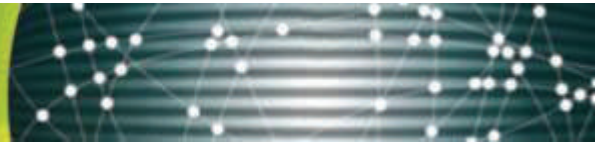


January 2008



The goal of the newsletter is timely information sharing. In the issues you can expect a brief update on Press Releases, Industry Development Groups, Standards Development Process Groups, Auto-ID Labs and Public Policy.

EPCglobal Inc held its first Asian Joint Action Group Meeting in Hong Kong with huge success. With more than 300 participants present, the aim of managing the different business sectors and to synergize where possible was achieved. Save the date for the next Joint Action Group Meeting in Las Vegas from 13 to 18 April 2008!

Updates in Standards Development

UHF and HF Gen 2 Item level Standards are in Last Call working draft stage and should be ready for ratification in early 2008. For more information on the additional item level functionality that will be standardized and for an explanation of how the UHF and HF standards will relate to one another, please refer to [UHF HF Update 2007 Nov.](#)

The update to the Filtering and Collection standard (ALE 1.1) which adds full support for Gen2 features including TID, user memory and others and includes features which:

- *Reduce* volume of data from readers to applications
- *Elevate* level of abstraction for application writers
- *Insulate* applications from device details
- *Share* data among multiple applications
- Is *Extensible* to vendor changes
- *Integrate* easily using standard XML / Web Services technology

For more information on the Filtering and Collection standard (ALE), please refer to [Update of Filtering and Collection ALE 1.1.](#)



Standards Integration News

As reported in earlier newsletters, a review of the EPCglobal Standards (60 day review) has been underway since August 2007 when the GS1 community was requested to identify and submit in detail any questions/issues with the current versions of the 11 EPCglobal standards. Nearly 300 comments were received from nine countries and one end user company and were grouped into 14 categories. The majority of the comments were focused on Tag Data Standards and EPCIS. The GS1 Architecture Group held two day meetings in October and November to discuss the issues which were then addressed through consensus. A clear proposed resolution was identified by the review committee for most of the issues.

Each item analyzed has a "Resolution" and "Action Plan". Specific actions and owners have been identified to achieve what has been proposed in the Resolution. Members of the review committee worked to find a way to ensure consistency of the 11 ratified EPCglobal standards with the GS1 System, and ensure continued adoption of standards. The discussions included very good input from the users, including Ahold, Wal-Mart, P&G, Kraft and Alcon Labs. Results would not have been achieved without the collaboration of the team and support from the end users. All comments will be distributed and shared with respondents in November/December. Final recommendations will be presented to the GS1 and EPCglobal leadership teams in December and a communication will be sent to the EPCglobal and GS1 communities by early January 2008

Joint Action Group (JAG) Meeting in Las Vegas April 2008

Save the date for the next JAG meeting 13-18 April 2008 in Las Vegas, USA. The next JAG will be done in collaboration with RFID Journal and will be held at the same location as the RFID Journal LIVE! Conference. The JAG will be held the 13-18 while the RFID Journal

LIVE! will be held the 16-18. The JAG plenary and the RFID Journal opening keynote sessions will be held on the 16th and will be open to attendees of both events.

Watch for an announcement with more details and registration information coming soon.

Architecture Review Committee

The Technical Steering Committee (TSC) has recently decided on two new representatives on the EPCglobal Architecture Review Committee (ARC). There was a very strong field of applicants this year and all of the applicants were given extensive consideration. The TSC is comprised of both the SAG and HAG co-chairs. The TSC has decided on two candidates with the background considered to be important to the work that the ARC will be undertaking in the next 12 months.

Josef Preishuber-Pflügl, CTO, CISC Semiconductor GmbH, has been elected to a three year term. Josef has been involved in the EPCglobal community since 2004 serving as a co-chair of the SBAC WG, SB JRG, and HACET WG as well a member of other works groups. In addition, Josef is an active member and contributor to various ISO work groups.

Ken Traub, Independent Consultant, Ken Traub Consulting LLC, has been re-elected to a two year term. Ken has been involved in EPCglobal since the early days of the Auto ID Center. Ken has contributed a great deal to EPCglobal to date including serving as the co-chair of the Filtering & Collection WG, specification editor for EPCIS, and an active member of the TDS and RP work groups.

Sanjay Sarma, Associate Professor MIT, has been appointed by the EPCglobal President to serve on ARC in recognition of his long term involvement and commitment to EPCglobal. Sanjay also serves on the EPCglobal Board of Governors.

Public Policy Steering Committee (PPSC)

This November EPCglobal presented www.DiscoverRFID.org, its new global website for consumer information on RFID. www.DiscoverRFID.org communicates the benefits and potential of the technology in an entertaining and emotional way, addressing not the technology itself but the current and future use cases and the manner in which they will positively affect people's lives.

This initiative is driven by the PPSC to raise awareness about the benefits of RFID and EPC.

Communication guidelines will soon be sent to EPCglobal subscribers, in order to maximize the positive effects of the website. Please visit www.discoverrfid.org

For more information, please contact Marissa Jimenez at marisa.jimenez@gs1.org.



Auto – ID Labs

At the JAG meeting in Hong Kong the Auto ID-Labs held a special session and panel discussion focusing on the topic of "Challenges to the Internet of things" which covered research from the business and technical areas such as: managing difficult reads, environments that will not sustain RFID, combined HF-UHF tags and protocols,

high security tags and protocols, sensor technology and networks (gas sensors, and corrosion sensors, etc.), end-user integration, successful applications and services, EPC Adoption, really understanding the process, what drives adoptions, what company to addresses when, concepts for data sharing and access rights, access

rights in non-predetermined supply chains, RFID and risk-management/insurance , perishable goods, quality management, robotics, consumer support, RFID for resource efficiency, ecological footprint and RFID, etc.

The presentations can be downloaded from the "All Subscribers area" in the section "Documents" "JAG Hong Kong" "Auto ID Labs session" (<http://www.epcglobalinc.org/apps/org/workgroup/subscriber/documents.php>).

The most recent papers published: "[A System to Detect Change of RFID Tag Ownership](#)"; "[An Authentication Framework for Integrating RFID Systems](#)" and "[Use of the Shrinking Generator in Lightweight Cryptography for RFID](#)" can be downloaded from <http://www.autoidlabs.org/>

Joint Requirements Group Update

Sensors and Battery Assist Passive Tagging (SB JRG)

STILL OPEN – Call for Proposal: End users interested in sensor and/or battery-assisted passive tags are invited to propose business use cases that they would like to see demonstrated by available technology. The technology demonstration is scheduled for 2008.

Please contact Giselle Ow-Yang (gowyang@epcglobalinc.org) for more information.

Data Exchange (DE) JRG

The Data Exchange JRG has been able to incorporate initial requirements of the Transportation and Logistics group into their initial set of vocabulary requirements. These requirements came directly from the pilot efforts occurring in Transportation and Logistics. The DE JRG will incorporate the TLS work into their document and will be able to include these as part of the Core Business Vocabulary requirements document.

We hope to charter a SAG working group by the beginning of the year to take the DE JRG EPCIS Core Business Vocabulary requirements into a normative specification. There has been high demand for the creation of the DE work into a standard and we look forward to moving on that!

If you have any questions on this group and want to get involved, please contact Gena Morgan at gmorgan@gs1us.org.

Discovery

This group has officially kicked off and anticipates work beginning in earnest on use case and requirements development after the new year. The group anxiously awaits additional participation from end users involved in the various industries EPCglobal supports.

For more information on the Discovery JRG, please contact Gena Morgan at gmorgan@gs1us.org.

Electronic Article Surveillance (EAS JRG)

The group has completed work on basic objectives of the EAS JRG's efforts. This will become the foundation of the requirements for the Standards for RFID based EAS. The group includes a number of retail and manufacturing companies as well as solution providers who met for their second face to face meeting in Philadelphia, on 5-6 December. The group has taken initial steps to ensure that the requirements will reflect the needs to address the supply chain and industry verticals including manufacturing, retail, apparel, consumer electronics and healthcare.

Standards Development Process (SDP)

The Standards Development Process (SDP) JWG has completed compiling the requirements for changes to the current version of the SDP. These requirements were approved by the Business and Technical Steering

Committees in November and the draft of the next version, version 1.4, will go through JWG review and finalization in December before seeking final approval with the EPCglobal Board in February 2008. The major areas of impact are as follows:

- Add GS1 Architecture Group review steps to assure synchronization of GS1 standards.
- Update EPCglobal Architecture Review Committee Process
- Updates to Opt-in process so documents can be shared between WGs and JRGs
- Revisions to Enhancement Request Process for processing proposed changes to approved requirements and ratified standards
- Updated diagrams, fixing of errata and added enhancements and clarifications to process descriptions

For more information about the SDP JWG activities contact Mark Frey at Mfrey@epcglobalinc.org



Performance and Certification Process

EPCglobal Hardware Certification:

EPCglobal Inc has combined the conformance and interoperability certification marks into one mark. Effective 25 June, 2007, EPCglobal Inc announced the following policy change to the current hardware certification testing program: Eligible devices (silicon chips/tag integrated circuits, readers, reader modules, printers/encoders with embedded reader modules) will be required to demonstrate all applicable mandatory testing for both conformance and interoperability requirements in order to gain certification. Tags and printers are not affected by this change; however, just as a reminder, tags are required to have certified Tag-IC component and printers are required to have a certified reader module in order to be eligible for certification testing.

Approved RFID Testing Center (ARTC) Program – The ARTC program provides the opportunity for regional test centers to offer a broad range of testing and certification services based on GS1 EPCglobal standards. Accredited ARTCs will offer RFID testing based on GS1 EPCglobal specifications for UHF, HF and other (such as sensor technology) as they become available. This program was created by MET Laboratories at the request of hardware vendors, member organizations, and EPCglobal Inc.

On 9 October, 2007 at the GS1 EPCglobal Joint Action Group Meeting in Hong Kong. MET Laboratories was pleased to present the first group of accredited ARTCs. These labs are Article Numbering Center of China (ANCC), GS1 China, located in Beijing, P.R. China; Telecommunication Metrology Center of MII, located in Beijing, P.R. China; Industrial Technology Research Institute (ITRI) located in Chutung, Taiwan, ROC.

GS1 EPCglobal Certification:

The GS1 EPCglobal Software Certification Program for the EPC Information Services (EPCIS) Standard was launched on 2 October 2007 at EPC Connection Conference in Chicago, IL, USA. Electronics and Telecommunications Research Institute, International

Business Machines Corporation, LG CNS Co., Ltd., MetaRights, Inc., NEC Corporation, NTT Comware Corporation, and Samsung SDS received certification for 8 software products.

For more information, please visit www.epcglobalinc.org/certification or email certification@epcglobalinc.org

Cross Industry Adoption and Implementation Group (AIG) Updates



Implementation Sharing (IS)

A must hear and learn is the Implementation Sharing Interest Group. This group discusses all the hot topics for implementing EPC/RFID. For example, the group created a document to help describe how to work with a solution provider. It includes the two top ten lists giving you insight before you engage in discussions. Top 10 Questions-Answers as a vendor/retailer begins to engage with solution providers and Top 10 Questions-Answers from solution providers as they engage with vendor/retailer. There is so much more to know. Please join the learning by going to www.epcglobalinc.org and click "join group" at EPCglobal Implementation Sharing

European Adoption Programme (EAP)

Don't miss the next EAP meetings on the 28 February 2008 in Lisbon and 12 June 2008 in Copenhagen.

Industry Action Group Updates

The next Joint Action Group (JAG) meeting will be held from 13-18 April, 2008 in Las Vegas.

Retail Supply Chain (RSC)

The Retail Supply Chain IAG met in Hong Kong. The co-chairs updated the work plan to reflect the goal of the group over the next year. Work has begun on drafting the agenda for the next face to face meeting in the USA.

Apparel, Fashion, and Footwear (AFF)

The AFF interest group will start working on the data exchange core vocabulary. The AFF group will be the first interest group which passes through the new process of change management for data exchange. Fortunately, the AFF group has already spent a lot of effort in developing a full set of comprehensive use cases which are common throughout the apparel industry in phase 1 of AFF IG. As a first step, the group will focus on the development of apparel specific business requirements. For example, the "dressing room" would be a new location where an EPCIS event could be generated in future.

For more information contact Jessica Pröpper (proepper@gs1-germany.de)

Media & Entertainment

Media and Entertainment Interest Group's year of hard work is coming to a close. The WS2: Retail Group's reading of the tag pilot is completed. Currently, WS3: Data Analytics is actively reviewing the data to understand the benefits that RFID can bring to the supply chain vertical.

The complete group met for a face to face meeting in mid-December in Anaheim, California to review the results and to scope the work for phase 2 which will include more stores and more DVD's.



Healthcare and Life Sciences (HLS)

The existing user communities, GS1 EPCglobal HLS Industry Action Group and the GS1 global Healthcare User Group, have made progress in formalizing GS1 Healthcare as a single forum covering the full spectrum of GS1 Standards. Final drafts of the Governance Charter and Roadmap have been developed. GS1 Healthcare will now be one group for members to be engaged in and to be a single source for regulatory bodies and associations seeking input and direction for global standards specific to healthcare. It will also allow optimization of the standards development process. In practice, projects and work teams have already been integrated (or are being integrated) and all involved stakeholders now come together at joint meetings.

Transportation and Logistics Services (TLS)

The main focus for 2007 for the Transportation and Logistics Services Industry Action Group has been working toward the implementation of the Phase II pilot. The first shipment of tires from Shanghai, China left the factory on 3 December. The tires will be shipped via ship, through the port of Los Angeles, and truck to John Deere's warehouse in Wisconsin, USA.

The Air portion of the pilot is scheduled to start in January 2008. Laptop computers will be shipped from the source manufacturer in Shanghai, China to Los Angeles via truck and air.

The use of multiple EPCIS's in the pilot along with newly defined data elements for transportation and logistics will achieve one of the pilots stated goals of Visibility. The Conveyance Asset Tag (CAT) and Extended Conveyance Asset Tag (XCAT) will also be tested in the pilot. Four CAT tags and 2 XCAT tags will be used on containers and trailers in the ocean pilot.

Consumer Electronics Industry Action Group (CE IAG)

The first EPCglobal Consumer Electronics Industry Action Group (CE IAG) F2F meeting was held with great success during the EPCglobal JAG meetings in Hong Kong.

The first day of the meeting consisted of educational sessions to bring all participants up to speed with the various initiatives from the CE industry. Members of the JRCCE (Japan RFID Consortium for Consumer Electronics) presented on subjects such as lifecycle management, product classification, granularity management, various use cases, EPCIS, merit investigation, security policy & tag quality and SSCC. Representatives from the Retail Supply Chain and the Transportation and Logistics EPCglobal Industry Action Groups provided presentations on the work done in their respective groups so far, potential collaboration opportunities between the CE IAG and their groups and shared experience and learnings from their work as an IAG that could be useful to the newly formed CE IAG.

The second day participants worked on prioritizing work items for the group. The group decided to divide the CE IAG work plan into three Phases.

- Phase 1: Document the CE business processes - deadline Jan. 08
- Phase 2: CE IAG requirements gathering and submission of new requirements to the relevant Technical Action Group or Joint Requirements Groups – deadline Tentatively Jun 08
- Phase 3: Compile an industry specific guideline(s) to include HW, SW and Network elements, Key consumer benefits, etc. - deadline tentatively Dec. 09

For more information regarding EPCglobal Inc's CE IAG contact Audrey Kremer Audrey.kremer@gs1.org

Technical Action Groups

Software Action Group (SAG)

The SAG was present and active at the Hong Kong JAG F2F meeting last October. The SAG's Margaret Wasserman and Ken Traub gave educational presentations and explained to users and solution providers the functions for each of the SAG ratified standards; primarily, Reader Operations Low Level Reader Protocol, Application Level Events (ALE), and EPC Information Services (EPCIS). Margaret Wasserman of ThingMagic also presented at the general plenary session the accomplishments of SAG for the past year and a view of the work to be done in the next twelve months. We now have ratified standards that cover all the interfaces as documented in the Architectural Framework document.

From 23-25 October the Filtering and Collection Working Group completed a very successful prototype testing event in Graz, Austria. 7iD hosted the entire event in excellent style. This was truly a global event, since participants came from India, France, Japan, Austria, and the United States. GS1 EPCglobal would like to acknowledge the following companies and individuals that participated in this important Standards Development Process step:

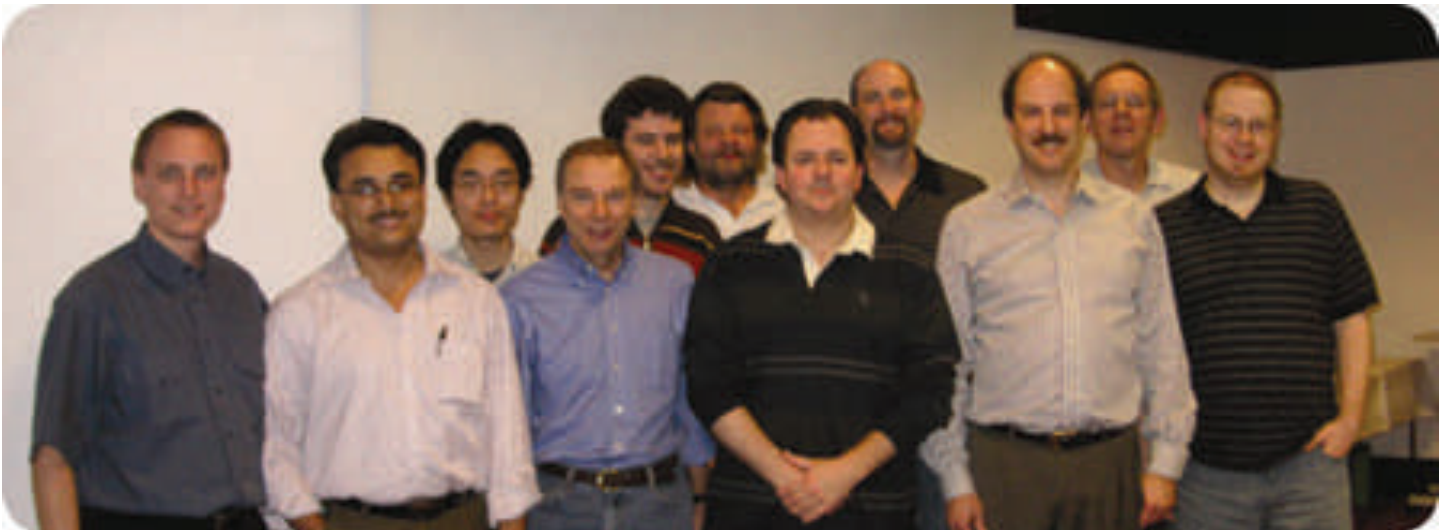
- 7id-Gerhard Gangl, Andreas Kerschbaumer, Wolfgang Thaller and Reinhard Dunst
- GlobeRanger-Richard Bach and Adam Sills
- GS1 France- Nicolas Pauvre

- IBM-John Ross
- Intermec-Jeff Sailors
- Ken Traub Consulting-Ken Traub
- NEC –Satoshi Kinoshita
- Polaris Networks-Soumya Roy Chowdhury
- EPCglobal Inc-Mark Frey

The Working Group is currently busy finalizing the ALE (Application Level Events) version 1.1 standard which should be ratified by February of next year. Please note that this version allows writing collection of tags and other bi-directional functionality that was missing in the 1.0 version.

The SAG TDTS (Tag Data and Translation Standards) WG is busy creating two new updates to the TDS and TDT standards. The next TDS version will be 1.4 and is slated to be ratified in the first quarter of 2008. This version of the TDS will add two new headers: GDTI (Global Document Type Identifier) and the GSRN (Global Service Relation Number). The Tag Data Translations Standard will also be updated and be in synchronization with TDS 1.4. The follow-up version of TDS or version 1.5 will address TID and User Memory and will be ready for ratification by the middle of next year.

For more information about SAG events and standards, contact Mark Frey at Mfrey@epcglobalinc.org



Hardware Action Group

Test methods are in development for end user field applications in the Tags, Labels, Readers, Printers Performance Working Group (TLRPP). These include test methods for tags and test methods for calibrating/measuring the RF field in door portals.

The HAG held their annual physical meeting 15-16 November in Aix-en-Provence at ST University. This meeting was sponsored by ST Micro and Tagsys. Three discussion forums were featured at this meeting to examine critical challenges facing the hardware community:

- Forum 1 Tags, Readers, Air Interface Capabilities
- Forum 2 Privacy, Security, Authentication, EAS
- Forum 3 Battery-supported tags

Outcomes from Forums 1-3 were synthesized to assess the current Picture of the Future. This draft roadmap will be shared with the BSC and JSPC.

Item-level tagging standard for UHF is anticipated to be ready in the 1st quarter 2008.

Item-level tagging standard for HF is anticipated to be ready in the 1st quarter 2008.

Test methods are in development for end user field applications in the Performance WG (TLRPP). These include test methods for tags ("Tag Parameter Test Method") and test methods for calibrating/measuring the RF field in door portals. The Tag Parameter Test Method

is being prepared for approval by the HAG. The next TLRPP F2F will be hosted by METRO in Duesseldorf, Germany, 28-30 January 2008.

Regulatory Affairs ad hoc Committee (RAC) was launched in recognition of increasing need for a coordination point to address emerging or potential changes in regulations in Europe, Japan, China and the US. This Regulatory Affairs ad hoc Committee will also support regulatory work as needed in the air interface WGs. The RAC is open to all Subscribers of EPCglobal in good standing. To join the mailing list, please click on the following link and follow the instructions to self-add: http://www.epcglobalinc.org/apps/org/workgroup/hag_ad_hoc_regulatory/index.php.

If you are experiencing problems joining this or any other Group at the EPCglobal Inc website, please contact the EPCglobal Inc. Help Desk at epcinchelp@epcglobalinc.org.

For more information on activities in the HAG, please contact the HAG facilitator Giselle Ow-Yang (gowyang@epcglobalinc.org).

Your suggestions are encouraged

If you have ideas to improve this newsletter, or article topics you would like to suggest, please contact Karl Van der Spiegel at karl.vanderspiegel@gs1.org

EPCglobal 2008 Calendar of Events



Consumer Electronics IAG Face to Face, 15-16 January, 2008 Brussels, Belgium

European Adoption Program, 27-28 February, 2008 Lisbon, Portugal

Joint Action Group Meeting, 13-18 April, 2008 Las Vegas, USA

Visit <http://www.epcglobalinc.org/events> for more information

Other GS1 Events:

RFID Solutions Today 2008, 22 January, 2008 Zeist, The Netherlands

Global RFID ROI 2008, 28-29 January, 2008 Munich, Germany

GS1 Healthcare Conference, 12-14 February, 2008 Granada, Spain

GS1 Global Forum, 18-22 February, 2008 Brussels, Belgium

Visit <http://www.gs1.org/services/events/> for more information

EPCglobal Subscriber's Website Tips

- Did you know that you can view all employees from your company that have access to groups and what groups they are involved in? Login to <http://www.epcglobalinc.org>, click on "My Groups", look midway down the page for "my company's members", click on the + next to their names to view their groups.. If you notice someone listed who has left your company, please notify the EPC admin at epcinchelp@lists.epcglobalinc.org.
- Getting too many emails from groups you are not interested in? You can unsubscribe yourself from these groups, but still remain a member of the group. To do so, go to "my groups", click on the "email" tab, click unsubscribe next to each group you no longer want emails.
- Did you know that you can use your same EPCglobal Inc Subscriber's Area login (id/password) to access the subscriber's area of the EPCglobal North America site? EPCglobal NA has many implementation tools they've developed and they kindly share them with all EPCglobal subscribers internationally. Use your current www.epcglobalinc.org id/password at <http://www.epcglobalna.org> to access their tools.