



IMPACT OF NEW BSS DIRECTIVE ON RADIATION PROTECTION TRAINING AND EDUCATION IN SLOVENIA

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ABSTRACT: Implementation of the new Directive will influence radiation protection system in Slovenia on multiple levels. Implementation requires update of existing legislation, at least 20 different legal documents should be changed.

Regarding radiation protection training and education the greatest differences to existing system are related to education and training of RPEs, and RPO's duties and competencies, and therefore also their training.

The definition and roles of RPEs are basically not different from the definition in the new Directive, but only the general requirements for recognition and authorisation are given. Up to now, there were no formal arrangements for education, training and retraining of RPEs, which is now required in Directive. Fulfilling these requirements practically will probably be the most demanding task.

In current legislation RPOs were already introduced as "RP unit staff members" or "person responsible for RP" (in non-nuclear facilities).

The duties of this second category were initially related mostly to

licensing or registration of practices, and later to implementation of radiation protection measures, but not on the technical level. Their capacity to be practically involved in radiation protection was limited.

New Directive anticipates more technical and practical duties for RPOs, which is also our objective and will require revision of current approach to training of a persons responsible for RP.

According to the Directive, one of the practical tasks that may be assigned to the RPO is also training of exposed workers. Since this task requires additional skills and knowledge that could not be acquired through simple training, it is highly unlikely that a RPO will be able to deliver effective training.

Since the training is extremely important element of RP, it is highly improbable that existing system (i.e. training through RPEs/ authorised organisations) system will be changed.

Providing information on local rules and procedures was already duty of a person responsible for RP.

RADIATION PROTECTION OFFICERS

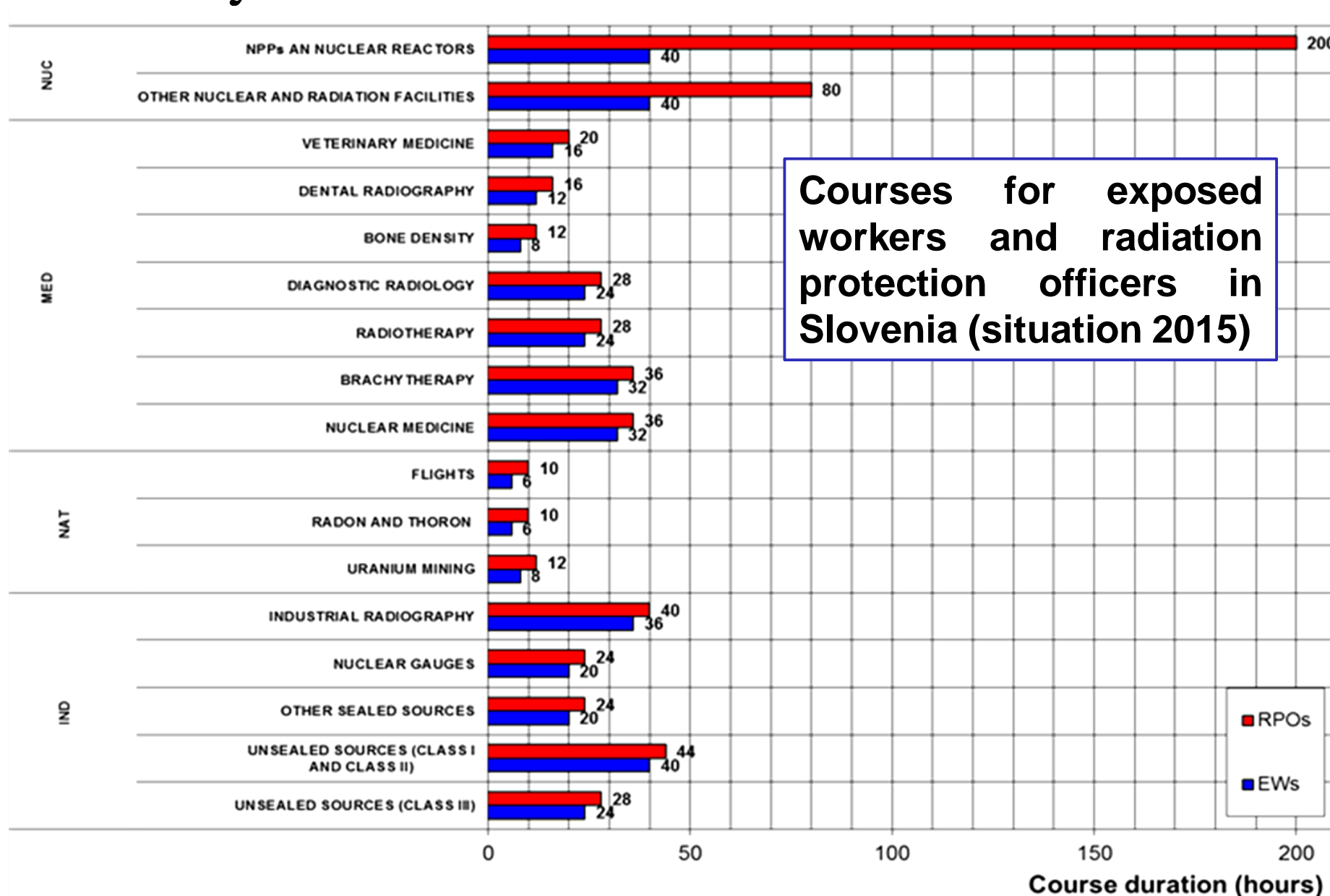
- Requirements for training are similar to requirements for exposed workers.
 - For persons responsible for RP (non-nuclear facilities) training for exposed workers is required with additional lectures related to legislation;
 - For RP unit staff members (nuclear facilities) training is extensive and implemented separately;
 - Re-examination every two/five years (depends on category);
 - Re-training is not formally regulated, but it is performed prior to re-examination (on agreement with authorities).

- What must be done/what is next:

- Although the profile of RPOs in Directive is not defined in details ("the tasks of the radiation protection officer ... may include...", Article 84), it is definitely more practically oriented than existing profile in Slovenia (this apply to a persons responsible for RP)
- We must update training to enable these RPOs to practically supervise or to perform radiation protection tasks within an undertaking;
- They must be also able to provide appropriate introduction to local rules and procedures, and provide information to workers.
- One of the practical tasks that may be assigned to the radiation protection officer is also training of exposed workers.
 - Considering that this task requires additional skills and knowledge that could not be acquired through simple training, it is highly unlikely that an average radiation protection officer (being either the person responsible for radiation protection or radiation protection unit staff member) will be able to deliver effective radiation protection training as required by current legislation.
- Since the training is extremely important element of radiation protection, it is highly improbable that this system will be changed.

CURRENT SYSTEM

- System is defined in *Rules on the obligations of the person carrying out a radiation practice and person possessing a ionizing radiation source*:
 - 17 course categories, contents and durations were defined;
 - Programs were defined for exposed workers and RPOs (i.e. persons responsible for RP in non-nuclear facilities and members of RP unit staff in nuclear facilities);
- Requirements for authorisation, and the scope of authorisation of radiation protection experts (RPEs) and medical physics experts (MPEs) are defined in separate *Rules on approving of experts performing professional tasks in the field of ionising radiation*
 - Only the general requirements for recognition and authorisation are given;
 - Recognition of expertise for particular field of radiation protection is therefore performed through the "case-by-case" evaluation.



EXPOSED WORKERS

- Requirements in current Rules relate only to initial training:
 - Re-training is not formally regulated;
 - Rules require re-examination every two/five years;
 - Training and examination of exposed workers and RPOs performed by authorised organisations (formally RPEs for training);
 - It is the position of all authorized organisations that re-training is necessary and re-examination without preparatory course is possible only under special circumstances;
 - Information to exposed workers should be provided by employer through person responsible for RP.
- What must be done/what is next:
 - Re-training for exposed workers must be formally regulated (intervals, programs, extent, possible requirement for continuous training for certain categories of exposed workers);
 - Informing of workers by undertaking must be also regulated in greater details (also requirements for repetition and documentation of the process);
 - Training and information of workers in undertakings with high activity sources should be extended;
 - Programs for informing (and training) of workers who are likely to come into contact with high activity sources;
 - Existing programs for emergency workers should be reviewed (programs are dispersed in documents and responsibilities between different ministries).

RADIATION PROTECTION EXPERTS

- Mechanism for recognition of radiation protection experts and medical physics experts is established, but in regulations only general requirements are given;
 - The situation is mainly consequence of absence of formal arrangements for education, training and re-training of radiation protection experts.
- For medical physics experts study of Medical Physics, as second and third cycle degree is available at University.
- What must be done/what is next:
 - Program for education, training and re-training for radiation protection experts must be established;
 - Existing programs for medical physics experts must be supplemented to fulfil requirements of Directive.
 - This will be the most important and demanding change in the existing system of radiation protection training in Slovenia.

CONCLUSIONS

- **Currently, 17 different categories of training courses are defined for exposed workers; training is implemented through authorised organisations;**
 - **No bigger changes are foreseen.**
- **Radiation protection experts: definition and roles are already in accordance with Directive, but:**
 - **Education, training and re-training are not formally arranged;**
 - **Only general requirements for recognition are given.**
- **Radiation protection officers: in our legislation defined as person responsible for RP or RP unit staff member:**
 - **Persons responsible for RP should be more practically oriented (and skilled);**
 - **Training should be adequately changed.**