

60 Years

Atoms for Peace and Development

# Factsheet for Decision Makers

## Radiation Protection of the Environment

## RADIATION PROTECTION OF THE ENVIRONMENT

### Why is it important?

The environment comprises the conditions under which people, animals and plants live or develop and which sustain all life. Until recently, it was assumed that the system of radiological protection provided sufficient protection for the environment, including animals and plants.

### What do I need to know?

The International Basic Safety Standards allows the environment to be considered in a more explicit manner and ultimately reinforces the system of radiological protection. Protection of people and the environment against radiation risks and, in particular, protection against risks that may transcend national borders and may persist for long periods of time. This is important in achieving equitable and sustainable development.

International trends are towards an increasing awareness of the need to protect the environment. This substantiates the need to be able to demonstrate, rather than to assume, that the environment is being protected, irrespective of any human connection. We need flexibility in incorporating the results of environmental assessments into decision making processes in a manner that is commensurate with the radiation risks.

Radiological impacts in a particular environment constitute only one type of impact and, in most cases, may not be the dominant impact of a particular facility or activity.

Protection of the environment is usually accomplished by means of an environmental impact assessment that identifies the target(s), defines the appropriate criteria for protection, assesses the impacts, and compares the expected results of the available protection options.



**The International Basic Safety Standards (BSS) are the international benchmark for radiation safety. The BSS are used in many countries as the basis for national legislation to protect workers, patients, the public and the environment from the risks of ionizing radiation.**

### IAEA Safety Standards for protecting people and the environment

#### Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards

Jointly sponsored by  
EC, FAO, IAEA, ILO, OECD/NEA, PAHO, UNEP, WHO



General Safety Requirements Part 3  
No. GSR Part 3



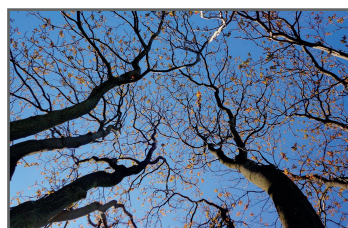
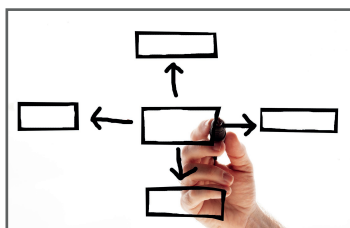
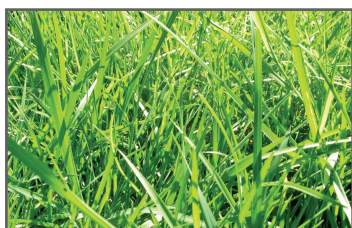
IAEA  
International Atomic Energy Agency



**The BSS are based on the most recent scientific evidence on the effects of ionizing radiation and take into account practices and experiences from around the world in the use of ionizing radiation and nuclear techniques. Eight international organizations sponsor the BSS.**



### What actions are required?



The regulatory body is responsible for ensuring that the assessment of impacts on the environment is viewed in an integrated manner with other components of the system of protection and safety.

National authorities need to consider an integrated perspective taking into account the need to prevent unauthorized acts with potential consequences for and via the environment.

The regulatory body needs to consider the potential for build-up and accumulation of long lived radionuclides released to the environment.

National authorities need to ensure the sustainability, now and in the future, of agriculture, forestry, fisheries and tourism, and of the use of natural resources, when establishing regulations.



### Resources

Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards, No. GSR Part 3  
[http://www-pub.iaea.org/MTCD/publications/PDF/Pub1578\\_web-57265295.pdf](http://www-pub.iaea.org/MTCD/publications/PDF/Pub1578_web-57265295.pdf)

Regulatory Control of Radioactive Discharges to the Environment  
[http://www-pub.iaea.org/MTCD/Publications/PDF/P088\\_scr.pdf](http://www-pub.iaea.org/MTCD/Publications/PDF/P088_scr.pdf)