New IAEA Spent Fuel and Radioactive Waste Database Facilitates National Data Reporting and Sharing

The Spent Fuel and Radioactive Waste Information System (SRIS) will provide an authoritative and integrated view of national and global spent fuel and radioactive waste inventories as well as relevant laws, regulations, policies, plans and activities. The IAEA is encouraging national authorities to take advantage of this important new tool by nominating representatives responsible for submitting data to SRIS, part of which will be available to the public and other countries using the system. So far, 38 countries have done so.

Orbrix Conducts First-Ever Virtual Summit for First Responders in CBRN Emergencies

Orbrix Technical & Occupational Skills Training (UAE)—in partnership with Elifort Safety and Security Management (France)—held its first-ever CBRN summit in English last month for an international audience likely to be responders in case of a CBRN emergency. This entirely virtual, live event was called “CBRN Virtual Summit – Lessons learned during Covid-19.” It took place on 18 June 2020, started at 2:00 pm
UAE Time and lasted three hours with about 148 Registrations, 80 attended participants from at least 25 countries. The event was also live-streamed on Facebook with almost 2.3k views.

Designed to help raise global awareness about the far-reaching social, medical and economic consequences of an event involving CBRN material and drawing lessons from the COVID-19 pandemic, and its consequences to the global economy and our daily lives, the summit focused on the importance of interagency and international cooperation in the response to biological threats and lessons learned from the COVID-19 crisis regarding the provision of specialized medical equipment and supplies.

Throughout the two panel sessions, the knowledge and experiences shared by the experts highlighted the need to build the capacity of first responders on CBRN emergency, convene meetings to share lessons learned and best practices applied during COVID-19 outbreak, strengthen the capacity of NGOs and media on effective communication with the public during a CBRN incident, and foster collaboration among agencies within states and across states on CBRN issues. Another takeaway from the summit discussion is the recognition that all governments around the world ought to have demonstrated political leadership in responding to COVID-19 at the outset. Such a move will close weak links in the global effort in combatting the pandemic, mitigating risk, and recovering from the consequences.
Expert speakers from around the world—UAE, South Africa, Canada, London, Ghana, France, and Nigeria—gathered online to share their unique experiences and insights. The panellists focused on successes and failures related to national and international partnerships, preparedness, medical infrastructure resilience, public response, and the role of scientists. The aim, thus, was to share lessons learned from the Covid-19 pandemic and identify how to apply them to CBRN preparedness and response.

In addition to the Opening remarks and Key Note address on the Theme of the Summit by guest speakers and event hosts, the summit was structured around one major presentation, two-panel sessions, a Fireside Chat and a Q & A session with the audience. The below questions were discussed by the experts.

Main presentation

1. You have great experience in biological and chemical weapons, but also the response to a major pandemic like the COVID-19 crisis. What is the ONE most important lesson you have learned in your management of such
crisis?
2. Based on your very recent experience with COVID-19, what is the greatest priority, today, in planning for CBRN incidents?

Fireside Chat

1. The COVID-19 crisis in the UAE was quickly controlled and did not reach the wide-spread impact of other nations. Noting that Dubai and Abu Dhabi are major hubs for international travellers, What did you do differently to achieve such remarkable success, noting that?
2. What went well and what didn’t during the COVID-19 crisis response?
3. What lessons have you learned that could apply to a large scale CBRN incident taking place in the UAE or the neighbouring region. For example, a “Bio” attack could result in consequences similar to those of the corona virus emergency. Similarly, a radiological contamination event in the UAE could also reach transboundary proportions.
4. What do you see as the major common points, and differences, between the current COVID-19 crisis and a CBRN crisis?
5. How do you see the role of national and international authorities/organizations in the management of such emergencies? For example, do you think that the WHO, IAEA or other similar agencies should play a greater role in establishing rules and standards in the way a country responds to such crises?
6. In many countries, we have seen major regional differences (within the country itself) on how the crisis was managed. Think of Italy’s Lombardy region in the early stage of the pandemic and an individual States in the USA. What do you think is the right way to manage such large scale crisis? Is there room for local
authorities to decide how they will apply the restrictions and rules, or should it be centrally controlled? How would that apply in the UAE?

Panel 1: Importance of interagency and international cooperation in the response to biological threats. (*Moderated by Dr Jeff Lafortune – Nuclear Engineer*)

Expert Speakers:

- **Paul Butler**, P.Eng – International CBRN Expert; CBRN Response Specialist
- **Hubert Foy**, MSS – Director, African Centre for Science and International Security, Ghana
- **Douglas Ledingham**, MSc – former INTERPOL Assistant Director CBRNE

1. How important is interagency and international cooperation in response to CBRN threats and incidents?
2. Why would a CBRN incident in one country have impacts on others and require their cooperation?
3. In terms of interagency cooperation, what changes during a CBRN event compared to other conventional emergencies?
4. What has the COVID-19 crisis taught us that applies to CBRN threats and incidents?
5. One of the things we heard in the early stage is that “no one saw this coming”. Do you think this is true, and can we say the same about CBRN threats?
6. What aspects of the COVID-19 consequences can be related to the potential impacts of a CBRN incident?
7. What do you think is the best national agency to lead the response to a COVID-type crisis? What about a CBRN-related crisis?
8. Do we need to review our model of an emergency management system based on what we have seen in the COVID-19 crisis?
9. Is there an international body, like the WHO for the COVID, that advises in case of a CBRN incident? Do you
think an international agency should play a greater leadership role?

Panel 2: Lessons learned from the COVID-19 crisis regarding the provision of specialized medical equipment and supplies. (Moderated by Dr Jeff Lafortune – Nuclear Engineer)

Expert Speakers:

- Pepijn van den Broek, M.Sc – National coordinator medical supplies and logistics for the corona virus crisis in the Netherlands
- Joanna Carter – Director Nursing for a large London hospital
- Dr Uche Anyanwagu, MD, PhD – Park Lane Surgery, UK

1. Can you give us one key success story and one major failing with regards to medical logistics in a major pandemic?
2. Beyond equipment and supplies, one of the greatest challenges may be the mobilization and deployment of qualified personnel. What is your view on that concerning a pandemic like the COVID crisis, and could this be an issue for CBRN incidents?
3. Based on what you have seen during the COVID-19 crisis, are we ready for a major CBRN incident?
4. If not, what do you think is the greatest priority?
5. Were medical personnel ready and trained? Would they be for a CBRN emergency?
6. If this happened again, what would you personally like to have in terms of training, equipment, etc. to be able to better respond?
7. PPE was a major issue. Given the potentially much more complex forms of CBRN incidents, what do you think can be realistically done to better prepare for future crises?
8. Should the medical community play a greater role in the operational management of such emergencies?
9. Is there room for better international cooperation of the medical networks in response to such incidents?

Why is it important to learn from the current crisis? In her welcome address, Mrs. Charfaray, CEO of Orbrix, spoke on this issue: “As the COVID-19 crisis is entering a new phase, gradually and carefully returning the world to a ‘new normal’, we are slowly identifying lessons in global health crisis management that can and should help us better prepare for and respond to future pandemics. But viruses are not the only threat that could have international consequences; criminal acts involving CBRN agents could potentially lead to similarly severe health, social, political, and economic impacts, including incredible pressure on the medical infrastructure. Therefore, it is imperative that the lessons identified during the COVID-19 crisis be examined for their implication in other large-scale contamination events like CBRN emergencies.”

As the summit’s co-host, Orbrix is grateful to all its speakers and delighted that the UAE was represented by several notable experts. One of whom was Captain Ali Al Madfei of the Abu Dhabi Police CBRN Administration, who shared the lessons learned in the UAE, as well as its many success stories during the pandemic. Other speakers from the UAE included Mr. Peter Clevestig, biosecurity specialist & trained virologist, and Mr. Ahmad Al Shemeili, international CBRN expert and nuclear scientist.

Although this was the first-ever virtual summit on CBRN, Orbrix promises that it will not be the last. Mrs. Charfaray made this point clear: “We plan to have many more lined up, on different interests of CBRN, including crisis management and disaster management.”

Looking forward to future CBRN summits,

Hawa Charfaray
CEO – Orbrix
Building a stronger tomorrow

Nuclear energy can play a central role in post-COVID recovery efforts by boosting economic growth in the short-term, whilst also supporting, in a cost-effective manner, the development of a low-carbon, resilient and affordable electricity infrastructure. Investments into nuclear energy will also strengthen energy security, and can contribute to the production of heat and hydrogen to decarbonize other sectors of the economy.