



Bundesamt für
kerntechnische
Entsorgungssicherheit

The Development of Guidelines for the Transport of Nuclear Material in Germany

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and Nuclear Facilities

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The Federal Republic of Germany



<https://www.weltkarte.com/typo3temp/images/bundeslaender.png>

- 16 Federal States (Bundesländer)
- Supervisory of Transports lies within the Länder authorities

Transports in and through Germany

- About **400** transports of Nuclear Material each year
- Most of them **Category III**
- Nuclear Material is mostly transported by **road**
- Most of them are **transits**
 - Poland -> Belgium
 - Czech Republic -> Netherlands
- To transport Nuclear Material in or through Germany a **license** is required



Transports in and through Germany

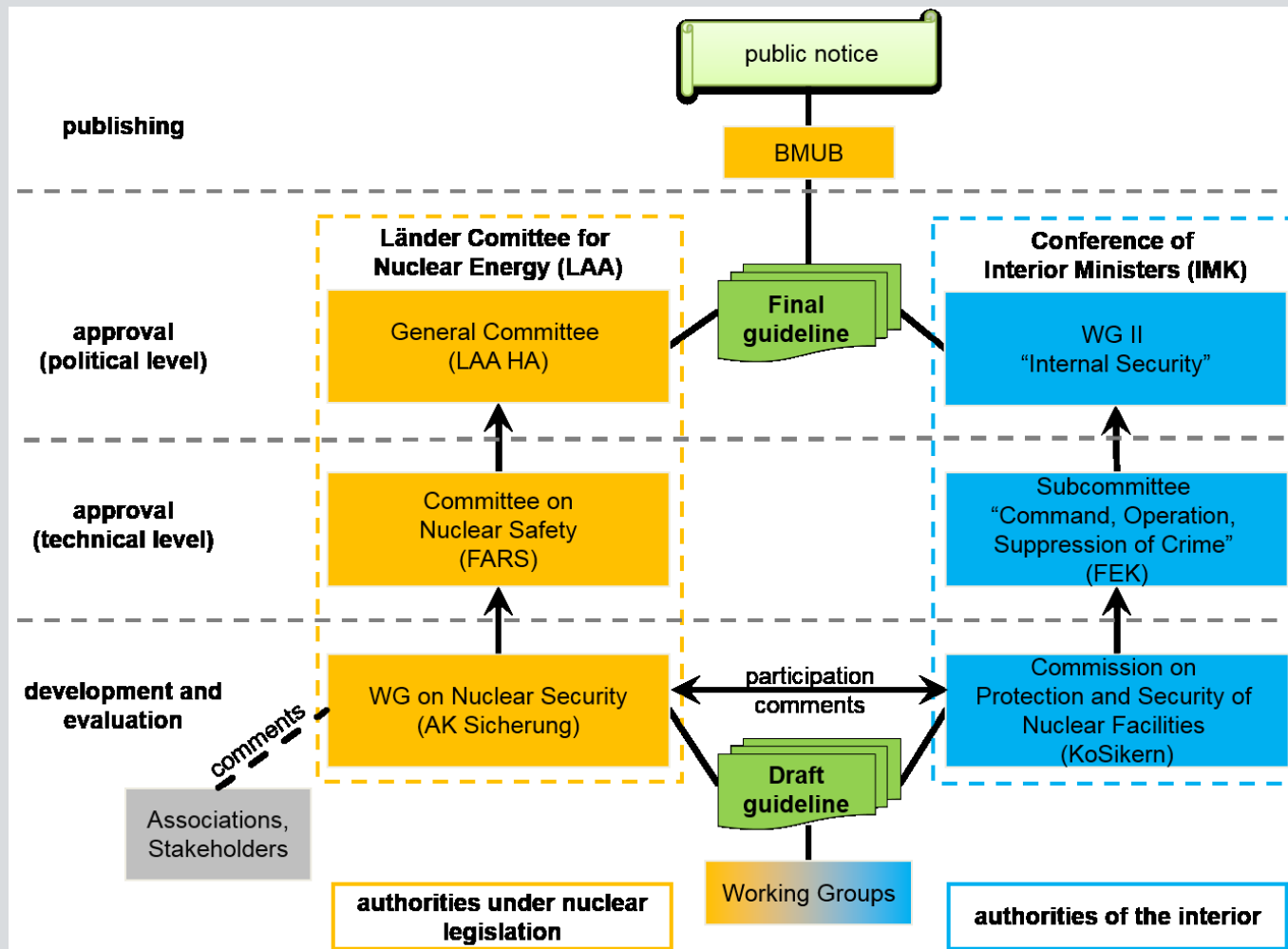
- Act on the Peaceful Utilisation of Atomic Energy and the Protection against its Hazards (Atomic Energy Act, AtG)
- §4 AtG describes the requirements
- Security measures have to be fulfilled according **§4 no. 5 AtG**
 - If *“the necessary protection has been provided against disruptive action or other interference by third parties”*, the license shall be granted



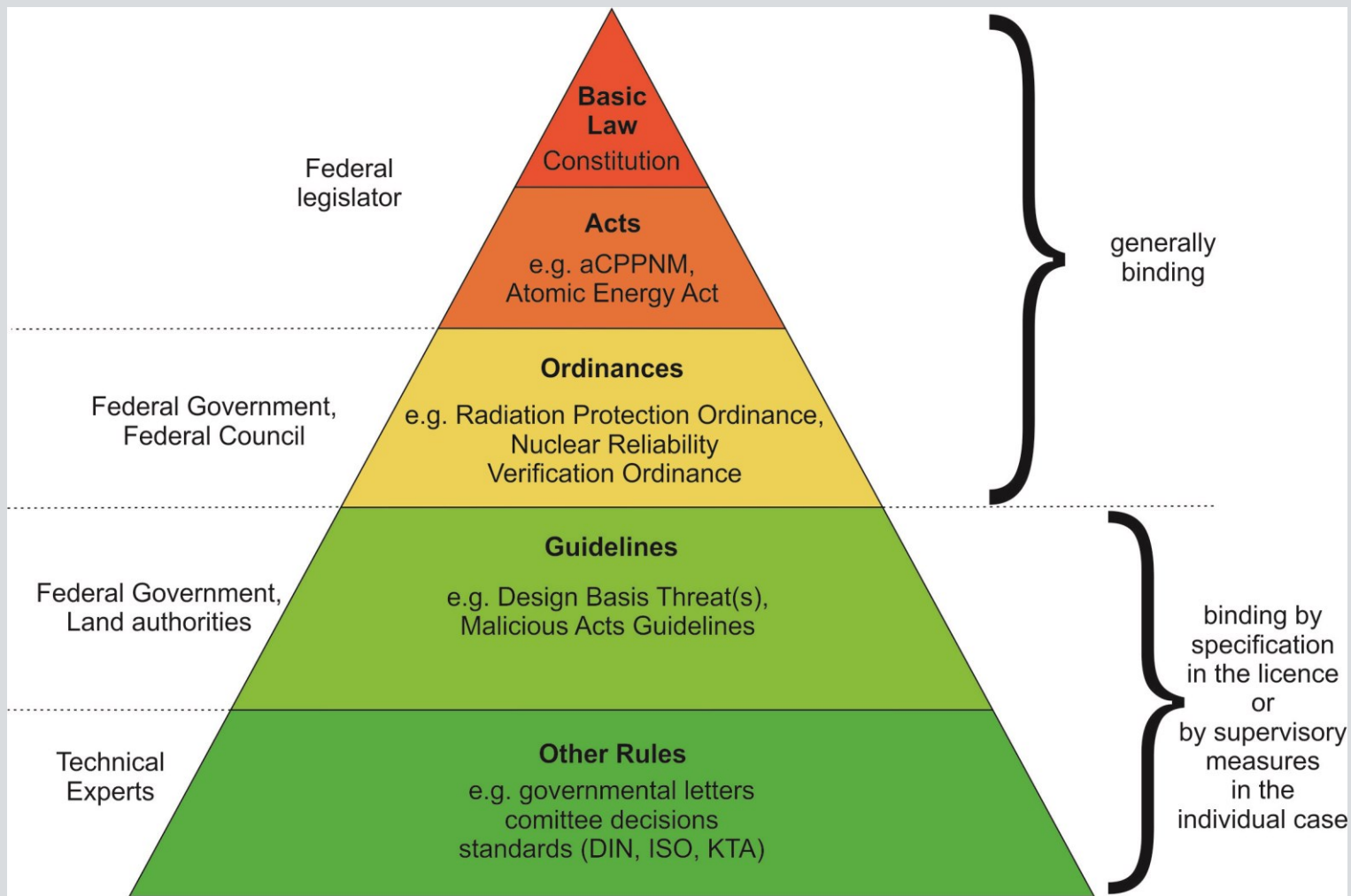
Development of German Guidelines

- Basic for Guidelines is the national Design Basis Threat (DBT)
- Evaluation every 3 years or in case of an unusual new finding
- If DBT changes
 - ➔ Guideline rework
 - ➔ cooperative working group of authorities of the interior and the Länder authorities

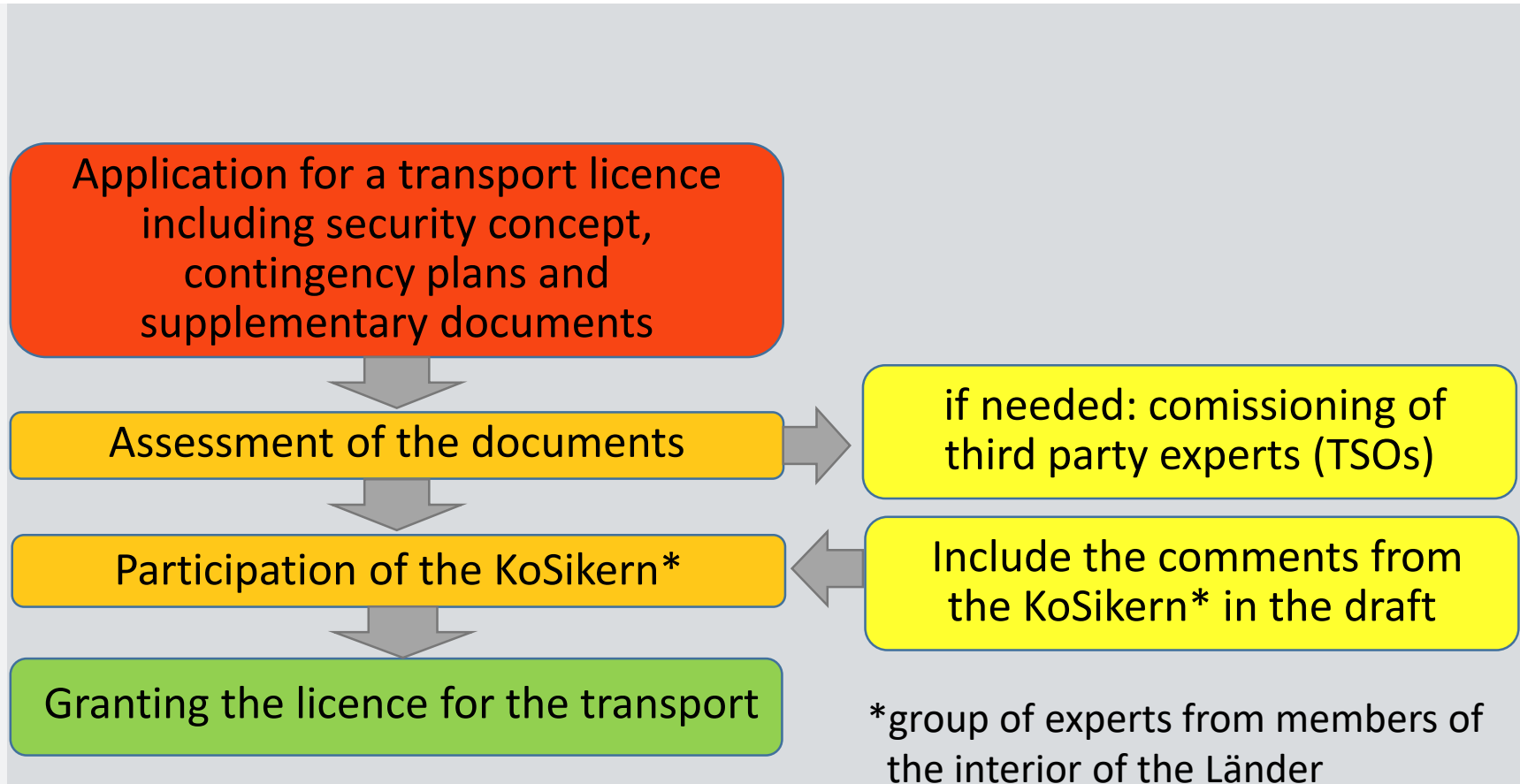
Development of German Guidelines



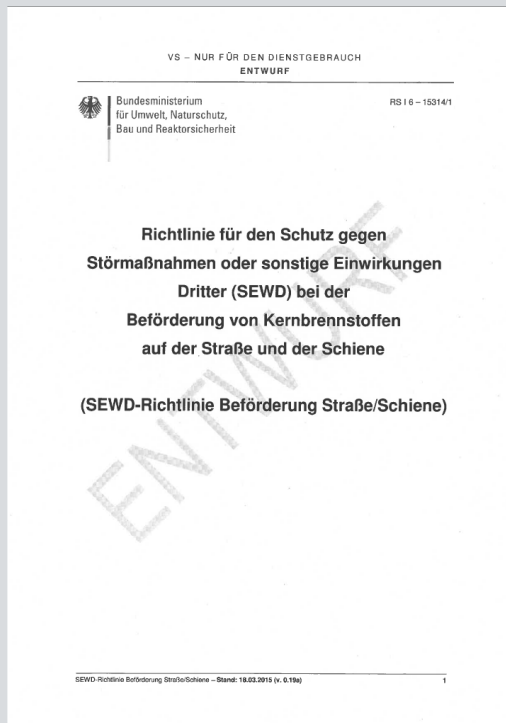
German Guidelines in Context of Laws



Licensing Process according to §4 AtG



The New Transport Guideline



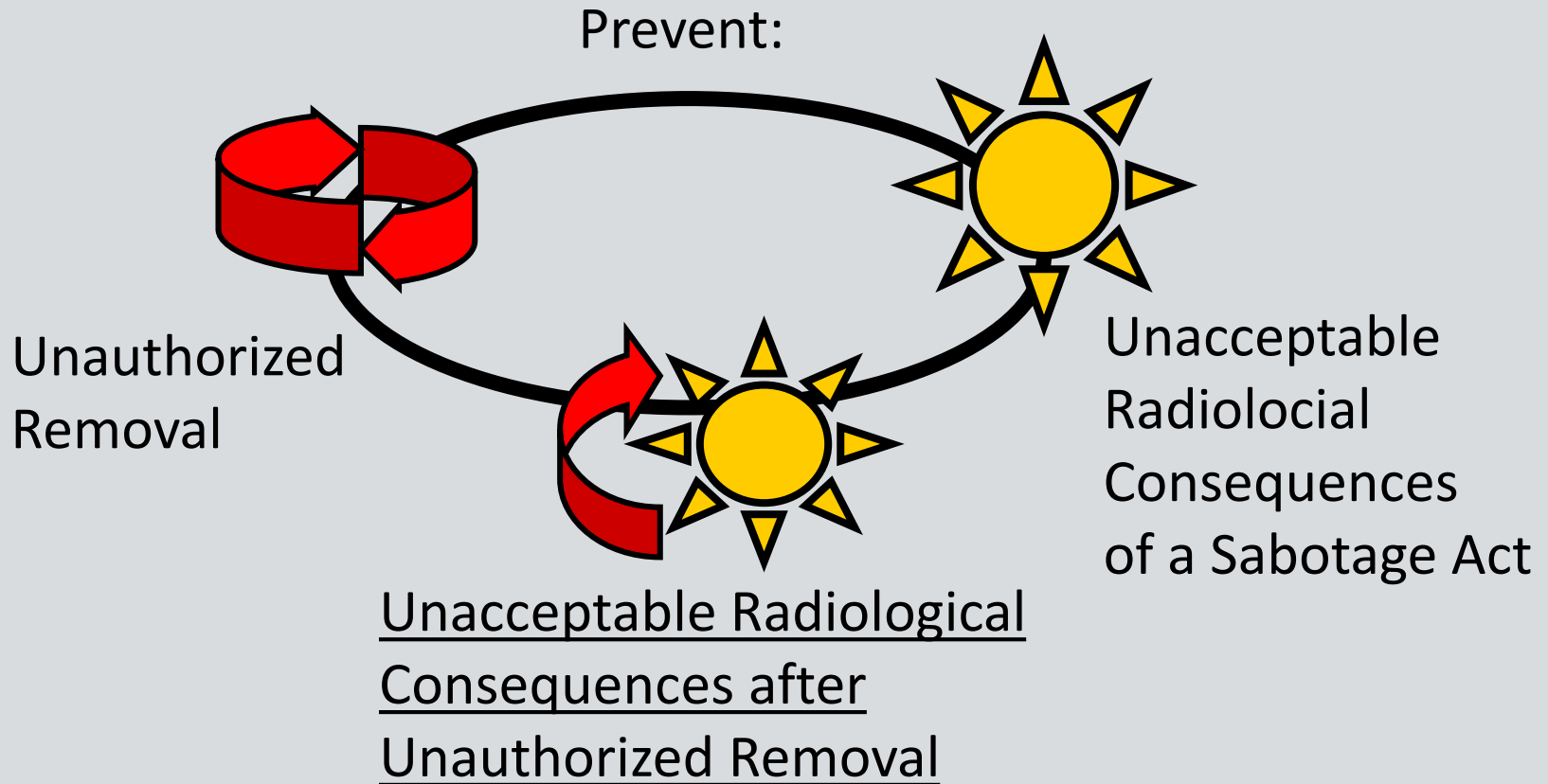
- Guideline especially for transports on road and by train
- Nuclear Material is categorized analog to NSS 13
- Guideline is classified as *restricted*

The New Transport Guideline

- Contains measures for the different parts of the transport (e.g. vehicle, transport control center) ordered by category of the material
- Contains chapters with requirements for
 - organisation
 - over all measures
 - cooperative work with police forces
- Requirements in general higher compared to old Guideline

The New Transport Guideline - Big Point 1

New General Objective:



The New Transport Guideline - Big Point 2

- New categorization:

Calculation of radiological consequences in case of a Sabotage Act

- ➔ Consequences higher than defined value
- ➔ Categorization in Release-Relevant Material
- ➔ Additional measures are required
(e.g. second protection layer around the cask)

- Additional talk about the calculations by Ms. Döhler, GRS

Summary

- German DBT evaluation every 3 years leads to rework of guidelines
- Guidelines are created in close collaboration between the Federal State and the Länder
- TSOs and interior of the Länder are involved in licensing process
- Guidelines contain measures ordered by the category of the Nuclear Material (analog to NSS 13)
- New Transport Guideline contains third General Objective and requires additional calculations of the radiological consequences

**Thank You for your
Attention!**