

UNITED NATIONS Office for Outer Space Affairs

NASRDA/UN-SPIDER/ZFL Interinstitutional Workshop on The Use of Space-Based Information for Flood Response and Early Warning 12 to 14 September 2022

United Nations Office for Outer Space Affairs United Nations Office at Vienna www.unoosa.org



### **National Emergency Operations Centres:**

#### Aims:

Improved coordination of response efforts by government agencies and the international community in case of emergencies or disasters; through an improved information management of data on impacts, needs, resources and services needed and allocated:

- To expedite the provision of humanitarian assistance to communities affected by disasters;
- To coordinate the restoration of lifelines and critical infrastructure;
- To report officially on impacts and what the government is doing to address such impacts.
- To coordinate the provision of support to neighbouring countries in case of disasters.







### National Emergency Operations Centres:

#### How:

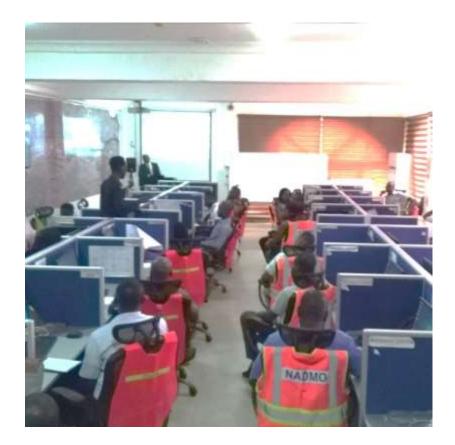
The NEOC as a structure established to compile and use, in a more systematic fashion, data on damages and losses, to coordinate response efforts, and to rehabilitate lifelines and critical infrastructure in a more timely and efficient manner.





#### The role of the Emergency Operations Centre is to:

- Assess the impacts using a variety of sources of data and information, including satellite imagery,
- Identify what needs to be done in each community or sector of development
- Transform data on impacts into needs and services that need to be fulfilled to restore communities to their normal way of life.
- Keep track of what has been done so far, and what is still pending.





#### The role of the Emergency Operations Centre is to:

- Identify which institutions have resources to fulfil those needs, and trucks, airplanes or helicopters to deliver those resources to the places where they are needed.
- Identify which needs cannot be met with national resources so as to elevate requests to the international community as quickly as possible.
- Be able to compile information, in the form of bulletins, for high ranking authorities to organize press conferences to raise awareness about impacts and actions being implemented to address those impacts.
- Prepare a report of the event and how the Emergency Operations Centre responded.







### **Decision Support Systems:**

# A decision support system is used to facilitate the coordination of emergency and disaster response efforts:

- Structured compilation of data on impacts:
- To structure and quantify needs in terms of resources and services and the conduction of tasks to respond to the impacts of disasters;
  - To document the resources and institutions are committing to contribute to meet the needs;
  - To keep track in a single system on resources already delivered or services already rendered, and which ones are still pending;
  - To identify more quickly any resources which may not be available in the country to meet specific needs.







## **Decision Support Systems:**

Rapid impact assessment	Implication in terms of resources needed	Important to keep in mind
278 families in temporary shelters	Food rations, potable water, Portable toilets Sponges, blankets	How will these resources to transported to the shelters or places where they are needed?
405 potential cholera cases	Medicines	Keeping track of what has been taken care of and
Roads or bridges damaged	Heavy machinery to rehabilitate roads	what remains pending
Electrical power failure	Crews and materials to replace, fix problems	Identify what may not be available in the country to
Problems with potable water supplies	Crews and materials to replace, fix problems	request international support



## **Decision Support Systems:**

Implication in terms of resources needed	Services	Reporting	
Food rations, potable water, Portable toilets Sponges, blankets	Transport supplies to temporary shelters	Data in a single place on impacts to	
Medicines	Provision of medical assistance to those injured or sick Transport those seriously injured from remote areas to hospitals in cities	all sectors of development and efforts to address them	
Heavy machinery to rehabilitate roads	Rehabilitate roads	to prepare official	
Materials to replace, fix problems	Rehabilitate electrical service, potable water supply, telecommunications, other critical infrastructure	bulletins and press conferences	



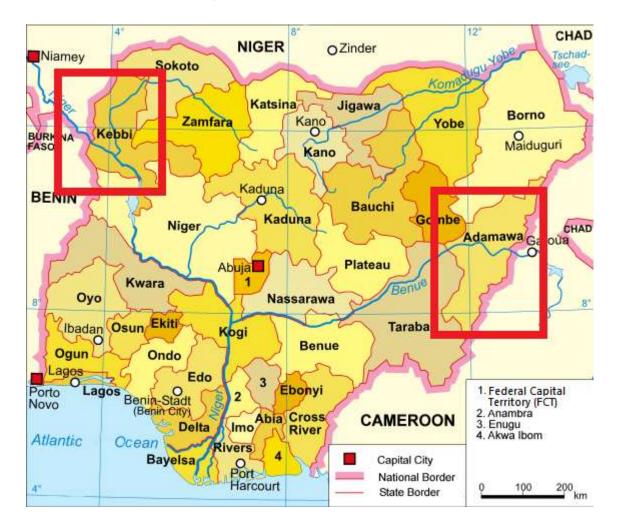
## Scenario of floods in the Benue and Niger river:

A tropical storm hits several regions of Cameroon, Niger and Nigeria and provokes multiple impacts in cities, towns, villages, critical infrastructure and lifelines in several states:

- On the simulated 1<sup>st</sup> day, floods impact areas in the Adamawa and Kebby states.
- On the simulated 2<sup>nd</sup> day, floods progress downstream and impact additional states.
- On simulated 3<sup>rd</sup> day, the floods in the Niger and Benue rivers reach the junction near Lokoya City and continue to impact additional states.

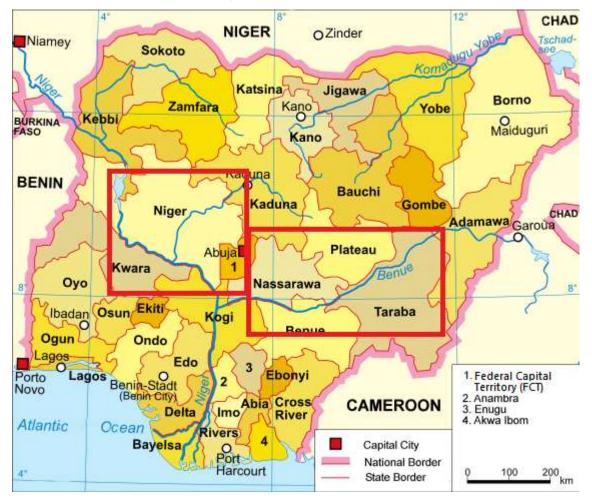


## Simulated 1<sup>st</sup> day:





## Simulated 2<sup>nd</sup> day:





## Simulated 3<sup>rd</sup> day:





### What we would like to do during the simulation:

- Raise awareness about the value of having an operational Emergency Operations Centre.
- Participants to get a more precise idea about how the Emergency Operations Centre is:
  - Initially activated
  - Escalated to engage additional institutions depending on the size of the disaster
  - Managing data , processing such data to transform it into actions in the field, to generate reports of impacts and efforts being conducted to address those impacts.
  - Providing transparency to how resources are being used to provide assistance to those affected and to restore basic lifelines



#### **Sectors within the EOC:**

- Shelter management & Security (Ministry of Housing, Ministry of Health, Red Cross/Red Crescent, Policy).
- Resources and Logistics (Ministry of Health, Ministry of Defence, Ministry of Agriculture):
- Sectors of development (Ministry of Energy, Ministry of Telecommunications, Ministry of Public Works)
- Other Sectors and International Community