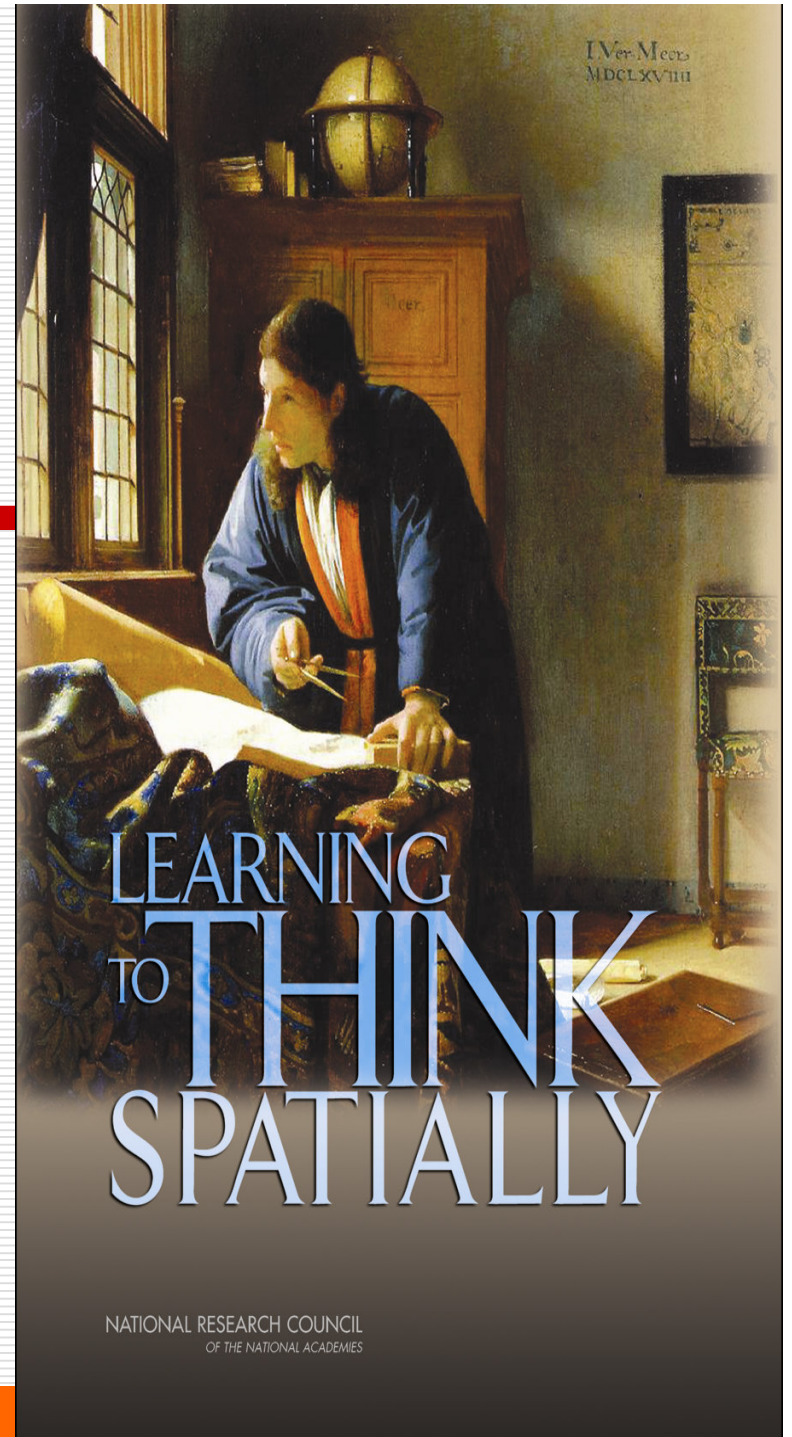


# Current Plans & Programs for Space-related activities

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ICT and Sciences & Technology Division (ISTD)  
Geoinformation Systems Section (GiSS)

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# Outlines

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- **1. Principles & Features**
- **2. Policies & Strategies**
- **3. Current and forthcoming activities**
- **4. Other activities**
- **5. The way forward : Priorities in Space development in Africa**



# Space-related activities Principles...

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- ❑ **Arrange for widest possible dissemination of available information**
  - Unlock the hidden potential in the data
- ❑ **Put in place policies, resources and structures:**
  - To make information available to decision makers and the community when they need it; where they need it; In a form they can use (almost) immediately



# Space-related activities

## Features...

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### ❑ **Policies and Coordination**

- Assign custodianship responsibilities as appropriate

### ❑ **Data (Re-engineering)**

- Fundamental, Core Datasets, thematic data

### ❑ **Capacity Building and Retention**

- Critical mass of awareness of EO (Producers & Users)

### ❑ **Standards and interoperability**

- Common geodetic framework
- Metadata Standard
- Common base themes

### ❑ **e-Services (find and share data)**

- Streamlined electronic delivery of services to achieve improved user service, faster response times, efficient operations, lower transaction costs, more informed decisions...



# Space-related activities Policies and Strategies

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- In line with UNISPACE III recommendation, ECA has undertaken major actions:
  - To increase access to and use of spatially based information resources in decision making processes
  - To strengthen the capacity of member States to design institutional arrangements and implement national policies and programmes that reinforce the linkages within the nexus of food security, population, environment and human settlements.



# Protecting the Earth's environment and managing resources

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- The strategy leads with placing emphasis on the priority areas identified in the WSSD plan of implementation
  - In 2007, ECA has assisted Member States to establish a West African Regional Network aimed to strengthen the integration of space-based and in situ earth observations of land cover dynamics in West Africa, including operational early warning systems for bush-fires
  - In 2008/2009 and beyond, ECA will continue to assist the African Union, Member States and Regional Economic Communities on establishing the African Monitoring of Environment for Sustainable Development (AMESD) project and the Global Monitoring for Environment and Security (GMES Africa) Programme





## Applications for Human Security, humanitarian assistance, development and welfare

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- The strategy leads with developing value-add products and services, exploiting the vast opportunities provided by the Web.
  - ECA has developed a mapping tool to enable at-a-glance visualization of the status of countries with regards to meeting the MDG targets. Called “MDG Mapper” (<http://geoinfo.uneca.org/mdg/>), it includes functionality to thematically map MDG progress, view the raw and derived data, chart and sort the indicators, download the data, and can produce a rich set of summary statistics and metrics of spatial association
  - In 2008/2009 and beyond, ECA will continue to foster the accessibility of spatial data and the use of spatial information technologies in government day-to-day business processes and services delivery, through the development of spatially enabled e-government Services, where geospatial technologies are used to help our Member’s States perform on-line delivery of location-based services



## Development of law, Guidelines and ethics

- The strategy leads with developing value-add products and services.
  - ECA has published for decision makers, researchers, academia and other dealing with land issues in Africa, a guide on the role of information management in formulating and implementing land policies. The publication underscores the importance of geospatial technology for the collection and maintenance of data needed for sound land's administration
  - ECA has also published a new report on a consistent definition and specifications of contents of fundamental geospatial data sets to support Africa's development agenda, as no standard definition existed.
  - ECA has developed an African Profile of the International Standard ISO 19115:2003, Geographic information Metadata to support the realisation of the objectives of the programme on Mapping Africa





## Utilizing and facilitating information and communication technology for development

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- The strategy leads with exploiting the vast opportunities provided by the Web.
  - ECA has developed and will continue to maintain a clearinghouse system, such as to provide a facility for member States to publish the metadata of their available data holdings.
  - The Commission has also implemented a new Web-Server aiming to enable the development of Geospatial portal, which will be in the future a “one-stop shop” for authoritative geospatial data in Africa



## Using and improving satellite positioning and location capabilities

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- The strategy leads with building an uniform coordinate reference system for Africa.
  - ECA pursued its effort to develop through the AFREF Project, a unified geodetic reference frame for Africa so that maps and other geoinformation products can be represented on the same datum.
  - As part of a donation from Trimble Corporation, ECA is currently implementing in its subregional offices, five GPS reference stations equipment that will add to the network of stations, for the determination of the African reference frame as well as being part of network of continuously observing reference stations (CORS).
  - In addition, the Commission has developed a proposal to densify the network such that positioning professionals (surveyors, engineers, environmentalists, mineral prospectors, etc) would always have access to parameters of at least one reference point within 500Km from any place in Africa



## Capacity-building and education in space applications for sustainable development

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- The strategy leads with championing sound research and transfer of technology's programmes, where activities will be significantly expanded to cover the fostering of innovation, product and service development, and earth observations applications.
  - ECA in collaboration with specialized regional centre (RECTAS and RCMRD) will continue to develop training programs in geo-information technologies and their applications in resource assessment, planning, management and monitoring for resource technicians, managers and scientists.
  - In 2008/2009 and beyond, ECA will increase its effort toward the development of an indigenous African capability in Space Science and Technology.



## Advancing scientific knowledge of space and protecting the space environment

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- The strategy leads with creating and managing spatially-enabled knowledge in the continent.
  - ECA has organised the 5th session of the Committee on Development Information. Among others recommendation, the meeting requested ECA to undertake appropriate action with space imagery's providers to make satellite images affordable to African countries.
  - In 2008/2009 and beyond, ECA will continue to enable Member States participation at important regional geo-related events and to partner with African sciences and research institutions, as well as other sectors to increase awareness in space applications.



## Other activities

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- The strategy leads with harmonizing datasets and approaches to spatial data management
  - ECA will continue to promote and support activities for coordinating the input and views of key stakeholders to ensure that the standards and approaches to be adopted in geospatial information make sense, are build on existing standards and approaches in such a way that it anticipates the future potential use of earth observation data for various purposes.



# Space-related activities Priorities

- ❑ Assist member states in the implementation of NSDI (technical / policy component)
  - Have appropriate policies, standards and institutional arrangements
- ❑ Establish a continuous, permanent GPS stations (AFREF Project)
  - Develop an unified geodetic reference frame for Africa so that maps and other geoinformation products can be represented on the same datum
- ❑ Capacity-building and education in space applications
  - Champion sound research and transfer of technology's programmes, where activities will be significantly expanded to cover the fostering of innovation, product and service development, and earth observations applications
  - Increase effort toward the development of an indigenous African capability in Space Science and Technology
- ❑ Advance scientific knowledge
  - Enable Member States participation at important regional geo-related events
  - Partner with African sciences and research institutions, as well as other sectors to increase awareness in space applications.
  - Support the organization of regional conferences such as AfricaGIS and African Association of Remote Sensing of the Environment (AARSE)





# Contacting Us...

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