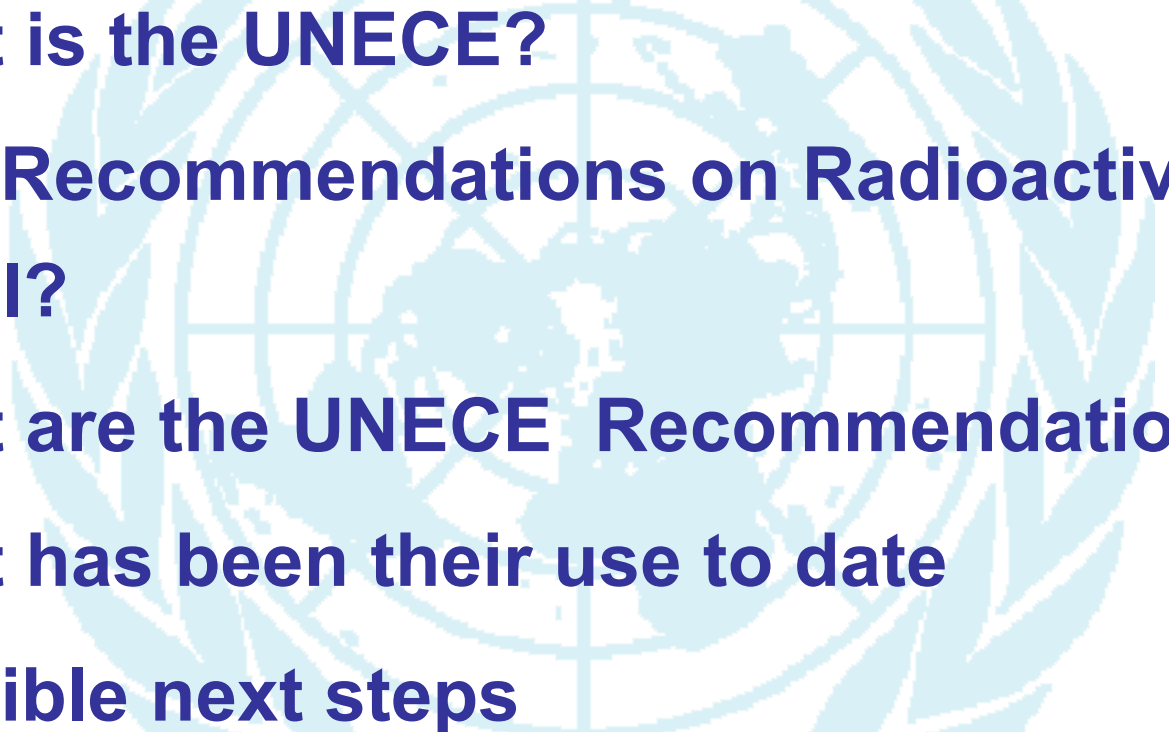




UNECE Recommendations on Monitoring and Response Procedures for Radioactive Scrap Metal

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Structure

- 1. What is the UNECE?**
 - 2. Why Recommendations on Radioactive Scrap Metal?**
 - 3. What are the UNECE Recommendations?**
 - 4. What has been their use to date**
 - 5. Possible next steps**
- 

1. What is the UNECE?

- United Nations Economic Commission for Europe
- One of the 5 regional commissions of the UN
- Inter-governmental body of 56 countries: Europe, central Asia and North America
- Forum for economic cooperation (eg: in *energy, environment, housing and land management, population, trade, and transport*)
- Works closely with the industry in areas like trade, transport and environment.

2. Why Recommendations on Radioactive Scrap Metal...?

- Affects everyone - private sector, governments, consumers etc..
- Consumers and industry want “radiation-free” goods
- Recycling on the rise -> **74% less energy and 86% less emissions (iron and steel)**
- Transport and trade concern: more and more transported by land and sea
-> **Annually: World: 184 Mio tonnes; EU: 68 Mio tonnes; CIS: 21 Mio tonnes**
- Decommissioning of sites with potential radiation hazards
- Increasing detections and better detectors
- Potentially major economic, financial and trade consequences -> **cost of clean up in \$10s of millions**
- Health, environmental and security concerns

2. Why Recommendations on Radioactive Scrap Metal...?

1999

UNECE Seminar on Radioactively contaminated scrap metal (Czech Republic)

2000/01

UNECE, EC and IAEA publication “Report on the Improvement of the Management of Radiation Protection in the Recycling of Metal Scrap”

2003/04

1st Session UNECE Group of Experts to discuss **policies and experiences** in monitoring & interception of radioactively contaminated scrap metal & to explore ways to facilitate international trade and transport of scrap metal

2005/06

2nd **UNECE Survey**

2006

2nd Session UNECE Group of Experts to agree on **Recommendations on Monitoring and Response Procedure for Radioactive Scrap Metal**

3. What are the “Recommendations”?

- Voluntary
- Compendium of best practices and alternatives
- Based on national/international regulations, standards and practices
- Expert opinion (regulatory and industry participation)
- Comprehensive approach (from demolition to melting)
- Identify responsibilities, procedures and mechanisms
- Encourage national and international collaboration
- Framework (for Governments and industry to develop their own strategies)

3. What are the “Recommendations”?

Substantive basis

- **Spanish Protocol** for Collaboration on Radiation Monitoring of Metals (1999)
- **UNECE, EC, IAEA Report** on Management of Radiation Protection in the Recycling of Metal Scrap (2001)
- **EU and IAEA** regulations and “guidance”
- Metal processing and recycling specifications (**industry**)



3. What are the “Recommendations”?

Objectives:

- To assist Governments and industries to effectively monitor, intercept and respond to radioactive material in scrap metal
 - by preventing its occurrence (**prevention**),
 - by monitoring shipments and facilities (**detection**),
 - by intercepting and managing any radioactive material in scrap metal (**response**).
- To encourage use of recycled materials
- To facilitate international trade and commerce of scrap metal without compromising safety

3. What are the “Recommendations”?

I. GENERAL PROVISIONS - (scope, definitions etc.)

II. FIELDS OF ACTION - A. Recommendations on **prevention** , B. Recommendations on **detection**, C. Recommendations on **response**

III. ADDITIONAL PROVISIONS Training and Information exchange

ANNEXES (Practical examples)

I. Certificate of Shipment Monitoring

II. Content of a Unified National Collaborative Scheme to the Discovery of Radioactive Scrap Metal

III. National Arrangements to Support Response to the Discovery of Radioactive Scrap Metal

IV. Monitoring Procedures Used for Scrap Metal Shipments

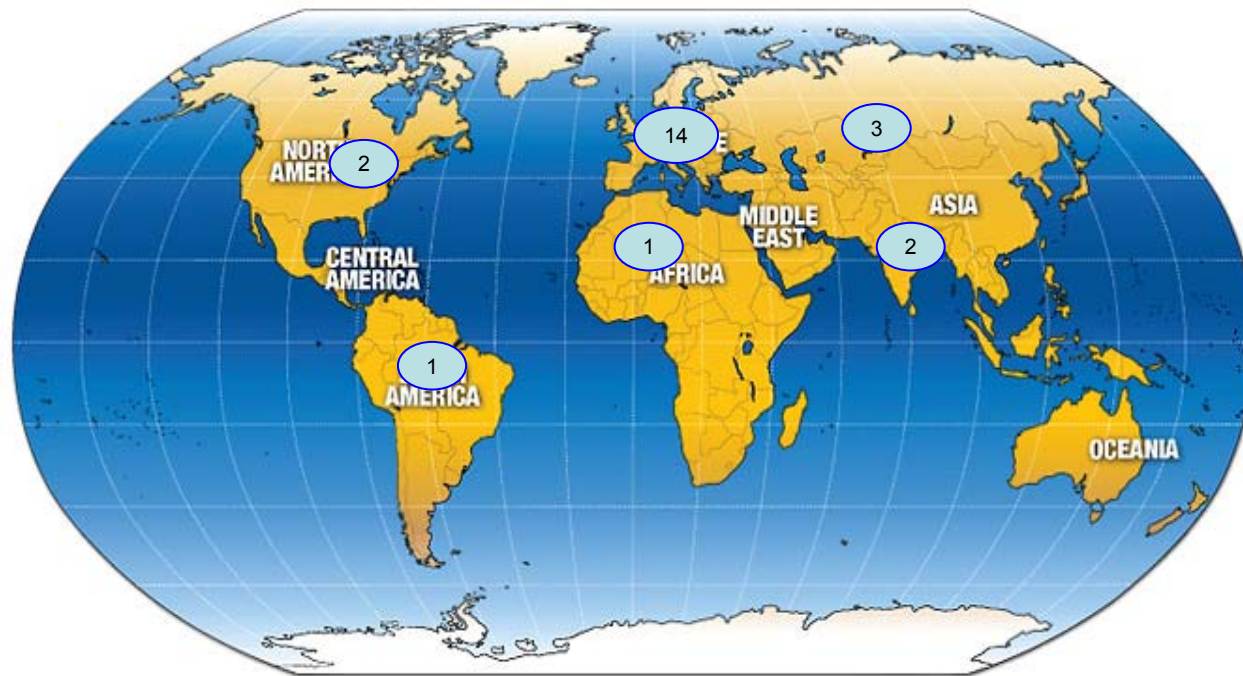
V. Form for Reporting Detected Radioactive Material in Scrap Metal

4. Use of the Recommendations

- Two years on, questionnaires sent out in **Sept. 08** to determine use of Recommendations in practice.
- The questionnaire seeks to a) determine overall **use** and **value** of the Recommendations, and b) identify the need for **updating** them
- It is a snapshot of the current situation

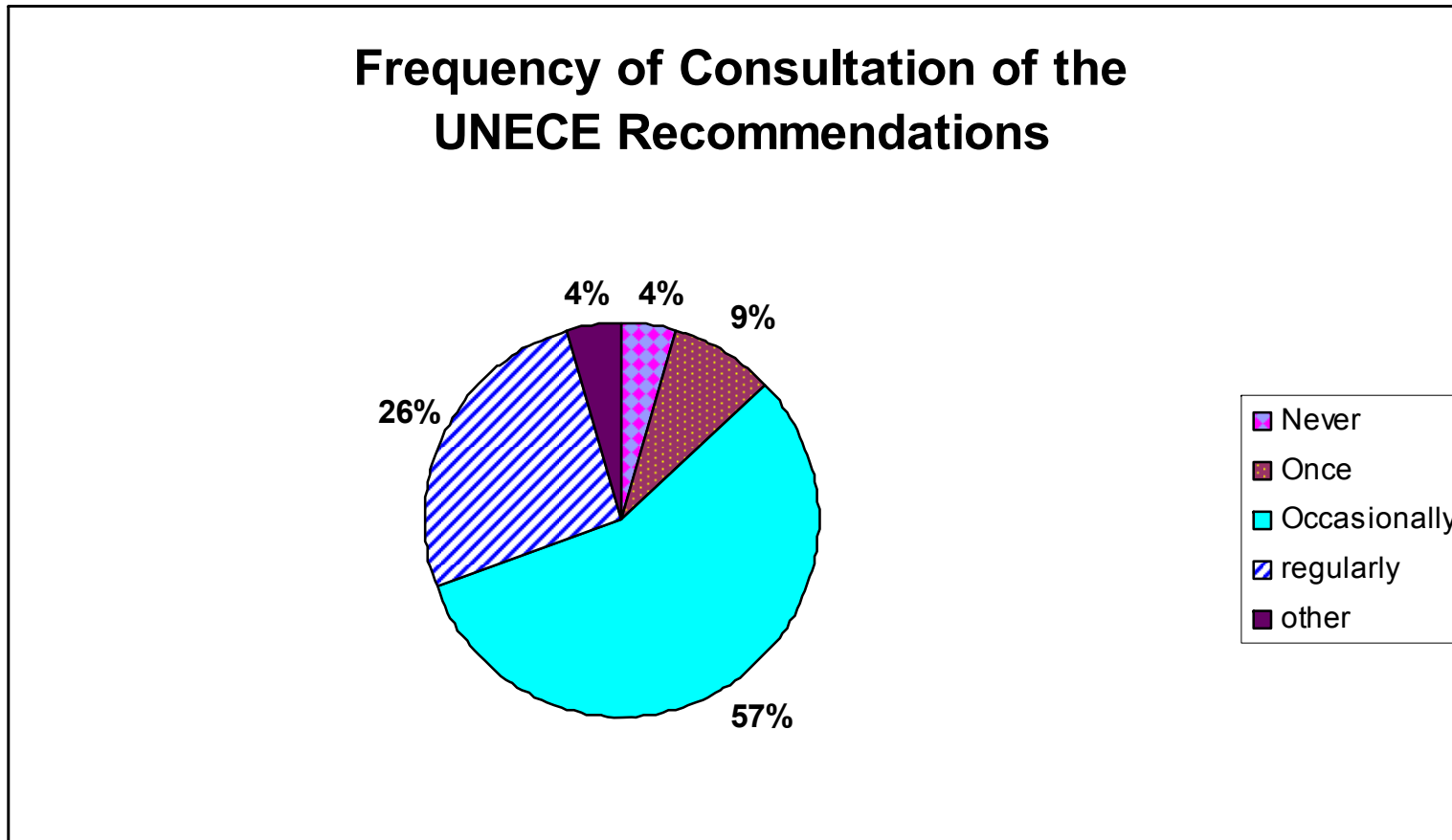
4. Use of the Recommendations

Responses to questionnaire (to date)

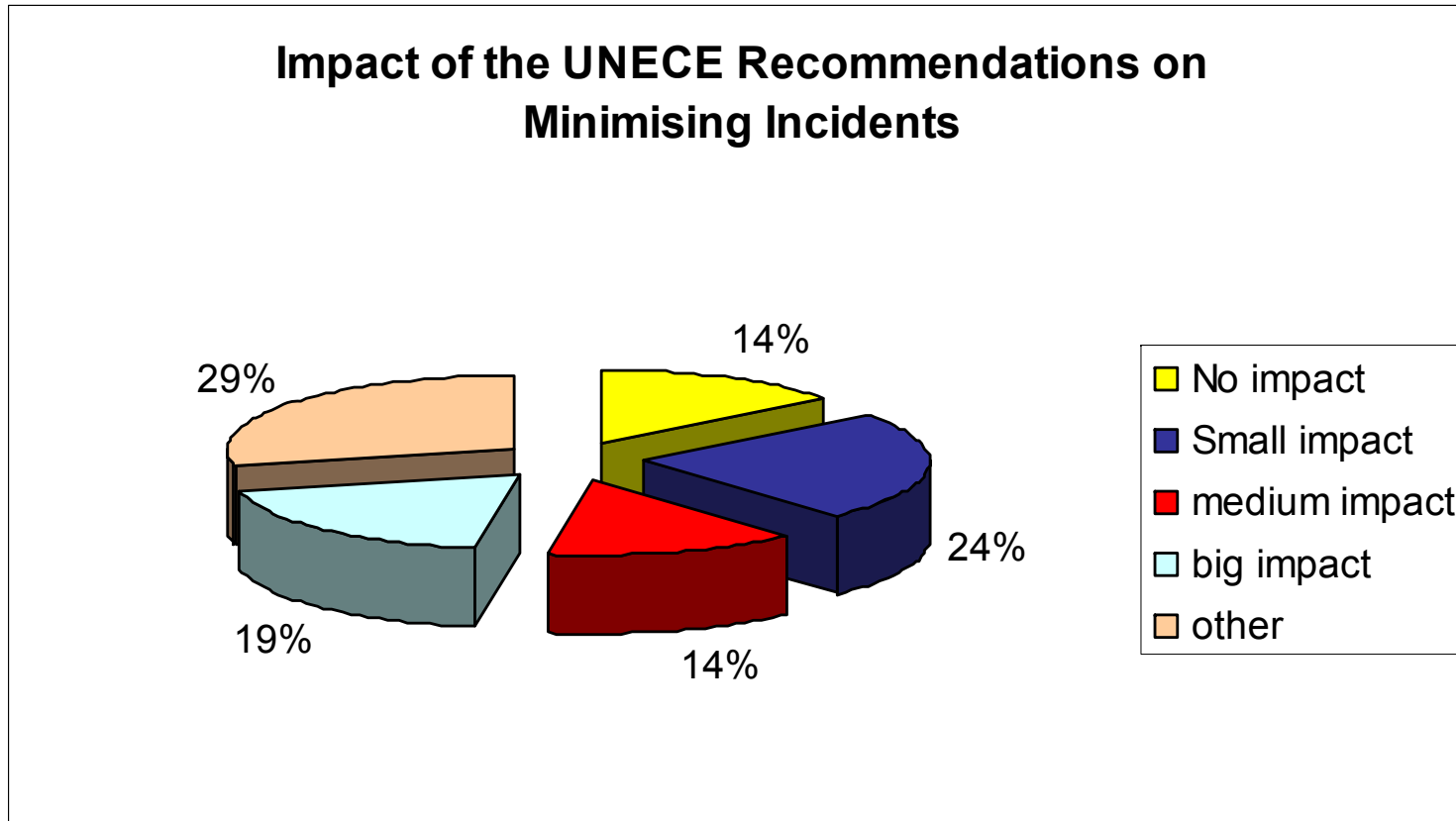


Sent to: 61 governments, 7 IGOs, 7 companies, 1 NGO (BIR) and 3 individuals
Responses to date: 23

4. Use of the Recommendations

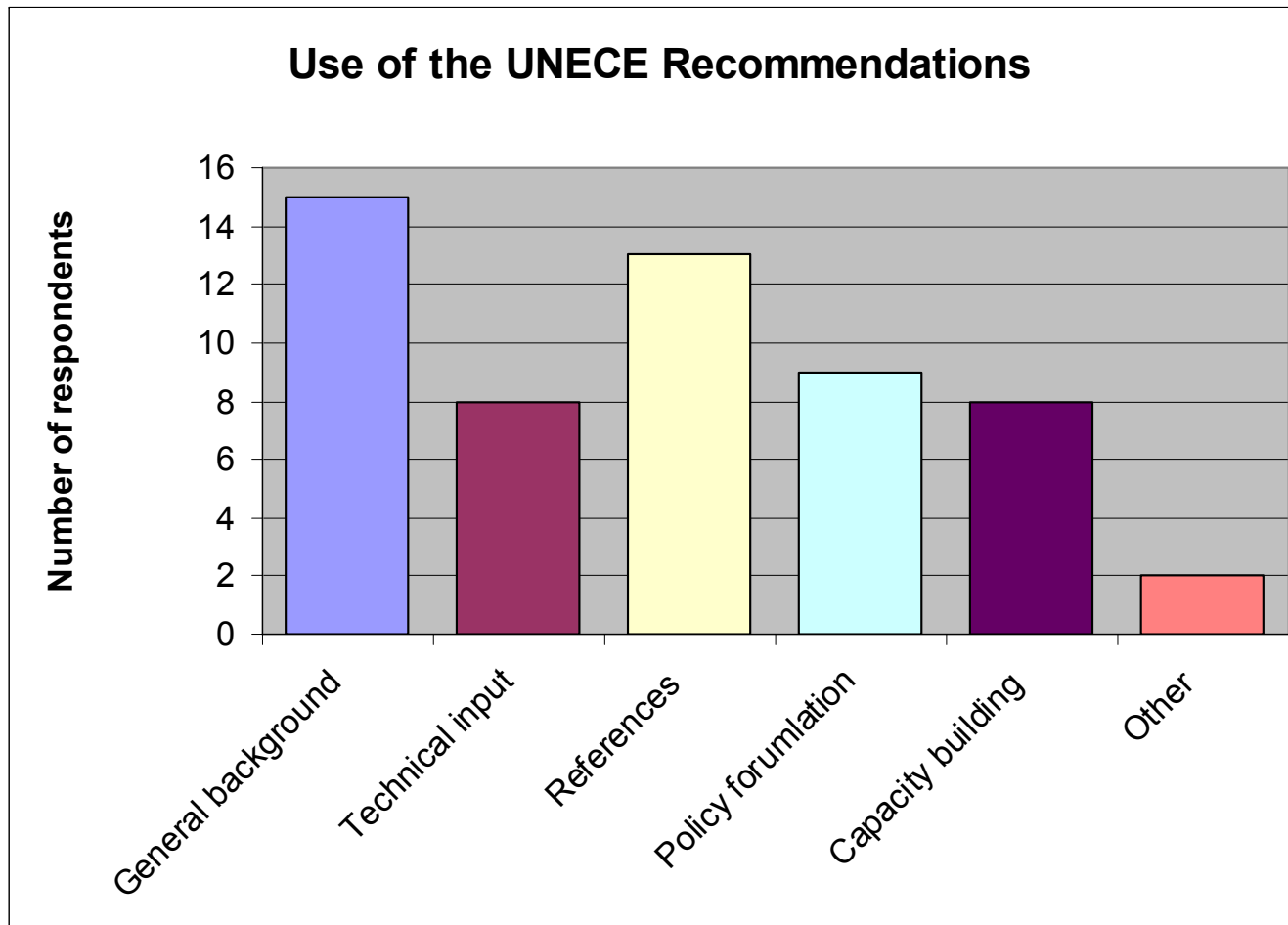


4. Use of the Recommendations



57% felt that the UNECE Recommendations had SOME impact on minimising incidents

4. Use of the Recommendations



Note: > 100% since more than one use

4. Use of the Recommendations

Examples of practical application of Recommendations

- Gave an international **legitimacy** when dealing with **Belgian** Stakeholders.
- Basis for the development of a **Brazilian Protocol**; **Bulgarian** Guidelines for prevention, detection and response to radioactive material in scrap metal and in **Romania** to elaborate a specific regulation on shipment, import, export, transit and monitoring of scrap metal.
- Used for **training in India, Lithuania, the Russian Federation, Serbia and the USA**:
- In **Luxembourg** helped to improve existing procedures
- In **Morocco** have been used for interventions with orphan sources and to contaminated material

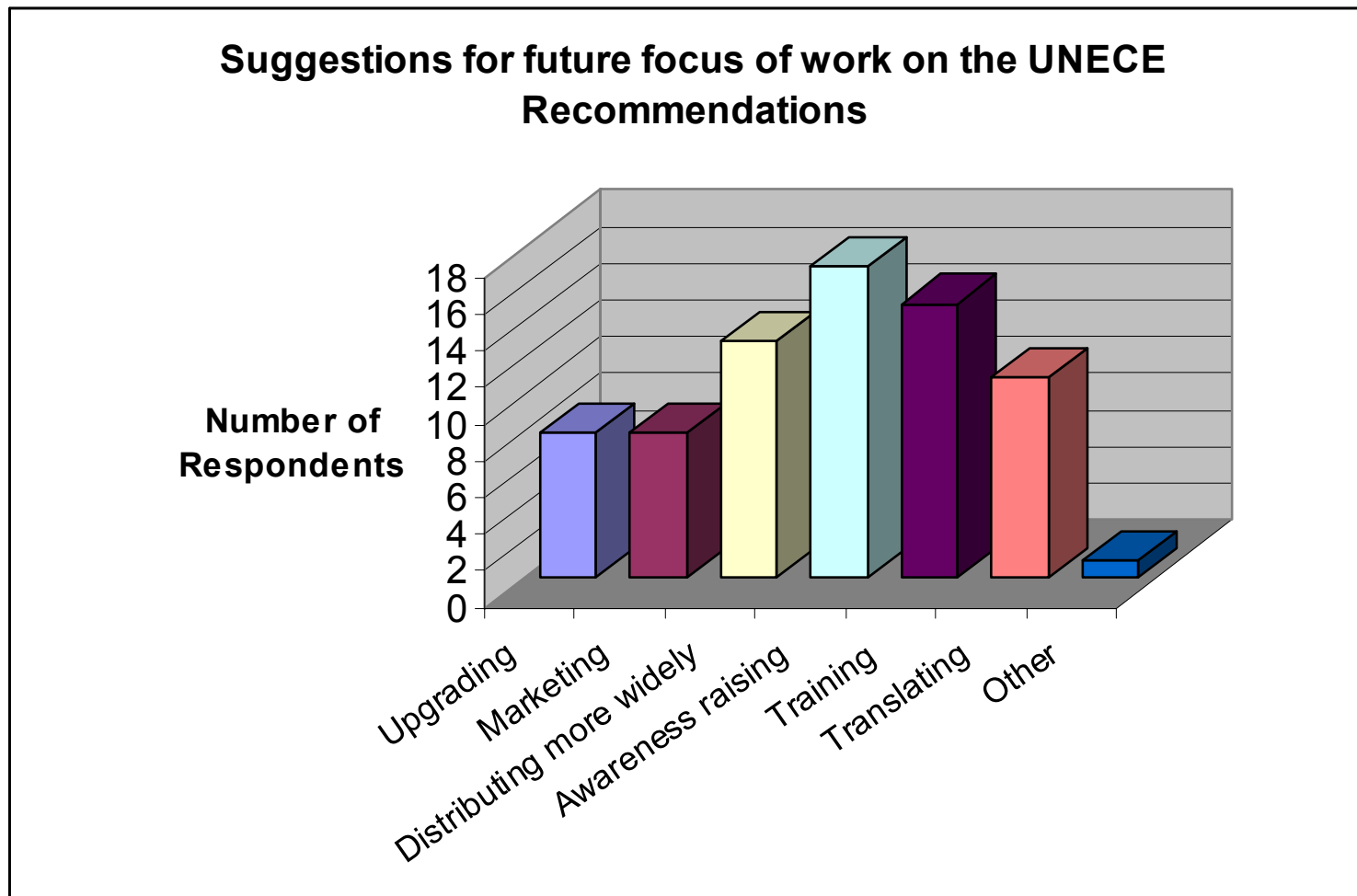
4. Use of the Recommendations

“Because of the Recommendations, have you developed new: “

Laws	3
Training programmes	6
Procedures (prevention, detection, response)	12
Safeguards	3
Partnerships	4
Institutions	1
Other	7

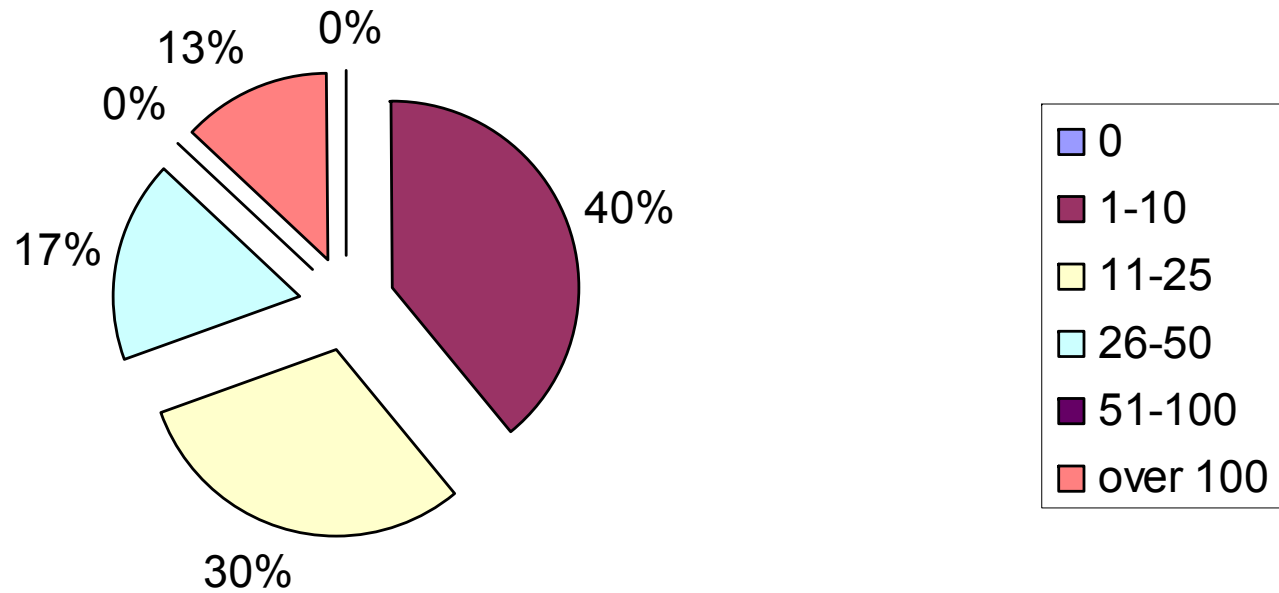
4. Use of the Recommendations

“What should be the focus of future work on the Recommendations?”



4. Use of the Recommendations

Reach of the UNECE Recommendations
(Number of people with whom the Respondents shared the Recommendations)



5. Possible next steps

- UNECE project completed
- Reviewing Recommendations on basis of feedback on questionnaires?
- Private-public partnership?
- Training and capacity building possibility with other partners?

United Nations Economic Commission for Europe (UNECE)

WHAT are the UNECE Recommendations?

A set of recommended best practices based on experience from over 50 countries. They aim to support countries and the industry to minimise the risks of radioactive scrap metal and are in line with and complementary to relevant IAEA activities.

WHY do we need Recommendations?

- Radioactivity can enter the metal stream intentionally or not, through orphan sources, or simply through natural occurrence.
- Radioactivity is a major concern for the metal industry
- Health and environmental concerns are real.
- Clean up and de-contamination costs can reach millions of dollars.

WHO are the Recommendations for?

The Recommendations are for: recyclers, the metal industry, smelters, metal processors, trade ministries, Customs, transporters, regulators, researchers, the nuclear sector, etc.



UNITED NATIONS

UNECE Recommendations on Monitoring and Response Procedures for Radioactive Scrap Metal



Three Fields of Recommended Action:



Prevention

Prevent radioactive scrap from entering the recycling stream, through:

- Effective legislation
- Safety arrangements
- Risk assessment
- Training and awareness



Detection

Ensure effective detection is in place, including:

- Administrative, visual and radiation monitoring
- Monitoring at points of origin, borders, scrap yards, processing facilities and melting plants
- International coordination



Response

Establish appropriate response measures and capacity, including:

- Suitable procedures to respond to an alarm
- Management of detected radioactive material
- National and international reporting



Photos © Ray Turner

More information, as well as the UNECE Recommendations, can be obtained on: <http://www.unece.org/trans/radiation/radiation.html>

Thank you..!

<http://www.unece.org/trans/radiation/radiation.html>

UNECE
Transport Division