



# Newsletter

Oct. & Nov. 2006



## RFID & Cross Enterprise Executive Breakfast in Sydney on December 8



The Department of Communications Information Technology and The Arts (DCITA) and RFIDAA will be hosting an Executive Breakfast at the Sydney Hilton on December 8 from 7.30am to 9.15am.

DCITA will officially launch the RFID guide for businesses; Getting the Most Out of RFID. It is another

step together with the National Demonstrator Project, that the Department has supported to foster the development of innovative new technologies.

RFIDAA, in its mission to facilitate RFID adoption in the country, has asked its Foundation Sponsors to discuss the true potential of this innovative technology. The global trends in RFID will be reviewed along with what the business case for RFID is. Finally the requirements for leadership in Australia will be developed.

As you may be aware, the Japanese government is actively funding RFID pilots, the European Union has committed 5.6 million pounds to promote industry pilots and successful rollouts are occurring in the US. The logistics industry is under transformation given the capability of RFID technology. Mobile warehouses, source to consumer tracking and supply chain visibility can be automated to radically change the cost of doing business.

RFIDAA members, along with industry leaders have been invited to this important event which will announce the beginning of a series of Executive Briefing sessions through 2007.

However, there are still a few seats available to attend this free event. Don't miss this opportunity to get the latest update on DCITA's involvement on RFID and learn from industry leaders about RFID.

To express your interest in attending or to learn more about the event email us at [julien@rfidaa.org](mailto:julien@rfidaa.org).

### Implementing RFID: keep the big picture in mind

RFID reduces the cost of routine business operations.

It can be reduced at each level of the supply chain by limiting the human resources required. This is usually understood by reducing the labour force which is used to manually scan objects at each transaction. However more reductions can be attained by shifting functions to the suppliers or the clients. For instance, a trusted supplier can become in charge of part of the materials planning functions. This is the next step of "Just In Time", a stage that Jonathan Loretto\* from Telstra calls "near real time." This change of cross enterprise business

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### **Government sponsorship of trade missions**



Be part of the Australian Stand at CeBIT Hannover in March 2007. Pods are offered at a discount price and rebate programs are available to cover up to 50% of the total cost.

RFIDAA is interested in finding Victorian companies that wish to take part in this opportunity. We believe the timing and profile of this show is of exceptional value for RFID developers, service providers, consulting companies and education companies.

To join RFIDAA, visit <http://www.rfidaa.org/join-RFIDAA>.

### **Join RFIDAA and profile your company in our RFID Capability Directory to be launched in 2007**

Early in 2006, RFIDAA embarked on the development of an Australian adoption program for RFID related technologies, systems and services.

We now invite interested companies to become RFIDAA members and profile for us your capabilities to help interested organisations anticipate, understand and implement RFID. As the Peak National Body serving as the point for contact for government and international RFID contact, RFIDAA will play a significant facilitation role in linking user needs to members' capabilities.

Following initial industry and government surveys and feedback sessions, there is need for assistance in the following categories:

- RFID education services
- RFID technical expertise
- RFID related services
- RFID based solutions

[Read more](#) about our RFID Capability Directory

To join RFIDAA and start taking advantages of the benefits of the membership, go to <http://www.rfidaa.org/join-RFIDAA> or e-mail us a [rfidaa@rfidaa.org](mailto:rfidaa@rfidaa.org) to get more information.

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## [RFID For Libraries: The Australian Proposal for a Library RFID Data Model has been sent to ISO](#)



The Standards Australia Working Group IT-019-01-02, chaired by Alan Butters, completed its proposal for an RFID Data Model and sent it to the International Standards Organisation (ISO) as a working document for the international standards project which started this month.

### Abstract:

*A major decision to be made by libraries internationally relates to the question of what we want to accomplish in the long term with regard to RFID. If our horizons extend to only achieving interoperability at the tag level, then a prescriptive model will suffice. If we want interoperability in the short term but desire an open RFID systems architecture as an end goal, then we must standardise more than simply the tag data model.*

*Standards already exist to allow us to accomplish this. With a little extra effort and a clear vision for the future, we can pave the way for the RFID systems of tomorrow. The Standards Australia IT-19-01-02 working group is suggesting that we begin as we aim to proceed and adopt an approach to standardisation that will deliver the long term benefits that libraries require.*

The full proposal is available for download at [www.sybis.com.au](http://www.sybis.com.au)

Read related articles on [www.rfidaa.org](http://www.rfidaa.org)

## [Short courses with GS1:](#)

### RFID & EPCglobal Standards



Get the whole picture on RFID and the new global standards system, Electronic Product Code (EPC) that supports RFID technology in one day.

Dates & locations:

- ▣ 9/11/06: Queensland
- ▣ 16/11/06: Victoria
- ▣ 23/11/06: New South Wales

For more information about the short courses and how to register, visit [GS1's website](#) or [Ferret website](#).

## [Update on the Gold Coast City Council \(GCCC\) Library Service RFID implementation](#)



As planned, the roll out of the 3M One-Tag RFID System at the GCCC Library Service to the 14 branches has been completed (with the exception of one library that is scheduled to be moved to a new building in December).

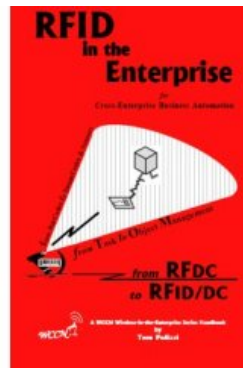
Overall the response from customers has been good, with up to 60% of them using the self check out desk on peak days said Leona Jennings, Coordinator, GCCC Library Services Management Projects.

It is too early to have a complete analysis of the actual benefits of the solutions but already the staff have forgotten that they did not have RFID before. In the past a general inventory would take a couple of weeks, today it is done on a daily basis, which allows better customer service, such as finding missing or overdue books.

## [Implementing RFID: keep the big picture in mind](#) (from front page)

practices is the move from *building to forecast* to *building to order*. Procurement becomes automated and Material Resource Planning (MRPs) take on their full meaning and capabilities.

Finally, even more valuable, by tracking the life experience of goods at the item level, automating traceability and problem resolution become possible.



Source: Polizzi, T. (2004) *RFID in the Enterprise for Cross-Enterprise Business Automation*, WCCN Publishing.

Join RFIDAA and get a discount on Tom Polizzi's Handbook and newsletters. To join RFIDAA and start taking advantages of the benefits of the membership, go to <http://www.rfidaa.org/join-RFIDAA> or e-mail us at [rfidaa@rfidaa.org](mailto:rfidaa@rfidaa.org) to get more information.

\* See article on the presentation given by Jonathan Loreto, General Manager of Extended Enterprise Solutions at Telstra during Cebit 06: **RFID: Explosion and New Ways of Working**



## Member testimonial: Regni goes to China



In September the Victorian Government helped sponsor Australian companies to attend Cebit Asia in Shanghai. RFIDAA supports the Government in its effort to promote Australian RFID capabilities along with the Australian IT community. A member of RFIDAA, Regni, took up the opportunity:

*Regni is a boutique and specialist Telecommunications company specializing in Radio Frequency Identification (RFID) and Sensors; providing advisory, design and implementation services to improve the bottom line of companies.*

*Our China mission was to identify the logistics sector and its large base of transportation and freight companies; to this end we have been successful and are formalizing representation with Shanghai Quan Zhi Trade Co. Ltd for the China market. The arrangement is not exclusive, and leaves room to provide solutions to three other players, notably; China Telecom, ST Electronics (Shanghai) Co. Ltd and Neusoft Co. Ltd.*

*Regni in all circumstances must thank the Victorian Government, especially Minister Marsha Rose Thomson for the ICT Sector for promoting SMEs and Mr. Ray Nicol who has been instrumental in our promotion to Multimedia Victoria and thus promoting us in Japan and China where long-term relationships have been forged.*

*Finally, I would like to promote the RFID Association of Australia as being a foundation for specialist companies such as Regni to have a platform to launch from and have a forum for collaboration.*

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### About Regni:

Regni's Business Practise covers three main areas:

1. Radio Frequency and sensors, coupled with Active & Passive RFID products for the Health and Logistics Industry (Patented)
  2. Wireless Telemetry Patents (AUS, UK & USA) for diagnostics in the medical field.
- From research and Development through to collaboration

with third-party companies, creating IP for Australia and the licensing thereof.

Regni's R&D capabilities include collaboration with La Trobe University, The Alfred - Centre for Medical Innovations, Monash University and NICTA (Melbourne University) amongst overseas universities and third-party companies in micro and nanotechnology products and solutions.

Our markets include the US and South America, Sri Lanka and the APAC region.

## Think about the security of your RFID project beforehand

Recently, critics of RFID have been raising the issue about the security of RFID-enabled documents (such as passports). Or about the protection of the consumers' data on their contact-less payment cards. These solutions have been implemented on a large scale (20 million cards issued in the US and 35,000 in an Australian trial with the Commonwealth bank) which highlights the need and the demand for such solutions. However, security has not always been a priority as we can see, as the flaws have been exposed.

*"If the security issue is not taken care of during the first phase of an RFID project then it will slow down its development later on"* says Robert McAdam from Pure Hacking in Sydney. His company helps firms design the security of their RFID solutions being deployed. Robert McAdam and his business partner Joshua Perrymon focus on the protection of data:

- the confidentiality of the data
- the integrity of the data (making sure that the data being processed are the actual figures)
- the availability of the data (making sure that the information is available when needed).

To do so, the two founders of Pure Hacking perform penetration testing of RFID systems and provide the consultation services needed.

Of course not every organisation will need comprehensive security audits, it will depend on the value of the assets being tracked. However, companies like Pure Hacking are here to remind us of the importance of addressing the security issue when deploying RFID. Industries with highly sensitive or proprietary information such as Banking, Retail Supply Chain or Access Control are likely to need such security audit services.

To learn more about Pure Hacking, read "[Pro Hackers Take On RFID Down Under](#)" in the RFID Journal or visit their website (<http://www.purehacking.com>).

Interested in becoming a sponsor or a member of RFIDAA?

E-mail us at [rfidaa@rfidaa.org](mailto:rfidaa@rfidaa.org)

Visit our website: [www.rfidaa.org](http://www.rfidaa.org)





## NLIS: A research from Wollongong University about leveraging NLIS requirements.



Universities in Australia are realising the benefits of RFID and starting to understand the need of Australian industries for an educated workforce on RFID capabilities. RFIDAA is proud to promote the efforts of such universities.

At Wollongong University Adam Trevarthen, under the supervision of Dr Katina Michael, Faculty of Informatics, developed a thesis on "The importance of utilising electronic identification for total farm management in Australia."

*The introduction of the National Livestock Identification System (NLIS) within Australia empowers authorities with rapid and precise information, however it also provides Australian farmers with the opportunity to derive additional benefits for themselves via enhanced farm management practices. Radio Frequency Identification (RFID) is becoming globally recognised as the technology to implement animal identification and has become a mandatory form of livestock management in many countries. In accordance with this global trend, Australia has introduced the NLIS for the identification and tracking of livestock, subsequently placing Australia at the forefront of cattle traceability in the world. However, it is proposed that producers go beyond mere compliance with this system, and take advantage of the RFID technology used in the NLIS to derive leverage additional benefits for themselves through enhanced farm management practices. This research investigates this concept and attempts to derive provides an possible ideal framework for the use of RFID technology for total farm management.*

*At the core of this research are two case studies, undertaken on dairy farms on the South Coast of New South Wales. These case studies differ with regards to the use of RFID technology in their farming operations - from utilising little to no RFID technology, to a dairy farm with strong integration of RFID technology in their daily operations. It is believed that dairy farmers may be able to relate to these case studies in terms of their own current situation, or future plans for their dairy, subsequently aiding them to decide on their own utilisation of electronic identification for farm management.*

*As a final endeavour, the research undertakes a cross-case comparison to derive provide a proposed framework with the aim to maximise the advantages and return on investment for farmers by utilising RFID technology for farm management. Some of the potential advantages explored include increased efficiencies, greater information availability, reduced feed and labour costs, improved milk quality and volume, improved herd health, ease of herd management and more. With the rapid growth of RFID technology for animal traceability, this research takes a step towards resolving the current gap in academic research in this domain, while also aiding to inform farmers of the range of opportunities provided by utilising RFID technology for farm management.*

The full version of Adam's thesis is available for download: <http://ro.uow.edu.au/thesesinfo/1/>

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## Snapshot on the National Livestock Identification System

In October, the Five Nations Beef conference was held in Australia and industry representatives came from the US, Canada, Mexico and New Zealand.

Michael Thomson, from the Rural Press National News Bureau, reported that North American cattle groups have praised Australia's National Livestock Identification System, saying they will follow suit to meet market demands.

After visiting the various NLIS facilities, the delegates were impressed by Australia's leadership in implementing its livestock identification, traceability and product integrity system.



Exhibit 4.1 Cows waiting in dairy holding area

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