



Schweizerische Eidgenossenschaft  
Confédération suisse  
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Eidgenössisches Nuklearsicherheitsinspektorat ENSI

# Update on Swiss Nuclear Regulations

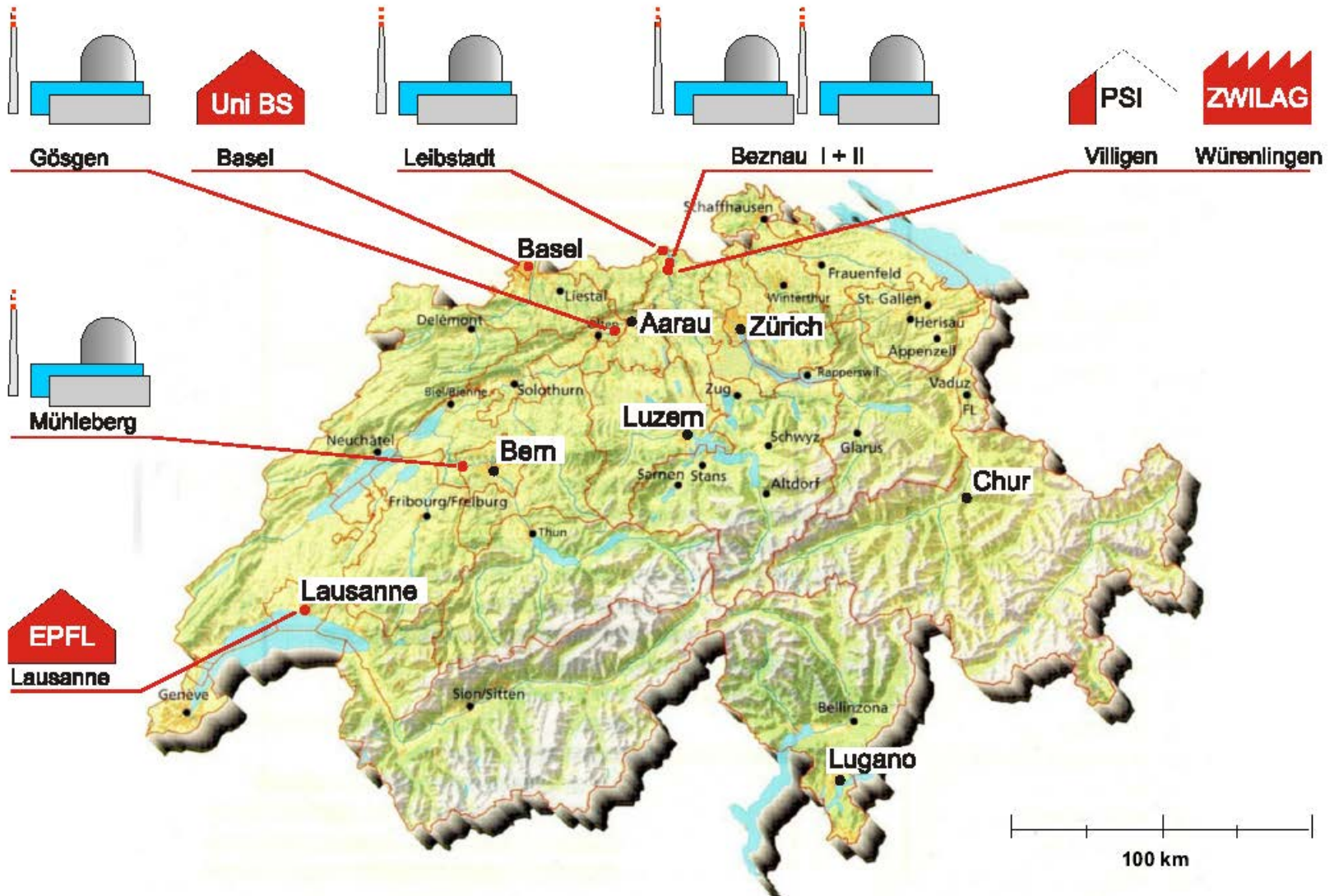
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ENSI



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Swiss Federal Nuclear Safety Inspectorate



# Nuclear Facilities in Switzerland



# Regulations for Swiss Nuclear Installations

**Legislation** (acts and ordinances): No  
justification required

**ENSI Guidelines:** No justification required

**Designated Principles:** Justification required

**Other Principles:** Justification required

Involvement in the development of international standards as a benefit for ENSI and the utilities

# Types of ENSI Guidelines

## new ENSI guidelines

Type A: Assessment of facilities

Type B: Surveillance of operations

Type G: General requirements

Examples: ENSI-B09, ENSI-G14

## older guidelines: Type R

Example: HSK-R-07



# Changes in Legislation

## Nuclear Energy Act

- no new builds
- no reprocessing of spent fuel
- status of the nuclear safety commission

## Nuclear Energy Ordinance

- changes according the new nuclear energy act

## Radiation Protection Ordinance

- harmonization with ICRP 103 and Basic Safety Standards



# New ENSI Guidelines

## ENSI-A08

- Source term analysis

## ENSI-G02

- Design basis for nuclear power plants

## ENSI-G17

- Decommissioning of nuclear installations

## ENSI-G20

- Reactor fuel



# Decommissioning of nuclear installations (1)

## Guideline ENSI-G17

### Requirements for decommissioning

- 1 Phase concept
- 2 Final shutdown
- 3 Post-shutdown period
- 4 Demonstration of safety and security
- 5 Radiological characterization of the entire installation
- 6 External storage of nuclear materials
- 7 Conditioning and temporary storage
- 8 Human and organizational factors
- 9 Radiation protection
- 10 Emergency preparedness



# Decommissioning of nuclear installations (2)

## Guideline ENSI-G17

### **Requirements for decommissioning (cont.)**

- 11 Reporting and duty of notification
- 12 Archiving of documents
- 13 Deferred dismantling

### **Requirements for the application documents**

- 1 Decommissioning concept
- 2 Decommissioning plan
- 3 Post-shutdown period
- 4 Decommissioning project
- 5 Phase 1 and subsequent phases
- 6 Final report





# Revision of the Radiation Protection Legislation

- 2007: ICRP 103 published
- 2012: revised IAEA Basic Safety Standards
- 2014: new EU Basic Safety Standards

revision process of all ten Swiss RP ordinances since 2010

main goal: harmonization with new ICRP recommendations, IAEA-BSS and EU-BSS as far as useful

## Major changes

- three exposure situations
- lower clearance criteria
- type A and type B workers
- dosimetry of flight personnel
- reduced dose limit for the lens of the eye

public consultation until February 15 this year

final versions not before 2017 expected



# Thank you for your attention !





# Questions?

