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Press Release

T-Engine Forum  
Ubiquitous ID Center

Start of Feasibility Study Experiment of “The Location Tracking Management System of Returnable Containers Using Active Tags” by T-Engine Forum

T-Engine Forum/Ubiquitous ID Center (Location: Shinagawa Ward, Tokyo; Chair: Ken Sakamura, Professor at the University of Tokyo) has been promoting research and development activities for Ubiquitous ID technology that automatically identifies ucodes that are assigned to physical objects and locations and provides services using the information associated with those physical objects and locations, towards realization of a ubiquitous computing society.

In FY2008, we will start feasibility study experiment of “The Location Tracking Management System of Returnable Containers Using Active Tags” with Ubiquitous ID technology which has been promoted by T-Engine Forum for the practical application of Ubiquitous ID technology in cooperation with Ito-Yokado Co., Ltd. (Location: Chiyoda Ward, Tokyo; Chairman and CEO: Toshifumi Suzuki), YOKOHAMA SIJYOU CENTER CO., LTD. (Location: Yokohama City, Kanagawa; President and CEO: Takeo Yamanoue), YOKOHAMA MARUNAKA SEIKA CO., LTD. (Location: Yokohama City, Kanagawa; President and CEO: Atsushi Harada), YOKOHAMA LOGISTICS SERVICE CO., LTD. (Location: Yokohama City, Kanagawa; President and CEO: Yoshihide Akutsu), etc. This feasibility study experiment will be conducted as part of “2008 Food Industry Competitiveness Reinforcement/Food Distribution Streamlining Projects” of The Ministry of Agriculture, Forestry and Fisheries (MAFF).

The distribution systems using passive tags that have been proposed mainly aim to improve efficiency of inspection and management through batch inspection. However, it has been pointed out that such systems can't detect 100% of passive tags during batch inspection. In order to overcome this problem, we focused on active tags as a new solution. Active tags are RFID tags with built-in battery. Unlike passive tags, as they can communicate for several tens of meters and perform retransmission processing, etc., they are expected to be inspected without fail. Also, they are expected to contribute to quality control of food with their capability to measure temperature.

In this feasibility study experiment, we will verify the system that ucode active tags incorporated in returnable containers communicate on regular basis with the base stations which are set up at wholesale market and logistics center so that information system connected with the base stations knows exactly where the returnable containers are located (location information). This system enables effective merchandise management at markets or logistics centers where the location to place merchandise isn't

fixed depending on receiving situation. Moreover, managing the temperature history of merchandise during distribution process using temperature sensor incorporated in ucode active tags and working with this location management system enable vendors to know the distribution conditions for the merchandise correctly including the recording of receiving and shipping time for the merchandise. We will give feedback to players such as vendors regarding the above-mentioned information and conduct confirmation and verification of business model in which the vendors can offer traceability information (product safety and reliability) in response to inquiries from consumers.

□ Main facilitator

- T-Engine Forum, Ubiquitous ID Center  
(Location: Shinagawa Ward, Tokyo; Chair: Ken Sakamura)

□ Participating organizations (alphabetic order)

- Ito-Yokado Co., Ltd. (Location: Chiyoda Ward, Tokyo; Chairman and CEO: Toshifumi Suzuki)
- YOKOHAMA SIJYOU CENTER CO., LTD. (Location: Yokohama City, Kanagawa; President and CEO: Takeo Yamanoue)
- YOKOHAMA MARUNAKA SEIKA CO., LTD. (Location: Yokohama City, Kanagawa; President and CEO: Atsushi Harada)
- YOKOHAMA LOGISTICS SERVICE CO., LTD. (Location: Yokohama City, Kanagawa; President and CEO: Yoshihide Akutsu)
- YRP Ubiquitous Networking Laboratory (Location: Shinagawa Ward, Tokyo; Chair: Ken Sakamura)  
etc.

□ Period of feasibility study experiment: February 1 to 28, 2009

Contact information for inquiries regarding this matter

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