

Discussion Summary of Working Group III
Nuclear Science, Technology, Security, and Safeguards
TECRO-AIT JSC Meeting on Civil Nuclear Cooperation
November 29-December 1, 2022

Number of items discussed	23
Closed items	0
New items	0
Merged items	0
Number of working items	23

1. **Closed items:** 0
2. **New items:** 0
3. **Merged items:** 0
4. **Commitments:**

TECRO appreciates the assistance of AIT. Many of the cooperative items have been progressing successfully. Following detailed discussions, both sides agreed to keep 23 items going.

D59: AEC propose this item to keep ongoing, and if the U.S. side holds any training program related to radiation protection aspects of decommissioning, please notify AEC in advance. AEC would send staff to attend it if budget allowed. NRC looks forward to continuing to share information in this area.

D64: AIT and TECRO will seek future opportunities in 2023. NRC looks forward to continuing to share information in this area.

I7: Continue to participate in the meeting program in 2023 SNMMI Annual Meetings, 2023 congress of the European Association of Nuclear Medicine and WMIC 2023 for radiopharmaceutical research and development. Furthermore, considering of visiting national laboratories to seek the opportunities of the cooperation and training course of radioisotopes, proton and neutron research of 70 MeV cyclotron.

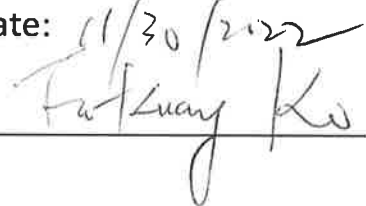
I14: Continue to participate in the meeting program in 2023 SNMMI Annual Meetings, 2023 congress of the European Association of Nuclear Medicine and WMIC 2023 for radiopharmaceutical research and development. Furthermore, considering of visiting national laboratories

- to seek the opportunities of the cooperation and training course of radiopharmaceuticals, proton and neutron research of 70 MeV cyclotron.
- I19:** INER will continue to develop innovative software and hardware technology of X-ray and nuclear medicine imaging, and hopes to have a chance to connect national laboratories or regulatory bodies (e.g.: NETL, US EPA, etc.) to visit or collaborate with international experts and scholars.
 - Y3:** INER is expecting to use the FAST code (the merge code of FRAPCON and FRAPTRAN) for further spent nuclear fuel behavior evaluation in Kuosheng NPP and Maanshan NPP.
 - Y4:** INER is expecting to attend the BISON code training course and use it for the spent nuclear fuel dry storage evaluation.
 - CC1:** AIT and TECRO will seek future more opportunities in 2023.
 - EE2:** TECRO sent two representatives to attend ITC-29 held in Aug/Sep, 2022. TECRO proposes to have the information of ITC-30 in 2024, if available.
 - EE3:** AIT and TECRO will seek future opportunities.
 - EE5:** There's limited activity during COVID-19 pandemic and propose to keep ongoing.
 - EE6:** Limited activity.
 - EE7:** AEC proposes to continue technical exchange on "Cyber in a Case" (CiaC) for remaining technical issues. AEC and DOE/NNSA agree to have two in-person workshops conducted in Taiwan in 2023: one on "cyber security exercise" and another on "response force assessment" including UAS considerations. In 2023, AEC and DOE/NNSA will consider holding additional virtual engagements to include "insider threat mitigation" and other priority topics. In addition, AEC requests an opportunity to observe security exercises at nuclear facilities in the USA, such as tabletop, force-on-force or cybersecurity drill.
 - FF1:** TECRO plans to send two observers to attend SSAC course in 2023.
 - FF2:** Continue advanced safeguards technology and information exchange.
 - FF3:** Safeguards information papers will be exchanged at JSCCNC 2023.
 - FF4:** In May 2023, AEC will send TECRO the annual inventory report on all material subject to the current agreement for cooperation as well as individual inventory of Canadian, Australian, and EURATOM flagged materials of 2022.
 - HH1:** AIT and TECRO will seek future opportunities in 2023.

- II1:** AEC welcomes further information sharing of new analytical technique. AIT will seek to identify a contact point.
- II2:** AEC welcomes further information sharing of new analytical technique. AIT will seek to identify a contact point.
- II3:** AEC welcomes further information sharing of new analytical technique. AIT will seek to identify a contact point.
- Y5:** INER proposes to visit INL for Integrated Energy Systems (IES) in 2022 or 2023 and to obtain more detail information of Dynamic Energy Transport and Integration Laboratory (DETAIL) and the IES Techno-economic Analytical Tools.
- LA:** INER would expect LANL's experts to share more ISOCS experience for NM declaration, like uncertainty acceptance, multi-detectors measurement simultaneously, direct measurement under high activity environment for instance.

Approved:

Fu-Kuang Ko
TECRO Representative

Date: 11/30/2022


Taylor Hart-McGonigle
AIT Representative

Date: 11/30/2022

