WHY

We cross borders much more easily than before and the distance we cover increases. If you live in Brussels, then London, Paris and Amsterdam are all within two hours reach! These cities each require you to use different electronic ticketing schemes: MoBiB, Oyster, Navigo, ((eTicket and OV-Chipkaart.

Now you may ask: “who needs interoperability, I hardly ever travel to all these places?”. Probably true, but it is very likely that you do travel regularly to neighbouring cities! From there, other people travel to other cities and so on. In this way Amsterdam is linked to Paris and London to Munich, making them an integral part of your “Greater Region”.

Besides, if you drop the e from eTicketing, there is already a high degree of all sorts of interoperability, for example, lîle-de-France since 1977, the Netherlands since 1980, and the many Verbünde in Germany, etc.

In 2007, UITP published a Focus Paper “Everybody Local Everywhere” which strongly recommended searching for some level of interoperability between the many different emerging electronic ticketing systems within the Greater Region(s) of Europe. In 2008, this was the starting point for the European IFM-Project on Interoperable Fare Management (Where “Fare” in fact stands for “electronic ticketing systems”). Focus was given to the topics of Trust and Privacy, the Medium (previously “card”), Organisation and the Back Office.

The project ended successfully in June 2010 with consensus on a first step towards customer delivery: to use their own medium (smartcard) eTicketing at their destination by downloading the local application (scheme) on compatible media...

WHAT

The world we live in is getting smaller and smaller. We cross borders much more easily than before and the distance we cover increases. If you live in Brussels, then London, Paris and Amsterdam are all within two hours reach! These cities each require you to use different electronic ticketing schemes: MoBiB, Oyster, Navigo, ((eTicket and OV-Chipkaart.

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WHO

Some members of the IFM-Project were already involved through UITP from as early as 2005. In those days, there were very few experts with profound knowledge of the architecture of schemes other than their own! Today the situation is better and rather friendly, even cooperative.

The IFM-Project united representatives from the national scheme in the UK (ITSO) and ((eTicket Germany, and the many local and regional CALYPSO based schemes (through RATP and SNCF). Two universities in Paris and Newcastle completed the consortium.

The IFM-Forum, a “mirror group” of further stakeholders, enables many others to participate: from the Dutch OV-Chipkaart and the Swedish Resekortet to ATAC in Rome and JR East in Japan, all together participants from 21 countries. The IFM-Project was co-funded by the EC with 740,000€ for the duration of 30 months.

WHEN

The question of when entirely depends on your eagerness to be involved. Already at the IFM-Forum in May 2010 it was shown that ITSO, VDV and Calypso can adapt their applications to be downloaded onto, and co-exist on one multi-application card/medium. It should be possible to issue these EU-IFM Media within the next two years. However, concrete developments will greatly depend on further EU funding.

A logical step would be to offer an internet portal from which the compatible applications can be downloaded. A further three years may be required to develop a generic EU-IFM Application for standardised types of products (e.g. a single ticket or a one-day pass).

A further step could be to include the customers’ statutes (profile, address, credit, etc). A common stored value or common fares could come next, as local operators and authorities will agree about it!
The IFM-Project has defined two tracks for the global road map to European eTicketing interoperability (here is a selection):

**Track 1: Priority Lane for quick wins**

a) Interoperability through common multi-application processes to allow the customer to continue using his media even outside his home networks. Coexistence of multiple ticketing applications on the same media is the fastest and more cost effective way to enlarge interoperability. It enables every participating IFM to keep on using its existing infrastructure and products. The common European approach is shouldered by a voluntary group of IFM-Alliance members which organises rules & regulations.

b) Common portal for remotely loading local applications - Once the EU-IFM media are issued, customers can download the applications they need.

c) Updating and harmonisation of current standards to support EU-IFM - Links to emerging technologies must be facilitated (NFC, EMV, etc.) and new roles must be defined (media, secure element, etc.).

**Track 2: Long Haul towards long term vision**

d) Development of a common EU-IFM Application – which can be loaded onto a variety of media such as mobile phones, bank cards and for example USB-keys. The owner of this application, security management and set of rules will have to be agreed upon.

e) Develop common Products – to obtain synergy effects in the area of organisation, back-office functions and business models.

f) Develop a commercial and technical framework - for the sales and settlement of EU-IFM Products.

Privacy is key to customer and operator acceptance. Protection of privacy is an ethical requirement of confidentiality, unlinkability, unobservability and anonymity. Agreements can be of two sorts: a “privacy charter” (vowing to be privacy respectful parties) and “privacy by design” (ensuring absolute data isolation through system architecture).

Action lists are available from the IFM-Project web site (see Deliverable D7.3).

### Today

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<td>EU-IFM media, Multi-application</td>
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<td>Common processes and development</td>
<td>Common processes and development</td>
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### 2 years

### 5+ years

**FORUM**

The first UITP IFM-Forum convened in September 2007 just before the official IFM-Project started. Until the IFM2/pilot project is a fact, UITP will continue to organise the forum and support this platform for IFM stakeholders.

The main topics on the agenda will be in support of the current IFM network which is providing direction, coordination, networking and exchange of best practices and implementation in planning the IFM initiatives (for example in setting up the IFM-Alliance). UITP would be pleased to see its European IFM-Forum collaborate with other major world regions.