

RFID for Libraries

Standards Australia Working Group IT-019 -01-02

Wednesday February 22nd 2006, 0930 - 1230

RMIT Carlton Library - Cardigan Street, Carlton

Attendees:

Alan Butters, Sybis (Chair)

Jan Wild, DA Library Technologies

Leona Jennings, GCCC

Craig Anderson, RMIT

Christine Mackenzie YPRL

Apologies:

Peter Dart, Pearson Australia Group

Lynn Regan, BHSC

Brian Dunne, 3M Australia

Janifer Gatenby, OCLC PICA

1. Welcome and meeting objectives

AB welcomed the members to the fourth meeting of the IT-019-01-02 working group and outlined the objectives of the meeting which were:

- Discuss the effect on the standards process of the announcement that the Danish DML had been accepted as a National Standard in Denmark.
- Discuss the broad thrust of the BSi proposal from Paul Chartier.
- Complete the RFID framework document so that the group can focus on its Australian feedback document.

2. Process for handling reduced working group numbers

A brief discussion was held regarding how the working group meetings might proceed in the case of reduced numbers of attendees. It was agreed that following simple system would be adopted:

1. Where a majority of members attend - the meeting is conducted as normal.
2. Where the attendees comprise neither a majority or a minority (4 present and 4 apologies from the attending members) - a decision will be made on a case-by-case basis as to whether the meeting proceeds, based primarily on what is to be

discussed. If the meeting proceeds, no decisions taken will be final until approved by a majority.

3. Where a minority of members attend - the meeting will not be held.

3. Followup from previous meeting

AB reported on his meeting with Geoff Chamberlain representing public libraries in New Zealand. Geoff will discuss the activities of the working group with his colleagues and decide the best way to participate in the process if they wish to be involved.

At the last meeting, AB undertook to determine the minimum tag size with which the Danish DML will operate. The answer is 256 bits.

4. Implications of Danish Standard's endorsement of the DML

AB explained that this essentially triggered a process of internationalisation which could be expected to result in an internationally standardised data model for RFID within libraries and detailed the steps involved. The Australian working group will provide comments and feedback at the appropriate stages as the process unfolds.

5. BSi Proposal from Paul Chartier

A discussion was held by the group on the broad architectural differences between the Danish DML and the BSi proposal. AB summarised these in a PowerPoint presentation. Essentially the BSi proposal employs two additional ISO standards (ISO/IEC 15961 & 15962) in communications layers above the tag data model. The data model itself employs a non-prescriptive message structure and a single-element mandatory requirement. A number of implications both positive and negative regarding this proposal were discussed. These included:

- A move toward a more open RFID system architecture as outlined in the BSi proposal is a positive step for libraries.
- The BSi proposal allows more flexibility for libraries in selecting data elements to be placed on the tag. It is not as prescriptive as the Danish DML.
- Concern was expressed that the quantum of work involved in implementing the BSi proposal compared with the Danish DML may be seen as a negative by RFID library vendors. The fear is that this may cause a standard based on the BSi proposal to stall at the implementation stage. It was suggested that both BD and JW as vendor representatives attempt to quantify the additional work involved for vendors to implement the BSi proposal over the Danish DML.
- Concern was expressed that some RFID vendors may feel that the insertion of standards at the higher levels suggested by the BSi proposal could work to limit the differentiation in the market that individual vendors seek.
- There was general agreement that a smaller mandatory part (as in the BSi proposal) was preferable as it removes the basis for arguments that invariably result in situations when individual libraries want to implement a more flexible solution than that prescribed.

- It was acknowledged that, in the absence of any changes to the current Danish DML, the model was still a good step forward for libraries generally as there currently exists no standard in this area.

AB also outlined his discussions during the week following the VALA conference with Gregor Hotz from Bibliotheca who was one of the principal architects behind the Danish DML.

6a. Framework document - part 3 Performance

A brief discussion was continued on this topic and acknowledged the difficulty in quantifying the issues. LJ outlined her personal experience with self serve loans transactions where borrowers were more agitated by a slow printing receipt at the conclusion of the transaction than by the individual-book processing times. BD is still to report on his investigations into whether any research has been conducted in this area.

6b. Framework document - part 4 Item Security

The group acknowledged the BSi proposal's assertion that using the data encoding area of the tag for security is fundamentally weak. CM stated that while this may be technically true, for public libraries the ability to apply one tag rather than two outweighed any performance or security gains offered by using an RFID - EM security model. CA advised that some academic libraries might evaluate this question differently due to their dissimilar requirements. CA favoured an open solution that permitted optional use of a combined RFID - EM configuration.

The WG felt that the AFI approach of the Danish DML was satisfactory and permitted interoperability while allowing the use of integrated EM security where required.

6c. Framework document - part 5 Cost

The group discussed the RFID tag price point at which libraries might be enticed away from standards towards an inexpensive but closed system. CM felt that a price of A\$0.50 per tag would be an acceptable tip-point for many libraries to embrace a standards based system whereas an RFID tag price of A\$0.25 might be seen as being overwhelmingly persuasive - a lack of standards notwithstanding. CA said that within many academic libraries the RFID evaluation process would probably not place as much emphasis on absolute price levels.

The point that the group acknowledged was that cost is a significant factor in many libraries and that there exists a finite "price" that these libraries would be prepared to pay at this point for open systems. This, of course, potentially opens the door for library systems based on less expensive RFID tags designed for the logistics and supply chain management sectors.

In order to keep costs to a minimum, the group favoured the concept of a data model that could operate with RFID tags having memory capacities as small as 256 bits.

6d. Framework document - part 6 Integration with Booksellers / Publishers

As a result of discussions held at the last meeting, the group acknowledged the possibility that the core needs of publishers and the core needs of libraries are sufficiently dissimilar that little common ground would currently be found. Common ground was detected, however, between libraries and library suppliers. Both the Danish DML and the BSi proposal offer data elements that could be useful in this context. It was felt that a presentation by a library supplier to the group would help the group to see how RFID might be beneficial to both parties. JW suggested that perhaps the selected library supplier should not be DA Information Services due to her personal involvement with the working group. LJ and CM to negotiate with an appropriate supplier who would be prepared to speak at a meeting of the group.

6e. Framework document - part 7 Library & item specific data

The intent of this section is to tease out anything that may be important to ANZ libraries but which is not featured in any of the proposals discussed to date. The group will continue to cogitate upon this point.

AB to update the framework document.

7. Other business.

JW brought up the topic of tag data life. It is generally understood that the charge in the RFID tag's user data EEPROM cells diminishes with time. As it appears that the data model proposals do not require the data to be refreshed as part of the tag's normal operation, the question posed was how long does the data remain readable in the tag and does this vary between different manufacturers?

It was suggested that this question could be put to the vendors represented by BD and JW. Also, as LJ is in the final stages of RFID system selection, it might be an appropriate question for the successful vendor.

8. Next meeting

The group will attempt to meet again toward the end of March. AB to canvas possible options.

9. Meeting closed

The meeting concluded at 1235