



LAND INFORMATION NEWSLETTER

No. 4 March 2007

Welcome to the fourth issue of the Department of Planning and Infrastructure's (DPI) Land Information Newsletter, where you will find updates on:

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We will be moving to Chinatown in 2007

Land Information will be relocating from Nichols Place to the new office building in the Chinatown development later this year – exactly when depends on completion of the fit out work and hand-over. We will occupy half of the 2nd and all of the 3rd floors – a bank of three lifts should provide fast access. The Land Information Centre will be located on the 3rd floor. As yet the building does not have a name.

The physical relocation itself will be a major challenge. As timing becomes clearer further information will be circulated to all customers. Unfortunately all of our telephone and fax numbers will need to be changed.

Further information can be obtained from Vic Stephens on 8999 7027.

Aerial Photography Programs

The 2006 Aerial Photography Program ran out of time due to bush fires and the approaching wet season, though the good news is that only two projects, the Douglas-Daly region and Katherine Rural, were not completed and will be captured by the contractor when the weather clears.

A tender for the 2007 Program was awarded to Qasco Northern Surveys on 7 February and will commence as soon as the weather permits. The projects included in the 2007 Program can be found on the Department's web site at

<http://www.dpi.nt.gov.au/whatwedo/landinformation/capture/index.html>

Further information can be obtained from Doug Rannard on 8999 6636.

2007-08 Mapping Program

Many thanks to all those who have assisted in defining requirements across government for topographic mapping in the 2007-08 period. The requirements to date can be found on the Department's web site at

<http://www.dpi.nt.gov.au/whatwedo/landinformation/mappingcapture.html>

A tender for this work is currently being prepared. Further information, including progress on the 2006-07 Program, can be obtained from Bob Schulze on 8999 7462.

Imagery over Remote Communities

Some of our customers may be aware that over the past few years we have been acquiring Digital Globe (DG) satellite imagery over selected areas – at 63cm pixel this is the highest resolution imagery that is currently commercially available. Taking advantage of DG's speculative capture program, in 2005 we requested that Territory remote communities be captured for possible future purchase.

Last year, faced with a price increase due in December, we coordinated other NT Government agencies, Power Water Corporation and Geoscience Australia to jointly fund the licensing of DG imagery over almost 500 communities and homelands. This imagery has been delivered and made available to the licensees. It will also be loaded into NT Visualiser for general access (see below).

Given government proposals to improve infrastructure and housing in remote communities, this imagery provides an ideal information base for planning and can be maintained incrementally as developments take place. Further information on the areas covered can be obtained from Tony Gill on 8999 7028.

NT Visualiser Service – Client Licenses Now Free!!!

Land Information received advice from Google late last year that as the NT Government holds an Enterprise licence client licences can now be allocated at no cost, subject to the defined concurrent user limit.

Accordingly, Land Information has sought to have the Google client included in the standard workstation software suite provided to all government staff. This will occur during 2007 as workstations are refreshed by the desktop contractor Fujitsu.

New imagery is also being loaded into Visualiser as it is acquired. The latest additions are Ausimage data over Darwin and Palmerston, to be followed by satellite imagery over remote communities.

More information can be obtained at http://www.ntlis.nt.gov.au/forum/ntlis_documents/nt-visualiser/ or contact GIS Support on 8924 4230.

Ivan Price and his team were responsible for getting NT Visualiser up and running last year. A paper on how this was done was presented by Ivan at the Western Australia Land Information System (WALIS) Forum in September and was very well received.

NTLIS Web Site – at last!

At last the NTLIS web site has been re-vamped in line with government web standards and is now available at <http://www.ntlis.nt.gov.au/>

The content from the old site has been revised – further work is required on the Spatial Data pages before they are published. The site also includes a new NTLIS Collaboration Forum for anyone interested in spatial information – this is the place to find information, news and events relating to spatial data and services in the Northern Territory.

The Forum <http://www.ntlis.nt.gov.au/forum/> is relevant to people inside and outside of the Northern Territory Government who are:

- GIS (Geographic Information Systems) professionals;
- users of online GIS systems including ILIS Maps, NT Atlas, Google Earth; or
- developers of applications that include mapping or geocoding functionalities.

Thanks goes to the Department's Web Management team for getting the site completed and the NTLIS team for sorting out the content.

New ILIS Platform goes live

ILIS was cut over to a new operation platform on the weekend of 9 December with minimal problems. The new platform doubles the number of servers available to ILIS and provides increased performance and data storage. A high bandwidth (1Gb) communications link is installed from the site of the new platform to the Government's communications hub in the Chan Building.

The contract also provides for 24 x 7 operations, a high level of availability and access to a disaster recovery site in Sydney. Congratulations to all involved in this successful project – the NTLIS team, service provider Hermes Precisa, applications programmers from Ross Pty Ltd and DPI staff who tested everything prior to the cutover.

ILIS Developments - New Planning Scheme

To enable the new NT Planning Scheme to come into effect required significant changes to the existing digital Town Plans and to the planning system in ILIS. The Town Plan data base is now separated from the Cadastral data base, though both are spatially aligned. Implementation of the Scheme required the zone of every land parcel affected by the Scheme to be changed in ILIS on the night of 31 January 2007, prior to the Gazettal of the Scheme on 1 February.

This was done by implementing changes to ILIS such that from that date the zone of a parcel will be changed automatically from the spatial Town Plan data base, not manually.

Contact Matthew Winston on 8924 4215 for more details of ILIS developments

Town Plan Administrative Maps

Prior to the introduction of the new Planning Scheme Land Information received a number of requests from people in the property industry for new Town Plan booklets – or administrative map booklets with zoning overlaid.

We can advise that this new product is under development and when completed will be generated on demand directly from the data bases using our automated map products facility – in other words, the product will be accurate on the day it is generated.

These booklets will be in colour and A3 format. For more information including timeframes contact Tony Gill on 8999 7028.

GNSS Base Stations up and running

Two Base Stations of the Darwin Pilot CORs project are now operational. Both the Supreme Court and Palmerston City Council sites are streaming raw GPS data back to a site server to allow post processing and DGPS / RTK corrections are being broadcast.

There is still some work to do to refine the true GDA94 positions of the GPS antennae at these sites and resolving site server communication issues however these are expected to be worked out over the coming months.

The DGPS and RTK corrections are being broadcast / transmitted over the internationally accepted format for expressing Real Time DGPS corrections known as Radio Technical Commission Maritime or RTCM. For the technically minded, the RTCM version being used is 2.1 and the types are:

Type 1: Differential GPS Corrections

Type 2: Delta Differential GPS Corrections

Type 18: RTK Uncorrected Carrier Phases

Type 19: RTK Uncorrected Pseudoranges

Broadcasting frequencies are: 469.625Mhz and 469.950Mhz.

At this stage we are still testing and configuring the DGPS and RTK corrections from the sites however those who can 'tune in' are more than welcome to test the system but must be aware the system's variables are still being refined.

Another GPS RTK CORs base station site is being investigated in the vicinity of the Charles Darwin University or the Royal Darwin Hospital. When operational this site should provide coverage over the northern suburbs of Darwin.

For further information please contact Phil Verrall on 8999 3932 or Rob Sarib on 8999 6081.

National Geospatial Referencing System (NGRS)

Late last year the Australia Government announced an allocation of \$15.8m towards improving the National Geospatial Referencing System or NGRS. This funding is a result of the National Collaborative Research Infrastructure System (NCRIS) initiative and is design to support highly accurate measurement of the Australian continent.

Though we do not have co-funding available to formally participate in this project, Land Information is working with Geoscience Australia to ensure that the location and operation of GNSS infrastructure in the Territory complements our own GNSS Base Station facilities, and vice versa.

The proposed location of the first two NGRS GNSS Base Stations for the NT are at National Tide Gauge facilities in Darwin and Groote Eylandt.

More information will be provided in the next Newsletter.

Metadata Developments

The NTLIS team has been working towards converting the NT Spatial Data Directory or metadata repository to conform with the International Standards Organisation (ISO) spatial metadata standard that was finalised in 2006. This is now close to completion.

Development of a new Metadata tool whereby people can capture and maintain metadata entries in the data base is also close to complete. This tool will be made available to data custodians within the next few months.

Further information is available at http://www.ntlis.nt.gov.au/forum/ntlis_documents/ntlis-metadata-tool/ or from Ivan Price on 8924 4024.

Feedback

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