#### MATTERS ARISING FROM THE UN-SPIDER TECHNICAL ADVISORY MISSION TO NIGERIA

#### Godstime James UN-SPIDER Regional Support Office in Nigeria

United Nations International Conference on Space-based Technologies for Disaster Risk Management "Best Practices for Risk Reduction and Rapid Response Mapping" Organised by the United Nations Office for Outer Space Affairs (UNOOSA) Beijing, China - 22 – 25 November 2011



# BACKGROUND

- ➢ Nigeria like any other country is prone to Natural and Anthropogenic disasters.
- ➢ Prevalent types of Disasters are:
- •Drought,
- •Desertification,
- •Flooding,
- •Epidemics,
- •Coastal erosion,
- •Dam failure,
- •Building collapse,
- •Oil spillage,
- •Maritime collision or accident,
- •Bomb explosion,
- •Communal clash,
- •Fire,
- •Air crashes and boat mishap,
- •Landslides.







## BACKGROUND

➤The Nigerian Government through the National Emergency Management Agency (NEMA) (UN-SPIDER NFP) invited the UN-SPIDER to conduct TAM in the Country.

Assessment of existing institutional capacities regarding access to and use of space-based information in all phases of the disaster management cycle.

➢ Propose recommendations on how Government Agencies in Nigeria can improve their capacities to access and make use of space-based technologies for Disaster Management in the country.

## **Technical Advisory Mission**

#### Mission was conducted from 13-17 June 2011 in Abuja

The mission team consisted of the following experts: David Stevens, Jörg Szarzynski, Michael Leitgab (UN-SPIDER); Isi Ikhuoria, Seyi Fabiyi, Gabriel Yusuf (RECTAS) Ishiaku Muhammed (WMO, UNCT Nigeria) Alhassan Nuhu and Justine uwazuruonye (NEMA/UN-SPIDER NFP) Godstime James (NASRDA/UN-SPIDER RSO)





# **DAY 1: Institutional Visits**



#### **COSPAS-SARSAT System Overview**







# **DAY 2: Technical Workshop**

### Stakeholders Workshop

- Stakeholders in the field of Disaster Management.
- Presentation on Mandates and the role of Space Technology in Operations.
   Administration of Questionnaire:
  - ➢ Mission/Mandate;
  - ➤Competency in RS/GIS;
  - Access to data;
  - Provision of data;
  - Contributions to Disaster
  - Management Cycle;
  - ➤Funding;
  - Financial resources;
  - Interactions with other institutions;
  - Expectations towards UN-SPIDER and its network partners.



## **DAY 3: Review of Disaster Response**

➢ Rain between the 1<sup>st</sup> and 11<sup>th</sup> of September 2010, resulted in the flooding of some northern states in Nigeria.

- ➢ 50 villages were affected,
- ▶130,000 were displaced,

➢ 48 persons were reportedly killed.

➤The charter was activated on the 11<sup>th</sup> of September 2010 at about 11pm.



# **DAY 4: Institutional Visits**

Office of the Surveyor General of the Federation.
 Nigeria Meteorological Agency

(NIMET).
➢ National Oil Spill Detection and Response Agency (NOSDRA).
➢ Farming Early Warning System Network (FEWSNET).
➢ Federal Fire Service.

Nigeria Hydrological Services Agency.







# MAJOR FINDINGS

► Nigeria has reliable access to spacebased information-Launched Satellites.  $\triangleright$  A well articulated disaster risk reduction and management plan exists. Several institutions exist in the country for man-power development in the use of space technology. > Optimum use of space based information for disaster management is limited by inadequate capacity.  $\succ$ Institutional cooperation during disaster management is not strong enough.





# **Follow-Up Activities**

- Increase awareness of decision-makers through special events.
- Map existing capacities and opportunities and define capacitybuilding needs.
- Develop clear data policy regarding NigeriaSat-2 Ensure access to DRM activities in Nigeria and globally.
- Ensure the complete implementation of the National Geospatial Data Infrastructure (NGDI).
- Establish cooperating partnerships including South-South cooperation.
- Develop MOUs with neighboring countries for COSPAS-SARSAT and play pro-active role at regional forums.
- Identify areas for hotspot mapping and leverage on existing opportunities (SAFER).

#### **RESPONSE TO FLOOD IN IBADAN**

➢On Friday 26<sup>th</sup> of August 2011 torrential rain resulted in severe flooding in Ibadan, Oyo State capital in south western Nigeria .

- ➢ Nigerian Red Cross report that about:
- $\checkmark$  30 people died in the disaster
- ✓ 2000 people affected
- ✓ 50 Houses were submerged,

 ✓ 2 Collapsed buildings, collapse of bridges, farm lands washed away, collapse of Eleyele Dam,

 $\checkmark$  pollution of underground water



#### **RESPONSE TO FLOOD IN IBADAN**

➢ NEMA activated the International Charter Space and Major Disaster on the 29<sup>th</sup> of August 2011. (Charter Call 370).

A project manager was appointed from the NASRDA to process the images that were received.

Data supplied by the Charter

✓ TerraSAR - 2011/08/31

✓ RadarSat – 1 & 2 - 2003/12/28 and 2011/08/31

✓ Spot Image – 2011/08/01 and 2011/07/19

✓ Envisat - 2005/01/04, 2009/09/02,
2010/06/09, 2010/05/21 and 2010/09/22.

Images were processed and results sent to NEMA.



Flooded Areas in Ibadan City, Oyo State



godstimej@gmail.com