RFID applications in Japanese Library Community:
a background paper (2011)

SOURCE: Japan
ACTION: For your information

1. RFID Usage
The number of Japanese public libraries using RFID is a little under 300 at the end of
2010 (counting branch libraries using same system with the main library). About 9% of
approximately 3,200 public libraries in Japan use RFID tag. The first introduction of
RFID system to public libraries was 2001 and by the year 2005, RFID usage rate in the
public libraries increased to 1.5%. Since then, the rate steadily increases by 1.5% per
year. The largest case is a city which equipped two million books with RFID in 21
branch libraries.
Except for public libraries, libraries which use RFID are not so many and the number of
those libraries is estimated to be about 50-60 in total. Most libraries use 13.56MHz tag.
There are several libraries using 2.45GHz tag and several others using 960MHz tag.

2. Manufacturers of chips and RFID tag system vendors
Most RFID chips used in libraries are Philips ICode-SLI and Infineon my’d. Library
RFID tag system vendors are Toshokan Ryutsu Center (TRC), Uchida Yoko, Takachiho
Koeki, and several others. Among them, the first two vendors’ (TRC and Uchida Yoko)
market share is more than 90%. These two vendors focus on the Japanese domestic
market. They have no alliance with Europe or American vendors.

3. Source tagging project in the publishing industry
The publishing industry in Japan started feasibility study of the source tagging of the
RFID tag in 2003. The purposes are 1) efficiency improvement of complex circulation
system that a few copies of many titles are sold in various conditions, 2) anti-shoplifting
at bookstores.
The project explored various topics such as business model, tag attaching method to
books at the time of binding process, influence of tag on recycle, privacy protection, and
so on. One of the topics was the coding system to be used for item identification in the
publishing industry. Original members of the coding system group were from publishers, publication distributors, bookstores, and standardization organization. Then, secondhand bookstores and library community were requested to participate. The library community sent representatives in consideration of the possibility to use the RFID tag of the publisher in libraries.

The interim report on the code system was published in 2009. The project reported in 2010 that technical problems of attaching and disposing RFID tag were resolved. These reports seem to have almost concluded the examination stage. However, the prospects for the implementation of RFID tag are still far from certain.

Along with the code system in the publishing industry, members selected from associations of various types of library considered the allocation of those codes to each type of library. This examination took two years from 2008. A draft coding scheme was proposed, but was not finalized. During this examination period, National Diet Library started preparation for introduction of ISIL, and announced to take ISIL national agency in 2011. Now, the whole coding scheme needs reconsideration to accord with coming ISIL.