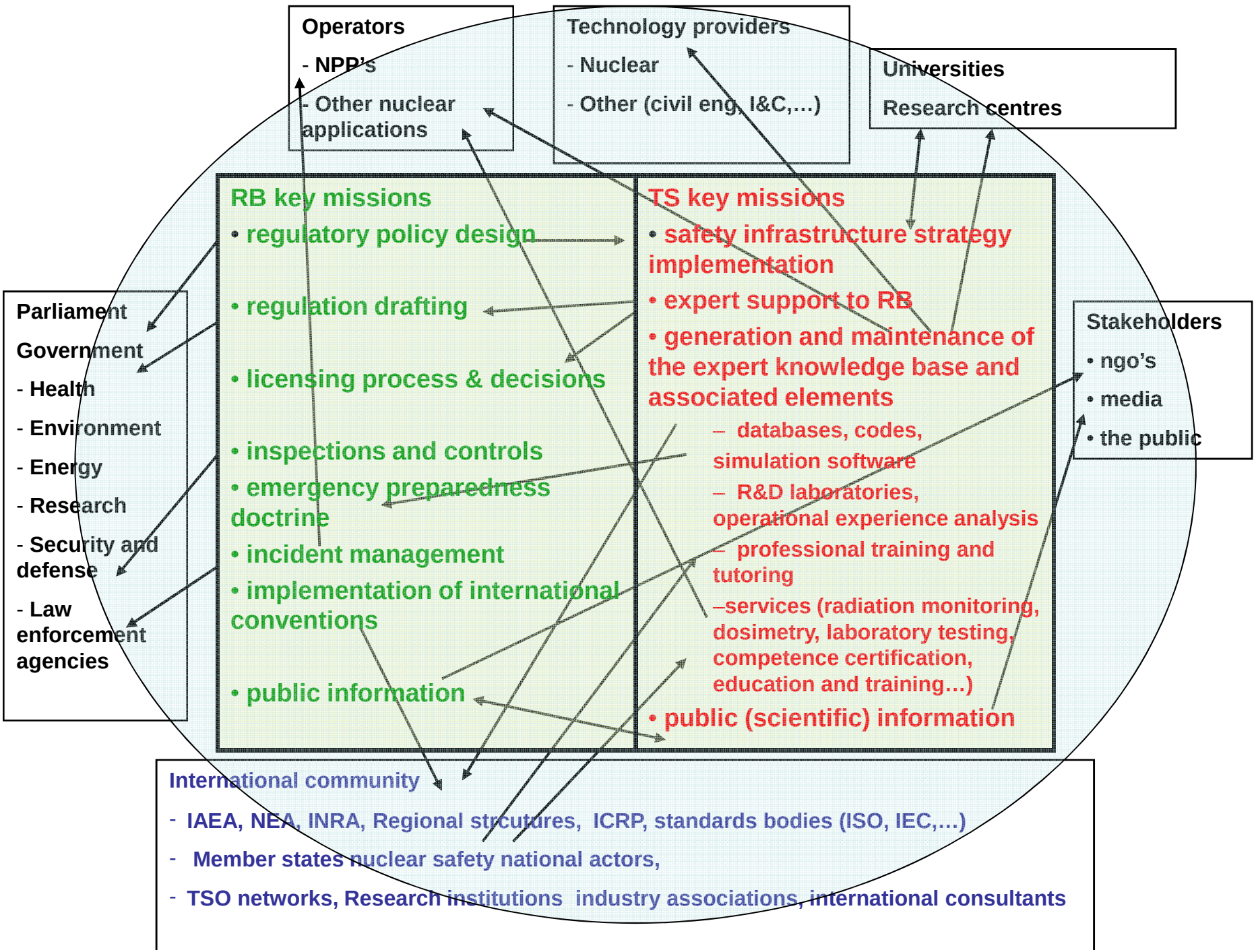
Operators
- NPP's
- Other nuclear applications
Technology providers
- Nuclear
- Other (civil eng, I&C,…)
Universities
Research centres
RB key missions
• regulatory policy design
• regulation drafting
• licensing process & decisions
• inspections and controls
• emergency preparedness doctrine
• incident management
• implementation of international conventions
• public information
TS key missions
• safety infrastructure strategy implementation
• expert support to RB
• generation and maintenance of the expert knowledge base and associated elements
– databases, codes, simulation software
– R&D laboratories, operational experience analysis
– professional training and tutoring
–services (radiation monitoring, dosimetry, laboratory testing, competence certification, education and training…)
• public (scientific) information
Parliament
Government
- Health
- Environment
- Energy
- Research
- Security and defense
- Law enforcement agencies
Stakeholders
• ngo's
• media
• the public
International community
- IAEA, NEA, INRA, Regional strcutures, ICRP, standards bodies (ISO, IEC,…)
- Member states nuclear safety national actors,
- TSO networks, Research institutions industry associations, international consultants

Safety is knowledge based: what does this mean ?

Barrier effectiveness and defense in depth

- Design safety of processes, components and safety equipment
- Neutronics/criticality
- Ageing
- Radiation protection design
- Discharge and waste management
- Integration of concepts, including security

Understanding chroni

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- Radioecology
- Radiobiology
- effects
- Epidemiology

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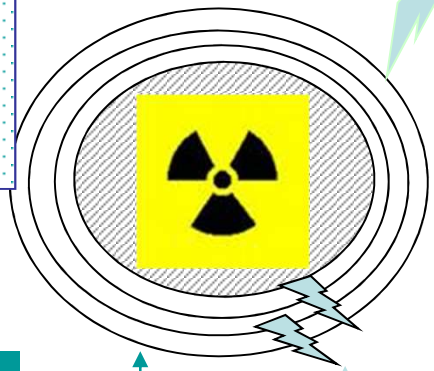
- Metrology/Dosimetry
- Workers
- Patients
- Public
- Environment
- Polluted sites



Societal approach to risk

- Communication/information/transparency
- Pluralism/risk control
- Risk perception
- Economics of nuclear risks
- Local economy sensitivity

Barrier integrity during accident situation

- Natural phenomena (earthquake, flooding...)
- Predictable technological events (internal: fuel, external: grid...)
- Fire
- Human and organizational factor
- Malicious acts
- Theft of nuclear materials/radioactive sources

Emergency situations

Technical diagnostics

- Current and future state of safety barriers, components and safety equipment
- Mitigation systems
- Anticipation of radioactive releases /environmental dispersion

ostics
logy

(external/internal)
radiation doses
s/therapies