

Radiation protection today – success, problems, recommendations for the future

- An initiative of the German-Swiss Association for Radiation Protection -

In recent years, discomfort on the current situation of radiation protection as well as how it is perceived by society became evident in the radiation protection community. This concerns technical aspects of the regulations and their implementation and, to a particular extent, also the perception of radioactivity, radiation, and radiation protection by today's society.

The German-Swiss Association for Radiation Protection (Fachverband für Strahlenschutz FS) has therefore commissioned a working group (the Club of the Philosophers) to comment on fundamental issues of radiation protection and to make recommendations for its future development. The results of the work of this group became a position paper of the FS in 2018.

On October 21, 2018, it was presented to the European Associate Societies of IRPA for discussion and comments. Some of the European societies reacted. The Netherland's NVS organized a Workshop on this topic on February 13, 2019 and made detailed comments. The ÖVS in Austria published comments in its journal „Strahlenschutz aktuell 53(1) 2019, pp. 7 – 17“ and the CRPA of Croatia also dealt with it in a workshop and in national publications.

The position paper was presented and discussed in Germany and Switzerland at meetings of the Eidgenössische Kommission für Strahlenschutz (KSR) and the German Commission on Radiological Protection (SSK) as well as on during national meetings in 2019 and 2020 (FS Annual Meeting 2019 Würzburg, at the workers compensation board (BGETEM) 2019 and 2020 and during the 3rd Sonthofener Strahlenschutztag 2020. International presentations were made at RASSC 46 June 2019, NEA Workshop on Optimisation: Rethinking the Art of Reasonable, in Lisbon January 13-15, 2020 and IAEA RP2020 Conference November 2020..

The position paper discusses in detail the historical development of radiation protection, the role and relevance of the natural radiation exposure, the discomfort expressed in the community and finally develops 24 recommendations for the following topics:

- Radiation and radiation risk,
- Radiation doses, radiation effects, and dose limits,
- Practice of radiation protection,
- Dealing with emergency situations,
- Communication with and information of the population.

A short survey on the position paper will be given during the IRPA Virtual Conference 2021 by Rolf Michel in session 8 “Radiological Protection – Past and Future”.

Plea for discussion

We present here the German position paper to the Associate Societies Forum to initiate further discussion. The comments and results of discussion should be sent to michel@irs.uni-hannover.de or to the secretary of the FS. The German and English versions are also posted on the FS website under <https://www.fs-ev.org/themen/>. A somewhat shortened German version was published in the 4th issue of the StrahlenschutzPraxis 2018.