Capacity Building in Singapore


The Third UN-GGIM-AP Plenary Meeting
Bali Indonesia
10 Nov 2014

- Coordinates: 1° 17’ N 103° 50’ E
- Area: 718.3 km²
- Population: 5.4 million
- Population density: 7,615/km²
1. Optimise land resources
2. Maintain National Title Registry and Land Survey Systems
3. Drive Singapore’s geospatial development and support Smart Nation initiatives

GROWING OUR GEO-CAPABILITIES

GEO-GOVERNMENT
GEO-ECONOMY
GEO-PEOPLE
GEO-GOVERNMENT

Goals:
1. Enhance Public Sector Service Delivery
2. Support Policy and Decision Making

Traditional Users

New Adopters

Singapore Public Service Demand
Build GeoSpatial competencies within and across public sector

Create geo-communities for multi-agency data sharing, visualisation and geo-analytics
Geo Fund: Eight Call-For-Proposals

- Slope Stability Module (SSM) in GeoSpace (SLA)
- Environmental GIS for Sharing Environmental Site Assessment (ESA) Information (JTC)
- Building Geospatial Database (BCA)
- Geospatial Visualisation and Analysis of Library Data (NLB)
- Climate Change Information System – CLICIS (NEA/SLA)
- 3D Urban Modelling for Sensor Network EM Wave Propagation (IDA)
- Open Source Remote Monitors (BCA Academy)
- Big Data Processing Capability Extension for GeoSpace (SLA)

Build GeoSpatial competencies within and across public sector

Briefings (FY2012 – Present)
- Over 70 Briefings:
  - SG-SPACE
  - GEOSPACE
  - ONEMAP
  - GEOFUND

Training (FY2012 – Present)
- Over 600 Officers Trained in Geospatial 101

Build GeoSpatial competencies within and across public sector
GEO-GOVERNMENT

Outcomes:
1. Enhance Public Sector Service Delivery
2. Support Policy and Decision Making

Stakeholders:
MINISTRIES AGENCIES

>600 Officers Trained
36 Pilot projects
28 Agencies
20 GeoFund Projects Awarded

GEO-ECONOMY

Goals:
1. Grow Geospatial Industry in Singapore
2. Support Singapore’s key economic drivers using GeoSpatial
for companies & individuals to create innovative applications and services

Geo-Economy
OneMap

A common map platform:

- Access to Agencies  Shared Data
- Catalyzes businesses and services
- Empowers communities & improves lives

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GeoSpatial Competency Map

IHL

Creation of New GIST Programs

Students & Professionals

A better understanding of GIST career opportunities and progression
Stakeholders:
GEOSPATIAL INDUSTRY
RETAIL
MANUFACTURING
LOGISTICS

Outcomes:
1. Grow GeoSpatial industry in Singapore
2. Support Singapore’s key economic drivers using GeoSpatial

Competency Map
Pte Sector Licenses Issued Annually
Licensed Data
Seed Funding
Geo R&D: UAV, 3D Street Video Analytics

GEO-PEOPLE

Goals:
1. Develop Nation-Wide GeoSpatial Capability
2. Increase GeoSpatial Literacy
Recent initiatives to build Geospatial Capabilities & Awareness

- **i.** Young Surveyors
  - In collaboration with SISV

- **ii.** Singapore Geospatial Challenge
  - Inviting students to develop analysis and solutions for the community

- **iii.** Singapore Geospatial Scholarship
  - A multi-agency collaboration offering local & overseas geospatial scholarships

- **iv.** Hackathons
  - Engaging the developer community to generate solutions for VWOs & NGOs
SLA Land Survey Officer demonstrating the usage of survey equipment to the students.

Two days field trip with SLA Land Survey officers to gain insights into what survey work entails.

**Hands-on Training for “prospective surveyors”**

**SGC Grows Our Young Geo-People**
An alternative route for the disabled

Creating More Valuable Information

Datasets Used
- Maps
- Building outlines
- Road network

Datasets Collected
- Access Points
- Ramps
- Sheltered Walkways
- Exterior Walkways
- Bus Routes
Singapore GeoSpatial Scholarship

GeoSpatial talent as Singapore’s strategic national resource

Meet increasing demands for use of GeoSpatial

Multi-agency collaborative effort

Nurture Geo-Talents
How can we deliver bread from >100 bakeries to 180 beneficiaries island-wide?
Creating Positive Social Impact

Datasets Used
- Maps
- FFTH Data
  - Collection Centres
  - Participating Bakeries

Potential Datasets
- Traffic Conditions
- Parking Data
- User Needs
  - Food Centres
  - Toilets

Stakeholders:
PUBLIC
NGOs
RESEARCHERS

Outcomes:
1. Develop nation-wide GeoSpatial capability
2. Increase GeoSpatial literacy

GEO-PEOPLE

2 National Initiatives: Geo Scholarship & Competency Framework
>2000 People Trained
35 Geo-Events
>3500 Participants
Conclusion

1. GeoGovernment
2. GeoPeople
3. GeoEconomy

Thank You.

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