Office of Nuclear Security
Department of Nuclear Safety and Security
IAEA Illicit Trafficking Database (ITDB)

IAEA information system on illicit trafficking and other unauthorized activities involving nuclear and radioactive materials
What is ITDB?

• ITDB is more than just a database
  • IAEA information system on illicit trafficking and other unauthorized activities involving nuclear and radioactive material
    • Information exchange
    • Analysis of reported information and identification threats and vulnerabilities
    • Reporting to States and IAEA

• ITDB is more that just “illicit trafficking”
  • Deals with any incidents involving any nuclear or radioactive material outside legitimate control, intentionally or unintentionally, with or without crossing borders

• ITDB is a restricted product for Official Use Only
Introducing ITDB

- Information Management and Coordination Section
  - Information analysis
  - Needs assessment
  - Coordination

- ITDB was established in 1995

- Unique network of points of contact connecting 100 states and several international organizations

- Information collected from official sources supplemented by open-source reports
**IAEA Ilicit Trafficking Database (ITDB)**

**IAEA Incident Notification Form (INF)**

---

**PART I: General Information**

Information provided in this section will be disseminated by the IAEA to all Member States participating in the ITDS programme. IAEA Member States not participating in the ITDS programme and related International Organizations.

1. Date of incident:
   - [ ] Unusual incident
   - [ ] Normal incident

2. Country (international incident):

3. Name of incident:
   - [ ] Unusual incident
   - [ ] Normal incident

   (Instructions to enter the appropriate country)

4. Location:
   - [ ] Country (international incident)
   - [ ] Country (international incident)

   (Instructions to enter the appropriate country, e.g. airport, hospital, and so on)

**Materials involved in the incident:**

<table>
<thead>
<tr>
<th>Nuclear Material</th>
<th>Radioactive Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- [ ] Domestic Uranium
- [ ] Domestic isotopes
- [ ] Other

**Other materials:**

- [ ] Radioactively Contaminated Material
- [ ] Non-radiologically Contaminated Material
- [ ] Non-radiologically Contaminated Material
- [ ] Other or Unknown

**NOTES:**

- [ ] Radioactively Contaminated Material
- [ ] Non-radiologically Contaminated Material

**Quantity:**

- [ ] Radioactively Contaminated Material
- [ ] Non-radiologically Contaminated Material

**Weight (g or kg):**

6. **Chemical description:**

- [ ] C, H, O, Na, K, Ca, Mg, etc.
- [ ] Other or Unknown

7. **Physical description:**

- [ ] Unusual incident
- [ ] Normal incident

8. **Comments:**

**FURTHER DISTRIBUTION:**

- [ ] Yes
- [ ] No

**Part II: Additional Information**

Information provided in this section will be distributed to the ITDS participating States only. Marked “Do not further distribute. Part II will not be distributed outside the IAEA.”

11. **Incident Summary:**

   (Describe the circumstances of the incident)

12. **Means of Detection:**

   (Describe the means of detection)

13. **Individuals or organizations involved in the incident:**

   (Instructions to enter the appropriate category, e.g. government, someone)

14. **Properities’ intended next steps:**

   (Instructions to enter the appropriate category, e.g. police, military, etc.)

15. **Country location associated with the origin of the material’s movement:**

   (Instructions to enter the appropriate category, e.g. police, military, etc.)

16. **Transport route and mode:**

   (Instructions to enter the appropriate category, e.g. police, military, etc.)

17. **Country location of destination or intended destination of the material’s movement:**

   (Instructions to enter the appropriate category, e.g. police, military, etc.)

18. **Facility location from which material has been stolen or lost:**

   (Instructions to enter the appropriate category, e.g. police, military, etc.)

19. **Description of containers, packaging, and labelling:**

   (Instructions to enter the appropriate category, e.g. police, military, etc.)

20. **Notes of laboratory testing required:**

   (Instructions to enter the appropriate category, e.g. police, military, etc.)

21. **Other additional information and comments:**

   (Instructions to enter the appropriate category, e.g. police, military, etc.)
Reporting to the ITDB and dissemination of ITDB information

• Reporting to the ITDB
  • Reporting by POCs
  • Timely reporting of initial information; update reporting
  • Reporting by non-participating States
• Collection of open source information
  • Requests for verification
• Dissemination of the ITDB information
  • Dissemination of INFs
    • Dissemination restrictions apply
  • Periodic reports
  • Ad-hoc reports
Public information

- [http://www-ns.iaea.org/security/itdb.htm](http://www-ns.iaea.org/security/itdb.htm)
TYPES OF INCIDENTS

• **Group 1. Illegal possession and related criminal activities**
  Unauthorized possession, transaction, movement or use

• **Group 2. Thefts and Losses**

• **Group 3. Other Unauthorized Activities**
  Discovery of orphan materials or materials disposed of in unauthorized way; various inadvertent activities
Types of incidents 1993-2007

1340 incidents reported during 1993-2007

- Group 1 – 303 incidents
- Group 2 – 390 incidents
- Group 3 – 570 incidents
- Unknown – 77 incidents
Group 1. Unauthorized possession and related criminal activities

- 15 incidents involved HEU and Pu
- Some seized HEU might have been only samples
- Some cases show malicious intent
- Buyers and repeat offenders registered
- Some cases involved organized crime groups
- Most materials not previously reported as lost or stolen

Confirmed incidents involving illegal possession, 1993-2007

- Unauthorized possession
- Attempted sale
- Attempted purchase
- Attempted unauthorized transaction
- Unidentified related criminal activity
- Attempted unauthorized movement
- Unauthorized movement
- Attempted malicious use

![Graph showing confirmed incidents involving illegal possession, 1993-2007](image)
Group 2. Thefts and losses

- One incident involved malicious intent
- Profit – common motive, but intent and motive are not known in many cases
- In about 66% of cases, lost or stolen materials have not been recovered (about 75% in 2004-2007)
- Mobile or portable industrial sources are most susceptible for theft or loss
- Sources/devices are especially vulnerable for theft/loss when located inside vehicles; during other transport

Confirmd incidents involving lost or stolen materials, by recovery status, 1993-2007

Lost/stolen, recovered  □  Lost/stolen, not recovered  □  Unable to determine
Group 3. Other unauthorized activities

- Primarily involved radioactive sources and radioactively contaminated materials
- Recent increase in the number of incidents involving unauthorized shipment of RCM across borders
- These events highlight failures to control materials in use and disposal
- Materials not previously reported as lost or stolen
Conclusions

ITDB information shows:

• Potential availability of materials for malicious purposes
• Vulnerabilities at facilities of origin - potential for more thefts
• Deficiencies in regulations governing use and transportation of some types of industrial sources
• Buyers and repeat offenders
• Some indication of intentions and attempts of groups and individuals to acquire nuclear or radioactive materials for malicious purposes
Contact details

IAEA Office of Nuclear Security
Illicit Trafficking Database
Tel: +43(1)2600-22217
Fax: +43(1)2600-29250
E-mail: trafficking@iaea.org