

**ntlis**  
The NT Land Information System -  
a Northern Territory Government Initiative

**Australia's Northern Territory**

**e-Government for e-Citizens**  
Case Study for the Northern Territory of Australia  
**Integrated Land Information  
System - ILIS**

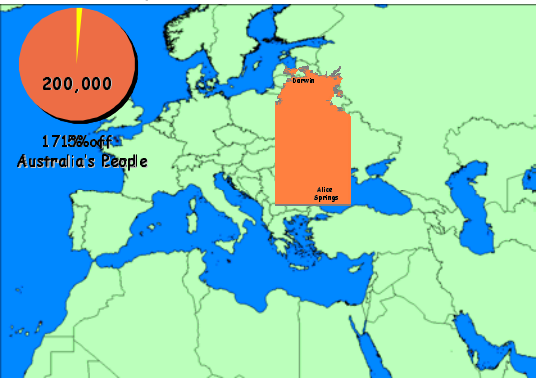
Presented by:  
Phillip Rudd      Director, NT Land Information Systems

WSE 1.5    2005/04/16

 Northern Territory Government  
Department of Infrastructure, Planning and Environment

**INTRODUCING THE NORTHERN TERRITORY**

Northern Territory



200,000  
171% of  
Australia's People

Darwin  
Alice Springs

**INTRODUCING THE NORTHERN TERRITORY**

- Much of what the NTG wants to do in the Land Development, Natural Resource Management and Environment Protection fields can only be achieved with good, consistent spatial information being available and readily accessible.
- There is a large amount of common data and information flows between these activities.
- Many different government agencies and the community are involved.
- There is a need for better Land Information to assist decision making.
- High costs are involved in establishing and maintaining this information.

**INTRODUCING THE NORTHERN TERRITORY**

**Departmental Functions**

- Strategic Land Use Planning and Development
- Development Assessment and Building Control
- Road and Marine Transport
- Surveying, Mapping and Spatial Information
- Environment Protection and Heritage
- Government Land Administration
- Natural Resources Management
- Aboriginal Land Issues
- Land Valuation
- Community Land Care

**THE NT LAND INFORMATION SYSTEM**

**What is the NTLIS?**

Making it ... *easier, faster, cheaper*...  
for all levels of government and the public *to access spatial data and information.*

**THE NT LAND INFORMATION SYSTEM**

**What is the NTLIS?**

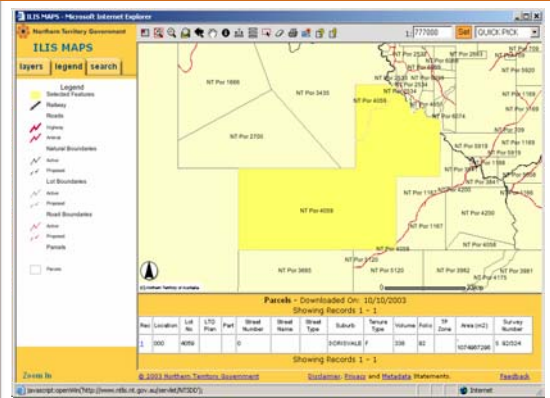
- Not a "computer system"
- A dynamic system of inter-related knowledge and expertise, spatial data and information, policies, procedures and standards and information technology and communications.
- In real terms, a cooperative arrangement between NT Government agencies, and potentially other governments and the private sector, designed to deliver better outcomes for government, the community and industry from the use of spatial data resources
- Focused on sustainable spatial information management

## THE NT LAND INFORMATION SYSTEM

### Key Spatial Data Sets

- Geodetic Reference Framework
- Cadastre
- Land Tenure
- Topography
- Administrative Boundaries
- Natural Resources
- Administrative Interests
- Aerial Photography and Satellite Imagery
- Development Activity

## THE NT LAND INFORMATION SYSTEM



## THE NT LAND INFORMATION SYSTEM

### Challenges

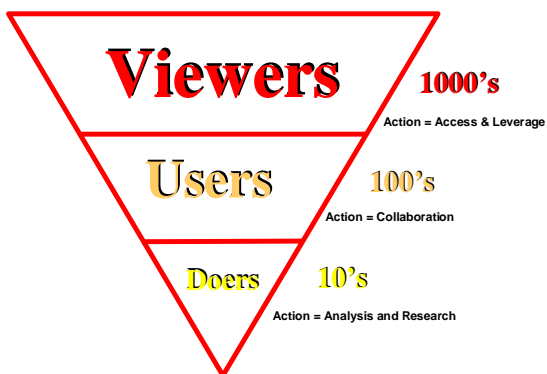
- Exploiting the data that are already available
- Making spatial data more accessible and interoperable
- Interoperable spatial information across state and national borders

## THE NT LAND INFORMATION SYSTEM

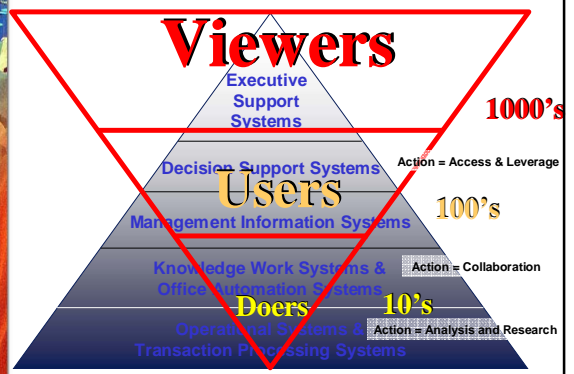
### Next Stages

- High performance accessibility
  - Making images/data readily available to decision makers in real time
- Synthesizing multiple data sources
  - Fusing data types in a fast, easy process accessible to anyone
- Utilising imagery in daily operations
  - Taking advantage of the information value of imagery

## WHO ARE OUR e-CITIZENS?



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### Did you know....?

There are almost 70,000 servers on the internet providing 31.5mil unique accounts with access to visualisation of the 2 most popular 3D spatial environments??

### What are they....?

1. Half life/Half Life 2
2. Call of duty

Gaming style interfaces have the potential to tap into the skills of this huge group of "viewers and users" to provide access to a wide range of spatial data for decision making.

## SPATIAL INFORMATION TRENDS

### What is Keyhole?

*"A powerful solution for utilising any form of geospatial data—imagery, terrain, features, vectors—in a high performance, interactive interface that accelerates and enhances decision making."*



## SPATIAL INFORMATION TRENDS

### Benefits

Interactive access to the NTG geospatial database

- Give every User and Viewer unprecedented levels of information depth without the costs and distribution issues of traditional methods of distributing data.

The intuitive yet high performance Keyhole interface

- Accelerate the decision making process by placing critical location information at Users' and Viewers' fingertips.

Faster collaboration by Users

- Annotations and overlays can be shared on top of the network-resident base map.

## SPATIAL INFORMATION TRENDS

### Demonstration



## XML for Topographic Data



## XML for Topographic Data





## SPATIAL INFORMATION TRENDS

Questions/Further Discussion?