



Who Is Emergency Worker? The Finnish Answer

Antero Kuusi

Radiation and Nuclear Safety Authority (STUK)

Finland

Background

- The new EU BSS Directive, due for transposition by February 2018, included requirements on protection of emergency workers during emergency exposure situation.
- In the directive, the definition of emergency worker is in very general terms:
 - *“Emergency worker” means any person having a defined role in an emergency and who might be exposed to radiation while taking action in response to emergency.”*
- Thus, different countries have adopted somewhat different national criteria in defining who should be included in emergency workers.

Potential problems

- Problem with the exact definition of emergency worker comes from the requirements on protection of emergency workers.
- Especially the requirement for regular prior training on effects of radiation and protection from them limits the number of people who could be defined as emergency workers.
- On the other hand, not having enough persons classified as emergency workers could be problem if widespread protective actions with risk of exposure are needed.

Identifying the workers

- Additionally, there are groups of workers that might be needed in the emergency, but who might be difficult to identify individually beforehand
- Examples of such groups include:
 - Professional workers needed at the accident site, such as electricians
 - Drivers and assistants in evacuation
 - Workers maintaining critical infrastructure in areas where sheltering is taking part
 - People assisting in decontamination.

Definitions in Finland

Emergency workers

- Emergency workers include workers employed by licensees as well as personnel of responding organizations with specific assignments, such as firefighters.
- Emergency workers are designated in advance to an emergency
- Regular and systematic training required in advance
- Just-in-time information and instruction before execution of emergency tasks

Emergency helpers

- Other workers who participate in response to a nuclear or radiological emergency (e.g. bus drivers during evacuation, maintenance of critical infrastructure).
 - Includes authorities not included in definition of emergency workers, such as police.
- Just-in-time information and instructions before execution of emergency tasks

Definition difference compared to GSR

Part 7

- IAEA's definition of emergency workers includes both workers who are designated in advance and those that are not designated in advance (and thus have not received advance training).
- In Finnish definitions, only workers designated in advance are emergency workers. All workers that are not designated in advance are helpers.
- The right to receive advance training was considered a key individual right from legal perspective. Thus, all persons who have not received advance training must have the stricter protection principles of helper in an emergency.

Doses

Emergency workers

- Whenever possible, exposure for emergency workers should be below 20 milliSv
- If this is not feasible, objective is to keep exposure below 100 milliSv
- Under exceptional situations, in order to save life, prevent severe radiation-induced health effects or prevent the development of catastrophic conditions, a dose above 100 milliSv but not exceeding 500 milliSv is allowed

Helpers

- May not be assigned for the work in which doses will exceed 20 milliSv unless absolutely necessary and in case the work cannot be done by emergency workers

