رئاسة مجلس الوزراء
هيئة الرقابة النووية والإشعاعية
ENRRA
Egyptian Nuclear & Radiological Regulatory Authority

ENRRA

INTERNATIONAL COOPERATION

NEWSLETTER

Connecting ENRRA with
the Global Regulatory Community

OCTOBER 2026 EDITION

A Message from the Communications and International Cooperation (CIC) Department:

Welcome to the Second Edition of ENRRA International Cooperation Newsletter!

We are pleased to present the October edition of ENRRA International Cooperation Newsletter, featuring selected developments from the global nuclear and radiological regulatory community. This edition highlights key issues, including nuclear safety in conflict affected areas, advances in nuclear technologies, International cooperation initiatives, and emerging regulatory approaches. Through these insights, we aim to keep ENRRA colleagues informed of International developments and their potential implications for our regulatory responsibilities.

Beyond providing updates, the Newsletter serves as a platform for institutional knowledge sharing, encouraging the exchange of information, perspectives, and professional experiences. By connecting International developments with ENRRA's work, we seek to promote continuous learning, enhance institutional awareness, and strengthen our collective expertise.

This edition also introduces "ENRRA on the Regional and International Stage", a dedicated section highlighting our colleagues' participation in International activities and the valuable knowledge, experiences, and lessons learned through their engagement with the global regulatory community. This initiative reflects our commitment to ensuring that the benefits of International cooperation extend beyond individual participation and contribute to institutional development across ENRRA.

We encourage all colleagues to explore this edition, share their feedback, and contribute their experiences and insights to future issues.

Because every experience shared is an opportunity to learn, grow, and move forward together.

Communications and International Cooperation

(CIC) Department Team

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Why International Cooperation Matters ?

Nuclear safety and security are shared global responsibilities. Ensuring the safe and secure use of nuclear and radiological technologies requires not only robust national regulatory frameworks, but also sustained international cooperation, knowledge exchange, and mutual learning among regulatory authorities and international organizations.

For the Egyptian Nuclear and Radiological Regulatory Authority (ENRRA), International cooperation plays a vital role in strengthening institutional capabilities, facilitating the exchange of regulatory expertise, and drawing upon the experiences and good practices of counterpart regulatory authorities worldwide. It also contributes to the continuous improvement of regulatory approaches, informed by International safety standards, recommendations, and established regulatory practices.

As the nuclear and radiological sectors continue to evolve, International cooperation becomes a significant. Advances in nuclear technologies, including small modular reactors (SMRs), emerging applications of nuclear science, evolving nuclear security challenges, and changing regulatory requirements present new opportunities and challenges. Addressing these developments effectively calls for continuous learning, professional dialogue, and collaboration across the International regulatory community.

Through its engagement with the International Atomic Energy Agency (IAEA), regional and International networks, and counterpart regulatory authorities, ENRRA actively contributes to global regulatory dialogue while benefiting from technical cooperation, peer reviews, capacity building initiatives, and the exchange of professional expertise. Such engagement reinforces ENRRA's commitment to regulatory excellence and the continuous development of its institutional and technical capabilities.

Against this backdrop, ENRRA International Cooperation Newsletter serves as a platform for connecting ENRRA colleagues with significant international nuclear and regulatory developments. Beyond raising awareness, it seeks to transform global developments by highlighting emerging trends, regulatory experiences, and areas of International cooperation relevant to ENRRA's mandate.

By systematically monitoring and sharing International developments, the Newsletter also contributes to strengthening ENRRA's regulatory intelligence, supporting informed decision making, strategic planning, and institutional preparedness for emerging challenges.

ENRRA'S International Cooperation Portfolio

ENRRA's International cooperation activities reflect Egypt's active engagement with the regional and International nuclear regulatory community, through participation in regional cooperation frameworks and networks, as well as bilateral partnerships with counterpart regulatory authorities.

At the regional and International level, ENRRA participates in five major cooperation frameworks and networks: AFRA (African Regional Cooperative Agreement for Research, Development and Training related to Nuclear Science and Technology), ANNuR (Arab Network of Nuclear Regulators), FNRBA (Forum of Nuclear Regulatory Bodies in Africa), AAEA (Arab Atomic Energy Agency), and the Regulatory Cooperation Forum (RCF). Through these platforms, ENRRA engages with regulatory authorities and nuclear organizations from different countries, benefiting from the exchange of expertise, regulatory experience, technical knowledge and lessons learned, while contributing to regional and International efforts to strengthen nuclear and radiological safety and security.

In parallel with its multilateral and regional engagement, ENRRA has established six bilateral cooperation partnerships through signed Memoranda of Understanding (MoUs) with counterpart authorities in the Russian Federation, Morocco, Cyprus, Hungary, Saudi Arabia and Rwanda. These agreements provide a framework for sustained cooperation and the exchange of operational and regulatory experience, technical information and expertise in areas of mutual interest.

ENRRA's bilateral cooperation also supports collaboration in areas related to nuclear and radiological safety, radiation protection, nuclear security, emergency preparedness and response, radioactive waste management and other regulatory matters. Such partnerships provide opportunities for ENRRA and its counterparts to share lessons learned, develop professional capabilities and strengthen regulatory approaches through direct engagement and technical cooperation.

Together, these regional, International and bilateral channels represent major cooperation links connecting ENRRA with the wider nuclear regulatory community. More than simply establishing institutional relationships, these partnerships provide practical mechanisms for knowledge exchange, capacity building, regulatory learning and professional networking, they help in overcoming current challenges, anticipating future ones, exposing staff to newly emerging nuclear and radiological technologies, and strengthening collective actions toward ensuring the nuclear and radiological safety and security of countries regionally and Internationally. This enables ENRRA to both benefit from International experience and contribute to the collective advancement of nuclear and radiological safety.

ENRRA ON THE REGIONAL & INTERNATIONAL STAGE

Beyond the Emergency: Building Public Trust Through Effective Communication

Insights and lessons from the IAEA Inter- Regional Meeting on Public Communication During Nuclear or Radiological Emergencies

Aswan, Egypt | 19–23 October 2026

Public trust cannot be built at the moment an emergency begins. It must be established long beforehand through transparency, consistent communication, and meaningful engagement with the public. This was one of the key messages emerging from the IAEA Inter-Regional Meeting on Public Communication During Nuclear or Radiological Emergencies, hosted by ENRRA in Aswan in cooperation with the International Atomic Energy Agency (IAEA) and the Arab Atomic Energy Agency (AAEA).

Bringing together representatives from ten Arab countries, the meeting explored an increasingly important dimension of nuclear and radiological emergency preparedness: how regulatory authorities can communicate effectively with the public when information is evolving, uncertainty is unavoidable, and public confidence is essential.



Learning from International Experience

The technical programme brought together International expertise from the IAEA, the UAE's Federal Authority for Nuclear Regulation (FANR), and the United States National Nuclear Security Administration (NNSA).

Through sessions delivered by Ms. Nayana Jayarajan, Mr. Salah Al-Hashimi, and Mr. Mark Basnight, participants examined the psychological, operational, and strategic dimensions of emergency communication.

One particularly important lesson was that public communication is not merely a supporting function during an emergency; it is an essential operational component of emergency response and public protection.

Discussions highlighted how public perceptions of radiation risks are influenced not only by technical information, but also by factors such as uncertainty, unfamiliarity, and the invisible nature of ionizing radiation.

The sessions also challenged the assumption that providing information about an emergency necessarily creates widespread public panic. Instead, they emphasized that timely, transparent, and actionable communication can strengthen public cooperation and support appropriate protective behaviour.



Communicating with Confidence, Without Over-Reassurance

Another significant area of discussion concerned the challenges of communicating under uncertainty.

Participants explored why absolute reassurances or premature statements about safety can undermine institutional credibility when circumstances change.

Rather than offering unsupported assurances, effective emergency communication requires acknowledging what is known, explaining what remains uncertain, and clearly communicating the actions being taken by the responsible authorities.

The exercises reinforced the importance of aligning technical assessments with understandable, empathetic, and consistent public messages.





Managing Misinformation and Strengthening Preparedness

The meeting also examined the growing challenge of misinformation and disinformation during emergencies, particularly in rapidly evolving digital environments.

An important practical insight was the need to prioritize misleading information that could influence public behaviour or interfere with protective actions, rather than attempting to respond to every circulating rumour.

Participants were introduced to proactive communication techniques, including prebunking, structured responses to misinformation, and approaches to evaluating communication performance.

Interactive simulations and spokesperson exercises provided opportunities to translate these principles into practical communication decisions under time pressure.

ENRRA's Participation and Knowledge Exchange





ENRRA was represented by Mr. Ramy Afifi, Senior Communications and International Cooperation Specialist, and Ms. Sarah Hegazy, Coordinator at the Technical Unit of ENRRA's Chairman.

Mr. Afifi delivered the opening remarks on behalf of ENRRA and coordinated the meeting's organization in collaboration with the IAEA, with organizational support from Ms. Hegazy.

Both representatives actively participated in the technical discussions and jointly delivered ENRRA's presentation, sharing the Authority's experience and ongoing developments in public communication under normal conditions and during nuclear or radiological emergencies.

A particularly valuable contribution to the meeting was ENRRA's presentation of a real-world case study demonstrating the importance of proactive public communication during periods of heightened regional uncertainty. Drawing on the Authority's experience during the June 2025 regional escalation, commonly referred to as the "12-Day War," the presentation highlighted how ENRRA responded to circulating rumours and unverified claims concerning potential radioactive releases. Through timely, evidence based public updates, ENRRA communicated the findings of its national radiological monitoring network, which indicated that radiation levels remained within established safety limits. These efforts were complemented by community awareness activities and coordination with media outlets to address public concerns and provide reliable information. The case study generated positive engagement among IAEA experts and regional participants, offering practical insights into the importance of transparency, institutional preparedness, and proactive communication in maintaining public confidence during periods of uncertainty.

Their participation provided an opportunity to exchange regulatory communication experiences with regional counterparts and International experts, while exploring approaches that could contribute to the continued development of ENRRA's institutional communication capabilities.

Bringing the Lessons Back to ENRRA

Beyond the technical discussions, the meeting offered several valuable perspectives for ENRRA's ongoing efforts to strengthen emergency preparedness and regulatory communication.

Among the most relevant lessons were the importance of integrating communication into emergency preparedness arrangements, developing spokesperson capabilities, communicating uncertainty responsibly, and establishing effective mechanisms for monitoring and responding to misinformation.

The meeting also reinforced the value of regular exercises, coordination between technical and communication teams, and maintaining public engagement during normal conditions.

By sharing these experiences across the Authority, International participation can become more than an individual professional development opportunity. It can contribute to institutional learning, strengthen preparedness, and support the continuous improvement of regulatory practices.

The lasting lesson from Aswan is clear:

Effective emergency communication begins long before an emergency, and public trust remains one of its most valuable foundations.

SECTION

01

NUCLEAR IN FOCUS

- Nuclear Safety in Conflict Zones
- Global Developments
- International/Regional Partners in Focus
- Regional Spotlight

IAEA Director General Statement on Situation in Ukraine

The eighth localized ceasefire facilitated by the International Atomic Energy Agency (IAEA) between Ukraine and the Russian Federation commenced on Thursday morning, IAEA Director General Rafael Mariano Grossi confirmed. The temporary ceasefire enables the repair of a backup transformer that has been damaged by military activity near the Zaporizhzhya Thermal Power Plant.

The repair will strengthen the connection between the Zaporizhzhya Nuclear Power Plant (ZNPP) and the Ferosplavna-1 330 kV off-site power line, the ZNPP's sole remaining external power line.



"Repair work during the Agency-brokered ceasefire will improve the reliability of the off-site power connection at the ZNPP," Director General Grossi said. "I am grateful that both sides have worked constructively with the IAEA, showing that persistent diplomatic efforts can yield concrete results that benefit both sides in the most difficult and challenging of circumstances."

Separately, efforts to re-instate the ZNPP's other external power line – the Dniprovska 750 kV line – are ongoing. Though repairs were completed in June 2026 under a previous IAEA-brokered ceasefire, the line remains unavailable because of subsequent damage to the line, as well as previous damage to the associated electrical substation.

"Despite recent positive steps to improve the reliability of the off-site power connection at the ZNPP, there remains only one line available, and we cannot be complacent," Director General Grossi said. "The restoration of the Dniprovska 750 kV power line would significantly enhance nuclear safety and security and reduce dependence on limited diesel fuel stocks. I call on both sides to continue working with the IAEA to facilitate the reinstatement of the Dniprovska line."

Diesel fuel supplies at the ZNPP have been running low in recent months, as no diesel deliveries have occurred since March 2026. "The availability of diesel fuel at the ZNPP continues to be an issue of critical importance. The depleted reserves increase the risk that nuclear safety is challenged in the event of another loss of off-site power. It is essential that steps are taken to increase the volume of diesel fuel available on-site prior to winter, when the situation may become acute," the Director General added.

This week, the South Ukraine NPP reported detecting 121 drones in their monitoring area, while the Khmelnytskyy NPP and Rivne NPP also reported 31 drones and one drone, respectively.

High numbers of air raid alerts were reported across all sites, with 194 in total over the past week. The IAEA teams at the Khmelnytskyy and Rivne NPPs had to shelter on multiple occasions.

"Our on-site teams once again report frequent military activity. Regardless of whether nuclear facilities are deliberately targeted, such activity increases the risk that accident or miscalculation challenges nuclear safety. I renew my calls for maximum military restraint from all sides," Director General Grossi said.

16 October 2026 | IAEA | Source Link

IAEA Chief Says Agency 'Ready' to Verify Iran's Nuclear Activities, Urges Diplomatic Agreement

'Most of the technical work, which is required to ensure an adequate verification of the activities in Iran has been done,' says Rafael Grossi.

International Atomic Energy Agency (IAEA) Director General Rafael Grossi said that the agency has completed most of the technical preparations needed to verify Iran's nuclear activities, stressing that a lasting and stable solution to tensions over Tehran's nuclear program requires a diplomatic agreement.

Speaking to the UN General Assembly in New York, Grossi said the IAEA was ready to carry out the technical verification work necessary to support negotiations between Iran and the US.

"Most of the technical work, which is required to ensure an adequate verification of the activities in Iran has been done, so we are ready. The IAEA is ready," Grossi said.

He expressed hope that negotiations between Tehran and Washington would make progress with the support of regional and International partners, including Pakistan, Qatar, Oman and Egypt.

Grossi said the IAEA had been working with these countries and others to help bring the situation back to a framework in which nuclear activities could be adequately verified.

"There will not be, dear friends, there will not be a lasting, stable solution without a diplomatic agreement," he told the General Assembly.

Grossi emphasized that independent verification by the UN nuclear watchdog would be essential to any diplomatic arrangement involving Iran's nuclear program.

"For a diplomatic agreement to happen, we need the verification. We need the solid support of the work of the IAEA. We are ready, and we are certain that they want the same thing," he said.

23 October 2026 | ANADOLU AJANSI | Source Link

Regional Spotlight

IAEA Mission Says UAE Response to Barakah Nuclear Power Plant Event in May 2026 was Effective

An International Atomic Energy Agency (IAEA) mission to the United Arab Emirates (UAE) concluded today that the national authorities and Barakah Nuclear Power Plant (BNPP) had appropriately responded to the loss of off-site power event at BNPP Unit 3 due to a drone strike on 17 May 2026.

The mission found that effective action was taken to maintain safety during the event including prompt national and International notification, implementation of the established emergency response procedures, and public communication.



BNPP is operated by ENEC Operations, a joint venture subsidiary of the Emirates Nuclear Energy Company (ENEC) and Korea Electric Power Corporation (KEPCO). The plant is located in the Al Dhafra region of the Emirate of Abu Dhabi on the Arabian Gulf, approximately 53 km west-southwest of Al Dhannah City, UAE. The plant's four APR1400 reactors produce 40TWh annually which is equivalent to around 25% of the UAE's electricity needs.

IAEA Mission Says UAE Response to Barakah Nuclear Power Plant Event in May 2026 was Effective

The mission was conducted from 12 to 20 October 2026 at the request of the UAE Government, following an agreement between IAEA Director General Rafael Mariano Grossi and the Emirati Government during his visit to BNPP in June 2026.

The six-member IAEA mission team visited the affected areas of the plant and key emergency response facilities, reviewed operating and emergency procedures, and met the senior management and technical staff of BNPP and the Federal Authority for Nuclear Regulation (FANR), the UAE's independent nuclear regulator. The mission focused on plant response actions, national arrangements for emergency preparedness and response (EPR), lessons learned from the event, and the reactor operator's arrangements to ensure safety.

"By requesting this mission, FANR and BNPP have demonstrated their strong commitment to safety and continuous improvement," said Amgad Shokr, Director of the IAEA Incident and Emergency Centre and leader of the mission team. "FANR and ENEC are encouraged to continue implementing the organizational and technical measures identified through the assessment of lessons learned from the event, with the aim of further enhancing safety and strengthening emergency preparedness and response arrangements in line with IAEA Safety Standards."

The mission team identified several good practices and performances, including the adoption by the UAE authorities of the IAEA's Seven Indispensable Pillars for Nuclear Safety and Security. The team also acknowledged the successful restoration of off-site power within a short period following the event, effective regulatory oversight over the event, strengthening of safety procedures, training of operating staff, and resilience of critical infrastructure based on lessons learned from the event.

The team provided recommendations for further improvement, including strengthening emergency preparedness and response arrangements, strengthening the reliability and resilience of critical infrastructure, and reinforcing coordination among relevant stakeholders to ensure the effective integration of nuclear safety and security measures.

In her remarks at the mission's conclusion, IAEA Deputy Director General and Head of the Department of Nuclear Safety and Security Karine Herviou said that "the mission recognized the UAE's strong record of engagement with the IAEA, adding that "the real value of an International mission lies not only in confirming what worked, but also in identifying lessons and opportunities for continuous improvements. In this regard, the team recognized the technical knowledge and competence of FANR, the Barakah management and operating personnel, and the national electrical grid field operators."

"The UAE has established a robust and comprehensive nuclear emergency preparedness and response system in line with the highest International standards, developed in close cooperation with the IAEA," said H.E. Hamad Al Kaabi, Director General of FANR. "The UAE shares the position of the International community and the IAEA on the importance of protecting nuclear facilities at all times. The UAE responded swiftly and effectively to the incident, applying the IAEA's Seven Indispensable Pillars for Nuclear Safety and Security. This mission reflects our continued commitment to implementing the highest standards of nuclear safety, security and emergency preparedness, drawing lessons from experience and further strengthening our national capabilities. We will continue working closely with the IAEA and our national partners to enhance the safety and security of nuclear facilities and ensure the protection of the community and the environment."

As part of the UAE's ongoing cooperation with the IAEA, follow-up missions will be considered in the future.



20 October 2026 | IAEA | Source Link

IAEA and OECD/NEA Release New Guide for Rating and Communicating Nuclear and Radiological Events

The IAEA and the OECD Nuclear Energy Agency (OECD/NEA) have published updated guidance for rating the safety significance of nuclear and radiological events and communicating them clearly to the public. The 2026 edition of INES: The International Nuclear and Radiological Event Scale User's Manual, which replaces the 2008 edition, reflects the latest experience and practices in effective communication on nuclear or radiological incidents.

About INES

Like the Richter scale for earthquakes, INES distils a complex event into a single number on a logarithmic scale. The INES scale was created in the aftermath of the 1986 accident at the Chornobyl nuclear power plant, when International experts convened by the IAEA and the OECD/NEA proposed a rating scale similar to those used for earthquakes and hurricanes. INES was introduced in 1990.

“INES provides a clear and consistent way to communicate the safety significance and associated radiation risk of nuclear and radiological events,” said Simon Coenen, Senior Expert for Nuclear Safety at Belgium’s Federal Agency for Nuclear Control and former Co-Chair of the INES Advisory Committee. “It supports a common understanding of the nature and severity of an event among technical experts, the media and the public. The scale applies to events at facilities and during activities involving sources of ionizing radiation, including the use of radioactive sources and the transport of radioactive material.”

Participation in INES is voluntary. Currently, over 80 countries have a designated INES National Officer, who is responsible for communicating events occurring in their country to the IAEA.

How INES Rates Events

While the Richter magnitude measures the physical size of an earthquake from instrument readings, INES provides perspective on the safety significance of events. It rates them on a scale from Level 0 to Level 7, with Level 7 assigned to events with the highest safety significance. Events without safety significance are rated at Level 0. Events are rated by assessing their actual and potential consequences against defined criteria in three areas, with the highest level derived from these assessments determining the event level:

- The impact on people and the environment, such as received radiation doses and releases of radioactive material into the environment;
- The impact on radiological barriers and controls at facilities, such as damage to reactor fuel;
- The impact on defence in depth, meaning the measures put in place to prevent or cope with accidents.



The Chornobyl accident and the 2011 accident at the Fukushima Daiichi nuclear power plant were both rated at Level 7.

Where a country so decides, the rating of an event is shared with the IAEA through the Unified System for Information Exchange in Incidents and Emergencies (USIE). It is then published on the IAEA's publicly accessible Nuclear Events Web-based System (NEWS).

Updates in the 2026 Edition

The 2026 edition of the INES Manual presents refined rating criteria and clarifies the scope of the scale and the responsibility for assigning ratings. It reflects lessons learned from past events, in particular the Fukushima Daiichi accident. It includes guidance on events involving multiple facilities or units at one site: where a single external event, such as an earthquake, leads to releases from several units, the total activity released from all units is considered in the rating.

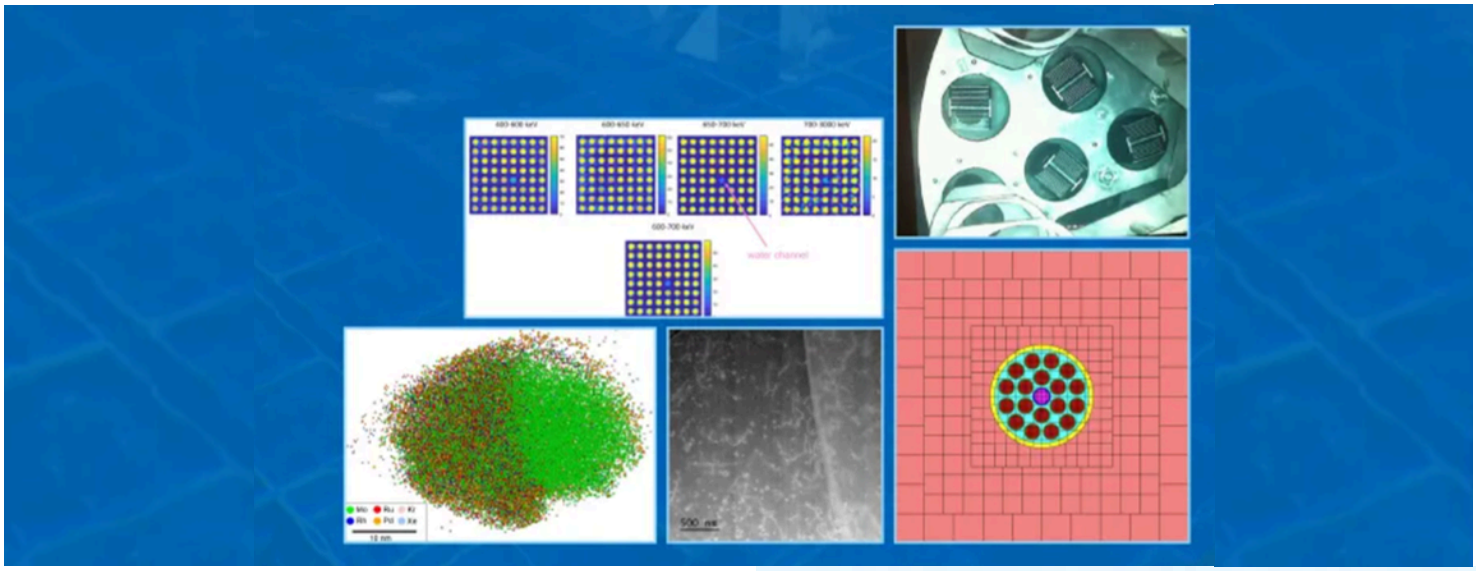
The Manual distinguishes between provisional and final ratings and addresses the use of INES in evolving severe emergencies, prioritizing public communication ahead of the rating process.

“The value of INES depends on the consistent, harmonized and credible application of the scale across Member States,” said Amgad Shokr, Director of the IAEA Incident and Emergency Centre. “The 2026 edition of the INES User's Manual provides Member States with updated guidance to support its consistent application. In addition, we are strengthening the INES National Officer network, enhancing training and guidance, and further developing the tools and platforms used for event rating and communication.”

12 October 2026 | IAEA | Source Link

IAEA Launches Research Project on Spent Fuel Characterization

A new Coordinated Research Project (CRP) on Spent Fuel Characterization Phase II (T13036) will bring together spent fuel characterization experts to advance work supporting spent fuel management throughout the backend of the nuclear fuel cycle.



To evaluate whether spent fuel assemblies can transition safely through the successive stages of its management, specific characteristics must be identified, calculated, and measured to support safety and technical assessments. This CRP will focus on advanced efforts leveraging modelling tools and both destructive and non-destructive techniques to define, simulate, and measure these characteristics to help optimize spent fuel management practices during storage, reprocessing, transportation, and disposal

Overall Objective

Building upon the characterization methods and techniques summarized and investigated in the prior CRP on Spent Fuel Characterization (T13018), the overall objective of this next CRP is to foster knowledge exchange between Member States on the characterization of spent nuclear fuel and to help them address spent fuel management requirements with state-of-the-art modelling, measurements, data management, and validation. The scope of work will cover legacy, current and advanced fuel types and will facilitate the exchange of information and experiences between Member States with significant experience in this area and those with more limited experience and infrastructures. The results are expected to be compiled in an IAEA Technical Report.

Specific Objectives

- To identify characterization methods and techniques to satisfy spent fuel management requirements for storage, reprocessing, transportation, and disposal.
- To enable characterization of radionuclide inventory and physical, neutronic, chemical and thermomechanical behaviour of spent fuel with state-of-the-art modelling techniques.
- To enhance understanding of the evolution of experimental techniques over decades and compare them with modern techniques.
- To identify data needs for activities at the different stages of back end operations.
- To share approaches to spent nuclear fuel characterization data management, including how to build databases, what information they should contain, and how to store and preserve information for the future.
- To promote awareness of existing characterization datasets and their uncertainties, assess their use for validation, highlight their impacts and identify gaps.
- To identify the potential for collaborative work between Institutes.
- To enhance the maturity of knowledge in Member States with limited experience.
- To enhance the participation of young professionals.

5 October 2026 | IAEA | Source Link

IAEA Carries Out Fresh LTO Review Mission to Oskarshamn

The International Atomic Energy Agency team focused on aspects related to the safe Long Term Operation of Sweden's Oskarshamn 3 nuclear power unit during the visit, which followed a similar mission two years earlier.



The Safety Aspects of Long Term Operation mission took place from 6 to 9 October and included two members of International Atomic Energy Agency (IAEA) staff and two experts from Argentina and the Netherlands.

Oskarshamn 3, a boiling water reactor, was commissioned in 1985, and its service life and production capacity were increased in 2009. The total power of the plant is about 1450 MWe and the annual production is around 11 TWh.

The unit currently has a planned operating period until 2045 but the owners of the plant - Uniper has a 54.5% share and Fortum 45.5% - announced in 2024 they were exploring a further 20-year operating extension of the plant, which would take it to 80 years.

Mission leader, IAEA Nuclear Safety Officer Bryce Lehman, said: "The team noted the plant is working on the suggestions and recommendations from the 2024 review. The plant has made improvements in the ageing management of unit 3, addressing many of the areas identified for improvement in 2024."

The team found that the plant had updated the Long Term Operation (LTO) programme "ensuring that all Long Term Operation activities are systematically planned, and clear responsibility is assigned for completing necessary activities" as well as finalising the ageing management scope for LTO.

Areas for further work included ensuring that the plant safety analysis report "is properly updated to reflect the ageing management activities, especially regarding time-limited ageing analyses (TLAAs) - assessments of ageing effects on plant components during long-term operation" and to ensure that TLAAs are "properly identified and revalidated, and properly incorporated into the ageing management".

Jenny Wirandi, Acting CEO of OKG, said such missions were "an important tool for ensuring that OKG remains aligned with IAEA standards and guidance in this area - the reviews strengthen our Ageing Management Programme and support our ambition to achieve safe, reliable and sustainable LTO".

A final copy of the report will be submitted to the plant management, the Swedish Radiation Safety Authority and the Swedish government within three months.

13 October 2026 | WORLD NUCLEAR NEWS | Source Link

The Only Country in the World that Operates a Floating Nuclear Facility Wants to Bring it to Africa, with It's Largest African Partner in Focus

Russia has reignited conversations with African leaders on bringing its floating nuclear technology to the continent.

Currently, Russia is the only country in the world that has a floating nuclear facility.
The country operates the Akademik Lomonosov, the world's first operational floating nuclear power plant.



It is essentially a nuclear power station built onto a ship-like platform that can supply electricity and heat to remote coastal communities.
Unlike a conventional nuclear power station, it can be stationed in a remote port rather than requiring a large land-based site.

Very recently, according to Rosatom's nuclear chief, Alexey Likhachev, the company reiterated its intent to bring its floating nuclear power to Africa.
He noted that this time, Egypt is a region of interest, given the North African country's intent to expand its nuclear capabilities.
Egypt aims to use the technology to facilitate localized shipbuilding and expand cooperation into small nuclear power plants.

As seen on Sputnik, Alexey Likhachev made this known to reporters he spoke to on the sidelines of the Russian Energy Week.

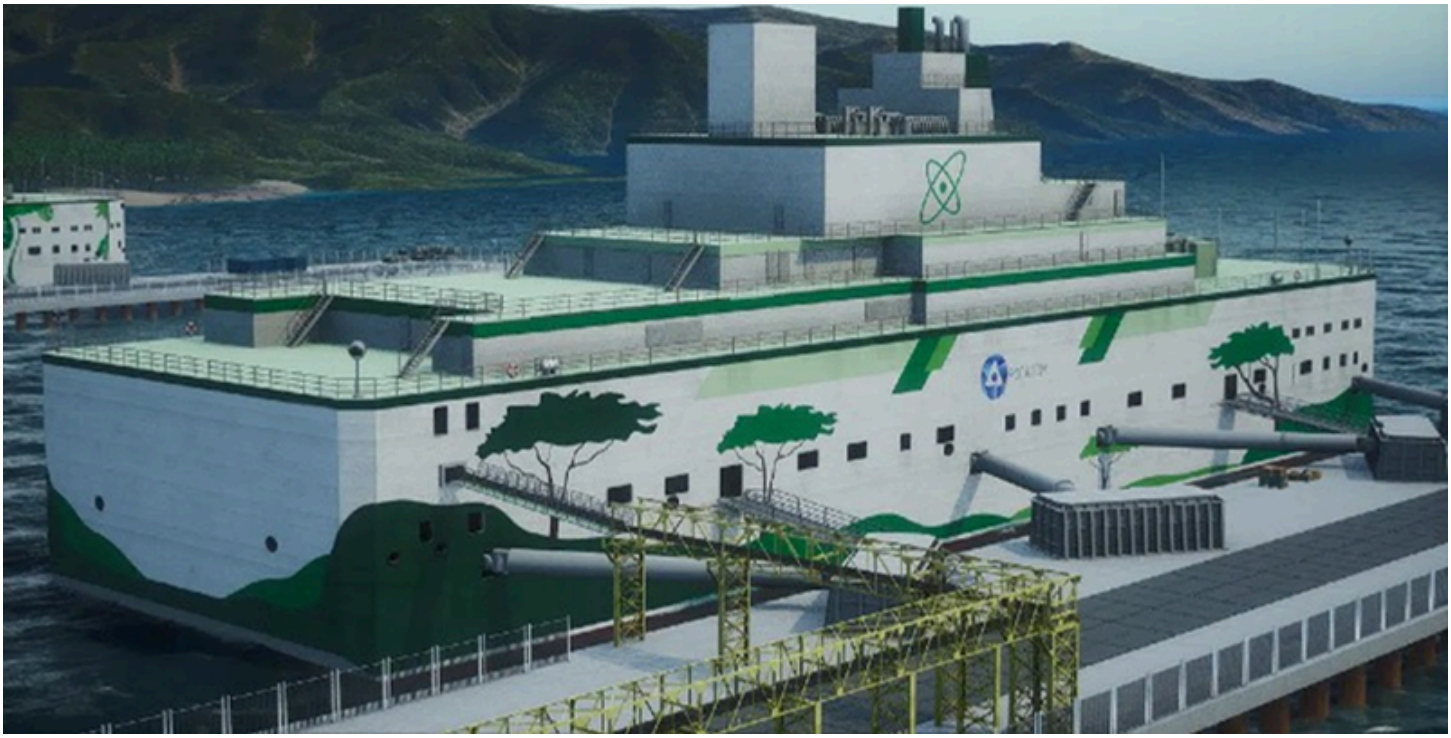
Ihe Rosatom chief further revealed that the initiative is not exclusive to Egypt, as other African countries that have already established a nuclear framework with Moscow are also in the mix for its floating nuclear technology.

As of 2025, official data showed that around 15 African countries had nuclear cooperation with Russia, including some of the continent's largest economies.
Countries such as Morocco, Egypt, Nigeria, Ghana, Ethiopia, and Tanzania not only have nuclear cooperation with Russia but also boast a military partnership with the Eurasian giant.
Of these countries, Egypt is currently Russia's top partner in Africa.

17 October 2026 | BUSINESS INSIDER AFRICA | Source Link

Rosatom Signs Floating Nuclear Power Deal for Indonesia

Electricity generated by floating nuclear power plants will be provided to an East Indonesian island, according to an agreement signed by Rosatom and Indonesian company PT Pembangkit Listrik Nuklir.
Electricity generated by floating nuclear power plants will be provided to an East Indonesian island, according to an agreement signed by Rosatom and Indonesian company PT Pembangkit Listrik Nuklir.



Russia's state nuclear corporation Rosatom said it signed the agreement during Russian Energy Week in Moscow to supply the power to the northern part of Halmahera Island in North Maluku.

Two of Rosatom's FPU-100 floating nuclear power units will be deployed, giving a combined capacity of 200 MW. Rosatom said it expects them to be supplying electricity to consumers within five years.

Alexey Likhachev, Director General of Rosatom, said: "Cooperation between Rosatom and Indonesia is progressing rapidly. Our recent meeting with President Prabowo Subianto reaffirmed that this world's largest island nation is consistently pursuing a course toward strengthening energy security and achieving carbon neutrality. I would like to emphasise the historic significance of this milestone - the world's first-ever export agreement for electricity supply from a floating power unit.

I am convinced that this will send a strong signal to the global business community. With systematic government support, the private sector is actively taking the lead in initiating nuclear infrastructure projects capable of transforming the country's economy."

Yudi Utomo Imardjoko, Indonesian Nuclear Scientist and Director of PT Pembangkit Listrik Nuklir, said: "We firmly believe that providing our people with clean, reliable, and carbon-free electricity is essential to securing Indonesia's long-term energy future. It is important to emphasise that this project is structured entirely as a business-to-business initiative, driven by private-sector investment without reliance on funding from Indonesia's State Budget. We are deeply grateful for the opportunity to advance this historic partnership and sincerely appreciate the continued support of the Indonesian Government, particularly the Embassy of the Republic of Indonesia in Russia, in facilitating this important milestone."

In its discussions with Indonesia's government, Rosatom has proposed a two-phased approach to nuclear energy in Indonesia, with the first stage consisting of small-scale floating nuclear power units, followed by a second phase involving land-based nuclear power plants equipped with large units.

19 October 2026 | WORLD NUCLEAR NEWS | Source Link

SECTION

02

SPOTLIGHT ON GLOBAL REGULATORY ARENA

Global Regulatory Developments

Second Part of Construction Permit Application Submitted for SMRs at Palisades

Holtec has submitted the Preliminary Safety Analysis Report to the US Nuclear Regulatory Commission for two small modular reactor units at the Palisades Energy Center in Michigan, completing the second phase of the Construction Permit Application process.

The Construction Permit Application process was initiated with the limited work authorisation request and Environmental Report submitted in December of 2025. A limited work authorisation allows certain construction activities to commence before a construction permit or combined construction and operating licence has been issued. The Nuclear Regulatory Commission (NRC) accepted it for review and docketed it in February. Holtec said the NRC's draft Safety Evaluation Report for the limited work authorisation application, the first phase of the Construction Permit Application, is anticipated in December 2026.



The Preliminary Safety Analysis Report provides the NRC with detailed technical and safety information supporting Holtec's application to construct Pioneer 1 and 2, two planned SMR-300 small modular reactors at the Palisades site. The SMR-300 is a pressurised water reactor (PWR) producing about 300 MW of electrical power or 1,050 MW of thermal power for process applications. The Palisades site is also home to a single-unit 805 MWe PWR, which closed in 2022 and Holtec is now in the process of bringing it back into service.

"This submittal, the most significant step to date toward establishing the regulatory framework for the Pioneer plant, was preceded by numerous pre-submittal engagement meetings with the NRC and sustained rigorous technical interactions with the Commission's staff," Holtec said.

Holtec said it will now work completing a Class 2 construction estimate, a 4D simulation of the entire plant showing the step-by-step evolution of construction, and completion of the confirmatory safety analyses supporting the plant's Final Safety Analysis Report.

A safety evaluation report and environmental assessment are required before the NRC can approve reactor projects. Holtec will need to file a separate licence application to operate the units after they are built.

An exemption granted by the NRC on 28 August authorised installation of permanent support-of-excavation and cutoff-wall systems for Pioneer units 1 and 2. These systems include diaphragm walls, soldier-pile soil-mix walls, and perimeter cutoff walls, with tiebacks or struts as needed, Holtec said. These early works will establish the stable excavation and foundation conditions needed to support and accelerate subsequent plant construction following limited work authorisation approval. The support-of-excavation walls will eventually be "retired in place", with the space between the walls and permanent structures backfilled to grade, it added.

The Pioneer reactors are planned to be brought online in the early 2030s.

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NND Applies to Take Over Kjeller Nuclear Facilities

Norwegian Nuclear Decommissioning has submitted a licence application to the country's nuclear regulator to take over responsibility for the nuclear facilities at Kjeller from the Institute of Energy Engineering ahead of their decommissioning.

Norwegian Nuclear Decommissioning (NND) submitted its licence application to the Norwegian Radiation and Nuclear Safety Agency (DSA), which will now assess NND's ability to operate the facility in line with national regulations and International requirements, before making a recommendation to the Ministry of Health and Care Services. The final decision on the licence will be made by the government. As part of the licensing process, DSA will submit the application for public consultation. The consultation will ensure that affected parties, residents and other stakeholders have the opportunity to provide input into the directorate's assessments.

"Our experience with the transfer of the Halden facility has been helpful when we are now also applying for a licence to take over the facilities at Kjeller," said NND Director Pål Mikkelsen. "The fact that we have now submitted the licence application is an important milestone in the work to decommission the facilities, and I am happy and proud of the work that those involved in the licence work have accomplished."

The Institute of Energy Technology was established in 1948 with the purpose of conducting research on nuclear energy and developing Norway's expertise in the field. Norway was the sixth country in the world to build a nuclear reactor. The institute built and operated four research reactors in the period 1951–2019: JEEP I at Kjeller (1951–1967), the NORA critical assembly at Kjeller (1961–1968), the Halden materials testing reactor (1959–2018), and JEEP II at Kjeller (1966–2019). The reactors at Kjeller have been central to research in areas such as neutron-based measurement methods, materials technology and isotopes for use in radioactive medicines.



The facilities at Kjeller include, among other things, the Radavvalsanlegget, which functions as a national reception facility for radioactive waste, a storage facility for used nuclear fuel and several facilities related to former reactor operations at Kjeller.

Cleanup work at Halden and Kjeller is under way. The cleanup will take several decades, and the costs are currently estimated at between NOK33 billion and NOK57 billion (USD3.6-6.2 billion), depending on the solutions chosen.

To ensure clear responsibilities and state control, the government has planned to transfer responsibilities, tasks and facilities from the Institute of Energy Technology to NND as quickly as possible. Established as an agency under the Ministry of Trade, Industry and Fisheries in February 2018, NND is responsible for decommissioning the research reactors and other related nuclear infrastructure, as well as the safe handling, storage and disposal of radioactive waste.

The nuclear facilities in Halden were transferred from the Institute of Energy Technology to NND on 1 April last year.

In May this year, the Norwegian government said it would accelerate the process of transferring the nuclear facilities at Kjeller from the Institute of Energy Technology to NND, saying the transfer could take place as soon as 1 January 2027.

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Latest Terrestrial Energy Topical Report Submission Could Lead to Faster Deployment

Approval of the Thermal and Electric Facility Topical Report submitted by the company to US regulators would mean that part of the Integrated Molten Salt Reactor plant would be classed as a conventional industrial, rather than nuclear, project, allowing it to be built and operated ahead of nuclear licensing.

The Integrated Molten Salt Reactor (IMSR) is a Generation IV reactor that uses molten salt as both fuel and coolant, with integrated components, which can supply heat directly to industrial facilities or use it to generate electrical power. The plant itself is designed in two discrete parts: the Nuclear Facility, which contains standardised and modular nuclear systems, and the Thermal and Electric Facility, or TEF, containing non-nuclear heat transfer, steam supply and electric systems for commercial power generation and thermal energy supply.

In its submission, Terrestrial Energy asks the US Nuclear Regulatory Commission (NRC) to confirm that building the TEF is not "nuclear construction" under US regulations. The submission incorporates elements of the company's Postulated Initiating Events methodology, already approved by the NRC. Terrestrial Energy says it shows that the plant's nuclear systems do not rely on the TEF for safe operation and that any failure originating in the TEF is isolated from the nuclear systems.

Topical Reports establish foundational elements of the licensing basis that may be referenced in future applications without re-evaluation. NRC approval of the TEF Topical Report would mean the TEF, which could be customised for each site, could be built and operated using an auxiliary heat source such as natural gas as a bridge to nuclear power ahead of a nuclear construction permit and operating licence being granted for the nuclear part of the plant.



"This submission can change how an IMSR Plant is regulated, built and financed," Terrestrial Energy CEO Simon Irish said. "With its NRC approval, only the nuclear portion of the plant would follow the nuclear licensing timeline. The rest of the plant would become a conventional industrial project, giving customers earlier power and heat and giving financing partners a bankable construction phase. As this pathway applies to every IMSR Plant, it is a fleet-wide advantage, not a one-off exemption."

Terrestrial Energy says it is developing a pipeline of IMSR Plant projects, including plans for a plant at the Texas A&M-RELLIS site in Bryan, Texas. In September, the company announced its selection as supplier of advanced nuclear plant technology for Ameresco Inc's power plant project at the US Army's Aberdeen Proving Ground in Maryland, following a competitive request for proposals and selection process.

The NRC has been engaged with Terrestrial Energy in pre-application activities for the IMSR since 2019. This is the third of "at least" three reports the company is aiming to submit to the regulator during 2026.

9 October 2026 | WORLD NUCLEAR NEWS | Source Link

Unlocking ASEAN's Nuclear Potential - a case for Regulatory Convergence on SMRs

ASEAN's rising electricity demand and decarbonisation goals are driving interest in small modular reactors, but fragmented national regulatory frameworks, limited expertise and financing uncertainty could delay their deployment, write Ming Tan and Stephanie Liaw of engineering, management and development consultancy Mott MacDonald.

Southeast Asia's electricity demand is projected to rise sharply over the coming decades as industry activities expand, living standards improve and transport electrifies. At the same time, governments across the Association of Southeast Asian Nations (ASEAN) have committed to ambitious decarbonisation pathways, despite continued reliance on imported coal and gas in the energy generation mix.

Within this context, nuclear energy could provide dependable, low-carbon generation to complement renewable generation such as wind and solar. Small modular reactors (SMRs), nuclear power plants typically in the 50–300 MWe range, factory fabricated and assembled on site, offer an alternative option for countries with smaller grids or direct industrial applications.

The central proposition is that technology alone will not determine whether nuclear power is successfully deployed in ASEAN. Regulatory frameworks, specifically on nuclear safety regulation and licensing, will be required. A greater harmonised regional approach could reduce duplication, strengthen safety outcomes and improve the bankability of first deployments in ASEAN.

The challenge: fragmented regulatory scrutiny undermines the benefits of SMRs modularity

At present, each country maintains its own codes, standards, design requirements, safety classification systems and licensing sequences. For first-of-a-kind technologies such as SMRs, this results in multiple national reviews of the same reactor design, often requiring near identical evidence packages in different formats.

The result is vendors face repeated and resource-intensive submission processes; smaller regulators scaling up to interrogate complex designs separately; timelines lengthen; overall costs rise; and investor confidence suffers. Without ASEAN-wide convergence and harmonisation of regulatory frameworks, the attractiveness of SMRs, particularly on standardisation and repeatability, will be at risk of being undermined.



The proposed solution

Maximum commonality - ASEAN countries could pursue shared regulatory building foundations such as harmonised terminology, aligned evidence structures and common core safety expectations. Convergence of industrial codes and standards, combined with mutual recognition of common regulatory outputs where appropriate, would significantly reduce duplication.

Technology-centric licensing - the most demanding scrutiny should be applied once to the reactor design through a joint generic design evaluation undertaken collectively by ASEAN regulators, while site-specific considerations remain under national jurisdiction. This shifts effort from repeating full design reviews in each jurisdiction to a shared technical assessment with clearly defined national addenda.

Supplier and technology neutrality - all vendors should be assessed against transparent, evidence-based criteria. Neutral supplier qualification, referencing standards such as ISO 19443 or NQA1, would broaden participation from eligible manufacturers and support the development of a resilient regional supply chain. Fuel strategies should also remain technology neutral. Where certain advanced designs require high-assay low-enriched uranium (HALEU), coherent regional approaches to supply, transport and safeguards will be beneficial, without allowing fuel choice to become a barrier to regulatory convergence.

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From cooperation to convergence: a phased and practical roadmap

A practical phased approach to achieve convergence in ASEAN could include:

§Establishing governance and a shared regulatory language, using the ASEAN Network of Regulatory Bodies on Atomic Energy (ASEANTOM) to convene a dedicated SMR convergence forum to develop aligned terminology, International Atomic Energy Agency (IAEA)-aligned evidence maps and standardised documentation templates.

- Conducting joint technology evaluations, against ASEAN regional needs. Recognising that each ASEAN member state faces distinct drivers and challenges in pursuing SMRs, a pragmatic solution could be to subdivide SMR technologies into categories based on their intended purpose, such as grid-connected baseload, industrial applications, or remote deployment, and to select a handful of suitable technologies rather than attempting to converge on a single option.
- Aligning codes, standards and supplier quality requirements, by converging materials, fabrication and inspection requirements, and introducing an ASEAN vendor qualification framework referencing ISO 19443/NQA1 with mutual recognition of supplier audits.
- Addressing fuel assurance and lifecycle considerations, covering regionally coherent strategies for fuel procurement (including potential HALEU), transport security, waste management and decommissioning, consistent with IAEA safeguards.
- Clarifying finance and market framework, through standardising revenue models and risk allocation mechanisms recognised by lenders across ASEAN and linking dispatchable nuclear capacity to the intermittency of renewables and the evolving ASEAN Power Grid initiatives.
- Transposing common outputs into national frameworks, incorporating common outputs into national licensing process and iterating real project data from early projects to reduce cost and schedule risk over time.

Regulatory convergence would streamline engineering deliverables across multiple markets, reduce rework and ambiguity in classification and testing and enable pooling of scarce specialist expertise in ASEAN.

This improves both the speed and robustness of regulatory decisions, while preserving national sovereignty over siting and operations. For investors, clearer and predictable timelines and region-wide processes would enhance bankability. For manufacturers and suppliers, common specifications and recognised quality systems would facilitate Southeast Asian participation in the global SMR supply chain.

COMING IN OUR NEXT EDITION:

From Environmental Monitoring to Regulatory Preparedness: Lessons from an IAEA Workshop

From 25 to 29 October 2026, ENRRA hosted an IAEA workshop on Environmental Monitoring Programmes for Operational Stages and Dose Assessment, as part of Egypt's Integrated Work Plan (IWP) with the IAEA, which was reviewed and updated during a Technical Meeting held in the IAEA premises in Vienna from 29 June to 1 July 2026.



In our next edition, we will explore the workshop's key discussions, practical insights, and lessons learned, highlighting their relevance to strengthening environmental monitoring capabilities and regulatory preparedness for the operational stages of nuclear facilities.



Stay with us tuned as we turn international cooperation into shared institutional knowledge.

ENRRA ON THE INTERNATIONAL STAGE

International cooperation is not only about organizations and agreements; it is also about the people who represent ENRRA around the world.

Starting from the second edition, ENRRA on the International Stage section will feature the experiences of ENRRA employees who participate in international meetings, missions, workshops, training programmes, conferences and other activities abroad.

The Communication and International Cooperation Department encourages you to share your experience with your colleagues through our Newsletter, you are invited to share your lessons learned and professional experiences, helping colleagues across ENRRA benefit from knowledge gained through international engagement.

Have you recently participated in an international activity?

Share your experience with us at:

PRIC@enrra.org

Contributions may include a short-written reflection, key lessons learned and, where available, photos from the activity. Selected contributions will be considered for publication in upcoming editions of the newsletter.