Calypso®

Mobile Ticketing
Solution with Calypso

Calypso, the perfect solution for Mobile Ticketing

Today it appears new forms of media which may help to simplify the end-user's life: NFC phones, dual banking cards (payment & transport), watches and other wearable devices. Calypso is ready to support all these form factors, and proposes a full set of solutions for mobile ticketing.

CALYPSO GENERIC APPLET FOR SECURE ELEMENT

CNA provides free of charge to its members a generic «Calypso Applet», fully compliant with all international standards, easily downloadable through GlobalPlatform mechanisms on SIM cards from the mobile operators and on embedded SE from the phone manufacturers. The Calypso Applet is not customized for one specific Java platform or another one, and works for each of them at the same level of performances.

The current version is the Calypso REV3.1 Applet Version 1.3.

> The applet supports all non-optional features of the REV3.1 and all options which are compatible with the Java Card environment, except the extended EF feature.

> The functional compliance with Calypso REV3.1 has already been evaluated for several Java Card platforms.

> This new version has been validated by the AFSCM security evaluation.

> Activation modules, dedicated to managing the serial number of each applet and complying with the license policy, are reqiered to activate them after their installation.

CALYPSO HCE SOLUTION FOR NFC DEVICES WITHOUT SECURE ELEMENT

When it is not possible to implement a secure Calypso applet into a SE (Sim card or eSE), CNA has defined an HCE-based solution for Android mobile phones. This solution is based on two documents: the Calypso HCE application specifications and the Calypso HCE Guidelines.

> **The Calypso HCE solution** providers have to fulfill those documents, and especially the security requirements that are described in the Calypso HCE Guidelines. Furthermore, since an HCE solution is software based, it will be always less secure that a "secure element based solution".

> **The Calypso HCE Guidelines** describes also the countermeasure mechanisms that the ticketing infrastructure shall implement to accept an HCE Calypso solution.

In order to ensure a fair ecosystem of Calypso HCE providers CNA provides to each of them a HCE Authorization Module (HAM), to manage the serial number of Calypso HCE application and to perform the cryptography requested for its loading in the mobile phone, based on a PKI architecture where CNA is acting as the Certification Authority.

HCE

Become a member of

Calypso
Networks Association

www.calypsonet-asso.org

@calypsonet_asso

/company/calypso-networks-association

contact@calypsonet-asso.org

+ 32 2 515 31 55

Rue Royale, 76/2 B- 1000 Brussels, Belgium