

Outcome-focused Radiation Protection : IRRS mission to Japan

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1. Background

- The **NRA** and **Ministry of Health, Labour and Welfare (MHLW)** are the primary regulatory bodies responsible for implementation of the requirements concerning occupational exposure
- The **core legislative framework** is defined by the following acts:
 - **the Reactor Regulation Act**
 - **the Radiation Hazards Prevention Act**
 - **the Industrial Safety and Health Act**
 - associated cabinet orders and ordinances

1. Background

- The IAEA conducted an Integrated Regulatory Review Service (**IRRS**) mission to NRA **from 11 to 22 January 2016**
- The mission report was sent from IAEA and received by NRA on **23 April 2016**

2. Report of IRRS mission

Good practices

- The Government of Japan has put in place a framework which established and supports NRA as a new effective independent and transparent regulatory body with increased powers
- NRA made a prompt and effective incorporation of the lessons learnt from the TEPCO Fukushima Daiichi accident in the areas of natural hazards, severe accident management, emergency preparedness and backfitting of existing facilities, into the Japanese legal framework

2. Report of IRRS mission (regarding Eye Dose Issue)

concerning determination of eye lens dose

- The NRA action plan, developed in preparation for the IRRS mission, recognizes the need to reduce the annual dose limit to the lens of the eye to conform to GSR Part 3, **however there is no plan for implementing the dose limit reduction**

3.Limits on Equivalent Dose for the Lens of the Eye

Occupational Dose limits in Japan

	Regulatory Dose limits	Emergency Response Dose limit s
Whole body (effective dose)	100 mSv/5 y 50 mSv/y	250 mSv * (100 mSv)
Lens of Eye (equivalent dose)	150 mSv /y	300 mSv
Skin (equivalent dose)	500 mSv/y	1000 mSv

* Emergency Response Dose limit of 250 mSv for an accident that has a high probability of radioactive materials being released outside of the facility , is added to the current dose limit of 100mSv for emergency workers.

3.Limits on Equivalent Dose for the Lens of the Eye

Response to issues concerning determination of eye lens dose

- Determining the policy of the NRA by receiving indications of the IRRS report

(25 April,2016)

- Consider **establishing a mechanism** to collect and arrange up-to-date knowledge of the radiation protection including the equivalent dose limit for the lens of the eye
- Conduct **the necessary discussion**
- Compile a basic policy for **responding to new criteria for dose limit to lens of eye** as introduced in the latest IAEA safety standards within FY 2016

4. Report of IRRS mission (another Radiation Protection Issues)

Recommendations and Suggestions concerning Radiation Protection (Examples)

- implement an effective, collaborative process for the exchange of information regarding policies, authorisations, inspections
- enforcement actions to provide coordinated and effective regulatory oversight
- ensure a harmonized regulatory framework under their respective responsibilities
- put greater priority and allocate more resources on its oversight of the implementation of radiation protection measures by licensees
- participation in the development of international standards in radiation protection
- strengthening its plans and procedures to consistently respond to emergencies related to radiation sources

5. Response to Issues concerning another Radiation Protection of IRRS mission in FY2016

- NRA will create a proposal for detailed system design of regulatory requirements to licensees of radioisotopes which include development of an emergency response system, theft prevention measures (security), safety culture and quality assurance, etc.
- Based on the above proposal, NRA will revise the regulations
- To strengthen the inspection system for radioisotopes, NRA considers the improvement of training programmes for inspectors with sufficient capacity for the new field of inspection and requirements for an increase in man power
- NRA considers establishment of a mechanism to identify, collect, and evaluate up-to-date knowledge of radiation protection
- Based on domestic and international trends, NRA considers a framework for improvement of quality assurance in the monitoring of occupational exposure, etc.

Thank you for your attention