IST-ID
Associação do Instituto Superior Técnico para a Investigação e Desenvolvimento

PREPARE
Innovative integrated tools and platforms for radiological emergency preparedness and post-accident response in Europe

AGÊNCIA PORTUGUESA DO AMBIENTE

CENTRO DE CIÊNCIAS E TECNOLOGIAS NUCLEARES

Stakeholder involvement and local preparedness and communication strategies – views and experiences from Portugal (a non-nuclear country)

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Portugal as a non-nuclear country

- Portugal does not follow the nuclear energy option for the production of electricity.

Non-existence of nuclear installations

↓

Impact at: - Education and Training;
- Perception by the national stakeholders about the associated scientific, technical, socio-economic, ethical and legal issues.

However…

- Several Nuclear Power Plants in neighbouring countries (namely Spain):

Potential nuclear accidents and their radiological consequences	- Environmental contamination.
	- Contamination of foodstuffs, feedstuffs and consumer goods.
	- Consequences to human health.

Fukushima Accident - Concerns

Structures and expertise to address RN emergencies ?

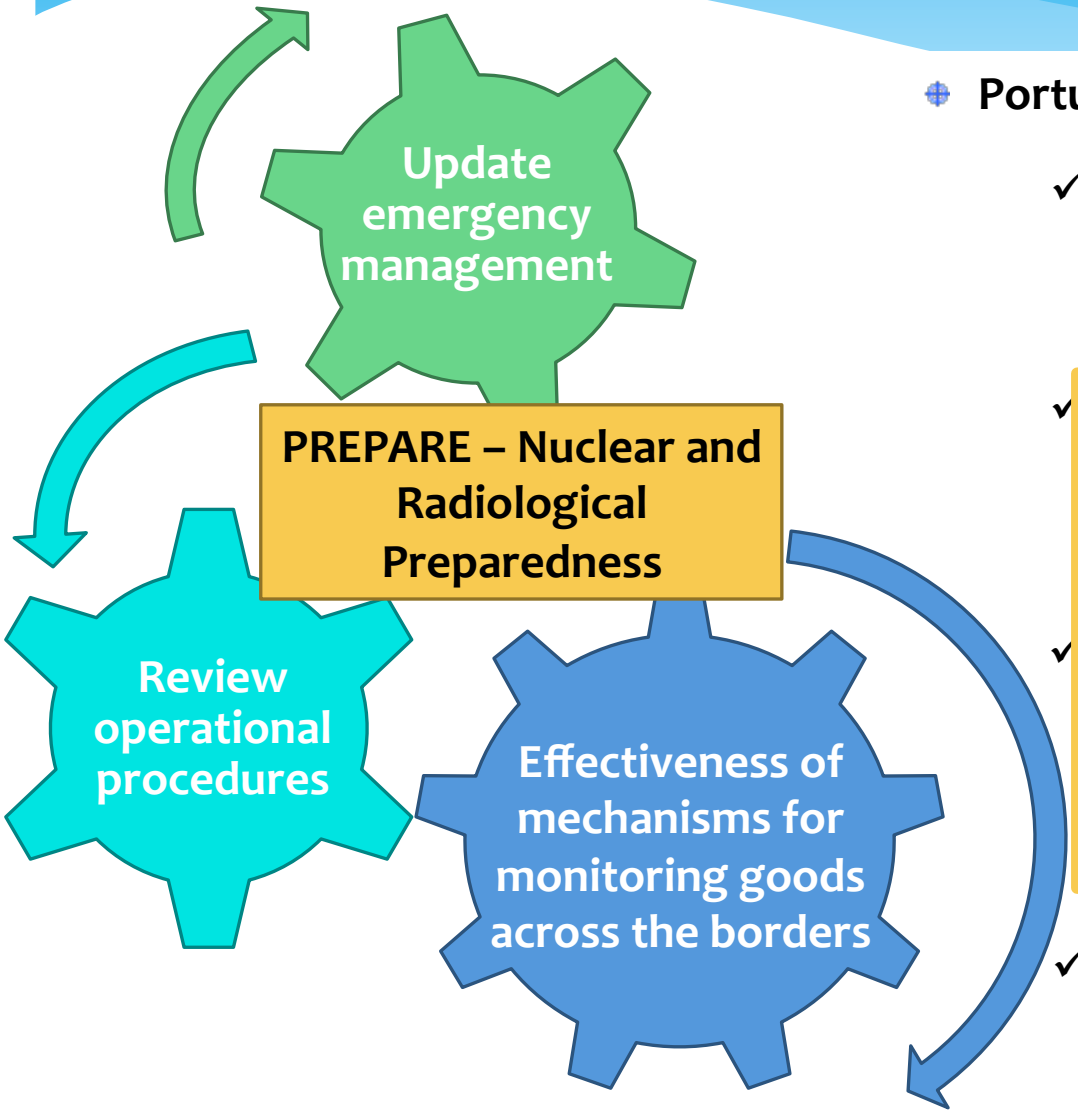
Emergency preparedness and response at the national level ?

Fukushima Accident

Coordination/cooperation with neighbouring countries and international organizations?

Answers both to media and to decision makers to address and respond to public concerns ?

Aim of the work



- **Portugal –** FP7-EURATOM project PREPARE:
  - ✓ **APA -** WP2 – Analytical Plataform: Development of operational procedures of the AP
  - ✓ **IST-ID -** WP3 – Consummer Goods: Panels were organized with experts covering a wide range of national stakeholders.
  - ✓ **IST-ID -** WP6 – Information and participation of the public: Interviews were conducted to experts involved in the follow-up of the Fukushima accident.
  - ✓ **APA -** WP7 – Testing + Dissemination: Participation on exercises and testing of the developed tools.

CNER Fukushima Working Group

- **CNER - National Commission for Radiological Emergencies:**
  - **Objectives:**
    - ✓ Follow up on the radiological situation resulting from the Fukushima accident.
    - ✓ Take decisions regarding the measures to be implemented in Portugal.

8 governmental organizations

ANPC (National Authority for Civil Protection)
APA (Portuguese Environment Agency)
GPP (Office of Planning and Policies)
DGS (General Directorate for Health)
DGEG (General Directorate of Energy and Geology)
IPMA (Portuguese Institute for Sea and Atmosphere)
INEM (National Institute for Medical Emergencies)
CTN (Campus Tecnológico e Nuclear, former ITN)

7 Invited Members

ASAE (Authority for Food and Economic Safety)
AT (Portuguese Customs and Taxes Authority)
DGAV (National Authority for Food and Animal Welfare)
ANAC (National Authority for Civil Aviation)
DGACCP (Bureau of Consular Emergencies - Consular Affairs and Portuguese Communities)
DGC (General Directorate of Consumer)
IPTM (Institute for Ports and Maritime Transports)

Fukushima was not considered an emergency in Portugal.
Relevant problems were the ones related to public information/health concerns.

CNER Fukushima Working Group

- **CNER Actions**

  - **Communication and Information**

Definition of a communication strategy:

- ✓ DGS – IR health effects
- ✓ APA - radiological situation in Japan and alert monitoring network
- ✓ CTN - environmental monitoring data (air monitoring station)

Revision of an informative document to be available to the social media and to the public in DGS site.

  - **Monitoring**

Articulation between entities (ASAE, DGAV, AT, GPP, CTN, DGS and APA) to establish radiological monitoring procedures to control foodstuff from Japan.

Elaboration of a statement for companies with monitoring procedures for consumer goods from Japan (CTN site).

CNER Fukushima Working Group

- **CNER Actions**
  - **Health and Environment**

Follow up of the trip back to Portugal of the Portuguese students that were in Tokyo at the time of the accident (reception at Lisboa airport by DGS and APA).

- **CNER Final Outcome**

Effective, fast and appropriate response to the situation.
The decisions were implemented in an integrated way and were transversal to all the institutions involved in the follow up actions.

The measures adopted in Portugal took into account the international information, from specialized international organizations and European partners.

WP3: Contaminated Goods

- **1st National Panel - Contaminated foodstuff and feedstuff**

"Management of contaminated foodstuff and feedstuff after a radiological or nuclear accident" - 11th of April 2014 at IST/CTN

Objectives:

National stakeholders

- ✓ Discuss issues to be addressed in RN emergencies: Management Practices; Health and Environment; Economics and Policies; Education, Communication, and Training.
- ✓ Understand concerns regarding the radioactivity control of goods.
- ✓ Promote exchage of experiences with RP experts.

35 participants from 16 institutions

- ✓ Governmental Organizations (10)
- ✓ Non-Governmental Organizations (6)

Panel Methodology:

- ✓ Thematic session - Concepts of IR, radiological emergencies, strategies to deal with contaminated food/feedstuff, regulatory issues and risk perception.
- ✓ Discussion session - Experiences in past emergencies, regulation, monitoring and control of contaminated food/feedstuff.

1st National Panel - Conclusions (1)

- **Management practices**

Similar or overlapping competences between different entities.

Incomplete and default legislation →

- ✓ Inefficient articulation between institutions.
- ✓ Incomplete knowledge of the different organization's competences and skills.

Some competent authorities and public institutions were not fully sure about the specific procedures related to the management of contaminated foodstuff/feedstuff and asked for clearly defined emergency protocols.

Suggestion: national handbook with procedures about what to do in the management of contaminated food/feedstuff

Limitations to implement national and international recommendations: Insufficient human resources, lack of technical resources and financial support from the Government .

Industrial stakeholders - availability in investing in monitoring equipment to control their products.

1st National Panel - Conclusions (2)

- **Health and environment**

Stakeholders are aware of the European regulations (maximum permitted levels of radioactive contamination of foodstuff and feedstuff following a RN emergency).

Concerns →

- ✓ Harmonization could be complicated and difficult to implement - different countries have distinct consumption patterns.
- ✓ More restrictive national legislation.

Governmental stakeholders - awareness of the problems involved in the follow-up of an accident and their ability to deal with it.

Industrial stakeholders - doubts about the country´s capacity to deal with the direct and indirect consequences of RN emergencies.

No receptivity of the public to consume contaminated products regardless compliance with legal radionuclide established reference levels.

But lowering the costs of the foodstuff and the absence of direct effects may change this behavior.

Lack of knowledge about health effects related to the ingestion of contaminated

1st National Panel - Conclusions (3)

- **Economics and Policies**

Possible contamination in foodstuff and feedstuff may have negative impacts on the regional and national economy.

Routine exercises with all stakeholders (authorities, regulators, technical/scientific experts, consumer's organizations, *media*, NGO's, local political power and general public) – establish a relationship of proximity between the organizations.

Bilateral cooperation between the EU and IAEA members in emergency situations are a good mechanism of rescuing and helping any country.

- **Communication, Education and Training – Part I**

Public is sensitive to issues related with radioactive contamination and its perception depends on the way the subject is communicated.

- ✓ Non-reliable sources of communication.
- ✓ *Media* deficient knowledge of these specific matters.
- ✓ Social networks – impossible to control the authenticity of the information.

1st National Panel - Conclusions (4)

- **Communication, Education and Training – Part II**

Contradictory information given by different institutions gives a wrong image about the competences of the management emergency and post-emergency crisis.

Public will more easily trust the communication and the information received from technical and scientific experts than from the politicians.

The first contact with the *media* is critical to develop an open dialogue - Existence of institutions trusted by the consumers involved in the communication process in the management of an emergency or post-emergency situation.

Technical/scientific personnel trained in communicating clear concepts using simple and transparent information based on straightforward language.

Training and education

- ✓ Implemented routinely to prepare the stakeholders involved in communicating RN emergencies.
- ✓ Fundamental for technical, scientific, *media* and general public.

WP6: Information and participation of the public

- **Interview Process in Portugal**

WP 6.1 - Emergency & post-emergency networks interactions

✓ Non institutional experts:

NGO (1), Press (1) and University (1);

✓ Institutional experts:

Regulator's (2), Civil Protection (2) and State Labs (1).

8 people
8 institutions

- Interviews were face-to-face (2-3 h time) and by email.
- Interviews were developed accordingly to the functions and role of the responder during the Fukushima crisis
- Answers received are an exclusive responsibility of the interviewee and are not, necessarily, the views of the organizations they represent

WP6: Information and participation of the public

- **Links between national, international bodies and regulators**

Need to implement harmonized measurements at EU level in terms of regulations and procedures.

Establish reference levels will contribute to show to the public that, even in the absence of harmonization, there is an implemented protection level.

IAEA, information from Japan and the measures carried out by EC were fundamental for the national authorities to be able to deal with the control of goods and be prepared to answer the industry and public concerns.

Challenges in case of an emergency close to PT:

- ✓ insufficient trained human resources;
- ✓ inexistence of enough monitoring equipment;
- ✓ lack of emergency generalized procedures.

WP6: Information and participation of the public

- **Communication channels and information reliability**

Information related to Fukushima accident arrived through ECURIE (EU) and ENAC (IAEA) platforms and through RASFF system (Rapid Alert System for Food and Feed-EU).

National level: official information from ECURIE/IAEA platform was received and treated at APA and ANPC.

During Fukushima (beginning), the information received from the Japanese authorities was difficult to analyze due to the high frequency of documents being issued with contradictory information (not possible to validate).

Information sources available were the possible ones and the information transmission was globally positive, adequate and without alarmism's.

Lack of people with the technical competences in risk communication.

WP6: Information and participation of the public

- **Social media, opinion makers and public communication**

Difficulties in understanding the contents of reports or press deliveries issued by national and international authorities to the public.
National institutional experts are difficult to reach.

Lack of training in the usual vocabulary as well as lack of the adequate background knowledge is the basis of most incorrect information.

Social networks referred as a preferential source of information used by the media due to the huge amounts of available information in a short time.

Information convened by the opinion-makers may not be totally reliable in terms of scientific and technical content once they do not possess the knowledge of the field and do not know the real scenario.

WP6: Information and participation of the public

- **Education and Training (E&T)**

E&T schemes expanded to a wider professional audience at national level.

Suggestions:

- ✓ Strategic plan of E&T should be design and implemented, involving the various stakeholders.
- ✓ Media specific language and ethics of communication should be also included in the workers E&T programs

Media was the professional group that more complains made about the lack of E&T initiatives

Conclusions

- Overlapping of competences and inefficient articulation between the governmental organizations.
- Credibility of the information is a fundamental step to achieve public confidence in the authorities' decisions.
- Be able to efficiently communicate scientific and technical issues should be a concern for all parts involved, including the *media*.
- Training of the institutional experts and media, in terms of briefing adequately and clearly about RN emergencies.
- Information dissemination needs a better preparation/coordination - dialogue between stakeholders.
- Education and training needs were regarded as fundamental for technical, scientific, *media* and general public.

Thank you for your attention!