## **SEMINAR ON:**

## PHYSICAL SECURITY UPGRADES OF NUCLEAR AND RADIOLOGICAL FACILITIES.

### PRESENTED BY

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## **INTRODUCTION:**

As terrorism has become a daily topic of news headlines across the world and owing to recent event in our own country here (Nigeria) also  $10^{th}$  may 2008, the former inspector General of Policy warned that the Al-Qaeda terrorist network was planning to bomb some parts of Nigeria. We all can easily recall the Abdlmutalab issue. The looming threat of radiological terrorism has become more apparent.

The interest expressed by certain types of terrorist groups in using radiological dispersal devices (RDDs) demand that increased attention be brought to this threat in this regard governments around the world and their cutinizes have become increasingly anxious about threat of such attacks.

There are several aspects to this subject. However this tutorial will focus on Physical security Upgrades of Nuclear and Radiological Facility in Nigeria as implanted by the NNRA US DOS and the IAEA projects in Nigeria.

The NNRA, USDOE, IAEA has taken the position of providing reasonable protection commensurate with the character and value of radioactive sources in Nigeria. Basic security concepts have adopted and applied to pre-determined area in this institution.

## **OBJECTIVES**

The objective of this seminar among other issues is to familiarise participant with the knowledge of physical protection and security of radiological and nuclear facilities in accordance with current international standards and to provide information and guidance on the tools and strategies to achieve this aim.

## PHYSICAL SECURITY UPGRADE

Physical protection (also called physical security) consists of a variety of measures for the protection of Radiological and Nuclear materials or facilities against sabotage, theft and diversion. This approach can be graded based on the significance of the materials or facilities being protected.

#### **IDENTIFICATION OF ASSETS**

What are assets / what are we trying to protect? Assets are anything with value (to you or a criminal / terrorist) and in need of protection.

Assets of facilities may vary considerably but there are general categories which should always be considered.

- PEOPLE
- MATERIALS AND EQUIPMENT
- SENSITIVE INFORMATION (INCLUDING IT EQUIPMENT)
- IMAGE

## **PEOPLE:**

(Employees, Local Population) – Terrorism, Blackmail, Physical Violence, Disaffected employee, Insider, exploitation, complacency, lack of security culture. To mention a few.

## **MATERIALS AND EQUIPMENTS:**

Sabotage, Vandalism, theft.

## **SENSITIVE INFORMATION**

Loss, Compromise, Corruption of Data.

## **IMAGE**

Reputation, Bad publicity, pressure groups for instance the NNRA can tarnished in several ways.

## **PHYSICAL SECURITY MEASURES**

Physical security measures are a combination of

- Accommodation
   (Container, Cabinet, Room, Building).
- Entry Control (Keys, Combinations, Guards, Receptionist).
- Alarms Intruder detection system.
- Surveillance Systems (CCTV)
- Barriers (Walls, Fencing, Gates, Turnstiles)

#### **ACCOMMODATION:**

The accommodation consist of buildings in the facility and other containers within the building such as cabinets for materials, equipment room etc.

## **Entry Control**

Control of access points, the perimeter clear of Sterile Zones, Adequate Security Lighting, perimeter intrusion detection systems. Crash barriers,

walls, fencing, Gates Turnstiles these measure are for both pedestal and vehicles traffics.

#### **ALARMS**

An intruder detection system is intended to notify the site security force of a potential intruder vital areas are located within the protection areas and they should have additional alarms to protect vital equipments.

## **SURVEILLANCE SYSTEM (CCTV)**

The close circuit television is effective in augmenting other physical security measures and providing real time surveillance, pictorial evidence for future reference purpose.

#### **FIXED DURESS ALARM**

The fixed duress alarm buttons are used to activate the alarm system. The action of holding down the red button triggers the siren / strobe light indicator. While the action of turning the key on the duress button turns of the siren / strobe light.

## **KEY PADS**

The key pad is used to activate and de-activate the control panel, upon entering a pre-set code which is provided refer to additional instructions on USERS MANUAL.

#### **MOBILE ALARM SYSTEM**

The mobile alarm system is use to raise alarm when under attack or when the holder observe suspicious behavior or movement from unauthorized individuals or group of people and is not sure about their motives. The Mobile Alarm system should not be taken away from the facility at any time. The actions of sharply pulling out the strap triggers the alarm and action of inserting the strap pin into its original position turns off the alarm.

#### **MOTOROLA GP340 COMMUNICATION KIT**

The Motorola GP340 Hand held mobile communication radio is a means of communication within the hospital premises between the guard, staff and receptionist. The radio is completed within chargers and holsters. They shall not be taken away from facility at any time.

#### **ACCESS CONTROL**

The basic principle of the security with regards to this project is to control and limit access to vital areas. Access should be limited to those persons with need to have access due to their official duties and responsibilities.

# ADHERENCES TO ACCESS CONTROL PROCEDURE TWO PERSON RULE.

The Director RT unit will be responsible for the appointing two key members of staff that will operate the safe for key and lock accountability / control, Ensure that keys locked in a designated safe place (Safe). All Doors are properly locked and secured at close of work.

The Unit shall maintain key control log for record purposes the log shall contain the following information:

- A. Date
- B. Time of opening / locking
- C. Name of person
- D. Signature.

## **STAFF RESPONSIBILITIES**

Staff members will make sure that procedures are maintained and strictly followed in daily activities.

Each staff member is expected to report any known or suspected violation direct or indirect knowledge of actual or potential threats, to appropriate authorities.

Each employee must help to prevent unlawful access to the protected area.

Each employee must assist in preservation of the equipments for maximum benefits.

## **ROLE OF RESPONSE FORCE**

The response force private security guards / NPF must respond to notification within 24hrs of incidence once a cell from pre determined phone / GSM No. or security related notices is given.

Once on site they will investigate the threat, and take appropriate action soon enough to prevent access, or to prevent a prevent a perpetrator from leaving the area. Arrest and hand over to appropriate authorities.

## **CONCLUSION**

For physical security upgrades of Nuclear and radiological facilities to be effective.

- People must understand that
- A credible thrust exist
- Radiological and Nuclear security important
- The acceptance of the management of the read protection system. (PPS)
- Good current and relevant procures and policies
- Good and effective behavior of all the people involved.
- Effective behavior comes from the establishment of attitudes and beliefs throughout an organization through:
- Effective and proactive leadership
- Acceptance of individuals responsibilities
- Education and training to ensure continuous improvement.

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