

# Common understanding of Emergency Workers

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# **Executive Summary**

While the protection of Emergency Workers is regulated in most countries, national definitions, respectively interpretations differ. The prevailing regulatory frameworks are:

- Basic Safety Standards (2013/59/EURATOM)
  The Basis Safety Standards (BSS) are binding for members of the EU. The BSS give a definition of Emergency Workers.
- IAEA General Safety Requirements Part 7 (Draft).
  The Agency's definition is consistent with the BSS-definition. In addition, the Helper is defined.
- The Nordic Flagbook.
  The Nordic Flagbook's *Emergency Worker* is consistent with the BSS-definition. In addition, *workers* are defined. Flagbook-Workers (FBW) are neither coterminous with GSR-P-7-helpers nor with BSS-workers.

The possible need for harmonization was assessed by the means of a questionnaire, asking members of the Working Group Emergencies to attribute regulatory categories to different roles that might arise in an emergency.

While showing a rich variation in interpretations, there is general agreement for the most important roles. Wherever differences are found, the bilateral impact is deemed to be marginal at worst. Therefore, no need for harmonisation with respect to the concept of Emergency Workers is seen.

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# 1. Prevailing Regulatory Frameworks

While the protection of *emergency workers* is regulated in most countries, the definition of *emergency workers* or praxis of who is an emergency worker varies between countries. Here, we focus on three regulatory frameworks that find application in European countries.

#### **Directive 2013/59/EURATOM**

## Article 4, Definition (31) states

"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 the emergency.

It should be noted, that

- this includes all persons having a defined role in an emergency such as bus drivers or policemen deployed during an evacuation.
- "having a defined role" excludes members of the public spontaneously trying to help.
- the role of an emergency worker does not necessarily have to be defined, prior to the emergency, in the relevant emergency plan.
- since "a defined role" is not defined in the Directive, it is left to the Member States' implementation to clarify which persons have a "defined role" in an emergency.

# 2. IAEA General Safety Requirements Part 7

Basis for this discussion is the GSR-P-7 draft from April 16th 2014. The definition of *Emergency Workers* is consistent with the BSS and the discussion above. In addition, the Helper is defined:

#### Emergency workers:

A person having specified duties as a worker in response to an emergency.

- Emergency workers may include workers employed, both directly and indirectly, by registrants and licensees as well as personnel of responding organizations, such as police officers, firefighters, medical personnel, and drivers and crews of evacuation vehicles.
- Emergency workers may or may not be designated as such in advance to an emergency. Emergency workers not designated as such in advance to an emergency, are not necessarily workers prior to the emergency.

# Helpers in an Emergency:

Members of the public who willingly and voluntarily help in response to a nuclear or radiological emergency. Helpers in an emergency are aware that they may be exposed to radiation while helping in response to a nuclear or radiological emergency.

# 3. Nordic Flagbook

The Nordic Flagbook (*Protective Measures in Early and Intermediate Phases of a Nuclear or Radiological Emergency – Nordic Guidelines and Recommendations – 2014*) defines *Emergency Workers* consistently with the BSS. In addition, *Other Workers* (FBW) are introduced. These are neither coterminous with the *Helper* from GSR-P-7 nor with the Worker from the BSS:

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## Emergency workers:

Workers involved in urgent protective and mitigation measures, as well as in other urgent work.

# Other Workers in the area:

People that practice their own profession in the area where protective measures are carried out are to be recognised as members of the general population as regards radiation protection.

# 4. Questionnaire

Apart from difference between regulatory frameworks, national interpretations vary. In order to assess a possible need for harmonisation, the Working Group Emergencies asked its members, to attribute regulatory categories to different roles that might arise in an emergency:

## Categories:

- Emergency Worker (2013/59/EURATOM)
- Helper (GSR-P-7)
- Worker (Flagbook)
- General Public

#### Roles:

- Rescue service or the persons in charge on site
- Police
- Fire fighters of auxiliary fire brigades
- Voluntary members of e.g. Red cross or other Civil Protection organisation
- Spontaneously helping neighbours
- Civilians appointed by the rescue leader to assist
- Professional personnel from the local hospital, school or children day care centre assisting the patients, pupils or children in urgent matters.
- Professional personnel from the local hospital, school or children day care centre assisting the patients, pupils or children in routine affairs that could be delayed or skipped.
- Monitoring teams
- Technical experts or other professionals on their way to the NPP to support
- Service personnel assisting at the evacuation centre(s) e.g. providing supplies, technical support etc.
- Professionals performing necessary work on critical infrastructure

Obviously, these roles are not necessarily mutually exclusive but they are assumed to be nearly collectively exhaustive.

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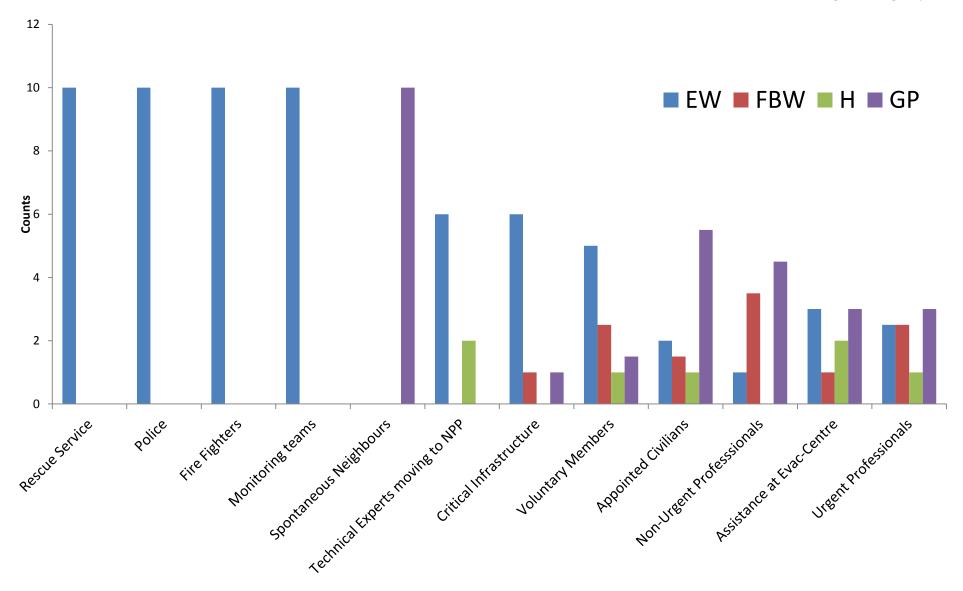


Figure 1: Histogram summarising the answers to the questionnaire. Emergency Workers (EW), Flag Book Workers (FBW), Helpers (H), General Public (GP)

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Role in an Emergency	Interpretation	Estimated bilateral Impact	Need for further harmonisation
Rescue Service	Harmonic	High	None
Police	Harmonic	High	None
Fire Fighters	Harmonic	High	None
Monitoring teams	Harmonic	High	None
Spontaneous Neighbours	Harmonic	Medium	None
Technical Experts	Nearly harmonic	Low	None. Bilateral exchange candidates would be designated in corresponding plan, thus EWs.
Critical Infrastructure	Nearly harmonic	Low	
Appointed Civilians	Nearly harmonic	Low	None
Voluntary Members	Untuned	Low	Possibly
Non-Urgent Professionals	Untuned	Low	None, local definition
Assistance at Evac-Centre	Untuned	High	None, cf. Technical Experts
Urgent Professionals	Untuned	Low	None, local definition

Table 1: Evaluation. The understanding of different roles varies from harmonic to untuned. Untened roles have either a low bilateral impact or are explicitly addressed in bilateral plans. Thus, there is no urgent need for further harmonisation

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#### 5. Discussion

While being far from complete (BE, BG, DE, FI, FR, IEC, LT, LU, NL, PL, SE, SI, ES participated), the present set of answers is a nice illustration of European diversity. All answers are summarised in Figure 1. For clarity, roles have been resorted.

The questionnaire served as a measure for harmonisation, the WGE estimated for each role the possible bilateral impact in case of an emergency leading to a judgment on the necessity of further harmonisation (cf. Table 1).

The four roles with the highest bilateral impact are *Rescue Services, Police, Fire Fighters* and *Monitoring Teams*. These groups are likely to be deployed in neighbouring countries. As indicated in Figure 1, there seems to be general agreement, that these tasks will be performed by *Emergency Workers*.

**Spontaneously Helping Neighbours** would be categorised by all countries as part of the *General Public*. Thus, there is no need to harmonise this point even though we see a potential bilateral impact.

While the answers regarding *Technical Experts* and the upkeep of *Critical Infrastructure* show some spread, these topics are estimated to have little bilateral relevance as any workers that are to be deployed in the neighbouring country would be designated in respective plans and, thus, per definition, *Emergency Workers*.

**Appointed Civilians** are mostly categorised as General Public. As appointed civilians are an inherently local phenomenon, the bilateral impact is expected to be low, there seems to be no need for further harmonisation.

**Voluntary Members** might become a bilateral issue. The received answers are not in tune. In some countries, voluntary members are the core of disaster response units. Where applicable, the classification of **Voluntary Members** should be clarified in bilateral agreements.

Responses for *Professionals*, whether *Urgent* or *Not*, are incoherent. As both roles are inherently localised, there is no bilateral impact and thus no need for further harmonisation.

The categorisation of **Assistance at Evac-Centre** fluctuates wildly, as these are supposed to be outside of evacuation and sheltering zones, the necessity for a specialised regime seems to be negligible.

While all member states respect the provisions for *Emergency Workers* made in the BSS, the interpretations are a "flower bouquet" of European diversity. As the bilateral impact is marginal at worst, we do not see any need for harmonisation with respect to the concept of *Emergency Workers*.

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