

Paul van der Molen and Martin Wubbe,
Kadaster International of The Netherlands

For FIG Conference Costa-Rica Nov. 2007

Good practice in e-Cadastre and e-land registry

kadaster
feitelijk verrassend

What is a spatially enabled society?

- When public sector, private sector and citizens decide, they should have access to spatial information that is meaningful to their decision making process
- Integration and sharing of data provides meaningful information, which is impossible in a non-digital environment



kadaster

How to realize?

1. Government to safeguard availability and access to spatial data through NSDI
2. Government to facilitate electronic legal and economic transactions
3. Data suppliers to organize availability and access to data and services, to deliver quality information



kadaster

- 1 Government to safeguard availability and access through NSDI
 - Key Registers and Concept of National Access Service
 - Public Restrictions Registers with National Access Service
 - Digital Land Use Plans
 - Digital Elevation Model
 - Large Scale Topo Base Map (GBKN)
 - Subsurface Topography
 - Inspire and Eulis
 - Stimulation Programme Geoinformation
 - Administration of NSDI

kadaster

Authentic or 'key' registers

- Problem: Multiple data acquisition and multiple storage, unknown quality parameters and unknown data sources
- Result:
 - government inconveniences citizens and the business community with requests for the same data many times.....
 - government does not deliver rapid and good service.....
 - government is misled.....
 - government make costs higher then necessary.....
- In 2000 ambitious plan 'Streamlining Key Registers', which is currently under implementation

kadaster

What is a 'key' register?

A key register is a **high quality** database accompanied by explicit **guarantees** ensuring for its quality assurance that, in view of the entirety of statutory duties, contains essential and/or frequently-used data pertaining to persons, institutions, issues, activities or occurrences and which is designed by **law** as the **sole officially recognised register** of relevant data **to be used** by all government agencies and, if possible, by private organisations throughout the entire country, unless important reasons such as the protection of privacy explicitly preclude the use of the register

kadaster

How to become a 'key' register: 12 requirements.

1. Regulated by law
2. Compulsory feedback
3. Compulsory use
4. Liability data supplier
5. Transparent costing
6. Clear content and scope of the register
7. Procedures between supplier and user
8. Accessibility of databases
9. Quality of data (correctness, actuality, completeness)
10. Data supplier committed to users' influence
11. Clear relation to other key registers (system consistency)
12. Responsibility and control by government



kadaster

State of affairs

1. Personal records (citizens)
2. Trade register (companies)
3. Cadastral register and maps
4. Topographic information
5. Buildings
6. Addresses
7. Vehicle registration certificate (plates)
8. Register fiscal incomes
9. Register real estate fiscal value
10. Register inhabitants-non citizens
11. Large Scale Topographic Base Map GBKN
12. Register subsurface topography

core

decided

investigated

kadaster

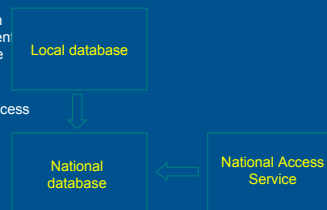
State of affairs geo-information datasets

- Law Key register 'cadastral registers and maps' and key register 'topography':
 - into force 1-1-2008
- Law Key register 'addresses' and key register 'buildings':
 - proposed into force mid 2009
- Personal census into force 1-4-2007
- New trade register ?

kadaster

Subsidiarity

- Information management appropriate level
- Safeguard national access



kadaster

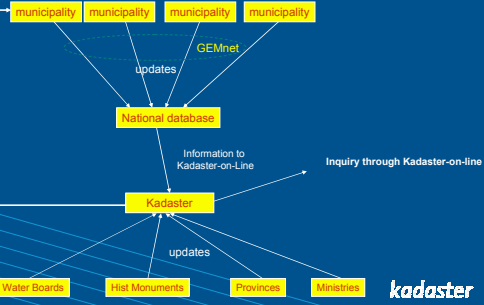
Law on Registration Public Restrictions

- About 80 public restrictions with third party power
- Imposed by various government bodies
- Tour de force to acquire full details of legal status of land parcel
- Has come into force 1-7-2007



kadaster

Scope Act Registration Public Restrictions



kadaster

Some additional developments

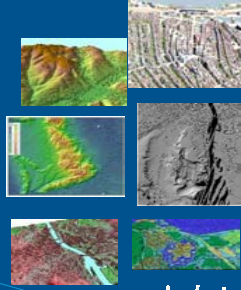
- Digital land use plans
- New Law State Gazette 566 d.d. 28-11-2006, into force end 2007
- All zoning plan digitally available and exchangeable (DURP)
- For:
 - better citizens participation
 - better data sharing and data integration



kadaster

Digital Elevation Model

- Since 2003
- Ministry Transport, Works and Water
- Based on laser altimetry
- Each pixel 4x4 meter 1 altitude
- Standard dev max 15 cm
- Systematic error max 5 cm



kadaster

GBKN

- Started in 1975
- Ready 2000
- 230 million € initial
- 20% maintenance
- PPP
- Potential key register
- Basismap-on-line



kadaster

Subsurface infrastructure

- Letter of the Minister of Economic Affairs and of Spatial Planning dd. 23rd November 2004
- 1,7 million km cables subsurface
- Importance for national economy
- Measures:
 - better registration
 - better planning
- Result:
 - Law submitted to parliament march 2006
 - Cable and Pipeline Information Centers merge with Kadaster
- One stop shop < 2010
 - digger reports to Kadaster
 - Kadaster routes request to network providers
 - Kadaster collects information and send to requester



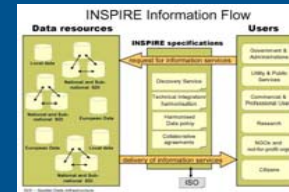
kadaster

Two other overall items

- INSPIRE
- Stimulation Programme Geo-information (RGI)



Ruimte voor Geo-Informatie



kadaster

Administration of NSDI

- RAVI abolished
- GI-Council since 13-6- 2006
 - Home Affairs
 - Administrative Reform
 - Defense
 - Economic Affairs
 - Agriculture, Nature & Food
 - Transport & Water
 - Housing, Env. & Planning
 - Association of Provinces
 - Association of Municipalities
 - Association of Waterboards
 - Kadaster
 - Geological Survey TNO/NITG
- Supportive Geonovum Foundation since January 2007



kadaster

2 Government to facilitate electronic legal and economic transactions

- Digital Identity for secure transactions
- SMS authentication
- Public Key infrastructure
- Personal- and Business Unique numbers
- Information portal for citizens
- Administration of key electronic government services



kadaster

Administration e-government

- Shared Service Organisation
- Responsible for tactical and operational management of generic key-services for e-government.
- Ministry Home Affairs



kadaster

3 Datasuppliers to organize availability and access to quality information

- Electronic Conveyancing
- Country wide deed register
- Country wide register of names of owners
- Kadaster-on-Line and MyKadaster
- Making Key registers work ('Veluwe initiative')
- One stop shop for subsurface information
- e-services
- EULIS
- 24 hours presence
- e-mail billing
- Top10NL database
- Terz@ke
- Administration of land administration activity



kadaster

Electronic Lodging

- Possible since September 2005
- Now: 90% notaries use the system for 75 % of the total input of deeds
- Problem: mandate of notaries to draw up deeds as they like best
- Now under discussion: standard model as an annex (covenant 13 December 2006)
- Makes automated updating of databases possible.



kadaster

Administration Land Administration Activity

- Market Pull
- Technology Push
- Virtual organisation?
- Developments
- Multi Year Policy Plan



kadaster



Thank you

kadaster
feitelijk verrassend