

## **Answers to Questionnaire on emergency preparedness and response (EP&R) provisions from a (practical) perspective of civil society**

### **Austrian Answers**

#### **Answer to Question 1:**

In the Austrian legislation (eg Austrian Radiation Protection Act) and regulations the responsibilities of all institutions involved in radiation protection and EP&R including federal ministries, regional and local communities and response organization are defined. Currently there is no explicit obligation for including additional stakeholders in off-site nuclear emergency and response activities. By implementing the new EC Basic Safety Standards into the Austrian legislation the Austrian Radiation Protection Act and the Ordinance on Interventions in Case of Radiological Emergencies will be updated and stakeholder involvement in the field of EP&R will become an explicit legal requirement.

Nevertheless stakeholders have been involved in different fields of nuclear and radiological EP&R in the past. This was especially the case during elaborating and updating an Austrian specific catalogue of counter measures after a nuclear accident and updating emergency plans at federal and regional level. The stakeholders involved came from local/regional communities, relief organizations, experts in the field of agriculture, food production and waste management, etc.

The stakeholder involvement is presently mainly focused on the emergency planning phase and would be also beneficial in the late phase of an emergency. Stakeholder Involvement is seen as important in order to make protective measures and protection strategies more efficient and acceptable.

**Answer to Question 2:** See answer to question 1. In addition there exist legal requirements concerning public participation and information of surrounding population in case of projects which could have an impact on the population or nature in Austria. In the field of ionizing radiation these requirements are also applicable for nuclear research reactors and interim and final storage of radioactive waste (Information for incidents and accidents, BGBl. II No. 498/2004, Environmental Impact Assessment Act, BGBl. No. 697/1993 and amendments).

#### **Answer to Question 3:**

In 1978, the Austrian electorate decided in a referendum not to start the operation of the constructed first nuclear power plant (BWR) in Zwentendorf. In 1999, the Austrian parliament passed unanimously the Constitutional Law on a Nuclear-free Austria. Austria has therefore no NPP in operation. In addition Austria has also no emergency planning zones of the NPPs in the neighboring countries on its territory.

Therefore questions c) and d) are not applicable to the Austria situation.

Stakeholders (especially local communities) are mainly involved in the preparation of methodology and guidelines for EP&R plans at national and provincial/local level (Question a)) and in the implementation of EP&R drills and exercises carried out at provincial/local level (Question e)).

In addition all national EP&R plans and activities are available at the homepage of the Federal Ministry of Agriculture Forestry, Environment and Water Management ([www.strahlenschutz.gv.at](http://www.strahlenschutz.gv.at))

**Answer to Question 4:**

Provinces and, in some cases, local communities are involved in the annual bilateral meetings on nuclear safety and radiation protection with each neighboring state of Austria. In addition there exist several bilateral cross border co-operations at local level in the field of disaster management. In some cases representatives of Austrian provinces are also invited to participate in emergency exercises in neighboring countries. Given the federalistic constitution of Austria communication and participation in EP&R takes place primarily between local communities/civil society on provincial level. As the Federal Government is convinced that communication and participation of the civil society in nuclear matters, inter alia, is important to continuously improve nuclear safety the Federal Ministry of Agriculture Forestry, Environment and Water Management strives to continuously improve the engagement of civil society also.

**Answer to Question 5:**

In Austria sheltering in normal houses is seen as an important and efficient protective measure especially for the critical group (persons < 18 yrs and pregnant women) Therefore the intervention level for critical group (1 mSv effective dose) is lower than for the rest of the population (10 mSv effective dose). Sheltering in houses provides a protection factor against external radiation of about one order of magnitude or more, dependent on the location and the building type.

In some special cases (such as camping sites) the protection is not adequate. Persons staying at these places are recommended to leave the area or to shelter in public buildings.

**Answer to Question 6:**

The supply of the population with stable iodine pills is planned and organized by the Federal Ministry of Health. Iodine pills are distributed countrywide. In particular, they are stored in schools, kindergartens, pharmacies and local authority buildings. In addition persons under 18 years of age are able to pick up iodine pills for home stockpiling at pharmacies for free.

**a)** Stable iodine blockage is planned as an individual countermeasure. WHO recommendations (Guidelines for Iodine Prophylaxis following Nuclear Accidents – Update 1999) are the basis for the Austrian intervention levels for the intake of stable iodine for different populations groups.

**b)** A sufficient number of iodine pills is available to provide the population also in cases of a severe nuclear accident.

**c)** Iodine pills are not delivered to the population. They are stockpiled locally and can be picked-up in case of need within a short period of time.

**d)** Yes, there are clear instructions in place for the use of iodine pills in case of a nuclear accident.

**Answer to Question 7:**

Since Austria has no operating NPP and no emergency planning zone on its territory evacuation after a NPP accident in a neighboring country is not planned in Austria. In contrast to this sheltering and Iodine Blocking, especially for the critical population, are the early protective measures which are planned to be implemented in all regions of Austria. If these measures are timely and efficiently implemented after NPP accidents in neighboring countries with an impact on Austria, evacuation is assessed as not necessary. Nevertheless, Austria is following pertinent activities, in particular in Germany, but also on European level, very closely and might reassess the situation based on the outcome of these activities, as appropriate.

**Answer to Question 8:**

Since Austria has not operating NPP and no emergency planning zone on its territory decontamination sites for cars etc. are not defined. Decontamination of cars etc. will be performed in the accident country. Decontamination strategies concerning children playgrounds, public places and streets etc. are foreseen in the Austrian specific catalogue of counter measures in case of NPP accidents with impacts on Austria. For the implementation of these planned decontamination measures no specialized personal is needed and the doses in Austria from these activities are assessed to be limited (it could be done eg by street cleaning workers). Therefore enough staff is in principle available. In addition some decontamination activities will be recommended also to private persons as self-help activity.

**Answer to Question 9:**

Temporary and permanent relocation as long term protective measures are seen as very unlikely protective measure needed after an NPP accident close to Austria. Nevertheless for a worst case accident in the NPPs closest to Austria it cannot be excluded that small areas close to the border may have to implement this measure. Relocation is addressed in the Austrian catalogue of counter measures and intervention levels are defined by the Austria legislation. In contrast to the urgent evacuation in the emergency planning zone relocation of the population (of small areas) as a long term measures is less time critical and cannot be planned in all details before the event. This was also shown by the relocation after Fukushima.

**Answer to Question 10:**

Maximum permitted levels of radioactive contamination of food and drinking water are laid down in an European Council Regulation. Food monitoring is done by the Austrian Agency for Health and Food Safety (AGES).

- a)** AGES is accredited for monitoring radioactivity in food and drinking water. Therefore the quality control is assured. The capacities of AGES are adequate to assure an effective control of food and drinking water.
- b)** For Austria there are expected no supply problems in case of a nuclear accident.
- c)** The Fukushima accident did not give rise to any change of the Austrian plans concerning food and drinking water monitoring in case of a nuclear accident.

**Answer to Question 11:**

The current Austrian legislation and regulations include only criteria for the implementation of temporary and permanent relocation. Criteria for lifting these protective actions will be defined with the implementation of the new EC Basic Safety Standards into the Austrian legislation in near future.

**Answer to Question 12:**

Since Austria has no operating NPP and no emergency protection zone on its territory question 12 is not applicable to Austria.

**Answer to Question 13:**

Since Austria has no operating NPP the first question is not applicable.

Concerning the communication with the general public in the event of a nuclear accident according to the Austrian legislation the Minister of Agriculture, Forestry, Environment and Water Management is responsible for informing the general public on a nuclear accident, possible consequences for the Austrian population and if necessary on protective actions for the population in accordance with the Council Directive on informing the general public about health protection measures to be applied and steps to be taken in the event of a radiological emergency (89/618/EURATOM which has been integrated into 2013/59/EURATOM).

Among other information channels (such as Internet, call centers, press releases,..) the information by the minister will be given on TV and radio.

In parallel the affected population will be alerted by the Austrian wide sirens warning system.

Based on the Fukushima experience and national exercises it was decided to elaborate a more comprehensive plan for communicating with the public in addition to the existing arrangements for informing the public in case of a radiological emergency

**Answer to Question 14:**

If the information provided by Austrian authorities in case of a nuclear accident is timely, proactive and consistent then the majority of the population will consider it as reliable and trusted and will behave according to the instructions provided by the authorities. All concepts and plans concerning communicating with the public are targeted to enable this.

As already stated in answer 13 in this field there is always need for improvement based on practical experience from exercises and real events.

**Answer to Question 15:**

Austria has a very dense early radiation warning network with about 330 gamma dose rate probes and 10 nuclide specific automatic air measurement stations. In addition emergency sampling and measurement plans exist, are periodically updated and exercised for the case of a large scale contamination after a nuclear accident. These plans also include regional intervention teams from the Austrian police (500 persons) which can rapidly provide additional car- or airborne measurements.

Some of these intervention teams are also registered in the RANET system of the IAEA for international assistance in case of a radiological emergency.

The emergency plans for organizing measurements in all Austrian Provinces have been updated during the last years as part of the updating of regional emergency plans. Exercising these plans is an important legal requirement and is done periodically.

**Answer to Question 16:**

Civil society organizations and independent experts/institutions are seen as important contributors of trustful, credible and effective information in the case of radiological emergencies after NPP accidents, especially also in case of far field accidents. In Austria authorities have started to create a pool of independent experts as contact persons for the media.

As one of the Fukushima lessons a European platform of independent scientific organizations was created (NERIS) which can support the European authorities by independent assessments and advice in case of radiological emergencies. The channels for distribution of this information in case of an emergency will mainly be an information platform on the internet.

**Answer to Question 17:**

Special provisions exist for the most critical group in the population concerning the health impact of radiation (children and in case of sheltering also pregnant women). The intervention levels for Thyroid blocking and sheltering for this group are a factor of 10 lower than for the rest of the population (1 mSv effective dose for sheltering and 10 mGy thyroid dose for Thyroid blocking). For this population group the Iodine tablets are cost-free available at the Austrian pharmacies. In addition as part of their emergency plans all Austrian schools and child-care institutions have Iodine tablets available.

**Answer to Question 18:**

According to the Austrian catalogue of counter measures the following advice will be given for pets: Where possible pets should be brought inside houses before the arrival of the contaminated plume and kept there in the plume phase. After the plume phase if needed the outdoor activities of pets will be restricted. Simple decontamination activities are foreseen before pets re-enter the house.

This specific advice for pets will be part of the recommendation on protective actions for the population and the general information given in case of a radiological emergency.

**Answer to Question 19:**

Since evacuation is not planned in Austria after an NPP accident this question is not applicable. For cattle and cows it is planned to bring them into the stables before the radioactive plume arrives and provide clean feeding after contamination has started.

**Answer to Question 20:**

Since Austria has no NPP in operation there are no on-site emergency workers in Austria.

Regarding off-site emergency workers the Austrian Ordinance on Interventions in Case of a Radiological Emergency contains specific requirements for education and training of interventions teams. Authorities responsible for implementing protective actions will activate these intervention teams. At federal level the intervention personal is provided by the Austrian police (about 500 specialists), by Austrian Agency for Health and Food Safety and by Nuclear Engineering Seibersdorf.

**Answer to Question 21:**

The competent authorities at federal and regional level are responsible for the costs of implementing protective actions. In addition special funds at state level for large-scale disasters exist and will be probably used in case of a nuclear disaster with large scale impact on Austria based on decisions of the government. In the long term the coverage of the costs or parts of the costs is based on liability regulations.