



## Calypso® Brand Policy - January 1, 2019

### Executive summary

Calypso is a contactless ticketing de facto standard, that provides to all those that have opted for this technology a guarantee of security, interoperability and suitability for competitive tenders. This value proposition has remained fulfilled without fail for twenty years thanks to governance supported by transport operators and authorities, and to a non-discriminatory licensing policy based on specifications and patents. Thanks to this, Calypso users' concerns are taken into account and product compliance is ensured.

The expiry of patents in 2022 posed a major threat to Calypso, regarding compliance with security principles, the ability to interoperate, the emergence of Calypso allegedly compatible products, and potential vendor-locking of solutions.

**Being aware of this risk, Calypso Networks Association (CNA) has thought out and implemented a brand policy which it enforces since January 1, 2019, to guarantee, once patents have expired, the durability of the Calypso standard and its founding principles. This brand policy is based on certification of products being mandatory** in order to be granted the Calypso brand, which is the core of a new licensing scheme for providers (components, contactless cards and embedded software).

**For whoever procures Calypso cards or any other embodiment of a Calypso application (in mobile phones, bank cards etc.), requiring a certificate of compliance with the Calypso specifications now guarantees compliance with Calypso security and interoperability requirements.** Any non-certified product should be considered as presenting a major risk of non-compliance, which might translate in severe failures for the ticketing system.

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*The purpose of this memo is to present the evolution of Calypso, whose use until 2022 is protected by a license based on patents, to a protected trademark that can only be used for certified products.*

*It recalls the principles of the current governance and patent licensing, details the risks incurred by both users and suppliers, with the expiration in 2022 of these patents, presents the brand policy implemented on January 1, 2019, based on the Calypso product certification requirement, and the associated new license. It explains the added value of this license for operators and industrialists, and the missions performed by CNA for the benefit of the community of Calypso players.*

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### **The new Calypso brand policy**

Calypso is a contactless ticketing standard compliant with all international standards. Calypso brings to its users a guarantee of security and interoperability of their ticketing system and ensures that solutions are always at a state-of-the-art technological level.

Calypso licenses are non-discriminatory, fair and reasonable, and in compliance with the requirements of international standards. They rely on patents that will expire in 2022.

Calypso has been used since the beginning in Navigo contactless cards and as part of the Mobile-NFC deployment in the Paris region, in most French regions, e.g. Pass Pass in Lille, Korrigo in Brittany, Ourra in the Rhône-Alpes region and also in Belgium - with Mobib and Interparking, in Quebec with OPUS, in Portugal, Italy, Mexico, Israel, etc. In total, more than 125 networks and cities around the world have chosen Calypso.

The Calypso technology prevents any industrial vendor-locking and allows several suppliers to take part in tenders on equal footing. For more than 20 years, it has enabled operational interoperability schemes between networks. It has never suffered any security failure.

These results were achieved thanks to the commitment of transport operators that got together within the Calypso Networks Association (CNA), and also thanks to the patent-based license, which provides a necessary regulation. Signing a license by manufacturers makes it possible to enforce:

- compliance of product specifications with the Calypso reference specifications,
- compliance with safety rules,
- respect for international standards,

and thus, to ensure the quality and performance of the technology.

The revenues associated with this license make it possible to finance the maintenance and the evolution of Calypso, to remain constantly in line with market requirements state of the art technologies by pooling development costs. They also help to increase Calypso's market-share through promotion to operators, authorities and manufacturers. CNA is able to:

- guarantee the uniqueness of the serial numbers of Calypso products,
- organise and lead working groups that focus on the needs of operators, e.g., regarding the evolution of specifications which is carried out in cooperative mode,
- update the specifications regularly to take into account security and new functional requirements,
- adapt the technology to new uses: mobile ticketing, MaaS, mid-range products, the use of Calypso in ABT schemes etc.
- set up hardware and software certifications,
- provide support and training,
- run a community of users through dedicated events,
- foster the sharing of experience,

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- protect the interests of operators in international bodies,
- promote Calypso internationally.

Each of these missions helps to ensure the sustainability of Calypso technology.

**The end of the current patent-based licensing represents a risk for operators and manufacturers. Without self-regulation and revenues Calypso would quickly lose all its distinctive and invaluable characteristics: security, interoperability, openness and vendor-unlocking. Without an alternative to the current license scheme, CNA would no longer be able to guarantee the durability of Calypso.**

In fact, if nothing were done, Calypso could regress or even disappear, with consequences, both on the technology:

- disappearance of the guarantee of conformity to standards,
- vendor-locking by suppliers,
- appearance of non-compliant Calypso products,
- no shared safety and functional evolution,
- inability to guarantee the uniqueness of serial numbers,

and for networks:

- reduction of the number of suppliers,
- interoperability between multi-vendor systems becoming very difficult to achieve,
- additional costs due to the absence of the shared development costs,
- risk of fraud due to security obsolescence,
- risk on the durability of ticketing investments,
- operational difficulties related to cards using identical serial numbers.

**This is why CNA, the guarantor of Calypso sustainability, has decided to prevent the occurrence of these problems, and is implementing a brand policy based on product certification and a new licensing scheme. As of January 2019, Calypso® becomes a registered trademark that can only be used for products certified by Calypso Networks Association.**

CNA is responsible for the licenses signed by the manufacturers and has delegated the legal and administrative management to Innovatron.

The certification process relies on independent laboratories and certification bodies like Paycert. The complete and up-to-date list of certified products and laboratories is permanently available on [calypsonet-asso.org](http://calypsonet-asso.org). Depending on products, licensing costs are 3 to 10 times cheaper than with the current license. Prices are publicly available on [calypsonet-asso.org](http://calypsonet-asso.org)

Producing and selling Calypso® products based on this license putting suppliers on an equal footing, it becomes possible to mandate Calypso product certification in tenders, in accordance with European procurement rules.

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**For clients (transport networks), asking for Calypso® certified products means:**

- ensuring the compliance with the standard in terms of performance, security and interoperability,
- not needing to manage the qualification process of portable objects,
- benefitting from a pool of trusted suppliers.

**For suppliers, offering Calypso® certified products allows:**

- to avoid unfair competition for products that are marketed as Calypso, but are in fact not certified,
- to have access to public procurement without discrimination,
- to benefit from the support of a community of ticketing experts.

As the owner of the Calypso brand, CNA will provide protection using the legal means available.

With this brand policy and the new associated licensing scheme, the objective of CNA is to guarantee the durability of Calypso, for the benefit of all, through a continuous process of improvement and modernization, fully consistent with its open source policy. Thus, the guarantee of quality and performance, which is the core commitment of Calypso, will be maintained, and even enhanced, as the number of suppliers increases following the emergence of open source solutions.

**Philippe Vappereau**

Chairman Calypso Networks Association

