Singapore Geospatial Collaborative Environment (SG-SPACE)

- the journey towards a spatially enabled Singapore

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Singapore National Spatial Data Infrastructure

Where are we now?

Where are we going?

How do we get there?

User Need Assessment (UNA) Survey

Data Needs

- ***83%*** of agencies have needs for spatial data
- ***35%*** of agencies are supported by Geographic Information Systems (GIS)

Data Sharing

- ***40%*** of existing spatial data layers are available for sharing by agencies
- Data users are unaware of data that is available and there is a lack of information sharing protocol

Standardisation

- ***22%*** of spatial data layers adopt recognised Metadata standards

Services & Applications within Public Sector

Land & Infrastructure Planning
SLA, URA, LTA, JTC, HDB

Environment & Public Health
NEA, AVA

Transportation
LTA, MPA, CAAS

Defence & Security
SPF, SCDF, Prison, DSTA, MU

Parks Management
NParks

Community Development
PA, NCSS

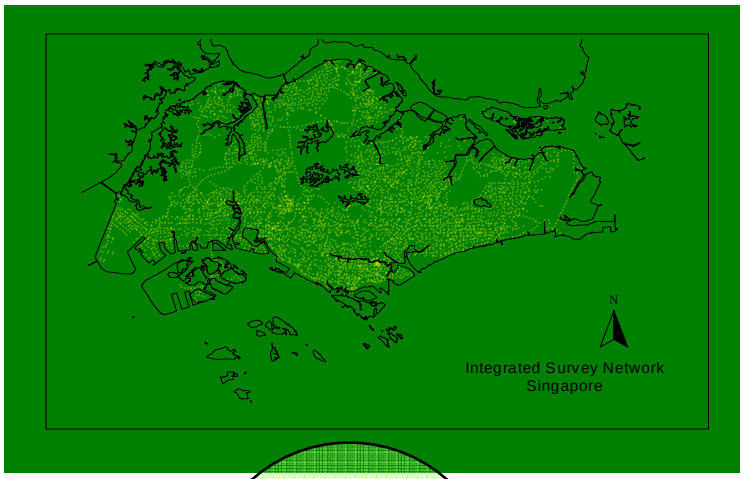
Utilities Management
PUB

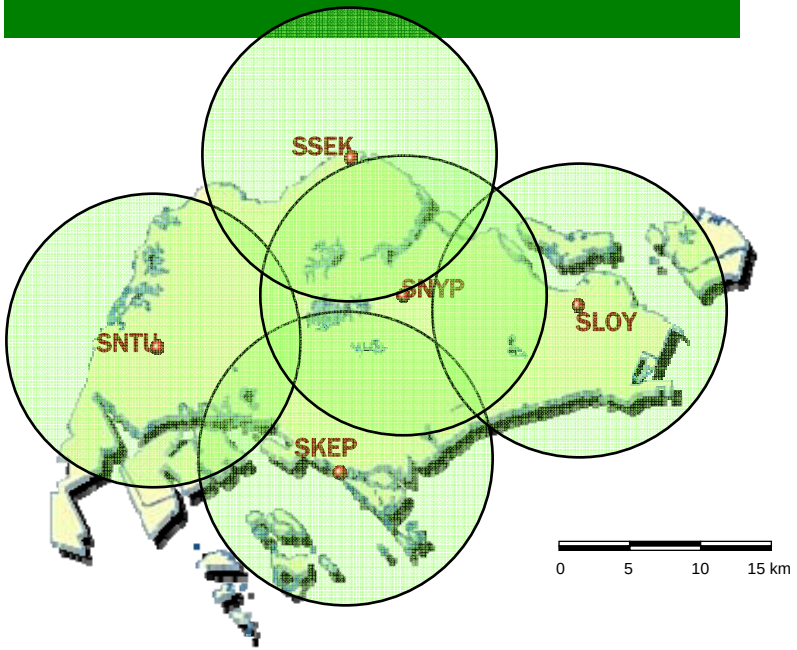
Health
MOH

Others
IRAS, ELD, MOE, DOS

Uniform Spatial Reference System

SiReNT

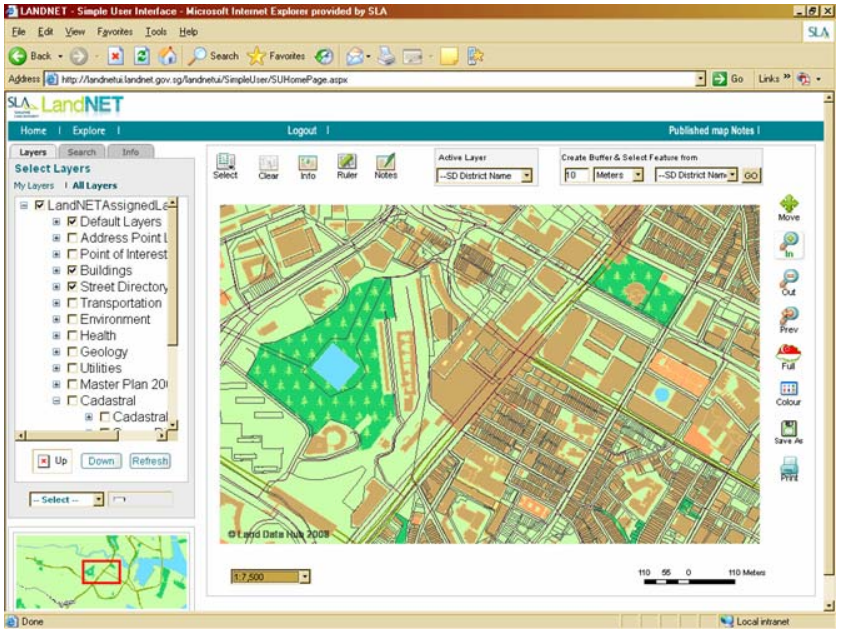




Data Sharing Portal

Land Data Hub - LandNET

- One-stop land data resource centre
- Pools land data from government agencies
- Eliminates needs for bilateral data exchange between agencies



We have the data and the basic infrastructure.

But, we need more…

Collection → Storage & Retrieval → Application

SG-SPACE

Data Supplier

Clearinghouse
Policy
Standards
Capabilities

Data User

Data Flow

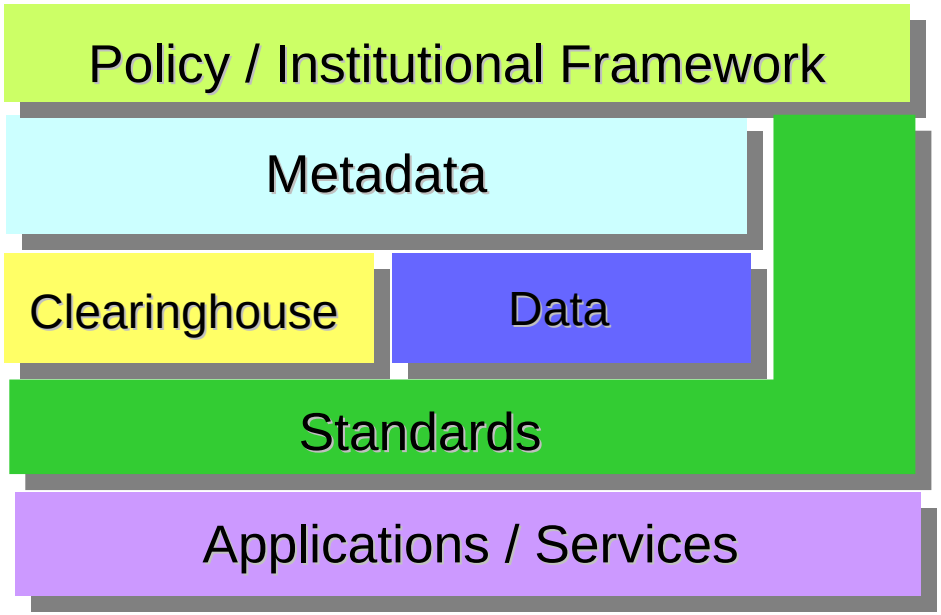
Desired Outcomes

- Establishment of a Clearinghouse with **richer** datasets and functionalities
- **Clarity** in policies on data access & pricing
- Definition, documentation and sharing of Data Standards
- **Consistent** definition of data, e.g. building data, address data
- Availability of data with better **resolution** & timeliness, e.g. aerial photos, demographic data
- Spatially-enabled **socio-economic** data, e.g. demographic & business data
- Improved awareness and **capabilities** on geospatial science & technology
- **Sustainable** operating model for both data suppliers and data users

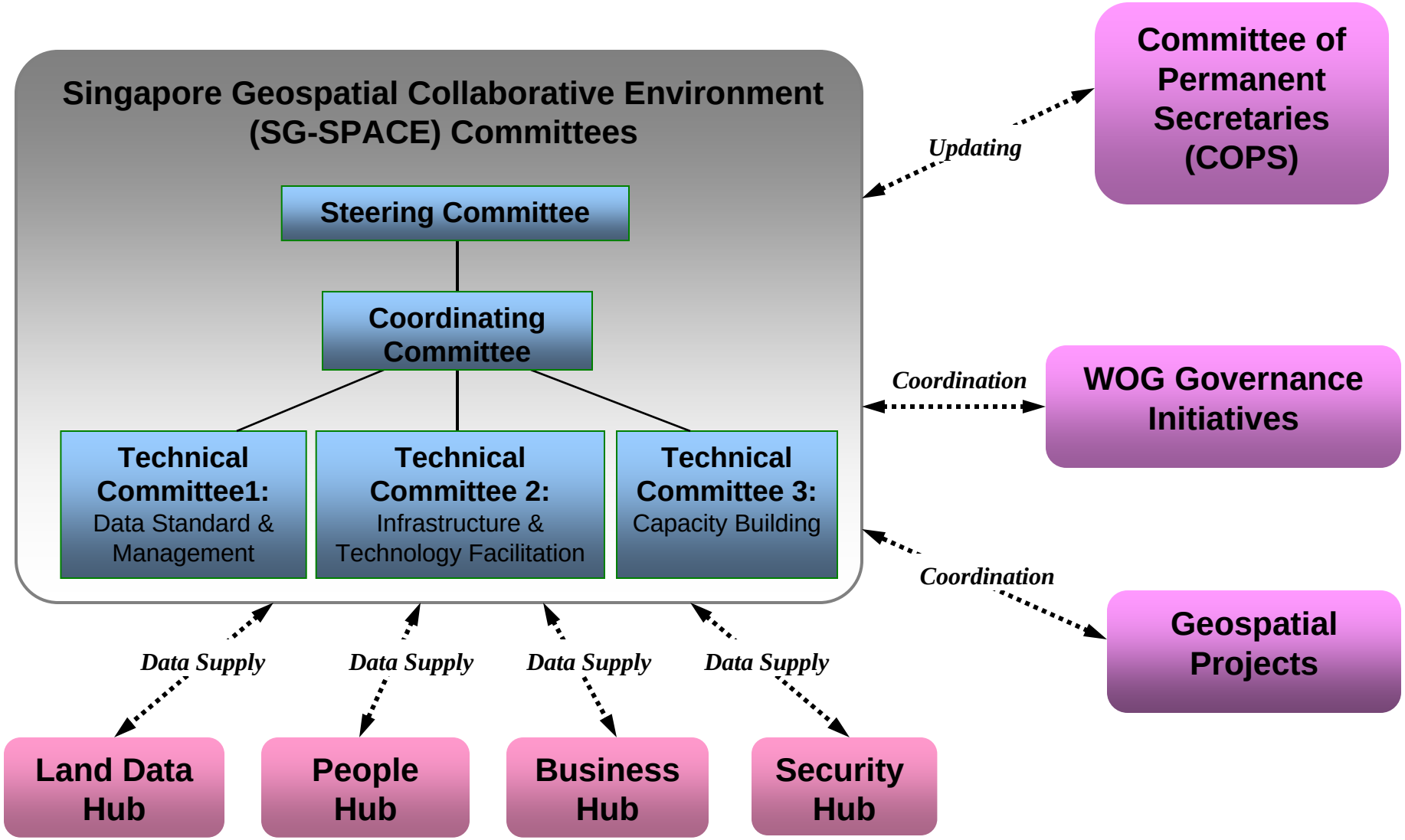
From Land Data Hub to SG-SPACE

Data Sharing Model

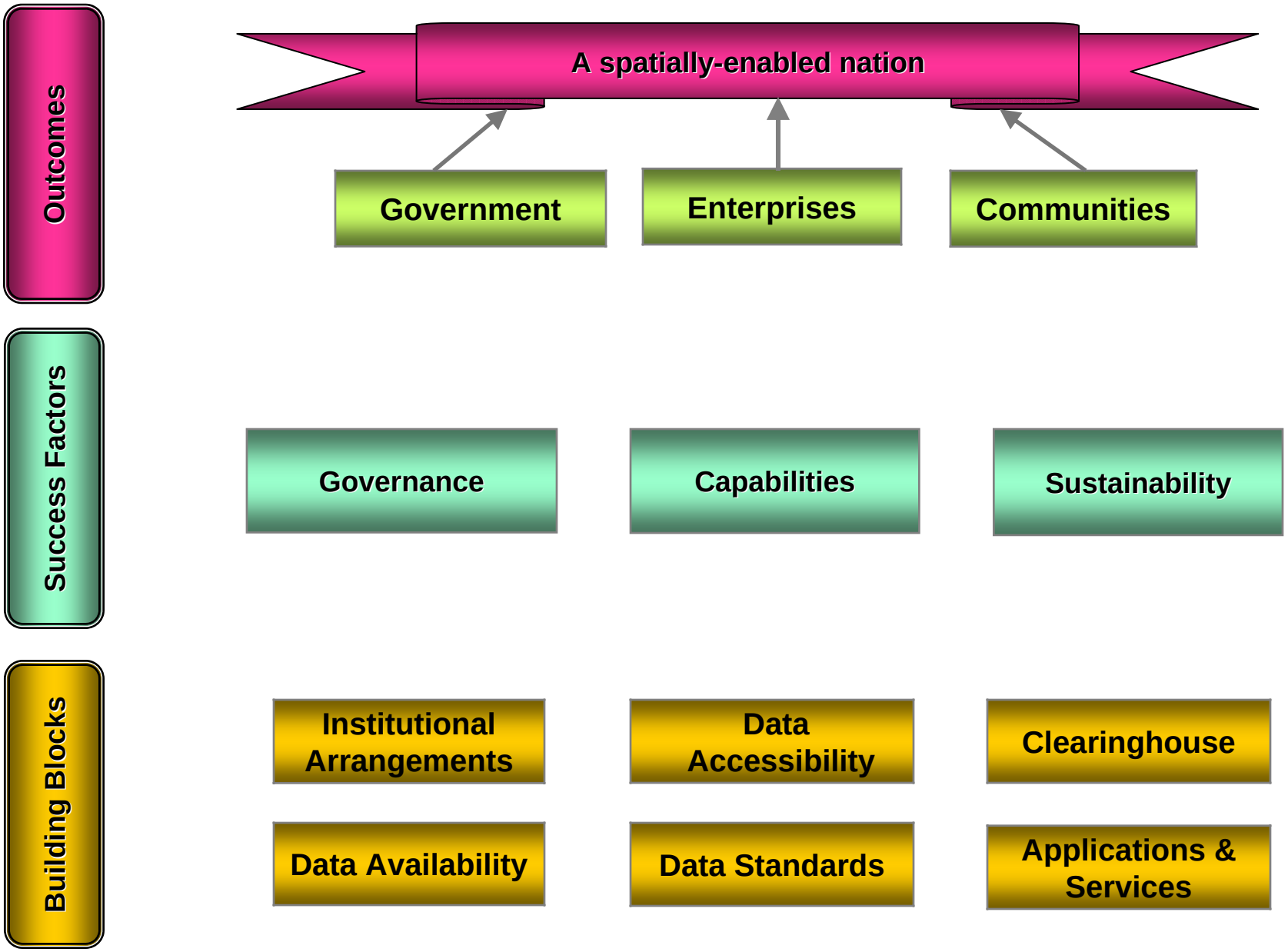
Governance Infrastructure



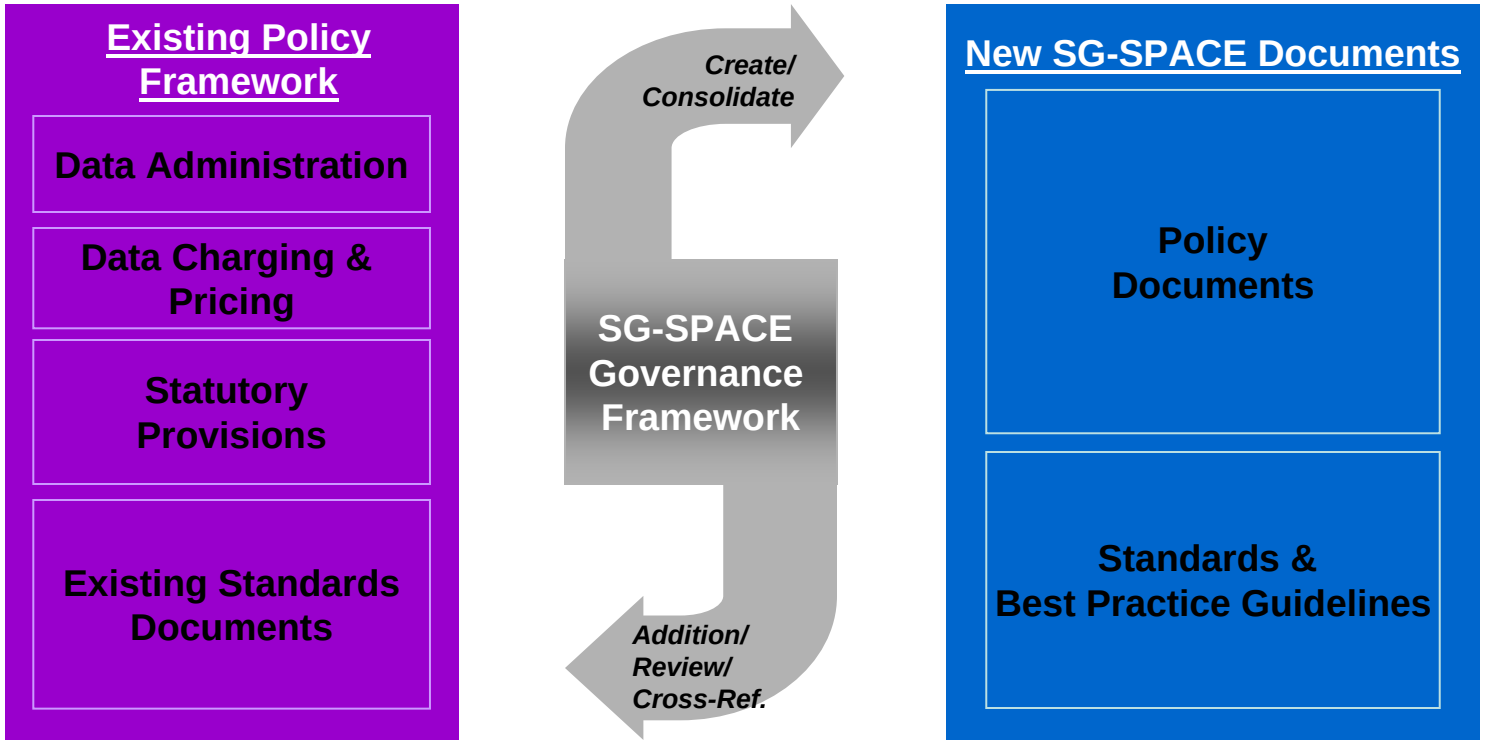
Whole-Of-Government Approach



Strategy Map for SG-SPACE



Harmonisation into Existing Frameworks



Ministry of Education SINGAPORE
MPA
iDA SINGAPORE
DSTA
MINISTRY OF HEALTH
ACRA
STATISTICS SINGAPORE
MINDEF SINGAPORE
SLA SINGAPORE LAND AUTHORITY
SINGAPORE
MOT MINISTRY OF TRANSPORT
MINISTRY OF LAW SINGAPORE
URBAN REDEVELOPMENT AUTHORITY
Ministry of the Environment and Water Resources
Building and Construction Authority
MINISTRY OF FINANCE SINGAPORE
Land Transport Authority
Ministry of Information, Communications and the Arts

Capacity Building

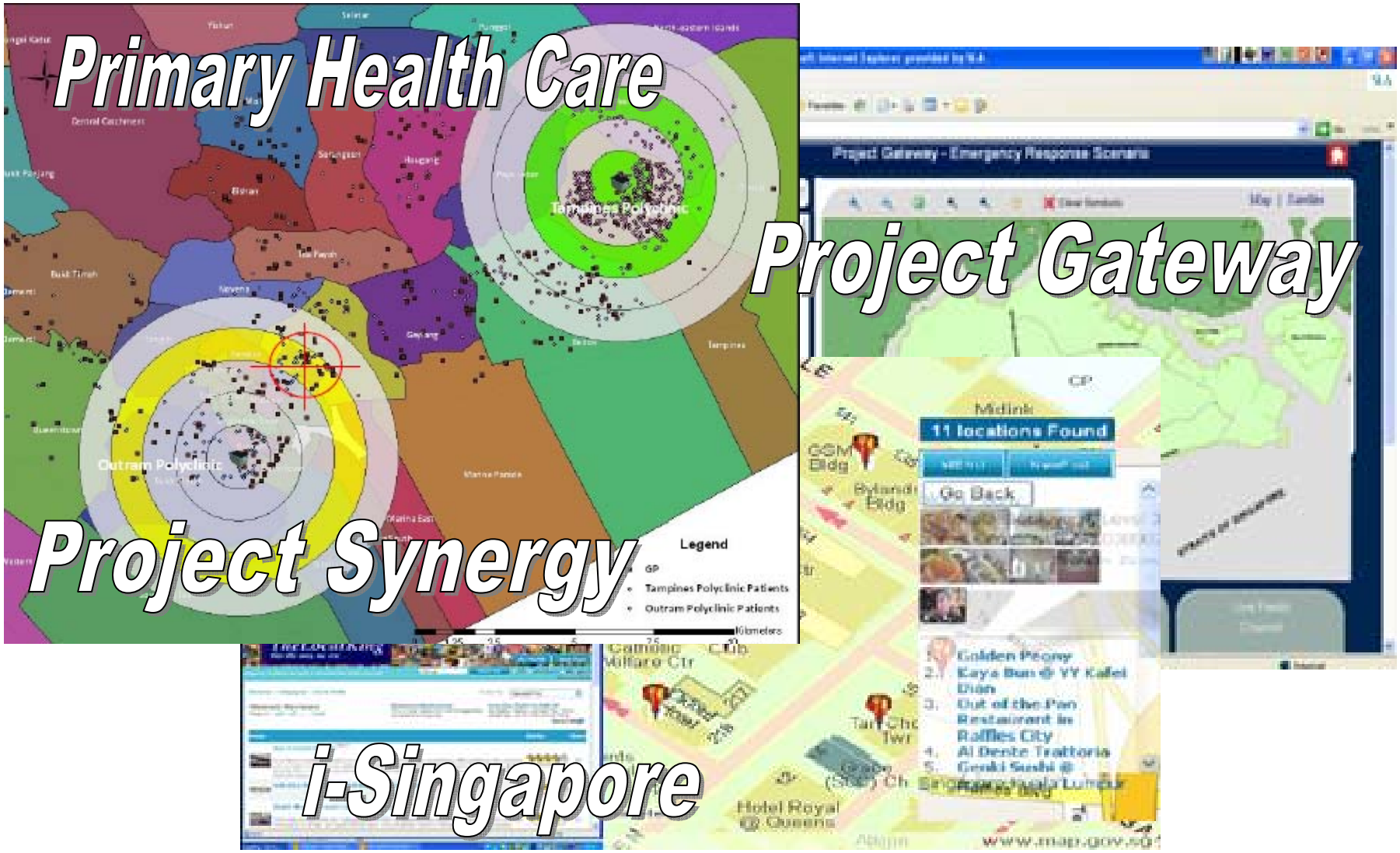
- Awareness & communication
  - SG-SPACE website (http://intranet.sg-space.gov.sg)
- Collaboration with academia / institutes of higher learning / research centres
- Geospatial Conferences
  - Map Asia 2009: 18-20 August 2009
  - GSDI 12: October 2010

SG-SPACE Website

- A one-stop communication platform

Pilot Projects

- *Stakeholder engagement*



Key Challenges

- Support from stakeholders
- Priority of funding
  - Specialised vs General user needs
- Alignment with existing governance frameworks
  - Policy enforcement
  - Scope of data standardisation
- Capacity building
  - Awareness on use and utility of geospatial data

Completed Tasks

- Completion of SG-SPACE Masterplan
- Assessment of user demands from public & private sector
- Establishment of 14 Fundamental Dataset categories and stewards
- Alignment with existing government policy framework on Information Management
- Drafting of Metadata Profile for Singapore
- Launch of Interim Clearinghouse

Thank You