

Contract Number 235542

RACE networkRFID

FP7 Thematic Network
ICT-PSP: a European concerted effort on RFID

D4.1.2 – WP4 Common terminologies report

Due date of deliverable: 28-02-2011 (M24)
Actual submission date: 20-04-2011

Start date of project: March 1st, 2009

Duration: 36 months
Version: 1

Organisation name of lead contractor for this deliverable: ETSI
Contact person: Trevor PEIRCE (AVANTA) and Patrick GUILLEMIN (ETSI)

Project co-funded by the European Commission within the Seventh Framework Programme (2007-2013)		
Dissemination Level		
PU	Public	PU
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

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Introduction

In 2011 RACE networkRFID has been renamed “RFID in Europe”

<http://www.race-networkrfid.eu> *The “RACE networkRFID” initiative is designed to establish an open network, federating all committed RFID stakeholders in Europe, with the objective of fostering the deployment of the RFID technology across Europe and across multiple applications domains while addressing all aspects of RFID technologies, ranging from theory, policy, standards, and regulations to technology uptake best-practices in order to enhance public and industry awareness and exploitation. Representation within the consortium embraces academia, business, technology stakeholders, researchers, standards and regulatory stakeholders and, very importantly, the user community with strong SME representation. The “RACE networkRFID” will be an open initiative, involving both the 25 *Contractual Members* (that are signatory to the contract with the European Commission) and *Associate Members* that will be invited, as the project unfolds, to join the network after its contractual start, with the objective of federating a broader community to drive and support the further development and deployment of RFID technology across Europe.*

The challenge of common terminology is one faced by many organizations from those trying to make use of it through those trying to create standards. It is particularly prevalent where there are significant and rapid advances in technology development or its adoption and, RFID is no exception. Duplication of terms can cause considerable confusion and make RFID seem more complicated than it needs to be. In the worst cases it can delay adoption or impede progress towards the development of solutions or standards.

This deliverable sets out to eliminate the confusion of duplicated terms. Where possible it will work towards diminishing duplication. Duplication can exist where one term has multiple meanings but also where there are several terms for the same meaning. The former challenge is easier to accommodate in the structure developed by RACE networkRFID WP4. The multiple meanings are grouped sequentially with repeated listing of the shared term. Where there are multiple terms for the referencing the same or similar explanations then a note will be added in the comments field to allow the user to be aware of this form of duplication. This may be viewed as supporting multiple definitions but the fact is that ignoring such duplication risks undermining the quality of RACE networkRFID WP4 deliverables and diminishing its potential influence to assist broader and faster technology adoption.

Deliverable number: D4.1.2							
Deliverable title: WP4 Common terminologies report							
Dissemination level (i): P				Nature of the Deliverable (ii): R			
Month of Delivery: M12, 24, 36							
Participant no. contributing to the deliverable	5	2	3	7	9	11	13
Participant short name	ETSI	GS1	FHG IML	IBER LOG	AIDC	ELTRUN-AUEB	ISMB
Participant no. contributing to the deliverable	14	15	16	17	18	20	21
Participant short name	UNIMAN	ADO	ITT	TECNALIA-	VTT	RAND	SINTEF

name				RBTK		EUROPE	
Participant no. contributing to the deliverable	22	25					
Participant short name	RFID NORDIC	INTER NET					
<p>Deliverable description and objectives to be achieved (iii): To improve the communication, a glossary of RFID related terms used by the Thematic Network stakeholders will be created and maintained. A consensus based Thematic Network set of definitions of terms will be produced in a public report published every year.</p>							
<p>Role of the different participants in the production of the deliverable (iv): ETSI, with the support of other participants, will collect and compile the RFID glossaries of terms used by the Thematic Network stakeholders and help to find harmonised definitions.</p>							

Progress

At M24 there is a requirement to complete a progress report on the M12 to M24 activities of D4.1.2 common terminologies report. Common Terminology has not been the focus of Work Package 4 activities between M12 and M24. That stated there has been important progress on the planned deliverables for this twelve month period.

The preliminary review, which was roughly 50% complete as at mid February 2010 was completed by WP4, resolving all outstanding issues 100%. The delivery of WP4 approved common terminology was ratified by the RACE networkRFID Management Board at their Board Meeting documented as “Minutes” (reference Management Board Audio Call, July 6th 2010). With MB approval the common terminology was placed on RACE networkRFID’s Web page at http://www.race-networkrfid.org/infonewsevents_rfid_term prior to it being presented at the Stockholm GA meeting by Ian Smith the Chairman of RACE networkRFID on 20th October 2010. While there was the intent to publish only terms not queried or still work-in-progress there were effectively no such terms at the end of the process.

With Management Board approval the common terminology posted upon RACE networkRFID’s Web was referenced in a communication to the following groups and organizations. In the communication these groups and organizations were asked to provide feedback and comments on the RACE networkRFID terminology.

- ETSI TC M2M/TC ERM TG34/TC TISPAN WG7/TC ITS
- CEN TC 225
- CEN WS DPP
- ITU-T JCA-NID
- ISO/IEC JTC1 SC31
- AIMglobal
- NFC Forum

At the end of M24 there has been no feedback received from any one of these organizations.

What remains to be completed are the additional terms with focus on industry sectors with established growing or emerging RFID adoptions:

- WCO
- IATA
- UPU/IPC
- ODETTE

Please refer to future objectives M24 to M36.

WP4 has partly addressed an outline model for post M36 maintenance including:

- Governance model
- Organization

The proposal is to develop a Wiki dedicated to the common terminology. Dortmund University has offered to develop such a platform. Access to input to the Wiki it is proposed would be to registered and authorized persons. The RACE networkRFID Web site would either host the Wiki or make a reference to a Web link to it. The final decision rests a great deal upon the sustainability plan for RACE networkRFID. For this reason WP4, Trevor Peirce has led a number of initiatives contributing to developing a plan for RACE networkRFID’s post M36 sustainability planning.

Deliverables

The M36 deliverables are outlined in appendix A).

The challenge ahead to common terminology is the sustainability plan of RACE networkRFID. WP4 has several actions to prepare for post M36 during the next twelve months. Updating the common terminology is not justified during the next period as there are no pressing demands upon RACE networkRFID nor WP4 to make changes, because the future direction of RACE will largely influence the contents of common terminology and, because securing the accessibility to the common terminology defined already are the highest priorities.

WP4 developed D8.4 – Network Sustainability Plan on the 3rd February 2011 under the WP8 title (reference sustainability discussion proposal draft v0.1). Further on the 18th February 2011 following a request by the MB face-2-face meeting in Sitges, Spain WP4 distributed the following email to MB members.

Dear All,

As an action of the last MB meeting I was asked to highlight a structure which will help us all align our contribution to the discussion on RFID in Europe sustainability. I would like to propose the following headings.

TARGET CUSTOMERS OF RFID in EUROPE

- Which customers should RFID in Europe target?
- How many of this type of customer exists in Europe or ROW?
- Who will pay?
- How much will they pay?
- How many customers should RFID in Europe target to acquire years 1 to 5?
- What competition is there for what RFID in Europe would provide these target customers?

RFID in EUROPE ACTIVITIES TO SERVE THE TARGET FUTURE CUSTOMERS

- What will the target customers expect from RFID in Europe?
- What will RFID in Europe need to do to meet customer expectations?
- How will RFID in Europe achieve these objectives?

FUTURE ORGANIZATION OF RFID in EUROPE

- Management Board or not?
- Who will manage operations i.e. deliverables fulfilling customer expectations?

FUTURE LEGAL STATUS OF RFID in EUROPE

- What legal status will the organization have?
- Where should it be registered?

FINANCIAL ASPECTS

- Estimated minimum revenue to sustain RFID in Europe?
- How should expenditure be approved?
- What should happen to assets if the organization fails?
- What should happen to ownership of RACE deliverables e.g. Web sites, databases, etc..?

Is there anything I overlooked? Have you feedback on the above sub titles and example questions?

Kind regards,

Trevor

Brussels Tel.: +32 2 767 4511 Mobile: +32 47 33 22 835

Planned Activities to M36

The following are the planned activities between M24 (March 2010) and M36.

Sustainability plan for common terminology:

- Establish a plan to maintain access to the common terminology and, if possible its future maintenance and development i.e. governance model, organization, financing.
- Gain support from RACE MB for common terminology sustainability plan.
- Implement the common terminology sustainability plan.

Sustainability plan for RACE networkRFID:

- Assist WP8 develop a sustainability plan for RACE.
- Structure the gathering of information from MB members regarding sustainability.

Appendix A)

Web link:

http://www.race-networkrfid.org/infonewsevents_rfid_term

File name:

RFID_Definitions_and_Terminology_5_version_1.pdf

Document 63 pages long. Pages 1 and 2 shown below as examples.

QUICK SEARCH FIRST COLUMN KEY

RFID System Related = R : Industry Sector Related = I : Software/Middleware/Information System = S : Other = O : <blank> = TBD

RFID Definitions, Acronyms and Abbreviations

	Term	Description	Additional Information	Comments
R	6LoWPAN	Specification for high-level communication protocols using radios based on the IEEE 802.15.4 standard for wireless sensor networks. Supports IPv6 address.		
R	Active tag	RFID tag with an internal battery or other on tag power source. The tag uses the onboard power source to power the transmitter to send back information to the reader.	RFID device having the ability of producing its own radio signal not derived from an external radio signal. To generate a radio signal active tags must employ some source of power. Traditionally this has been accomplished by integrated batteries, although designs exist for such devices that employ solar power or harvest ambient energy from the surrounding environment.	An RFID device which use a battery to transmit a signal to a reader or can gather energy from other sources and which transmits its identity and possibly other data at intervals and at a preset frequency. It will be read by any receiver of the same frequency within the active tags transmission range. Active tags can have read ranges of up to 100 meters or more. Some active tags can communicate with other compatible active tags. Some active tags incorporate sensors. Ref.: See BAP tags. Ref.: Passive tags.
R	Active tag	An RFID tag that uses a transmitter to return information as opposed to reflecting a signal back from the reader as a passive tags do. Most active tags are battery powered, though they may gather energy from other		

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Term	Description	Additional Information	Comments
	sources. Typical, active tags can be read from up to 100 meters.		
R Agile Reader	An RFID reader that reads tags operating at different frequencies or using different methods of communication between RFID tag and reader.		
R AIDC	Automatic identification and data capture. Technology associated with the creation and acquisition of machine readable data.	The primary technologies are bar codes and Radio Frequency Identification (RFID). It also includes SmartMedia, Biometrics, sensor networks and other automatic identification technologies.	Further technologies to be added. Seek further input.
R AIDC	Automatic identification and data capture. A broad term that covers methods of identifying objects, capturing information about them and entering it directly into computer systems without human involvement. Technologies normally considered part of auto-ID include bar codes, biometrics, RFID and voice recognition.		
R AIM	Automatic Identification Manufacturers. Association for Automatic Identification and Mobility. Global trade association that provides products and services	An international organization whose mission is to grow a worldwide market for Automatic Identification and Data Capture (AIDC) products and services through concerted action to set international standards, increase global awareness of AIDC solutions, and identify and educate	http://www.aimglobal.org/ Further clarification from AIM.

Appendix B) Detailed WP4 achievements

- 1st March 2010 Management Board Conference call
- 24th & 26th March 2010 General Assembly, Management Board and Review Meetings, Frankfurt
- 6th April 2010 Management Board Conference call
- 12th April 2010 Policy WP Leaders Conference call & prepare updated WP4 M24 planning
- 28th April 2010 EC RFID Recommendation Informal Working Group meeting, Brussels
- 4th May 2010 Management Board Conference call
- 12th May 2010 EU China IoT Expert Group Conference call
- 19th – 21st May 2010 EU China IoT Expert Group meeting, Beijing
- 27th & 28th May 2010 WP4 common terminology conference call & document update
- 31st May 2010 WP4 M24 planning & common terminology conference call & document update
- 6th July MB Conference call
- 7th July Preliminary draft of WP4 RACE Member survey – privacy, security and health
- 8th July Update to draft of WP4 RACE Member survey – privacy, security and health
- 15th July Review and discussion with WP1 leaders (GS1 Marisa Jimenez and Emilie Danel) of RACE Member survey – privacy, security and health
- 16th July Further coordination of WP1 leaders (Marisa & Emilie) input to WP4's RACE Member survey – privacy, security and health
- 27th July Review and modifications to WP4 RACE Member survey – privacy, security and health
- 29th July MB Conference call – common European RFID sign
- 3rd August Release distribution and follow-up WP4 RACE Member survey – privacy, security and health
- 9th August Support to WP4 RACE Member survey – privacy, security and health
- 10th August WP4 RACE Member survey – privacy, security and health
- 18th August Follow-up upon changes to RACE page on EU Web Portal
- 20th August WP4 RACE Member survey – privacy, security and health
- 23rd August Discussion over support of WP5 by fulfilling leadership role
- 4th October RACE follow-up to EC sign meeting
- 5th October MB Conference call
- 7th October preparations of WP5 leadership and interim organization
- 8th October meeting with Katerina Pramatarari at Brussels Airport to discuss WP5
- 14th October analysis WP4 privacy, security and health survey
- 19th October presentation preparation for MB and GA
- 20th October RACE MB & partner meetings in Stockholm
- 21st October RACE GA meeting in Stockholm with presentation of WP4 privacy, security and health survey and, WP4 common terminology (on Web site) and, WP5 RFID sign
- 22nd October Follow-up actions from MB and GA meetings
- 3rd November follow-up with EU Parliament on privacy
- 9th November MB Conference call
- 18th & 19th November Preparation for WP6 SME Event
- 22nd November WP6 SME Event presentation and RFID Medical Demonstration
- 24th November WP4 & WP5 articles for RACE Newsletter. Collect and forward SME Event presentations for distribution to members
- 30th November article on all policy (WP 1, 4, and, 5) related activities for Ian Smith
- 6th December MB Conference call
- 8th December follow-up with review and edits to RACE Newsletter
- 14th December RACE sustainability proposal drafted and distributed to MB
- 16th December follow-up with EC to identify EU Parliament members who would providing supporting public quotations
- 11th January 2011, RACE MB Conference call
- 24th & 25th January 2011, participate in ITU-T JCA NID meeting
- 1st February 2011, deliver RFID/IoT presentation to Effects+ cluster meeting in Brussels
- 3rd & 4th February 2011, Face to face Management Board Meeting in Barcelona/Sitges
- 15th February 2011, Conference call with EU members of EU China IoT Expert Group and preparation for next f-2-f meeting in Beijing
- 22nd February 2011, EU China IoT Expert Group meeting in Beijing