GRIFS Newsletter - July 2008

Building the Global RFID Standards Forum

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Foreword

Henri Barthel, GS1

Welcome to the first edition of the GRIFS newsletter, and welcome to the GRIFS community. At GS1, we are keen to streamline the global RFID standardisation efforts. We believe that the GRIFS project can deliver the required platform enabling the necessary coordination of standard activities. We want to be inclusive and look forward to your input to this important project.

Patrick Guillemin, ETSI

As a global organization with European roots, ETSI appreciates the importance of the GRIFS initiative. We will contribute with our proven expertise of bringing together organisations from all around the world with the objective to facilitate the coordination of standardization initiatives in the area of RFID and the related data communication challenges.

John Ketchell, CEN

With its 30 member countries and its affiliation with ISO, the European Standards Committee, CEN, is heavily involved in numerous initiatives addressing various components of RFID standardisation. The e-Business Memorandum of Understanding Management Group is good model that GRIFS can use to improve the coherence of global RFID standards for the benefits of End Users.

"The GRIFS Project offers an opportunity for Europe to lead a global, open grouping of standards bodies"
Gerald Santucci, Head of Unit Networked Enterprise & RFID, European Commission

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A world of global supply chains requires that RFID tags and associated sensors can operate, can be seen and can be interrogated anywhere. For maximum competitiveness and greatest efficiency this requires standards that are global in definition and in application.

GRIFS is a support action project funded by the European Union's FP7 programme with the aim to improve collaboration and thereby to maximise the global consistency of RFID standards.
This two year project started in January 2008 and is led by GS1, ETSI and CEN.

GRIFS is undertaking the following work to achieve its objective:
- Analyse the national, regional and global RFID standardization activities
- Create a number of liaison activities to disseminate information about the importance of global standards
- Initiate a forum that will continue to work constructively after the end of the project through a Memorandum of Understanding between key global standard organisations active in RFID.

This support action is focusing on the use of RFID in supply chain and related activities. These activities primarily encompass the tracking and tracing of physical items as they move through supply chains in many different businesses, both in the public and private sector

More information:
http://www.grifs-project.eu or contact info@grifs-project.eu

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Report on the GRIFS Open Meeting

The first GRIFS Open Meeting was organised on 18 June 2008 in Brussels, Belgium.
The Open Meeting aimed at providing an overview on the global RFID Standards Situation and the challenges the RFID standardisation is currently facing. Among other RFID topics, the structure and key issues of the GRIFS report which will contain an inventory/state of the art on the global development and implementation of RFID standards have been discussed.

More than 50 participants - including standards experts, industry representatives and government representatives - attended this event.

Keynote speech - Towards the Internet of Things

Florent Frederix, on behalf of Gérald Santucci, from the Information Society and Media Unit of the European Commission, presented the European Commission's perspective on the Internet of Things. After explaining the vision of the EC on how the Internet will considerably progress in the future, Dr. Frederix presented the Policy and Research Actions of the European Commission for the coming years. First of all, the EC is planning to fund the establishment of a Thematic Network on RFID to federate existing initiatives on RFID in Europe.

Another important development is the Lighthouse project, a collaborative initiative between the EU and the US to foster and exchange good practices for the deployment of RFID. The aim is to support joint pilots involving RFID. The Research Programme for 2009-2010 was presented; it will mainly focus on developing Architectures and Technologies for the Internet of Things.

The focus of the presentation was clearly on the wider concept of the Internet of Things, in which RFID plays a major role.

Frederix finally highlighted the importance of the GRIFS network to give an « opportunity for Europe to lead a global, open grouping of standards bodies that are interested in open standards »

Florent Frederix,
European Commission

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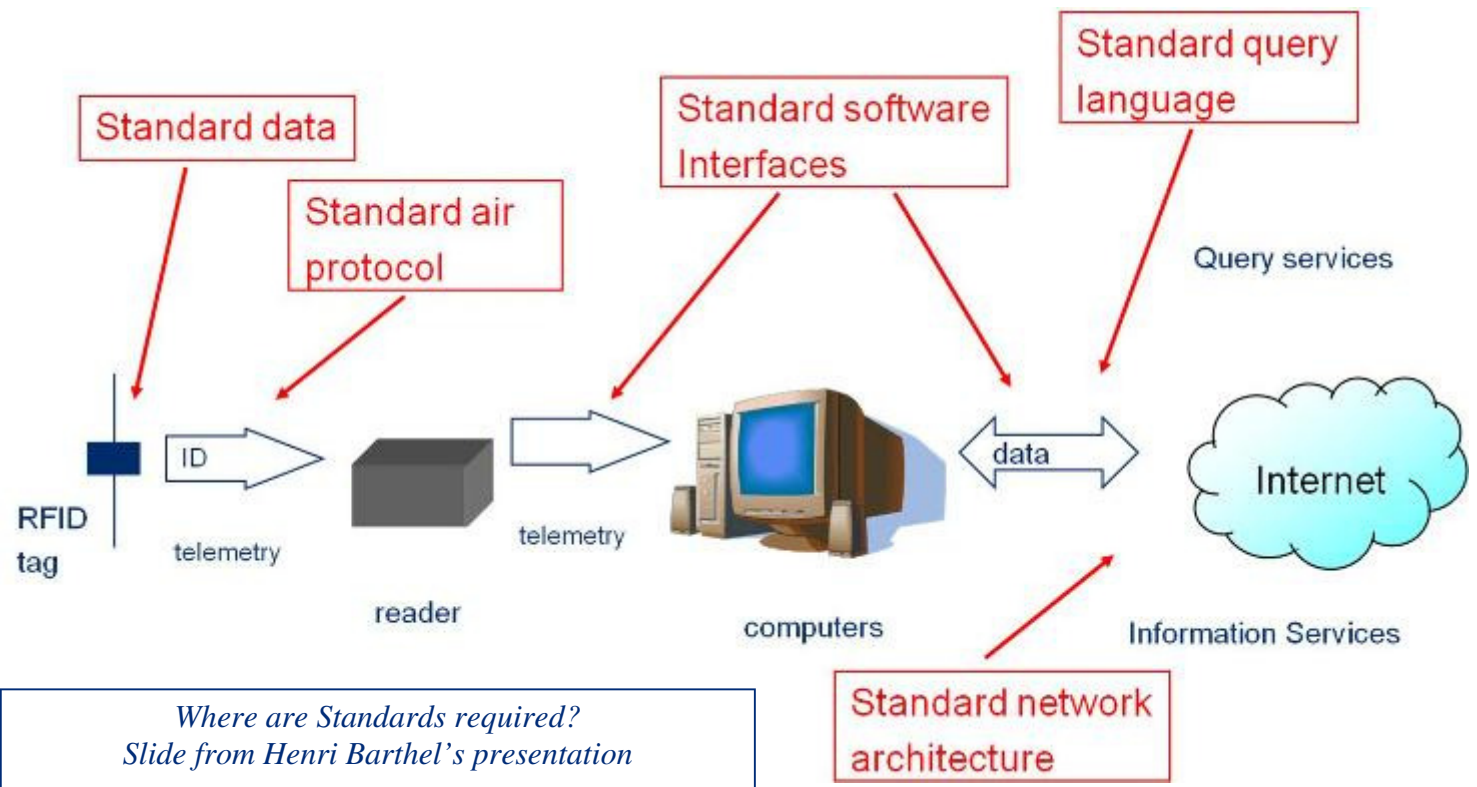
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GRIFS Open Meeting
The partners' perspectives

In the morning session, **Henri Barthel (GS1, coordinator of the GRIFS project**) presented the project and the forthcoming events to build the *Forum of Collaboration and Memorandum of Understanding*, main objective of GRIFS. He also presented **GS1**, coordinating organisation developing global traceability and identification standards for the supply chain.

Where are Standards required?
Slide from Henri Barthel's presentation

He underlined the foreseen growth of RFID technologies and use over the next decades, and explained to the audience the necessity of developing global standards to frame the diverse areas where the technology is going to be implemented. H.Barthel presented the EPCglobal structure as a model of global standardisation. The way that GS1/EPCglobal is working with ISO shows that a coordination between standard bodies is necessary and even fruitful for the global development of RFID.

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GRIFS Open Meeting
The partners' perspectives

Patrick Guillemin presented his organisation, The European Telecommunications Standards Institute (ETSI), which produces globally-applicable standards for Information and Communications Technologies (ICT), as well as the different working groups on RFID in which ETSI is involved. P. Guillemin underlined the importance of interoperability of RFID standardisation for the take off and the actual implementation of the technology and took as example such European initiatives as GRIFS, CASAGRAS or CERP, the cluster which encourages networking between the different EU funded projects on RFID. The role of ETSI in GRIFS is to make that link with other collaborative initiatives and contribute to the European Research Area.

Patrick Guillemin (bottom right), ETSI, GRIFS partner and his team of RFID experts, Trevor Peirce, Josef Preishuber - Pflügl, Scott Cadzow and Robert Williams

« We should apply generic solutions where possible »
John Ketchell, CEN, GRIFS partner

Finally, John Ketchell, representative for CEN, presented the European Standards Committee, its structure and goals to develop European standards and technical specifications. He underlined the role of CEN as transmitter of regional requirements to the global scale and provider of global standards to regional applications. This makes CEN an important actor of the GRIFS action. J. Ketchell explained how the different actions on RFID should be combined to avoid duplications of work and underlined the relevance of GRIFS in this respect.

To learn more about the outcomes of the Open Meeting, we invite you to read two interesting articles published after the event:

EURACTIV - No missing mail with RFID tags, says Commission
http://www.euractiv.com/en/infosociety/missing-mail-rfid-tags-commission/article-173478?Ref=RSS

ANSI News & Publications - GRIFS Meeting Fosters International Discussion on RFID Standards Issues
http://ansi.org/news_publications/news_story.aspx?menuid=7&articleid=1874

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GRIFS Open Meeting
The perspective of international actors

Robert Noth, Chairman of the Board of Directors of the American Standards Institute, strongly advocated for the concept of "one standard - one test - everywhere". On behalf of his company John Deere, he underlined the importance of interoperable standards for the successful implementation of the RFID technology in his industry sector.

He welcomed the GRIFS initiative and presented similar initiatives within the US, such as the Standards Panels set up by the US government to address standardisation issues and technologies across industry sectors. He underlined the importance of users' requirements in order to do "standards for business, not standards as business"

> "(…) when it comes to codes, standards and related compliance programs, we want to "do it once, do it right, and do it globally."
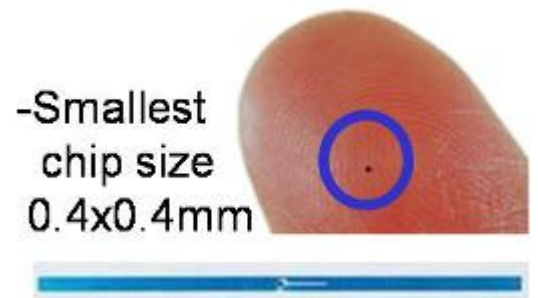> **Robert Noth, Chairman of the Board of ANSI**

Akilesh Mathur, Programme Manager for the Standards and Certification at the Universal Postal Union, also underlined the importance of global standardisation for postal services.

With the liberalisation of postal services becoming the general pattern, the postal chain will involve more and more actors. Since RFID seems to be the most appropriate solution for the tracking at item level in the postal environment, it will be essential for these actors to work on the basis of common standards.

A. Mathur also stressed the importance of collaboration with other institutions such as the Custom authorities and airlines and expressed his support to the GRIFS initiative to create an online database of existing standards.

Atsushi Honzawa from the Japanese company Hitachi Ltd. presented the latest projects of Hitachi in the areas of miniature, cheap and secure RFID chips.

In the Hibiki project and the secure RFID tag project, Hitachi demonstrates that RFID can easily become more affordable and therefore accessible to a larger market whilst complying to common global standards, such as the ISO18000-6TypeC or EPC UHF Gen2, and have the relevant secure functions of privacy and data protection.
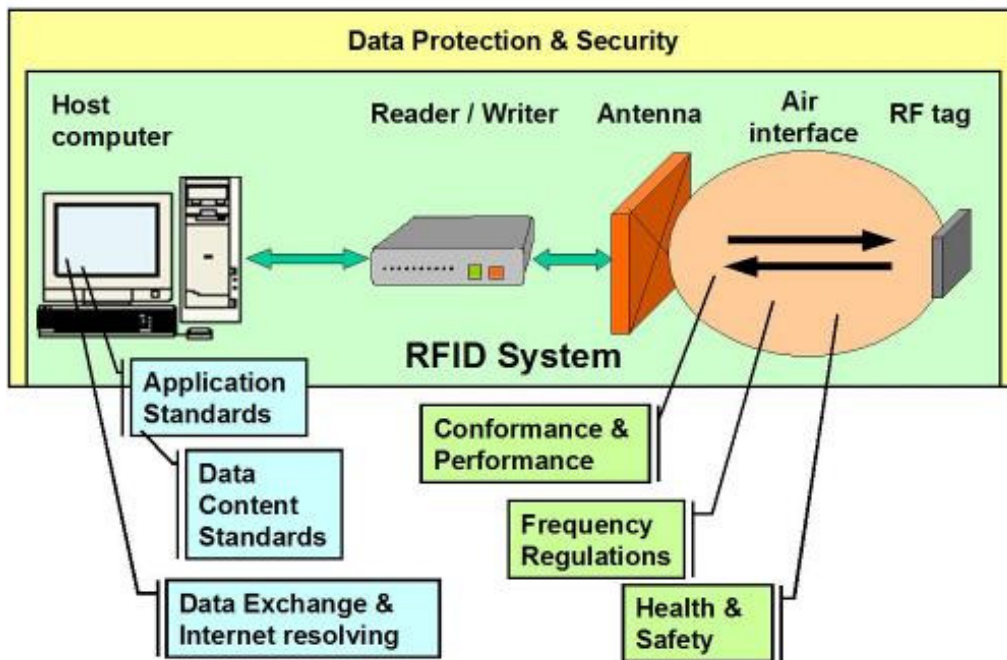

-Smallest chip size 0.4x0.4mm

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Presentation of the GRIFS state of the art on RFID standardisation and outcomes of the panel

In the afternoon session, Paul Chartier, RFID consultant, presented the structure and key issues of the state of the art report that he is developing in the frame of the GRIFS project.

Example of the Database structure

Paul Chartier presented his proposal to create an online database to gather all existing standards on RFID. This *Standards Map*, based on a wiki model, would become a tool that anyone - mainly work groups secretariats - could update and consult to have the latest information on the variety of existing standards.

P. Chartier presented possibilities for structure and navigation through this new search engine.

The database would contain such information as the title of the standard, its scope, the detail of the responsible committee, the publisher and the date of publication, and the normative references.

For Paul Chartier, there are key issues to consider when reporting on the current standardisation globally: the phasing of standard development, the possibility of new approaches to RFID - such as the object identifiers - but also Intellectual Property issues, privacy issues, Near Field communication, UHF harmonisation, etc. These issues are also presented in the discussion paper.

The discussion paper is available on the GRIFS website for consultation
http://grifs-project.eu/donwnloads
Interested stakeholders are invited to send their comments to the GRIFS team.

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Presentation of the GRIFS state of the art on RFID standardisation and outcomes of the panel

The presentation of Paul Chartier was followed by a panel discussion where the speakers exchanged their views on the proposals presented by the GRIFS project and addressed questions from the floor. During this discussion a few topics were covered.

Convergence between different standards
The first step to create convergence between standards is to get communities to collaborate and agree on requirements. In this context, GRIFS offers a platform for standards bodies to collaborate effectively. The geographical differences will be a big challenge to bring such an initiative at the global level, this should be overcome by the international experience of the GRIFS partners and the future members of the MoU.

Role of ISO, ITU, UPU, IATA etc
Major standards bodies are already and will continue to be involved in the GRIFS initiative, especially they will be invited to sign the MoU that will be finalised in the course of the project.

Users perspective
Users have a critical role to play in the development of standards. The collaboration of standards bodies is of course important, but for the successful implementation of RFID, user-friendly information on the technology and the standards have to be developed. In this context, the proposal for the online database is considered as a great opportunity to get the users on board.
Along the same line, it is suggested for GRIFS to engage more in showing use cases of the technology and promote the involvement of end-users in the standards groups.

In conclusion, the panellists all evaluated that the GRIFS initiative is starting very timely and its activities will be critical to raise awareness on RFID standardisation. The ultimate recommendation from the panel and the audience is to involve users as much as possible, which will be done through the upcoming GRIFS workshops that will be organised in different regions of the world over the next year and through the online database of RFID standards that was presented during the conference.

The panel, from left to right: Henri Barthel, Akilesh Mathur, Paul Chartier, Robert Noth, John Ketchell, Patrick Guillemin, Florent Frederix and Atsushi Honzawa

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CASAGRAS & GRIFS Open Day

GRIFS and CASAGRAS had a joint Open Day meeting at the AIDC Centre in Halifax, UK on 30 June. The meeting aimed at cementing the relationship of GRIFS and CASAGRAS and moving both projects on.

Presentation of the two projects

Ian Smith, CASAGRAS coordinator, gave a background of the project and its objective of developing a framework for the standards required to implement the Internet of Things. He explained that CASAGRAS is working closely with a number of other AIDC related organisation in Europe and Asia.

David Weatherby, from GS1 UK and responsible for several tasks within the GRIFS project, introduced GRIFS and the possibility of using the Electronic Business MoU as a framework for the forum extracting a number of principles behind it.

CASAGRAS perspective on the Internet of Things

Anthony Furness (AIDC UK, CASAGRAS partner) presented the project's perspective on the Internet of Things. He emphasised the importance of analysing in detail just what is meant by the *Internet of Things* and to clarify the general principles on which it should be based. *Anthony saw the Internet of things being made of RFID plus messaging, sensing and intelligence*. Identification is clearly key

and he made the distinction between natural feature identification and data carrier identification pointing out that both needed to be used appropriately. Similarly the need to hold data with the object ("object attendant data") and on a network database can both be valid, which leads to the issue of how to keep both data sets in step.

During the discussion with the audience, it was suggested that the real issue was to simplify the edge devices to keep costs low and to simplify implementations. Another interesting discussion point was that as tags begin to talk to tags so networks become transitory leading to new management and security issues. With the increasing use of mobile phones and other devices it is no longer safe to assume that tags move and readers are stationery. *In the Internet of things both tags and readers will be moving and have no fixed location.*

GRIFS - Standardisation for RFID

Mark Harrison, of the Auto-ID Centre at the University of Cambridge, presented the EPCglobal Network and the various standards that have already been created and those, like Discovery Services that are still under development. *He underlined that standards are now in place to support real deployment for many RFID related applications.*

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CASAGRAS & GRIFS Open Day

Mark also pointed out that many of the standards related to data management were therefore equally applicable whether information was captured through RFID or bar codes or in any other way.

A question was raised about the relationship of EPCglobal standards to ISO standards which of course is a specific example of the need for collaboration which is the objective of the GRIFS project.

Paul Chartier presented the situation analysis of the global standards and standards organisations related to RFID. *He explained the idea of having a standards database of value to systems integrators and developers*. He also highlighted some of the areas where collaboration between standards organisation was needed.

Discovery Services for the Internet of Things

Mark Harrison presented the Discovery Services concept and how the details are being specified through the activity of the BRIDGE project, EPCglobal and the IETF. He explained that Discovery Services are limited to identifying where information is to be found rather than delivering information directly. The BRIDGE project had developed a Discovery Service prototype although security and permissioning were key areas that were not fully addressed. The talk led to discussion about *the necessity of the discovery services concept if the Internet of Things is to be realised.*

GRIFS and CASAGRAS published a statement of cooperation to clearly define their respective work scope and the areas where the two projects can share their outcomes and coordinate their tasks.

This statement can be consulted on both projects' websites
http://www.grifs-project.eu
http://www.rfidglobal.eu

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GRIFS workshops, Planning 08/09

In the coming months, GRIFS will organise a series of workshops to start the discussion around the Memorandum of Understanding and Forum of Collaboration that will be developed over the course of the project and to identify potential members for this Forum.

GRIFS Workshop - 26 September 2008 - Tokyo, Japan
A workshop will be organised in Tokyo to cover Data Standards, Device Interface Standards, Data Encoding and Protocol Standards.

GRIFS Workshop - 20 November 2008 - San Diego, USA (TBC)
This workshop in San Diego will focus on Air Interface Standards, Sensor Standards, Conformance and Performance Standards.

GRIFS Workshop - 04 December 2008 - Hong Kong, HK
In this Hong Kong workshop, Industry Application Standards, Real Time Location Standards will be discussed.

GRIFS Workshop - 19 February 2009 - Brussels, Belgium
The last workshop will be organised in Brussels and will cover Frequency Management Standards, Health and Safety Standards, Environmental Standards, Data Protection & Privacy Standards.

For more information about these events and to register your interest in participating, please contact emilie.danel@gs1.org

> **For more information about the GRIFS project**
> **http://www.grifs-project.eu**
>
> **Or contact**
> **info@grifs-project.eu**

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