GeoSmart Information for Infrastructure
The Digital Convergence

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Geo-information, Policy and Security

What message Does this Send?
Data and Information in the “Smart” Era

- In this era of Smart Cities, data is the new “Natural Resource” - vast and mostly untapped

- **80% OF ALL HUMAN ACTIVITY HAS LOCATION INFORMATION EMBEDDED IN IT!**

- Like our cultural heritage, Data is a resource that needs to be generated, protected and interpreted.

- Data based decision making must be our behavior.

- *As Plato pointed out, human behavior stems not just from knowledge but also from desire and emotion*

- It is the management of human desire and emotion which will be key to the UNGGIM information management policies

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**Policies**

**Implementation Framework**

**Operating Framework**

**ECONOMIC HEALTH**
- Agriculture
- Electricity
- Construction
- Property and Real Estate
- Mining

**NATIONAL GEOSPATIAL AGENCIES**
(Information Providers)

**SOCIAL WELL BEING**
- Water
- Health
- Education
- Defence and Safety
Aim is Better Management of public assets through the lifecycle of Design Build Operate Maintain
Source: ARC Advisory Group, 2016

- **Big Data/Predictive Analytics**
  - Understanding All Elements of the Project/Process

- **Cloud**
  - Information Infrastructure

- **Asset Management/Internet of Things/Digital Asset**
  - Intelligent, Connected Assets

- **Mobility**
  - Portability, Real-time Interactions

- **Laser Scanning/GIS Technology**
  - Brownfield/Greenfield/Geosystems Model Information

- **Virtual Reality Environments: Plants, Buildings, Infrastructure**
  - Virtual Modeling, Digital Photometry, Virtual Training, Augmented Reality

Emerging Technologies Support ALIM
Continuous Surveying

Geo-Coordination
Digital Photography
Engineering-Ready
UAV Ubiquity

Reality Modeling...
monitoring

Drone Photogrammetry
Autonomous Flight

For Stateland Monitoring

WELCOME TO ARSKA-SERVICE!

ARSKA is an electronic service of archives. ARSKA has all the designs that have been stored in archives of Helsinki City Building Control Department. These are e.g. master drawings i.e. architectural designs, special drawings i.e. working and structural drawings, ventilation system plans and municipal engineering plans with appendices.

Search for architectural designs

Briefings

Search by an address e.g. Kalesvankatu 3. A search finds location of buildings on the grounds of an address. After that you can choose the exact building on the map. A search is directed at addresses and also at perm in members of architectural designs. You may focus the search on specific data. Detailed instructions you will get here.

Search

24.1.2013
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**NATIONAL GEOSPATIAL AGENCIES** (Information Providers)
Open Data is the need of the hour!

Conscious efforts are being made by countries to make their data, including geospatial data, open and often times, freely available for use by public and private enterprises.

Globally too, like, Group of Earth Observations (GEO) have been striving to make EO data freely and openly available for societal benefit areas via the GEOSS platform.

Economic Value of Geospatial Open Data across countries:

- USA: USD 96,000 Million
- European Union: USD 40,000 Million
- Australia: USD 25.3 Million
Issues with **DATA PRIVACY** Policies

- **Transparency** and specificity of purpose
- Catching up with complexity of Data Proliferation and accessibility
- **Balance** needs of NMAs vs. Users vs. non-traditional data generators
- Policies for **volunteered geospatial information (VGI)**
- Acknowledging **voice of industry, academia, as well as government** while creating policies
- First create policies to market geospatial information and **encouraging use** of fundamental geospatial data

Issues with **DATA PRIVACY** Policies

- Free data needs to be matched with complementary infrastructure, so **policy for suitable data infrastructure**
- No single legal framework possible to address multi user-multi supplier system of today – **multiple legal framework needed**
- Put **professional responsibility and liability on data generators** and distributors in times of risk

“PRIVACY IS A MOOT POINT”
What should be the Story?

Thank you

“PEOPLE HAVE REALLY GOTTEN COMFORTABLE NOT ONLY SHARING MORE INFORMATION AND DIFFERENT KINDS, BUT MORE OPENLY AND WITH MORE PEOPLE - AND THAT SOCIAL NORM IS JUST SOMETHING THAT HAS EVOLVED OVER TIME.”

MARK ZUCKERBERG

@LinkedIn Quotes