ExtenSive

Enhancing IP4 Ecosystem

Deliverable D 12.2
Dissemination and Exploitation Plan

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Bombardier	BTG	Contribution in Section 8 and Review of the document
CS Group	CS	Contribution in Section 8 and Review of the document
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1. Executive Summary

In a world where digitalisation is increasingly important for businesses and the personal life of consumers, information technology is becoming a key enabler to reinforce the attractiveness of the railway services, increase ridership, revenues and customer convenience.

The present deliverable aims to consolidate the strategy of ExtenSive to give a clear definition of the goals and gives a first attempt at setting a detailed plan for the implementation of Dissemination, Exploitation and Communication activities accomplished since the initiation of the project (1st December 2020) until the moment of creation of this document (month 10 of the project). It further creates a roadmap i.e., the objectives, tools and channels that will be adopted throughout the entirety of the project as well as a first approach towards exploitation plans.

This document will be followed up by D12.3 "Dissemination and Exploitation report" that will further outline the dissemination tools and channels established withing the project, as well as activities accomplished in this timeframe. This report is due at M26 of the project.

Table of Contents

2. Reference Document

Reference Number	Title
R1	ExtenSive Grant Agreement Annex I Description of Action
R2	ExtenSive Consortium Agreement

Table 1 - Referenced document

List Of Figures

List Of Tables

3. Introduction

The ExtenSive project (Extending the attractiveness of transport for end users**)** is a part of Shift2Rail (S2R), the first rail joint technology initiative focused on accelerating the integration of new and advanced technologies into innovative rail product solutions.

ExtenSive further provides complementary and continuous solutions already started within previous projects - MaaSive (Grant agreement no. 826385) to enhance the traveller experience and improve the travel services (in the areas of travel shopping, trip tracking, booking and ticketing) aligned with Mobility as a Service paradigms and deal with Software as a Service approach.

As in other R&D projects, dissemination and stakeholder engagement is an important element of success of the ExtenSive project. This deliverable is based and consistent with the project's [R1] Description of Action (DoA) and [R2] Consortium Agreement (CA). It is the first outcome of project's Task 12.3 "Exploitation and public Dissemination" in Work Package (WP) 12 (Dissemination and Communication) and presents the activities that are to be conducted within the project to disseminate its outcomes to wider audience.

The document is outlined in 10 sections designed to properly present the overall objectives, target audience, tools, channels and materials for an effective execution of Dissemination, Exploitation and Communication activities within the entirety of the project.

Following an introduction, section 4 gives a clear overview of ExtenSive project and its core objectives.

In section 5, the terms Dissemination, Exploitation and Communication (DEC) is defined.

Section 6 describes the dissemination strategy that will be adopted throughout the lifespan of the project and proceeds with the overall timeline of the activities and elaborates on external communication, presenting the visual identity and communication tools that will be used for the successful implementation of the DEC.

Section 7 further outlines the various events/conferences that will aid in raising great awareness about ExtenSive project.

A first attempt at exploitation by individual partners is presented in section 8 and section 9 concludes the document.

Section 10 presents the appendices which includes abbreviation/ synonyms used throughout the entire document.

4. ExtenSive Project

4.1. ExtenSive in a Nutshell

ExtenSive is framed within the Innovation Programme 4 (IP4), which addresses "IT solutions for attractive Railway services" and brings together eight partners from six countries in Europe.
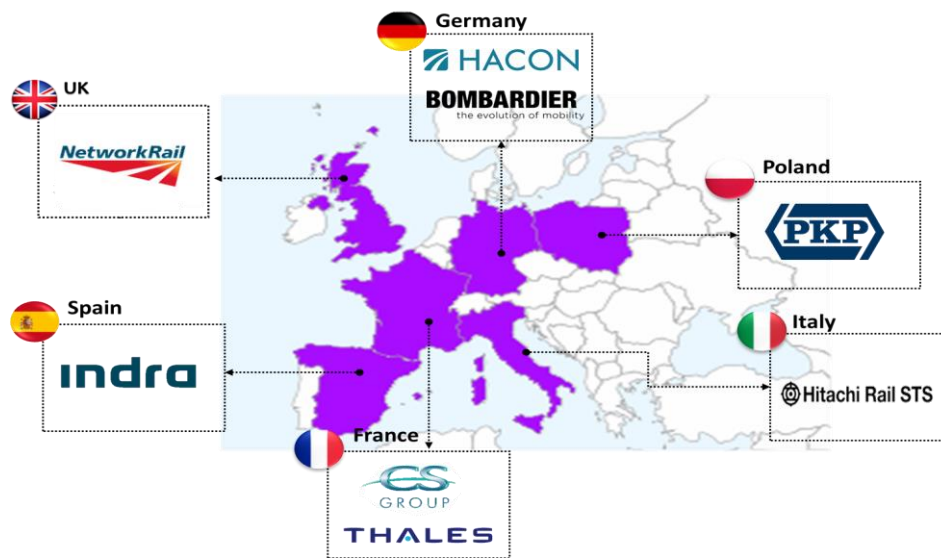
Figure 1 – Extensive Consortium and their countries

ExtenSive advances and provides additional enhancement of the current functionalities of IP4 in addition, creating synergies with the other S2R IPs to enhance services for users and operators and facilitates information flow among IP4 services and other railway systems.

ExtenSive project will make a further attempt in the development of components that supports the implementation of mobility ecosystem thereby giving the end-user (traveller) a seamless multi-modal mobility experience, and gathering various TSPs, exchange data with them using heterogeneous systems. This project will focus the efforts on delivering.

ExtenSive exudes great benefits to the Traveller, Transport Service Providers (TSP), retailers, Transport Operators (TOs). Some of these include:

- Provides Transport Operators (TOs) with greater access to data, which simply means that operators will be able to understand their customer-base more thoroughly and adapt their services accordingly. Nevertheless, attracting more use of their services and, therefore, increasing their revenues.
- Provides the traveller with high service quality and a seamless travel experience during multimodal travel thereby, minimising the interactions needed among travellers and the infrastructure.
- The use of mixed reality technologies will offer additional revenue opportunities for retailers, as they provide advertisement opportunities which can be utilised by stations' retailers.

4.2. Project Objectives

Objectives	Description
Prepare the S2R IP4 ecosystem for large-scale implementation, taking into consideration technical, users, business needs and requirements	ExtenSive will complement the activities already started in the previous projects to provide an integrated solution, gathering the technical as well as business achievements from the different projects to be shown within InnoTrans2022.
Prepare the S2R IP4 ecosystem to complement the activities already started in previous projects with respect to intermodal travels.	ExtenSive project WP3 and WP4 are dealing with the evolution of the activities already started within the previous projects. ExtenSive WP3 and WP4 complement work on TD4.2, TD4.3,TD4.4 on the following topics, with special emphasis on intermodality and MaaS approach: - Orchestration - Travel Shopping - Ticketing - Contractual Management Market Place
Software as a Solution	ExtenSive will provide an architecture and several services to be consumed in a Software-as-a-Service approach, specially targeted for those small TSPs registered in the ecosystem that do not have the specific capabilities (such as Journey Planning) or want to improve the ones they already have.
Security for Transport Service Providers (TSPs) and systems	The mentioned Contractual Management Market Place (CMMP) will be the tool to help TSP to configure multimodal agreements and translate them to a technical language that could be understood by other IP4 components (offer building, clearing etc). ExtenSive will pay particular attention to the management of different actors' roles, capabilities and authorisation to access to information and services from others.
Supporting the overall railway system architecture as defined by the conceptual model	ExtenSive will tighten links with other IPs and CCA (especially IP2, IP3 and IPX) to facilitate information flow among IP4 services and other railway systems, allowing the creation of enhanced services for users and operators following the Conceptual Data Model. 4 work packages within ExtenSive (WP7, WP8, WP9, WP10 respectively) are dedicated to study the overall railway system architecture as defined by the conceptual model as well as the implementation of stations management within the travel companion.

Table 2 - ExtenSive Project Objectives

5. Definitions

5.1. Dissemination

Dissemination simply defines itself as a planned process of spreading awareness about research findings, with thoughtful consideration of your target audience and communication with this target audience.

This activity involves presentation of the project's results and outcomes to a wide industrial and scientific community whilst managing knowledge within the consortium.

5.2. Exploitation

Exploitation is rightly put as an action of utilising and benefiting from resources. The aim of exploitation is to increase attractiveness using the results of the project.
It involves working closely with all Work Packages to ensure outputs are captured and partners can engage with potential customers. We are supporting partners in the development of the project outputs to yield products and services that can be implemented.

5.3. Communication

Communication on project is a strategically planned process, that starts at the kick-off of the project and continues throughout its entire lifetime, aimed at promoting the project and its results.

Communication is critical in reaching success in ExtenSive project as it will be used as a channel to inform the relevant railway stakeholders and the scientific community of the project activities and create awareness of the project among the public.

6. Dissemination Objective & Strategy

The objective of the dissemination strategy is to identify and organise the activities that will be performed within the project to: (I) Maximise the influence of the project (II) Ensure the widest possible dissemination of the project and (III) Increase the impact of the project.

With this said, it can be explained that the core objective of WP12 is to create a strong connection on the project vision, objectives and results are important tasks to promote the ExtenSive and Shift2Rail purposes.

With a consistent approach with the Shift2Rail objective, the Dissemination and Communication Work Package will address the following objectives:

- Put in place communication tools and channels to guarantee seamless exchange between partners and to have a permanent link with a large audience.
- Ensure that the outcomes of the project will be produced at time and with a high quality.
- To disseminate the project goals and results to the interested audiences.
- Organise and conduct public events to share the acquired experience and know-how of partners.
- Manage a common IP Advisory Board to collect recommendations and advices about the project requirements and solutions.
- Foster the application of search results across the industry.
- Align the search activities with the existing standards.
- To expand the adoption and maximize the impact of the ExtenSive results and S2R IP4 platform.

The Dissemination and Exploitation Plan (DEP) reports on the activities that have been carried out from the initiation of the project up until month 10 and outlines the main exploitation plans of the partners, representing a first attempt that will be updated in WP12 during the project execution.

This is a live document as all routine takes place during the entirety of the project to ensure that the project results are presented to the main target audience identified in this report.

Furthermore, the DEP recognises the following:

- Targeted Audience - The beneficiaries of the work.
- Conveyed Message – How these stakeholders will benefit from the work.
- Tools – How to maximise reach to these stakeholders.

6.1. Target Audience

The purpose of the dissemination of this project is to raise awareness with the aim of reaching the widest audience possible. The key audience for the project is divided into 2 segments:

Internal Audience – This includes Shift2Rail consortium partners, IP4 projects and Open Calls (OCs) projects.

External Audience – This covers industry related audience (public authorities, railway associations and regulatory bodies), transport industry (Travel Service Providers & Travel Operators) and EU citizens (Travellers).

6.2. Timeline of Dissemination Activities

The timeline of the dissemination activities and events is a working document, and it is being updated by Network Rail (NR).

Figure 2 presents what the project is planning to deliver on the different dissemination materials as well as some of the planned events where ExtenSive will be showcased. We aim to present the project and attend different external event like Shift2Rail innovation days scheduled on December 2021 which is organised by the JU; TRA2022 which is a common event, will hold on November 2022 in Lisbon and IP4 projects will be presented at this event; InnoTrans 2022 which will be held in berlin on September 2022 as well as UITP Global Public Transport Summit which will hold at Barcelona in June 2023.

During the lifetime of the project, there are a couple of dissemination activities that will be created. The consortium has agreed to the design of two brochures expected in November 2021 which will entail a written project overview and a summary of the main project objectives and characteristics and another brochure will be available in August 2022 and will capture InnoTrans event.

Furthermore, three newsletters will be written and will largely focus on general information on the project and major results and achievements.

Figure 2 – Timeline of dissemination activities

6.3. Dissemination Materials

6.3.1. Identity Logo

A graphic identity logo has been designed as described in Subtask 12.3.1.

Figure 3 – Extensive Project Logo

6.3.2. Project Brochure

As agreed by the consortium, two project brochure(s) will be designed with the first to be released electronically in month 12 of the project. The main objective of the project brochure is to provide our audiences with an attractive and written project overview and a summary of the main project objectives and characteristics. The brochure presents the goals of the project and the main (expected) findings. It will be based on similar content of the website to present the project. It will be distributed by the partners and will be conveyed through their respective network.

6.3.3. Project Presentation

An official PowerPoint template was created under the responsibility of Network Rail to accommodate the required content for a complete project presentation provided by all partners. The ExtenSive official presentation will not be published on the website. However, it will be used as a tool for partners, who will be able to add further slides to the basic general presentation for their specific dissemination uses.

It is anticipated that this project presentation will be slightly modified to accommodate the relevant information for a specific event.
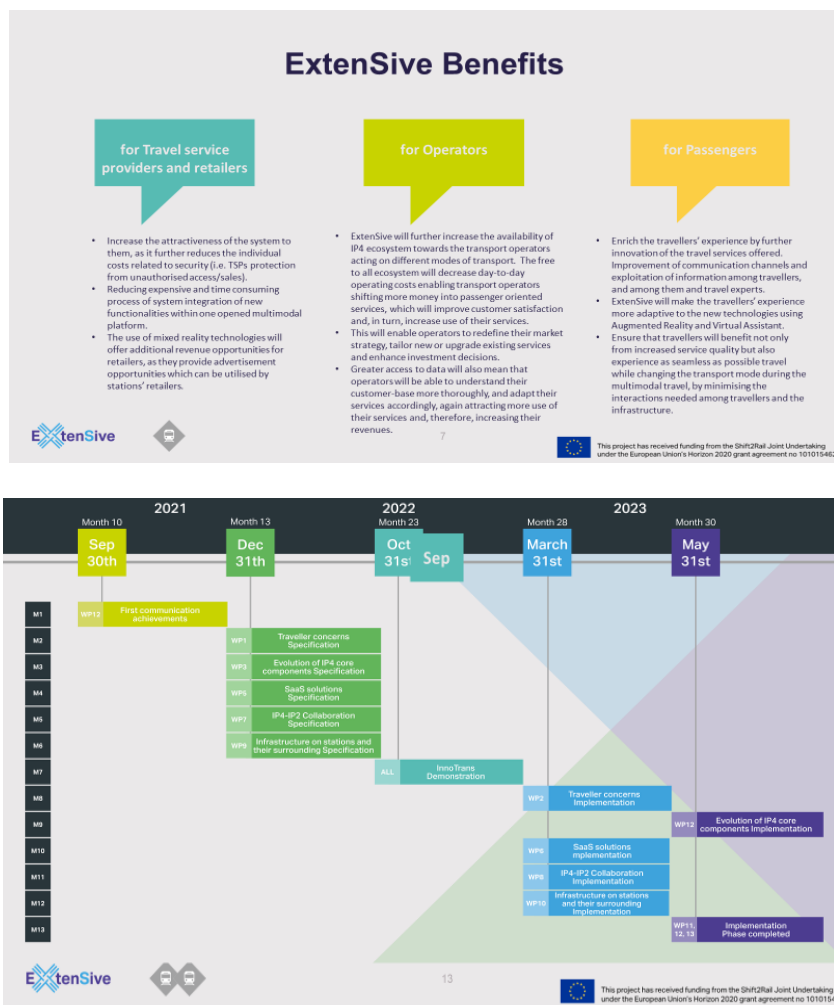
Figure 4 – PowerPoint slides from the latest version of the Project Presentation

In addition, it is important to note that all materials used for communication and dissemination purposes of ExtenSive, will demonstrate the EU emblem along with the statement that the project has received funding from the H2020 research and Innovation Programme.

6.4. External Communication

We explain the different tools that will be used for communication purposes in this chapter.

6.4.1. Project Website

To ensure supreme visibility of the project objectives and results, a project website has been developed to constantly disseminate information & news about the project's activities and related area. A dedicated webpage within Shift2Rail website has been established for the project. It is safe to say that the creation of the project website achieves M1 - First communication Achievement. The website can be found following this URL:
https://projects.shift2rail.org/s2r_ip4_n.aspx?p=EXTENSIVE

Furthermore, a dedicated section within the project webpage has been established for Project News & Events. This section is used to publish short news articles and announcements (such as IP4 Advisory Board meetings and participation in events).
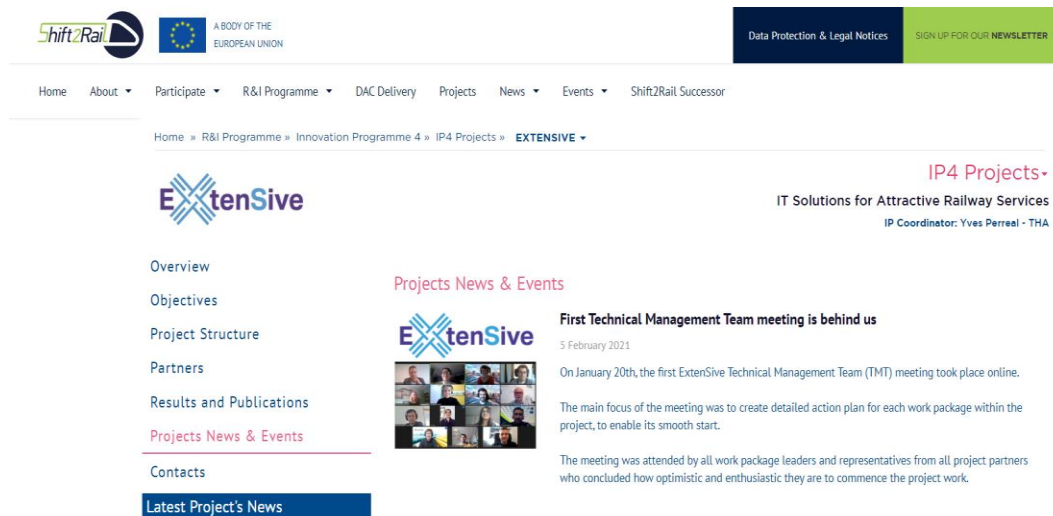
Figure 5 – Extensive Project News and Event page within shift2Rail webpage

The design of the website builds upon the following criteria:
- Visual Communication: use of colours and/or photos, web pages are easy to browse, information is kept short and links are included to websites, publications, and so on.
- Verbal Communication: the website uses simple phrasing, no jargon is used to attract the widest possible audience, e-devices are user friendly.
- Regular Updates of contents: the website is maintained and updated by Network Rail accordingly to contributions from the partners.

The public section of ExtenSive website delivers the following:
- A brief overview of the project and further details about its objectives, contents and structure.
- The confirmation of the project consortium and partners logo which links to the partners' websites when clicked on.
- Access to the project deliverables (e.g. core outputs, results, presentations, written publication).
- Information about ExtenSive events, such as TMT meetings and workshops, as well as conferences and external events where the project will have an active role (e.g. presentation of paper(s), organisation of sessions, stands with demos, etc.).

6.4.2. Project Newsletter

The consortium agreed to having three e-Newsletters, which will be created and distributed (printed or electronic version) within the lifespan of the project. A newsletter template will be prepared by Network Rail and the content will be provided by the leaders of technical work packages and will relay general information on the project and the major results/achievements. Furthermore, the content will be incorporating latest developments of the project, as well as

recent or upcoming dissemination activities, pilot activities, workshops and demonstrations, reports and publications.

Additionally, the distribution of the project newsletter will be performed via partners' communication channels as well as JU Channels lists and will be published on the website under section "Results and Publications" as it becomes available.

6.4.3.   Roll-up Banner

Relevant material was created to be used for the creation of this banner. Due to COVID-19, the need for a Roll-up banner has been of lower priority to the project as all events are currently been held online. However, this will be created to match the look and feel of the website and the overall project design concept to meet the needs of the project. The banner will be created based on dissemination needs and used at all types of physical events in the future that ExtenSive partners plan to attend.

6.4.4.   Publications

As a consortium, the first outstanding results from the project will be communicated in writing and published in a specialised magazine such as Railway Gazette, IRJ, RTR European Rail Technology Review, European Railway Review, Rail Technology Magazine, Passenger Magazine and also magazines indexed on scientific database (e.g. Web of Science, Scopus). A first work has been done and our plan is to at least target one or more of these publications.

6.4.5.   Advisory Board

A common Advisory Board (AB) group for all IP4 projects was set up to involve a wider community of stakeholders in the project activities. This also provides a flow of bi-directional information from the project to the audience and/or among the partners of ExtenSive. This includes a mix of TSPs, Mobility Service Providers and technical experts within the rail industry.

The focal purpose of the Advisory Board is to contribute to standardisation activities and provide advice particularly on the technical aspects of the project. Furthermore, it creates the prospect for a transfer of knowledge between sectors.

To this effect, the following are to be exercised between ExtenSive partners and the Advisory Board:

- The Advisory Board will provide expert advice and recommendations on specific matters in the mobility sector. This will aid in the enhancement of the overall quality of research being carried out by ExtenSive. Project topics will be shared with all stakeholders at a European level.
- Internal (consortium partners) and External (Advisory Board) will hold bi-yearly summits (due to COVID-19, meetings are online).
- Inform ExtenSive partners about new and emerging issues that might impact the project work.

- Partners provide the AB with project reports for review purpose.
- The AB shall provide feedback on submitted reports by completing an online feedback form which is located on www.zoho.com .
- The same Advisory Board members will be required to provide expert advice on valuable and close related topics from different projects depending on the selected area.
- Provide a wide range of perspectives and facilitate stakeholder engagement across the railway and transportation sector.
- The Advisory Board members will be required to offer their perspectives to dissemination activities.
- Communicate the work of the ExtenSive project to internal and external stakeholders.
- ExtenSive project will actively seek new collaborations with external partners, to seek and integrate additional ideas and to prove the outcomes of ExtenSive.

Since the initiation of ExtenSive project, the following events have occurred:

- ExtenSive project has held its 1st Advisory Board summit on 12th May 2021.
- 11 active members make up the common Advisory Board so far.

7. Events

7.1. Objectives

The most effective way to disseminate results is through the attendance of congresses and events. This could be done at different levels:

- **At consortium level**: all consortium partners will be responsible for these activities, including preparation of material, budget for attendance, and representation at conferences. CS Group, as coordinator of the project and Network Rail as WP12 leader, will be the presenters for general project presentations, supported by the rest of partners in technical workshops. Normally ExtenSive will attend these events, together with other IP4 and S2R projects and coordinated by S2R (such as InnoTrans).

- **At partner level**: partners are also encouraged to participate in events and disseminate the project at individual level.

7.2. Participation in Events

ExtenSive partners will continuously identify and take part in local (national), EU, and international level conferences, industry fair events and exhibitions as appropriate to raise ample awareness around the ExtenSive project activities, expected results and disseminate the relevant developments & outcomes.

7.2.1. Events for EXTENSIVE 2021 and beyond

Table 4 provides a list of indicative relevant upcoming events that we aim to present the project at. This list will be continuously updated and extended and further communicated with all ExtenSive partners to plan participations in upcoming events. The dissemination through these events will be customised based on the project's main target audience (railway association/ transport experts).

Event/ Conference	Date	Target audience	Partner
Mobility Summit 2021 (Germany)	20TH -22ND April 2021	Industry, Customers	HACON
LAVAL VIRTUAL	7TH – 9th July 2021	Transport experts	CS GROUP
TRAKO (Poland)	21ST September 2021	All interested in railway, International audience.	PKP
Shift2Rail Innovation Days	9th – 10th December 2021	All interested in railway, International	ALL

		audience.	
INNOTRANS 2022 (Berlin)	SEPTEMBER 2022	All interested in railway, International audience.	ALL
TRA 2022	14TH -17TH November 2022	All scientists and other interested in transport.	ALL
UITP Global Public Transport Summit 2023	4TH -7TH June 2023	All interested in railway, International audience.	ALL

Table 3 – Upcoming Events for ExtenSive

7.2.2. Indicative Events

The following are a list of suggestive events that we plan to present ExtenSive.

- ITS Spanish Congress
- Digital Transportation Days
- Future of Transportation World Conference

8. Exploitation Plan

The Exploitation Plan (EP) has the objective to define the strategy to increase the influence of the proposed solutions for innovative IT tools and prepare the transition towards industrial and commercial uptake to fully achieve the expected impact. Here, ExtenSive partners explore the first steps at exploitation that will be updated throughout the life of the project.

8.1. Exploitation Plan Per Partner

The following tables briefly outlines the mains exploitation plans of individual partners, representing a starting point that will be updated in WP12 during the project execution.

	Bombardier Transportation (now part of Alstom Group)		
Related Product(s)	Multimodal Orchestration (MASTRIA)	**New product or existing?**	Existing
Description of the product & improvement resulted from Extensive work	MASTRIA is Alstom's multimodal orchestration and passenger flow tool allowing optimization in capacity utilisation, dwell time and adjusting multimodal transport offers to passenger demand. Through Extensive project, WP7 and WP8 aims at bridging data exchange between passenger counting data along with other open data to the TMS (Traffic Management System) data allowing for a better optimization of traffic through adjusted schedules and timetables but also enhancing MASTRIA capability of passenger information through a more real time recommendation-based system for multimodal offers based on dynamic TMS schedules and timetables		
Target Customer	Transport Service Providers, Public Transport Operators, Public Authorities and cities		
Distribution Channel	B2B		
Expected Impact	Increased passenger satisfaction, more fluid passenger journey limiting impacts on disruptions, improve operations for operators		
Exploitation activities during project lifetime	Low TRL, lab-based Proof of concept that can be showcased at upcoming events with some defined KPIs for demonstrations.		

Table 4 – Bombardier's Exploitation Plan

	CS GROUP France		
Related Product(s)	Location Based Experience Editor (Inscape)	**New product or existing?**	Existing
Description of the product & improvement resulted from ExtenSive work	INSCAPE is a new-generation authoring tool enabling non-programmers to create Mixed Reality experiences such as interactive visits, location-based applications, and pervasive games featuring augmented reality as well as mobile technologies. This tool is not specifically dedicated to the travel		

	market, but addresses different markets such as the industrial, construction or entertainment markets. New concepts for the support of mixed reality devices are carried out within ExtenSive project to provide dedicated messages or instruction, to provide real time navigation instructions. This work will help the creation of MR experiences their publication on AR devices and their connection with the Travel Companion devices.
Target Customer	TSPs, station managers, cities or companies that want to provide Location based experiences in MR to the travellers.
Distribution Channel	B2B
Expected Impact	Increase customer satisfaction, promote local business or cities.
Exploitation activities during project lifetime	Provide the solution to be tested by the OC during the IP4 project life, to progress again the state-of-the-art and maintain the company leadership in the field of design tools for various applications by extending its INSCAPE flagship product for AR travel experience production. This will enable CS to continue its successful commercial development. Communication, marketing and exploitation of these features will be integrated to the sales process of INSCAPE.

	CS GROUP France		
Related Product(s)	TSP Orchestration and supervision Tool (CRIMSON)	**New product or existing?**	Existing
Description of the product & improvement resulted from ExtenSive work	The TSP orchestration and supervision tool is a desktop tool that enables actors to collaborate to collectively create a station map and POI to be used for navigation purposes in normal situation or for crises and disasters. It provides a system: - To collaboratively create a plan involving multiple organisation. - To enable multiple organisations, define a plan during a simulated emergency (crowded station, disaster…) and send specific messages to travellers. - Situational awareness capabilities to provide end users (travellers for transport domain) with real-time information. Within ExtenSive, the tool will be improved by adding an access to the IP4 capabilities allowing TSPs to add their POIs and by enabling the communication link between the TSP that is responsible of the surveillance of the screen tool and the travellers using the TC PA.		

Target Customer	TSPs, station managers
Distribution Channel	B2B
Expected Impact	Providing a situation awareness tool for network monitoring and travellers' communication.
Exploitation activities during project lifetime	Provide the solution to be tested by the OC during the IP4 project life. We will then build upon the knowledge acquired into this project and use it for other European projects about crisis management that can benefit from the CRIMSON software. This will enable CS to continue its successful commercial development.

	CS GROUP France		
Related Product(s)	MobilitX	**New product or existing?**	Existing
Description of the product & improvement resulted from ExtenSive work	MobiltX is a set of products that aims to provide the passengers of multimodal transport networks with real-time, comprehensive and reliable information, ahead of time and during the travel. The MobilitX Hub is a key component of the pTT Solution provided by CS Group France to the IP4 environment. Extensive aims at extending IP4 to SaaS Solution. The results of the project, produced within the trip tracking part, will be the first experimentation attempt of the installation and delivery of a MobiltX based solution "as a Service".		
Target Customer	TSP		
Distribution Channel	MobilitX is sold worldwide on online sites or through CS Group France.		
Expected Impact	Extensive helps CS Group France being able to provide customers with a highly scalable, automatically updated, and cost-efficient deployment solution for the MobilitX products, and allow smaller TSPs to alleviate from the maintenance of an "on premise" software platform.		
Exploitation activities during project lifetime	Results of the Extensive project will provide a first technical validation of the ability for the MobilitX products to be delivered through SaaS deployment. In parallel with the Extensive project lifetime, other "on premise" to "SaaS" experimentations will be performed on the MobilitX products, and will benefit from the Extensive feedback The long-term goal is for CS Group to be able to provide its customers with a full SaaS MobilitX product line.		

Table 5 – CS Group's Exploitation Plan

	Hacon		
Related Product(s)	Navigator Lib	**New product or existing?**	Existing
Description of the product & improvement resulted from ExtenSive work	Improvement of a module that shows a map providing locations and POIs to travellers. We will focus our work on the integration of an intelligent level of number of objects according to the zoom level, importance of objects and other factors.		
Target Customer	Companies that want to create their own application		
Distribution Channel	B2B		
Expected Impact	Increased customer satisfaction and easier navigation.		
Exploitation activities during project lifetime	Experience with integrating improved functionality to App and test within the Open Call Pilots.		

	Hacon		
Related Product(s)	HAFAS Smart VMS	**New product or existing?**	Existing
Description of the product & improvement resulted from ExtenSive work	Hacon's computer-based vehicle management system HAFAS Smart VMS gathers real time data that guarantee comprehensive, up to the minute passenger information and reliable connections between bus and rail. Additionally, HAFAS Smart VMS also performs data administration, processing, and archiving in the control centre. As a result, travellers can easily keep track of any irregularities in operations. This is possible through a journey planner, app installed on their smartphone. The product will be integrated into the S2R ecosystem and provided as SaaS to the TSPs.		
Target Customer	Public transport companies, Operators of MaaS platforms		
Distribution Channel	B2B		
Expected Impact	Providing SaaS to Public transport companies to increase user satisfaction by providing updated timetable data through real time information.		
Exploitation activities during project lifetime	Experience with providing SaaS to the S2R ecosystem and selected Open Call Pilots.		

	Hacon		
Related Product(s)	HAFAS timetable information system	**New product or existing?**	Existing
Description of the product & improvement resulted from ExtenSive work	The HAFAS timetable information system helps passengers to always be up to date on their connections. Combination of different means of public and private transport are included. The product will be integrated into the S2R ecosystem and provided as SaaS to the TSPs.		
Target Customer	Public transport companies, Operators of MaaS platforms		
Distribution Channel	B2B		

Expected Impact	Providing SaaS to Public transport companies to increase user satisfaction by providing updated timetable data through real time information.		
Exploitation activities during project lifetime	Experience with providing SaaS to the S2R ecosystem and selected Open Call Pilots.		

	Hacon		
Related Product(s)	eos.ticketingSuite	**New product or existing?**	Existing
Description of the product & improvement resulted from ExtenSive work	The mobile ticketing solution developed by eos.uptrade, a Hacon subsidiary, ensures an easy and fast mobile ticket purchase for the customer. The highly flexible solution allows the integration of multiple payment service providers, a wide range of different fares and tariffs can be displayed, and relevant novel mobile payment options are implemented. The ticketingSuite is ready for and forms the backbone of Hacon's automated mobile ticketing solution – a GPS-based Check-/Be-in/Check-/Be-out system for a seamless intermodal travel experience. The best price function calculates the lowest price for the passenger and makes it easier and more attractive to use.		
Target Customer	Public transport companies, Operators of MaaS platforms		
Distribution Channel	B2B, App Stores		
Expected Impact	Extension to an intermodal best price solution for higher attractiveness for customer and user.		
Exploitation activities during project lifetime	Experience with the implementation of additional means of transport for best price calculation.		

Table 6 – Hacon's Exploitation Plan

	Hitachi Rail STS		
Related Product(s)	Multimodal DSS	**New product or existing?**	Existing
Description of the product & improvement resulted from Extensive work	The Multimodal DSS (Decision Support System) aims at supporting TSPs for the management of multimodal transport operations. Experience with the implementation of a DSS for the mitigation of impacts related to maintenance activities and assets degradation has been developed within CONNECTIVE project. Therefore, the Extensive project will enrich the developed solution fostering its capability to manage multimodal scenarios, through an improved decision-making system able to react to events and disruptions in an effective and efficient way. The developments and novel achievements performed within the project will be incorporated in Hitachi Rail STS transportation technologies and subsystems like TMS, I-HMI, IL, PIS, etc.		

Target Customer	STS transportation technologies improvement for TSPs
Distribution Channel	B2B
Expected Impact	Optimized disruption management in order to offer a more reliable service and consequently increase travellers' satisfaction.
Exploitation activities during project lifetime	STS will build upon the knowledge acquired into this project and use it for internal development and for other European projects.

Table 7 – Hitachi's Exploitation Plan

	Indra		
Related Product(s)	Web Front Travel Companion	**New product or existing?**	Existing
Description of the product & improvement resulted from Extensive work	The Web Front Travel Companion can be used from a browser either from a computer or from a smartphone in order to be able to be used by more clients. The development of this component was carried out in MaaSive providing an initial set of functionalities that provided an initial experience of the S2R-IP4 ecosystem. In ExtenSive, the improvement of the Web Front Travel Companion will be focused on the integration of new functionalities that extend the scope achieved in MaaSive in order to provide a full experience of the S2R-IP4 ecosystem.		
Target Customer	Companies that want to offer MaaS functionalities from a browser		
Distribution Channel	B2B		
Expected Impact	Increased flexibility and customer satisfaction.		
Exploitation activities during project lifetime	Experience with integrating improved functionality of IP4 environment and test within the Open Call Pilots.		

	Indra		
Related Product(s)	Token Generator	**New product or existing?**	Existing
Description of the product & improvement resulted from Extensive work	Token Generator is a tool that can generate tokens and ETE. From either token from the TSP or the Contract Data and the Metadata structure, it is able to provide Token that follows the Metadata structure with the Information provided by the TSP or the ETE itself in different formats. This tool can be used by Operators that do not have the capacity to generate digital embodiments. Indra's Token Generator provides Digital Embodiment Entitlements to TSP that do not have such capacity, it helps TSP to digitalise their		

	systems. The product will be integrated into the S2R ecosystem and provided as SaaS to the TSPs.
Target Customer	Public transport companies, Operators of MaaS platforms
Distribution Channel	B2B
Expected Impact	Providing SaaS to Public transport companies to increase their digitalisation capabilities.
Exploitation activities during project lifetime	Experience with providing SaaS to the S2R ecosystem and selected Open Call Pilots.

	Indra		
Related Product(s)	CMMP	**New product or existing?**	Existing
Description of the product & improvement resulted from Extensive work	The CMMP (Contractual Management Market Place) is a component created in the Co-Active project, intending to facilitate the creation and management of agreements among TSP of the IP4 ecosystem. In Co-Active the main functionality was to allow that two TSP create multimodal discounts that take place when both TSP are involved in the same offer. The agreement needs to be accepted by the involved parties, and after that, a "contract" is established, and the conditions of the contract are considered at IP4 processes, such as at offer building time in the case of discount. Within MaaSive, it was decided to take advantage of this existing component to be also the basis for the creation of Mobility Packages (MP), which will be considered by other components of the ecosystem at shopping or issuing time. In ExtenSive, CMMP will increase flexibility by introducing different rights and capabilities to the users of the CMMP. This will increase the flexibility of the component and it will create different types of users with different capacities depending on the nature of the capacity that represents.		
Target Customer	Operators of MaaS platforms, Public institutions		
Distribution Channel	B2B		
Expected Impact	Public institutions would provide an open tool to foster the implementation of MaaS environments.		
Exploitation activities during project lifetime	Enhancement of the component and feedback from the experience with selected Open Call Pilots.		

	Indra		
Related Product(s)	CRM	**New product or existing?**	Existing

Description of the product & improvement resulted from Extensive work	Customer relationship management (CRM) is a component to manage operator interaction with its customers focused on Transport operations. It uses data the customers' data registered in the ecosystem to improve business relationships with customers, specifically focusing on customer satisfaction. In Extensive, CRM will increase flexibility by introducing different rights and capabilities to the users of the CRM. This will increase the flexibility of the component by creating different types of users with different capacities. The objective of implementing different roles in the ecosystem is to separate the rights and accesses to the information that is collected by the ecosystem depending on the nature of the user.
Target Customer	Public transport companies, Operators of MaaS platforms
Distribution Channel	B2B
Expected Impact	Extension to the CRM developed in MaaSive to improve the flexibility and privacy of the component for customer and user.
Exploitation activities during project lifetime	Experience with the implementation of new hierarchy within the component and selected Open Call Pilots.

Table 8 – Indra's Exploitation Plan

	Network Rail		
Related Product(s)	N/A	New product or existing?	N/A
Description of the product & improvement resulted from Extensive work	ExtenSive WP7 has analysed several scenarios to develop some use cases that could be used to demonstrate the IP2-IP4 Synergy. Within Network Rail's R&D programme "Target190plus", there may be an opportunity to reuse these use cases and their findings in part or in whole within the development of our projects.		
Target Customer	Public transport companies, Operators of MaaS platforms		
Distribution Channel	Implementation through development channels		
Expected Impact	To be determined		
Exploitation activities during project lifetime	Shared awareness through other R& D projects within Networkrail		

Table 9 – Network Rail's Exploitation Plan

	PKP S.A.		
Related Product(s)	APIS	**New product or existing?**	Existing
Description of the product & improvement resulted from Extensive work	The main serious problem will be the creation and updating of the ICT environment. The project will allow for the development - ensuring the management of MS management with solutions for navigation and passenger information. The project made it possible to test the vehicles that routed between these points on the site that have now been replaced in terms of the status of the station vehicles that are taking place. The emerging dictionary of audio description of standardized standards of the line of the blind or visually impaired with IT systems. We will help you design immensely that you will be able to create data from various sources and improve quality of improving quality and timeliness. This is essential for passengers to provide information of the required quality.		
Target Customer	Public transport companies		
Distribution Channel	B2B		
Expected Impact	The project will allow for the development of construction standards in the future, to adapt them to the navigation solutions that will be developed in the ExtenSive project. At the same time, the IRES tool will be a starting point for further expansion of the scope of collected and combined data to develop solutions and mechanisms like the Big Data type tool aimed at achieving greater value from the data held.		
Exploitation activities during project lifetime	N/A		

Table 10 – PKP's Exploitation Plan

	THALES PORTUGAL		
Related Product(s)	APIS	**New product or existing?**	Existing
Description of the product & improvement resulted from Extensive work	APIS system aims to provide Passenger Information to several types of transportation, but mainly Main Line (Rail) and Urban (Metro and Light Rail). This differentiation derives from technical and strategic specifies. Technically, the Main Line projects are more complex and resource demanding, having more sophisticated Production Plans and Transit Management Systems, contrary to Urban transports that are more straight forward. From the strategic perspective, urban solutions are being deployed along-side with other ISCS integrated applications providing an Urban Transport ecosystem		
Target Customer	Public transport companies		
Distribution	B2B		

Channel	
Expected Impact	The Collaborative space tolls are expected to allow the generation and management of new network information provided by the travellers. This information may be used to improve the information provided to the traveller in-station or through digital channels.
Exploitation activities during project lifetime	Collaborative space trolls are to be tested within Shift2Rail project pilots. Depending on the results of the development and tests, these tools may be integrated on the APIS product line or other new products related to mobility.

Table 11 – Thales' Exploitation Plan

9. Conclusion

Dissemination and stakeholder engagement is key to the success of this project and all IP4 and Shift2Rail initiatives.

This deliverable presents a thorough plan relating to the Dissemination and Communication activities of ExtenSive carried out since its initiation up until month 10 of the project, with the aim of raising awareness of the project objectives and outcomes achieved until now.

It also provides a roadmap of activities that will be followed throughout the lifetime of the project, taking strongly into consideration that it is not a standalone project but part of a wider programme as S2R, and should be completely aligned with the S2R activities and dissemination guidelines. Consequently, some of the dissemination activities mentioned throughout the document will be accomplished together with other IP4 projects (for example, other IP4 projects will have opportunity to participate at ExtenSive Mid – Term event in 2022).

Furthermore, it is important to note that the Dissemination & Exploitation Plan will be updated constantly and accurately throughout the lifetime of the project.

A final Deliverable D12.3 Dissemination and Exploitation report (month 26) will provide a comprehensive summary on the outcomes of the entire Dissemination, Exploitation and Communication activities that are exercised throughout the ExtenSive project.

10. Appendices

10.1. Abbreviations & Acronyms

Abbreviation/Acronym	Description
AB	Advisory Board
DEC	Dissemination, Exploitation and Communication
DEP	Dissemination and Exploitation Plan
GA	Grant Agreement
IP	Innovation Programme
IT2RAIL	Information Technology for Shift2Rail
OCs	Open Calls
S2R	Shift2Rail
TO	Transport Operator
TSP	Transport Service Provider
WP	Work Package

Table 12 – List of Abbreviations/Acronyms