

## WP 3: Development of a radiation protection culture to support governance of radiological risk

### Development of Radiation Protection Culture for Different Categories of Stakeholders at Local Level

13-15 February 2019, Athens, Greece

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## *Characterization of case study including type of actions and processes*

- EEAE coordinates the implementation of the Radon National Action Plan (RNAP).
- Indoor radon measurements countrywide to:
  - estimate the distribution of indoor radon concentrations in dwellings;
  - complete the National Radon Map
  - identify areas with increased levels of radon concentration in indoor air.



## *Characterization of case study including type of actions and processes*

- EEAE takes communication actions to:
  - increase public awareness on the radon issue;
  - inform local decision makers.
- Information leaflets are distributed to the members of the public and especially to those who participate in the radon survey.



## *Characterization of case study including type of actions and processes*

- Stakeholders have been invited by EEAE to consultations during the previous years.
- Aim of consultations:
  - to present in detail the radon issue;
  - to initiate appropriate actions following a common and efficient approach.
- **Intention:** to engage stakeholders more intensively during the preparation of the RNAP.



## *Characterization of case study including type of actions and processes*



- Preliminary results of indoor radon measurements performed by EEAE showed elevated concentrations of radon in dwellings at the municipality of Xanthi.
- The municipality of Xanthi is located at the northeast Greece with an area of 1793 sq.km and a bedrock rich in granites.

## *Characterization of case study including type of actions and processes*



- EEAE initiated a survey based on large scale measurements in the region together with further actions aiming to make the local stakeholders (authorities and owners of dwellings) aware of the radon issue.
- 30% of measurements exceed the reference level of 300 Bq/m<sup>3</sup>

Main source of information for the public are:

- the material provided by EEAE (leaflets, web site, etc.).
- Presentations:
  - in the framework of conferences or seminars on radiation protection;
  - during special events organized by local authorities.



## *Characterization of RP Culture*



The information provided should be reviewed regularly and revised appropriately in accordance to the needs of each target group of stakeholders (local authorities, members of building engineering organizations, dwelling owners, etc.)



## *Development of tools, methods & processes to build, enhance and transmit RP culture*

- EEAE in collaboration with the local authorities performed large scale measurements across the region of Xanthi.



## *Development of tools, methods & processes to build, enhance and transmit RP culture*



During the period of measurements EEAE was in contact with:

- the Department of Regional Planning and Urban Development, and
- the local authorities

in order to provide information on the progress of the survey and coordinate the required actions.

## *Development of tools, methods & processes to build, enhance and transmit RP culture*

Further actions are planned for increasing the awareness of local stakeholders in the region of Xanthi such as:

- Meetings with the local authorities to present and discuss the survey results;
- Events aiming to increase public awareness;
- Events for professional societies;
- Dissemination of informative material to schools and hospitals.



## *Development of tools, methods & processes to build, enhance and transmit RP culture*



- increase the awareness of the local authorities and the public;
- support the development of a radiation protection culture;
- establish an effective and sustainable communication channel with the local stakeholders;
- enhance common efforts for the reduction of average radon concentration and the improvement of air quality;
- establish a model case to be used as an example.

## *Development of tools, methods & processes to build, enhance and transmit RP culture*

- Professionals could contribute effectively in the implementation of appropriate RP measures in the case of radon.
- Architects, engineers, etc. should be provided with appropriate E&T on RP through courses, conferences, seminars, etc.
- EEAE encourages the participation of professionals to meetings addressing the radon issue.



## *Evaluation of the level of RP culture*



- There is not a formalized process to evaluate the RP culture of the stakeholders in case of radon.
- The effort in the region of Xanthi indicated the need to provide basic information on ionizing radiation before starting any further discussion on the issue of radon.

## *Evaluation of the level of RP culture*

- The introductory “lectures” by EEAE facilitated the communication with the stakeholders (owners of the dwellings) and the survey.
- Continuous communication with the local authorities are of great important in order to ensure cooperation in future actions.



- The development of an RP culture is an on-going and demanding procedure.
- The initial evaluation of the stakeholders' RP culture requires a follow-up for verification.
- The role of the competent and local authorities as well as the scientific societies is crucial.
- Greatest difficulty in building an RP culture:  
**To change beliefs and perceptions.**





- More actions are necessary to:
  - increase public awareness on radon, and
  - change beliefs and perceptions regarding ionizing radiation.
- The actions should include:
  - events where the radon issue will be addressed properly;
  - dissemination of informative material to schools and hospitals.





- The cooperation of the competent authorities with the local authorities and the professional and scientific societies is crucial.
- Creation of appropriate communication channels among authorities and societies.
- Provision of appropriate E&T on RP to professionals (courses, conferences, seminars, etc.)

