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New International Coordinating Mechanism Unified Global Geoinformation Platform *

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New International Coordinating Mechanism

Unified Global Geoinformation Platform

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Issues of global geospatial information

Major Chinese achievements

Practice and experiences

Positioning UNGGIM

Vision on international cooperation

2011-10-25

Issues of global geo-information





Need of International Coordination Legislation Man power Standards Issues World Geo-Name Forum Data Share Boundary

Trend of International Cooperation

- 1. Governance Improvement
- 2. Standards and Qualification
- 3. Earth Observation System of Systems
- 4. Share of geospatial information
- 5. Manpower development
- 6. Unified geospatial information service
- 7. Technical transfer
- 8. International fund

Major Achievements in China

China Surveying and Mapping Innovation Base

Inaugurated on Sept. 8, 2009 98m high, 26 storeys 75,000m²





Construction of Digital China(NSDI)

9

<u>NASG</u>

National Administration of Surveying,Mapping and Geoinformation

Catalog Clearinghouse

<u>DCGF</u> Digital China Geospatial Framework

aws Standards

Framework Datasets Institution & Coord

Digital Earth
Digital China
Digital Region
Digital City (160)
Digital County
Digital Township

Public Service





Geodetic Reference System



Modern Geodetic Datum



Base Map Series and Coverage





Citv

1:1000

1:500

Topographic maps and databases at 1:1 million, 1:250,000 and 1:100,000 covering 100% land area; 1:50,000 90%;1:10,000 50%;1:2000 most cities



Western China Mapping

Covering 2 million km²
Average height >4000m
5032 map sheets at 1:50K





Emergency Response



Wenchuan Earthquake 12 May 2008

北川县城0.3米航片



China Webmap Portal - Map World

Government leading, enterprises participating



进入

国家测绘地理信息局监制

11-m

<u>www.tianditu.com</u> <u>www.tianditu.cn</u> <u>www.Chinaonmap.com</u>



General Structure of the Platform



<u>Government Network:</u> for e-government users <u>Public Network(Internet):</u> for public



国家测绘局监制

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京ICP备10049814号

Image browse-various resolution



 2011年3月22日 星期二 农历二月十八 下月5日清明

 地图浏览
 省市直通
 成果日录
 专题服务
 用户指南

 English Placename
 隐藏地名
 矢量
 影像
 三维
 □

上海 (更换区域) <table-cell-rows> 9℃~3℃ 漫游标绘 距离面积 打印



国家测绘局些制



3D browse



国家测绘局监制

N





National Geomatics Industrial Park

English Placename 隐藏地名 矢量 影像 三维 🔳





Airborne InSAR Mapping System



Practice and Experiences

<u>Go out</u> Infrastructure Products Service Training •NGOs Trading Expertise Technology

4-2011-10-25

regional bilateral global

<u>Bring in</u> Products Service Training Standards Technology Trading Expertise Consulting



Bilateral Cooperation

China has assigned MOU with more than 50 countries in mapping field **China-Germany: Training and technical coop China-USGS: Training and R&D China-Australia:** Training and HLRFIS project **China-Sweden:** Training and consulting **China-Japan: Training and technical service** China-Russia (USSR) : technical and consulting

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China-Brazil Resource Remote Sensing Satellites



Regional Cooperation

China has been actively involved in UNRCC-AP and PCGIAP

Training on SDI and Disaster Management
 Regional Reference Framework

Global Cooperation

Global mapping Remote sensing field check NGOs

Global Land Cover Mapping Project (30m)

- GEO has identified 26 major tasks for the coming four years.
- Global Land Cover is listed as the 11th task

Land Cover data is the key spatial data of global change research and key parameters of earth system models;

Many GEO tasks require higher resolution, continuous land cover data

Existing five global land cover products

Product	USGS	UMd	BU	GLC2000	Europe
Scale	1km	1km	1km	1km	300m

Global Land Cover Mapping Project (Data Flow)

- From Jan. 2010 to Dec.2012
- Use 30m Landsat and HJ image, 250m MODIS and FY-3 image;
- Develop new classification scheme and methods
 - ecological geographic division
 - geometry processing methods of HJ image
 - classification algorithms

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- Produce higher resolution (30 meters)
- Global land cover products (2000, 2010).

Global Land Cover Mapping Project (Continent scale Product Development)

•Currently, the extraction of global water and wetland is under development. • The global land cover data production would be completed by the end of next year.

Positioning of UN-GGIM

Direction of UN-GGIM

UN Statistical and Geospatial Commission

UN Statistics and Geospatial Information Division

UN Geospatial Information Commission

UN Geospatial Information Division

GGIM

Vision on International Cooperation

Geographic Monitoring

- Monitoring key publicly invested projects
- Monitoring natural disasters
- Monitoring land coverage change cycles
 Providing analysis and service platform
- Providing analysis and service platform

Geospatial Industry in China

■13,000 licensed enterprises □400,000 employees □Total output in 2010: RMB 100 billion □Annual growth rate: 25% **B** enterprises listed in the stock market Merging and acquisition Geospatial Industrial Parks under construction

Go International

GNSS--Compass (Beidou) Satellites

Geostationary Orbit (GEO) 5 Middle Earth Orbit (MEO) 27 Inclined Geostationary Orbit (IGSO) 3 2012 Asia Pacific 2020 Worldwide

ZY3 Mapping Satellites

Tri-linear Pan cameras Forward Backward 5M Nadir 2.5M Strip width 51KM

Multi-spectrum 4 bands 6 M Strip width 52.66KM

B/H 0.85-0.95

> Sun-sync 500 KM

3.92M X 14.22M

Cycle time 59 D Revisit 5D

Global coverage Latitude 84

UAV Aerial Photography System

Digital Aerial Camera and Instruments

Mobile Mapping Systems

x=38424575.200; y=2565505.900 NUM

▼ ? N?

比例 1:9056

_ 181 × 1

Remote Sensing Software

Conclusion Remarks

China will be active in sharing experience providing economic technical solution training and consulting geo-service platform win-win cooperation latest earth imagery, etc.

UNGGIM: a new vision of the earth!