



Jordan Nuclear Security Measures



Agenda

- **Introduction**
- **Prioritized Threats**
- **National Committees**
- **Legal Framework**
- **National Capabilities**
- **Roles and Responsibilities**



Prioritized Threats

- **Security of Nuclear Facilities**
 - **Smuggling Nuclear Materials or Radioactive Sources Through Official Crossing Points or Green Borders**
 - **Security during transfer of radioactive materials, nuclear fuel, and spent fuel.**
 - **The use of Radiological Dispersal Device (RDD) as a dirty bomb or a Radiological Exposure Device (RED).**
-

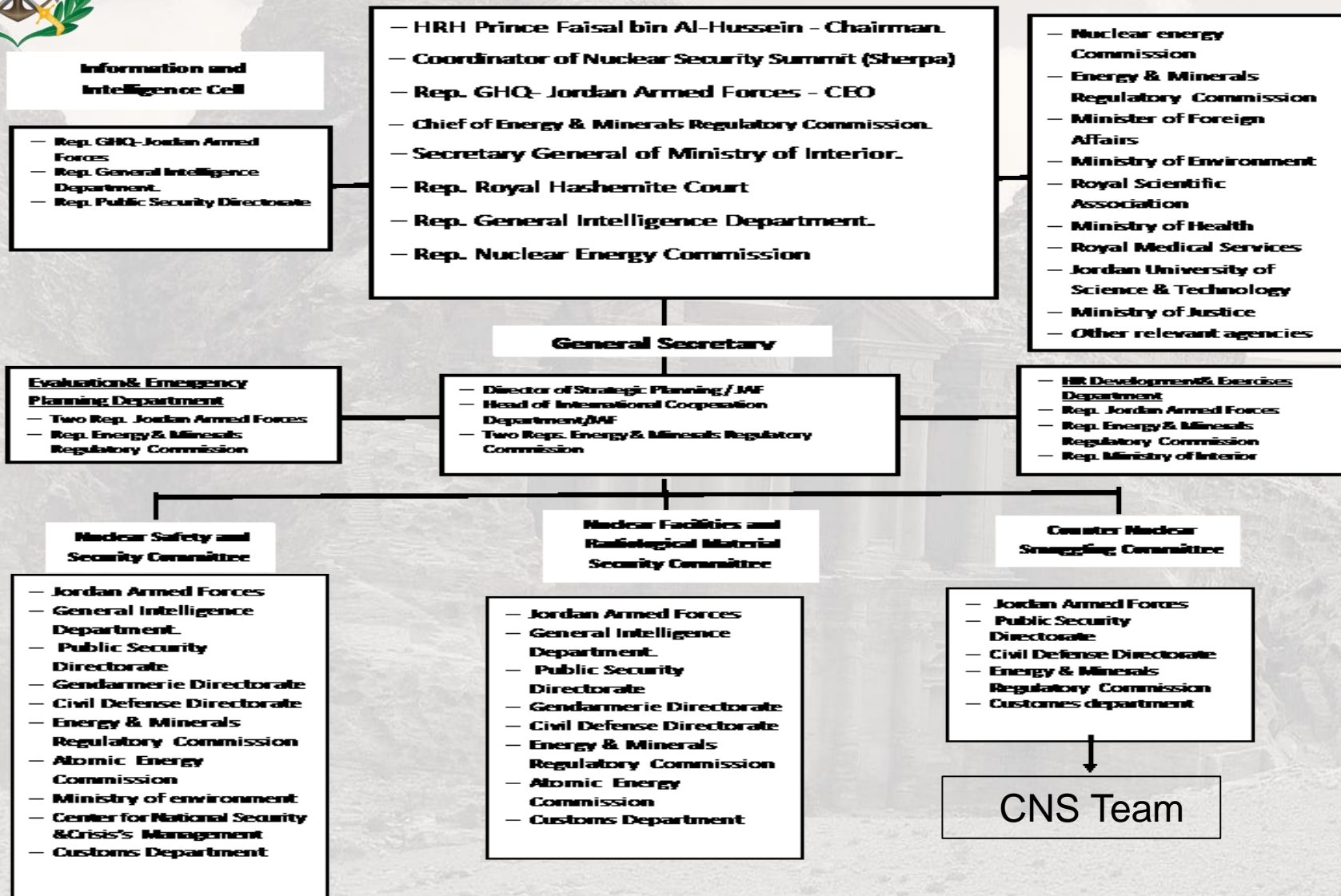


National Committees

- **National Nuclear Security Committee**
- **National R/N Emergency Response Committee**
- **WMD Annex in National Plan for mitigating the effects of natural disasters**
- **Counter Nuclear Smuggling Team**



Higher Counsel for Nuclear Safety and Security (Proposed)





Investigating and Prosecuting R/N Smuggling

- **Legislations:**

- Law No.55 for the year 2006 “Counter Terrorism”.
- Law No. 18 for 2014 expands jurisdiction on CT
- Law No. 43 for the Year 2007 "Radiation Protection and Nuclear Safety and Security“ .



National Capabilities

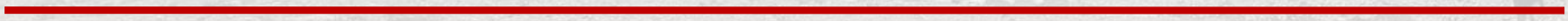


Agencies Involved

- ***Energy and Minerals Regulatory Commission(EMRC).***
- ***Jordan Atomic Energy Commission(JAEC).***
- ***Jordan Armed Forces(JAF).***
- ***Public Security Department(PSD).***
- ***General Intelligence Department(GID).***
- ***Jordan Customs Department(JCD).***



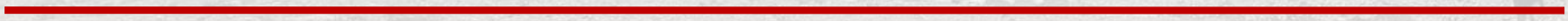
Jordan GOV Measures





Political/Regional & Local

- Public awareness of threats and measures undertaken.
- Assessing National capabilities and vulnerability
- Seeking assistance from International community
- Promote regional cooperation
- Training of regional partners





Border security





Border Control(Green Borders)

- Deployment of more than 5 security lines along the borders
- Attaching CBRN platoons to border guards(BG)
- Deploying BG Quick Reaction Teams with detection capabilities
- Constructing and enhancing of barriers to prevent smuggling
- Establishment of a national counter nuclear smuggling team (CNS Team)





Counter Nuclear Smuggling(CNS) Team

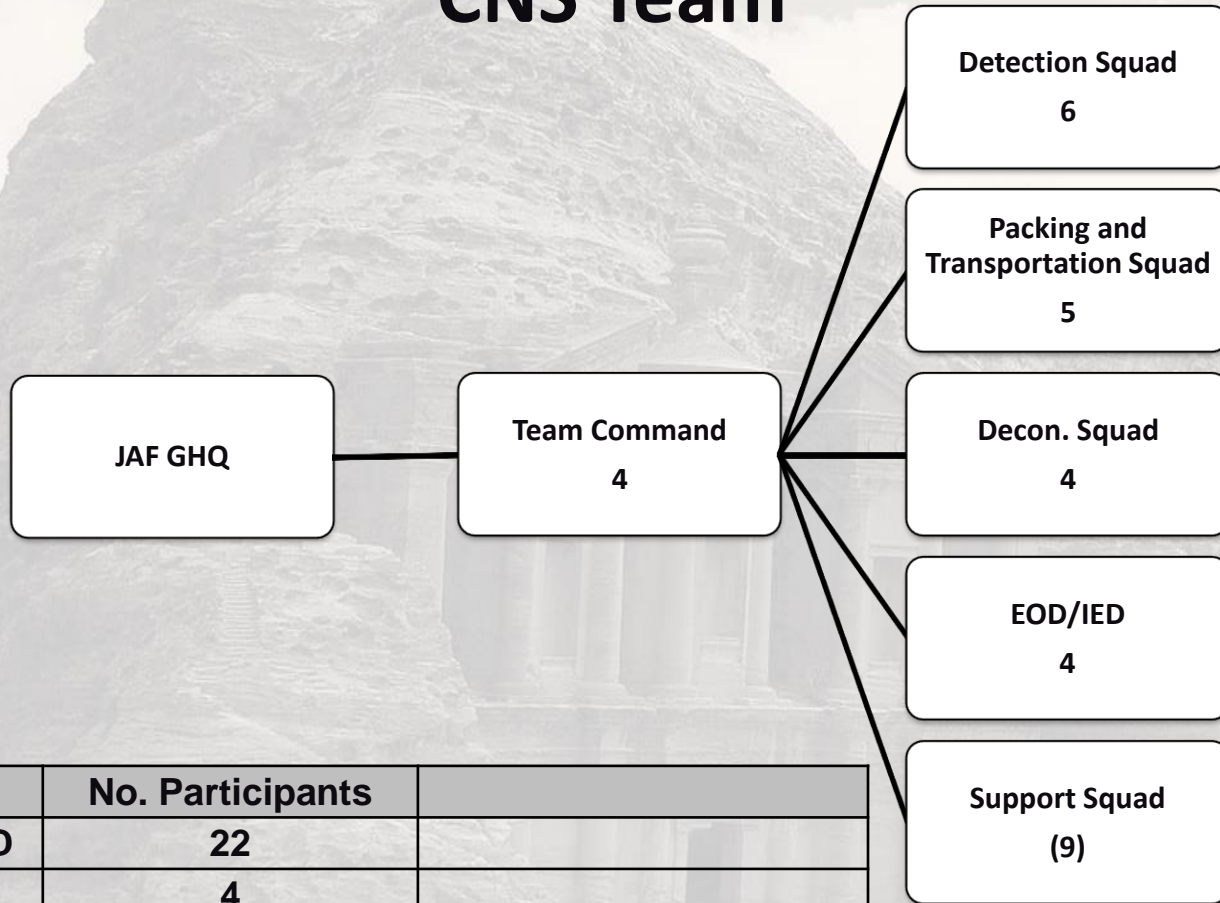


Jordan CNS Team Mission

- Prevention of smuggling operations by utilizing intelligence information & deploying personnel and material assets at Jordan's borders
- Respond to a radioactive material smuggling incident, Detect & locate, Identify, package and transport radioactive material to a secure location.



CNS Team



Authority	No. Participants	
JAF/CSU/EOD	22	
EMRC	4	
PSD	2	
Customs	1	
Civil Defense	3	32+7 Drivers



Response Mechanism.

Team Response Triggers

- Intelligence information.
- Border security elements detect radiation while intercepting a smuggling attempt at Jordan international borders.
- EMRC personal detecting radiation in a suspicious shipment at Jordan legal crossing points.



NON OFFICIAL CROSSING POINTS

1

- Border Guards elements detect radiation while intercepting a smuggling operation at Jordan international borders.

2

- Perpetrators arrested/neutralized by border guards or special operations forces.

3

- CNS Team arrival and securing of nuclear material .

4

- PSD escorts and safeguards transported material.



OFFICIAL CROSSING POINTS

1

- EMRC/ Customs/GID personal detecting radiation in a suspicious shipment at Jordan legal crossing points.

2

- Perpetrators Arrested/neutralized by PSD.

3

- CNS Team arrival and securing of nuclear material (if requested)

4

- PSD may be needed to setup security parameter and deploy patrols during transportation of material



DOMESTIC INTERDICTION

1

- Intelligence information .

2

- Perpetrators arrested/neutralized by PSD/Gendarmerie.

3

- EMRC response.

4

- CNS Team arrival and securing of nuclear material (if requested)

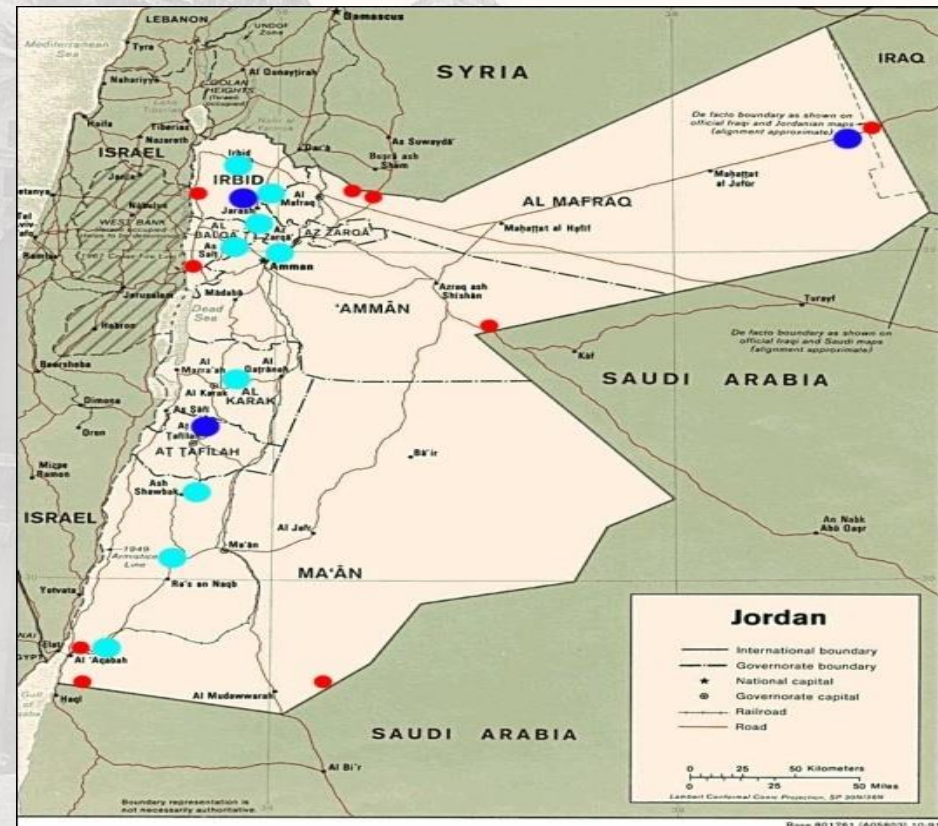
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- PSD setup security parameter and deploy patrols during transportation of material



Distribution of Jordan Radiation Portal Monitors

- 2004: the first RPM was installed
- 2008: 7 RPMs
- 2011: 22 RPMs
- 2013: 27 RPMs
- Now: 42RPMs & 4
(Mobil Detection Systems)MDS Vans





Border Control (Official Crossing Points)

- ❑ Deploy security agencies (PSD, GID, customs) on Official Crossing Point (OCP) with detection capabilities
- ❑ Attaching CBRNE specialist to OCP
- ❑ An integrated border security and response operation concept





Jordan GOV Measures (Response Capacity Building)





Actions 2012-2015

- ❑ JAF supervised the development of a roadmap that coordinates the efforts of all relevant Jordanian ministries and agencies
 - ❑ The roadmap incorporated a bilateral Joint Action Plan, based on the current threat, focusing on the following areas:
 - CBRN Passive Defense Measures
 - Consequence Management
 - Medical Countermeasures
 - Interdiction and Border Security
-



Civilian Protection

- ❑ WMD Annex in national disaster response plan
- ❑ Three fast response teams trained and equipped
- ❑ In 2013 revising the structure , duties and new gear provided by US and CANADA
- ❑ Total of five fast response teams (currently under development)



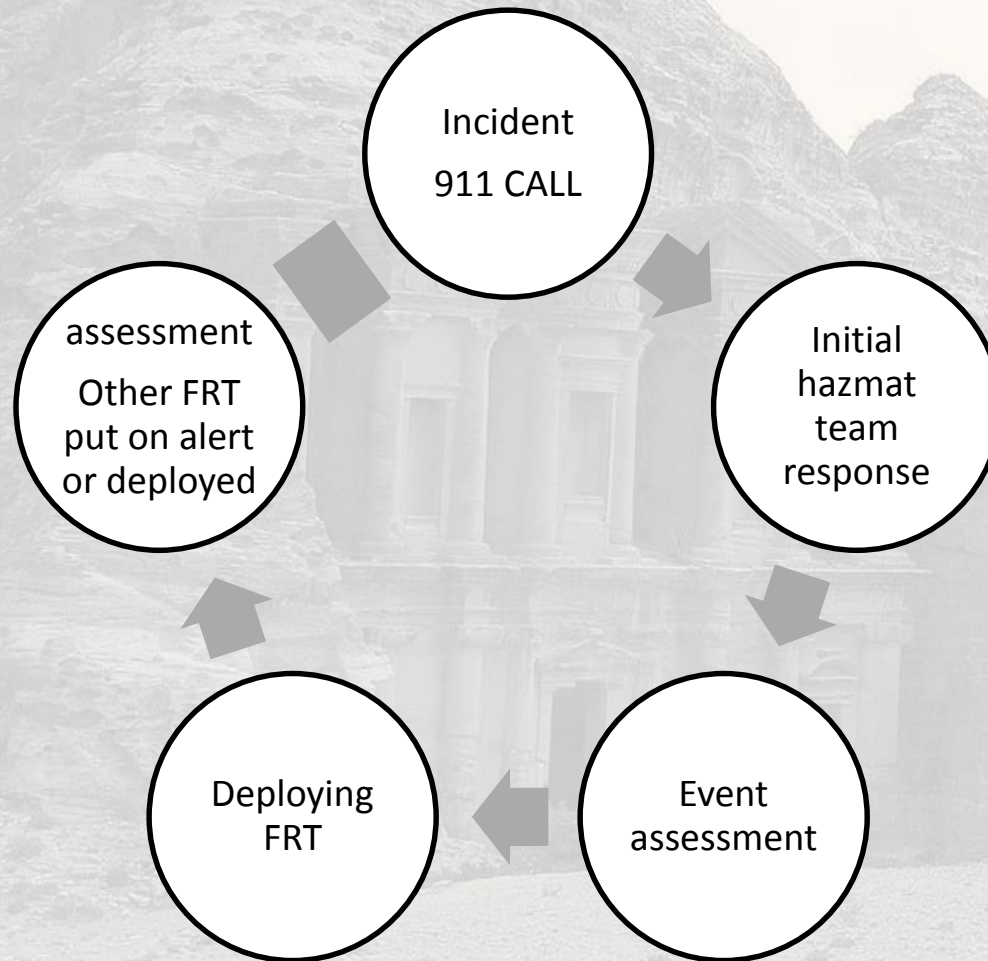


Fast Response Teams(FRT)

Agency	No. of personal
Civil Defense	20
Security agencies.	22
Ministry of Health	6
JAF/Chemical Support Unit	10
EOD/EMRC	4
Total	62



Response Mechanism





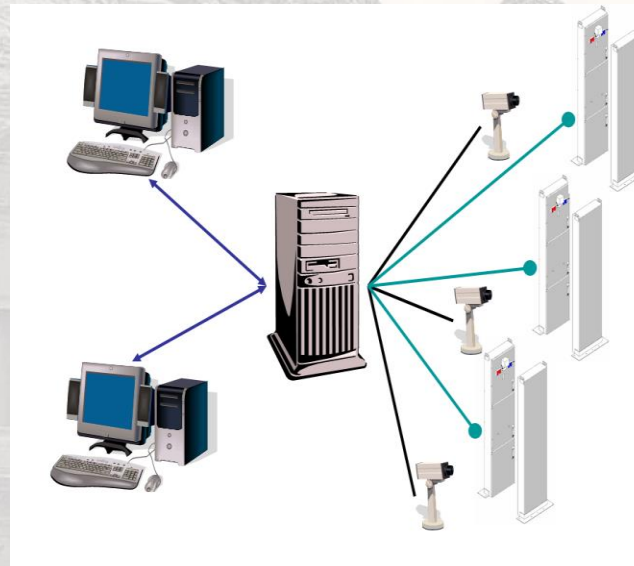
Funding Sources

- **National Budget.**
- **United States Government.**
- **Canadian Government.**
- **International Atomic Energy Agency (IAEA).**
- **Governmental and Non- governmental Agencies (e.g. European Commission, INTERPOL).**



Radiation Portal Monitors

- TSA
- Exploranium GR123
- Exploranium AT900
- Yantar-2U
- Thermo





Handhelds

- Radiation Personnel Detector
SENSOR Technology Eng



- Radiation Survey Meter
TSA



- Radiation Isotope Identification Device
THERMO





JAF- Capabilities Detection

- Radiation Set VDR2, PDR77.(US MIL.)
- Dosimeter, UDR 13. .(US MIL.)
- Isotope Identifinder







Gaps in Capabilities

- **Aerial Survey Capabilities**
- **Limited experience in investigation of nuclear smuggling cases .**
- **Lack of a nuclear forensics lab.**



Questions