

# LYNX may be a front runner

**P**PSMA Australia – the national company formed by Australia’s governments – may emerge as the ‘quiet achiever’ in the drive to establish a national spatial data infrastructure.

PSMA Australia’s Chief Executive Officer, Dan Paull (pictured right), said that PSMA was now developing the phase II version of its international-award-winning LYNX data management system.

“LYNX II will mean a revolutionary change to the way spatial data is managed and delivered ... it could be the circuit breaker which will bring the concept of the ASDI to life,” he added.

“We expect to have a pilot system up and running in three to six months which we hope will generate interest and momentum and act as a powerful demonstrator of what can be done more broadly.

“I believe that we will actually have a national SDI based on the LYNX concept within the next two years and we are off to a flying start with strong support from all jurisdictions, including the Australian Government.”

Mr Paull said that another area which could stimulate national action on an ASDI was the work being done by CSIRO on information capture for the national water program.

“In concept, it is little different from what we are doing with LYNX, it just has a focus on a different theme,” he added.

“We are talking to the CSIRO to see if there is something that can be done to co-ordinate and extend these initiatives much more broadly to everyone’s benefit.”

Dan Paull’s enthusiasm for LYNX is well justified. Last year, against stiff international competition, it won an international award for exemplary enterprise systems within government.

The phase one version of LYNX is currently used by PSMA to move gigabytes of data between PSMA, its data contributors (mainly the national, state and territory governments) data managers and on to clients. It also provides a range of services and tools which PSMA and its data suppliers and managers use to improve data quality, data logistics and enhance data useability and accessibility.

Mr Paull said that the issue of a national spatial data infrastructure had traditionally

been tackled from the perspective of standards and policy. The difficulty with this approach, however, was that the return to those organizations who participate is not adequate to cover the business reengineering costs of participation despite the larger benefit.

“PSMA’s approach involves the pragmatic management of a supply chain in a very complex environment. The challenge with spatial information is that the supply chain can be very complex, particularly the way the information can be used and the influence that this end use has on the way it is structured and the way it can be delivered so that people can extract the greatest value from the data.

“What we are doing with the second phase of LYNX is to extend what we currently have in such a way that the architecture not only provides the means of handling the complex supply chain issues and demonstrates a benefit to all the participating organisations, but also stimulates a desire to collaborate and participate. This outcome cannot be achieved through standards and policy alone.

“One of the serendipitous results of what we have done so far is that a number of the jurisdictions we deal with have offered to contribute services they have built themselves – like some features of the SLIP program in WA, and Victoria’s VMAS. This strong support from all governments presents a tremendous opportunity to build a powerful network spanning the country.”

Mr Paull readily concedes that the present version of the LYNX system is used to manage only a small number of Australia’s national datasets. “We certainly recognise that,” he said (although he emphasises the importance of those six fundamental datasets – G-NAF, an index of all Australian addresses, Cadlite, Australia’s 10.5 million land parcels, our national transport infrastructure, Australia’s topography, all of our postcode boundaries and administrative boundaries and a national dataset covering points of interest which includes everything from accommodation to banks, hospitals to museums.)

“But the second phase of LYNX infrastructure is generic – the technologies involved enable us to handle and process



spatial information without a great deal of concern about what thematic dataset it is associated with,” he said.

“LYNX decouples the processing and manipulation from the content expertise.”

Mr Paull said that PSMA saw its primary role as “building new relationships with new organisations who are content experts in their own right and using the LYNX infrastructure so they are able to build national datasets themselves.

“We are not trying to be experts in all datasets, but PSMA has become very good at managing the complex supply chain involved,” he said.

“We can partner with other organisations, particularly government organisations where the states and territories have information that has its greatest value when it’s combined together at a national level.

“As PSMA Australia has many relationships beyond government as a result of its reseller network and contractor arrangements, this same arrangement could be extended to include spatial information held by private and other organisations,” he said.

“For instance there is a great deal of aerial photography held by private sector organisations as well as by government. Theoretically, we could establish a means within LYNX to facilitate access to that.

“If you take the LYNX construct that has generalized many of the business processes and formed them in such a way that you get a lot of flexibility from the services architecture and extrapolate that into different industries, different areas and data contexts, then you are talking about a true ASDI.

“In fact, we are probably talking more about a Virtual Australia – there is no reason why all the data needs to be spatial.

“Spatial is probably the most complex type of electronic digital data so there is no reason why aspatial data could not be managed and delivered in a similar environment.”