

**Country Report from Japan**

**Two of the Principle Act  
for GNSS utilization in Japan**

**The 48th CGSIC, 15-16 Sept, 2008  
at Savannah, Georgia**

**Hiroshi Nishiguchi  
Japan GPS Council**

# **Two of the Principle Act related with GNSS effective uses have been established**

**(1) May 2007 : The Principle Act on 『Promotion of NSDI 』**

**〔National Spatial Data Infrastructure〕**

**(2) May 2008 : The Principle Act on 『Space Development and Utilization 』**

**Both was submitted to the National Diet and was established as the Diet Members Proposition through the consensus reached among three major political parties in Japan.**

# **Basic Implementation Plan**

**(1) The Implementation Plan for NSDI :**

**Published in April 2008 by the Cabinet Secretariat through the Cabinet approval**

**(2) The Implementation Plan for Space Principle Act :**

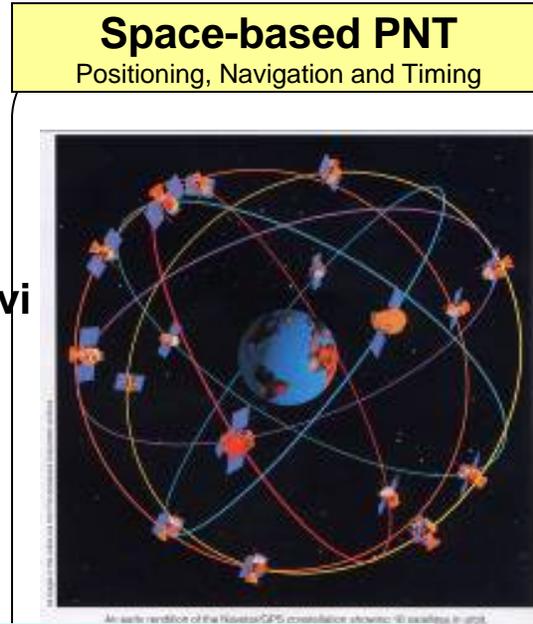
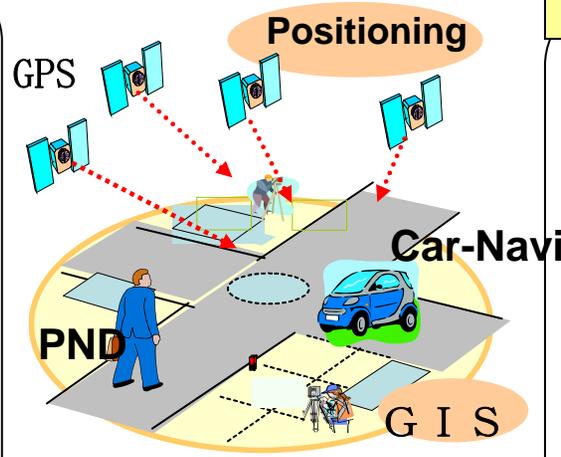
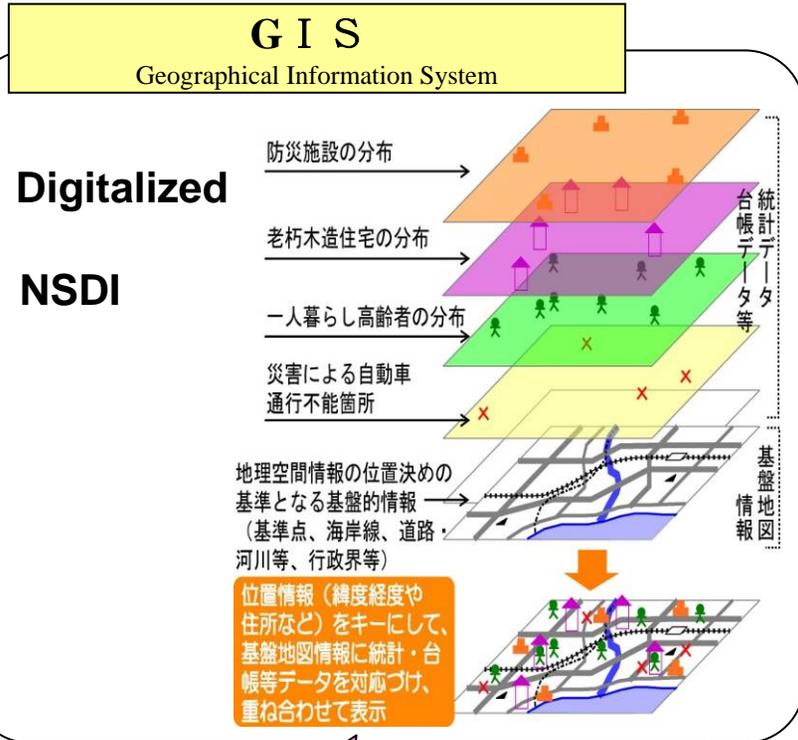
**Just under preparation and will be published by the end of March 2009, subject to the Cabinet approval.**

- Headquarter : the Cabinet**

- Coordination office :**

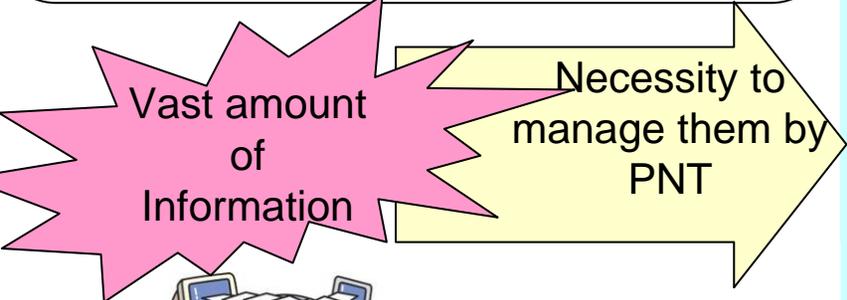
**“Secretariat of Headquarters for Space Policy”**

# Significance of National Spatial Data Infra (NSDI)



**GIS and Space-based PNT**

- All nature exists in terms of Position and time
- Fusion of PNT with communications to manage, analyze and present the information
- Provide precise information as the basis of choosing action

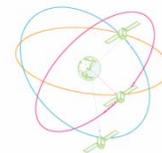


**Realization of the high grade society using Geo-Spatial information and Space-based PNT**

# **Significance of the Principle Act**

- (1) To specify clearly the Definition under the NSDI Act;**
  - **What is 『Geo-Spatial Information』 (NSDI)**
  - **What is 『GIS』 (Geographical Information System)**
  - **What is 『Space-based PNT』**
  
- (2) Importance of NSDI through synergistic effects of the measures for GIS and Space-based PNT**
  
- (3) Restructuring of communication and coordination framework among the related Ministerial Offices**

# Relation between two Principle Act for NSDI and Space Utilization Policy



## Space Act

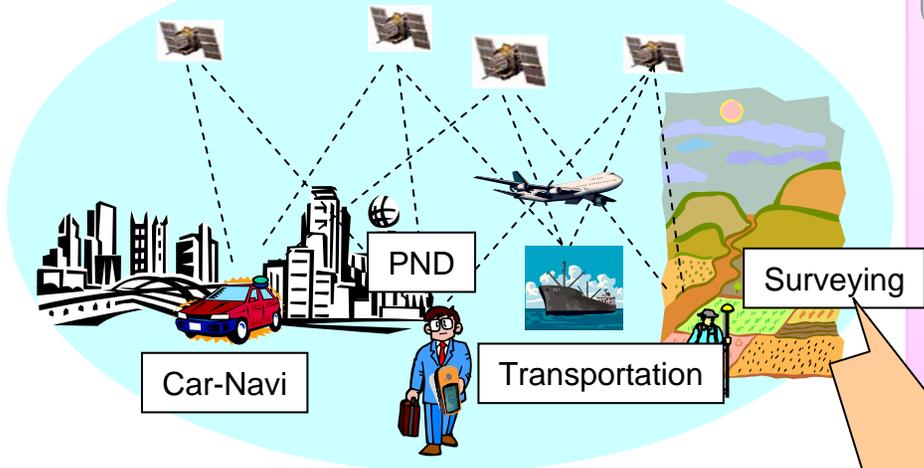
- Establishment of a new commanding body which is organized to promote the measures for the space exploration in an integrated and planned manner.
- Space-based PNT matters are solved as part of the above measures, including positioning information system.

## NSDI Act

- Promotion of Geo-Spatial Data Infrastructure, and measures (GIS and PNT) will be promoted based on the Basic Space Plan to be worked out by Secretariat of Headquarters for Space Policy in an integrated and systematic manner.
- The satellite positioning plays an important role for utilization of NSDI. This Act has stipulated communication and coordination regarding the

# To communicate and coordinate with GNSS providers

PNT is widely utilized in Japan



**PNT in Japan is totally dependent on Others**

It is imperative to secure effectively the environment to obtain reliable GNSS services in a stable manner

Useful information such as satellite unhealthy must be provided to people

**Study on the system to deliver such information on operating status, etc of GNSSs must be conducted**

**Communication and coordination with the operators of GNSSs must be made**

○ Use of PNT depends heavily on GPS

Periodical get together of “US-Japan GPS Talk”



**For stable utilization of GPS in Japan**

○ Status information of GNSS providers (GPS, GLONASS, Galileo etc) is needed

Participation to the UN ICG and providers forum

**As J-Government, to promote coordination and cooperation among GNSS provider countries**

# Acceleration of R&D for GNSS Utilization and Technology

## GNSS Utilization by the Government Organizations

Tracking of law enforcement officers and helicopters

Navigation aid by National Defense Force

Digital map ledger

Seismic survey and research

Robotic precise agriculture, Study on marine animals behavior

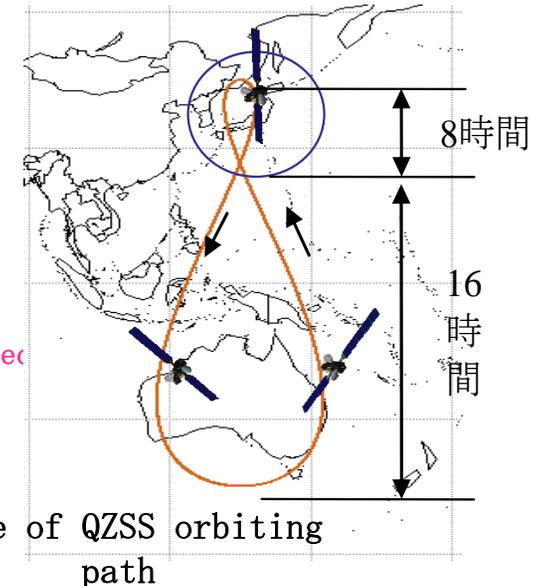
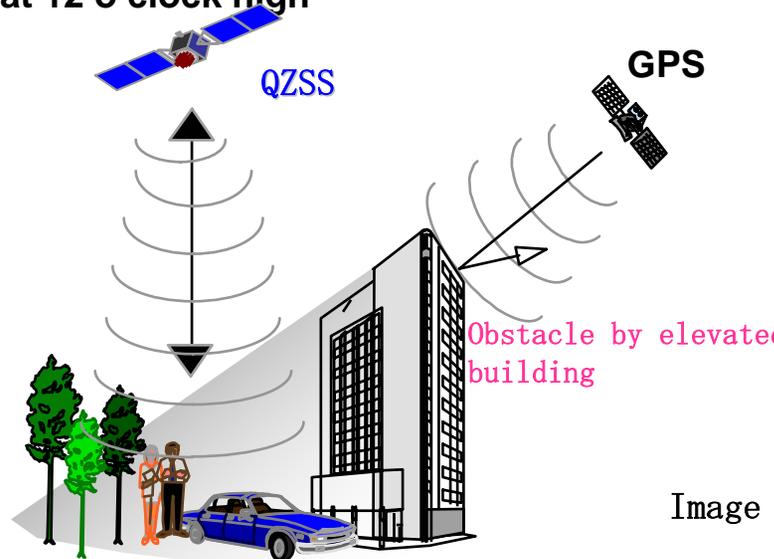
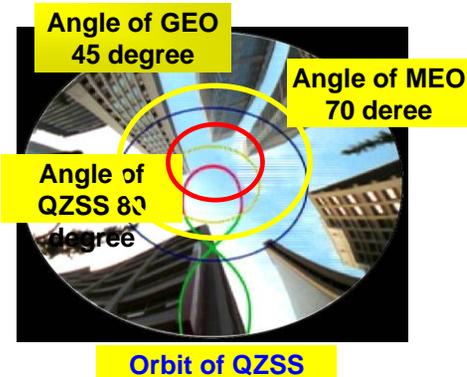
Information supply for GPS augmentation to secure safety of air and maritime traffic

Collection and supply of GPS observation data by GEONET

## GNSS Utilization by Municipal Governments and private sectors

### Concept of QZSS

Realization of high-precision positioning services free of multi-pass effects at urban canyons etc to cover entire national land with the constellation visibility close at 12 o'clock high



Major feature is the provision of high precision PNT in entire Japan