

# ACTIVITY REPORT

## April 2010 – April 2011

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### Message from the Chairman

Eurosmart's activities are reflecting the shift in the core activities of the Smart Security Industry from traditional segments to a broader range of applications (Internet of Things, M2M, Biometry, eCommerce ...). More than ever, Eurosmart is also supporting the paradigm change that the digital society is undergoing and the acceleration of the process of evolving from a PC society to a mobility society.

In the next few months, new form factors will be further explored, as they represent future markets for the Smart Security industry. The Machine-to-Machine environment encompasses what is now known as the "Internet of things" with billions of smart objects communicating with each other. Our added value is to highlight the needs and the lacks in terms of security for applications which have a

direct impact on citizens, such as the emergency call system eCall or smart metering. With multiple commercial deployments happening worldwide, 2011 is definitively the year of NFC and several pilots, for instance in France, have shown a good level of acceptance among the users and retailers. To support this development, Eurosmart has increased its market analysis expertise on NFC, especially across all the various secure element form factors and business models. Eurosmart is also closely following the European agenda, which is reflecting the accelerating evolution of the digital world and the new challenges for privacy and security. In the field of identity management, which is a very sensitive issue at the EU level, Eurosmart has launched a new task force to deliver a vision on the privacy and security aspects of Biometrics. The European Commission is now revising the legal framework for data protection and privacy and is evaluating the obstacles to the take-off of eCommerce, especially for cross-border transactions. Here again, Eurosmart's role is to bring awareness to policy makers on the importance of adapting the legal framework to the evolution of technology and to take account of new threats to privacy and security. In 2011 and 2012, we will continue our efforts to explain our technology through our position papers, participation in conferences, and our traditional channels of communication. Security is more than ever at the top of the agenda of major corporations, governments and the European Commission. Our challenge is to spread Eurosmart's vision and expertise.

Marc Bertin

Chairman

Eurosmart General Assembly, 3 May 2011, Brussels

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## **Objectives and achievements**

### **Presenting a vision of the market trends and emerging markets**

#### ***Anticipating the evolution of worldwide markets***

Twice a year, Eurosmart presents its market analysis and vision of the Smart Security market worldwide.

In 2010, the Smart Security Industry has confirmed its dynamism, passing the milestone of 5 billion microcontroller-based Smart Secure Devices. A Smart Secure Device is an object which contains a secure microcontroller and its embedded software for authentication, integrity, confidentiality and non-repudiation purposes. It is also characterized by a rigorous product life cycle management including personalization by the issuer. 4.5 billion units of Smart Secure Devices were shipped in 2009, and Eurosmart anticipated that this number would grow by 18% in 2010, to exceed 5.3 billion units. Over 4 billion SIM cards were shipped in 2010 and over 1 billion payment cards are expected in 2011. The proportion of Contactless cards grew, especially dual card combining both contact and contactless.

In Telecom, SIM shipments benefited from strong growth in China, India, Indonesia and Brazil, with 3G in India being a driver for larger memory size. Mobile financial services are increasing security needs and demand for higher end products, while M2M and embedded mobile connectivity are generating great interest.

In the Retail-Banking segment, worldwide EMV and DDA migration benefited from strong growth in Latin America and Asia and strong dual contact and contactless cards grew.

In government ID-Healthcare, several trends were observed:

- Increasing deployment of eID cards and the European Resident Permit;
- European initiatives driving provision of e-Services for citizens' convenience and administration savings, requiring secure identification;
- USA visa waiver program and European Union directive on biometrics e-Passport increasing penetration of high-end security technology.

For contactless Smart Secure Devices, around 15 Million of units of NFC secure elements were expected to be shipped, mainly by MNOs in Asia and Europe in 2011. Growth of dual (contact and

contactless) was higher than pure contactless and 20% of Retail Banking cards had a contactless interface in 2010, reaching 22% in 2011. In addition, the emergence of microcontroller-based cards combining transit and a second application was observed.

#### ***Offering a vision on privacy and security aspects of Biometrics***

A few months after being set-up, during Cartes & IDentification 2010 the Biometrics Task Force published a White Paper on Biometrics, entitled "Smart Biometrics for Trust and Convenience" and covering biometric technology state of the art and best use cases, and technical choices for implementation when in combination with smart card technology. The study also involves the concept of creating biometric characteristics for physical documents, identification of use cases and

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techniques, as well as the benefits of putting together human and physical document biometric characteristics. It also makes recommendations on the use of Biometrics for cases of identification and authentication of individuals and goods.

Having achieved its initial aim, as a second step the Task Force is now initiating contacts with different national and European entities in order to get feedback on the White Paper and elaborate an overworked version of the document.

#### ***Further exploring New Form Factors***

After having provided a definition of the concept of Smart M2M and having gathered information on the market segmentation and key players, the Eurosmart New Form Factors Working Group prepared a short form which included Eurosmart's vision on Smart M2M. A presentation on Smart M2M was made by Jean-Pierre Delesse on 3 February 2011 at the conference "SIT- Smartcard Workshop" organized by the Fraunhofer Institute. The convenor of the New Form Factors Working Group presented the "Key challenges for M2M ecosystem development" (see photo). Work on this segment will now be consolidated in 2011 through a market update.

As part of its actions in 2010, the New Form Factors WG initiated a reflection on Smart Grids and Smart Metering in the Smart M2M ecosystem, taking account of the current considerations of the European institutions for their EU-wide deployment.

#### ***Initiating a reflection on the Internet of Things***

Further to Smart M2M, the New Form Factors Working Group extended its scope by looking into the Internet of Things. The objective is to elaborate an analysis of the Internet of Things's environment which should result in the publication mid-June 2011 of a Vision Paper. In parallel to this, the Working Group is closely following the discussions taking place at EU level and the work done by the Internet of Things expert group set up by the European Commission.

#### ***Pursuing our involvement in favour of Card Standardisation***

In 2010, Eurosmart maintained its involvement in the Cards Stakeholders Group (CSG) through the participation of Lorenzo Gaston, who acts as the common representative of Eurosmart and the Smart Payment Association in the CSG for the "vendors" category. Set up by the European Payment Council, the CSG aims to support the EPC Cards Working Group in the maintenance and enhancement of the SEPA Cards Standardisation Volume.

#### ***Getting involved in discussions on e-Commerce***

Eurosmart participated in the public consultation on e-Commerce that was opened by the European Commission in late 2010 with the objective of evaluating the e-Commerce Directive 2000/31/EC and identifying obstacles to the development and security of e-Commerce in the European Union. Based on this first step, a deeper reflection was initiated within the association and in cooperation with the European Commission on solutions which could help secure e-Commerce in the EU and creating trust for the citizens.

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## **Defending the assets of the Smart Security Industry worldwide**

In line with the actions undertaken since 2008, Eurosmart continued its involvement alongside the European semi-conductor industry association (EECA-ESIA) and the European digital technology industry association (DigitalEurope) in the consultation meetings convened by the European Commission concerning commercial barriers on the Chinese market. This commitment will be pursued in 2011 in order to make EU institutions aware of Eurosmart members' concerns. The China Desk was created in 2009 by the European Union Chamber of Commerce in China in order to support the growing information gathering and advocacy needs of the European smartcard and semiconductor industries related to China. Eurosmart closely followed its work in 2010 and shall continue in 2011.

## **Promoting the assets of the Smart Security Industry in the field of IID**

### ***Closely following the evolution of STORK***

Since the launch of the large-scale pilot in June 2008, Eurosmart has closely followed the work undertaken by the STORK consortium with the objective of establishing a European eID Interoperability Platform that would allow citizens to establish new e-relations across border through a national eID. Two years after the start of STORK, Eurosmart eID Working Group issued a paper identifying missing points in the project.

### ***Identifying the drivers for the change from ID to eID***

In 2010, the Eurosmart eID Working Group provided insight into the migration from Identity to electronic Identity by identifying the different steps and drivers for this change. The Position Paper that was published in March 2011 reviews the current and future applications of eID, the achievements in terms of certification and interoperability, and makes some recommendations in order to support the migration to secure and interoperable ID documents.

### ***Getting involved in the debates related to Border Management at EU level***

As in the last few years, Eurosmart has continued to closely follow the debates related to border management at EU level and has provided its expertise to the European institutions on the best technical choices for ensuring a smooth workflow of passengers at EU borders thanks to convenient and interoperable solutions, while at the same time guaranteeing efficient controls and the security of citizens.

In 2010, Eurosmart gave special attention to projects related to the deployment of an Entry-Exit system at EU borders aimed at registering the entry and exit of third country nationals and at identifying overstayers. In a Position Paper published in July 2010, Eurosmart makes a comparison between different systems implementation approaches based either on a central database, a Smart Secure Device or the combination of both.

### ***Offering our expertise on the European Port Access Identity Card***

In 2010, Eurosmart maintained its involvement in the discussions on the possible deployment of a Eurosmart Activity Report 2010-2011

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European Port Access Identity Card by participating in the consultative expert group set up by the European Commission and giving advice to EU institutions on the technical functionalities of such a card. Current discussions concern the introduction of a card that would be interoperable throughout the European Union and giving sea port workers access to the secure and restricted port areas, depending on their function and needs.

### ***Participating in the revision of the eSignature framework***

The Eurosmart eID Working Group participated in the public consultation on eSignature and eIdentification and Authentication opened in early 2011 by the European Commission. Launched twelve years after the entry into force of the eSignature Directive, the consultation aimed to open a debate on its possible review and to prepare an initiative on the recognition of electronic identification and authentication. Its objective was to provide input to policy makers on how eIdentification, Authentication and eSignature can contribute to delivering the European digital

single market and to better understanding what is needed to create the optimal conditions for their use across the EU.

#### **Supporting the work done by MOBIDIG**

As part of its activities, the Eurosmart eID Working Group closely followed the work done in the framework of the *European Mobile Identification Interoperability Group*. The MOBIDIG Working Group was established with the objective of intensifying the collaborative work on mobile identification and to assist Member States in the EU and in the Schengen Area on the issue of mobile identity devices for police and immigration services. Eurosmart participated in industry meetings of MOBIDIG, providing technical advice on mobile identification.

#### **Eurosmart Education Mission**

##### **Running on an M2M module for the Smart University**

As part of its education mission, Eurosmart participated in the Smart University 2010 programme. Smart University organises training modules on the latest advances in ICTs, relying on European universities, schools, institutes and labs. Through these training courses, organised in London in June 2010 and in Sophia Antipolis in September 2010, the objective of Eurosmart was to explain the state-of-the-art technology and illustrate it through case studies. The New Form Factors Working Group delivered a module on "Security and privacy in the machine-to-machine ecosystem". This module will be updated and highlighted through other education tools, such as webinars, potentially.

##### **Explaining the key concepts of the Smart Security Industry**

As part of its education mission, Eurosmart members explained the key concepts of the Smart Security Industry, via participation in international events (see page 10) but also via the realization of a Glossary of terms. This Glossary that was first launched in November 2009 has been constantly updated and completed by the Working Groups of Eurosmart.

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#### **Further developing the membership of our Association**

##### **Eurosmart new members**

At the General Assembly of May 2010, Eurosmart welcomed new members, which allowed the association to further develop its membership towards new categories of members, as Eurosmart decided, in April 2008. Two associations joined Eurosmart (Danish Biometrics and MobiSmart), as well as a French laboratory (CEA-Leti). Michel Koenig, Professor at Polytech'Nice University, also joined the association as an individual expert in May 2010.

Finally, the applications of the French company Prooftag and the individual expert Bernard Morvant were approved by the Steering Committee in July and September 2010. Specialised in authentication technologies, Prooftag is in particular involved in Eurosmart work on Biometrics.

##### **Eurosmart General Assembly, May 2010, Munich**

###### **Bureau**

Marc Bertin – Oberthur Technologies - Chairman

Thomas Froschmeier – Giesecke & Devrient - Vice-Chairman

Oyvind Rastad – Gemalto - Vice-Chairman

Helmut Gassel – Infineon Technologies - Treasurer

Bruno Dupont – General Secretary

###### **Members of the Steering Committee 2010-2011**

Pascal Didier — Inside Secure

Volker Politz – Renesas Electronics (replaced by Daniel Borleteau, as from March 2011)

Jörg Suchy – Samsung

Didier Chaudun – Morpho

Laurent Sourgen – STMicroelectronics

Steve Owen – NXP Semiconductors

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##### **Working Groups convenors**

Alain Boudou— Gemalto – Products and System Security  
Steffen Grote—Morpho – Security Management (replaced by Michael-John Turk, Morpho, as from March 2011)  
Jean-Pierre Delesse – Individual Member—New Form Factors  
Oyvind Rastad—Gemalto – Market & Technology  
Rodrigue Gil— Giesecke & Devrient – Smart Security Market Segmentation  
Bruno Rouchouze—Gemalto – e-ID  
Didier Chaudun—Morpho—Biometrics  
Clotilde Servajean—Gemalto— Communication

## **Participating in international events**

### ***Eurosmart at Smart Event***

Eurosmart has been deeply involved since the beginning as founding institutional partner in the organisation of the Smart Event conference (Sophia Antipolis), an annual forum where the industry experts and leaders can present and discuss the challenges of the Smart Security Industry. Smart Event is a major forum for knowledge-sharing, learning, and networking in the fields of e-ID, mobility and Smart Security.

In 2010, for its 11th edition, Smart Event encompassed 3 international conferences covering complementary areas: e-Smart, Smart Mobility and World e-ID. Eurosmart members presented the vision of the association on several topics:

- "System comparison for European Entry/Exit program" by

Carloman Grelu, Member of Eurosmart's e-ID Working Group, 22 September 2010;

- "Third-country nationals and digital identity management in the EU" by Bruno Rouchouze, Convenor of Eurosmart's e-ID Working Group, 22 September 2010;

- "New generation of tachograph equipment, and electronic driver's licence: Technology contribution for a better road

safety" by Didier Chaudun, Member of Eurosmart's e-ID Working Group, 22 September 2010;

- "Smart Biometrics for Trust and Convenience" by Didier Chaudun, Convenor of the Task Force on Biometrics, 24 September 2010.

In addition, a press conference was organised on 22 September 2010 during the event. Eurosmart Chairman Marc Bertin presented the agenda of the Smart Security Industry for 2010 and 2011. He highlighted the strategic choice of Eurosmart members to focus on the most promising technologies which, when combined with Smart card technologies, bring innovative answers to today's challenges.

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### ***Providing live demos at Cartes & Identification***

As every year, Eurosmart was the official sponsor of Cartes & Identification exhibition in 2010, which brought together 500 exhibitors and 20 000 visitors. This ensured a great visibility for the association, notably thanks to Marc Bertin's opening speech at the World Card Summit, presenting the latest market analysis of Eurosmart.

At the exhibition, Eurosmart vision on smart M2M was emphasized through a demo zone, bringing together Gemalto, Infineon Technologies, Morpho, NXP and Oberthur Technologies, and including demos on smart metering, M2M module and tape, M2M SIM-centric services and M2M innovation services for end-users.

In addition, Jean-Pierre Delesse, the convenor of the New Form Factors WG, made a presentation at the congress on "Security, which challenge for the Internet of Things?".

Another demo zone was organised by Eurosmart, following the publication of the Paper "Smart

Biometrics for Trust and convenience". This demo zone brought together Gemalto, Infineon Technologies, Morpho, Oberthur Technologies, Precise Biometrics and ProofTag. The demos dealt with mobile and fixed enrolment stations, biometrics for ID verification, authentication and signature, Match-on-Card for eDriving licence and Healthcare, and mobile terminals for card authentication. During Cartes & IDentification 2010, Didier Chaudun, the convenor of the Biometrics Task Force at Eurosmart, did an interview on the French radio BFM. This interview was the opportunity to present Eurosmart's vision on privacy and security aspects of Biometrics.

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#### ***Supporting several events around the world***

**Cardist 2010**, 12-14 May 2010, Istanbul (Turkey)

**The Future for Transport Smartcards**, 27 May 2010, London (United Kingdom)

**Contactless Cards and Payments 2010**, 21 June 2010, London (United Kingdom)

**Cards and payments**, 15-17 September 2010, Paris (France)

**Smart Event 2010**, 21-24 September 2010, Sophia Antipolis (France)

**ATM Conference Security**, 14-15 October 2010, London (United Kingdom), "How Smart Security could contribute to ATM services: technologies and scenarios", by Eurosmart Chairman Marc Bertin (Oberthur Technologies)

**Biometrics 2010**, 19-21 October 2010, London (United-Kingdom)

**RSA Conference Europe**, 12-14 October 2010, London (United-Kingdom)

**ID World Congress**, 16-18 November 2010, Milan (Italy)

**Next Generation Cards and Payments Conference and Exhibition**, 25-26 November 2010, Brussels (Belgium)

**Cartes & IDentification 2010**, 7-9 December 2010, Paris (France)

**Omnocard**, 18-20 January 2011, Berlin (Germany), presentation on "Smart Biometrics for trust and convenience", by Mr. Axel Deininger (Giesecke & Devrient)

**RSA Conference USA**, 14-18 February 2011, San Francisco (USA)

**Security Document World 2011**, 4-6 April 2011, London (United-Kingdom), presentation "From Biometric travel document to entry/exit Schengen : where Europe stands today", by Detlef Houdeau (Infineon Technologies)

**PREPAID Conference**, 14-15 June 2011, London (United-Kingdom)

**NFC World Congress**, 19-21 September 2011, Sophia Antipolis (France)

**Smart Event**, 20-23 September 2011, Sophia Antipolis (France)

**Cartes & IDentification**, 15-17 November 2011, Paris (France)

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#### **Assessing Eurosmart's achievements**

#### ***Continuing to improve Eurosmart communication tools***

In 2010-2011, the Eurosmart website was constantly improved in order to better illustrate and highlight the activities of the association, including those linked to the education mission. The home page now includes a special area (the right column shown in the image below) dedicated to Eurosmart's education mission, with a link to Eurosmart publications, the Eurosmart Glossary, training programmes, live demos at Cartes, and Eurosmart member interviews on topics such as

Smart M2M or Biometrics applications.

From **March 2010 to March 2011**, the Eurosmart website welcomed almost **10 000 visitors**.

In order to increase its visibility at international events but also during meetings with partners and institutions, Eurosmart issued an updated Directory in September 2010 and a flyer giving basic information about the association. This work was done by the Secretariat General under the supervision of the Communication Working Group.

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#### ***Eurosmart in the press***

In 2010-2011, Eurosmart continuously communicated in the general and specialized press about its activities and the developments of the Smart Security Industry.

#### **• Communication on Eurosmart's vision on transport**

Eurosmart chairman Marc Bertin wrote an article for the magazine Eurotransport, entitled "*New solutions for a more efficient and coherent mobility network*", which was published in the June 2010 issue of the magazine.

#### **• Partnership with "Smart Cards Trends"**

On the occasion of Cartes 2010, Eurosmart renewed its partnership with the magazine Smart Cards Trends, the November issue of which gave a special space for advertisement of Eurosmart activities at Cartes. Didier Chaudun, member of the eID WG and convenor of the Biometrics Task Force did an interview in Smart Cards Trends on the occasion of Cartes, about the White Paper "Smart Biometrics for Trust and convenience".

#### **• Wide Media coverage on Eurosmart figures**

As every year, the market overview published by Eurosmart is very much looked forward to and quoted by the international – specialized and non-specialized - press, on the occasion of Cartes, but also at the Eurosmart General Assembly in April, when the figures are updated.

#### **• Smart Card Technology**

Eurosmart contributed to the 2010 issue of Smart Card Technology (ID Credentials) with an article on EU developments regarding the Digital Agenda.

#### **• Electroniques**

An interview of Marc Bertin was conducted on the smart security market and major trends.

#### **• ISCAN Newsletter**

ISCAN – the International Smart Card Association Network – continued to publish its quarterly review where all ISCAN members share their respective activities. Eurosmart contributed to the issues in April 2010 and January 2011.