Newsletter, December 2015.

Dear Madam, dear Sir,

This last newsletter of 2015 is the opportunity to take a look back on a very fruitful year for Calypso and it also highlights some key points for the future of Calypso. The creation of Wizway, the launching of a Canadian NFC pilot, the emergence of a standard dedicated to multiservice applications, all these topics fit perfectly well with the orientations that CNA intends to support in the coming years and which lead Calypso to be the Open Source Ticketing Standard.

I will come back beginning of 2016 to these orientations that have been announced during the Open Session, but now let me only wish you a very good Christmas and an Happy New Year. In 2016, we will build all together an even better and open Calypso for the benefice of its users.

Philippe Vappereau

Chairman

2015, a very fruitful year for Calypso

 20 new members, increasing the CNA membership of about 50%, a communication entirely renewed, highlighting the strong on-the –field implementation of Calypso **through videos**, a full **certification process operational**, including functional and RF aspects, the diffusion of the **generic cardlet to more than 20 companies**, some **key promotional events**, such as the Budapest ticketing forum or the Information Day dedicated to consulting partners.

Discover our videos about major Calypso implementations on the Calypso web site
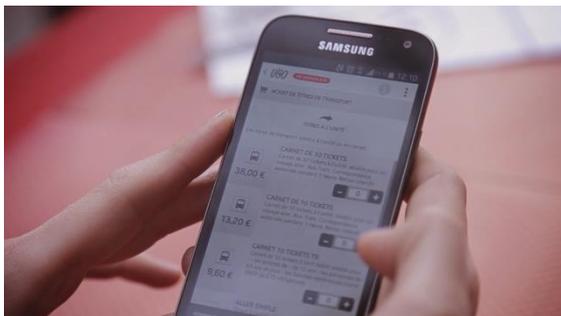

All smartphones Calypso inside in France

 RATP, the Paris transport operator, **SNCF**, the French railways, **Orange**, the mobile network operator and **Gemalto**, the card and digital security company announced, on December 3, that they have formed a joint venture company, **WIZWAY SOLUTIONS**, to develop **integrated contactless mobile ticketing solution**s. The launching of Wizway will be a

key step for the development of mobile ticketing based on Calypso.

Each company will each hold 25% stake in Wizway Solutions, and this alliance is open to other public transport operators and mobile phone operators. Wizway Solutions aims **to develop simple and modern ticketing facilitating door-to-door travel.** Concretely it will bring to travelers the possibility to use their mobile phone to buy and validate dematerialized tickets in all networks which will adopt the Wizway solution. All phones equipped with NFC, the Near Field Communication standard, will be eligible to this new way to access public transport, truly increasing its attractiveness.

The Wizway solution is based on CALYPSO, the international contactless ticketing standard, which is largely deployed in France,

and also in many other countries such as Italy, Belgium, Portugal, Israel, Canada, Mexico, Latvia, Morocco, Algeria, Tunisia, etc. Calypso is the solution answering to the requirements of Wizway thanks to its high level of security and to its easiness to provide interoperability scheme such as TRIANGLE. **The large worldwide deployment of Calypso will enable the Wizway solutions to be adopted internationally in the medium-term**.

Technically speaking, **the Wizway solution integrates the generic Calypso cardlet,** developed by CNA (Calypso Networks Association). This cardlet is **fully certified Calypso rev. 3.1 and by the AFSCM** (Association Française du Sans Contact Mobile). It demonstrates the relevance of the CNA policy to provide a generic application to be downloaded in SIM cards through GlobalPlatform mechanisms.

The Wizway solutions will be experimented in 2016 and a **public rollout is scheduled for 2017, targeting more than 8 million NFC smartphones.**

Canadian pilot for NFC public transport solution

Canadian NFC mobile wallet service Suretap and TSM provider EnStream have completed a proof of concept trial with public transport agency Société de transport de Montréal (STM) that enabled transit passengers to pay fares using their smartphone. The trial was supported by Rogers, Bell and Telus, the three carriers which own both Suretap and

Enstream. It is based on the use of the Calypso generic applet.

"Suretap and EnStream successfully reproduced the purchasing and validation features of STM's Opus smart card on multiple Android mobile devices using NFC technology," Suretap says.

"The work was conducted in a controlled environment for the STM as part of ongoing research and development activities.

Downloading an app that virtually reproduced Calypso-type smart cards such as the Opus card, the initiative tested multiple components of a quick and secure mobile ticketing solution for commuters."

Prototype

"We are excited to be collaborating with STM on this mobile ticketing prototype," says Almis Ledas, president of Suretap and COO of EnStream. "Enabling the Suretap wallet to support transit access is the next major step in the evolution of the mobile wallet."

Rogers launched Suretap in partnership with CIBC in November 2012 and went on to launch a second and separate Suretap mobile wallet service in 2013. The services joined to form part of a new and single Suretap offering in June 2015 between Rogers, Bell and Telus and is now being offered to customers of all participating carriers.

EnStream acts as a single connection point between Canada's card issuers and mobile network operators. MTS and SaskTel became the latest Canadian mobile network operators to launch NFC mobile payment services using EnStream in May 2015. Scotiabank expanded the reach of its SIM-based NFC mobile wallet service to four additional mobile network operators by connecting to EnStream in October.

18th November, 2015, the Calypso Open Session and Awards ceremony

The success of the [Awards ceremony](#) demonstrates the dynamic innovation from the Calypso community, towards multiservice applications, such as **KorriGo from Rennes Métropole** or the diversification of products, such as **Celego, from Gemalto.**

For the third time, on the occasion of CNA annual Open Session, the Calypso Awards ceremony took place on the 18th of November.

The winner of the category **Best Customer Value** was **Rennes Métropole** with **KorriGo Services** and the winner of the category **Best Innovation** was **Gemalto** with **Celego Calypso G1.**

Best Customer Value

KorriGo Services from **Rennes Métropole** is a digital device (card calypso with application AMG) to access the widest range of local services connected to an open source platform designed to guarantee the confidentiality of data.

The other nominees in the Best Customer Value category were:

STM avec OPUS en ligne, qui est un nouveau service qui permet maintenant à nos clients d'acheter leurs titres de transport et de consulter le contenu de leur carte en ligne à partir de leur ordinateur personnel avec l'aide d'un lecteur de carte

Interparking with Pcard+, which is based on the Belgian Calypso implementation Mobib, is a dedicated Parking & Loyalty application was developed around the MPP1 DF. The spirit of a true offline capable Calypso application was implemented in a way that parking transactions are securely stored on the card, allowing secure and flexible access control for cars and pedestrians.

Best Innovation

Gemalto with Celego Calypso G1 which is a product designed by Gemalto, offering an exclusive range of new benefits for Calypso transport systems and local authorities.

The other nominees in the Best Innovation category were:

ADCET with its project: AMG. The objective of the project is to define a new open standard for multiservice applications on cards and mobiles based on Calypso This standard allows the management of any type of services in the territories (cities, universities ...). For example, areas that appear most frequently in the needs study are: Canteens and nurseries, sports and leisure activities, Culture and Tourism, parking, Loyalty programs Physical and logical access control.

Spirtech with Calypso HCE Application has designed an innovative solution to use mobile phones in existing Calypso contactless ticketing networks using the NFC HCE technology.

ASK with HCE MobeePass application can be downloaded on any Android NFC smartphones, whatever telecom operator you may use. With cutting edge secured technology, mobile phone allows the end user to purchase and receive any transport contract. The security is ensured by a highly efficient software secure element associated to a remote security platform. Those contracts are validated through the NFC interface of the

phone, as if they were using regular RFID plastic cards or tickets.

With the intent to reward the actors on the market who contributed to the promotion and development of Calypso, the "Calypso Awards" represent the most prestigious yearly reward. CNA was very happy to see such a wide participation to the Awards and thanks all participants for their work and dedication.

Calypso: a standard also for multiservice applications on smartcards and smartphones

Calypso has been selected as an experimental standard for multiservice applications on smartcards and smartphones following the conclusions of an ADCET workgroup , which brought together numerous local authorities (Rennes, Bordeaux, Lille, Amiens, Lyon, Marseilles, …), universities , transport operators and Calypso Networks Association, and most of smartcard suppliers.
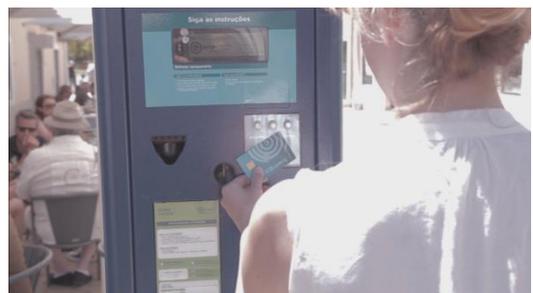

This standard, known as AMG (Generic Multiservice Application), will definitively be recorded by AFNOR, the French standards organisation, at the beginning of next year once the first projects in Rennes and in Bordeaux validate the concept. In parallel the workgroup will pursue its works so that this standard is also recognized at the European level.

This standard allows the management of any type of service by local authorities and universities.

For example:

- Canteens and nurseries,
- Sports and leisure centers,
- Culture and Tourism,
- Parking,
- Loyalty programs
- Physical and logical access control

It was decided to use Calypso as a bearer of AMG data, for several reasons:

- Calypso is used by many public transport systems around the world.
- The organization of Calypso data meets the identified needs.
- The Calypso Applet for mobile phones exists and has been successfully deployed by several Telecom operators.
- The security level is proven.
- Scalability and continuity are ensured by Calypso Networks Association.
- There is a varied and sustainable industrial supply of Calypso products.

Thanks to the existence of such a standard it will be possible to build new technical architectures by ensuring the compatibility of the various components of the systems, and to avoid systems that are proprietary and expensive to maintain.

The potential market in France alone is estimated at several million cards or mobile applications per year.

Several cards suppliers can already supply smartcards compatible with this new standard: Gemalto, Oberthur, Morpho, ASK and Watchdata.