

Review and Revision of the International Basic Safety Standards

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IAEA

International Atomic Energy Agency

The importance of radiation safety to the IAEA

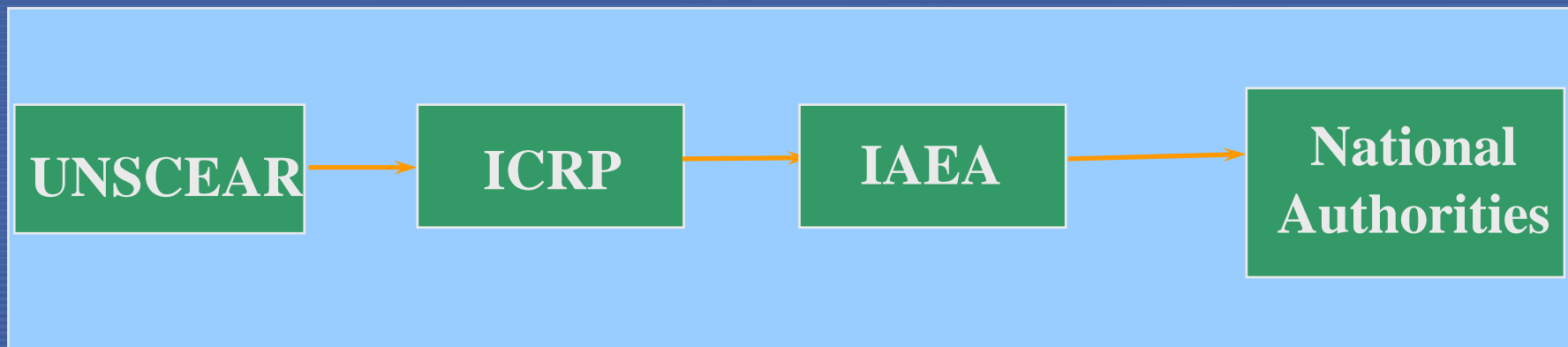
- IAEA Statute came into force in 1957
- Basic Safety Standards
 - 1962, 1967, 1982
- International Basic Safety Standards
 - 1996 (6 co-sponsors)
 - One of the crown jewels of the Agency
 - National legislation of member states usually based on or consistent with the BSS

The link with ICRP

- In 1960: ... *the Agency's basic safety standards will be based, to the extent possible, on the recommendations of .. ICRP*
- The subsequent revisions of the BSS followed the development of new ICRP recommendations

Radiation Safety Standards.

- UNSCEAR - basic biological data
- ICRP - protection principles
- IAEA - safety standards
- Member States - regulations, working rules



Why revise the BSS?

- BSS (SS115) is 10 years old and due for *review*
- Conclusions of review conducted by RASSC:
 - No single urgent need for change, but...
 - Some improvements could be made
 - Need to bring BSS into current *Safety Standards Series*
 - Need to take note of new *Safety Fundamentals* and anticipated new ICRP *Recommendations*
 - which, overall, establish a case for *revision* .

BSS review by Committees

- BSS review was the major agenda item for RASSC and WASSC at their April meetings. (NUSSC and TRANSSC were informed at their meetings earlier in the year and had access to all materials)
- RASSC/WASSC discussion included:
 - One day of feedback from RASSC and WASSC members on their national use of the BSS
 - Additional reports from countries normally unable to attend Committee meetings (attendance supported by TC funding)
 - IAEA experience from provision of its safety services

Guidance from RASSC and BSS Secretariat

- Retain BSS role as the international benchmark for radiation safety standards across all fields
- Recognize the need for stability in international standards; so be conservative and justify proposed changes
- Maintain close connection with ICRP
- Keep cosponsors (WHO, PAHO, ILO, NEA, etc) and all Safety Committees fully involved.
- Seek and take note of feedback from Member States on current BSS
- Assist developing countries to participate.



Key features of Basic Requirements

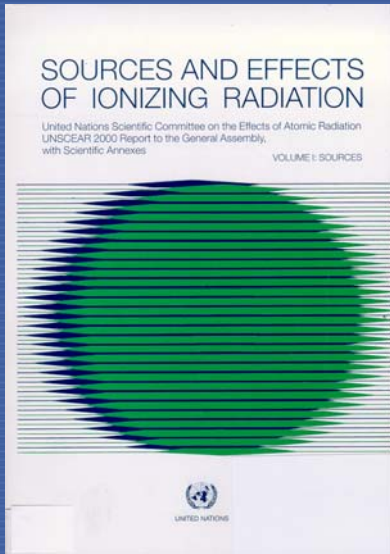
The future Basic Requirements will:

- underpin Agency approach to radiation safety in every domain.
- be classified as a general safety standard due to cross cutting nature
- The need to maintain stability in regulatory systems will be taken into full account.

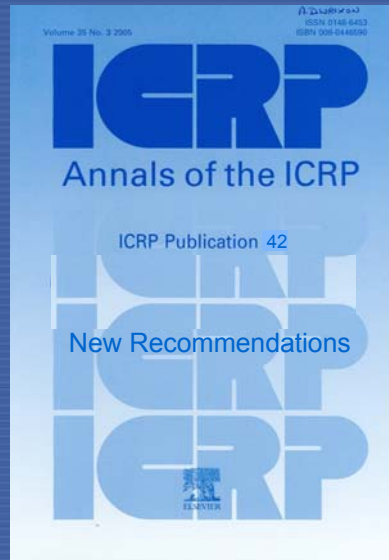
Key features (cont.).

- Experience gained in Member States will be taken into full account.
- Security measures that are essential components of safety will be included.
- The need for radiation protection of non – human species to be addressed but it is too soon to develop requirements.

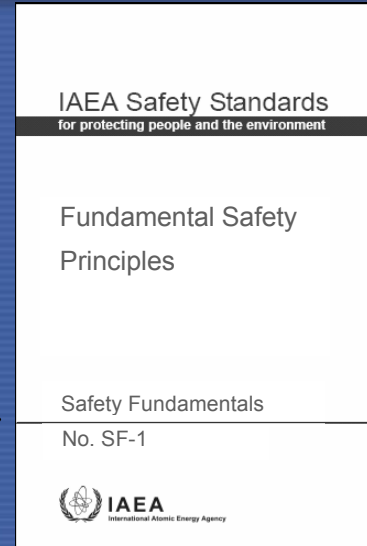
UNSCEAR - ICRP - IAEA



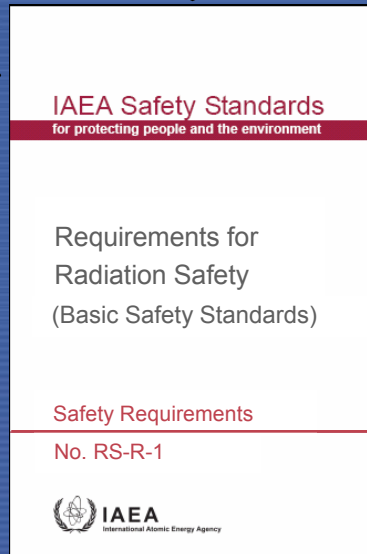
Effects of radiation



Recommendations for protection

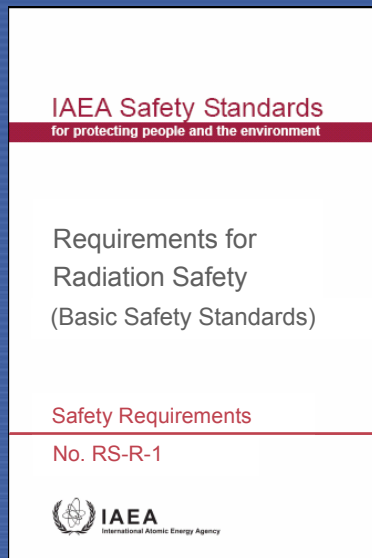


Essential principles



Essential requirements

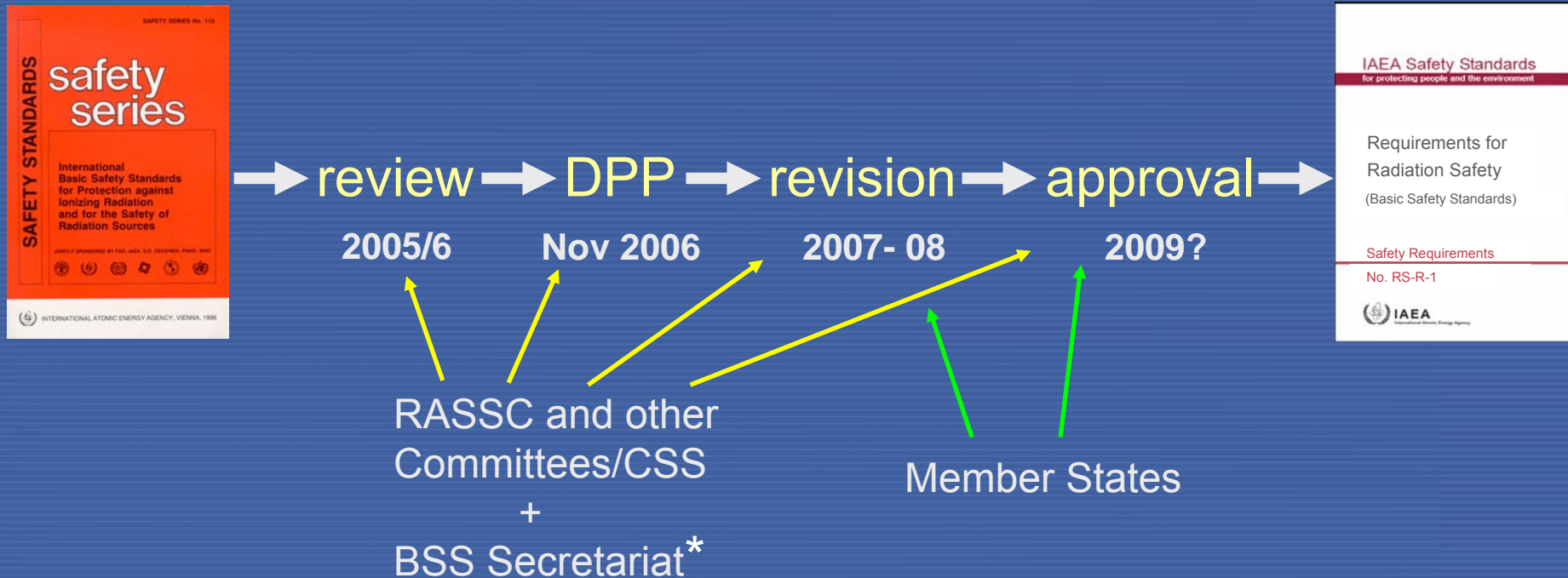
Comprehensive character of the new BSS



- Regulatory control of exposure
- Occupational and public exposure from practices
- Safety of sources
- Safety of radioactive waste
- Medical exposure
- Existing exposure
- Emergency preparedness
- Rehabilitation

The essential protection and safety requirements of the BSS underpin all circumstances of exposure to radiation

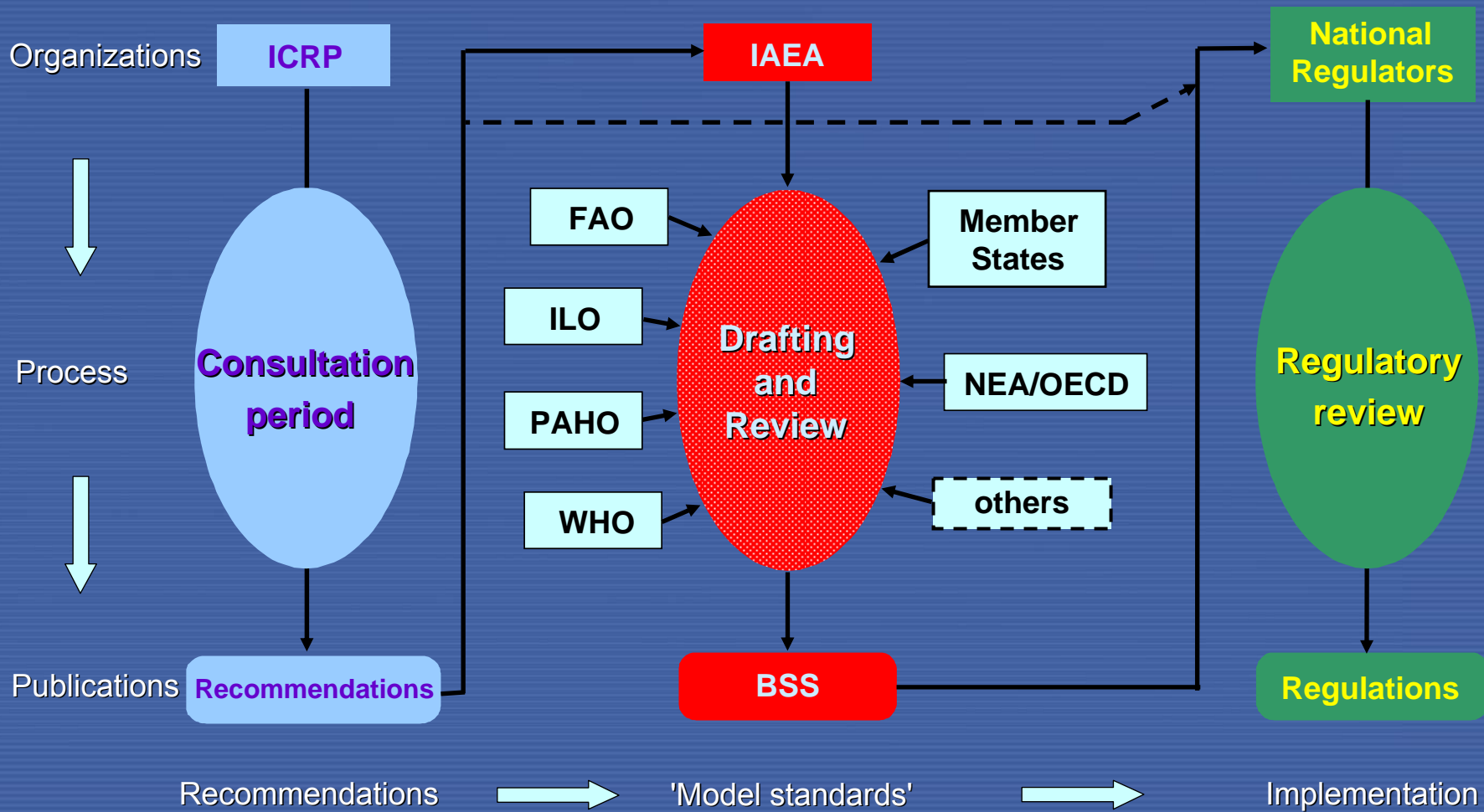
Process of BSS review and revision



* participants include:

FAO, IAEA, ILO, OECD/NEA, PAHO, WHO
EC, ICRP, IRPA, UNEP

From recommendations to regulations



Implications for national regulators

(preliminary) general conclusion:

- If a country has established a system of radiation protection consistent with ICRP60 and the current Basic Safety Standards, that system will also be consistent - in the level of safety provided - with the new ICRP Recommendations and the new BSS
- It is likely that there will be no urgent need to change national regulations simply to bring terminology and detailed practice into line with new ICRP Recommendations and a new BSS