

WHY AN EFFECTIVE NATIONAL REGULATORY INFRASTRUCTURE IS ESSENTIAL FOR A COUNTRY'S RADIATION PROTECTION SYSTEM

D. Mroz; E. Reber; H. Suman; I. Shadad; T. Hailu; H. Mansoux

International Atomic Energy Agency, Vienna

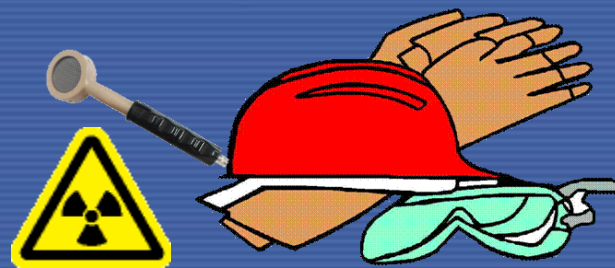


IAEA

International Atomic Energy Agency

Scope of the presentation

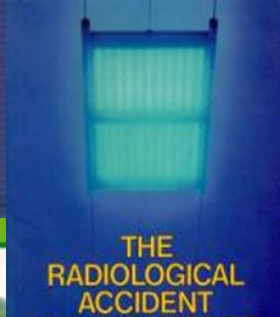
- Consequences of inadequate infrastructure
- Elements of effective regulatory infrastructure
- Impact of the infrastructure on safety
- IAEA contribution to global safety



Benefits versus hazards

Benefits

Risks



THE RADIOLOGICAL ACCIDENT



The Radiological Accident in Samut Prakarn



The Radiologic Accident in Yanango

The Radiologic Accident in Lilo

INVESTIGATION OF AN ACCIDENTAL EXPOSURE OF RADIOTHERAPY PATIENTS IN PANAMA

Report of a Team of Experts, 26 May-1 June 2001



Safety Reports Series No. 17

in Goiânia



LESSONS LEARNED FROM ACCIDENTAL EXPOSURES IN RADIOTHERAPY

Examples of reasons for accidents

- Unclear rules
- Undefined responsibilities
- Lack of procedures
- Inadequate training
- Equipment
- Lack of safety culture
- Negligence



Ineffective regulatory control



Elements of regulatory infrastructure...

- Radiation safety law
- Regulations
- Regulatory body
- Coordination

Framework

GRADED
APPROACH

Regulation

Activities

Authorisation
Inspection
Enforcement
Information management



Increasing Risk



... and its impact on safety in the field

- Radiation safety law
- Regulatory body
- Regulations
- Coordination

Framework

Activities

- Authorisation
- Inspections
- Enforcement
- Information management



Workplace safety

- Procedures
- Qualifications
- Safety provisions
- Source inventory

Safety culture



International Atomic Energy Agency



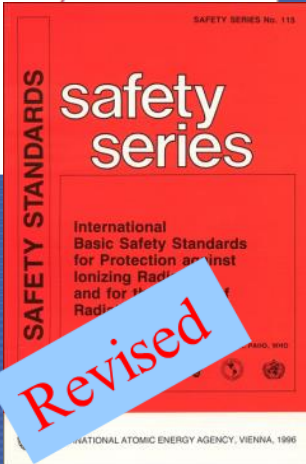
IAEA Safety Standards

for protecting people and the environment

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

INTERIM EDITION

General Safety Requirements Part 3
No. GSR Part 3 (Interim)



IAEA Safety Standards

for protecting people and the environment

Governmental, Legal and Regulatory Framework for Safety

General Safety Requirements Part 1
No. GSR Part 1



IAEA Safety Standards

for protecting people and the environment

Fundamental Safety Principles

Jointly sponsored by
Eurasian FAO IAEA ILO IMO OECD/NEA PAHO UNEP WHO

Safety Fundamentals
No. SF-1

IAEA Safety Standards

for protecting people and the environment

Categorization of Radioactive Sources

Safety Guide
No. RS-G-1.9



CODE OF CONDUCT ON THE SAFETY AND SECURITY OF RADIOACTIVE SOURCES

放射源安全和保安行为准则

CODE DE CONDUITE SUR LA SÛRETÉ ET LA SÉCURITÉ DES SOURCES RADIOACTIVES

КОДЕКС ПОВЕДЕНИЯ ПО ОБЕСПЕЧЕНИЮ БЕЗОПАСНОСТИ И СОХРАННОСТИ РАДИОАКТИВНЫХ ИСТОЧНИКОВ

CÓDIGO DE CONDUCTA SOBRE SEGURIDAD TECNOLÓGICA Y FÍSICA DE LAS FUENTES RADIATIVAS

مدونة قواعد السلوك بشأن أمن المصادر المشعة وأمنها



GUIDANCE ON THE IMPORT AND EXPORT OF RADIOACTIVE SOURCES

放射源的进口和出口导则

ORIENTATIONS POUR L'IMPORTATION ET L'EXPORTATION DE SOURCES RADIOACTIVES

РУКОВОДЯЩИЕ МАТЕРИАЛЫ ПО ИМПОРТУ И ЭКСПОРТУ РАДИОАКТИВНЫХ ИСТОЧНИКОВ

DIRECTRICES SOBRE LA IMPORTACION Y EXPORTACION DE FUENTES RADIATIVAS

معلومات توجيهية بشأن استيراد وتصدير المصادر المشعة



Revised version to be published



IAEA

<http://www-ns.iaea.org/standards>

IAEA services and tools

- Integrated Regulatory Review Services (IRRS)
- Advisory expert missions
- Review of laws and regulations
- Training courses and materials
- Self-Assessment methodology and Tool (SAT)
- Regulatory Authority Information System (RAIS)
- Radiation Safety Information Management System



Technical Cooperation programme

Infrastructure - prerequisite for supply of sources

Conclusions...1

- Effective national regulatory infrastructure is key to radiation safety at workplaces.
- Graded approach increases effectiveness of the regulatory oversight of the radiation safety.



Conclusions...2

- IAEA Safety Standards contribute to effective regulation and to global safety.
- The IAEA offers services and tools to strengthen regulatory infrastructure worldwide.

...Thank you for your attention



Control of Radiation Sources Unit

Hilaire Mansoux



radiation.sources@iaea.org



Eric Reber



Hazem Suman



Ibrahim Shadad



Teodros Hailu



Dariusz Mroz