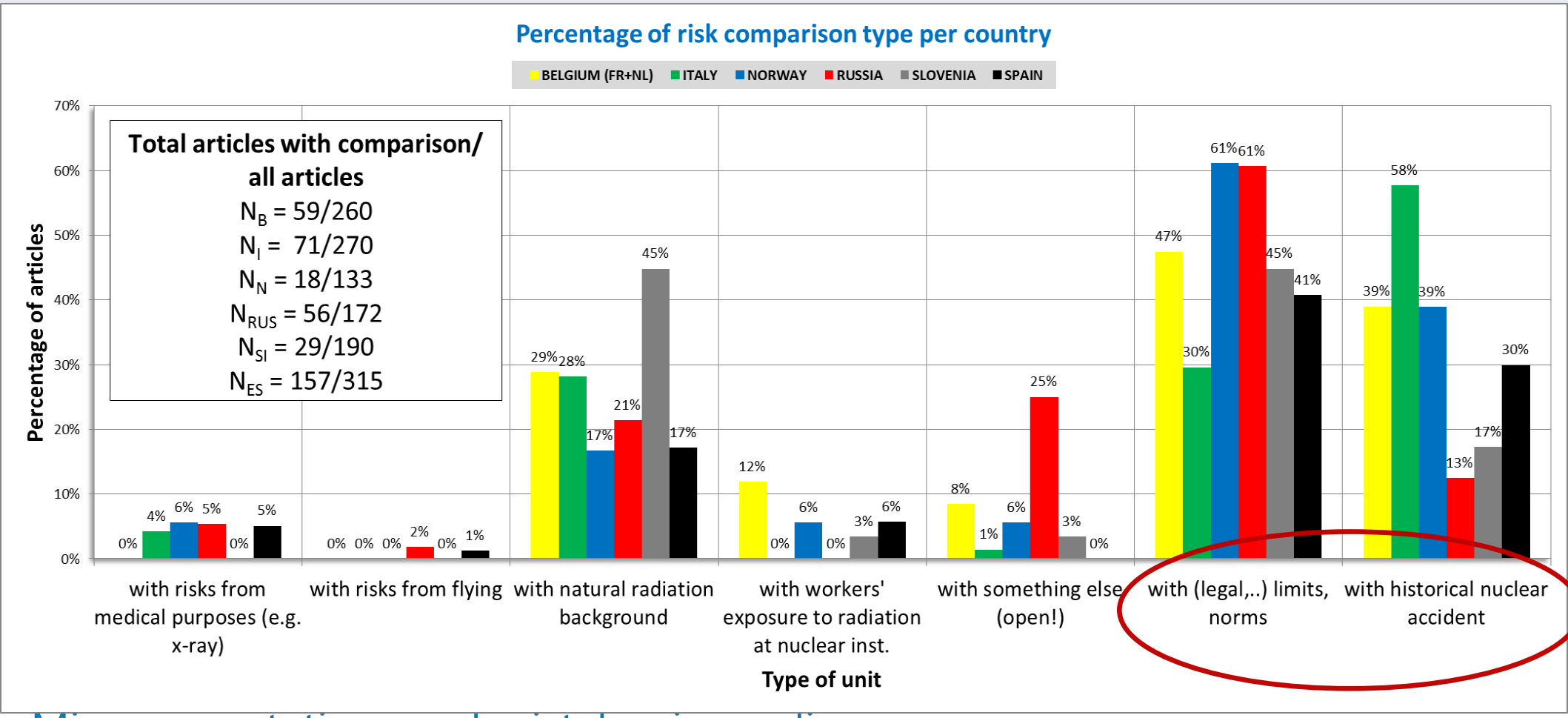
High media attentiveness



What we can learn?

- The nuclear –emergency information is the most newsworthy at the beginning of the accident.
- At a later stage, media re-orientate the attention to other topics.
- The newsworthiness of information will decrease in time and does not support recovery phase.





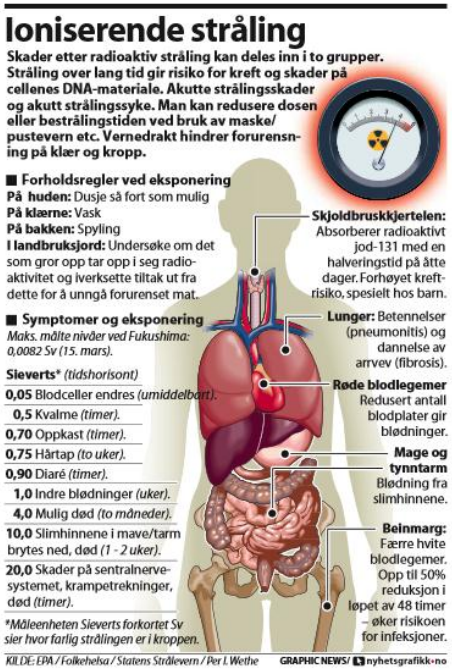
Misrepresentations and mistakes in media

- References to non-existing norms (e. g. levels in the enviroment)
- Using norms for drinking water as benchmark for seawater
- Mixing up allowed levels for general population and emergency workers
- Mixing up dose and dose rate
- Presenting permitted levels as «safe»

Health effects communicated unsound

- Although health effects are main concern of population, they were rarely mentioned in the media. (Detrimental health effects of high doses rather than those relevant for Japanese population.)
- Visual representation of radiation risks was barely used.

Corriere della Sera, 5.04.2011



Dagsavisen, 17.03.2011

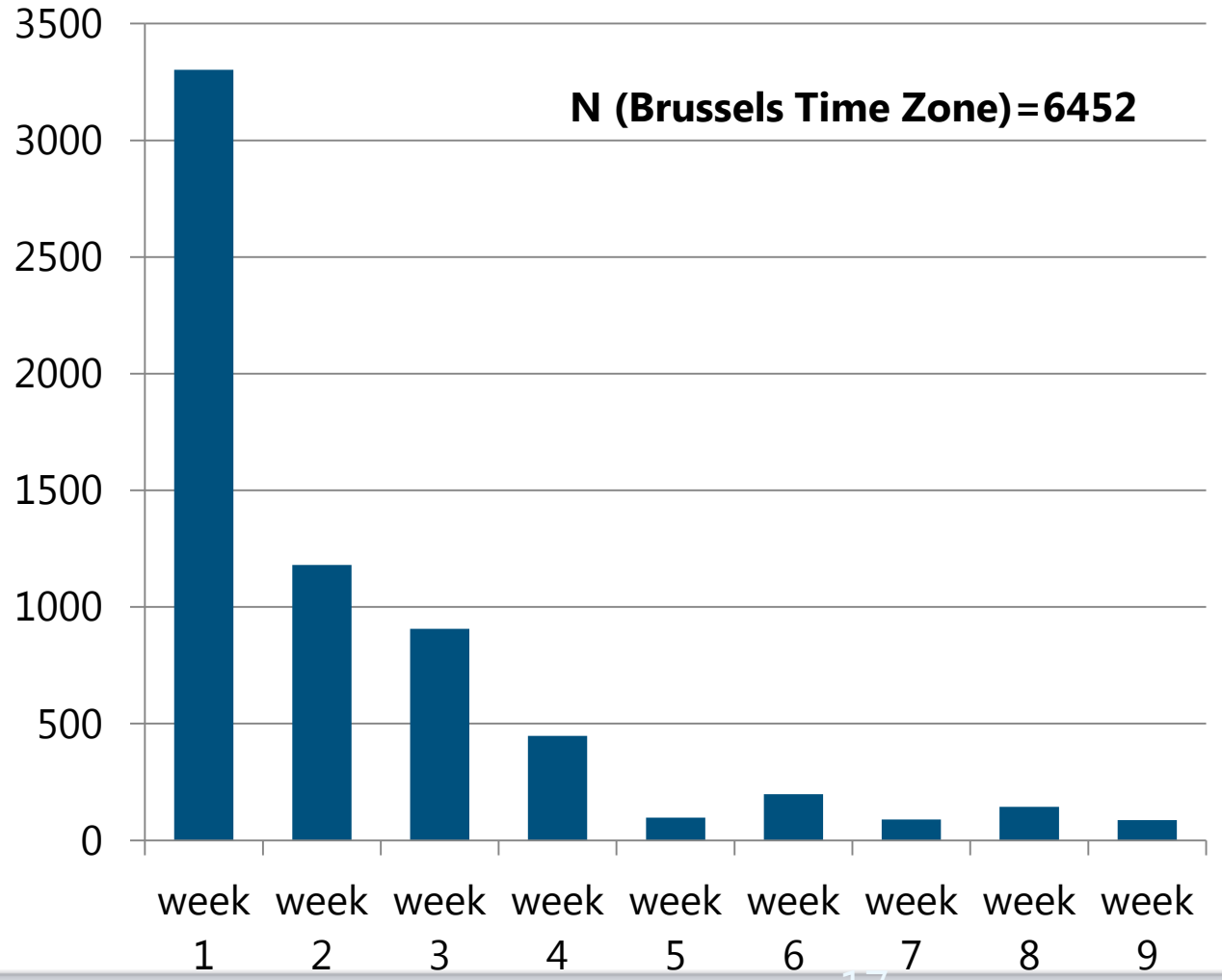
"Fukushima"

> 2 million

- > **2 million** tweets with the word "Fukushima" globally in the two-month period

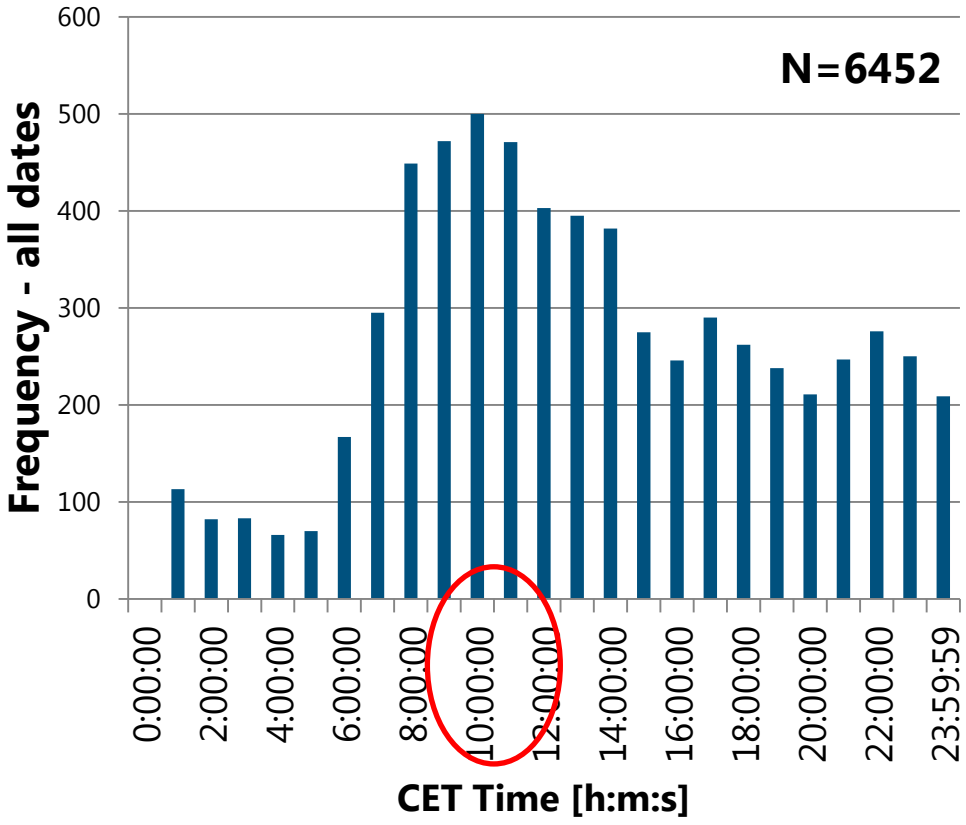
- Fukushima was a tweet-worthy event in Europe

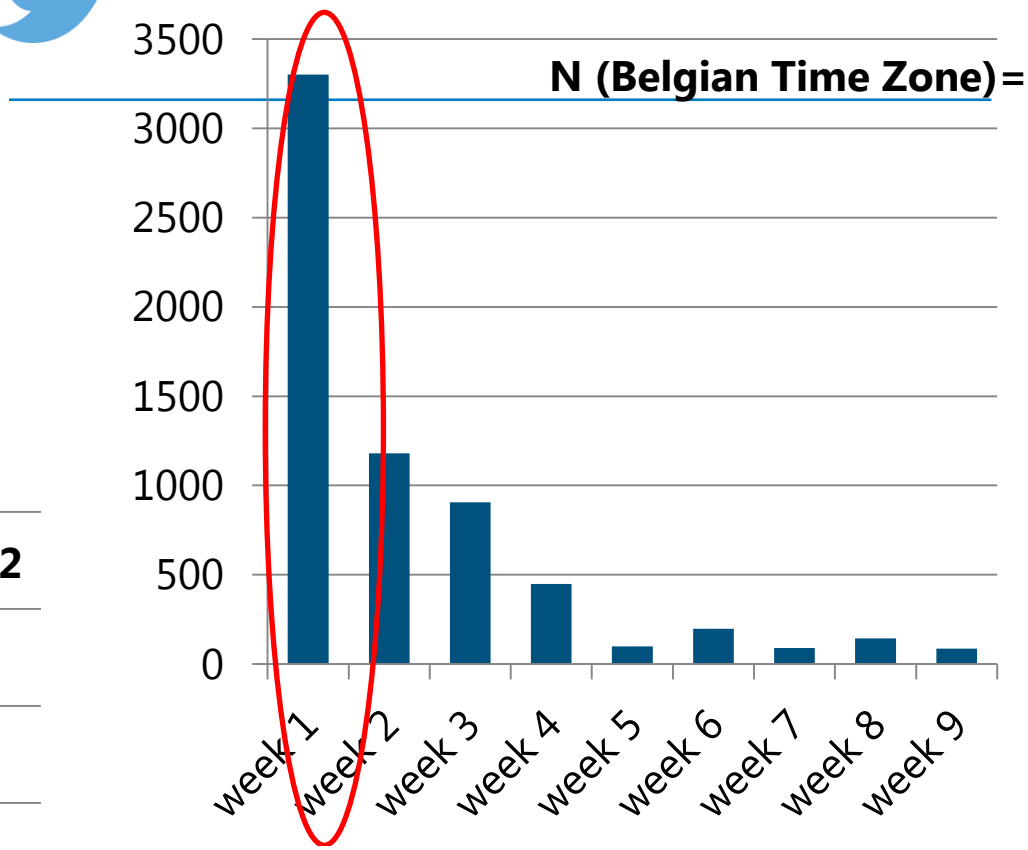
  > **6400** tweets in the BTZ



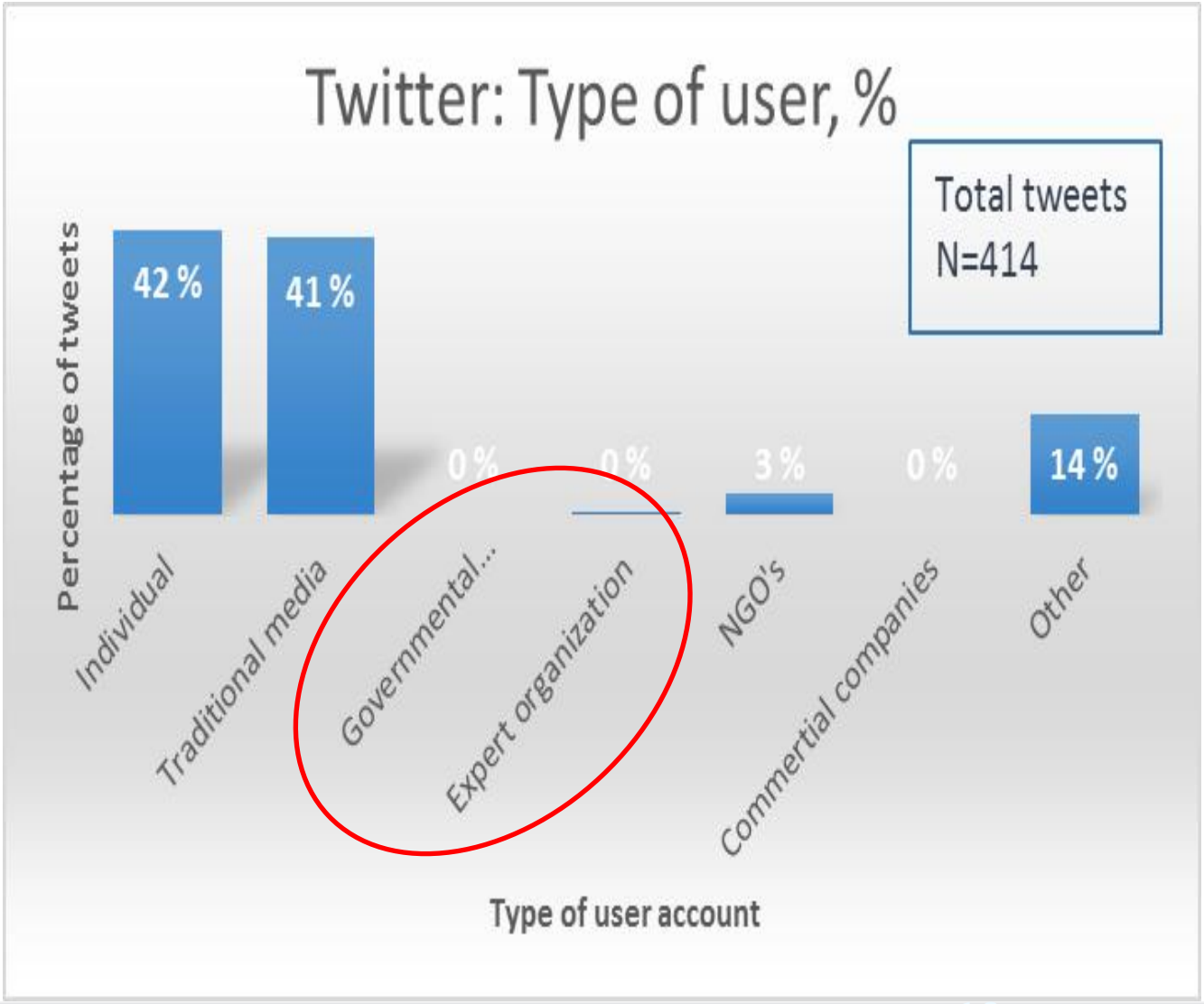
"Fukushima" the most tweeted in:

- the first week (51% of all tweets)
- between 9h - 11h for the analyzed period





Importance of tweetes overlooked by experts and authorities



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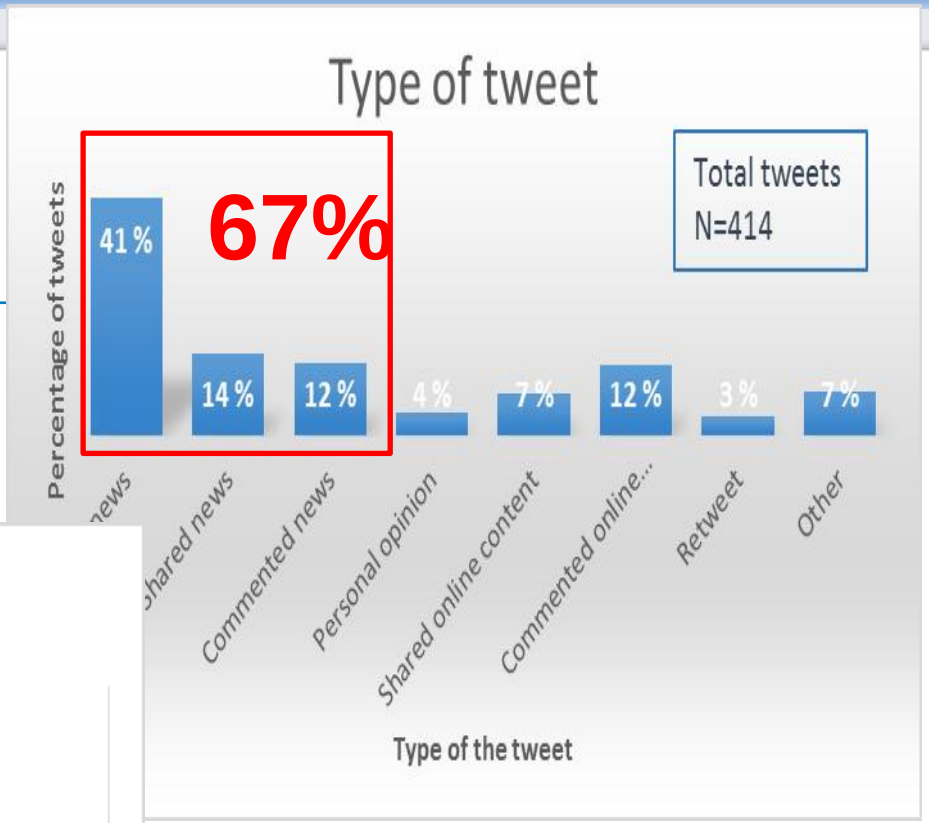
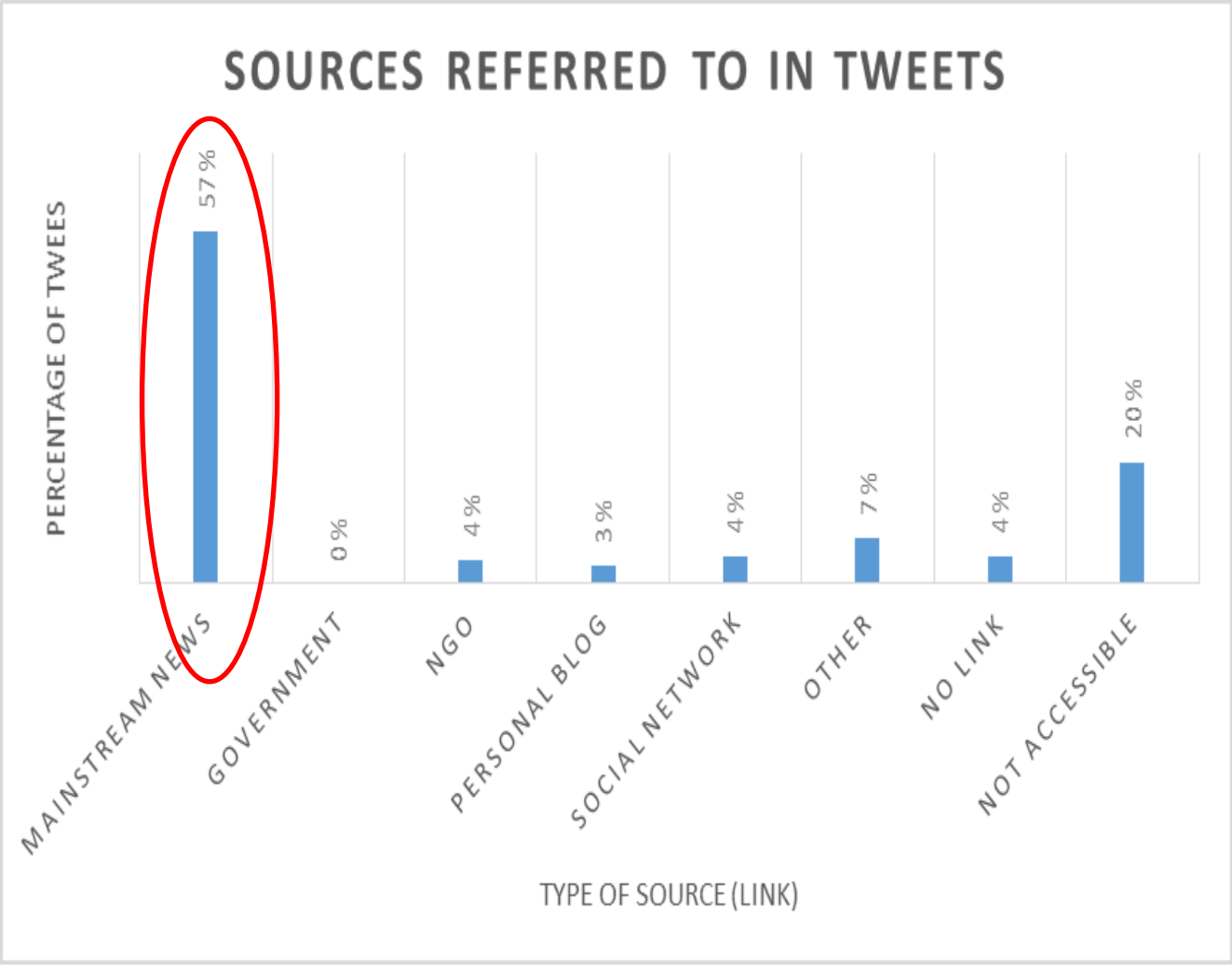
Dominance of traditional media





Qualitative study
EU and Japan

Forum for soft and hard science, journalists, decision-makers and citizens.

RICOMET 2015

Risk perception, communication and ethics of exposures to ionising radiation

Workshops, focus groups, dialogues and round tables

>120 participants

- What is the role of media in nuclear and radiological emergencies?
- How journalist report about ionising radiation issues and why?
- What is the level of public understanding of ionizing risk information, what are challenges and solutions?
- Can we influence future European research agenda and How?
- What is the meaning of ethics in an emergency communication and management?
- New research in sociology, psychology, humanities and political science related to:
  - Emergency management
  - Communication and stakeholder involvement
  - Radiation protection in medicine
  - Education, training and information …

Some selected results

- Converging values and differences that must be respected were identified. (Knowledge, Roles, Practices, Needs, Objectives)
- Move from observation to action, from good ideas and common knowledge to more satisfactory professional relations.
- Appeal for citizen engagement and empowerment; e.g. creating opportunities to monitor radioactivity with the help of scientists (e.g. SAFECAST).
- Harmonisation of communication is not possible, but better communications might be.
- Accountable and effective communication is and always will be about humans first, technology is not substitution…

Call for the **incorporation of social and ethical aspects into account during core R&D related to nuclear emergency management.**

Findings important for **expert's communication**

- Experts are under-skilled for media communication. (Possibly also for public speaking).
- Journalists want to have experts as an information source not PR.
- Identity of an expert in media is often limited to an identity of employer.
- Empathy as the most important part of a trust concept is not communicated by experts in media.
- In general, independent experts are recognised as trustworthy information source, however, trustworthiness of experts is questioned in nuclear emergencies.
- For experts are mass media one among the most important information sources during emergencies.

Findings important for **expert's communication**

- Experts don't' form a social group in media from a communication point of view. (Scientific community is anonymous in media).
- Uncertainty is not satisfactory communicated by experts.
- Experts are not frequent active-users of social media. (Also authorities responsible for emergency management are not active).
- Experts don't speak with one voice in media. They use the same facts but different "framing". Presence of a contempt between different "types" of experts.
- Social media enables "expertizing of citizens".

Findings important for **public communication**

- Nuclear emergency receives huge media coverage and limited content (Usually is content limited to a national level).
- Complexity of an emergency is in media reduced - by focusing on one or few aspects of an emergency.
- Local population receives a great attention of (international) media at the beginning of an accident.
- Recovery phase (important for local population) is not in the main attention of mass media.
- For local population is important to communicate what science can and can not do.
- Local population have higher trust in experts than in media.

19 pm

- lead by SCK•CEN
  - SCK•CEN: 3.5 pm;
  - UPM: 1,5 pm;
  - UMB: 6 pm;
  - UMIL: 4 pm;
  - UL: 4 pm

9 deliverables

- D6.4: Draft report on media reporting about Fukushima nuclear accident in the Eu countries
- D6.5: Draft report on use of social media after Fukushima with a focus on the social media as a stakeholder engagement tool
- D6.8: Final report on **media reporting** about Fukushima nuclear accident in the Eu countries
- D6.9: Final report on **use of social media** after Fukushima with a focus on the social media as a stakeholder engagement tool
- D6.12: Recommendations and **training material** for communication with traditional media during nuclear or radiological emergencies.
- D6.13: **Dissemination** of the information
- D6.16: Draft recommendations for improvement of communication for nuclear/radiological emergency management
- D6.17: Final **recommendations** for improvement of communication for nuclear/radiological emergency management

RICOMET 2016

Risk perception, communication and ethics of exposures to ionising radiation

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1st to 3rd of June 2016 in Bucharest – Romania

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CONCERT

PLATENSO

RICOMET 2016

Risk perception, communication and ethics of exposures to ionising radiation

University Politehnica Bucharest

The Second International Conference on Risk Perception, Communication and Ethics of Exposures to Ionising Radiation will take place from 1st to 3rd of June 2016 in Bucharest – Romania.

The conference is organized under the auspices of the four Euratom Projects: EAGLE, OPERRA, PLATENSO and CONCERT and intends to continue the dialogue started by RICOMET 2015 on social and ethical issues, as well as stakeholder and public participation in nuclear science, technology and innovation.

The focal points of this year are:

- Creating a Strategic Research Agenda on Social Sciences and Humanities in Radiation Protection
- Policy making related to different applications of ionizing radiation.

Details on the conference topics, dates for abstract and paper submission, venue and accommodation will be available on January 20th, 2016 on http://ricomet2016.sckcen.be/en

Dr. Daniela Diaconu
Institute for Nuclear Research, Romania
Chair of the Organising Committee