Calypso is the contactless ticketing standard designed by users for users.
WHAT IS CALYPSO

Calypso is an open standard for contactless services originally designed by major transport operators. For more than 20 years Calypso has been used around the world to improve the lives of end-users.

A ticketing standard for many services in the Smart City

BENEFITS & FUNCTIONALITIES

Today, local authorities and transport operators have to rise to the dual challenge of improving the service quality using the new technologies: contactless cards, Internet, mobiles. Related services should simplify end-users daily life, while fostering their loyalty and maximizing their relationship with the services providers. Electronic transactions have a key role to play in order to reach these objectives. For this reason, the technology must be secure and reliable.

Calypso was designed to meet these challenges. It offers the best solution, suited to all needs: open, widespread, secure and proven.

/ FAST & SECURE

Calypso uses up-to-date contactless technology to ensure a complete transaction in the shortest time. Based on a patented procedure, Calypso ensures the integrity of the data written onto the media (card, mobile phone, other device), even if the media is withdrawn too quickly, and leaves the application in a safe state if the communication link is broken between the terminal and the media.

To avoid possible fraud or forgery, CALYPSO ensures that the media, the terminal, and the data are genuine, thanks to mutual authentication. Calypso’s high level of security is reached using secure microprocessor components, Security Modules on terminals, and proven cryptographic algorithms.

/ OPEN STANDARD

The Calypso technology is really independent from industry suppliers. The technology is proposed by numerous industrials, offering a wide and competitive range of multi-source compliant cards and terminals.

Moreover, because of the huge variety of suppliers in the market, this allows different parts of the ticketing system to be assigned to different ones if required. This competition leads to a significant drop in investment costs within the tendering procedures and also enables the possibility to tender for only single elements and components of a ticketing system.

If there is an unfortunate case of a component from a manufacturer not performing efficiently, it is possible to rapidly take on a new supplier who replaces it.
Today it appears new forms of media which may help to simplify the end-users life: NFC phones, dual banking cards (payment and transport), watches and other wearable devices.

Unlike other technologies, Calypso is ready to support all these form factors. A generic applet Calypso is already available, fully compliant with the international standards, easily downloadable onto those new media.

Modern urban living is rapidly changing with new technological innovations, one of which is the possibility to integrate different electronic “on demand” services into one single medium.

Therefore different applications can be brought together into one single device, offering to the citizens in the city the simplest way to access to a wide variety of services in various sectors: car park, bike and auto sharing, carpooling, driving license, tourism, culture and leisure, universities, access control, retail and loyalty...

All these services are in use in many cities which implement Calypso to propose to their citizens the “Urban Pass”: it gives the ability to integrate mobility and banking applications, local authority and public administration service access for the benefit of the end-users.

In the case of public transport, interoperability and intermodality are key issues: end-users require to have a single media to access all the different means of transportation and to travel everywhere in the world.

Calypso technology satisfies those requirements while offering freedom and independence to each operator.

CNA has set up certification programs for media and terminals managed by independent laboratories to guarantee the technical interoperability between the different suppliers.

CNA proposes the TRIANGLE solution, a Calypso application dedicated to international interoperability which allows the end-user to travel seamless everywhere with his own transport card, mobile phone, bank card... For the operators and authorities, it is the simplest scheme of interoperability to implement, without any clearing system.

Calypso benefits from a large and deep footprint in the world with more than 150 million Calypso cards and 490 000 readers in 125 cities and 25 countries among which: Algeria, Belgium, Canada, Columbia, Ecuador, France, Israel, Italy, Latvia, Mexico, Morocco, Portugal, Switzerland, Venezuela...