



46th RCA National Representative Meeting, 14-17 May, Beijing, China

RCANRM(46)/06

Report on the RCA Technical Cooperation Programme

RAS9092 (ROK)

**Strengthening the Capacity
to Respond
to Radiological Emergencies of
Category II and III Facilities**

Bongseok Kim

Senior Researcher

Nuclear Emergency Preparedness Section
Korea Atomic Energy Research Institute



Project description



Project title

- RAS9092 Strengthening the Capacity to Respond to Radiological Emergencies of Category II and III Facilities (2020-2024)

Thematic area

- Radiation Safety

Lead country

- Republic of, Korea

Phase of implementation

- 5th Year (2020~)

Budget allocation

- EUR 324,450 (ROK EB)

Sustainable Development Goal project aims to achieve

- UN SDG Goal 3, 8, 11, 17

Project's Objective, Expected Impact and Intended Outcome

- Capabilities developed among operators and NRAs in the RCA GPs for establishing adequate emergency preparedness and response procedures for Category II and III facilities, using a graded approach

Activities

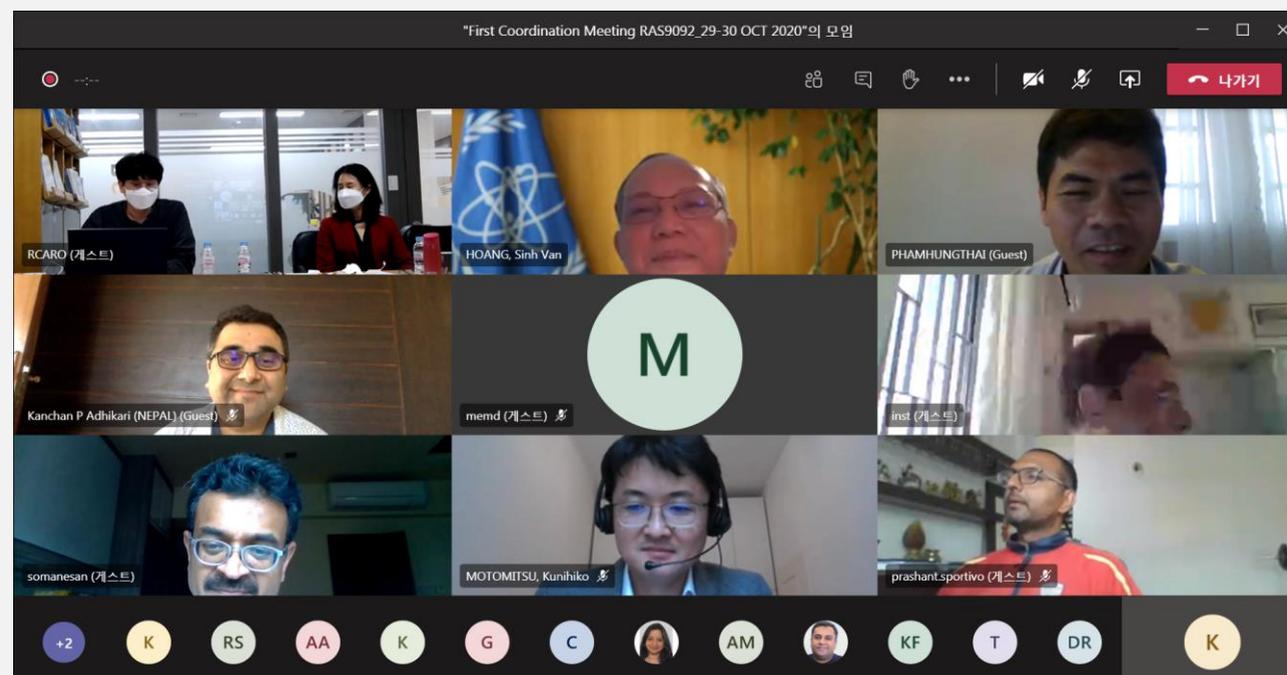


- First Coordination Meeting (Virtual)
- 26 participants from 15 countries

27 – 30 Oct. 2020

7 Sep. 2021

- Webinar on An Introduction to the IAEA Safety Standards and Protection Strategies (Virtual)
- 37 participants from 19 countries and the IAEA



Activities



- Regional Training Course on Development and Use of Operational Intervention Levels (OILs) for Reactor Emergencies (Bangkok, Thailand)
- 28 participants 11 countries, the IAEA and external experts

3 – 7 Oct. 2022

31 Oct. – 1 Nov. 2022

- Regional Training Course on Developing a Protection Strategy for a Nuclear or Radiological Emergency (Hanoi, Vietnam)
- 26 participants from 10 countries and the IAEA and external experts



Activities



- Mid-term Review Meeting (Putrajaya, Malaysia)
- 20 participants from 14 countries and the IAEA

13 – 17 Feb. 2023

25 – 29 Mar. 2024

- Regional Workshop on Development of National Radiation Emergency Plan (NREP) (Including Hazard Assessment) (Bangkok, Thailand)
- 28 participants from 13 countries, the IAEA and external experts



Risk Management



Different Priorities

- Different levels of the priorities on the EPR plans at national level among the GPs could lead to different levels of commitment for the project.

Knowledge Transfer

- Designated personnel for project activities such as Regional Training Courses need to be carefully monitored by the local governments.
- Appropriate measures could be active promotion on the importance of appropriate radiation emergency preparedness arrangements and their methodologies through information sharing and training.

Covid-19 Pandemic

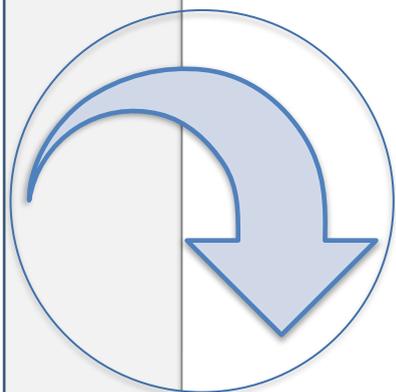
- Unable to hold physical meetings and Unable to active participation on the project.
- It is not suitable for sharing knowledges through virtual meeting because EPR covers a wide range of topics on national framework.

Project Launched in 2020

Efficiency



- This project has been supported by the RCA Regional Office and the Government of Korea as an EB project.
- Full financial support has been made (EUR 324,450) to this one and only project in the thematic area of “Radiation Safety” contributing to the enhancement of the EPR capabilities of the RCA Region. (Note: The last project under this thematic area was RAS9042 (2007-2010))

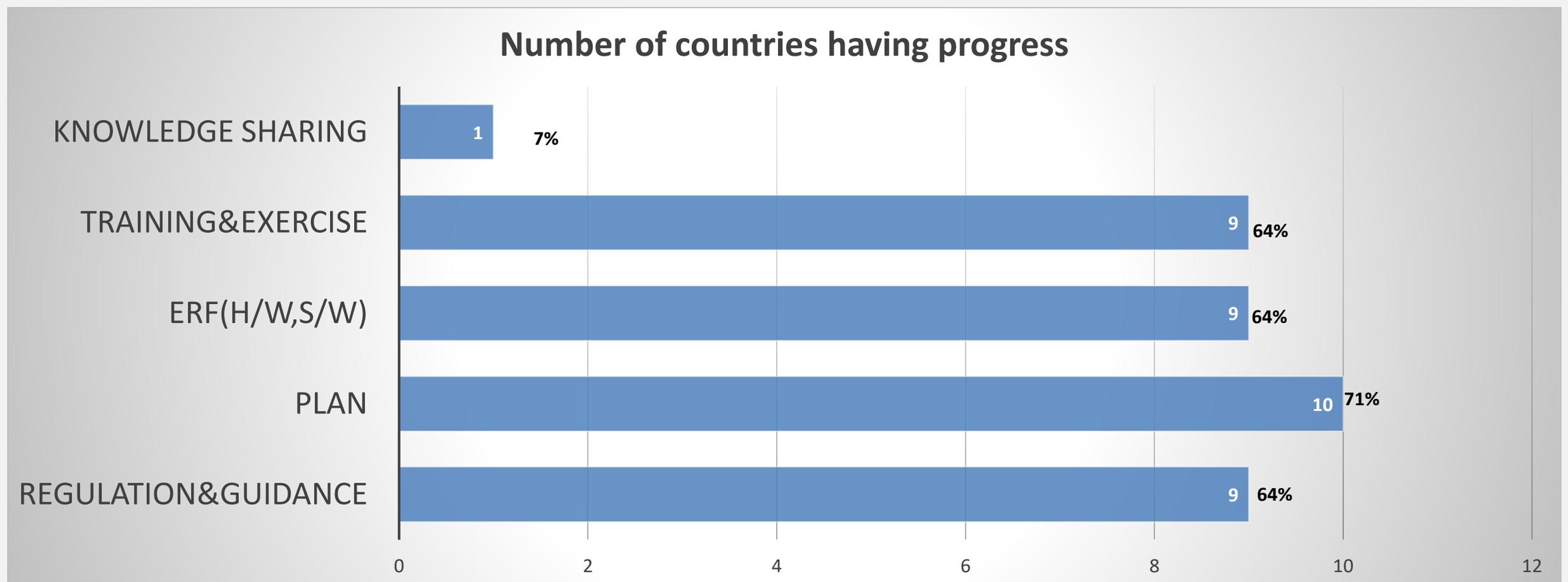


- In 2021, this project has been utilized as a channel to provide procurement of EPR related equipment to the RCA countries, contributed by Norway (EB in total EUR 364,206).

Key Findings from Recent Review



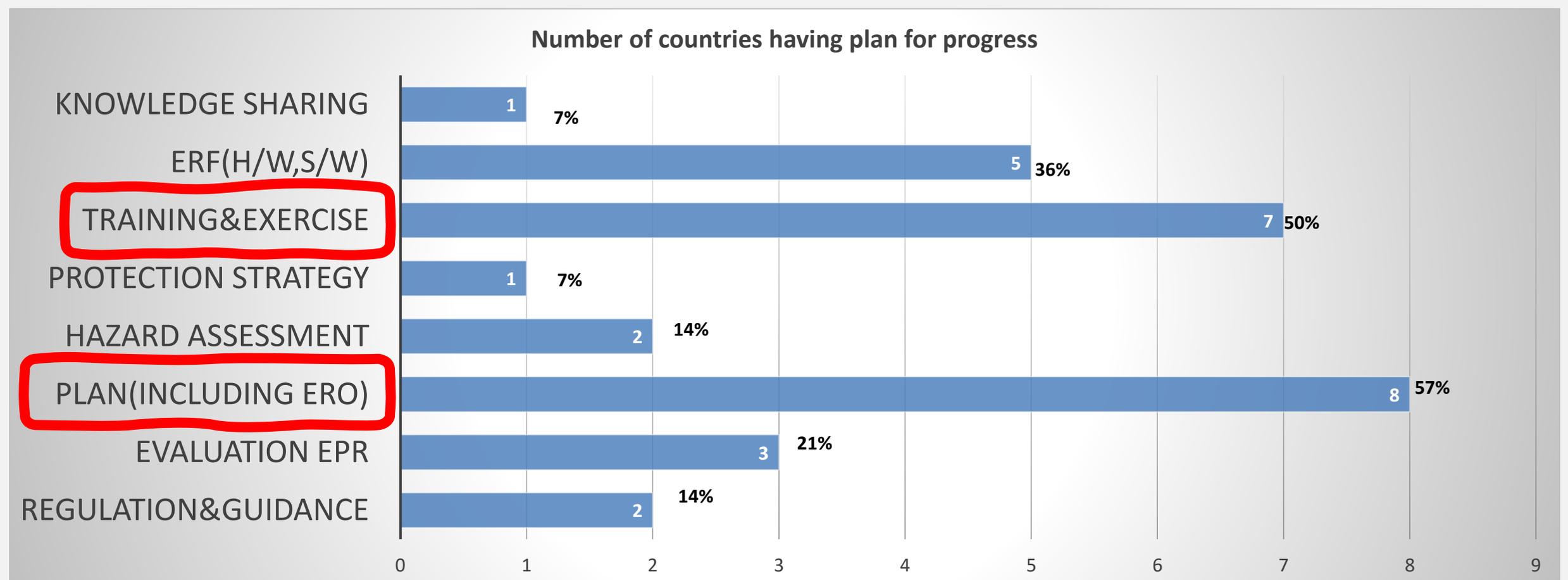
- Progress focused on regulations, planning, training and exercise, emergency response facility means that each participating country is currently in the stage of preparing an EPR system or strengthening human resources.



Key Findings from Recent Review



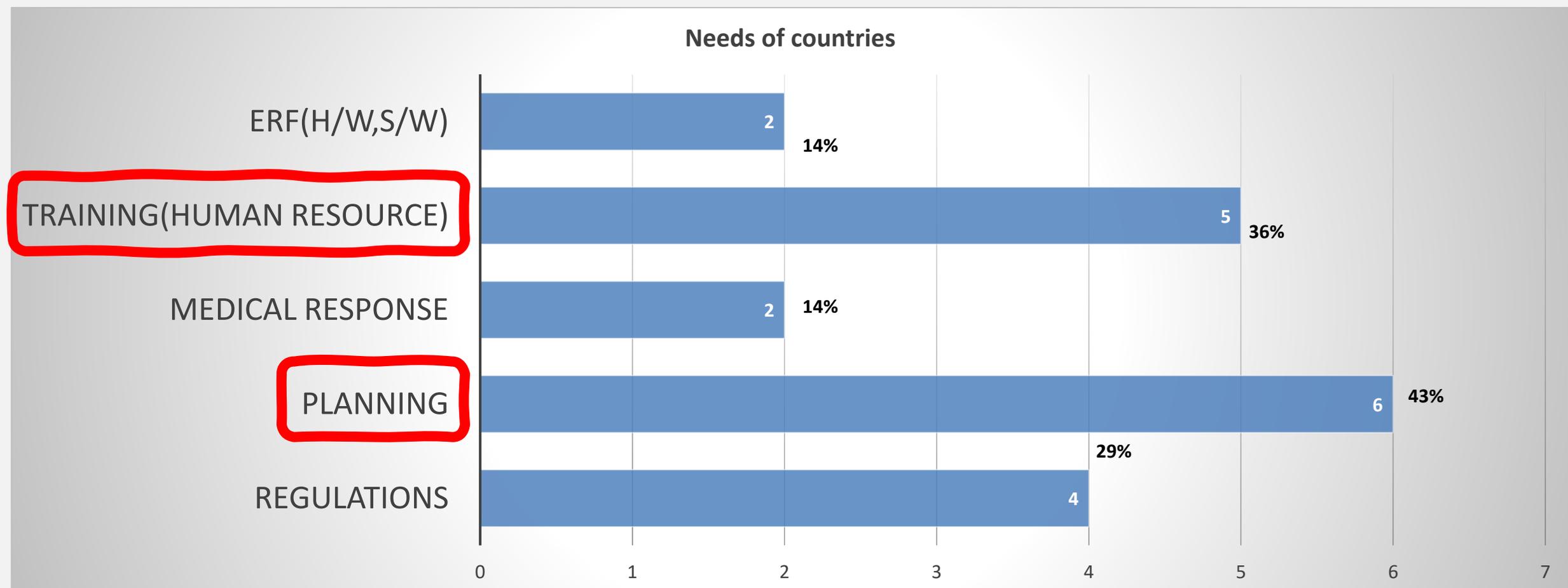
- The biggest common need is for each country to secure human resources such as professional emergency planners and trained response personnel.
- It can be seen that participating country intend to prepare a system (planning) and increase human resource (training)



Key Findings from Recent Review



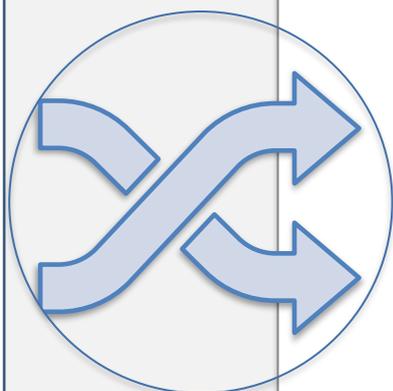
- The biggest common need is for each country to secure human resources such as professional emergency planners and trained response personnel.
- It can be seen that participating country intend to prepare a system (planning) and increase human resource (training)



Key Findings from Recent Review



- Based on this analysis, the Meeting noted the need for changing the work plan.
- At the project approval stage, the development of a handbook that compile pilot cases of protection strategy was included as one of the outputs, to support the establishment of protection strategy (the concept developed and introduced by the Agency in 2020).



- However, the Meeting noted that a various scope of the IAEA publications related to the protection strategy have become available. The Meeting decided to implement activities fully utilizing the already made publications, to directly respond to the current needs of the participating countries on strengthening the human and institutional capacities to set up the protection strategy. The Meeting agreed to adjust the work plan to increase the number of Expert Missions and implement Workshops on specific themes.

Effectiveness



Output	Indicator and Target	Status of Achievement until 2023
<p>Output 1 Project management structure established.</p>	<p>An agreed project implementation programme.</p>	<p>On target Several project implementations, which were previously agreed upon, are currently behind schedule and are planned to be implemented in the upcoming 2024 programme cycle.</p>
<p>Output 2 Regulators and operators trained in the field of radiation protection strategies for emergencies of category II and III facilities.</p>	<p>The number of regulators and operators trained in the field of radiation protection strategies for emergencies of the Category II and III facilities.</p>	<p>On target Regional Training Course and on/off-line workshops have been implemented</p>
<p>Output 3 A handbook of pilot cases of protection strategies for emergencies of category II and III facilities developed.</p>	<p>A handbook of pilot cases of protection strategies for emergencies of Category II and III facilities.</p>	<p>It was decided to replace the development of a handbook with expert missions and workshops in response to the specific demands of the targeted countries and to avoid redundancy with existing IAEA publications.</p>
<p>Output 4 Expert network established.</p>	<p>Online platform established on the RCARO website.</p>	<p>Completed A dedicated online platform for expert networks was successfully established on the RCARO website.</p>

Notable project achievement



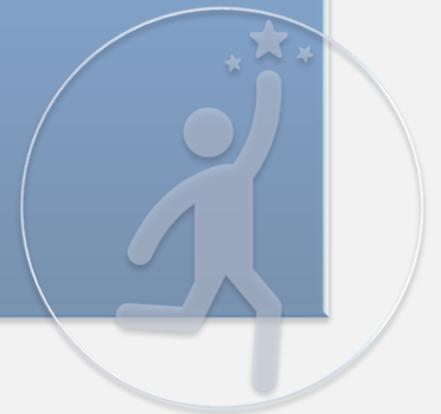
- Over 100 personnel trained through webinar/RTC/regional workshop
- Regional status of emergency preparedness understood
- Needs of each participating country identified on building a national EPR framework.

Achievements



- RAS9092 is the only project on Safety and Security field in the RCA region and that was able to be conducted through ROK EB.
- Expected to be utilized as background data for future projects on Safety and Security in the RCA region

Plan



Recommendations



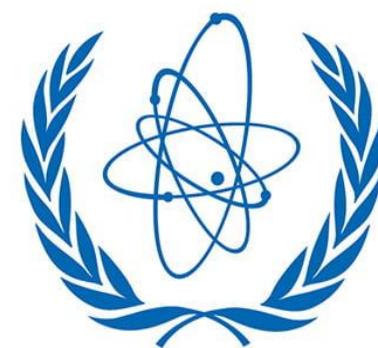
Building an EPR system is setting up national plans while considering the socio-economic status and legal framework. It should involve various stakeholders with a long-term perspective.

During the project implementation, it was notable that RCA countries need continued support in building their EPR systems. This will be a time-consuming process and requires various resources and concerted efforts.

Regional efforts through projects like RAS9092 will help the region build systematic and standardized EPR systems. Continued efforts will be highly important in terms of regional as well as national security and safety.



Thank You!



IAEA



R C A