



Multimodality for people and goods in urban areas

FP7 . CP 284906

WP1 – Second Technical Quality Report

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Editor: T. Nagellen / France Telecom

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Instant Mobility WP1

Second Technical Quality Report

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| Authors | T. Nagellen – France Telecom |
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Deliverable Abstract

This Technical Quality Report provides a management level overview of the quality process within the project, the identification of quality related problems encountered during the project and the remedial action taken

This document describes the main risks that the Instant Mobility consortium had to manage during the two years duration, especially related to Programme activities which were organized in different ways by key projects as FI-Ware and Concord. The involvement of Instant Mobility partners into the relevant Governance Bodies (Steering Board, Architecture Board) had an impact on the internal management of some specific tasks, especially to contribute in a better way to the programme spirit and results and to take benefits for Instant Mobility objectives of some collaboration results.

To understand the broad range of topics covered, it is sufficient to note that Instant Mobility objectives were impacted first by the definition of three development scenarios, which do not fully match with the initial prototype vision but were the results of a common work on identification of major issues for innovative multimodal services:

- Personal Travel Companion
- Smart City Logistics
- Transport Infrastructure as a Service

And the inclusion of FI-Ware Generic Enablers available through the release 1 in August 2012 required communication, definition of a common knowledge with external partners, not only from FI-Ware consortium but also other Use Case projects. This new knowledge built especially through the Architecture Board in a first step was then shared through interactions which happened during Architect Week and Webinars. It is not obvious for Instant Mobility consortia focusing on its own priorities and specific enablers to quickly integrate this new knowledge in the final results.

Instant Mobility consortium expects that all public deliverables will be useful to enhance creativity and development of new multimodal services in Future Internet PPP phase 2 and phase 3 and that the most relevant tools which were put in place at the programme level during these two years will be maintain and reinforce in the future

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1. Introduction

This report describes how the Instant Mobility consortium applied the “Instant Mobility Quality report” to:

- Manage in the best way potential deviations regarding the original GANTT,
- Assume to deliver good results,
- Contribute actively to cooperative actions at program level.

This report describes also some corrective actions the Project Management Committee validated based on Work Package Leader recommendations to improve the Quality process and enhance the team spirit.

Some of the major issues regarding quality improvement of Instant Mobility project are the collaboration activities which are divided in three categories:

- Collaboration with FI-Ware: technical requirements and use of Generic Enablers
- Collaboration with use Case projects: identification of commonalities
- Collaboration with Infinity: identification of interesting infrastructures

Another main point is the adoption of common tools for the description of scenario and technical specification to improve technical consistency.

Programme collaboration took time to be really useful but some relevant Working Groups were put in place during the second year of the project and communication actions from FI-Ware project were also fully appreciated to better share a common technical knowledge between all projects.

2. Progress and results monitoring

Since the beginning of the project, a PMC took place each month to manage collaboratively with Work Package Leaders (WPL) the main technical and administrative issues. All topics were discussed and any some actions were scheduled to resolve the identified issues.

The additional planned long term progress monitoring tool was the Activities and Resource Reporting, which should take place every 4 months but this activity was aligned during this first year with the first review, which occurred at month 6, and to prepare the first year review to avoid any administrative overhead for all Instant Mobility partners.

Based on the initial GANTT chart, Instant Mobility project defined seven milestones. Three milestones MS1, MS2 and MS3 occurred during the first year of the project, and four other milestones MS4, MS5, MS6 and MS7 have been planned for the second year.

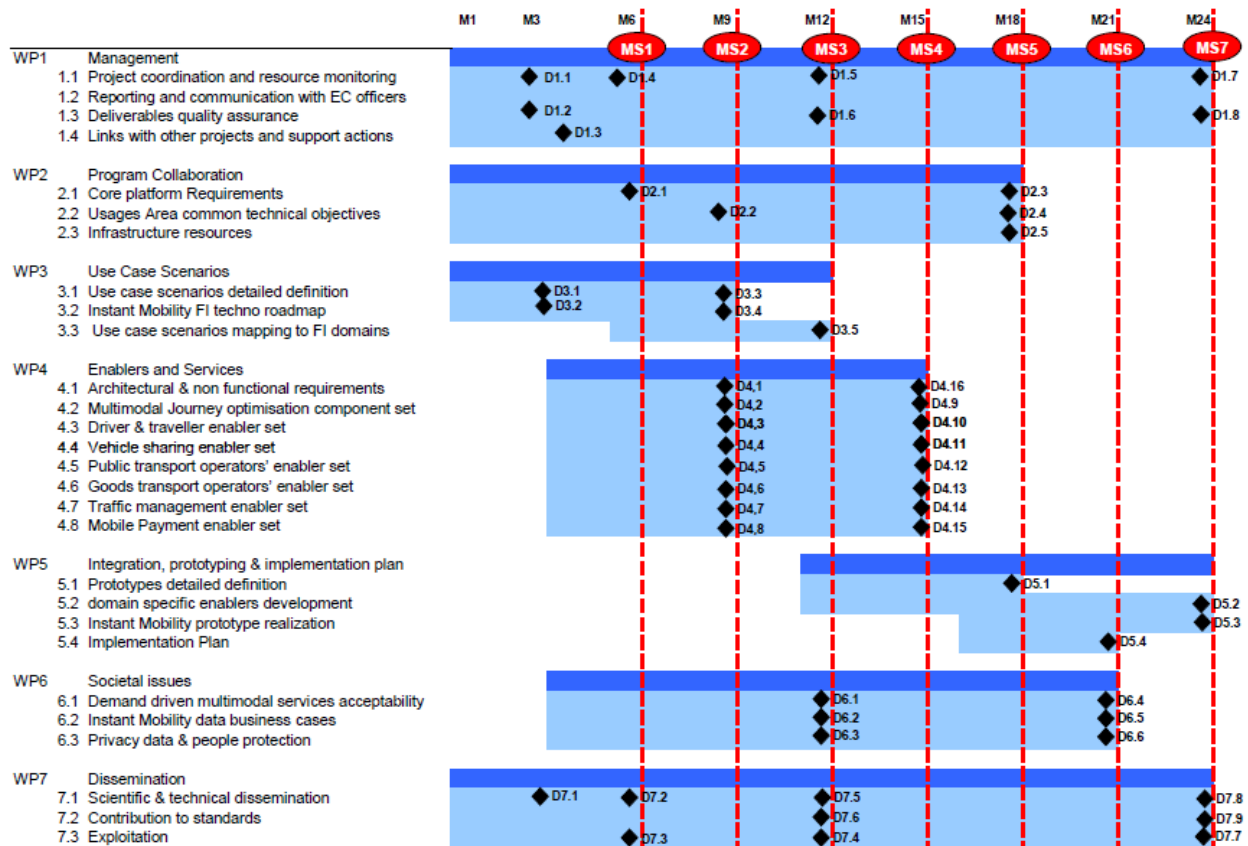


Figure 1: Instant Mobility initial GANTT

2.1 First year achievements: April 2011 – March 2012

The main achievements expected for the first year are related to these first three milestones:

| | |
|---------------------------------|--|
| MS1 Initial requirements | Planned M 6 |
| Objective: | Delivery to program level of Instant Mobility initial requirements |
| MS2 Scenarios | Planned M9 |
| Objective: | Final version of use case scenarios |
| MS3 Societal Issues | Planned M12 |
| Objective: | Initial recommendations on acceptability requirements |

MS1: Initial requirements

This milestone refers to the first visible impact that the Use Case Project Instant Mobility could have on the Future Internet Program providing first functional requirements to FI-Ware project. These first requirements should improve the understanding at the program level of generic technical needs to support multi-modal services and how these generic needs could be shared with some other Use Case projects.

The first requirements were provided on time using the Agile Methodology and a tracker system negotiated at the Architecture Board (consensus process which required 2,5 months) and instantiated by FI-Ware project.

The Instant Mobility partners had to learn the Agile Methodology as described and applied by Architecture Board members, especially FI-Ware project, and then delivered Instant Mobility requirements into the common tracker system. All requirements described as EPICS were delivered on the FI-Ware wiki for end of September 2011.

This delivery was supported by the first Instant Mobility scenarios draft descriptions all partners shared during the General Meeting held in Brussels in September 2011.

MS2 Scenarios

This milestone refers to the final version of the envisaged Use Case scenarios. The initial vision of the project was to focus on five lead scenarios:

- multimodal travellers (using several means of transport during the same journey)
- car drivers and passengers
- public and other collective transport operators, including taxi fleet operators
- truck fleet operators and the distribution industry
- road operators and traffic managers

But one of the objectives of Instant Mobility was also to enhance the collaboration between Transport stakeholders and ICT companies.

Based on the first descriptions of these five lead scenarios into 37 elementary services, it appeared that we had to revise this subdivision into 3 new scenarios called “development scenarios”. These new scenarios would gather the most innovative topics of the previous lead scenarios to support a better definition of the envisaged prototype Instant Mobility team has to define in Work Package 5.

To deliver this new vision and to try to integrate some dimensions provided by the other projects (FI-Ware: which are the most relevant generic enablers, other Use Case projects: some services commonalities), this milestone was delivered with **2 months delay at month 11**.

MS3 Societal Issues

This milestone refers to the preliminary report of Instant Mobility multimodal services acceptability survey. This survey was originally planned for January 2012. The quality of results is of course related to the quantity of answers not to reach a statistical point of view but to integrate the diversity of the European stakeholders involved in Instant Mobility: Istanbul (Turkey), Roma (Italy), Nice Côte d’Azur (France) and Trondheim (Norway).

Based on some methodology changes, the first survey was on-line end of February so the first results are available but with a very rough analysis.

But when the project expects to have between 800 and 1000 answers, we reach more than 4000 answers with only Istanbul, Roma and Nice Côte d'Azur.

Two other surveys are planned to complete these results: Trondheim (as expected) and Toledo (associated member). These two on-line surveys will provide better understanding of European acceptability for Instant Mobility services.

Feedback on these first milestones:

MS1: if Instant Mobility delivered on time its first requirements, the process based on the tracker system and virtual exchanges with some technical people from FI-Ware project did not provide the expected feedback, first because of the gap between the functional descriptions provided by Instant Mobility and the very detailed technical description expected by FI-Ware project, second because of the delay between EPICS submission and some exchanges required to clarify requirement at a technical level. This misunderstanding between the two projects, Instant Mobility and FI-Ware, introduced also some delays for some deliverables (technical description of expected Generic Enablers not available or requiring deep analysis).

MS2: to share different view between transport stakeholders and ICT Companies took more times than expected but we consider that this was a fruitful operation to clearly identify what are the main innovative topics that Instant Mobility could bring to the market and could be experimented in the next phase.

MS3: to define the right methodology to study the main acceptability topics required more time than expected, especially to define a questionnaire which could be relevant for the different countries and associated transport culture. Based on the number of answers Instant Mobility could collect and as we are able to involve also an associated member to investigate some usage in another country (Spain), we consider that the delay will be profitable for the second year of the project.

2.2 Second year achievements: April 2012 – March 2013

MS4 Enablers specifications (M15)

This milestone refers to the delivery of final version of enablers specifications via D4.16. The initial vision of the project was to describe the overall technical specification for the Instant Mobility domain-specific platform. It will include in a structured way all the detailed specifications for the expected enabler sets especially regarding their potential integration with Fi-Ware Generic Enablers.

If there were seven identified enabler set at the beginning of the project:

- Multimodal Journey optimisation enabler set
- Driver & traveller enabler set
- Vehicle & handheld devices enabler set
- Public transport operators' enabler set
- Goods transport operators' enabler set
- Traffic management enabler set
- Mobile Payment enabler set

At month 12, the partners have defined three main development scenarios:

- Personal Travel Companion
- Smart City Logistics
- Transport Infrastructure as a Service

The Instant Mobility consortium had to initiate a matrix approach between the Use Case approach and the technical approach to identify where the major technical issues are and how they could impact the detailed technical specifications.

In parallel, a lack of detailed description of Generic Enablers features push partners to provide an update of WP 4 deliverables for month 18, after the official delivery of Fi-Ware testbed and availability of documentation for each Generic Enabler instance.

Partners decided earlier (June 2012 – General assembly – Istanbul)) that the Mobile Payment enabler set was not the most relevant part regarding the 3 development scenarios.

MS5 Prototype definition (M18)

This milestone refers to the delivery of Instant Mobility prototype description. The initial content of this prototype included four key dimensions:

- Real-time multi-modal navigation and planning
- Open portable Mobile framework
- Multi-modal automated electronic payment system for mobile users
- Multi-modal freight information subsystem for urban areas.

The expected prototype should also prioritize the most critical and innovative aspects and functions of the Instant mobility Use Case scenarios and should reflect a subset of the specifications that is necessary to validate. At last but not least, the expected prototype should orchestrate Generic Enablers from the Core Platform and Instant Mobility specific enablers in a common implementation.

MS6 Data Business Cases (M21)

This milestone refers to the delivery of Data Business Cases for Transport in Urban Areas. The Instant Mobility consortium has planned to describe a collection of business cases instead of a virtual new business model, taking into account the results at MS2 (Scenarios).

Since the beginning of the project, it was agreed between partners that each of them would bring its own knowledge and business perspective to take benefits of Future Internet technologies. It was also expected that Instant Mobility Data Business Cases would take into account all data provided and consumed by all actors of the multimodal value-chain to create a new added-value for innovative services. These Innovative services could be relevant trials for Future Internet PPP projects in phase 2 and in phase 3

Data Business Cases should also include a new vision of the value-chain and how it could evolve based on the major trends emerging with the new usages on top of Internet

MS7 Exploitation plan (M24)

This milestone refers to the delivery of the exploitation plan of the project which should integrate the relevant scenarios, the results of the prototype and the vision developed into Data Business Cases as well as the feedback of Acceptability survey.

Feedback on these four milestones:

MS4: The Instant Mobility consortium had to initiate a matrix approach between the new Use Cases elaborated in Work Package 3 and the expected technical approach to identify where the major technical issues are and how they could impact the detailed technical specifications.

In parallel, a lack of detailed description of Generic Enablers features push partners to provide an update of WP 4 deliverables for month 18, after the official delivery of Fi-Ware testbed and availability of documentation for each Generic Enabler instance.

Using Enterprise Architect was very useful to describe with lots of details the technical specifications per expected enabler sets and to integrate Generic Enablers specifications.

Instant Mobility consortium had two main difficulties to finalize in a good way the technical specifications: first the dichotomy which happened between the expected enabler sets and the 3 development scenarios which are not fully aligned with the initial vision of the project and second, the lack of detailed specifications from Fi-Ware Generic Enablers, at least time for Instant Mobility partners to acquire enough knowledge about them. Because of the Architect weeks happened in May and June 2012, and despite there were really useful, new Fi-Ware documentation was planned for July and August (software documentation) which were key to finalize the technical specifications. In parallel, the first Open Call of Fi-Ware has just been closed and some additional Generic Enablers could be useful in the specific case of multimodal services.

Instant Mobility partners agreed that an update of the technical specifications are required for month 21 to include some last improvements based on Instant Mobility prototype description and Fi-Ware Generic Enablers availability.

Another decision taken in June 2012 (General assembly – Istanbul)) is that the Mobile Payment enabler set was not the most relevant part regarding the 3 development scenarios and the expectations for the Instant Mobility prototype and that this part would not be integrated because no major challenge has been identified.

Based on exchanges which happened during Architecture Board, the high expectations the Instant Mobility consortium had especially regarding DDS Generic Enabler cannot be satisfied because new partners proposing this technology would not be involved early enough.

A process was managed to evaluate the interest of Use Case projects in the use of Fi-Ware generic Enablers. The first step was managed after the Architect weeks (May and April 2012) when Instant Mobility partners had a better understanding of features and capabilities of Fi-Ware generic Enablers, and a second round was managed between October 2012 and March 2013 when first the Fi-Ware testbed was operational and open to Use Case projects, and then after Webinars organized by Fi-Ware partners to explain how FI-Ware Generic enablers instances (GEi) are really working.

End of October, Instant Mobility decided to analyzed in depth how these GEi could be useful and support Instant Mobility development scenarios. So Instant Mobility analysis focused on a short-list of GEi and the work was distributed between different partners.

| GE Name | Fi-Ware Chapter | Evaluators |
|--|-----------------|----------------------------|
| Location Server - LOCS | DCM | Thales |
| Identity Management - DT GCP | Security | Volvo |
| Identity Management - NSN One-IDM | Security | Telecom Italia; Volvo; DLR |
| PubSub broker-Samson | DCM | France Telecom; Thales |
| Pub/Sub Context Broker - TI Context Awareness Platform | DCM | France Telecom; Thales |
| Semantic Application Support | DCM | Thales |
| Object Storage GE - FI-WARE Implementation | Cloud | Thales |
| Data Handling - PPL | Security | Thales |
| Service Description Repository | ASE | Telecom Italia |
| Complex Event Processing - PROTON | DCM | France Telecom |
| BigData Analysis - SAMSON BigData Platform | DCM | Thales, Volvo |

This approach was explained to other Use Case project during the Architecture Board in Saarbruck (November 2012).

MS5: Instant Mobility prototype description

Meetings were organized to define what could be implemented taking into account that the DoW described that Instant Mobility partners have to focus their efforts on critical functions which should be grouped in the following four key categories of the Instant Mobility vision:

- Real-time multi-modal navigation and planning
- Open portable Mobile framework
- Multi-modal automated electronic payment system for mobile users
- Multi-modal freight information subsystem for urban areas.

In fact the Open portable Mobile framework was implemented for the demonstration in the ITS Vienna conference, demonstration supporting MirrorLink framework to use directly smartphones resources as communication facilities inside the car, without putting any other specific communication block in the vehicle.

Regarding the 3 developments scenarios identified in WP3, some actions were required:

- Personal travel Companion
- Smart City Logistics
- Transport Infrastructure as a Service

Some partners who were more involved in these scenarios were involved in the prototype definition. The real-time multimodal navigation and planning feature is fully integrated into the Personal Travel Companion scenario so the initial work on this part was aligned and was also demonstrated in the ITS Vienna Conference.

Taking into account comments received in December after the M18 review, additional work have been re-planned to revamp the development using FI-War GEs and to demonstrate it in the Mobile World Congress in Barcelona (February 2013).

For the multimodal freight information subsystem for urban areas, some features from the Smart City Logistics scenarios were selected (Volvo and DHL involvement) especially to focus on “Load sharing and optimizing”, “Dynamic time/place drop point”, and “Eco-optimized driving, vehicle and driveline control”. The link with the potential “legacy system” using traceability of parcels was discussed but not maintain in the prototype definition. It seems more relevant to show how algorithms developed for the Personal travel Companion could be also used in Smart City Logistics services and how the right information could circulate in real-time between drivers and fleet managers to optimize the delivery journeys and for a better management of environmental conditions and impact of vans and trucks on it.

MS6: Data Business Cases

This milestone was not met because two main reasons: first internal delays to collect the relevant inputs from partners because the new scope of the three development scenarios, second to contribute and benefit of the Exploitation and Business Model Working Group put in place by Concord project.

If the consortium had defined initially this task WP 6.2 and this milestone to provide some Data Business Cases which should be useful either in phase 2 (early trials) or in phase 3 (SMEs involvement), there were high expectations of the interaction between business partners and local authorities to include in these Data Business Cases potential impacts of new trend as Open Data or Social Networks from regulation and business point of view.

Some internal weaknesses have been identified and some of them were partially balanced by the collaboration between Use Case projects in the EBM WG:

- Lack of regulation inputs because only one partner was really a Local Authority (NCA) and it is difficult to involved people who are lawyers in an ICT project.
- Heterogeneous legal framework between the different countries and Local Authorities or their representatives
- Lack of knowledge on how to use and involved Social Networks in business activities and not for communication or advertising
- Lack of B2B partners involved in Instant Mobility to target correctly some specific business constraints (logistics area)

Despite these weaknesses, a stronger involvement happened during the last quarter of the project, especially because the potential innovative results seems more concrete and explicit for many partners, based on the prototypes shown at MWC2013.

MS7: Exploitation Plan

The main expectation Instant Mobility partners had put in this specific milestone was, beyond classical partners Exploitation Plans, an more ambitious Exploitation Plan including potential cross-fertilization with

some other vertical sectors (business commonalities with other Use Case projects) and an innovative view of taking advantage from FI-Ware Generic Enablers to launched a new ecosystem around multimodal services. Through the definition of WP 6.2 Data Business Cases, it was admit at the beginning of the project that multimodal services should use and produce many different data and that sharing these data should renew the added-value brought by many actors involved in this value-chain.

Difficulties and delays to obtain a better understanding about these interactions had a strong impact on the planned Exploitation Plan. Instant Mobility partners expects that their final results could be reused to improve this vision and that some new actions could be based on the common Position Paper elaborated by the EBM WG and delivered in April 2013.

The relevance of some business commonalities identified with the other Use Case projects should be also detailed in the light of the prototypes each of the 8 projects will delivered in March 2013.

Instant Mobility partners recommend that a specific action should be managed by the EBM WG to prepare and support the launch of Future Internet PPP phase 3.

2.3 Program collaboration

Program collaboration is one of the main challenges for all projects involved in the Future Internet program and this collaboration need some improvement regarding Instant Mobility objectives and resources management:

The collaboration, as defines into the Collaboration Agreement, is essentially based on two bodies: the Steering Board and the Architecture Board.

The Steering Board targets some strategic issues and involved 2 people from Instant Mobility: the Project Coordinator and a Stakeholder Representative. This board can also decide the creation of some Working Groups which could target some relevant issues at Program Level.

No working groups were active during the first six months but some are now running and would enhance and consolidate the program view for some topics as “standardisation” or “involvement of new stakeholders” to improve Future Internet program impact.

The Architecture Board manages the technical decisions to share between the Core Platform Project and the Use Case project, and involve for Instant Mobility the Technical Manager and Work Package 4 representative in charge of Instant Mobility Architecture description.

But after two months, another board appeared: the Concertation Board. This new body concentrate some efforts to optimize the support of the Support Action Infinity to deliver the best view of stakeholders’ involvement and some relevant actions to prepare the next phases of the Future Internet program.

All the actions and contributions regarding the different programme governance bodies have an impact on Work Package 2 activities and during the second year of the project on WP4, WP5 and WP6 results these different Work Packages having to include some collaboration results in their respective deliverables.

Meetings

- Steering Board and Architecture Board have monthly meetings which are mostly remote meetings for the Steering Board and face to face meetings for the Architecture Board, especially because the technical topics required more time to reach a consensus between nine projects.
- The Concertation Board meetings are organized every 3 or 4 months which very specific topics as the identification and description of all relevant technical environments identified by the Use Case projects, or the main Security and Privacy issues for each project.

2.3.1 Feedback on program collaboration during first year

- Contribution to Steering Board and Architecture Board improve Instant Mobility understanding of other projects objective and how we can identify some commonalities (technical enablers, potential cross scenarios)
- These activities are time consuming, are not fully integrated into the initial GANTT and the impact on Instant Mobility deliverables was under evaluated.
- To reach decision by consensus implies some delays on technical or strategic decisions which at the end impact Instant Mobility deliverables. Typically, it required more time than expected to organized some Use Case projects meeting to share potential cross-related topics (Steering Board action) or to define a common process to submit technical requirements (Architecture Board action – 3 months)
- Difference between Milestones and Deliverables: the Description of Work tries to synchronize all projects on the same milestones without to integrate which are the respective deliverables. To be able to share a common planning, exchange deliverables descriptions should improve the collaboration and define new milestones which could be really shared by all projects. Instant Mobility deliverables are too related to expected results from collaboration (FI-Ware technical description, collaboration with other Use Case projects) which implies delays which are difficult to manage.

2.3.2 Feedback on program collaboration during second year

- Instant Mobility contributed to the Steering Board and to the Architecture Board during the second year. A new representative was named for the Architecture Board especially to reflect WP4 requirements (J.M. Dautelle- Thales) in addition how the 2 other people (France Telecom representative and DLR representative). Telefonica representative continue attending the Concertation Meeting organized by Infinity project.
- Launched in January 2012 based on Instant Mobility request, dedicated meetings were organized during the first semester of 2012 between Use case projects to identify business and technical commonalities. This meeting cycle stopped quickly because of the second call and the creation of new consortia.
- A new Working Group was set, Exploitation and Business Model Working Group (EBM WG) which was really operational between September 2012 and April 2013. While it was initially planned that the Instant Mobility representative should be the Exploitation Manager, it seemed more relevant involving WP6 partners who are involved in the WP 6.2 task, Data Business Cases.
- The standardization did not have any concrete activity because of the lack of involvement of many Use Case projects.

The main conclusions regarding collaboration at programme level are that some relevant actions as the EBM Working Group were really operational too late to provide all the expected support but this EBM WG was really useful and should be maintained for phase 2 project to support a better programme dissemination and exploitation plan. If some gaps have been identified between FI-Ware and Instant Mobility milestones, this second year was much more operational, Architect Weeks and Webinars providing lots of content for a better understanding about Generic Enablers. The last small gap related to Instant Mobility roadmap was between prototype definition and prototype development and Generic Enablers instances availability, which were difficult to introduce properly in Instant Mobility developments.

Two main events impacted concretely programme collaboration as it was expected by Instant Mobility partners. Publication of the competitive call for Future Internet PPP phase 2 stopped communication between the Use Case projects, except in the official bodies (Steering Board and Architecture Board) but focusing on very specific points which did not support a potential cross-fertilization. Then, the difficulties met by Concord project along the second semester of 2012 delayed many actions as EBM WG or Standardization WG which did not provide the expected results.

3. Quality Plan improvement

3.1 Mailing-lists

To improve communication inside Instant Mobility Consortium, mailing-lists have been put in place. The guidelines to create a mailing-list or add new members are available on the internal project website (www.projectplace.com) so each Work Package or Task leader can create a dedicated mailing list for technical purpose.

The main mailing-list is main@instant-mobility.org to target discussions on topics of interest for the whole consortium.

Project lists are private lists, which mean that the list of members is not available to non-members. To see the collection of prior postings to the list, visit the WpX Archives but the current archive is only available to the list members.

These mailing-list guidelines have been integrated into the Instant Mobility Quality Plan.

3.2 Use Case numbering

As Instant Mobility consortium has to differentiate initial lead scenarios and development scenarios, and to improve readability of technical sequence diagrams, a new proposal for application numbering and Use Case codification was introduced:

WP3 scenarios were numbered :

- SC1: Personal travel companion (Prefix SC + scenario number)
- SC2: Smart city logistics operations
- SC3: Transport Infrastructure as a Service

Applications under scenario are also codified with scenario number, e.g. :

- AP1A Dynamic multi-modal journey (prefix 'AP' + scenario 1 + application letter A, B, C, ...)
- AP1B: Dynamic ride sharing
- AP1C: Optimized public transport usage
- AP1G: Ticketless Mobile Payment

Use Cases are codified depending on the 'application' codification they belong to, e.g. :

- UC1A.01: Plan Future Journey (Use Case prefix UC, scenario 1, application A, sequential numbering on 2 digits starting with 01)
- UC1A.02: Plan Immediate Journey
- ...
- UC1B.01: Maintain driver itinerary

Services in Service Model diagram are codified using SV+, taking into account application codification.

- SV1A.01: service prefix SV, scenario 1, application A, sequential numbering on 2 digits starting with 01

Use case numbering has been integrated into Instant Mobility Quality Plan.

3.3 Deliverables internal peer review

To optimize the internal review process, peer reviewers have been appointed for all deliverables Instant Mobility has to deliver during the project. This list is available on the internal project website for all deliverable editors.

| Delivery date | Deliverable name | Responsible partners | Internal reviewers |
|---------------|---|----------------------|--------------------|
| M3 | D1.1 - quality plan | FTE | Thales, DLR |
| M3 | D3.1 - Use case scenarios v1 | Ertico | FT, Ericsson |
| M3 | D3.2 - Technologies roadmap v1 | FTE | Mizar, VTT |
| M3 | D7.1 - project website | VTT | ISBAK, ATAC |
| M4 | D1.2 - leaflet | Ertico | Pertimm, NCA |
| M6 | D1.3 - management report | THS | ALL |
| M6 | D2.1 - Requirements v1 | TID | Volvo, IFSTTAR |
| M6 | D7.2 - Dissemination plan | Ertico | CRF, FT |
| M6 | D7.3 - Exploitation plan | Ertico | DHL, STVEG |
| M9 | D2.2 - shared usage areas commonalities | FTE | CEA, Ertico |
| M9 | D3.3 - use case scenario final report | Ertico | TID, DLR |
| M9 | D3.4 - technology roadmap final report | FTE | Navteq, Ericsson |
| M9 | D4.1 - global architecture | DLR | TLI, Thales |
| M9 | D4.2 - Multimodal Journey optimisation enablers specifications v1 | IFSTTAR | CEA, FT |
| M9 | D4.3 - Driver & traveller enablers specifications v1 | NAV | Mizar, DHL |
| M9 | D4.4 - Vehicle sharing enablers specifications v1 | CRF | Pertimm, Volvo |
| M9 | D4.5 - Public transport operators' enablers specifications v1 | THS | CRF, VTT |
| M9 | D4.6 - Goods transport operators' enablers specifications v1 | Volvo | STVEG, Ertico |
| M9 | D4.7 - Traffic management enablers specifications v1 | MIZ | Navteq, Valeo |
| M9 | D4.8 - Mobile Payment enablers specifications v1 | TLI | TID, IFSTTAR |
| M12 | D1.4 - management report | THS | ALL |
| M12 | D1.5 - technical quality report | FTE | Ericsson, Valeo |
| M12 | D3.5 - use cases requirements | Ertico | ATAC, NCA |
| M12 | D6.1 - multimodal services acceptability report v1 | IFSTTAR | Mizar, DLR |
| M12 | D6.2 - Data Business Cases for Transport in Urban Areas report v1 | FTE | TLI, Ertico |
| M12 | D6.3 - Multimodal services in a city: security and privacy challenges report v1 | THS | ISBAK, Pertimm |
| M12 | D7.4 - Exploitation plan v2 | Ertico | Volvo, DHL |
| M12 | D7.5 - scientific results v1 | VTT | IFSTTAR, CRF |
| M12 | D7.6 - Standardization & regulation recommendations report v1 | FTE | CEA, Thales |

Table 1: Peer review of deliverable First Year

| Delivery date | Deliverable name | Responsible partners | Internal reviewers |
|----------------------|--|-----------------------------|---------------------------|
| M15 | D4.9 - Multimodal Journey optimisation enablers specifications v1 | Thales | CEA, FT |
| M15 | D4.10 - Driver & traveller enablers specifications v1 | TLI | Mizar, DHL |
| M15 | D4.11 - Vehicle sharing enablers specifications v1 | CRF | Pertimm, Volvo |
| M15 | D4.12 - Public transport operators' enablers specifications v1 | THS | CRF, VTT |
| M15 | D4.13 - Goods transport operators' enablers specifications v1 | Volvo | STVEG, Ertico |
| M15 | D4.14 - Traffic management enablers specifications v1 | MIZ | Navteq, Valeo |
| M15 | D4.15 - Mobile Payment enablers specifications v1 | TLI | TID, IFFSTAR |
| M15 | D4.16 - functional & technical specifications | DLR | TLI, Thales |
| M18 | D2.3 - Functional and technical requirements v2 | TID | TNO, Mizar |
| M18 | D2.4 - Impact on Instant Mobility from shared Usage Area commonalities v2 | FTE | Pertimm, CRF |
| M18 | D2.5 - Instant Mobility recommended infrastructure for Pilots | TID | DLR, Ertico |
| M18 | D5.1 - Prototype description | DLR | Thales, Valeo |
| M21 | D5.4 - Implementation Plan for phase 2 | VTT | Thales, FT |
| M21 | D6.4 - multimodal services acceptability final | Pertimm | VTT, Volvo |
| M21 | D6.5 - Data Business Cases for Transport in Urban Areas final report | FTE | TNO, TID |
| M21 | D6.6 - Multimodal services in a city: security and privacy challenges - final report | THS | DLR, TLI |
| M24 | D1.6 - Management report v3 | THS | ALL |
| M24 | D1.7 - Technical quality report v2 | FTE | Volvo, DHL |
| M24 | D5.2 - Domain specific enablers | IFSTTAR/Thales | CEA, Valeo |
| M24 | D5.3 - Prototype | MIZ | VTT, Pertimm |
| M24 | D7.7 - Exploitation plan final | Ertico | STVEG, ATAC |
| M24 | D7.8 - Scientific results final | VTT | TID, Navteq |
| M24 | D7.9 - Standardization & regulation recommendations final version | FTE | DLR, Mizar |

Table 2: Peer review of deliverable Second Year

4. Risk management

4.1 Technical resources for common technical specifications

Instant Mobility decided in July 2011 to use Enterprise Architect (EA) to manage a common description of scenarios and use case diagrams for technical specification.

Unfortunately without configuration management we were not able to ensure consistency of our model artefacts. Each partner having its own model, EA was used solely as a drawing tool not a collaborative mean. In order to achieve harmonization and real-time cooperation, it was decided to integrate EA with a subversion repository. After a request to FI-WARE (<http://forge.fi-ware.eu/>) to no avail, we settled for a java.net public repository.

In February 2012, it was been pointed out that the version control of Enterprise Architect did not support merging! The way the modeling tool addressed this shortcoming was by using the SVN locking mechanism. In other words, only one user could check out a given package at the same time. To alleviate this issue, our components package was split into several sub-packages (one per subsystem) each of them under configuration.

As far as WP4 is concerned, the combination Enterprise Architect/Subversion was a godsend. Partners were not only able to follow each other progress, reuse common components (FI-WARE or domain dependant) but the integrated model could also be reviewed collaboratively during our weekly teleconference using Project Place Online Meeting.

4.2 Collaboration with FI-Ware project

As FI-Ware is the technical project which should provide Generic Enablers – enablers that should be used by more than one project to support innovative services in a vertical market –collaboration between Instant Mobility and FI-Ware is critical.

From the beginning of the project, Instant Mobility consortium has developed two different approaches to collaborate with FI-Ware:

- Based on functional descriptions from Instant Mobility Use Case Scenarios, we have submitted some requirements related to the five main technical chapters of FI-Ware
- Based on FI-Ware public material, Instant Mobility technical team has communicated the main technical characteristics of the planned Generic Enablers to the Instant Mobility consortium

At Month 12, we can consider that the collaboration is running under **two major risks**:

1 – The process to submit requirements to FI-Ware gave a low feedback on our requirements: In fact, the Agile Methodology deployed to submit requirements is a developer methodology when Instant Mobility partners involved in Use Case scenarios are business or services-oriented. These partners cannot directly apply the Agile Methodology and all efforts are supported by Instant Mobility to make its requirements compliant with FI-Ware approach. The Architecture Board took 3 months to reach a consensus on what are Themes/Epics/User Stories, and Instant Mobility team required 3 months more to have technical material and to understand what could be Generic Enablers. The virtual process based on submitted EPICS, and then FI-Ware Epics analysis provided new virtual exchanges, mainly based on FI-Ware forge, with little improvement of a common technical understanding of Instant Mobility requirements for FI-Ware, and interfaces and functionalities of Generic Enablers for Instant Mobility.

2 – Based on our understanding of FI-Ware Generic Enablers, technical teams have tried to introduce some Generic Enablers in our Architecture description and more specifically, into the sequence diagrams used for Instant Mobility Specific Enablers technical specifications. Because of a vague interface description of FI-Ware Generic Enablers, it is very difficult for Instant Mobility to assume that some of the Generic Enablers will really provide the expected functionalities, assuming also some non functional requirements as performance, scalability, reliability or resilience.

To manage these two major risks, Instant Mobility has proposed to FI-Ware to organize a technical meeting where Instant Mobility experts could described their Specific Enablers, and how these Specific Enablers are related to some Generic Enablers and would be supported by dedicated functionalities.

This meeting should also provide to FI-Ware team a better understanding of our non-functional requirements and provide an opportunity to better understand some other Generic Enablers. The meeting might also deliver new technical requirements to FI-Ware in a more reactive way than previously.

The meeting should happen in May 2012.

At Month 18, we can consider some improvement in the collaboration with Fi-Ware project:

1. Benefits of Architect weeks (May 2012 – June 2012)
Some Instant Mobility partners attended the first Architect Week (May 2012 – Zurich) and some other attended the second Architect Week (June 2012 – Madrid).
The Communication by Fi-Ware partners was useful, much more than the asynchronous exchanges which happened through the requirement process put in place during the first year.
Explanations and details provided from the high-level architecture to relevant API and using specific open specifications per GE have been a good input to update technical specifications planned in Instant Mobility (Deliverables D4.X).
Based on these Architecture Weeks and after Architecture Board decision, a dedicated spreadsheet was shared with Use Case Projects to identify major expectations from UC projects and for Instant Mobility partners to be aware of testbed availability of Fi-Ware release 1 GEs.
2. Fi-Ware testbed availability and documentation of FI-Ware Generic enablers (release 1)
Fi-Ware testbed was available in August 2012 but really reachable for some Instant Mobility partners in September or October 2012 depending of proxy configuration concerns.
Because of issues Instant Mobility has to managed in September and October 2012 (ITS Vienna event in particular), no specific analysis was managed on GEs available before M18 but for M18 all Instant Mobility partners who would access to the testbed have been registered.

At Month 24 we can consider some improvement in the collaboration at Programme level:

1. Exploitation and Business Model Working Group
While the Exploitation Business Model Working Group was launched before M18 the real work was achieved between October 2012 and March 2013 with a good cooperation with the other Use Case projects. Beyond the common use of the same tools (Osterwalder Canvas), this EBM WG launched also a closer cooperation between Instant Mobility WP6 activities and Outsmart project and the use of a common framework based on a specific spreadsheet.

But Instant Mobility partners identified some difficulties to assess the value of FI-Ware Generic Enablers instances:

1. Webinars in October and November 2012
Several webinars were organized by FI-Ware Generic Enablers Instances owners. A Fi-Ware GEi owner is a FI-Ware partner who has provided on the FI-Ware testbed (release 1) a specific instance of a Generic Enabler. Based on the description of Generic Enabler in the Fi-Ware wiki, the GEi has to implement totally or partially some of the generic features. Of course in release 1 Instant Mobility partners had not identified GEi which implemented the whole scope of features for a specific GE.
These webinars were relevant to clarify or update Instant Mobility partners understanding on how GEi are working but in some cases it seemed that features which should be useful and could support Instant Mobility requirements were not available or did not satisfied some no functional requirements as scalability or multi-tenant aspects.
Through the FI-Ware roadmap and the webinar it was difficult to understand if these kind of improvements were planned first by FI-Ware, and second by GEi owners/implementers. Typically, multi-tenant was discussed during the Architecture Board in November, FI-Ware explained to UC Projects that it was now in their technical roadmap but Instant Mobility partners could not validate which GE would be impacted.
2. Instant Mobility evaluation of Fi-Ware Generic Enablers available on the testbed
Because of the first webinars and to improve the last version of deliverables D4.X, a specific task has been launched to evaluate the running softwares provided by FI-Ware release 1 on the testbed. Five partners contributed to these evaluations (DLR, France Telecom, Volvo, Telecom Italia, Thales), sometimes for the same enabler because a short-list of critical enablers based on their usefulness for Instant Mobility Development scenarios emerged. These evaluations provided different answers demonstrating different expectations on how the features should be delivered.

4.3 Collaboration with Use Case projects

Based on early discussions with some other Use Case projects, Instant Mobility has planned to have strong links with the other Use Case projects to define some common technical and non-technical requirements.

The idea was submitted after Month 6 to organize some common meetings to share our scenarios and to identify these common requirements.

It took more time than expected to organize such meetings, especially because each project would have mature scenarios and because of planning which were overbooked by many other collaboration or internal activities.

These common Use Case meetings are now organized on a more regular basis since end of January (One meeting every two months).

Instant Mobility team took the opportunity to organize some peer to peer meetings with SmartAgriFood, Finest and Safecity. Relationships with Outsmart project is managed by partners which are involved in both projects.

Instant Mobility has identified three different level of interest with the other Use Case Projects:

1 – High: SmartAgriFood, Finest and OutSmart

Traffic or logistics topics, as well as a kind of traceability are the common technical issues. Some other peer to peer meetings happened, especially with SmartAgriFood and Finest to identify some common scenarios which could use Specific Enablers from the 3 projects and support interesting trials in the PPP Future Internet Phase 2.

Outsmart could provide also some useful Smart City environment which could improve Instant Mobility urban services, as well as Instant Mobility enablers could provide an extensive view of a sustainable city environment.

2 – Medium: Safecity and EnviroFi

Some technical and business issues are identified but there are not mature enough to be clearly introduced in a trial scenario. Other meetings are required to evaluate the common interest.

3 – Low: FI-Content and Finseny

Based on the first discussions, no major issues or interest were identified. As the electric car is also targeted by another FP7 objective, it seems not relevant to spend more time on this dedicated scenario.

No specific User Generated Content is required for Instant Mobility scenario, so no innovative scenario was identified by FI-Content and Instant Mobility.

During the **second year** of the project, there was a major issue to improve the collaboration with some other Use Case projects especially to prepare Future Internet PPP Phase 2. Based on the initial discussion, Instant Mobility could expect to share some trials and prepare another cross-sector proposal. The Future Internet PPP phase 2 brought many new risks in the management of Instant Mobility project:

- After the first discussion which happened during the General Assembly in Rome (March 2012) to analyze what could be future trials for Instant Mobility scenarios, and because the technical specifications from WP4 were not detailed enough, further discussions happened during the General Assembly in Istanbul (June 2012) after the publication of the competitive call for Future Internet PPP Phase 2. It was clearly identified that there were different point of views on potential trials and what could be early trials. No consensus was found to build a new consortium and to propose a consistent vision for Instant Mobility trials. This situation has impacted communication between partners during 4 months in a critical period where the consortium had to define prototype scope.
- Lack of communication with the other Use Case Projects: from Instant Mobility side the previous exchanges especially with projects as Finest, SmartAgriFood and Safecity were extended till July 2012 but on informal bases despite some face-to-face meetings which happened in Amsterdam. In those meetings, it was agreed that some specific enablers from Personal travel Companion are relevant and should be reused but after July 2012, the proposal phase to submit trials project for Phase 2 last all communications between projects.

- Prototype definition: the difference between the initial scope as described in the DoW and the new focus taking into account the three development scenarios issued from WP3 have changed the specific enablers to implement, as well as potential interaction with Fi-Ware Generic Enablers. Competences and of course people who were involved in the prototype development were not the same than planned initially.

4.4 Future Internet PPP working groups

Many Working Groups were initially planned by Concord and have to be discuss by all project at the Steering Board level to collect recommendations and improvements from all Future Internet PPP projects.

The **Standardization Working Group** was launched during the first year of Instant Mobility project after M9 and Instant Mobility was fully involved in as Chairman. Because of a lack of contribution from many Use Case projects which never proposed a dedicated person as standard representative, there was no progress along 2012 and when new meetings were planned in Autumn 2012, Concord was not able to manage them because of administrative issues. The last planned meeting (January 2013) was cancelled lately in December 2012.

Exploitation and Business Model Working Group: When it was planned that the Instant Mobility Exploitation Manager should be the person to contribute to this Working Group, based on internal discussion and because of the importance of the Data Business Cases, France Telecom as task leader 6.2 has been the official contact point for the EBM Working Group.

The Instant Mobility WP6 stakeholders, by attending the Exploitation and Business Modeling Working Group workshops (2 Telco meetings 30 April 2012 and 4 February 2013 and 2 face to face meetings 18 December 2012 and 19 March 2013), has build links with the other PPP uses case projects, that allows a better knowledge of the other business use cases. This cross-fertilization was eased by the use of a common methodology (Osterwalder Canvas) which was shared before with outsmart project but also used between projects in the EBM Working Group.

As other use case projects, as Outsmart, Instant Mobility added externalities in the Osterwalder Business Model canvas. Instant Mobility used the same framework than Outsmart to develop Data Business Cases. Instant Mobility has also actively contributed to the EBM Working Group Position Paper till April 2013.

In addition, Instant Mobility contributed to the preparation of the Future Internet PPP event and Mobile World Congress 2013 which happened in February 2013 in Barcelona. This contribution was provided by WP7 partners.

4.5 First Year Partners involvement improvement

Instant Mobility project was impacted during this first year by some partners' companies' strategy modifications:

- Ericsson withdrawal
- Navteq's integration into Nokia company

To reduce the impact on Instant Mobility project and deliveries, a new partner has been involved, TNO, which was previously an associated partner aware of Instant Mobility activities.

- Ericsson withdrawal
Until their withdrawal from the project on September 30th 2011, Ericsson worked with DLR to manage the work done in task 4.1 to prepare the global architecture that is suitable to house the enabler sets and to provide guidelines for the iterative refinement of their specification. Ericsson withdrawal impacted Work Package 4 and 5 activities. Some of their activities have been taken into account by existing partners (Thales, Telecom Italia) and some other were reallocated to TNO, as new member.
- Navteq's integration into Nokia company
The partner Navteq has been bought by Nokia and is under heavy reorganisation. The Navteq entity involved in the project no longer has technical resources available for specification or implementation tasks. In the meantime a solution was agreed at consortium level, Thales took over the deliverable D4.3.

- **TNO Involvement**

As associated partner, TNO was well aware of Instant Mobility objectives and work since the beginning of the project.

Based on their scientific and technical knowledge, TNO started with a contribution to deliverable D4.16 of WP4.1. TNO works with DLR to ensure coverage of functions for the full system and ensure consistency of generic enablers from FI-WARE core platform and specific components provided by partners.

TNO is also strongly involved into Work Package 6 for societal activities.

4.6 Second Year Partners involvement improvement

Some resources allocation changes were managed during the second year of the project to take into account:

- Resources not consumed in Work Package 3 which last at the end of the first year ;
- Recommendation from first year review and additional work in Work Package 6, especially for Acceptability Surveys.

Hereunder is the summary of the resources allocation changes:

| Partner | Planned WP | Unspent effort | Reallocated to | WP |
|----------------|------------|----------------|----------------|-----|
| VTT | WP3 | 1PM | VTT | WP7 |
| Telefonica | WP3 | 1PM | Telefonica | WP4 |
| Telecom Italia | WP7 | 1PM | STVEG | WP6 |
| France Telecom | WP3 | 2PM | Pertimm | WP6 |
| ISBAK | WP3 | 1,8PM | ISBAK | WP6 |
| Ertico | WP3 | 3PM | Ertico | WP7 |
| CRF | WP6 | 1PM | STVEG | WP6 |
| CRF | WP6 | 1PM | Mizar | WP6 |

Table 3: reallocation of resources – second year

WP4: resources have been used by Telefonica for its contribution on deliverables D4.9 and D4.14

WP6: resources were reallocated to Pertimm as task leader 6.1 (Acceptability Surveys) and to Statens Vegvesen (STVEG) to support Professional Acceptability Survey and provide new inputs for Data Business Plans. Some resources were also reallocated to Mizar also to support another business point of view in the Data Business Plans

WP7: some resources were reallocated from WP3 to WP7 without any change about partners contribution to improve dissemination activities especially after the Programme decision to launch an event in Barcelona in February 2013 (MWC 2013). Coordination with Concord and the importance of the event require more time than expected for specific Instant Mobility event.

4.7 Work Packages

4.7.1 First Year: April 2011 – March 2012

- **The Work package 2** has a strong dependency on other projects of FI-PPP programme which agenda or delays can affect Instant Mobility deadlines.
Following recommendations from FI-PPP programme reviewers, Instant Mobility will ask for changes when a wrong synchronization with other projects can affect the quality and usefulness of WP2 results.

- **The Work Package 3** suffered from significant delays of around 2 months in the first round of deliverables D3.1 and D3.2 from the first period, that had a knock-on effect for the second round (Deliverables planned for M9).
This work Package was planned based on strong relationships with FI-Ware project to provide technical inputs (Architecture and Generic Enablers description) to fuel Instant Mobility scenarios description. In addition, some lack of personnel availability during the summer months did not ease to put in place as soon as possible corrective actions.
Globally the corrective actions did succeed in catching up the lost time from earlier reports, also, because a close liaison was maintained throughout with Work Package 2 and Work Package 4 this minimized the knock-on effects of delays on those Work Packages.
- **The Work Package 4** suffered from Ericsson withdrawal at end of September 2011 (M5) which impacted Architecture description. (Deliverable D4.1)
This withdrawal was made up by DLR involvement to finalize expected deliverables and by the involvement of a new partner, previously associated partner: TNO.
Two tasks were also impacted by late description of full scenario 1, the more complex scenario including lots of transport actors which implied slight delay for deliverables 4.3 and 4.5.
One main risk is not solved at the end of the first year: FI-Ware components relevance. There is a potential mismatch between the FI-Ware components currently defined and Instant Mobility needs (e.g. FI-Ware components overly complex). A strong technical collaboration with FI-Ware developers is required and a request will be send to FI-Ware team in April 2012 to solve this issue.
- **The Work Package 6** suffered from methodology choices in task 6.1 (Acceptability survey) which did not reach easily a consensus. To solve this issue, task leadership was transferred from IFFSTAR to PERTIMM partner and the new partner TNO was also involved to bring its scientific knowledge.
Task 6.2 suffered also some delays based on the definition of the three new development scenarios. Work Package 6 team took the decision to use the 3 development scenarios as baseline for the data business cases to improve consistency between technical Work Packages and Societal dimensions. This approach is fully align with cities requirements to evaluate the economical impact on cities environment and citizen services.
One medium risk which is not solved at the end of the first year is the involvement of professional for a dedicated acceptability survey under professional constraints. The objective is to mobilize all Consortium partners and their professional networks and channel to be able to manage a survey with a relevant panel.
- The main risk managed by **Work Package 7** is related to the quality of the partners' exploitation plans. All the partners have been continuously made aware of the EC's expectations of the dissemination of the results. Work Package 7 team launched an extensive questionnaire of partners' exploitation plans. These exploitation plans will be updated regularly.
The plan of exploitation workshops has been revisited, and the next three workshops have already been agreed to be organized in the participating cities and in connection with ITS Vienna conference to involve local stakeholders and collect their feedback on Instant Mobility services.

4.7.2 Second Year: April 2012 – March 2013

- During this second year, the **Work Package 2** had three major objectives: submit new requirements to Core Platform project, detail Business commonalities with the other Use Case project and identify relevant infrastructure resources for future trials.
Based on the Architecture Weeks which happened in M14 and M15, no new requirements have been identified based on the WP3 results available at M12 and no specific issues were raised before M18 and a stable version of the first version of deliverables D4.X.
Based also on the communication from FI-Ware on the results of the first Open Call, Instant Mobility partners understood that one of their requirements regarding scalable middleware for message bus should be available soon. At M20, it was also agreed in the Architecture Board meeting that because most of the Use Case projects were in a development phase, it was more useful to switch from new requirements to an operational management of feedback on existing GEi, putting in place specific tracker systems that Use Case projects could use to interact faster with the GEi owners/developers.
Regarding cross-fertilization with the other Use Case projects, Instant Mobility tried actively to identify commonalities, first through the meetings put in place by Concord and the Steering Board, then with peer to peer meeting (especially with SmartAgriFood and Finest) and last but not least by internal exchanges with teams who are involved in some other Use Case projects. Despite all these

efforts, the creation of new consortia to submit new proposals to the competitive call for Future Internet PPP Phase 2 stopped de facto the collaboration at M16. A new approach was defined based on public deliverables the Use Case projects produced either describing functional scenarios or describing how to use some FI-Ware Generic Enablers. Because two different approaches were managed by the Use Case projects to publish their public deliverables either publishing them as soon as the final version is available or waiting for official approval before updating them on the website, WP2 deliverable suffered of additional delays to have a good overview on cross-fertilization. For the infrastructure resources identification, despite attending regularly the collaboration meetings organized by Infinity project, it was unclear how the identified or referenced infrastructures could support specific resources for multimodal services and/or provide Core-Platform services at it was expected.

- The main risk for **Work Package 4** was higher expectations to improve technical specifications based on FI-Ware Generic enablers description.

Because adding delay to integrate new inputs especially based on the FI-Ware Generic Enablers description is an approach where an expert can always try to refine more its understanding and details for interoperability, it was critical for WP4 partners to maintain the link between WP4 activities and WP5 expectations and deadlines.

The main recommendations for WP4 partners and especially for D4.X deliverables were to attend the different communication events from Fi-Ware project, to reconstitute the additional knowledge into deliverables and to use the same tools to maintain consistency between WP4 and WP5 activities.

WP4 partners attended the Architecture Weeks which happened in M14 and M15 and results were delivered in D4.X at M18.

Because of the availability of the Fi-Ware testbed at M16 which was difficult to use at the beginning (proxy concerns), it was planned to extend the delay for the final version of D4.X to include a better description on how available softwares (FI-Ware Generic Enablers instances) could be integrated.

Webinars from FI-Ware partners happened at M19 and M20 after the scope of the Instant Mobility prototype has been defined.

A specific task was launched in M20, announced at the Architecture Board meeting in November 2012 to manage the FI-Ware Generic Enablers instances evaluation and to provide quick feedback in the last version of the deliverables D4.9 to D4.16.

- Three main risks rose for **Work Package 5**: first the prototype definition, second resources development and third new deadlines for MWC 2013.

Because of the first vision of the prototype was built in 2010 during the proposal phase without any knowledge of what could be FI-Ware Generic Enablers, because of the involvement of partners which are involved in different ways in the transport business and because the involvement of several cities in Europe, the focus of the prototype evolved a lot from its initial description and its focus after the results of WP3 Use Case scenarios.

Partners and resources who were involved in WP5 do not have the same development interest in the new specific enablers and recommendations to focus more on integration with Fi-Ware Generic Enablers was formally expressed four months before the delivery.

Telecom Italia switched its development resources from payment enablers to interfaces on smartphone into a car in collaboration with CRF who work on specific Car API. France Telecom switched some resources from Logistics and mobile router to the use of some Generic Enablers to support some specific Logistics Use Case. Volvo used resources to demonstrate Eco-driving, Mizar focused its development resources on cloudification of traffic management. IFFSTAR, Pertimm and Thales provided a first prototype for ITS Vienna, earlier than the expected prototype, using also the Open Mobile framework (Mirrorlink) that Valeo has integrated in a specific hardware.

Based on recommendations from intermediate review at M18 to show concrete and convincing things at the MWC 2013, weekly conf call took place in January and February 2013 to prioritize some developments which were before aligned to deliver prototypes end of March.

- The **Work Package 6** had to meet three major challenges during this second year: new acceptability survey for a larger population, management of the professional survey and definition of the data business cases.

Based on the M12 review recommendation to validate that there was no bias in the previous Acceptability survey, especially regarding the education level of the population who had answered the first questionnaire, WP6.1 partners tried to manage another survey with a shorter questionnaire

and through social networks tools as Facebook or LinkedIn. In parallel, France Telecom required the support of an external resource, Doctor in Economy, to manage another statistical analysis of the previous results. The results of this work was that there is no specific bias in the previous analysis while the new actions using Facebook and LinkedIn did not provided relevant results.

Because of van drivers are a professional target, a specific survey was planned since the beginning of the project. Especially because these drivers are working under professional constraints, the geographical location which was identified as the main potential obstacle to some innovative services, this specific topic could not be evaluated in the same way than for travelers. A specific survey was managed by TNO and the first feedback was, as expected, that this professional population is much more difficult to involve in a survey than end-users consumers.

Regarding the Data business Cases, it was decided in General Assembly at M12 to focus on the three development scenarios to elaborate how availability of open data as well as additional data shared between business partners of the same value-chain could provide a new business approach for multimodal services. The main difficulties for the Data Business Cases were the identification of data which could be shared and how the value could be distributed between the actors of the value chain. These difficulties are much more critical for the B2B services where the competition is stronger between actors. In parallel, local authorities have few relationships with these business partners and a lower influence in terms of regulation.

- The **Work Package 7** had specific challenges during the second year of the project to improve communication and dissemination activities.

Based on the first Stakeholders Groups which happened during the first year, Instant Mobility partners decided to have one Stakeholders Group session in parallel of each General Assembly meetings. These events were organized in Roma (March 2012, Istanbul June 2012 and Toledo 2012) based on the strong involvement of the cities in the Instant Mobility project, including Toledo which was not a funded partner. The last event which was initially planned in Helsinki with Nokia at the beginning of 2013 could not be organized because of the major event MWC 2013 which required partners to focus their effort on this event.

The ITS Vienna event required also lots of resources and effort to coordinate demo requirements for the stand while the demo development was not finalized. In parallel a specific workshop was organized dedicated to Instant Mobility project results and lots of effort were put to communicate on it because, based on ITS conference organization, it happened on Sunday and Instant Mobility partners expected to attract companies which are not involved in the Future Internet PPP.