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Regulatory Control on Radiation Protection Instruments for Information and Experience Exchange in a Federal System

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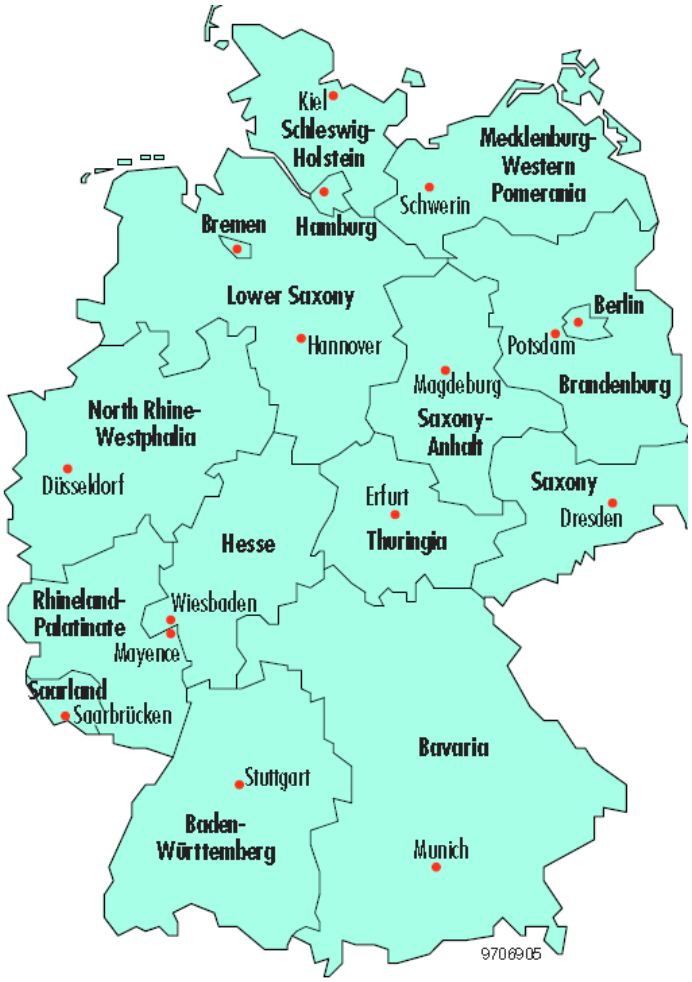
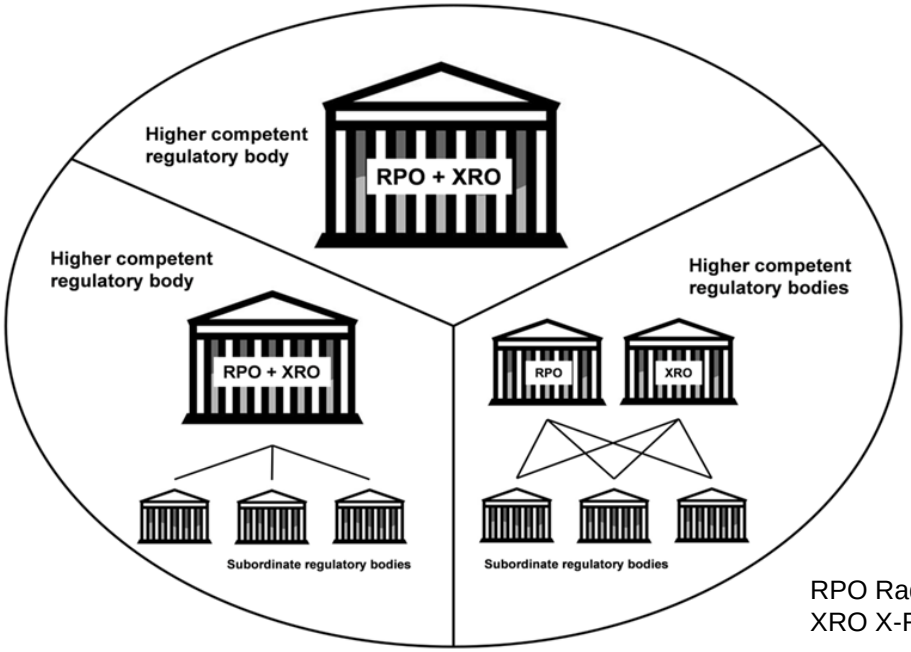
Regulatory Control on Radiation Protection

- Germany is a Federal Republic with 16 Federal States so called Länder.
- The Federal Republic has the exclusive legislative competence in the field of radiation protection.
- The execution of laws, regulations and general administrative regulations, i. e. licensing and supervision, is performed by the Länder.



Regulatory Control on Radiation Protection

- The establishment of the individual regulatory bodies of the federal states lies within the responsibility of each of the Länder.
- Different organisational structures have evolved in the Länder to implement regulatory functions related to the application of ionising radiation.



RPO Radiation Protection Ordinance
XRO X-Ray Ordinance

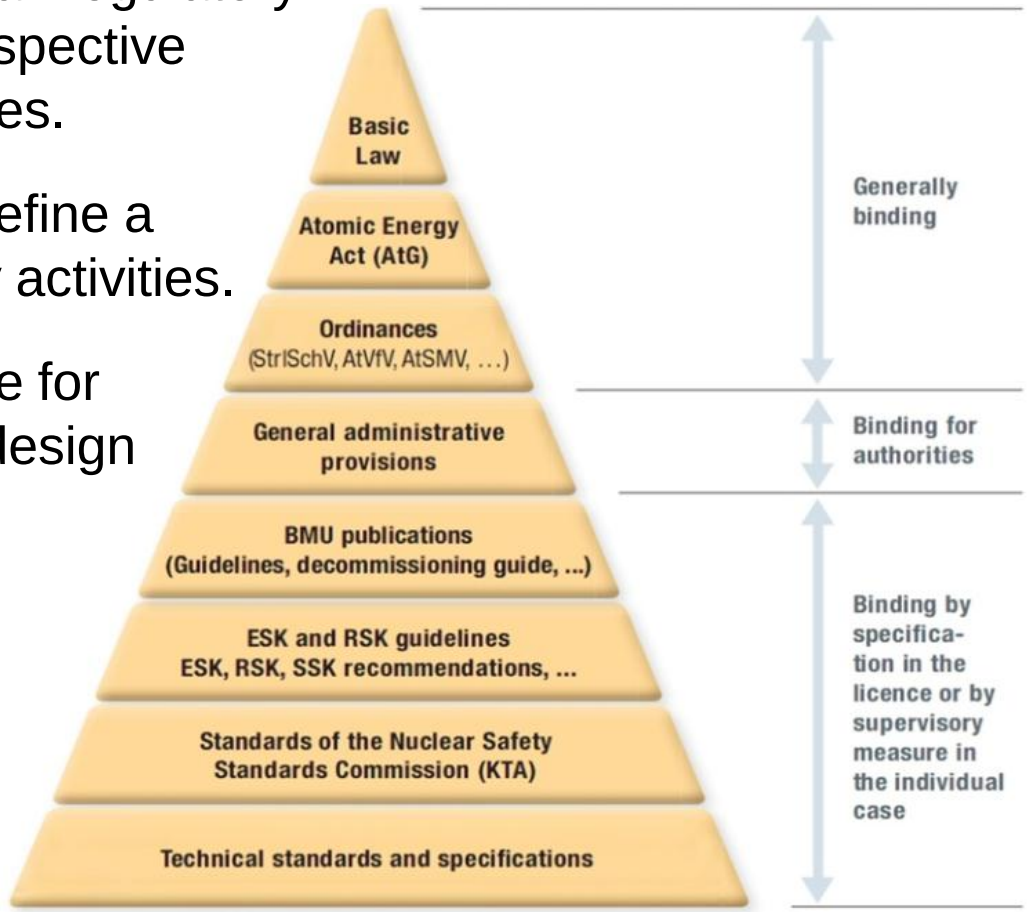
Regulatory Control on Radiation Protection

The higher competent regulatory body

- is participating in national boards to discuss national and international developments,
- is responsible for implementing new regulations and guidelines of the Federal Government,
- has to fulfill the reporting commitment towards the Federal Government and
- has to guarantee the uniformity of regulatory actions among its subordinate regulatory bodies (issuing licences and conduct of supervisory actions).

Legal System

- The regulatory activities of all regulatory bodies are based on the respective German laws and ordinances.
- The laws and ordinances define a frame to perform regulatory activities.
- There is still sufficient space for interpretation and specific design of regulatory actions.
- Regulatory guidelines help to harmonise possible different interpretations.



Challenges for the Regulatory Control on Radiation Protection

GRS performed a project between 2008 and 2011, funded by the Federal Ministry for the Environment,
Nature Conservation and Nuclear Safety (BMU)

Scope of the project:

- Analysis of the obligations and detailed tasks to be met by the regulatory bodies of the Länder, which are responsible for licensing and supervision of the application of ionising radiation outside the nuclear field (regulatory control)
- Proposals for methods and common approaches to support and improve regulatory activities
- Intensive involvement of regulatory bodies - most of the 16 Länder supported the project by sharing experiences on current obligations and duties

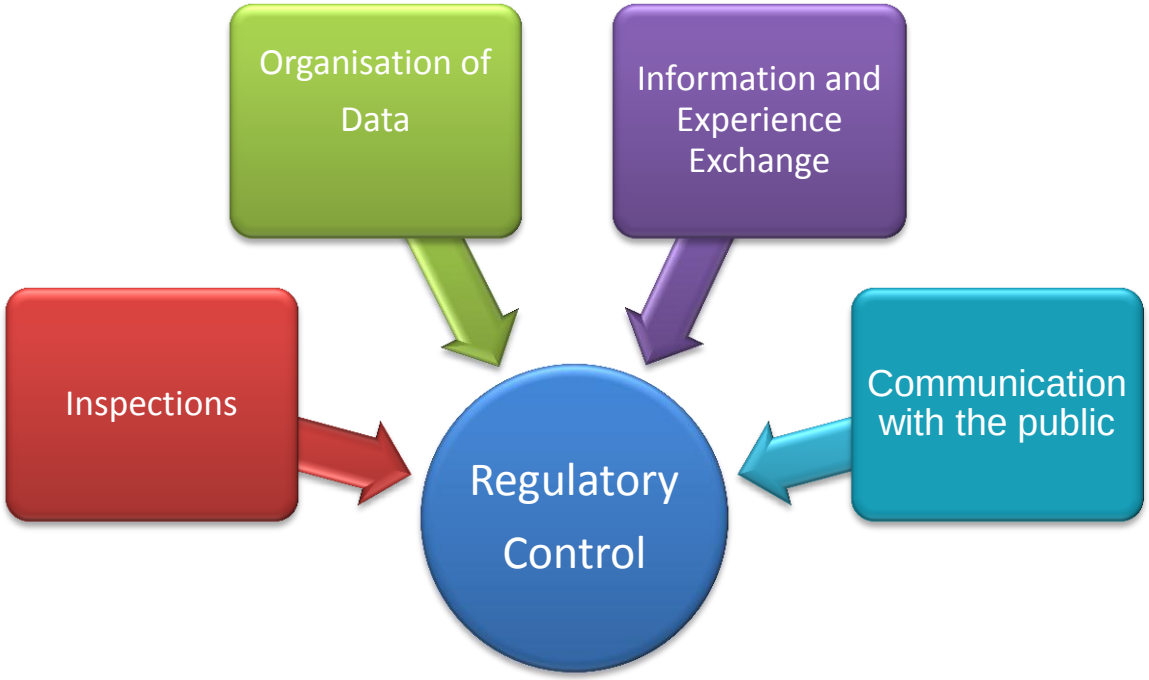
Challenges for the Regulatory Control on Radiation Protection

- The regulatory control today is facing several challenges:
  - The number of tasks and also the number of licences increase.
  - The number of staff members of the regulatory body decreases or at best remains constant.
  - The time available to focus on individual regulatory tasks is limited resulting in the need to select focal points of regulatory activities.
  - The technical complexity of the application of ionising radiation outside the nuclear sector increases, requiring a continuous effort to keep and improve technical qualifications

➡ Need to develop instruments to support the regulatory functions of regulatory control to meet these challenges and to contribute to a further increase of efficiency

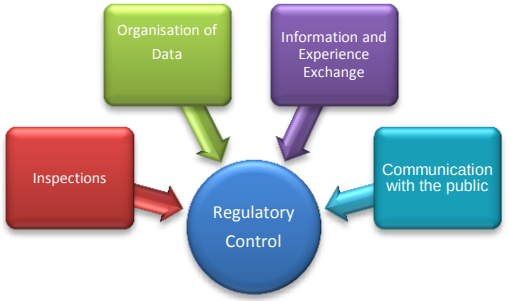
Challenges for the Regulatory Control on Radiation Protection

- Major challenges for the regulatory control identified in discussions with regulatory bodies of the Länder



Challenges for the Regulatory Control on Radiation Protection

Challenges for the regulatory control:

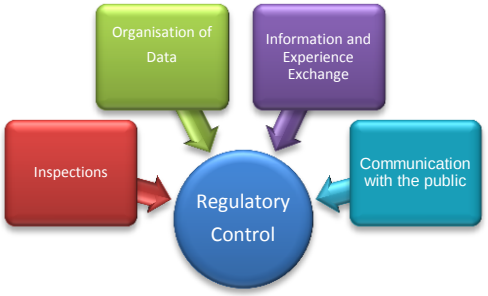


- An effective **organisation of data** and information to effectively support the administrative processes and the conservation and improvement of competences
- Increase of licences results in an increasing number of **inspections**
- **Communication with the public**, which needs
  - to consider not only today information technologies but also
  - the increasing demand for real-time information, especially in case of radiological relevant events
- **Exchange of information, knowledge and experience**

Challenges for the Regulatory Control on Radiation Protection

Focal point: **Exchange of information and experience**

- The main requirement for the regulatory control in a federal state is to guarantee the uniformity of the administrative actions in the Länder.



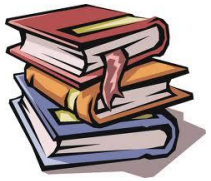
- Due to the high number of involved bodies the exchange of information and experience have a high importance for the uniformity.
- Insights on the state of science and technology as well as information about the licensing and supervision process have to be exchanged
- Conservation and improvement of competences

Instruments for Information and Experience Exchange

The accomplishment of the challenges to ensure proper licensing and supervision requires specific instruments.

Three instruments to support and improve the exchange of information and experiences:

- Handbook on licensing and supervision in radiation protection



- Seminar series on issues of licensing and supervision in radiation protection

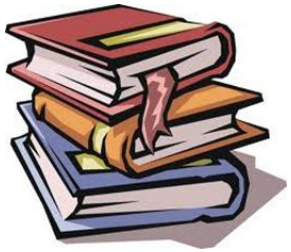
- Internet-based communication platforms

Handbook on licensing and supervision in radiation protection

- Contribution to the knowledge and experience exchange
- Promotes synergies between the competent regulatory bodies in a single federal state and between the federal states.
- Suitable format to organise documents in the sense of a collection of instructions, rules and checklists.
- A modular design for such a handbook seems reasonable
  - basically the same structural design for the handbook in all federal states
  - supplemented by the respective special interests of a Land and its competent regulatory bodies

Handbook on licensing and supervision in radiation protection

- General module may include basic topics in terms of licensing and supervision, which are the same for every Land.
  - legal principles,
  - definitions and explanations,
  - relevant federal agencies and contacts.



- A module "Land" of the handbook can be tailored to the individual needs of a respective Land.
- Implementation should be realised on a digital basis - accessible via a shared server,
  - the regulatory bodies maintain the content,
  - the general module could be maintained by the regulatory body of the Federal Republic.

Seminar series on issues of licensing and supervision in radiation protection

Already today

- For staff members of the federal ministry and higher regulatory bodies of the federal sates, some meetings are held to discuss recent topics in the field application of radiation protection, but:
  - Due to shortness of time and variety of issues addressed, time for exchange of experience is limited.
  - Most of the topics address superior aspects of radiation protection but not issues of the daily regulatory work, especially of the subordinate regulatory bodies.
- To allow a larger number of staff members to participate in the information and experience exchange, some individual Länder already today perform internal training courses .

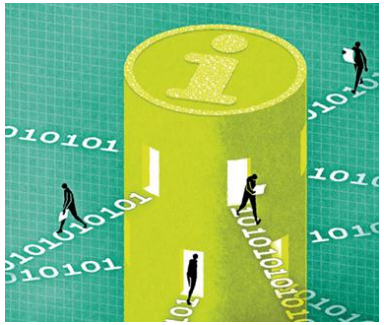
Seminar series on issues of licensing and supervision in radiation protection

Identified and foreseen improvements

- Establishing a platform for staff members of the subordinate regulatory bodies to participate in an experience and information exchange with staff members in other federal states
- Creating a new seminar series with participants from all Länder with the focus on issues of daily regulatory work related to licensing and supervisor in radiation protection
- Such a series of seminars will
  - Support dissemination of knowledge and
  - Stimulate the experience and information exchange

Internet-based communication platform

An internet-based communication platform could aid in the exchange of information and experiences between staff members of the regulatory bodies:



- Share information on new developments and techniques in the field of application of ionising radiation
- Make experiences available and findings gained during inspections
- Exchange of standardised licences or checklists
- Establishment of forums to discuss emerging questions and challenges

Conclusion

- GRS and German Länder analysed current challenges for regulatory control for radiation protection, related to
  - Inspections,
  - Organisation of data,
  - Communication with the public, and
  - Information and experience exchange.
- Instruments to support and improve the exchange of information and experiences are
  - A handbook on licensing and supervision,
  - Seminar series to address aspects of daily regulatory activities, and
  - Internet-based platform, to allow an real-time exchange of information, working documents etc. related to the regulatory functions.

Thank you for your attention!