

INFORMATION SYSTEM ON OCCUPATIONAL EXPOSURE

*DRAFT*

**[ISOE STRATEGIC GOALS]**  
**2022-2026**



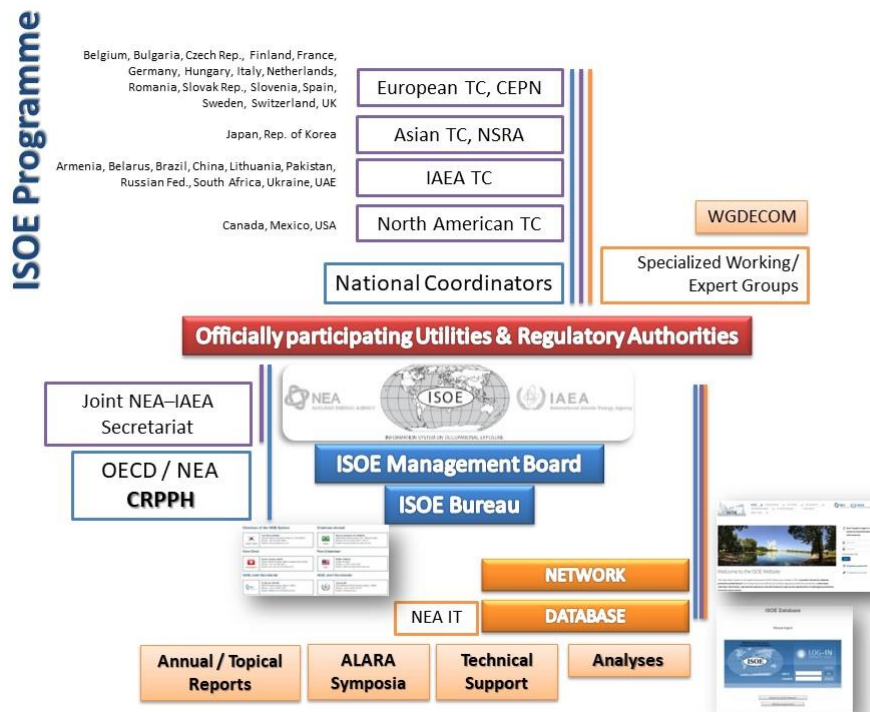
### ISOE, at a glance

The Information System on Occupational Exposure (ISOE) was created in 1992 to provide a forum for radiological protection professionals from nuclear electricity licensees and national regulatory authorities worldwide to discuss, promote and co-ordinate international co-operative undertakings for the radiological protection of workers at nuclear power plants.

The ISOE is jointly sponsored by the OECD Nuclear Energy Agency (NEA) and the International Atomic Energy Agency (IAEA).

The objective of the ISOE is to improve the management of occupational exposure at nuclear power plants by exchanging broad and regularly updated information, data and experience on methods to optimise occupational radiological protection.

As of January 1<sup>st</sup>, 2022, the ISOE programme includes 79 nuclear licensees and 27 regulatory authorities from 31 countries. The ISOE database contains occupational exposure information for 367 operating units, and 125 units in cold-shutdown or some stage of decommissioning in 30 countries, covering about 83% of the world's operating commercial power reactors.



#### Core products and benefits of the ISOE include:

- Annual reporting of reactor units' occupational exposures, key work activities and selected dose rate results.
- Collection and exchange of good radiological practices and lessons learned.
- Regional and International ISOE ALARA Symposia where international dose reduction experience is exchanged.



## ***Future Directions***

### **Context and challenges**

The elements of context and the associated challenges considered for setting the 2022-2026 ISOE strategic goals include:

- The strong commitment of ISOE members to developing and maintaining effective and efficient occupational radiation protection (ORP) programmes throughout the construction, operation and decommissioning of reactor(s).
- The need to identify and integrate new technologies (like artificial intelligence, virtual reality, drones, robotics, etc.) in ORP programmes.
- The need to take into account operational experience in radiation protection in the design and operation of new nuclear reactors.
- The need to transfer knowledge, train and educate new generations of health physicists and involve them in ISOE activities.
- The ageing of existing NPPs and its consequences on ORP with potentially dose-intensive modifications and refurbishments.
- The increasing number of plants under decommissioning and the need to collect and share the associated ORP challenges.

### **Strategic goals**

The strategic goals for ISOE in 2022-2026, both to continue current and to pursue new activities of ISOE members and Technical Centers, are:

1. Organising and conducting regional and international ISOE ALARA symposia;
2. Facilitating benchmarking visits to identify and share ALARA good practices;
3. Creating ISOE webinars on specific topics, e.g. artificial intelligence, virtual reality, drones and robotics as related to ALARA in ORP;
4. Collecting annual occupational exposure data and entering it into the ISOE Database;
5. Promoting the use of the ISOE forum;
6. Promoting the exchange of major project information at NPPs;
7. Updating the content of the ISOE network website;
8. Establishing and maintaining programmes for sustainable involvement of younger generations of health physicists in ISOE activities;
9. Communicating ALARA good practices and lessons learned in ORP for the design and operation of new nuclear builds;
10. Sharing ALARA good practices and lessons learned from nuclear sites undergoing decommissioning;
11. Supporting ISOE expert/working groups including the Working Group on Radiological Protection Aspects of Decommissioning Activities at Nuclear Power Plants (WGDECOM) and other groups established on an ad hoc basis;
12. Promoting ISOE system and its activities through the regular distribution of an ISOE newsletter and the publication of ISOE information sheets.
13. Strengthening cooperation with RP-related international, scientific and technical organisations, associations, societies and networks.



<http://www.isoe-network.net/>



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