The Incident and Trafficking Database (ITDB) Programme

European Regional Transport Security Series (ERTSS)

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Speaker:

Jose GARCIA SAINZ

Jose Garcia

Incidents of
nuclear and other radioactive
material
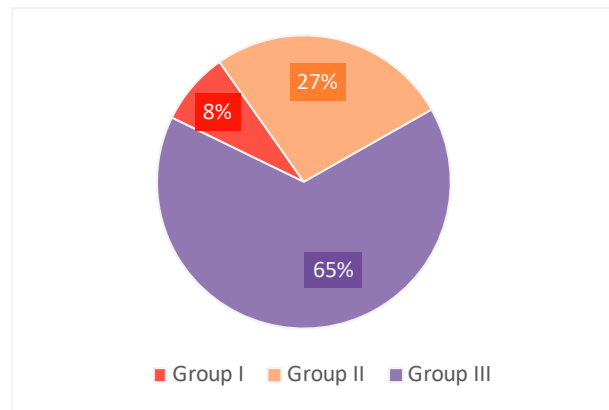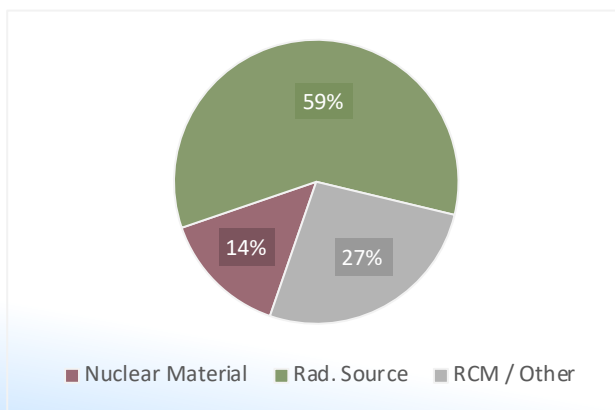**out of regulatory control**

Loss of Regulatory Control

Material Secured

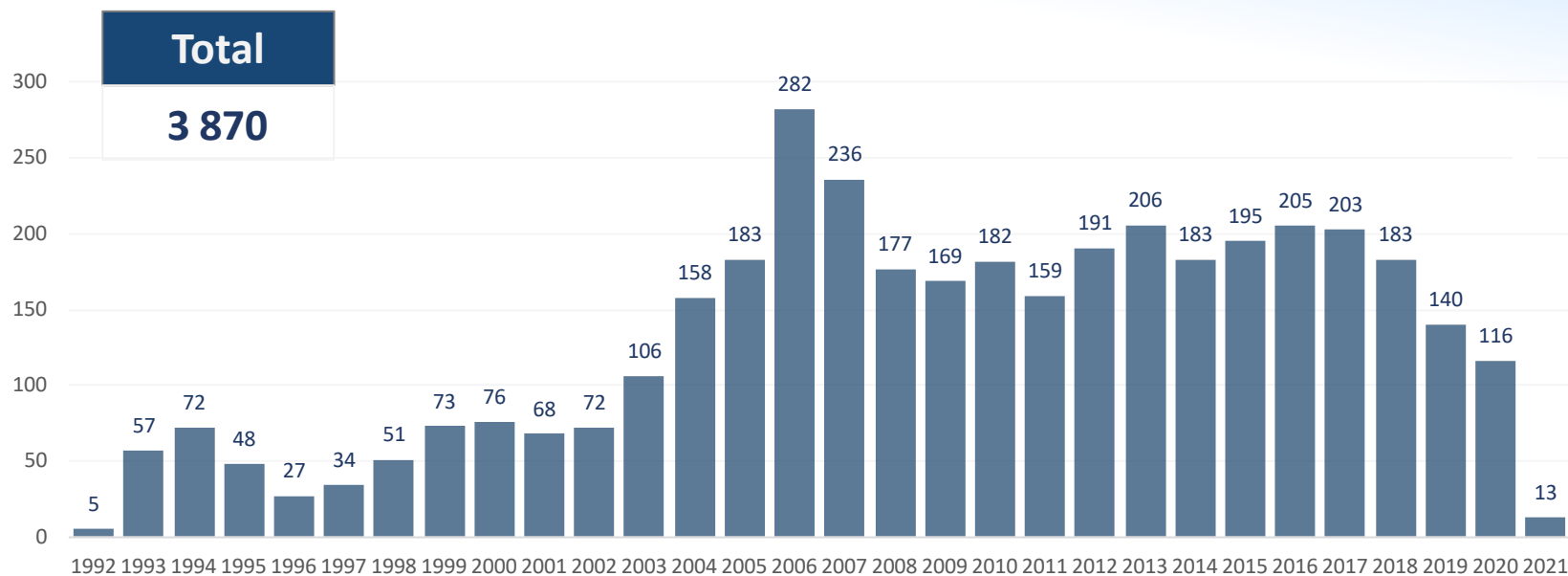**measures** in place
to detect
unauthorized activities

Theft, Loss & Missing

Operator Error

Regulatory Failure

Material available for trafficking or malicious use

no measures in place
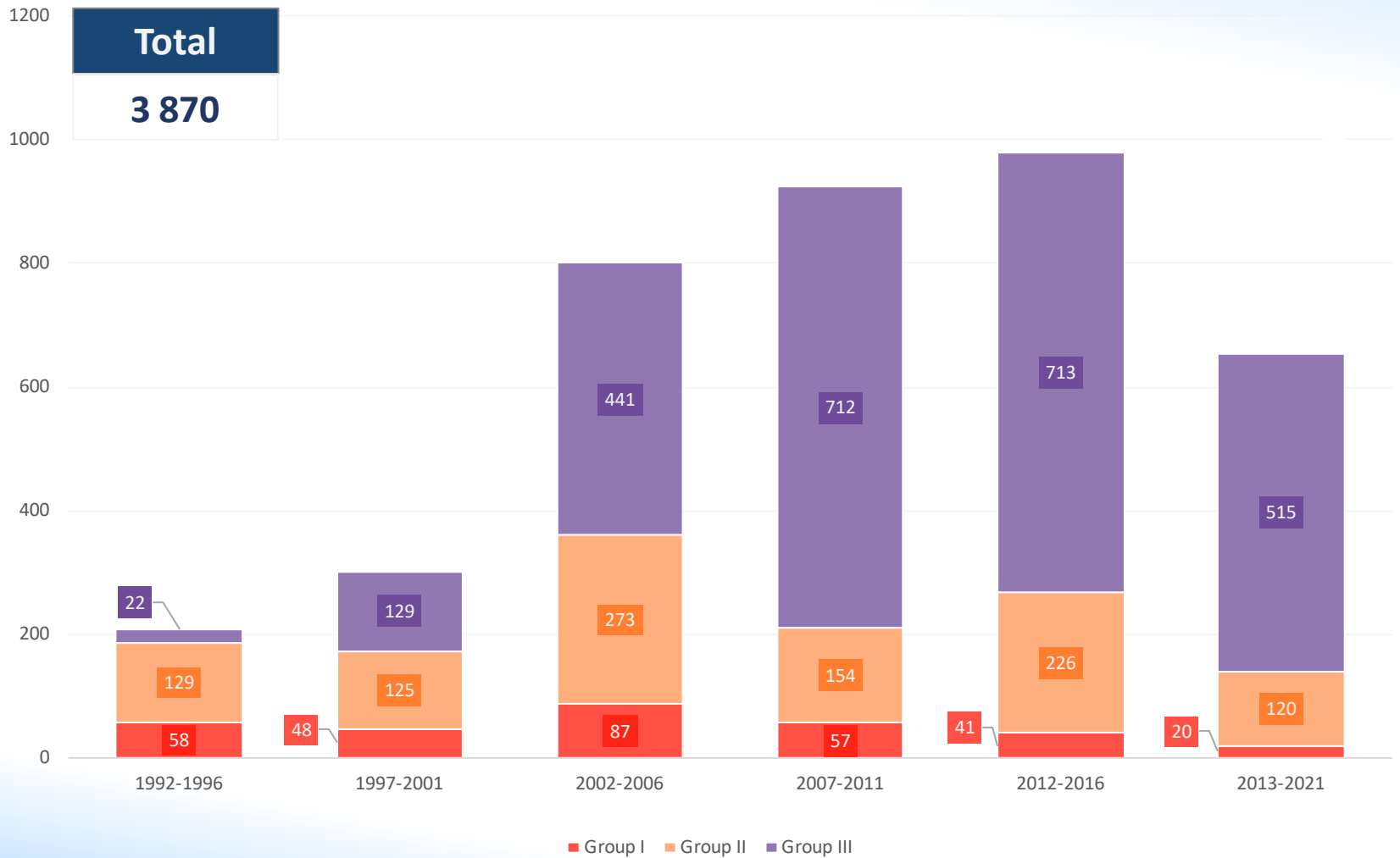**to detect**
unauthorized activities

Confirmed Incidents: by Incident Date

Total
3 870

Bar chart values by year:
- 1992: 5
- 1993: 57
- 1994: 72
- 1995: 48
- 1996: 27
- 1997: 34
- 1998: 51
- 1999: 73
- 2000: 76
- 2001: 68
- 2002: 72
- 2003: 106
- 2004: 158
- 2005: 183
- 2006: 282
- 2007: 236
- 2008: 177
- 2009: 169
- 2010: 182
- 2011: 159
- 2012: 191
- 2013: 206
- 2014: 183
- 2015: 195
- 2016: 205
- 2017: 203
- 2018: 183
- 2019: 140
- 2020: 116
- 2021: 13

Pie chart 1:
- Rad. Source: 59%
- RCM / Other: 27%
- Nuclear Material: 14%

Pie chart 2:
- Group III: 65%
- Group II: 27%
- Group I: 8%

Confirmed Incidents: by Group

Total
3 870

Chart: Confirmed incidents by group across time periods

Period	Group I	Group II	Group III
1992-1996	58	129	22
1997-2001	48	125	129
2002-2006	87	273	441
2007-2011	57	154	712
2012-2016	41	226	713
2013-2021	20	120	515

Legend: ■ Group I ■ Group II ■ Group III

Confirmed Incidents: by Material
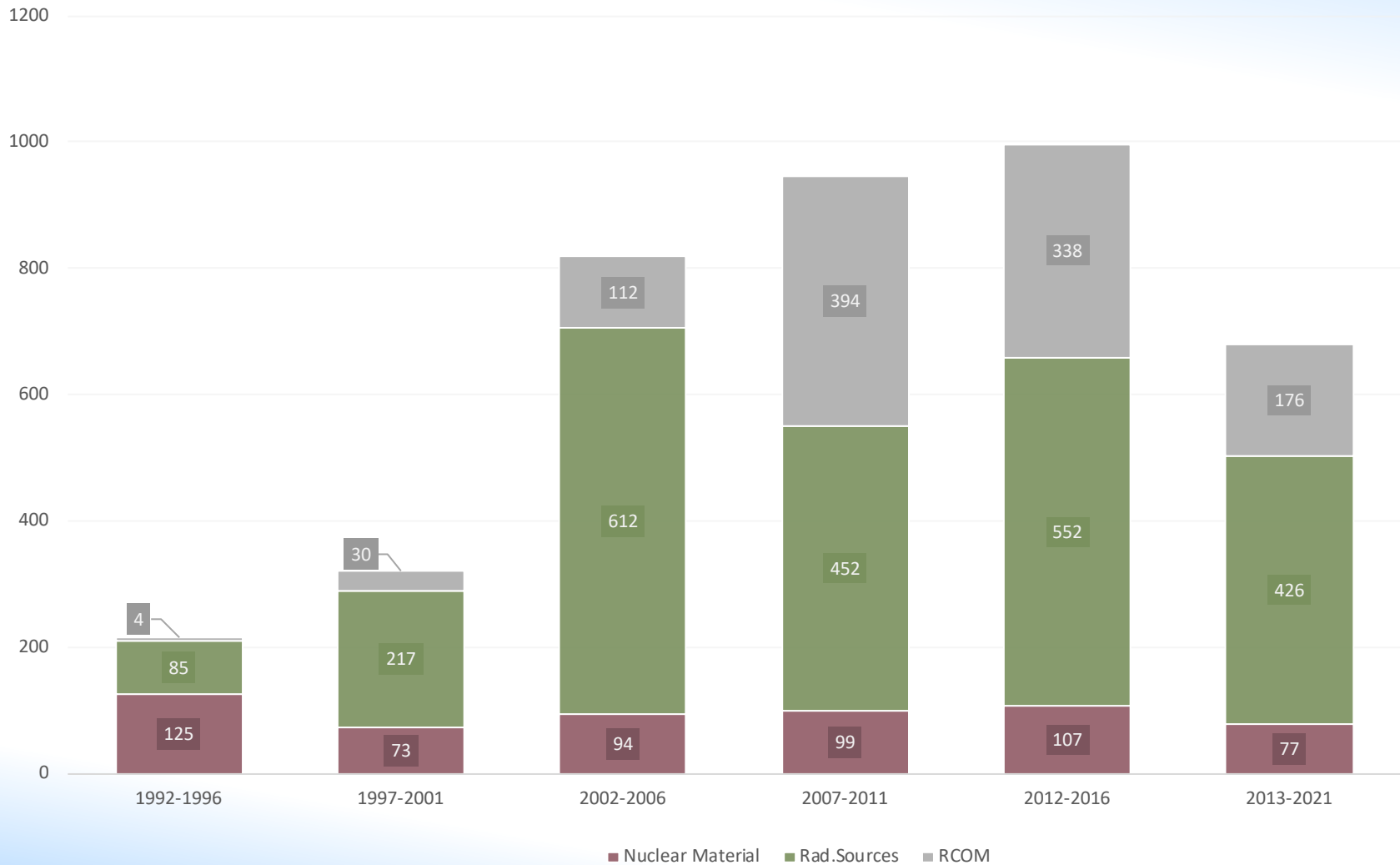
Recovery of Stolen Materials

623 thefts

Transport-Related	Other Thefts
214 (34%)	**409 (66%)**

Recovered	Unrecovered	Recovered	Unrecovered
95 (15%)	**119 (19%)**	**160 (26%)**	**249 (40%)**

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Thefts: Recovery Rate

Transport-Related

Other Thefts
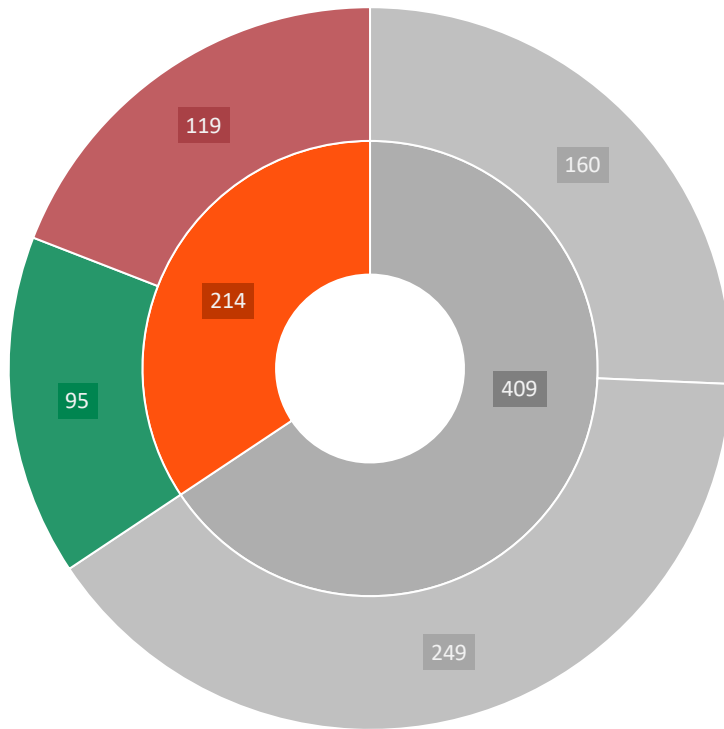
Legend:
- Transport-related Thefts
- Recovered
- Unrecovered
- Other Thefts
- Recovered
- Unrecovered
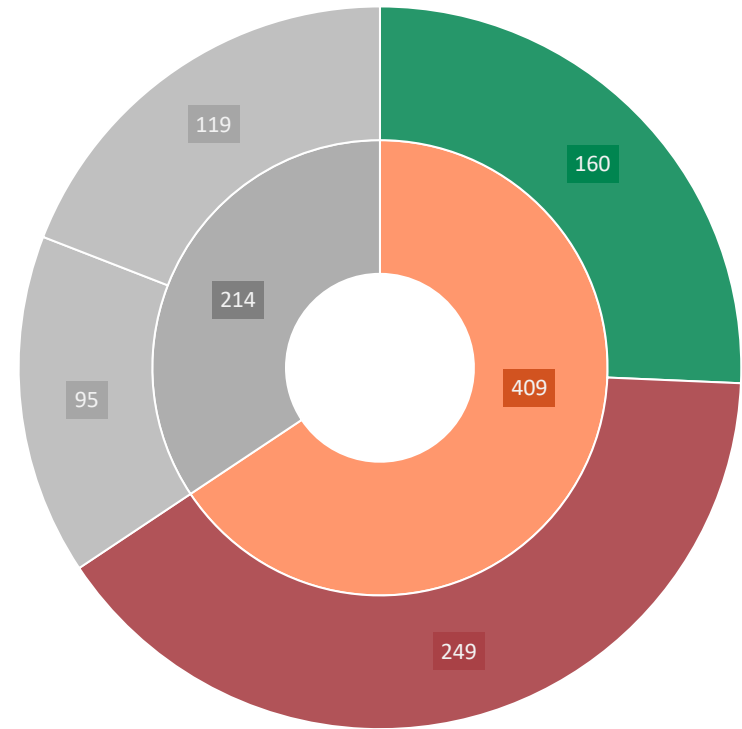
Transport-Related values: 119, 160, 214, 95, 409, 249

Other Thefts values: 119, 160, 214, 409, 95, 249

Transport-related Thefts: Overview of Material Recovery

Legend: Stolen & Recovered, Stolen & Unrecovered

The Incident and Trafficking Database

Thefts: by RS-G-1.9 Category

Transport-Related

- 1%
- 0.3%
- 9%
- 6%
- 49%
- 35%

All Thefts

- 3%
- 0.4%
- 8%
- 4%
- 49%
- 36%
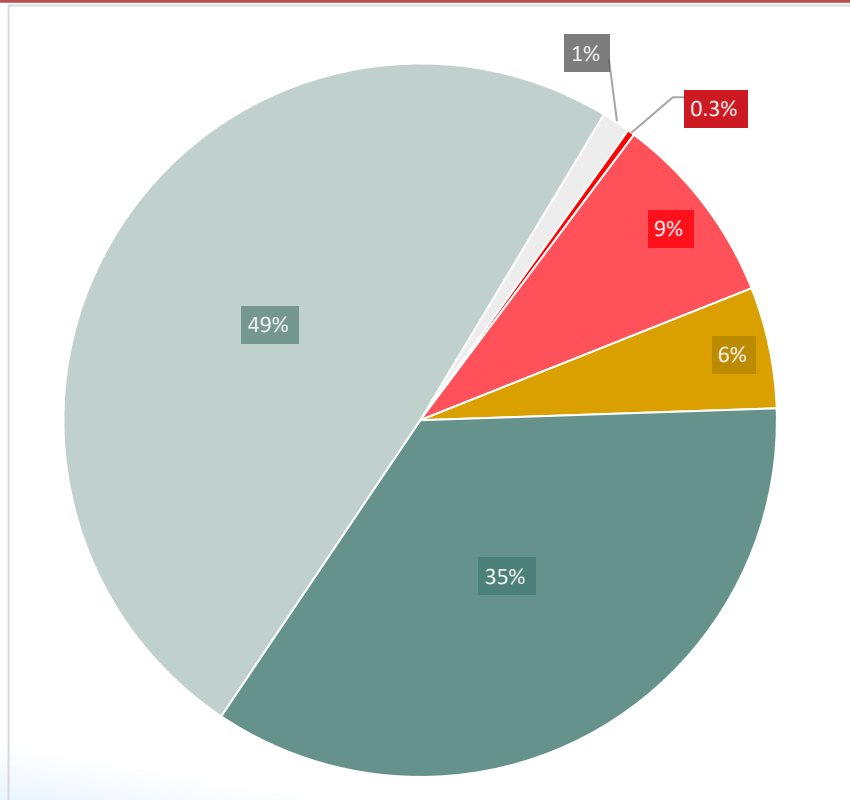
Legend: Cat.1 | Cat.2 | Cat.3 | Cat.4 | Cat.5 | Unknown
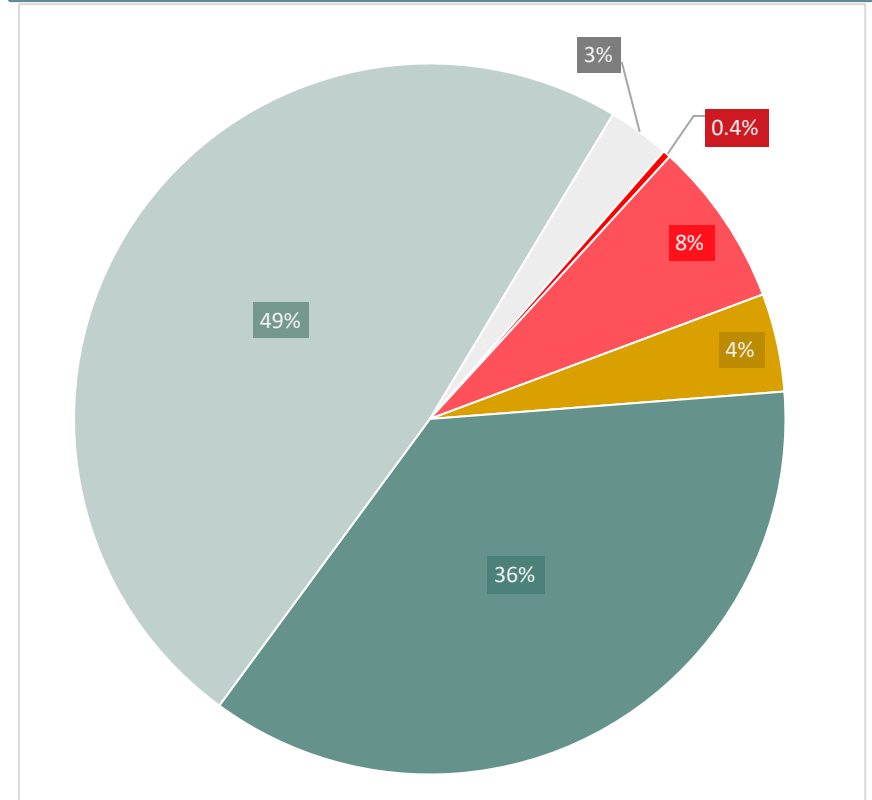
Thefts of nuclear / other radioactive material

➢ The majority of thefts involve sources in **industrial or medical applications**

➢ Only a few incidents have involved Category 1 sources. **Category 2** sources are regularly reported

➢ The **recovery rate** for Category 1-3 sources is **high**. The recovery rate for Categories 4-5 sources is much poorer

Other Unauthorized Activities

➢ The majority fall into one of three **categories**:
- unauthorized disposal
- unauthorized shipment
- discovery of uncontrolled material

➢ This indicates potential **deficiencies** in systems to control, secure & account for radioactive material

Who Can Use this Information?

➤ Nuclear regulator
(Security / Safety / Safeguards)

➤ Emergency Response /
Public Safety Agencies

➤ Domestic Intelligence Agencies

➤ Police

➤ Customs/Border Guards

➤ Military

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"…the ITDB System can be **extremely valuable**, not in the sense of being a scoreboard of illicit trafficking, but by being a **weathervane that can point to problems** needing attention …"

G. M. Moore

Thank you for your attention!