1. Project Summary

1-1 Background

**Hot Spot**
- Closed-door, High Expenditure, Low Usage
  - Avoidance of Open (No Accuracy)
  - Hard to Search
  - Inconvenience of Approach
  - Absence of Data Relation
  - Burden of High Cost

**Positive Environment**
- Positive Condition
  - Market Share
  - Spatial Infrastructure
  - Technology

**Way to Pursue**
- Private Integration Network
  - Spatial Information Open Platform
  - National Spatial Data Infrastructure
  - Data Correctness, Obtain of the newest

Efforts to Improve
- Strategy Presentation of Building Spatial Infrastructure for New Industry
  - [4.27, Economy Policy Meeting]
- Effort to Supply Private Enterprise with National Spatial Information
1. Project Summary

1-2 History

- **Enhance Lineup of services**
- **Services Upgrading project 2**
  - 2014
  - Enhancing platform Service
- **Services Upgrading project 1**
  - 2013
  - Expanding 3D service area (130 km²)
  - Providing Mobile, Data API
- **Pilot Project**
  - 2012
  - Serving 3D map of Seoul, 6 Metropolitan
  - Providing User, 2/3D Map Service
- **3D T/F & Research**
  - 2010
  - Provide an Open Platform based on Spatial Information
1. Project Summary

1-3 3D Spatial Information

**World**

- **World wide**
  - Satellite Image → 15m
  - Sea Image → 500m
  - DEM data → 90m

- **Oversea Area**
  - London, Sydney, Tokyo 3D Model

- **North Korea**
  - Satellite Image → 0.5–1m
  - Mt. Baekdu → 500m
  - DEM data → 90m

**Nation**

- **South Korea**
  - Satellite Image → 25–50cm
  - DEM data → 5m

- **Precisonal Area**
  - Seoul(part Dist.), 6 Metropolitans Yeosu, Chuncheon cities
    - Ortho image → 25cm
    - DEM data → 1m

- **High Precisonal Area**
  - Myeong-dong, Hong-dae, Insa-dong etc In Seoul

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2. Project Details

2-1 Components of Spatial Information Open Platform

**DATA**
- DEM
- Aero-photo
- 3D Model
- HyCing
- Attribute

**SERVICE**
- PARTICIPATION
- DISTRIBUTION
- MAP SERVICE
- OPEN API

**ORGANIZATION**
- PRIVATE ORGANIZATION

Choosing your Service channels

- Selecting service that appropriates to the range of budget and the type of service

Providing secure database throughout National Spatial Information Integration System

Granting private operating initiatives Maximizing the creativity of private sector

Convergence of platforms and private ideas
2. Project Details

2-2 V-World Service

Open API
- 2D/3D/integration OpenAPI
- proper reference & common tools

Portal
- The core hub of V-World
- notifying information, news about V-World service

2D/3D map
- 2D/3D map, integrated search service
- Searching and using high quality NSDI

Developer center
- apply & authorize Open API key
- support Open API developer

Spatial Open Platform
http://www.vworld.kr

One Stop Service

Data center
- Spatial Info, Metadata and list
- data error declaration

3D Desktop service
- An application like Google Earth
- utilizing Various 3D practical service

Participation center
- sharing user content
- participating POI marking and uploading 3D model, user content
2. Project Details

2-3 V-World Service: Portal Service

Open Platform Information Offer

Portal Service Composition

- Open Platform Introduction
- Service Introduction
- Notice/Q&A
- Policy

Map Service
Developer Service
Data Center
Participation Center
3D Desktop
2. Project Details

2-4 V-World Service : Map Service

**Features**
- map-oriented content
- Integrated UI with easy-use
- Provide administrative information based on map

**virtual spatial information**
- Provide 3D spatial information that is similar to real world

**2D/3D map service**
- Able to choose the map types between 2D and 3D for users’ purpose

**provide spatial and administration info.**
- Can easily see national spatial information and administration information through VWorld.
2. Project Details

V-World Service : 3D Desktop Service

Features

• Powerful 3D Tools
• User-friendly environment & upload user-content service
• Quick Search with ease

Powerful 3D tools

• Provide specialized 3D operating environment tools such as 3D menu, Tool bar and etc

Upload user-content service

• Upload various spatial information to 3D desktop such as 3D model of user generated content

Specialized 3D functions

• Able to check gradient of the land, measurement of excavated soil volume, and see the simulations by tour Tools
2. Project Details

2-6  V-World Service : Developer Center

Developer Center provides API reference and sample files.

**Providing an open API up to a level of customer needs**

- **Providing the API of Application Package**
  - The default map packages (samples)
  - Real Estate Package (samples)

- **Provides expert-level API**
  - Location control
  - Field control
  - Model control

- **Explain utilization references for one to one**
- **Support technology depending on developer’s ability**

- **Transforming Map API**
- **Integrated API**
- **2D map API**
- **3Dmap API**
- **Mashup Example**
- **API Certification**

**Location Search**

**Landscape Analysis**

**Emergency / Disaster response**

**Statistical Map**
2. Project Details

2-7 V-World Service : Participation Service

**Features**

- customized mapping service
- sharing user-generated contents
- providing various images that users have shared to each other

**Customized mapping service**

- Able to make customized mapping service choosing preferable locations such as restaurants, tourist course

**Sharing user-generated contents**

- Improve the usability of spatial information by sharing user-generated contents

**Providing various images produced by users**

- Able to search the contents and images that users have shared to each other
2. Project Details

2-8  V-World Service : Data Center

- **Features**
  - provide open platform data details
  - search function of spatial information by category
  - Inquiry of Open platform service

- **Providing registered data**
  - Provide the contents and terminology of spatial information

- **Data search**
  - Search data related to spatial information by category

- **Inquiry service**
  - provide the procedure guidance such as reporting errors of open platform service
3. Practical Use

3-1 Successful Application Cases: Public

- Developed the new contents and better map service using the Vworld.

- National weather info.
  - Providing statistical weather information for each region

- 3D Dokdo service
  - Supporting 3D Dokdo image
3. Practical Use

3-2 Successful Application Cases: Public

- Provided various supporting service of international events

- Yeosu Expo
  - Providing cyber tour and event information service

- G20 Seoul Nuclear Security Summit
  - Supporting security service of G20 summit leaders
  - ex) Terror simulation
Successful Application Cases: Civilian

- Utilize Vworld as background map of its solution
- Utilize for gCRM and place marketing
  
  have developed better system and enhanced solutions
4. V-World 3D Gallery

4-1 Domestic V-World 3D Gallery

- Gangnam Station
- National Assembly Building
- Gyeongbok Palace
- 63 Building with Han River
4. V-World 3D Gallery

4-2 Oversea V-World 3D Gallery

<London>  <Sydney>  <Tokyo>
4. V-World 3D Gallery

4-3 Issue V-World 3D Gallery

<Mt. Baekdu Choenji Lake>  <Neungrado Stadium>

<Jeju Seongsan Ilchulbong>  <Dokdo>