



# **Nuclear Security as part of Security of Major Public Events**

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# **Pakistan's Experience** *of* **Nuclear Security to Major Public Events (MPEs)**



**Focus**

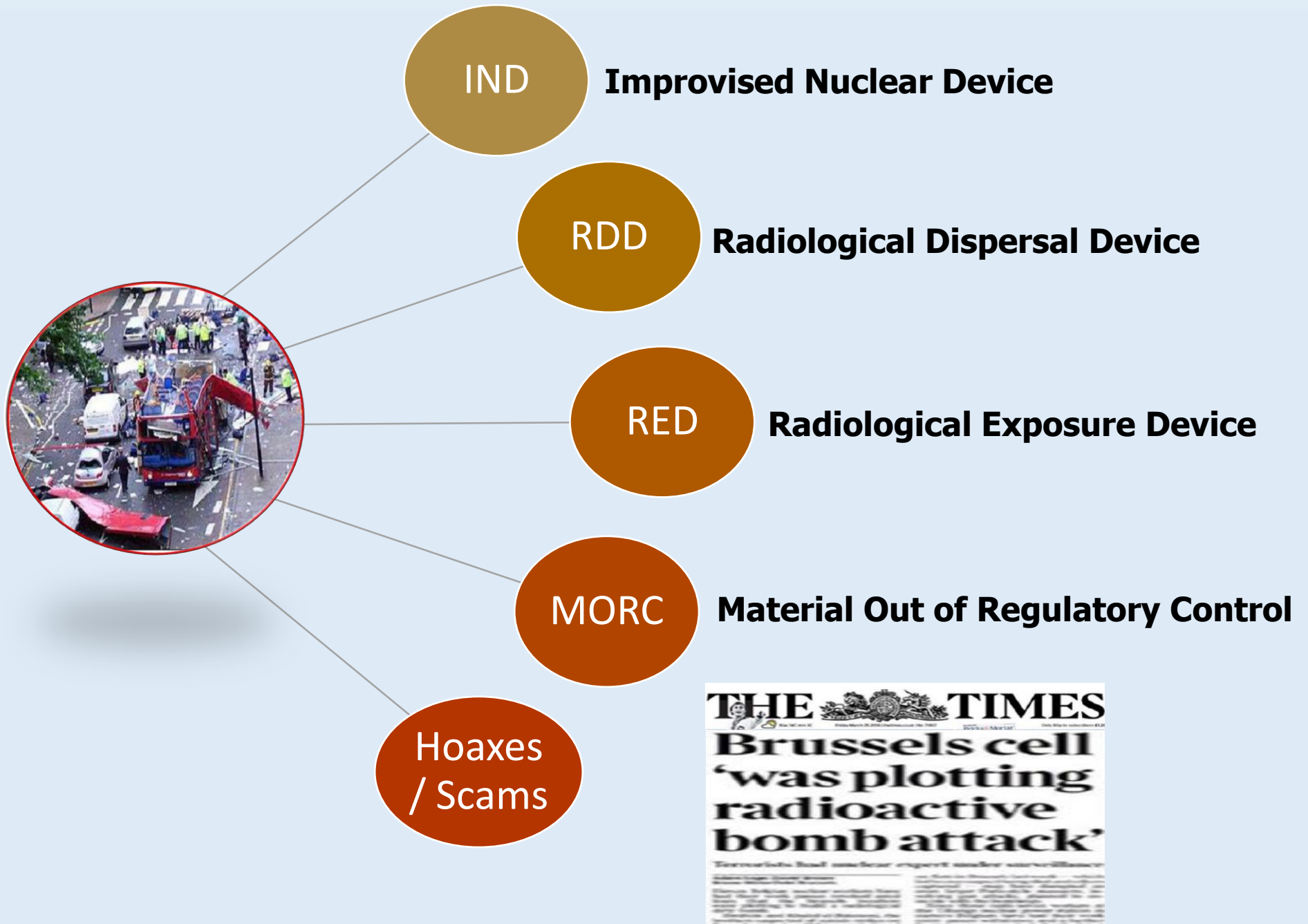


**CONOPS, Key Challenges & Lessons Learnt**

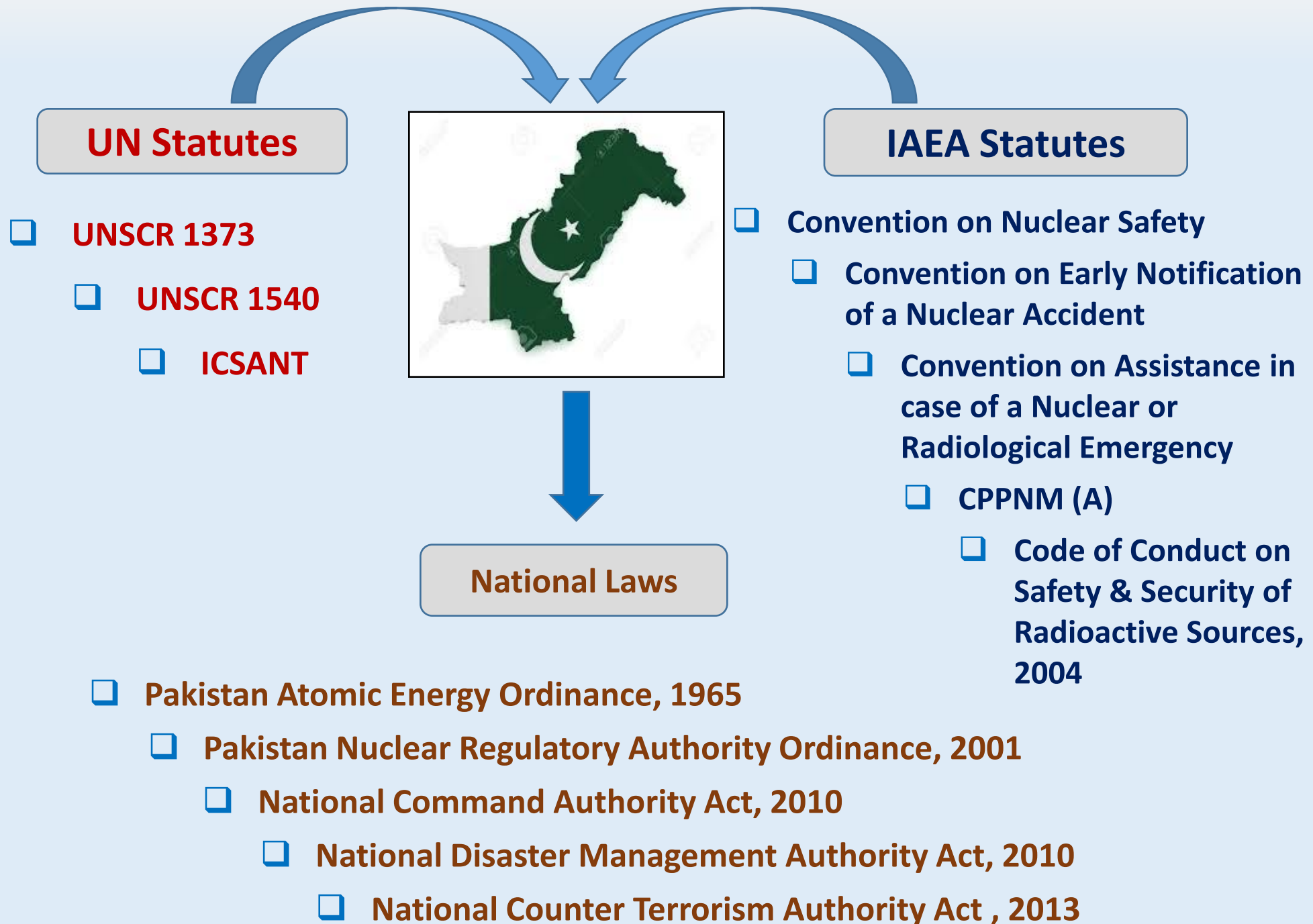
# Outline

- ❑ Legal and Regulatory Interfaces
- ❑ Nuclear Security Threats to MPEs
- ❑ Nuclear Security to MPEs in Pakistan
- ❑ CONOPS
- ❑ Drills / Exercises
- ❑ Key Challenges
- ❑ Lessons Learnt

# Nuclear Security Threats to MPEs



# Legal and Regulatory Interface



# MPEs in Pakistan

Chinese Premier Visit



2013

Change of Army Command Ceremony



2013

Chinese President Visit



2015

Saudi Crown Prince Visit



2019

Pakistan Day Parade



2019

Chinese Vice President Visit



2019



# MPEs in Pakistan (Statistics)

MPE	Venues	Personnel	Vehicles	Alarms
Chinese Premier Visit (2013)	5	1500	350	-
Change of Army Command Ceremony (2013)	2	3500	650	-
Chinese President Visit (2015)	6	2300	425	-
Saudi Crown Prince Visit (2019)	9	3200	575	2*
Pakistan Day Parade (2019)	3	32000	3800	7*
Chinese Vice President Visit (2019)	7	3500	450	1*

**\* All alarms declared as innocent**

# CONOPS

## (Concept)

*Integration of nuclear security systems and measures with the overall security of MPE to prevent, detect and respond against nuclear security threats by conducting **pre-event radiological surveys** and deploying detection instruments at **screening points** and **Radiation Monitoring Teams***



# CONOPS

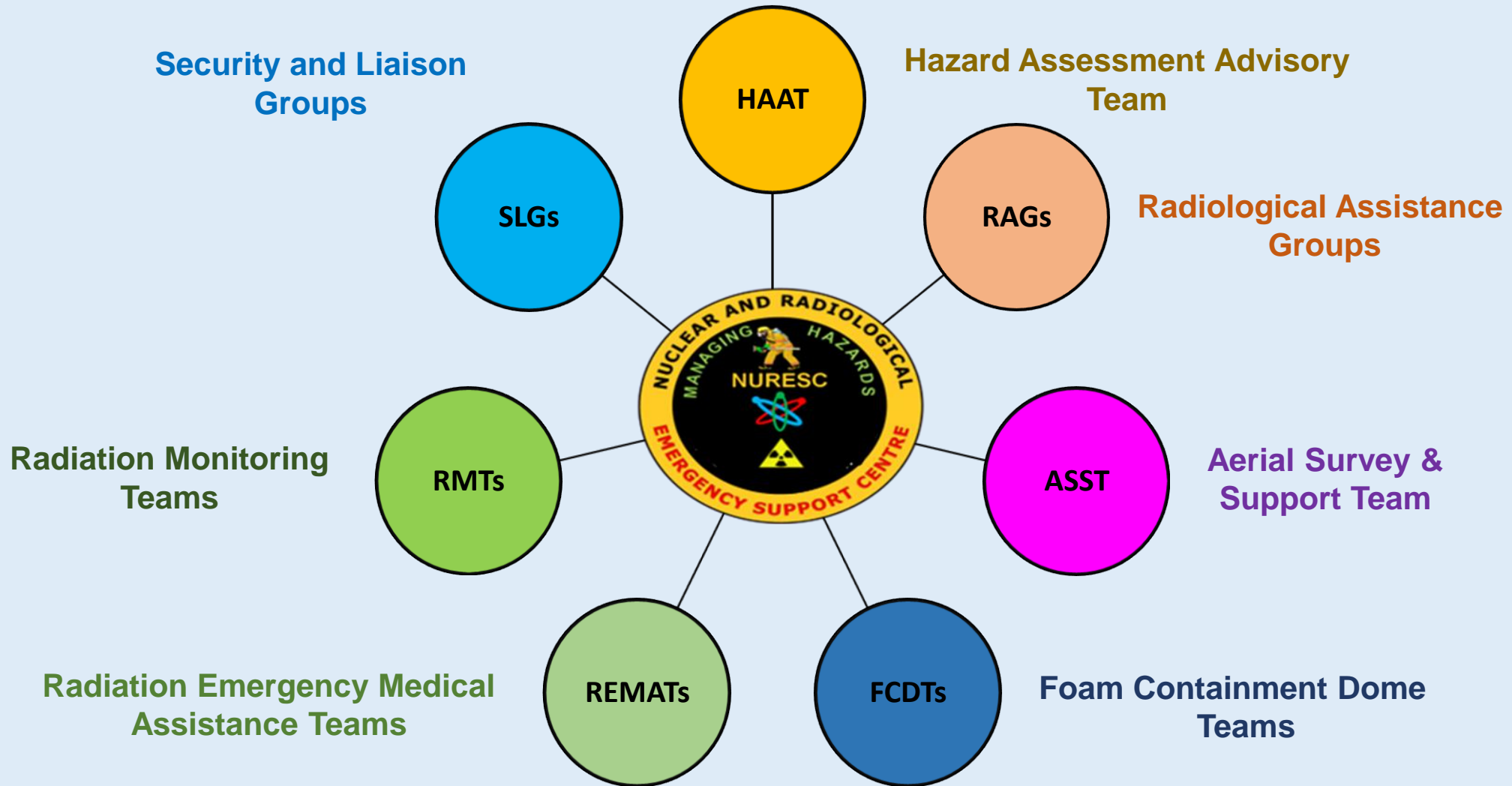
## (Operational Framework)

- ❑ In Pakistan, *Nuclear and Radiological Emergency Support Centre (NURESC)* is responsible to plan, prepare and execute integration of nuclear security systems and measures during MPEs
- ❑ For seamless inter-agency coordination and cooperation, CONOPS is dovetailed with the overall security plan
- ❑ NURESC is part of Incident Command Centre (ICC) established by LEA



# CONOPS

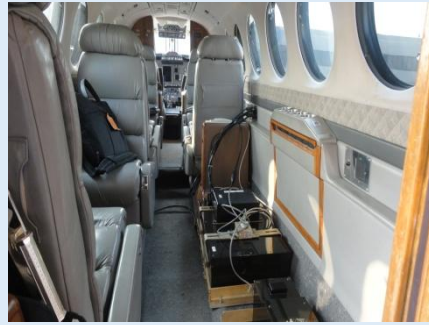
## (Operational Structures and Capabilities)



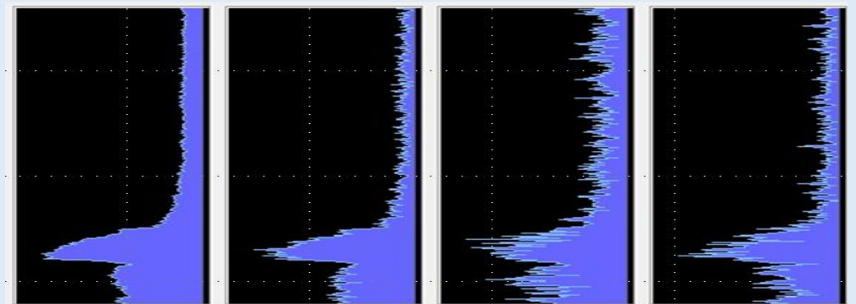
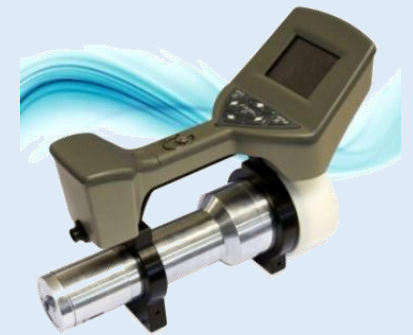
# CONOPS

## (Radiation Detection Equipment)

### Radiation Search & Monitoring




### Radioisotope Identification



# CONOPS

## (Integrated Security Approach to MPEs)

- ❑ Pre-Event Activities (Prevention  Detection)
- Dovetailing with Incident Command Centre
- Selection of radiation detection equipment
- Radiological surveys of venue and strategic locations and identification of hotspots
- Deployment / integration of detection equipment at screening points
- Mobile radiation detection and monitoring teams in the area
- Detect nuclear and other radioactive material out of regulatory control

# CONOPS

## (Integrated Security Approach to MPEs)

- Response Measures
  - Assessment of alarms and information alerts
  - Technical assistance by Radiological Assistance Groups
  - Radiation Emergency Medical Assistance Teams for triage
  - Radiological Crime Scene Management (RCSM)
    - Safety - Security Interface (scene control and safety management)
    - Source recovery / mitigation actions
    - Forensic management
    - Media feed
    - Decontamination and waste management

# Nuclear Security Event at a Public Place (Drill / Exercise)



# Nuclear Security Event at a Public Place (Drill / Exercise)



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420 ft

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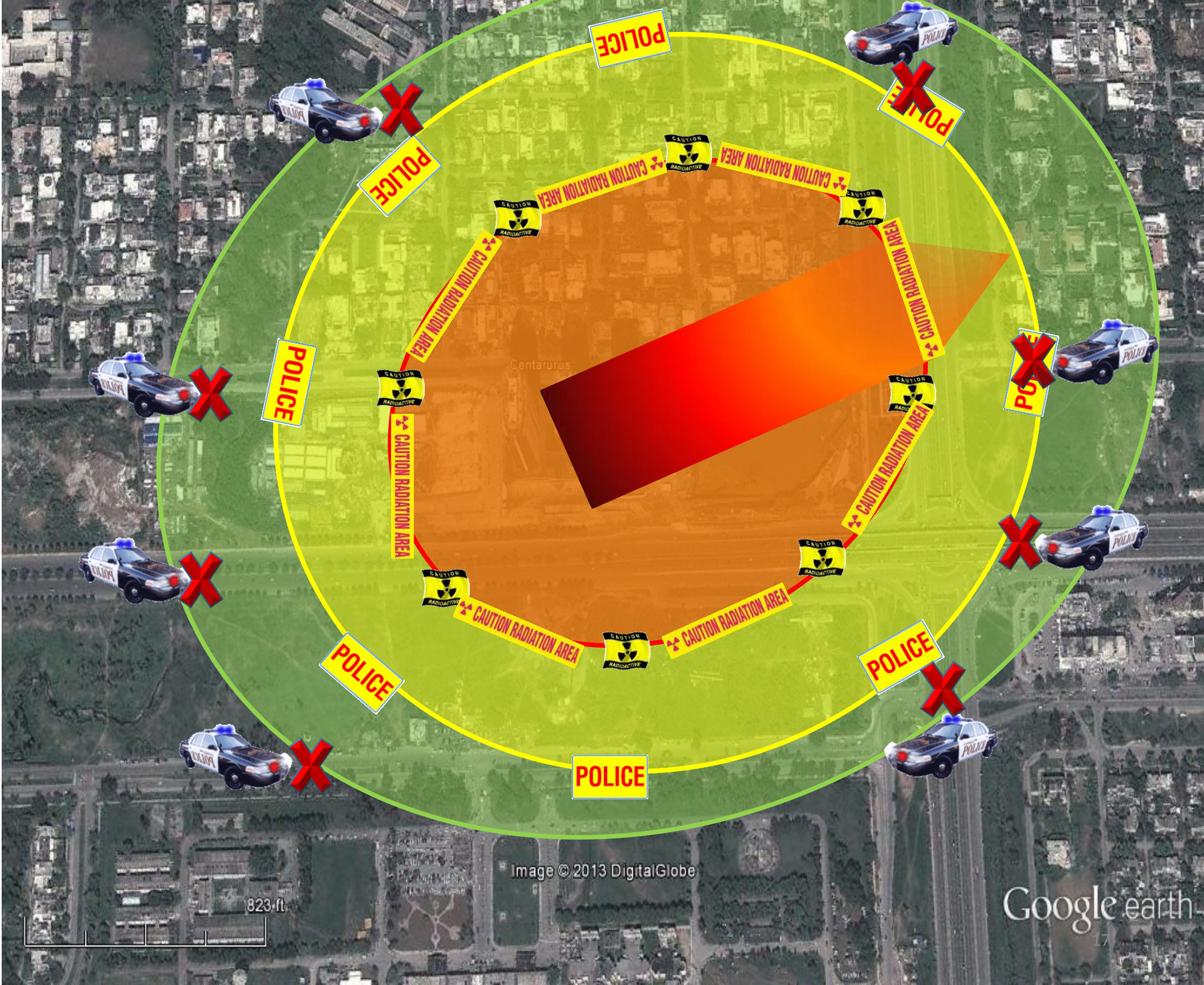


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CAUTION RADIATION AREA

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CAUTION RADIATION AREA

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EMERGENCY ASSEMBLY POINT

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CAUTION RADIATION AREA

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EVACUATION ROUTE

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# Recovery Area

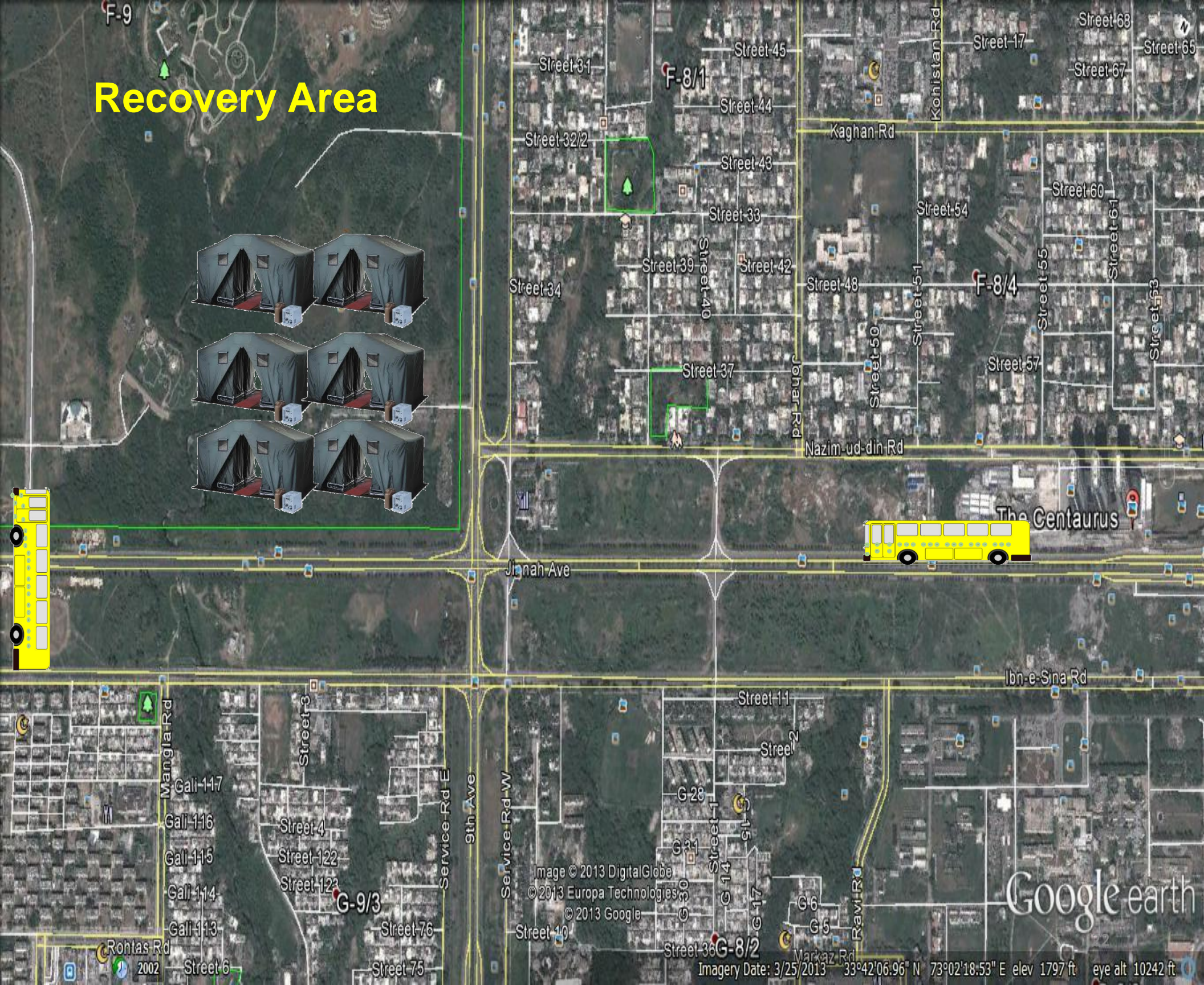


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Imagery Date: 3/25/2013 33°42'06.96" N 73°02'18.53" E elev 1797 ft eye alt 10242 ft

# Key Challenges

- ❑ Awareness about nuclear security threats and timely sharing of info alerts among stakeholders
- ❑ Inter-agency coordination and cooperation:-
  - Protocols / Memorandums of Understanding
  - Safety – Security Interface
  - Radiological Crime Scene Management
  - Public information / media feed
  - Joint Exercises
- ❑ Alarm adjudication (swift mechanism)
- ❑ Availability of Resources viz Tasks
- ❑ Capacity building (Training, HR & Equipment)

# Lessons Learnt

- ❑ Timely sharing of Protocols / Memorandums (efficient / smooth inter-agency coordination / cooperation)
- ❑ Deployment of Radiation Monitoring Teams at strategic locations beyond outer security perimeter (Defense in Depth / Deterrence)
- ❑ Joint Training / Exercises (efficient Safety - Security Interface)
- ❑ Deployment of Hazard Assessment and Advisory Team (HAAT), radiation emergency medical arrangements and rescue teams as part of RCSM
- ❑ Designation of Public Information Officer for media feed





**Thank you**