

Transatlantic Symposium on the Societal Benefits of RFID

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Symposium Report

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Preface

This document relates to the provision of reporting services for the Transatlantic Symposium on the Societal Benefits of RFID, and specifically for rapporteur services. It has been drafted by Ms. Rebecca Schindler in response to the service contract commissioned by the Information Society and Media Directorate-General of the European Commission (DG INFSO), dated 12 August 2008.

The views expressed in this document are those of the author and not necessarily those of the U.S. Government, the European Commission or any of the other organisations, associations and bodies which supported the organisation of the Transatlantic Symposium.

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Summary of key insights

Facts and Figures:

- RFID represents a \$5.3 billion industry
- IDTechEx forecasts that in 2009 the value of the RFID market will grow by 23% over 2008, and in 2010 it will grow by 25% over 2009
- RFID is a supporting technology to future Internet and Internet of things
- RFID is implied in the solution to/for many policy priorities

Application areas:

- Environment: material management, garbage separation and recycling, informing customers of products' carbon footprint, more efficiency in supply chain and manufacturing leading to less waste, less transport and more productivity
- Health care: item level tagging of drugs and Real Time Locating Systems (RTLS) for staff, patients and assets to improve efficiency, safety and availability and to reduce losses – great improvements are expected in anti-counterfeiting, theft deterrence, stock controls and recalls
- Supply chain security: ensuring airport and port security, identifying and monitoring (hazardous) materials as they move through the supply chain, facilitating recalls, helping to ensure product safety and consumer protection
- Consumers: more information on the product to consumer, increasing convenience and consumer experience; improving the decision making process for consumers, e.g. providing test results, peer-reviews and consumer review of products; and RFID applications assisting the visually-impaired

Benefits, Challenges & Opportunities:

- Privacy, data access rules and the effective application of Privacy Enhancing Technologies (PETs); protecting and managing access to information that links item level tagging and personal information
- Raising awareness of benefits
- Transparency on the presence, uses, risks of RFID applications
- International standards; EU, US and Asia should not go the unilateral route
- Failure to capture the current momentum

- Opt-in, opt-out, ... right of choice
- Affordability of tags
- Need for cooperation among all stakeholders; Consortia approaches (bringing together IT, marketing and industry experts)
- Reliability and interference (health)
- Ethical and personal dignity challenges
- Developing consumer-centred future applications that provide benefits to the consumer
- Concerns about customer and citizen surveillance through item-level tagging
- Lack of RFID skills

Policy suggestions for the USG and EU:

Government:

- Policy makers should not respond to privacy and security concerns through over-restrictive regulation because it might strangle the development of this technology
- Policy makers should strive for consensus on trade liberalisation and to reassure industry players
- Government should foster partnerships and dialogue with industry and stakeholders
- The European Commission should push the European Union in a harmonised and unified direction
- Governments should provide for a stable legislative framework in the EU that encourages companies to operate and to invest
- OECD guidelines adopted as best practices for RFID under the TEC Lighthouse Project
- Need to support development of RFID skills, which will have a major impact on the deployment of RFID
- U.S. Health Insurance Portability and Accountability Act (HIPAA) privacy and security rules should be examined to assess whether they meet new challenges [and to develop a comprehensive privacy and security framework that would set clear parameters for access, use and disclosure of personal health information for all entities engaged in e-health
- To engage stakeholders in discussions and to jointly develop proactive protocols and international standards for RFID

Industry:

- Industry should take a leadership role to develop global and consistent standards

- Industry and governments (EU, US) should identify additional areas for joint pilot projects, which could possibly become part of the TEC Lighthouse Priority Project on RFID

US, EU cooperation is important:

- setting standards
- compatible solutions to privacy and security issues
- environmental pedigree
- joint pilot projects in field of radioactive isotopes and pharmaceuticals
- exchange of best practices and alignment of different regulatory and policy approaches

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Opening and keynote address

As part of the 2007 framework for Advancing Transatlantic Economic Integration between the European Union and the United States, the U.S. – EU Summit Leaders identified priority growth projects that will significantly enhance transatlantic economic integration, growth, and job creation. One of these “Lighthouse Projects” is Innovation and Technology, and cooperation on Radio Frequency Identification (RFID) technologies is singled out for specific joint action.

This symposium was designed to facilitate a dialogue about the societal benefits of RFID technologies. Discussion focused on three current RFID technology applications: environmental protection and sustainability, healthcare delivery, and supply chain security. In addition, the symposium explored future applications to enhance consumer experience as well as the benefits of RFID technology to society at large.

The event featured representatives for transatlantic businesses and U.S. and EU government agencies currently employing RFID technology, user groups, and other organisations involved in the development and application of RFID. Speakers were invited to deliver key statements and to engage in discussions with the panel and the audience. In each session, a case study was presented to illustrate RFID in action.¹

Kathryn Hauser (U.S. Executive Director, TransAtlantic Business Dialogue)

In her opening remarks, Kathryn Hauser, U.S. Executive Director of the TransAtlantic Business Dialogue (TABD), highlighted the pivotal role TABD has been playing in facilitating a dialogue between the transatlantic business community and the governments of the United States and the European Union. Its success shows in the large attendance of more than 120 participants, representing a diverse group of key stakeholders in the debate.

The Transatlantic Symposium on the Societal Benefits of RFID represents a timely follow-up of the 3rd meeting of the Transatlantic Economic Council (TEC) held in June 2008 and the launch of the TEC Lighthouse Project on RFID initialised by German Chancellor Merkel, U.S. President Bush and European Commission President Barroso in 2007.

¹ This text stems from the symposium invitation; small adaptations were made by the author.

Michelle O'Neil (Deputy Under Secretary, International Trade Administration, U.S. Department of Commerce)

Michelle O'Neil (Department of Commerce) replaced The Honorable John. J Sullivan, Deputy Secretary of the U.S. Secretary of Commerce. She noted that the collaborative approach between the United States and the European Union will encourage the continuous development of efficiency and innovation in both economies.

Michelle presented key RFID market figures highlighting the importance of the RFID market. According to recent figures provided by IDTechEx, RFID represents a \$5.3 billion industry. Estimates suggest that in total, 2.16 billion tags will be sold in 2008 versus 1.74 billion in 2007 (across all frequencies, passive and active). By value, IDTechEx forecasts that in 2009 the value of the RFID market will grow by 23% over 2008, and in 2010 it will grow by 25% over 2009.

Engaging the general public in discussions around RFID represents a key element to facilitate RFID take-up. People must feel comfortable using RFID.

Deborah Wince-Smith (President, U.S. Council of Competitiveness)

In her keynote address, Deborah Wince-Smith, President of the Council on Competitiveness, underlined the instrumental role RFID plays in enabling innovation capacity, enterprise resilience and sustainability. She presented concrete examples on how and where RFID intersects with technology shifts:

- RFID supports the digital revolution: RFID can serve to provide global footprints giving visibility to global digital production networks;
- RFID is supporting the development of emerging economies, which are becoming the main consumer markets of the future;
- Globally integrated enterprises are embracing RFID to inject knowledge into complex global supply chains;
- RFID supports enterprise resilience, allowing companies to resume business quicker in emergency situations (e.g. Wal-Mart was able to deliver within 48 hours after Hurricane Katrina), enhance productivity and provide sustainability build-in (displaying information on energy production costs);
- RFID supports innovation and is central to many productivity enhancing strategies. It helps to respond to major challenges such as energy, food safety, water, health, pandemics and security, going beyond efficiency and cost reduction, creating value for the customer.
- Digital, bio and nano-technology offer new platforms for innovation. RFID applications can support innovation processes in various ways. For example, RFID can be used to facilitate user-driven innovation; it can serve as an important input factor to new home-based networks or new health systems.

In order to allow RFID to reveal its full potential and for countries to become *creation nations*, Deborah advised policy makers not to respond to privacy and security concerns

through over-restrictive regulation because it might strangle the development of this technology. She encourages policy makers to strive for consensus on trade liberalisation and to reassure industry players.

After the opening speakers four plenary expert panels discussed the following issues:

- Panel 1: The Application of RFID to Enhance Environmental Protection and Sustainability
- Panel 2: The Application of RFID to Improve Healthcare Delivery
- Panel 3: The Application of RFID to Enhance Supply Chain Security
- Panel 4: Future Applications of RFID to Enhance End-to-End Consumer Experience

Panel I: The Application of RFID to Enhance Environmental Protection and Sustainability



KEY STATEMENTS

- *RFID-enabled environmental cost accounting is the next “big thing”: Environmental pedigree will help to achieve environmental protection and sustainability.*
- *eWaste: RFID will serve as a platform to innovate.*
- *Positive environmental business cases and positive cost-benefit analyses give green light for RFID.*
- *New consumer-centred RFID applications will drive RFID adoption.*
- *To drive adoption, industry needs to inform consumers about benefits, potentials and risks of RFID.*
- *Free choice requires a system to de-activate tags.*
- *Best practice and standards must balance security, privacy and environmental sustainability.*
- *Privacy is a basic requirement for user acceptance and take-up.*
- *Environmental pedigree will empower the consumer and allow to choose green products.*

Panel I explored how innovative uses of RFID technology can provide significant benefits to society in the area of environmental protection and sustainability. The panel was moderated by Scott Boylan, Senior Counsel, Government Relation at GE Security. Panel members included Angie Leith, Dr. Thorsten Staake, David Isaacs. A case study was presented by David Isaacs, HP.

Scott invited panelists to focus on key statements and to engage in discussions with the audience. Audience and panel members were keen to agree that RFID offers great potential in environmental cost accounting. Thorsten Staake from Auto-ID Labs in St. Gallen highlighted that many positive environmental business cases and positive cost-benefit analyses support the use of RFID. Discussions also highlighted the need to develop best practice and standards that aim to find an adequate balance between security, privacy and environmental sustainability concerns.

Angie Leith (Senior Policy Analyst, U.S. Environmental Protection Agency)

Angie Leith, Senior Policy Analyst at the U.S. Environmental Protection Agency (EPA) introduced EPA's interest in RFID. EPA has been involved in the debate since 2005 when it first set up an informal roundtable with stakeholders from industry including EPCglobal, Auto-ID and some of the trade associations that dealt with recycling issues of RFID. Recently, EPA has also commissioned research and a pilot project on eWaste, studying the potential advantages RFID can offer to eWaste handling from an environmental and recycling point of view². EPA is currently conducting a pilot case in the Texas -Mexico region on hazardous waste tracking.

EPA is moving away from a waste management approach towards a material management approach that embraces the entire life-cycle of materials. EPA believes that RFID offers great potential in managing the entire life-cycle of materials and appreciates that the environmental issues are now part of the discussions and that policy debates highlight the great potential RFID offers in managing the entire lifecycle of materials. EPA is not interested in regulating RFID technologies.

Angie expressed her concern that promoting an opt-out approach as a response to security concerns would potentially hamper environmental and recycling benefits of RFID. She believes that discussions, conclusions and recommendations relating to opt-in/opt-out approaches should be postponed until the potential benefits of RFID have been understood.

² The pilot project, funded with EPCglobal, aims to develop a methodology for tags and data systems.

Dr. Thorsten Staake (Associate Director, Auto-ID Labs and Bits to Energy Lab ETH Zurich and University of St. Gallen, Switzerland)

Dr. Thorsten Staake, Associate Director of the Auto-ID Labs at St. Gallen University introduced the conceptual vision of the Internet of Things. He also provided a brief overview of recent EU funded projects on RFID. Whereas early projects focused on convenience (RFID-enabled car keys), time savings and improved processes, and security (RFID in passports), currently three new streams of funding are emerging with focus on:

1. Embedding environmental information associated with the product in the tag,
2. RFID enabling novel industry processes,
3. Enhancing the value of the technology for the end user.

For example RFID+sensor applications make it possible to estimate the lifetime of perishable goods, helping to cut down costs and reduce waste and emissions, and change business models as data becomes available. For example, RFID+sensor combinations can be used to monitor the energy-intensity of products. RFID-enabled cell phones will allow citizens to access this information and to make better informed purchasing decisions, offering new possibilities for consumers to reward energy-efficient companies. New RFID applications integrate the consumer into the product design and show the benefits of RFID to consumers. Consumer-centred applications will improve user acceptance.

Thorsten highlighted that various case studies and research have shown positive environmental business cases and positive cost-benefit analyses for the application of RFID to enhance environmental protection and sustainability.

David Isaacs (Director, Government & Public Policy, HP)

David Isaacs, Director Government & Public Policy at HP presented two case studies illustrating ways HP is currently using RFID to support environmental sustainability.

- (1) Improved efficiency in e-recycling: RFID is used to identify material and components for separate handling and to allow for an automated sorting of recyclable material and products to allocate costs. Procedures are in compliance with e-recycling laws based on 'return share'.³
- (2) Facilitating environmental sustainability in retail supply chains: RFID can improve on-shelf availability, provide for better manufacturer-retailer logistics and offer the potential to reduce customer transportation. RFID-enabled proof of delivery allows retailers to identify products automatically and reduces invalid supply claims.

³ The law defines return share as a manufacturer's percentage, by weight, of identified brands of covered electronic products returned for recycling. For more information please consult: <http://www.ecy.wa.gov/PROGRAMS/SWFA/eproductrecycle/returnShare.html>.

Discussions and Q&A:

Panelists see the following challenges for RFID applications with respect to environmental sustainability:

- Establishing international standards: Angie Leith highlighted that the speed of technological progress and the importance of environmental aspects of RFID make it essential to establish internationally compatible standards in this area. As an example, she expressed her concern about the compatibility of the proposed EU standard in applications outside the EU.
- Overcoming the privacy hurdle and recycling: David sees as major challenges the need to overcome the privacy hurdle and to raise awareness of future benefits of RFID in recycling.
- Just go ahead and give time to time! Thorsten sees that RFID is gaining momentum and suggests that it is better not to focus too much on potential downsides of RFID but *just go ahead*.
- Panelists agreed that an environmental pedigree could be a process that would help to achieve environmental protection and sustainability.
- Susan Grant (Public Policy Consumer Federation of America, PPCFA) questioned EPA's approach to promote opt-in by default for recycling reasons. Instead, PPCFA encourages industry and government to promote the use of technological solutions that give consumers the control that they want, such as encryption (available today), notice, choice and education, or smart de-activation/re-activation mechanisms (maintaining minimum information that facilitates further processes). Anette Høyrup (Danish Consumer Council) highlighted that giving free choice to the consumer will require a system to de-activate and supports the development of best practices and standards. The key is to find a solution that adequately balances security, privacy and environmental sustainability.
- Shaun Donnelly (National Association of Manufacturers) expressed the industry's concerns and invited the European Union and the United States to strive for a compatible solution to privacy and security issues. The United States has no regulation on RFID and supported the consultation process in the European Union. Robin Layton (Department of Commerce) highlighted that the EU draft recommendation on privacy and security is not a binding regulation and serves as guidance to industry. In the United States, privacy and security issues of networks are regulated through the Federal Trade Commission (FTC), and discussions between the European Union and the United States are striving for a compatible solution.
- In the European Union, the Waste Electrical and Electronic Equipment (WEEE) Directive determines that the presence of an RFID tag on products does not make it subject to special WEEE requirements.

Panel II: The Application of RFID to Improve Healthcare Delivery



KEY STATEMENTS

- *RFID and barcoding applied in hospitals reduce administration errors by 79%. (McKesson)*
- *RFID improves patient safety and increases efficiency in healthcare delivery.*
- *RFID fights counterfeit drugs and facilitates recall.*
- *Privacy is to be discussed at the point where unique item identification and person-identifiable information intersect.*
- *RFID applications in healthcare require highly sensitive data.*
- *Key to take-up lies in how to protect and manage access to sensitive information.*
- *Stakeholders need to engage in standardisation efforts, share best practice and educate.*
- *Benefits and threats should be more visible to providers and consumers.*
- *Biomedical engineers/we need to gain a better understanding of electromagnetic spaces in hospital, of potential conflicts and unintended consequences.*
- *RFID helps to rethink business processes and will show full potential in integrative solutions.*

Panel II focused on how applications of RFID in the healthcare field can create patient-centric care; enhance patient safety and security; , improve patient-tracking, medication dose monitoring, and medical asset tracking; increase efficiency and reduce waste and costs; prevent counterfeiting, and aid product recalls. The panel was moderated by Deven McGraw, new Director of the Health Privacy Project, Centre for Democracy and Technology. Panel members included Billie Whitehurst, Dr. Florent Frederix, Michael P. Rose, Dr. Larry Kessler and Stephen Cloughley. A case study was presented by Billie Whitehurst, McKesson.

Discussants underlined the numerous potential benefits RFID can offer to improve patient care. Along with the substantial benefits delivered by RFID, two key challenges emerged, namely: (1) data protection and privacy, and (2) electromagnetic waves and interference. Experts highlighted that RFID used in healthcare will require access to sensitive data and demand particular caution. Discussants also encouraged policy makers and industry to stimulate research on electromagnetic waves in order to gain a better understanding of electromagnetic spaces in hospitals and of potential conflicts between waves emitted by wireless technologies and wireless devices.

Billie Whitehurst (MS, RN, VP and GM & Chief Nursing Officer, McKesson)

Billie Whitehurst highlighted that there are a significant number of opportunities for RFID to improve healthcare delivery. In her presentation she focused on two specific opportunities:

- RFID for patient safety: Medication errors harm 1.5 million people and cost \$3.5 billion. RFID can be applied to improve patient safety by matching caregiver, patient and medication to ensure the “5 rights”: right patient, right medication, right time, right dose, right route – delivering very tangible results. RFID and barcoding applications introduced at the Concord Hospital, Concord, NH allowed them to reduce administration errors by 79%. It virtually eliminated wrong patient, wrong medications, wrong dose and omitted dose errors, improved charge capture and coordination between pharmacy and nursing, and provided immediate physician access to medication administration.
- RFID for real-time identification and tracking of staff, patients and equipment in healthcare institutions: Estimates show that more than 20% of equipment ends up missing or lost within a fiscal period, driving up costs of healthcare. RFID can be used to track expensive and hard to find equipment and supplies inside hospital organisations, providing for significant savings, efficiency gains and in time availability of equipment. It also helps to ensure compliance with safety standards (e.g. supporting cleaning and disinfection routines). RFID can also be used to monitor and track both staff and patients (e.g. tracking transporters) supporting procedures and transfers. Patient-tracking solutions in most cases rely on tagging patient charts as opposed to patients themselves. It facilitates communication among all care providers.

Challenges include affordability (tags, infrastructure), protection of privacy, standardisation (using existing infrastructure to support RFID), and cooperation among all stakeholders. Billie encourages stakeholders to engage in standardisation efforts, to share best practices and to invest in education in order to make benefits more visible to healthcare providers and consumers.

Florent Frederix (Head of Cluster, Networked Enterprise and RFID unit, European Commission, DG Information Society and Media)

Florent Frederix replaced Antti Peltomäki, Deputy Director General at European Commission Information Society and Media Directorate General (DG INFSO). He highlighted that policy awareness and research on RFID in healthcare is still in its infancy. Recently, the eHealth unit at DG INFSO commissioned RAND Europe to conduct a study on the requirements and options for RFID application in healthcare. RAND Europe has produced a first interim report in September 2008, confirming most of what has been presented by McKesson.

RFID in healthcare can improve efficiencies and lead to significant cost reductions. However, most importantly, it also offers the potential to increase patient safety by helping to reduce procedural errors and increase the quality of service. More forward-looking, RAND Europe's interim report also indicates that new technologies such as RFID show a great potential to improve patient-centred care and independent living (through for example RFID-supported telemedicine applications).

RFID offers the opportunity to rethink business processes and is expected to unfold its full potential when applied in an integrated fashion. Challenges include affordability, standards, best practices and the availability of off-the-shelf products as well as security, privacy, reliability and interference, ethical and dignity challenges.

Michael P. Rose (Vice President, Johnston & Johnston)

Johnston & Johnston is exploring the opportunities of RFID from a supply chain perspective and a healthcare perspective. Johnston & Johnston has been involved in various RFID pilots and programmes, in the United States and in Europe.

Counterfeit drugs represent a growing concern to consumers and industry. Michael highlighted that responding to this challenge will be essential to ensure competitiveness, quality standards and consumer trust in the Internet age. Action points include:

- Encouraging closer collaboration between all actors along the healthcare supply chain, including those equipping products with tags and those utilising tags in the healthcare setting;
- Engaging in joint thinking on how to reengineer business processes and to share best practices;
- Promoting acceptance and appreciation of standards critical to RFID adoption and take-up;

- Communicating and leveraging societal benefits of RFID to healthcare consumers, as soon as possible.

When discussing hospital applications, Michael encouraged stakeholders to engage in discussions and to clearly distinguish between standards and wireless protocols used (UHF, HF, Wifi, ZigBee, active, passive or semi-active tags, etc). EPCglobal supports RFID applications operating in the UHF range. Michael stressed that many hospital applications are not compliant with EPC standards.

Stephen Cloughley (Senior Director of RFID Strategy, SAP Americas)

Stephen Cloughley highlighted that RFID are not just electronic barcodes but offer a lot more capabilities and additional benefits:

- RFID does not require line of sight, providing essential qualities for moving material and proof of delivery applications;
- RFID allows developers and manufacturers to provide real-time location services, offering additional value and information;
- RFID tags can have data written on them .

RFID applications for hospitals and healthcare providers developed at SAP currently focus on asset management and inventory management.

Dr. Larry Kessler (Director of Office of Science and Engineering Laboratories, Food and Drug Administration)

Larry Kessler highlighted that RFID can offer tremendous benefits in the field of medical devices. For example, RFID can protect against counterfeiting, facilitate identification of products during recalls and alert in the case of adverse events.

FDA currently promotes regulation on Unique Identification (UID) technologies, including RFID and is conducting research on electromagnetic waves. Today, millions of people are wearing implantable active devices. Research on electromagnetic waves suggests that RFID applications may lead to unintended issues of interference, e.g. causing risks for pacemaker holders. At the moment the biggest danger appears to occur with low frequency modulated RFID readers and scanners. Concerns may also include low frequency readers and scanners suitable for inventory and asset management applications. FDA believes that these issues should receive more consideration and encourages further research.

Dr. Kessler believes that the healthcare environment deserves particular attention from biomedical engineers in order to gain a better understanding of electromagnetic spaces in hospitals and of potential conflicts between waves emitted by wireless technologies and wireless devices. FDA encourages stakeholders to engage in these discussions and to jointly develop proactive protocols and international standards for these technologies.

Discussions and Q&A:

- Deven McGraw (CDT) highlighted that personal healthcare records and other consumer access services are now being created by third parties, including companies such as Google and Microsoft. CDT encourages the U.S. government to assess whether and how the Health Insurance Portability and Accountability Act (HIPAA) privacy and security rules should be strengthened in order to meet new challenges and to develop a comprehensive privacy and security framework that would set clear parameters for access, use and disclosure of personal health information for all entities engaged in e-health.
- Panelists highlighted that privacy issues should be discussed and worked out at the point where unique item identification and personally identifiable information intersect and where information becomes associable to a person. RFID applications in healthcare require this type of data. The real question lies in how to protect and manage access to this information.
- Members of EPCglobal highlighted that tags compliant with EPCglobal standards do not carry personally identifiable data. Tags simply carry a number that identifies the product for efficiency purposes. Applications aiming to tag, track or monitor patients should be evaluated in the context of existing data protection legislation. EPCglobal encourages policy makers in Europe to look at existing data protection legislation and not to develop new legislation and regulation that would eventually slow down adoption.
- FDA highlighted that the barcode rule does not associate a drug to a patient and has not led to any violation of privacy.
- SAP added that personally identifiable information is stored in secure databases, compliant with data protection standards.
- Susan Grant (PPCFA) agrees with the many benefits RFID can offer to improve healthcare. In particular, she sees consumer concerns arising when the patient is leaving the hospital environment.
- Hana Pechackova (European Commission, DG Justice, Liberty and Security) stressed that according to the European data protection legislation, medical data are considered sensitive data and require additional criteria to be applied in order to make data processing legitimate: (i) informed consent from the data subject (requiring that the data subject be sufficiently informed), (ii) of vital interest of the data subject (save lives and improve efficiency), (iii) data processors will have to take safeguards.

Panel III: The Application of RFID to Enhance Supply Chain Security



KEY STATEMENTS

- *RFID+sensor applications make global shipments more visible and more secure.*
- *Technology convergence and integration into existing infrastructure creates value to consumers.*
- *RFID is bringing to transportation what mobile phones have brought to communications.*
- *As business is going global, RFID is becoming more viable.*
- *RFID is designed to address efficiency, security and safety in the supply chain.*
- *RFID can help to comply with new regulations controlling shipments of hazardous materials.*
- *eSeals will secure port transactions and increase efficiency.*
- *Government should provide funding opportunities that require co-financing by industry.*
- *Web2.0 will provide useful online interfaces to consumers.*

Panel III examined the broad range of RFID applications that can be used to enhance traceability, security, and safety of various levels in the supply chain for the benefit of business, consumers and society as a whole. The panel was moderated by Tony Hollis, Director of Innovation and Technology Management at DHL Exel Supply Chain. Panel

members included Bret Kinsella, Randy Walker and John Lawford. An RFID and wireless case study was presented by Tony Hollis, DHL Exel Supply Chain.

Panelists agreed that RFID offers great potential to ensure airport and port security, to identify and monitor (hazardous) materials as they move through the supply chain, to facilitate recalls and to ensure product safety and consumer protection. Government representatives from the European Union and the United States used the opportunity to announce the launch of a joint pilot project focusing on radioactive isotopes.

Tony Hollis (Director, Innovation and Technology Management, DHL Exel Supply Chain)

DHL Exel Supply Chain provides logistics and supply chain services. It uses RFID+sensor applications for transit visibility and temperature monitoring.

DHL Exel Supply Chain uses RFID+sensor applications that communicate through Wifi networks to provide real-time location and sensor information. For example, temperature sensors are used for shipping pharmaceuticals, ensuring that pharmaceutical products are kept at the right temperature during shipping; hence helping to ensure the quality of the products as well as patient safety. In combination with GPS and cellular technologies, it enables tracking of transporters, the communication of information to personnel, and if needed, the ability to send alarm messages in real time.

Tony highlighted that the convergence of various technologies and integration into existing infrastructure are key to creating value to the consumer. Technologies are often complementary, and used in combination, allow for smart, cost-effective combined solutions. Standardisation will facilitate further progress in this area.

Bret Kinsella (Odin Technologies)

Odin Technologies operates in the United States and Europe, and works with large global companies, such as Airbus. Odin Technologies conducts work across the healthcare, defense, aerospace and retail sectors, providing services to organisations that face global trade challenges where items like security, efficiency and safety are apparent.

RFID is designed to address efficiency, security and safety. Odin Technologies considers RFID-enabled authentication as a key element in the fight against counterfeit pharmaceuticals, and in ensuring airport and port security. Operating without line of sight will enable automatic scanning of all containers and introduce cost-efficiency to (air)port security procedures. Also, equipping containers with e-seals will facilitate the identification of suspicious containers.

Bret expressed his appreciation for the work done by GS1, EPCglobal, ISO and other standardisation bodies in enhancing trade and collaboration between the United States and the European Union. In particular, he underlined EPCglobal's efforts in taking privacy concerns seriously. EPCglobal supports both opt-in and opt-out approaches, allowing consumer-friendly solutions and convenience to consumers.

Bret encourages governments to take a leading role in fostering partnerships and dialogue with industry and stakeholders, and to provide funding opportunities, co-financed by industry.

Randy Walker (Transportation Programs Lead, SensorNet Program, Oak Ridge National Laboratory)

Oak Ridge National Laboratory (ORNL) has its roots in the Manhattan Project, working on issues such as the atomic bomb and nuclear weapons. It is now the largest multi-purpose lab in the United States and operates as a government contract operator. Oak Ridge National Laboratory has extensive expertise in RFID. Randy highlighted the lab's involvement in transportation, in particular in the shipping of hazardous material.

The transportation sector has always been concerned with efficiency, security and safety issues. After 9/11, the hazardous materials industry saw major changes, intensifying security requirements. New regulations made it more challenging to comply and to ship hazardous materials. Homeland Security has provided an influx of resources to raise awareness and to develop improved and better solutions. Tracking technologies such as RFID and sensors have proven to bring substantial benefits to support the agenda.

The Sensor Net project, led by ORNL, shows how to integrate sensor-deployed technologies and databases in hazardous material shipping. Sensor Net is an RFID+sensor enabled application that helps to identify and monitor materials as they move through the supply chain. It provides awareness of the location of hazardous materials at every moment, in real time.

Radioactive isotopes represent high value, high risk radioactive material. Radioactive isotopes play an important part in technologies that provide us with food, water and good health. However, they can also constitute real or perceived dangers. The lab welcomes the recent initiatives taken by the European Union and the United States to conduct joint pilot projects in this field.

Fedex is currently using RFID to offer visibility of shipments to the consumer. It allows customers to locate their shipment at any time through an online interface, in Web 2.0 fashion. Randy highlighted that the development of such applications requires all actors across the supply chain and systems to work together and to agree to participate in a network, envisioning the Internet of things.

John Lawford (Counsel, Public Interest Advocacy Centre, Ottawa, Canada)

The Public Interest Advocacy Centre (PIAC) is a small non-governmental organisation, based in Ottawa, Canada. PIAC's interest in RFID comes from a consumer's point of view, primarily focusing on privacy and security concerns. John briefly outlined *RFID: Shopping into surveillance*, a report written by PIAC in 2006.

In the context of supply chain management, PIAC recognises the incredible efficiencies that can be gained through RFID in the supply, and encourages industry to pass along efficiency gains to the consumer. For example, PIAC sees a potential for RFID to facilitate recalls, helping to ensure product safety and consumer protection.

PIAC expressed concerns with item-level tagging at the consumer level, leading to discussions around customer and citizen surveillance. In particular, PIAC encourages industry to ensure that adequate privacy measures (e.g. killing tags, encryption) are put in place and that consumers are fully aware and informed about the use and consequences of RFID applications. In addition, John highlighted that the question of who has access and who can use the data will be essential to further uptake of RFID applications in this area.

Discussions and Q&A:

- eSeals: eSeal applications can send out affirmative messages to port personnel, facilitating security assurance. Industry representatives underlined the high impact RFID can have in securing port transactions and improving efficiency.
- Susan Grant (PPCFA) promoted combined solutions and asked for moderation when discussing benefits of RFID. RFID should not be promoted as a panacea in product safety and product recall. She sees the greatest value to use RFID in combination with other safety measures (e.g. human inspection). The recent baby powder incident, where contaminated baby powder produced in China entered markets in Europe and the United States, would not have been stopped by RFID, highlighting the need for human inspection.
- Promoting data security and data protection: Anette Høyrup (Danish Consumer Council) encouraged industry to promote the quality of tags used for B2C applications by making use of Privacy Enhancing Technologies (PETs) or active encrypted solutions. Bret Kinsella (Odin Technologies) highlighted that the emphasis of the discussion should be on data storage and access, not on data collection.

Panel IV: Future Applications of RFID to Enhance End-to-End Consumer Experience



KEY STATEMENTS

- *Guidelines and standards provide certainty for RFID roll-out.*
- *Future applications will allow the consumer to learn more about a project.*
- *RFID industry should demonstrate benefits and efficiency gains.*
- *Privacy should be built in by design and not be an after-thought or a retro fix.*
- *Privacy impact assessments are a good way forward.*
- *There is no concern for applications that do not link to person-identifiable information.*
- *Interdisciplinary consortia are needed to develop new user-centred RFID applications.*

Panel IV explored how potential enhancements of technology and product information may increase the utility of RFID technology for consumers. The panel was moderated by Susan Grant, Vice President of the Public Policy Consumer Federation of America. Panel members included Antonia Voerste, Joseph Alhadeff, Paul Skehan and Emilie Barrau. A case study was presented by Antonia Voerste, MGI METRO Group.

The panel highlighted that future applications of RFID will be designed to offer more information on the product to the consumer, increasing convenience and consumer experience. Discussions highlighted the need to consider privacy in the design phase,

promoting consumer take-up and satisfaction. Discussants agreed that interdisciplinary consortia are needed to develop new user-centred RFID applications.

Antonia Voerste (Head of Communications and Public Affairs, MGI METRO Group Information Technology)

METRO is a German food retailer, operating in 31 countries. METRO Group Information Technology (MGI) is the national and international IT service provider for all companies of the METRO Group. Antonia Voerste presented examples of how METRO is using RFID for item-level quality assurance in its Future Store:

- The butcher shop of tomorrow: RFID supports the fresh meat supply process from the delivery to the consumer: RFID ensures quality check routines (automatically checks best-before dates), facilitates demand-driven production, packaging and storage (smart management, intelligent freezer). RFID gives inventory insights and helps to ensure product quality and availability. In addition, it can also offer additional benefits to consumers, providing recipes and wine suggestions.

The Future Store complies with EPC guidelines. It provides customer notice (RFID logo and information) and allows consumers to deactivate the tag at the point of sale/check out. Antonia highlighted that the check out procedure is running on a barcode system, thus does not involve personal data to be linked to RFID.

METRO has been employing RFID on item level for five years. On average, one customer per week chooses to deactivate RFID tags after purchase. In 5 years, METRO has received no formal complaints, a very limited number of people have voiced concerns. In response to the recent EU recommendation, METRO deliberately conducted a privacy impact assessment, which was presented and approved by the relevant privacy officer of North Rhine Westphalia.

In the future, METRO would like to see stronger uptake of RFID, offering additional value to consumers, i.e. linking RFID to a website, providing more information on the product to the consumer.

Joseph Alhadeff (Vice President, Global Public Policy & Chief Privacy Officer, Oracle)

Consumers are indirect beneficiaries of RFID, which explains why consumers are not the first to applaud or to request for it. To facilitate RFID take-up, consumer-centred future applications should focus on providing benefits to the consumer. RFID applications should aim to create useful information to the consumer. For example, a consumer allergic to nuts should be able to send targeted queries to a product, and inform the consumer in his/her decision making.

Working in a competitive market means that meeting the needs and concerns of consumers in realising the potential of a technology is key. Oracle appreciates the timely

initiative of the European Commission and acknowledges that the European Commission has been instrumental in setting up a dialogue and facilitating discussions between stakeholders.

Oracle believes that privacy impact assessments could be measured against EPCglobal privacy practices guidelines and existing Data Protection legislation, and does not require new privacy laws. Joseph highlighted that enforcing privacy is the state-of-play. He underlined that public and private bodies such as the Federal Trade Commission (FTC), the Organisation for Economic Co-operation and Development (OECD) and EPCglobal have issued substantive and adequate guidance to ensure that privacy is enforced. In addition, the recent EU Recommendation provides additional guidance for innovative companies operating in Europe and worldwide.

Paul Skehan (Director, Secretariat, European Retail Roundtable)

The European Retail Roundtable (ERRT) is a network of business leaders established to express the views of large retailers on a range of issues of common interest. Paul highlighted the potential impact of policy decisions on ERRT members. For example, mandatory deactivation at the point of sale would require costly changes to each of the more than 25,000 points of sale ERRT is representing.

ERRT sees strong potential for RFID in increasing convenience and the consumer experience, such as the intelligent washing machine, the intelligent dishwasher, or RFID-enabled solutions for perishable goods. In addition, ERRT sees great potential for RFID to assist with labelling and packaging requirements, making nutrition labelling and carbon footprint information more accessible to consumers. In particular, ERRT believes that the European Union needs to have a holistic view on these issues and that RFID should be considered as a tool to provide interoperable solutions.

ERRT strongly appreciates the efforts undertaken by the European Commission to push the European Union in a harmonised and unified direction. Paul Skehan highlighted that without the recommendation, industry may have been faced with 27 different Directives, individually designed for each Member State. A key element of European competitiveness and economic growth is to provide for a stable legislative framework that encourages companies to operate and to invest.

Working in a very competitive industry, Paul highlighted that savings and productivity gains through RFID will always be passed on to consumers. Marks and Spencer is already using RFID tags for exchanges, returns and warranty services.

Emilie Barrau (Legal Officer, BEUC – The European Consumers’ Organisation)

The European Consumers’ Organisation, BEUC, is based in Brussels and represents 41 European consumer organisations. BEUC believes that industry has been weak in showing the potential benefits of RFID to consumers. RFID does provide for better logistics and improved efficiency, but still falls short of providing real benefits to consumers.

Surveillance in stores, intelligent shelf applications and cameras in retail are less transparent to the consumer; if highlighted to consumers they may raise unease and disapproval.

To show benefits to consumers and ensure take-up, BEUC encourages industry:

- to promote transparency, by clearly communicating where RFID is used, when and why, and by whom;
- to respect privacy and right of choice;
- to implement measures before implementation, in order to avoid expensive ex-post fixing.

BEUC's motivation is to ensure that privacy and security are built-in by design. BEUC promotes an opt-in approach that leaves the choice to consumers. BEUC does not see a privacy concern, as long as there is no link between RFID tags and personal data.

BEUC appreciates the efforts undertaken by the European Commission. Emilie responded to industry concerns frequently expressed and highlighted that the recent Recommendation on RFID is not new legislation but provides an interpretation of existing legislation, providing helpful guidance to industry.

For the future, BEUC would like to see more consumer-centred RFID applications. In particular, BEUC sees potential for RFID applications to improve the decision-making process of consumers, e.g. providing test results, peer-reviews and consumer review of products; and RFID applications assisting the visually-impaired.

Discussions and Q&A:

- Consortia approaches (bringing together IT, marketing and industry experts) will be essential in developing new consumer-centred RFID applications. ERRT believes that the hardware and software industry alone does not seem to push consumer-centred benefits and to bring them forward.
- Panelists and discussants agreed on the importance of a continuous dialogue between stakeholders to understand concerns. Open discussions will allow stakeholders to reach consensus and help to find the right balance between adverse effects and abuse versus the development of adequate safeguards.
- RFID skills: Discussants highlighted that RFID skills are to be considered an important element and have a major impact on the deployment of RFID. Discussants believe that education and RFID skills have not received sufficient attention in the debate and should become a more central part in follow-up discussions.

Closing session



KEY STATEMENTS

- *Creating trust is key: we need to do a better job in informing and educating people.*
- *We need to support the creation of fewer but more broadly accepted standards.*
- *We need to develop common guidelines to data protection and find suitable information security standards.*
- *We need to ensure compatibility with the standardisation efforts in support of the Internet of Things and RFID.*
- *We need closer international cooperation of RFID standardisation organisations.*

In the closing session, the four moderators presented a short summary of each panel, highlighting the main points and conclusions of speakers and discussants. Dr. Thorsten Staake replaced Scott Boylan, moderating Panel I. Responses and reflections were given by Michelle O'Neill (United States Department of Commerce) and Gérald Santucci (European Commission, DG Information Society and Media). Closing remarks were presented by Michael Maibach (European American Business Council).

Michelle O'Neill (Deputy Under Secretary, International Trade Administration, U.S. Department of Commerce)

The Transatlantic Economic Council (TEC) Lighthouse Project on Radio Frequency Identification (RFID) invites the United States and the European Union “to develop a joint framework for cooperation on identification and development of best practices for

Radio Frequency Identification” (U.S.-EU Summit, 2007). The mandate defines the following programme of work/roadmap:

- Best Practices: develop a joint framework for cooperation on identification and development of best practices for RFID technologies.
- Regulation and Policies: Strive to align U.S. and EU regulatory and policy approaches on RFID technologies, including pilot projects in the public sector and an exchange of viewpoints on technical/policy standards development.
- Education and Outreach: Hold symposia on societal benefits of RFID; generate greater industry cooperation and more opportunity for consumer and legislative involvement; and encourage industry to explore ways in which the technology can be used to serve society.

The U.S. Department of Commerce considers the recently issued OECD guidelines as best practice and a good starting point to the dialogue. Michelle highlighted that industry should take a leadership role to develop global and consistent standards. In addition, the Department of Commerce supports joint pilot projects focusing on pharmaceuticals and on industrial isotopes. In both cases, RFID is used to secure international supply chains. Next steps will be to identify additional areas for joint pilots.

Michelle O’Neill invited the audience to participate in the Transatlantic RFID workshop on Consumer Privacy and Data Security, taking place the next day (23 September 2008), organised by the Federal Trade Commission.

Gérald Santucci (Head of Unit, Networked Enterprise and RFID, European Commission, DG Information Society and Media)

In his closing remarks, Gérald Santucci thanked Michelle O’Neill for her support and generous introduction. He commended Robin Layton, Director for Technology and Electronic Commerce at the U.S. Department of Commerce for stupendous work and dedication to keep the U.S. – EU cooperation on course. The European Commission welcomes the opportunity and confirms that a new joint pilot project on the tracking of radioactive isotopes has recently been announced.

The Symposium reflected the commitment of public authorities to accept and promote the new spirit of transatlantic cooperation. It shows:

- A new willingness and commitment to develop RFID applications and services for enhancing global trade, fostering economic growth, and improving people’s quality of life.
- A new understanding that Government and Industry are all in this together, tightly associated in the implementation of the TEC RFID Lighthouse project and the announced U.S.-EU pilot project on radioactive isotopes tracking, and
- A new readiness on the part of the majority of private and public organisations to use and take advantage of RFID.

The Symposium underlined the tremendous opportunities RFID offers in society. RFID supports the greatest issues on the global agenda, such as environment, health, manufacturing and privacy challenges. RFID offers great potential and requires commitment to transform these challenges into reality.

RFID raises unprecedented challenges such as trust, education, standards, compliance with data protection and privacy legislation, consumer protection, ethics, information security, governance of identities, safety and integration of RFID with sensor technologies. It underlines the necessity for the U.S. Government and the European Union to exchange best practices and to align their different regulatory and policy approaches.

The European Commission highlighted that RFID appears as a springboard for moving to the Internet of the Future and the Internet of Things. *The best is yet to come.*

Gérald Santucci invited the audience to the next symposium, organised by the European Commission, scheduled to take place in Brussels in spring 2009.

Michael Maibach (President, European–American Business Council)

Michael Maibach, President of the European-American Business Council closed the Symposium, thanking the organiser, speakers and participants. Michael highlighted that the key for RFID take-up is to focus on the consumer and to highlight the many benefits RFID can offer: RFID can make airplanes safer, provide for real-time monitoring, assist Alzheimer patients and the visually impaired, track emergency equipment, and control access to hotel rooms.

Consumer groups continue to force businesses to consider the impact on privacy, which helps companies to be responsive to these needs. The key to success for all companies is to please their customers and to keep their trust.

“No single man makes history. History cannot be seen, just as one cannot see grass growing.”
(Boris Pasternak)

ANNEXES

Annex 1: Workshop agenda

Transatlantic Symposium on the Societal Benefits of RFID

Center for Strategic and International Studies (CSIS)
1800 K St., NW (Level B1), Washington, DC 20006
September 22, 2008

Program

- 8:00-8:30 **Registration and Coffee**
- 8:30-8:40 **Opening Remarks:** **Kathryn Hauser**
U.S. Executive Director
TransAtlantic Business Dialogue
- Welcoming Remarks:** **The Honorable Carlos Gutierrez**
U.S. Secretary of Commerce (invited)
- 8:40-9:00 **Keynote Address:** **Deborah Wince-Smith**
President
Council on Competitiveness
- 9:00-10:15 **Panel I: The Application of RFID to Enhance Environmental Protection/Sustainability**
This panel will explore how innovative uses of RFID technology can provide significant benefits to society in the area of environmental protection and sustainability.
Panel will begin with a case study presentation.
- Moderator:** **Scott Boylan**
Senior Counsel, Government Relations
GE Security
- Panelists:** **Business Representative** (invited)
- Angie Leith**
Senior Policy Analyst
U.S. Environmental Protection Agency
- Dr. Thorsten Staake**
Associate Director, Auto-ID Labs & Bits to Energy Lab
ETH Zurich and University of St. Gallen, Switzerland
- 10:15-10:45 **Coffee Break and Technology Demonstrations**

10:45-12:00 **Panel II: The Application of RFID to Improve Healthcare Delivery**
This session will focus on how applications of RFID in the healthcare field can improve patient care, such as infant tracking, medication dose monitoring, medical asset tracking and product recalls.

Panel will begin with a case study presentation.

Moderator: **Deven McGraw**
Director, Health Privacy Project
Center for Democracy & Technology

Panelists: **Business Representative** (invited)

Jay Crowley
Senior Advisor for Patient Safety
Center for Devices and Radiological Health
Food and Drug Administration

Antti Peltomäki
Deputy Director General
DG Information Society and Media
European Commission

Stephen Cloughley
Senior Director, RFID Strategy
SAP Americas

12:00-1:15 **Luncheon, Networking, and Technology Demonstrations**

1:15-2:30 **Panel III: The Application of RFID to Enhance Supply Chain Security**
This session will examine the broad range of RFID applications that can be used to enhance traceability, security, and safety at various levels in the supply chain for the benefit of business, consumers and society as a whole.

Panel will begin with a case study presentation.

Moderator: **Tony Hollis**
Director, Innovation and Technology Management
Exel DHL US Subsidiary

Panelists: **Business Representative** (invited)

Randy Walker
Transportation Programs Lead, SensorNet Program
Oak Ridge National Laboratory

John Lawford
Counsel
Public Interest Advocacy Centre
Ottawa, Canada

2:30-3:00 **Coffee Break and Technology Demonstrations**

3:00-4:15 **Panel IV: Future Applications of RFID to Enhance End-to-End Consumer Experience**

This panel will explore how potential enhancements of technology and product information may increase the utility of RFID technology for consumers.

Panel will begin with a case study presentation.

Moderator: **Susan Grant**
Vice President of Public Policy
Consumer Federation of America

Panelists: **Joseph Alhadeff**
Vice President, Global Public Policy & Chief Privacy Officer
Oracle

Antonia Voerste
Head of Communications and Public Affairs
MGI Metro Group Information Technology

Emilie Barrau
Legal Officer
BEUC -- The European Consumers' Organization

Paul Skehan
Director, Secretariat
European Retail Roundtable

4:15-4:30 **Networking Break**

4:30-5:15 **Summary**
This session will summarize key policy issues, highlight areas of ongoing and future collaboration, and identify next steps. (Press will be invited to attend.)

**Summary of each panel session by the four moderators
Response and reflections:**

Michelle O'Neill
Deputy Under Secretary, International Trade Administration
U.S. Department of Commerce

Gerald Santucci
Head of Unit, Networked Enterprise and RFID,
DG Information, Society, and Media
European Commission

5:15-6:00 **Closing Remarks:** **Michael Maibach**
President
European-American Business Council

Networking Reception

Annex 2: List of participants

Transatlantic Symposium on the Societal Benefits of RFID

September 22, 2008

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List of Attendees

Christine Adams	The Dow Chemical Company
Joseph Alhadeff	Oracle
Kim Ambler	The Boeing Company
Linda Astor	Department of Commerce
Jan Barnes	European-American Business Council
Jeff Barnett	Verisign
Emilie Barrau	Bureau Européen des Unions de Consommateurs
Jana Barresi	Wal-Mart Stores, Inc.
Matthew Beh	Department of State
Laurent Bochereau	Delegation of the European Commission
Clayton Bonnell	US Postal Service
Iren Borissova	Verisign
Scott Boylan	GE Security
David Campbell	RGIT
Dan Caprio	DC Strategies, LLC
Kathleen Carroll	HID Global
Stephen Cloughley	SAP
Eamonn Confrey	Embassy of Ireland

Emilie Danel	BRIDGE Project
Anand Das	Commerce Events Corporation
David Dastvar	InnoVest Group
Franz Delpont	Embassy of France
Ed DiPaolo	Boehringer Ingelheim
Deborah Doherty	U.S. Commercial Service
Shaun Donnelly	National Association of Manufacturers
Leslie Downey	RFID Revolution
Robert Dunn	Devine, Millimet, and Branch, PA
Dina Eglite	Embassy of Latvia
Luis Estrada	All To Success
Sheila Flynn	Department of State
Florent Frederix	European Commission
David Frenkel	RFID4u
Robin Gaines	Department of Commerce
Mary Geiger	Department of Commerce
Susan Grant	Consumer Federation of America
John Greaves	European Centre for Excellence for AIDC
Katherine Hahn	SAS
Meg Hardon	Kelley Drive & Warren LLP
Katie Harrington-Bride	Federal Trade Commission
Kathryn Hauser	TransAtlantic Business Dialogue
Paulette Hernandez	Department of Commerce
Bernie Hogan	GS1 US
Tony Hollis	Exel DHL
John Howells	Healthcare Distribution Management Association
David Isaacs	HP
Larry Jellen	Motorola
Ajit Jillavenkatesa	National Institute of Standards and Technology
Marisa Jimenez	EPCglobal

Cynthia Johnson	Texas Instruments
Dalia Kadisiene	Embassy of the Republic of Lithuania to the US
Hannah Kaplan	TransAtlantic Business Dialogue
Dr. Larry Kessler	Food and Drug Administration
John Ketchell	European Committee for Standardization
Bret Kinsella	ODIN Technologies
Robert Knetl	Georgia Tech Research Institute
Deborah Kopsick	Environmental Protection Agency
Andy Kowl	RFID Switchboard
Simon Langford	Wal-Mart Stores, Inc.
John Lawford	Public Interest Advocacy Centre
Robin Layton	Department of Commerce
Coni Lefferts	Creative Packaging Solutions
Angie Leith	Environmental Protection Agency
Jason Leuck	Lockheed Martin Corporation
Christophe Luykx	Intel
Michael Maibach	European-American Business Council
Joe Mancini	PRTM Management Consultants
Julie Mayer	Federal Trade Commission
Elliot Maxwell	e-Maxwell and Associates
Duncan McCollum	CSC
Gray McGinnis	Wal-Mart Stores, Inc
Deven McGraw	Center for Democracy and Technology
William Miller	MaCT USA
Ronny Mingels	Arttic
Manas Mohapatra	Federal Trade Commission
Dr. Juergen Morhard	German Embassy
Dr. Fariba Nazemi	InnoVest Group
Chuck O'Hara	Procter & Gamble
Michelle O'Neill	Department of Commerce
Dustin Painter	Kelley Drye & Warren

Hana Pechackova	European Commission
Candie Phipps	Boehringer Ingelheim
Kathryn Ratte	Federal Trade Commission
Mark Reese	Johnson & Johnson
Mark Roddy	SAP
Carlos Rodríguez	Telefónica S.A.
Trista Roehl	Computing Technology Industry Association
Michael Rose	Johnson & Johnson
Teresa Rosenberger	Devine, Millimet, and Branch, PA
Gerald Santucci	European Commission
Rebecca Schindler	RAND Europe
Al Schmidt	Arch Chemicals
Simone Schmidt	Embassy of the Federal Republic of Germany
Alexis Serfaty	European-American Business Council
Linda Sherry	Consumer Action
Chris Sherwood	US Mission to the EU
Marc-Anthony Signorino	National Association of Manufacturers
Paul Skehan	European Retail Roundtable
Wendy Smith	RFideaWorks Corp.
Anna Snow	Delegation of the European Commission
Thorsten Staake	ETH Zurich and University of St. Gallen, Switzerland
Diane Steinour	Department of Commerce
Randy Stigall	UPM Raflatac
John Sullivan	Department of Commerce
Matt Truong	Intelligentz Corporation
Bora Turan	Alvin Systems
Andras Vilmos	European NFC Project "StoLPaN"
Antonia Voerste	MGI METRO Group Information Technology
Randy Walker	Oak Ridge National Laboratory
Tom Warren	Johnson & Johnson

Bernhard Welschke	RGIT
Billie Whitehurst	McKesson
Deborah Wince-Smith	Council on Competitiveness
Megan Yonke	IBM Global Business Services
Linda Young	AIM Global

Annex 3: Press release (Department of Commerce)

FOR IMMEDIATE RELEASE
MONDAY, SEPTEMBER 22, 2008

CONTACT: Matt Englehart/Michael Brown
202-482-3809

U.S. COMMERCE OFFICIAL ANNOUNCES ISOTOPE TRACKING PARTNERSHIP WITH EUROPEAN UNION

WASHINGTON – U.S. Commerce Deputy Under Secretary for International Trade Michelle O’Neill today announced the first phase of a U.S.-European Commission (EC) pilot project to track shipments of radioactive isotopes before the Transatlantic Symposium on the Societal Benefits of Radio Frequency Identification (RFID). The radioactive isotopes used in this pilot project improve the effectiveness of medical diagnostics, such as x-ray examinations, that can help save patient’s lives.

“This new partnership will help pave the way for other projects to increase the competitiveness of businesses on both sides of the Atlantic,” said O’Neill. “Improved RFID shipping will help our healthcare workers and researchers stay on the cutting edge of medical innovation.”

O’Neill discussed the pilot project before more than 150 public and private-sector representatives from the United States and Europe. U.S. and EU officials also announced U.S.-EC endorsement of Policy Guidance on RFID developed by the Organization for Economic Cooperation and Development to promote best practices on RFID. Participants agreed to focus future U.S.-European Union (EU) attention on creating an innovative, unified technical and policy environment for RFID that respects the needs of all stakeholders.

The RFID pilot project is a result of the U.S.-EU framework for Advancing Transatlantic Economic Integration. The initial phase of the project will begin in 2009, involving laboratories and postal authorities in the United States and the United Kingdom, with other participants pending. The second phase of the project will begin in 2010, expanding the project to other EU countries.

Please visit <http://www.tabd.com> for more information.

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