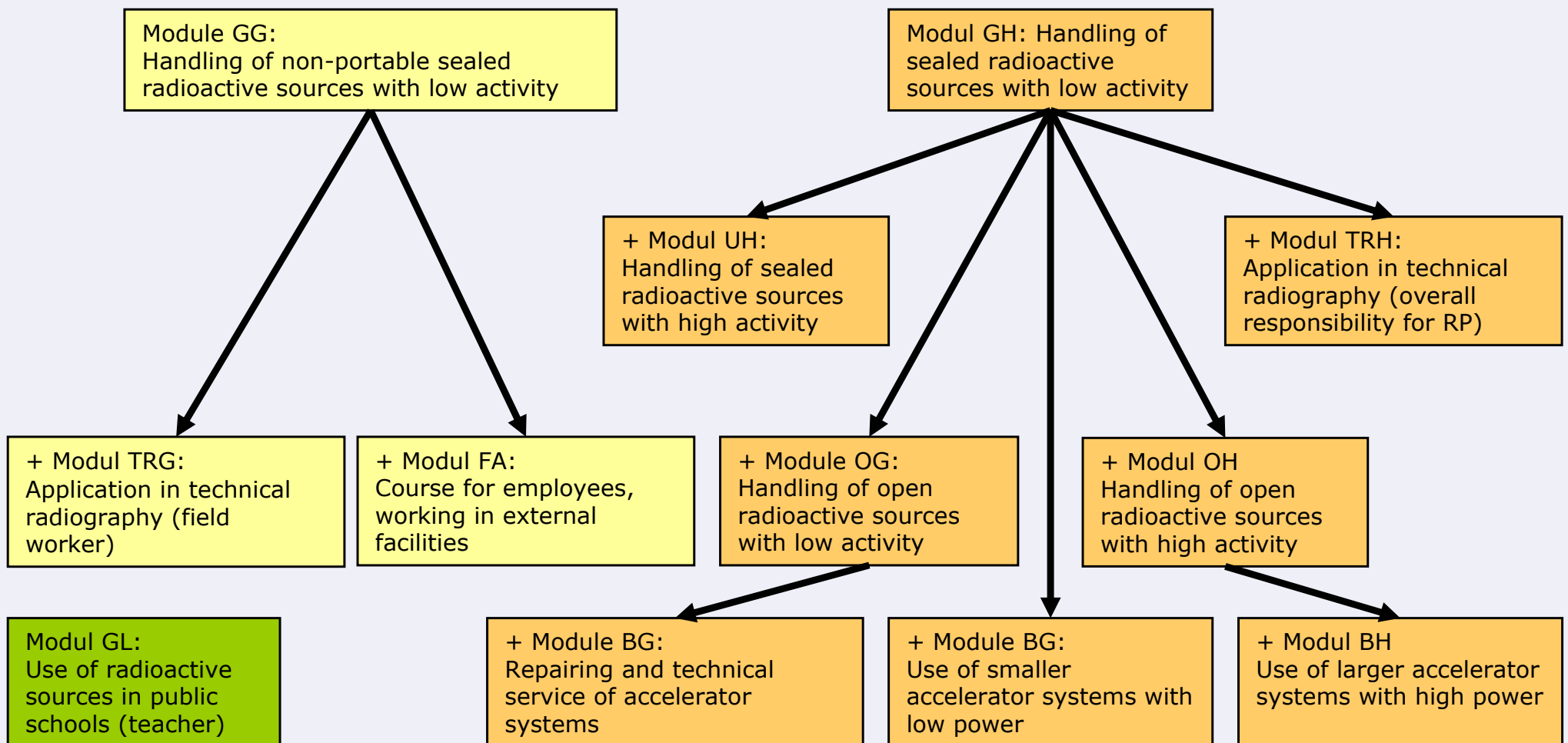


Overview

For technical applications a diversity of 37 different Knowledge Groups has been established for the German radiation protection system, which is based on so called "Strahlenschutzbeauftragte" (SSB). That leads, only concerning technical applications, to 37 different types of SSBs, all of them acknowledged by the competent authority. In most cases, a SSB would rather correspond to a RPO than to a RPE. This poster tries to give an overview on different kinds of Knowledge Groups for technical applications that are defined in two different Technical Expert Knowledge Directives.

The Technical Expert Knowledge Directive concerning the handling of sealed and open radioactive sources and accelerator systems



The Technical Expert Knowledge Directive concerning the handling of X-ray tubes

| Name | Description |
|------|---|
| R1.1 | Applications in non-destructive materials testing (overall responsibility for radiation protection) |
| R1.2 | Applications in non-destructive materials testing (field worker) |
| R2 | X-ray diffraction and -microstructure analysis |
| R3 | Applications of X-ray tubes with inherent protection and/or use of devices with unwanted X-rays |
| R4 | Use of X-ray facilities in public schools (teacher) |
| R5 | Inspecting, testing, servicing and repairing of technical X-ray facilities |
| R6 | Inspecting, testing, servicing and repairing of medical X-ray facilities |
| R8 | Handling of electron accelerators |
| R9 | Expert Knowledge Group for radiation protection experts (Sachverständige) |

Conclusions

Altogether, the experience with the German radiation protection system is positive. There have been only few accidents and the personal effective doses are small: In 2007 more than 80 % of all occupationally exposed persons have received an effective dose below the detection limit of their personal dosimeters, and less than 0,4 % received an effective dose above 6 mSv.