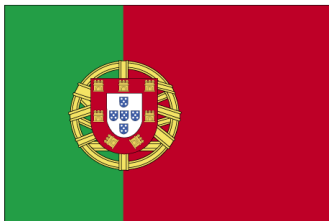




Portugal and the IAEA Technical Cooperation

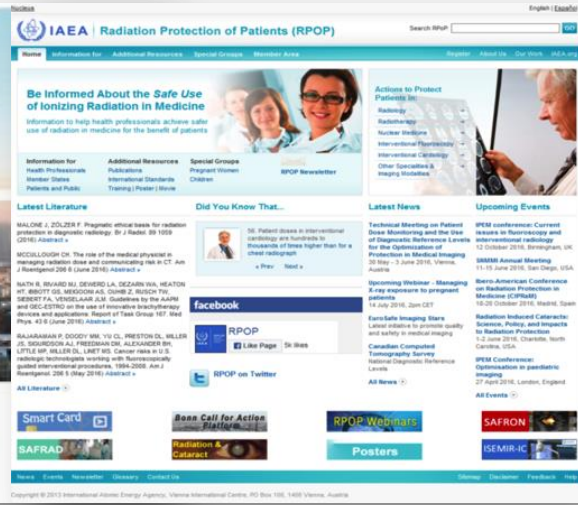
Pedro Vaz and Sofia Guedes Vaz

@INSA, Infoday, 22nd February 2018



How does Portugal perceive the IAEA activities (at large) ?

- Overarching statement:
 - The IAEA is instrumental to its Member States in a number of activities encompassing the provision of standards, training, guidance and technical assistance, fostering knowledge exchange, building awareness and promoting safe, secure and peaceful use of nuclear and radiation technologies.





How does Portugal perceive the IAEA TC Programme ?

- The activities and projects of the IAEA and its Technical Cooperation (TC) Programme are of paramount importance for:
 - The establishment of a robust system of radiological protection and radiation safety,
 - The sustainable and safe use of radiation sources and radioactive materials and the definition of policies concerning the deployment of nuclear technology applications in Medicine, industry and other sectors.
 - Topics/activities such as:
 - ✓ Management of disused radioactive sources
 - ✓ Radiological and nuclear emergency preparedness and response
 - ✓ Nuclear Security
 - ✓ Several others



Involvement of Portuguese experts in the IAEA TC Programme

- Grew in recent years
- Full potential of participation has not yet been reached
- Over the years, IAEA has persistently encouraged:
 - ✓ **Further** participation of Portuguese stakeholders in their projects under the TC Programme
 - ✓ **More active** Portuguese participation:
 - ✓ Providing data
 - ✓ Answering questionnaires and surveys
 - ✓ Exchanging experiences, methodologies/methods, practices
 - ✓ Etc.



Action Plan 2017-2021

Main Objectives

- To further and strengthen the relationship between Portugal and the IAEA Technical Cooperation Programme
- To increment, *inter alia*, the number of regional and national projects submitted from Portugal
- To increase the number of:
 - ✓ Meetings, workshops and training courses organized in Portugal
 - ✓ Fellowships hosted by Portuguese institutions
 - ✓ Scientific visits to Portugal
- To optimize the return for Portugal of participation in the TC activities



Action Plan 2017-2021

Detailed Objectives

- To promote and disseminate the activities of the IAEA TC amongst Portuguese decision makers and stakeholders, in a comprehensive and systematic manner;
- To further increase the participation of Portuguese experts in the projects and activities (Technical Meetings, Training Courses, Conferences and Workshops, questionnaires and surveys, exchange of data, etc.) under the umbrella of the IAEA TC;
- To encourage and assist the Portuguese stakeholders in developing proactive approaches leading to the proposal of national, regional or inter-regional projects;
- To engage the Portuguese stakeholders and to develop proactive approaches leading to a transparent and more systematic participation in the IAEA TC activities (at large);
- To publicise within the IAEA, the existing competences, expertise and skills of Portuguese experts in the relevant topical scientific areas for the TC Programme;
- To develop national mechanisms allowing to easily articulate the contacts and exchanges between the IAEA and the Portuguese stakeholders vis a vis procedural aspects associated to the participation of experts in the IAEA TC programme;
- To increase the number of fellowships in Portuguese institutions.



Action Plan 2017-2021

Main topical areas

- In line with the priorities set out by the Portuguese Government:
 - ✓ Proton/advanced ion therapies
 - Operation of a Unit for hadrontherapy in Portugal by 2022
 - ✓ Medical Physics and education and training of health professionals
 - radiation oncology and health applications of nuclear science and technology
 - ✓ Decommissioning of the Portuguese Research Reactor
 - ✓ Development and implementation of the national regulatory framework and infrastructure for Radiation Protection and Safety
 - Strengthening, enhancing and building competence and skills in related issues



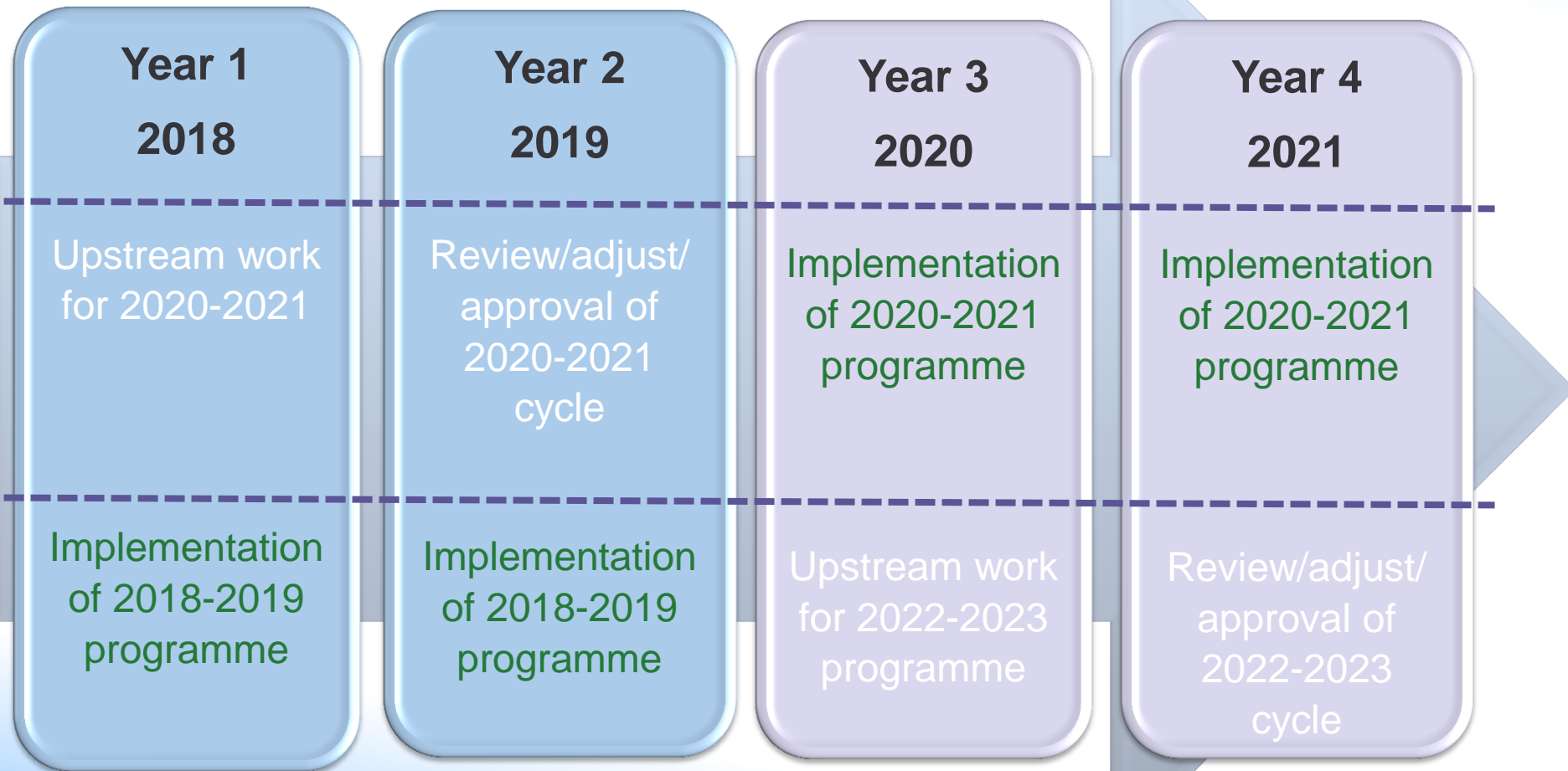
Action Plan 2017-2021

Components

- Organization of **regular meetings** between the Portuguese NLO, NLA and Portuguese stakeholders, and whenever deemed appropriate, IAEA TC staff;
- Establishment of a **Web site** publicising the activities of the IAEA TC Programme, ongoing RER projects, Training Courses, Technical Meetings and the corresponding deadlines;
- Promote the **organization of meetings** in Portugal, related to activities under the umbrella of the IAEA TC;
- Encourage, engage and help Portuguese stakeholders in the **compilation of data and information**, as requested in the framework of TC projects;
- Facilitate contacts between Portuguese experts and institutions, to enable **the reply to surveys and questionnaires** in the areas of relevance to the activities under the IAEA TC;
- Development of an **electronic newsletter** to be circulated on a regular basis;
- Consolidate and expand **the list of electronic mail and contacts of Portuguese stakeholders** in the health, industrial, environment, research, academia, regulatory, services and security sectors.

How TC Programme works?

- Biennium programme (Projects for 2 years or more..)
- + 2 years for preparation and project formulation





TC RER Projects 2018-2019

PT participation (1)

- Enhancing Capacity Building Activities in the European Nuclear and Radiation Safety Organizations for the Safe Operation of Facilities
- Harmonizing Non-Destructive Testing, Training and Certification for Civil Engineering and Cultural Heritage
- Enhancing Standardized Radiation Technologies and Quality Control Procedures for Human Health, Safety, Cleaner Environment and Advanced Materials
- Developing Radiotracer Techniques and Nuclear Control Systems for the Protection and Sustainable Management of Natural Resources and Ecosystems
- Enhancing National Capabilities for Early and Rapid Detection of Priority Vector Borne Diseases of Animals (Including Zoonoses) by Means of Molecular Diagnostic Tools
- Improving Radiotherapy Practices for Advanced Radiotherapy Technologies Including Quality Assurance and Quality Control
- Applying Best Practices for Quality and Safety in Diagnostic Radiology



TC RER Projects 2018-2019

PT participation (2)

- Enhancing the Inventory of Aerosol Source Profiles Characterized by Nuclear Analytic Techniques in Support of Air Quality Management
- Enhancing Capacities in Member States for the Planning and Implementation of Decommissioning Projects
- Enhancing Member States' Capabilities for Ensuring Radiation Protection of Individuals Undergoing Medical Exposure
- Strengthening the Regulatory Infrastructure for Radiation Safety
- Improving the Radiation Protection of Workers Occupationally Exposed to Ionizing Radiation
- Updating and Harmonizing Emergency Preparedness and Response Plans
- Enhancing the Regional Capacity to Control Long Term Risks to the Public due to Radon in Dwellings and Workplaces



Statistics...

	2016	2017
Counterparts	18 projects	18 + 20 (for 2018)
Dissemination of events	110 events	120 events
Nominations (Intouch)	84 (25%)	91 (50%)
Gender	50% Female	50% Female
Assessment of participation (1 – 5)	7% - 3 93% - 4 or 5	1% -3 99% 4 or 5
Qualitative Assessment	Networking, + knowledge + skills	Networking, + knowledge + skills
Afiliation	50% IST 20% IPO or Hospitais 30% (15 instituições)	50% IST 25% IPO ou Hospitais 25% (10 instituições)
Training in Portugal	20	20



CPF (2019+)

Country Programme Framework

- General description of the actions that Portugal envisages to carry out from 2019 onwards aiming at achieving national development objectives in key areas of the IAEA Technical Cooperation (TC)
- Sets out national goals and objectives
- Seeks complementarities between national development priorities, the TC Strategy and the Agency's policies to ensure that the proposed activities add value to national development efforts
- Process engaging stakeholders and involving – whenever deemed appropriate - working groups in major national priority sectors as input
- Ensures that newly identified project initiatives are consistent with the CPF
- Drafting will start later in 2018



Conclusions

- The TC programme is a very important mechanism through which the IAEA delivers services to its Member States
- Through the TC programme, the IAEA helps Portugal to build, strengthen and maintain capacities in the safe, peaceful and secure use of nuclear technology
- Participation in the TC projects is a unique opportunity for:
 - Networking
 - Capacity building
 - Strengthen skills and competences
 - Sharing data, methods, experiences, practices
- The engagement of **ALL** stakeholders is mandatory !



Annexes

Slides borrowed from J. Vassileva (IAEA)

TC areas of work

- **Human Health**
 - Food and Agriculture
 - Water Management
 - Environment
 - Industry
 - Nuclear Energy
 - **Safety and Security**



Participation of Portugal in the TC programme

<https://www.iaea.org>

Completed national projects 2000 - 2016

		1st Year of Approval ▲	Field	Status
<u>POR7003</u>	<u>Environmental and Marine Studies Using Nuclear Techniques</u>	1999	7F	Completed on 2002-02-26
<u>POR4014</u>	<u>Optimizing Utilization of the Portuguese Research Reactor</u>	2001	4B	Completed on 2005-06-30
<u>POR4015</u>	<u>Assessment of Environmental Contamination from Abandoned Uranium Mines and Planning of Remediation Measures</u>	2001	4O	Completed on 2004-06-25
<u>POR8010</u>	<u>Implementation of Wastewater Treatment Using Radiation</u>	2003	8H	Completed on 2008-04-29
<u>POR4016</u>	<u>Core Conversion of the Portuguese Research Reactor to Low-enriched Uranium Fuel</u>	2005	4B	Completed on 2009-02-04
<u>POR6004</u>	<u>Implementation of Compton Suppression Spectrometry for Air Pollution Monitoring</u>	2005	6I	Completed on 2008-04-29

Portugal



Portugal is a member of the IAEA and has submitted 48 requests for TC projects. The Framework Agreement was signed in the period 2013–2018. Key priorities include strengthening the regulatory security, safe management and improving human health services in cyclotrons.

period 2013–2018. Key priorities include strengthening the regulatory security, safe management and improving human health services in cyclotrons.

TC Cycle 2016-2017

POR6005: Supporting Multidisciplinary Research and Clinical Cyclotron Facility

*Counterpart: Mr José Joaquim Gonçalves Marques
Instituto Superior Técnico, Instituto Tecnológico e Nuclear;
Ministry of Science, Technology and Higher Education*

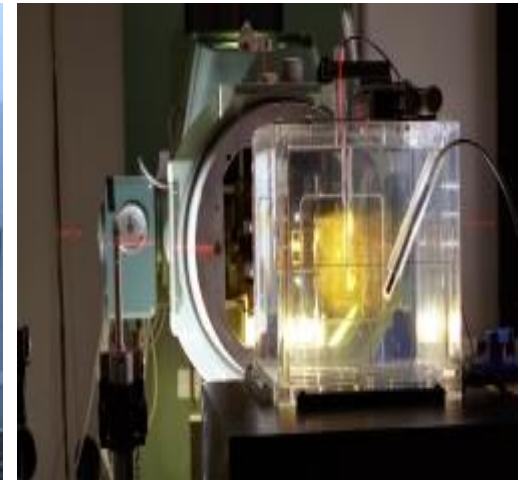
TC Cycle 2018-2019

No projects submitted from Portugal

TC Projects on Human Health

Helping States Enhance Prevention, Treatment and Control of Diseases

- Cancer Management: Detection and treatment
- Cardiovascular and other Chronic Diseases: Enhancing diagnostics
- Quality Assurance in Radiation Medicine
- Education and training of health professionals



TC Projects on Safety and Security

Helping States to Protect People and the Environment

- Regulation: Setting safety standards and security guidance
- Radiation and Transport Safety: Protecting workers, patients, the public and the environment
- Nuclear Installations: Advancing safe and secure operations
- Management of Disused Radioactive Sources
- Nuclear Security: Upgrading capabilities, reducing global risks
- Emergency Preparedness and Response: Raising levels of readiness

