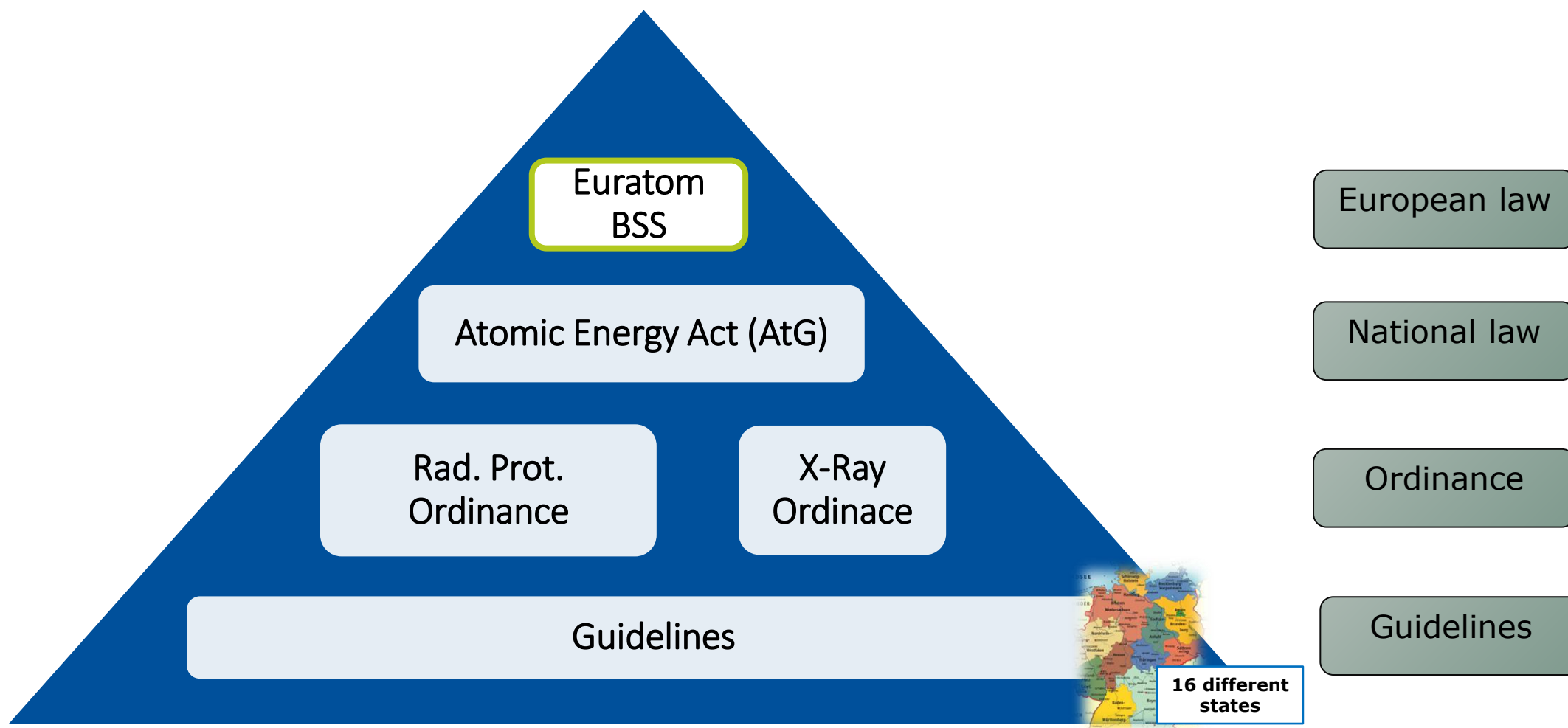




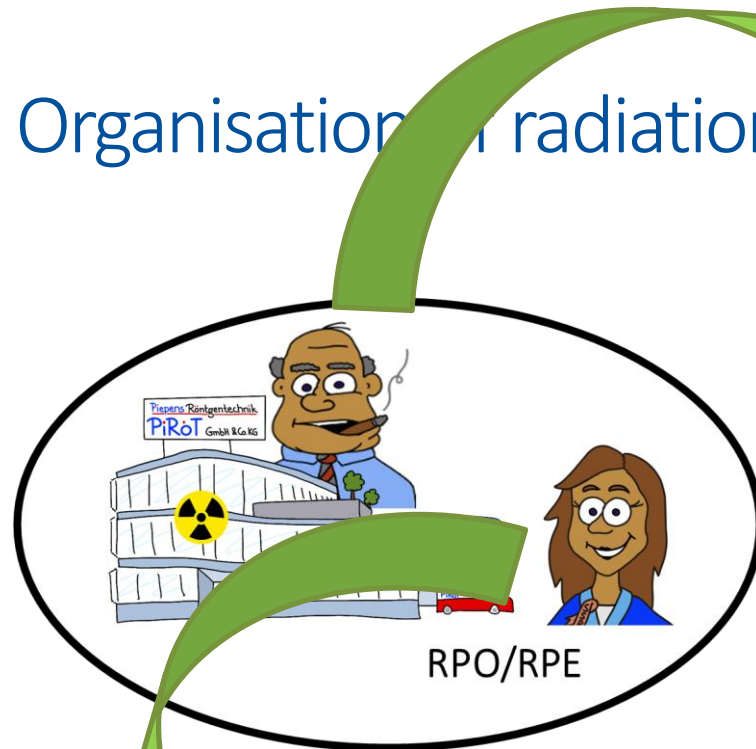
The new revised guidelines on E&T of RPOs and RPEs in Germany

Jan-Willem Vahlbruch, Leibniz University Hannover, Institut of Radioecology and Radiation Protection

Legal and administrative provisions in Germany



Organisation of radiation protection in Germany



RPO/RPE

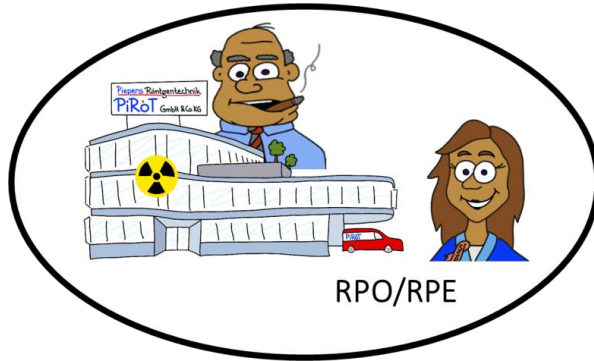
Strahlenschutzverantwortlicher (SSV) “RP executive”

- radiation employer (person who requires a license)
- Accountable for all legal duties of undertaking

Strahlenschutzbeauftragter (SSB) “RP Supervisor”

- An appropriate number of SSBs has to be appointed by SSV
- Responsible for implementation of RP (for area of designation)
- Belongs to the staff of the company (most cases)
- Recognized by the competent authority

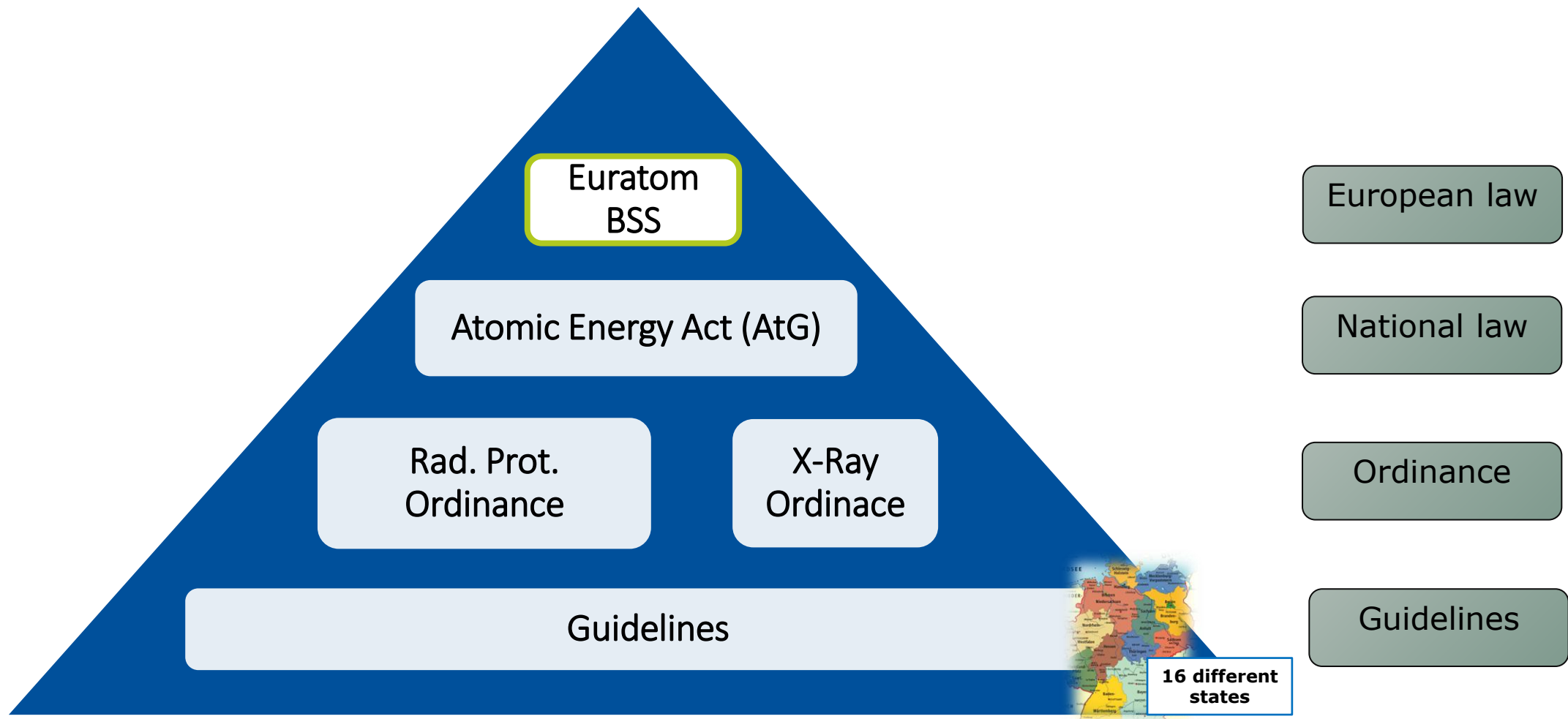
Organisation of radiation protection in Germany



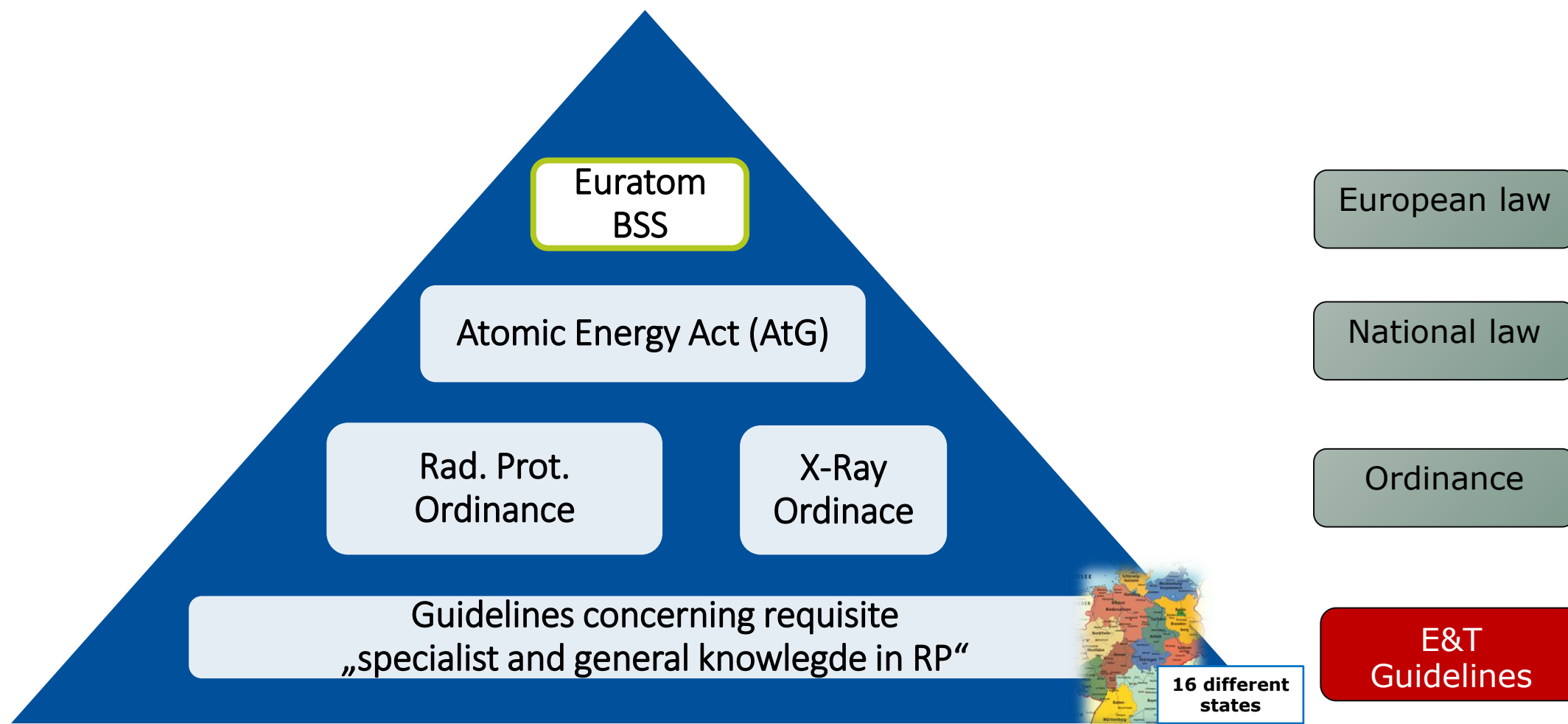
To ensure that a SSB (“RP Supervisor”) can fulfill the tasks and duties his training and education have to be appropriate.

- For this reason the notification of appointment shall be accompanied by the certificate about the **requisite specialist knowledge** in radiation protection.
- The **requisite specialist knowledge** in radiation protection shall, as a rule, be acquired through a
 - vocational **training** suited for the respective area of application,
 - **practical experience** and
 - successful participation in **courses** recognized by the competent agency.
- Further details concerning the requisite qualification in radiation protection are specified in different **Guidelines**.

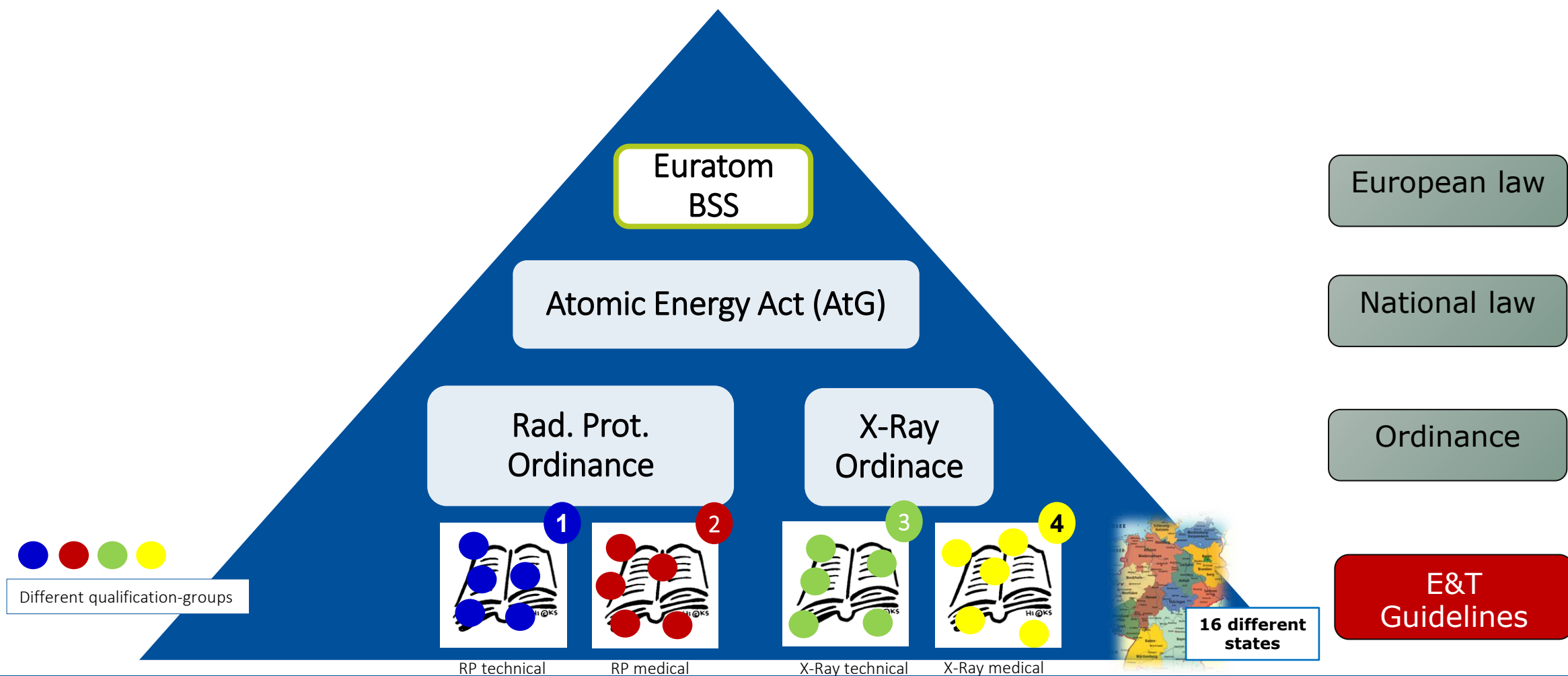
Legal and administrative provisions in Germany



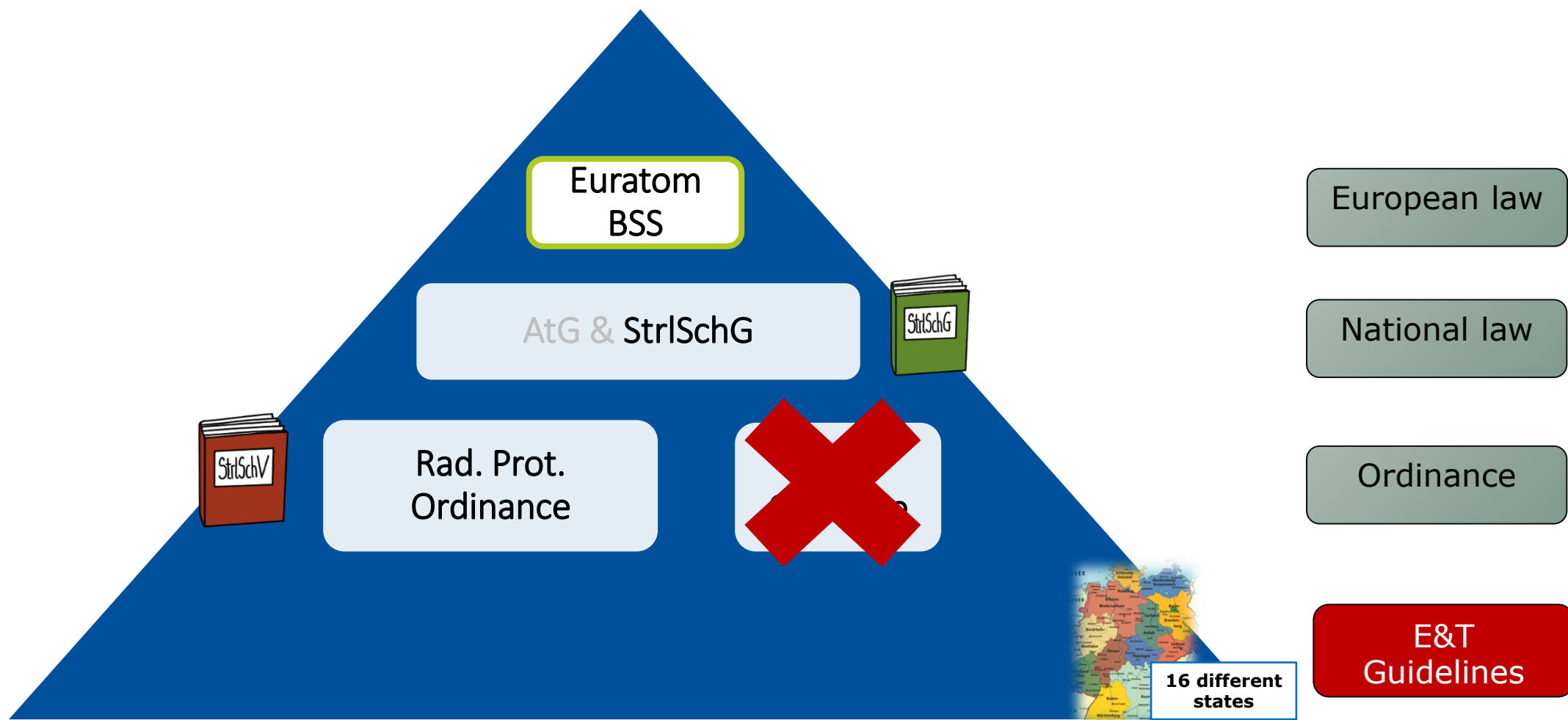
Legal and administrative provisions in Germany



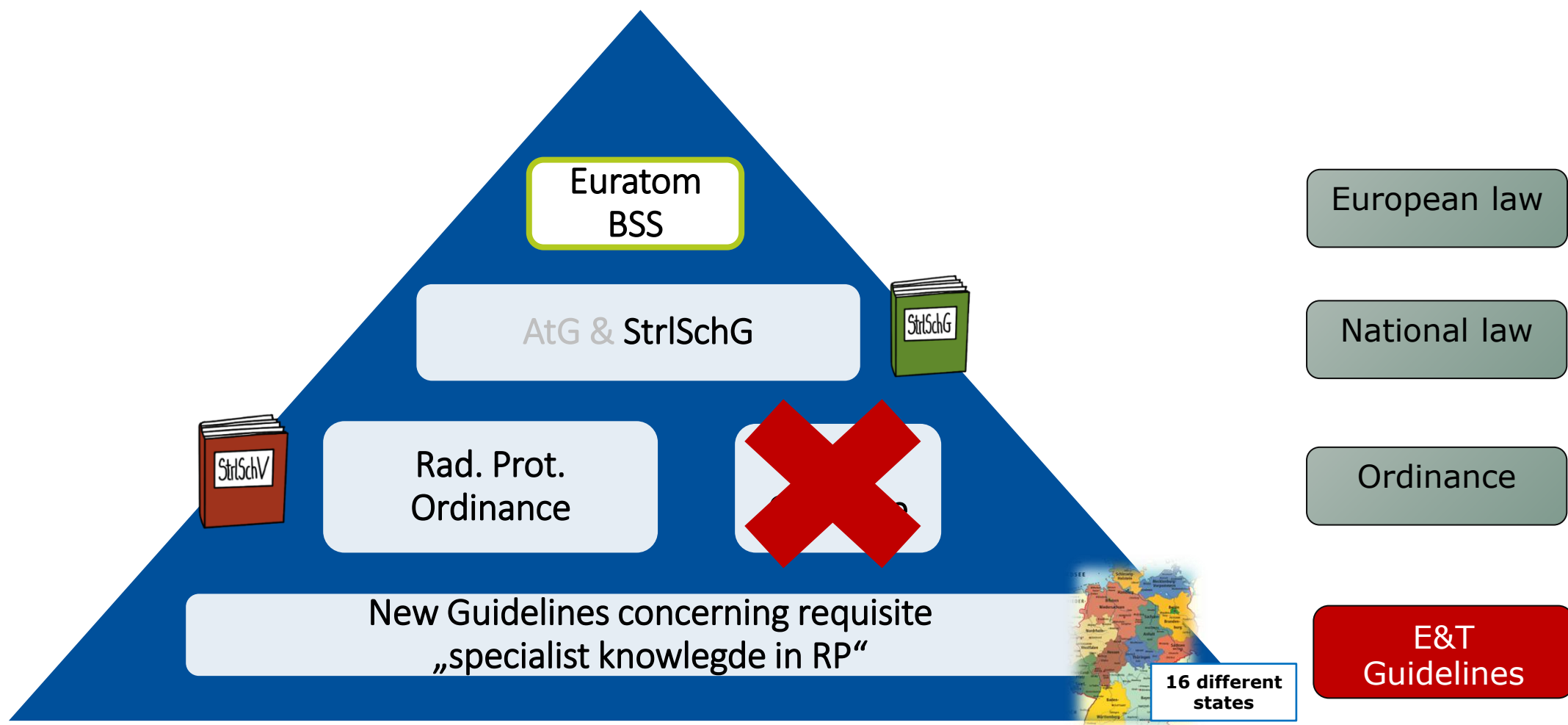
Legal and administrative provisions in Germany



Legal and administrative provisions in Germany



Legal and administrative provisions in Germany



New Guidelines concerning requisite „specialist knowlegde in RP“

Framework Guideline on Specialist Knowledge pursuant to Section 74 of the Radiation Protection Act (StrlSchG)

E&T GL Medicine

Doctors in radiological diagnostics, nuclear medicine and radiotherapy

Dentists in Radiological Diagnostics

Medical assistants

MPE (Until revised, the version dated 01 December 2021 applies)

E&T GL Veterinary Medicine

Until the revision, the version dated 25 September 2014 applies

E&T GL Technical Applications

X-Ray

Radioactive Sources

accelerators

Requirements regarding the qualifications of authorised experts

New Guidelines concerning “Requisite Specialist Knowledge in RP”

Framework Guidelines on Specialist Knowledge pursuant to Section 74 of the Radiation Protection Act (StrlSchG)

E&T GL Medicine

E&T GL Veterinary
Medicine

E&T GL Technical
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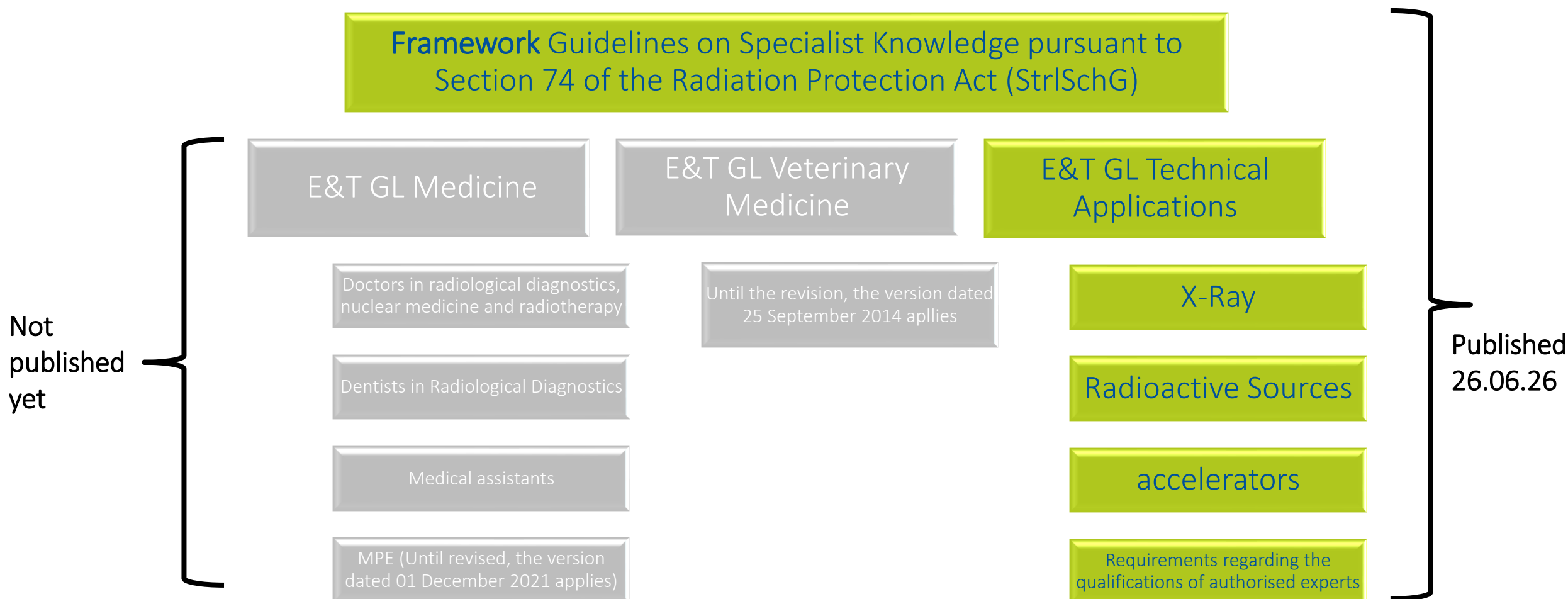
accelerators

MPE (Until revised, the version
dated 01 December 2021 applies)

Requirements regarding the
qualifications of authorised experts

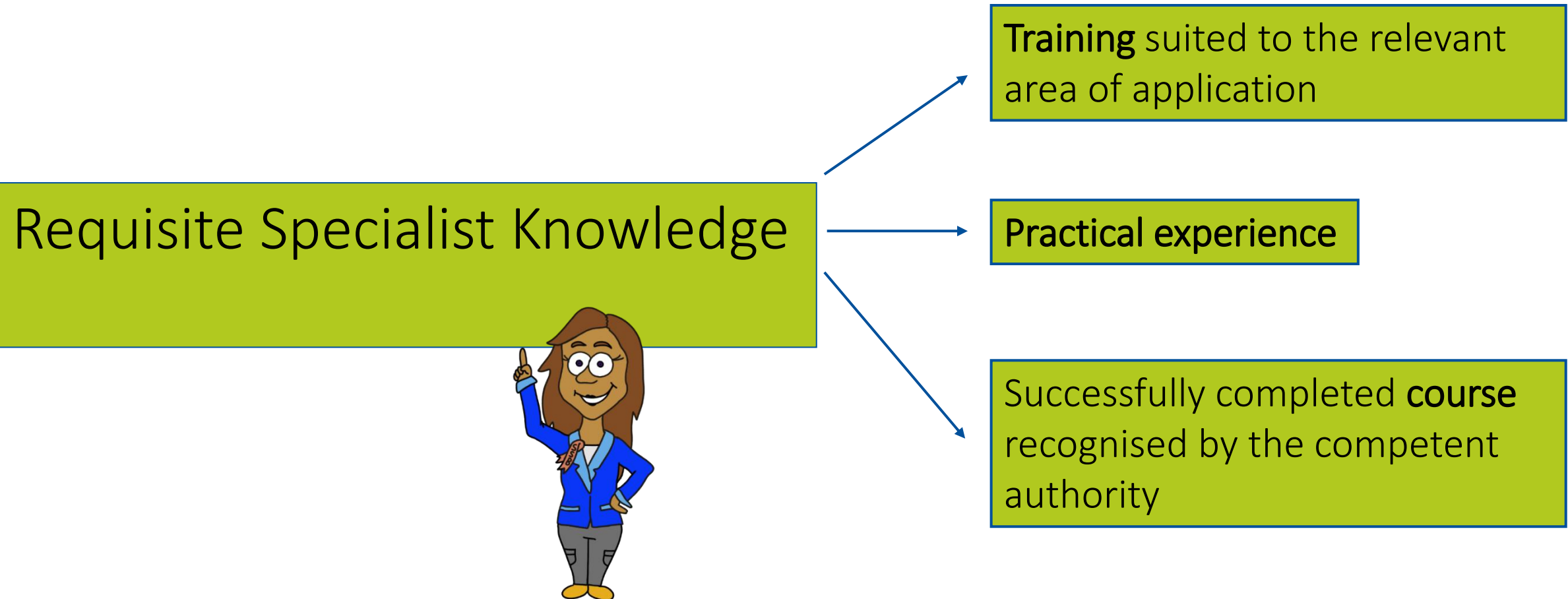
Not
published
yet

New Guidelines concerning requisite „specialist knowlegde in RP“



Framework Guideline E&T

Requisite Specialist knowledge according to section 74 StrlSchG



Training suited to the relevant area of application

- ‘Appropriate training’ may refer to vocational or academic training.
- The training must have been successfully completed.
- As a rule, participation in recognised courses and the acquisition of practical experience take place after the completion of appropriate training.

Successfully completed course recognised by the competent authority

- Courses are divided into teaching units and comprise theoretical components and, where applicable, exercises and practical sessions. The theoretical components may be delivered synchronously or asynchronously.
- A **course leader** must be appointed and present (in person) or reasonably accessible (via virtual presence and asynchronous learning components)
- For the synchronous learning phase, the daily duration of teaching must be pedagogically appropriate, and **should not exceed 10 teaching units per day**.
- The proportion of synchronous learning must, as a rule, amount to at least 50 % of the minimum course duration.
- The synchronous phase should generally be limited to a **maximum of 30 participants** in order to ensure the successful transfer of knowledge (exemption refreshers)
- If the final examination is held in a virtual setting, video surveillance of the candidates must be carried out

Recognition of qualifications obtained abroad

- A **qualification obtained abroad** may be recognised and certified by the competent authority, in whole or in part, as the required specialized knowledge in radiation protection, **provided that it is comparable to the expertise or knowledge in radiation protection required for the relevant field of application.**
- The competent authority shall examine the evidence submitted regarding training and professional experience, **as well as any other evidence of competence.**

E&T Guideline for technical applications

PUBLISHED 26.06.2026

Subdivision of the required specialist knowledge

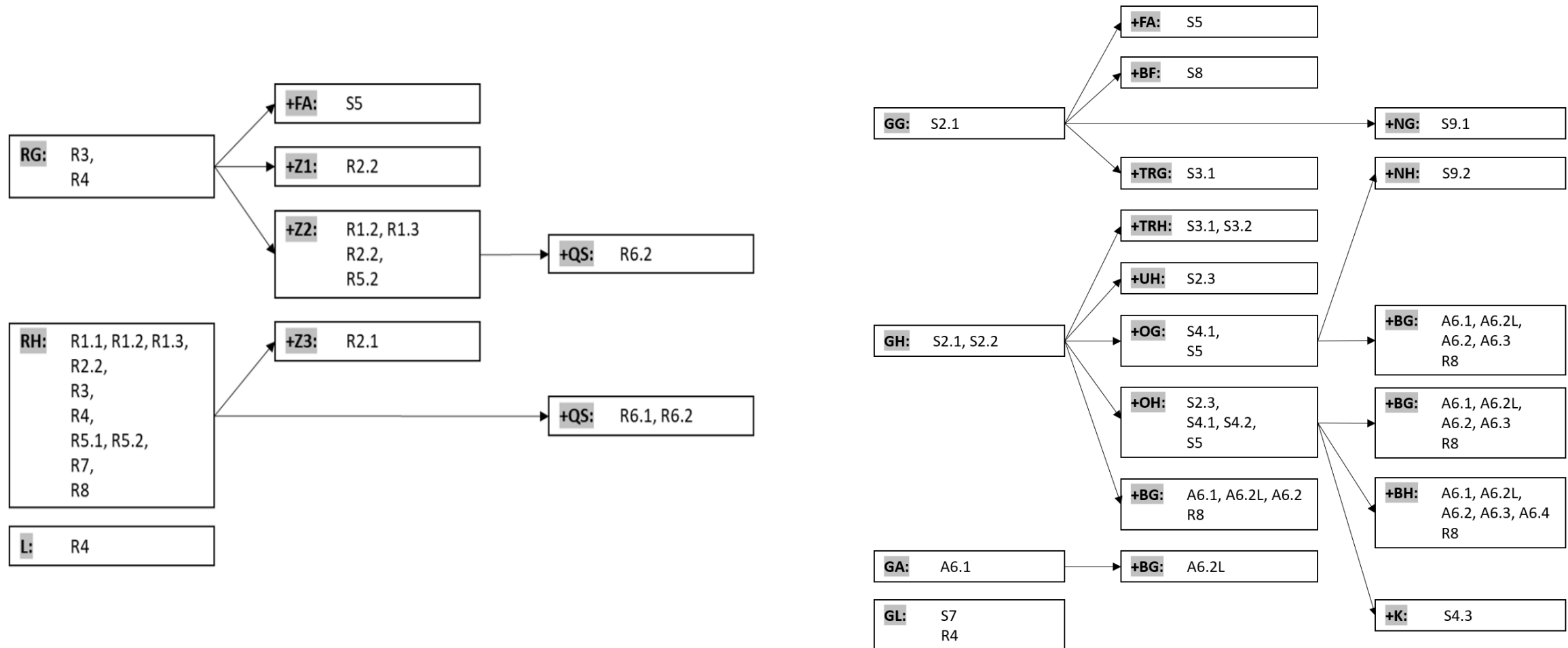
The required knowledge in radiation protection is divided into three areas of expertise according to the different activities:

- Operation of X-ray equipment and sources of stray radiation (Area R “Röntgen”)
- Handling of radioactive substances, materials (NORM) and devices containing radioactive substances, as well as other activities such as transport and contaminated sites (Area S “Strahler”); and
- Operation of installations for the generation of ionising radiation (Area A “Anlagen”)

Subdivision of the required specialist knowledge

- 31 different groups of required specialist knowledge
 - 11 specialist knowledge groups in the 'R' sector
 - 15 specialist knowledge groups in the 'S' sector
 - 5 specialist knowledge groups in the 'A' sector
- Graded approach: Level of qualification dependant on risk of practice
- Requirements vary depending on the specialist knowledge group for all three elements of required specialist knowledge
 - Vocational **training**
 - **Practical experience**
 - Successfully completed **course**

Modular System for different specialist knowledge groups



Vocational Training

In accordance with the European Qualifications Framework (EQF), three qualification levels are distinguished for the acquisition of the required specialist knowledge in radiation protection:

1. A **degree from a university of applied sciences or a university** (Bachelor's or Master's degree); a technician's qualification, a master craftsman's qualification or an equivalent qualification **in the natural sciences or technical field** (at least Level 6 according to the EQF)
2. A qualification in a vocational training programme in the natural sciences or technical field (at least Level 3 according to the EQF)
3. A qualification in a vocational training programme outside the natural sciences or technical field (at least Level 3 according to the EQF).

Practical experience

- Evidence of the acquisition of practical experience must be provided by means of a written confirmation from the competent radiation protection executive or the radiation protection supervisor under whose supervision the expertise was acquired.
- The duration and the necessary **competencies** required to acquire this expertise depend on the qualification level and the specialist knowledge groups for which the required specialist knowledge in radiation protection is being acquired.

Practical experience – duration (on the job training, figures in months)

Anlage 6 Regelzeiten (in Monaten) für den Erwerb der praktischen Erfahrung (Sachkunde) in Abhängigkeit von der Fachkundegruppe und dem Qualifizierungsniveau

Anlage 6 Teil 1 Bereich Röntgen

Fachkunde- gruppe	Qualifikation im naturwissenschaftlichen/technischen Bereich		Abschluss in einem Ausbildungsberuf außerhalb des na- turwissenschaftli- chen/technischen Bereichs (mindestens Niveau 3 nach EQR)
	Fachhochschul- oder Hochschulab- schluss (Bachelor- oder Masterab- schluss); Techniker, Meister oder in- haltlich gleichwertiger Abschluss (mindestens Niveau 6 nach EQR)	Abschluss in ei- nem Ausbil- dungsberuf (mindestens Niveau 3 nach EQR)	
R1.1	6	8	–
R1.2	4	4	8
R1.3	2	2	4
R2.1	4	4	–
R2.2	2 ²⁷	2 ²⁷	2 ²⁷
R3	0	0	0
R4	0	0	–
R5.1	6	12	–
R5.2	4	8	–
R6.1	6	12	–
R6.2	4	8	–
R7	4 ²⁸	8 ²⁸	8 ²⁸
R8	6	12	–

–: Erwerb der erforderlichen Fachkunde im Strahlenschutz nicht möglich bei dem betreffenden Qualifizierungsniveau

0: Kein gesonderter Erwerb der praktischen Erfahrung erforderlich.

Practical experience - competences

Anlage 7 Teil 1 Bereich Röntgen

Kompetenz Sachkunde R-Fachkunden	Requisite Specialist Knowledge Group												
	R1.1	R1.2	R1.3	R2.1					5.2	R6.1	R6.2	R7	R8
Is able to identify and explain the organisational structure of RP within the organisation	×	×	×	×	×	×	×	×	×	×	×	×	×
Is able to evaluate the radiation protection instructions	×	×	×	×	×	×	×	×	×	×	×	×	×
Is able to deliver the RP-training	×	×	×	×	×	×	×	×	×	×	×	×	×

Courses - competences

Anlage 5 Teil 2.2 Bereiche Umgang radioaktiven Stoffen und sonstige Betätigungen sowie Anlagen zur Erzeugung ionisierender Strahlung

Kompetenzen Kurse S- und A- Fachkunden	Module																Rechtsbezüge
	GG	GH	GA	GL	UH	TRG	TRH	OG	OH	K	FA	BG	BH	BF	NG	NH	
Atom- und Strahlenschutzrecht, weitere Vorschriften	1	1	1	1	0,5	0	0,25	0,25	0,5	2	0,5	0,5	0,5	1	2	2	
Übergeordnete Kompetenz																	
Kann die hierarchische Struktur, Verbindlichkeit und für die Fachkundegruppe zutreffenden Inhalte des Regelwerkes zum Atom- und Strahlenschutzrecht (z. B. Euratom, Gesetze, Verordnungen, allgemeine Verwaltungsvorschriften, Richtlinien, DIN-Normen, KTA-Regelungen, berufsgenossenschaftliche Vorschriften, ICRP-Empfehlungen) erläutern																	
Allgemeine Vorschriften, Begriffsbestimmungen																	
Kann den Anwendungs- und Geltungsbereich des StrlSchG nennen	+	++	+	+													§ 1 StrlSchG
Kann die unterschiedlichen Expositionssituationen und -kategorien nennen	+	+	+	+													§ 2 StrlSchG
Kann den Begriff des radioaktiven Stoffes erläutern	++	++		++													§ 2 AtG § 3 StrlSchG
Kann den Unterschied zwischen sonstigen radioaktiven Stoffen und Kernbrennstoffen erläutern		+								++							§ 2 AtG § 3 StrlSchG

Thank you for your attention!

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