







Deliverable D 1.2 Quality Assurance Plan

Project acronym:	LOCATE
Starting date:	01/11/2019
Duration (in months):	24
Call (part) identifier:	S2R-OC-IP5-01-2019
Grant agreement no:	881805
Due date of deliverable:	Month 03
Actual submission date:	28-04-2020
Responsible/Author:	Magno Santos - EVOLEO
Dissemination level:	PU
Status:	Final

Reviewed: yes







Document history			
Revision	Date	Description	
0.1	10/01/2020	Draft version	
0.2	20/01/2020	Revision by partners	
0.3	28/02/2020	Final revision by coordinator	
0.4	28/04/2020	Update regarding Public Deliverables on S2R website	

Report contributors				
Name	Beneficiary Short Name	Details of contribution		
Magno Santos	EVOLEO	First Draft of Deliverable and final revision		
Virgínia Infante	IST	Deliverable revision		
Adam Bevan	HUD	Review of deliverable		
Loïc ANCIAN	VIB	Review of deliverable		





loeate

Table of Contents

1	Exe	cutive Summary			
2	Abb	bbreviations and acronyms5			
3	3 Background				
4	Obje	ective/Aim	. 7		
5	Mar	nagement	. 8		
	5.1	Means and procedures	. 8		
P	anning	management	. 8		
Sł	nift2Rai	l access to information	. 8		
Т	op level	responsibilities	. 8		
	5.2	Reporting – means and procedures	. 9		
A	ction M	anagement	. 9		
G	annt-Cł	nart Schedule	. 9		
Pı	roject T	racking, cost, Schedule and reporting	. 9		
Te	echnica	Documentation	10		
6	Org	anization	10		
	6.1	EVOLEO (EVO)	10		
	6.2	IST	10		
	6.3	HUD	11		
	6.4	FGC	11		
	6.5	UIC	12		
	6.6	Vibratec	13		
	6.7	Tasks and Responsibilities	13		
	6.8	Advisory Board	14		
7	Pro	gress Monitoring	14		
	7.1	Deliverables	15		
	7.2	Project Meetings	17		
	7.3	Risk Management	18		
	7.4	Advisory Board	18		
	7.5	Cooperation with FR8RAIL III Project	19		
8	IPR	POLICY	19		
9	Info	rmation Flow	20		
	9.1	Project Documentation	20		
	9.2	Project Mailing Lists	20		
	9.3	Website	20		







1 Executive Summary

The deliverable D1.2 "Quality Assurance Plan" describes the processes in order to ensure that the scientific and technical activities of the project are accomplished successfully and in compliance with the required quality standards.

This document is divided into three main chapters:

- Management structure description including the Project Advisory Board (PAB) and Scientific Technical Committee (STC);
- Progress monitoring processes namely deliverables reviews, project meetings and risk management;
- Information flow including internal communication related to documentation and mailing lists, as external communication and inter-projects cooperation.







2 Abbreviations and acronyms

Abbreviation / Acronyms	Description
AIL	Action Item List
CCN	Contract Change Notices
CIR	Centre for Innovation in Rail
CoeRS	Centre of Excellence in Rolling Stock
FGC	Ferrocarrils de la Generalitat de Catalunya
HUD	University of Huddersfield
IPR	Intellectual Property Rules
IRR	Institute of Railway Research
IST	Instituto Superior Técnico
КоМ	Kick-off meeting
NA	Not Applicable
PA	Product Assurance
РАВ	Project Advisory Board
PC	Project Coordinator
PO	Project Officer
S2R	Shift2Rail
STC	Scientific and Technical Committee
TD	Technology Demonstrator
WA	Work Action
WP	Work Package







3 Background

The present document constitutes the Deliverable D1.2 "Quality Assurance Plan" as part of the WP1 – Project Management.

It does not contribute any TD/WA.







4 Objective/Aim

Deliverable D1.2 – "Quality Assurance Plan" intends to describe the project management structure and define suitable quality management processes, including mechanisms to review internal reports and deliverables to ensure that the scientific and technical activities of the project are accomplished successfully and in compliance with the required quality standards.

The main objectives of the deliverable comprise:

- Promote the effective discussion on scientific and technical issues between partners;
- Define the overall monitoring of the progress of the activities and the accomplishment of Milestones;
- Specify the contribution to the elaboration/revision of the project deliverables;
- Guarantee the scientific and technical quality of the results/deliverables.

Additionally, this document also describes the information flow and revisions steps of the deliverables as wells as the external project communications.







5 Management

The project management objective is to ensure that all project related tasks are performed successfully and according to established contractual and technical requirements. Main objectives are:

- Clear definition of contractual requirements and relationships
- Dedicated project organisation
- Project planning and control

The framework for control activities shall be the Work-Breakdown Structure in conjunction with the Gannt chart and the Work Package (WP) content. The WP content shall be well defined and WP outputs shall be clearly identified.

The following description shall provide a general overview of the procedures implemented by EVOLEO in order to provide both internal and external project management and control, as well as to guarantee the quality of its work.

5.1 Means and procedures

The project management will consist in applying the procedures described in the following sections.

Planning management

- Cutting out each step-in elementary tasks
- Assignation of resources to tasks
- Planning updates

Shift2Rail access to information

- All information relevant to the programme/activity, including documentation, financial records, equipment and facilities are available to the PO with free access for any inspection or audit;
- The PO will be notified at least with 2 weeks in advance of any Presential Meeting, Test or Demonstrator activities in order to enable the PO to attend if desired.

Top level responsibilities

Project Coordinator (PC)

The Project Coordinator has the direct responsibility for:

- Managing all the effort allocated
- Monitoring progress and status of the project
- Managing and updating the project planning and time schedule in agreement with Project Officer
- Reporting to PO
- Representing the consortium in all Review Meetings
- Managing the organization of Review Meetings and the provision of the meeting minutes







- Advising on all commercial, financial and legal aspects arising from the contract.
- Preparing of Contract Change Notices (CCN) in their legal and financial aspects
- Managing IP rights

In this activity, the PC role will be performed by Mr. Magno Santos from EVOLEO Technologies.

WP-Manager

The Work Package Manager's duties are to perform the tasks as specified in the WP-description and to deliver the specified output in accordance to the time schedule:

- Responsible for the fulfilment of the tasks as specified in the WP-description
- Directly interfacing the parent WP-manager and respectively the PC
- Managing the required resources needed to perform the tasks
- Provision of specified output (document)

5.2 Reporting – means and procedures

The project reporting will consist in applying the procedures described in the following sections.

Action Management

- Progress and review meetings will be reported in Minutes of Meetings prepared and distributed electronically up to 10 days after the meeting event
- An Action Item List (AIL) will be created to record all agreed actions
- Each item will be uniquely numbered
- Each action will make reference to the minutes of the meeting at which the action was agreed
- The AIL update will be reviewed at the review meetings

Gannt-Chart Schedule

- EVOLEO will maintain updated the Gannt-Chart Schedule agreed at KoM
- EVOLEO will present an up to date Gannt-Chart Schedule at each review meeting for review

Project Tracking, cost, Schedule and reporting

- Bi-weekly control of work progress within consortium
- Progress and review meetings within consortium
- Planning updates if necessary
- A periodic progress report will be prepared and sent to the PO, Shift2Rail and the European Comission with the status of the project including, but not limited to:
 - o action items completed during the reporting period
 - o status report on all long lead or critical delivery items
 - o description of progress: actual vs. schedule, milestones and events accomplished
 - reasons for slippages and/or problem areas, if any, and corrective actions planned and/or taken, with revised completion date per activity







- events anticipated during the next reporting period (e.g. milestones reached)
- o expected date for major schedule items
- o document status list
- o current change Status list
- o financial status report
- The PO will be notified of any problem likely to have a major effect on the time schedule of the work or to significantly impact the scope of the work to be performed

Technical Documentation

- LOCATE Consortium will submit to the customer for approval, not later than the due dates, all the documentation as foreseen in the deliverables plan
- LOCATE Consortium will review the all the documentation from the subcontractor and approve it before sending it to the customer, via the official formal interface
- Any technical documentation to be discussed at a meeting with the PO will be submitted two (2) weeks in advance

6 Organization

6.1 EVOLEO (EVO)

EVOLEO Technologies, Lda. (EVOLEO) is an SME, investing in skills related to the design of critical and complex electronic systems. EVOLEO embraces five areas of activity: Space, Transportation, Energy, Health and Industry. EVOLEO holds a skilled multidisciplinary engineering team seeking and promoting partnerships and networking between centres of knowledge and industry players. EVOLEO strongly cooperates, among others, with European Space Agency (ESA), Portuguese Medical Emergency Service (112), European Railway entities, Industrial entities as BOSCH and multiple international R&D groups in the frame of cooperation projects.

EVOLEO's mission is to provide high-end and differentiated electronic engineering solutions, seeking continuous improvement, flexibility, quality and customer-oriented innovation. EVOLEO aims for international recognition as a technological company for leveraging partnerships, added value enhancement and sustainable growth.

EVOLEO is also a founding member of the Portuguese Railway Platform, which is an organisation created to manage the rail cluster in Portugal, bringing together Operators and Managers, Academia and R&D, Industry and SMEs, focusing on Research and Development and Innovation projects in areas such as Rolling Stock, Command, Control and Communications, Interoperability, Infrastructure and Knowledge Management, amongst others.

EVOLEO has three business areas. First related to Quality Support System targeting Railways maintenance shops, including ATE – Automated Test Equipment or Portable Test Units to ease the process of fault detection, reduce time of operation and minimize human error, among others. Second, on the Technology Business area the focus is to create new products that can be used for third parties for their own applications. Lastly, EVOLEO is also investing heavily on the Tangible Assets Management area to have systems and solutions to Monitor different kind of assets and provide the management tools to the End User.

6.2 IST

Instituto Superior Técnico (IST) is the largest engineering school in Portugal. Inside the Mechanical G A 881805 Page 10 | 20







Engineering Department, the railway research group has extensive experience in national, European and international research projects. This research group has been actively involved in EU funded projects within the 6th and 7th Framework Programmes and H2020, among others: RAILDYN, PANTOTRAIN, SAFETRAIN, SAFEINTERIORS, MODTRAIN, AWARE, SKILLFUL, SKILLRAIL, FUTURAIL, EURENEX, MAXBE, SMARTE, PANTOCL.

6.3 HUD

The University of Huddersfield with over 22,000 students and 1600 staff, has close links with industry, business and the cultural community. Amongst seven academic schools, the School of Computing and Engineering hosts the Institute of Railway Research (IRR) carrying out research activities funded by UK and EC research grants and supporting the railway industry through direct enterprise activities.

The Institute of Railway Research (IRR) at the University of Huddersfield is an internationally leading research group built upon core expertise in the field of railway vehicle and track system dynamics. The group has been established for over 20 years in this field and brings together some of the most highly skilled railway researchers in the UK. The institute currently employs a team of over 30 multi-disciplinary staff with capabilities within the core areas of: Vehicle and track dynamics; Traction, braking and energy systems; Pantograph and overhead systems; Advanced safety management systems; Condition monitoring and analytics; Technology development and innovation.

Based upon its core capabilities the IRR delivers fundamental academic research through UK and European funded research projects. It further supports the rail industry through directly funded commercial project work and helps to deliver new technologies through its Centre for Innovation in Rail (CIR). The IRR also provides engineering and railway risk related research under a strategic partnership with Rail Safety and Standards Board and is leading the £30M Centre of Excellence in Rolling Stock (CoeRS). This centre is one of three rail centres of excellence under the banner of the UK Rail Research and Innovation Network (UKRRIN), funded by the Higher Education Funding Council for England with generous financial backing from the UK rail industry itself, which is designed to accelerate new technologies and products from research into market applications. The CoeRS will also include a Smart Rolling Maintenance Research Facility which will support research into the optimisation and automation of rolling stock maintenance.

IRR has had leading roles a number of EC funded research projects since its inception, including: SMaRTE, RUN2RAIL, DYNAFREIGHT, D-RAIL, CAPACITY4RAIL and SPECTRUM.

6.4 FGC

Ferrocarrils de la Generalitat de Catalunya (FGC http://www.fgc.cat/eng/index.asp) was founded in 1979 to operate two historical lines with their origins in 1863 in the introduction of the Barcelona – Sarrià suburban train service. Over the years, new lines have been added to FGC and these historical lines have been improved and have grown with new passenger and freight services in Barcelona and the surrounding areas. This continuous growth, together with the diversification of the business into other sectors such as leisure and tourism, has made us an efficient public company distinguished by its high quality of service and efficiency in infrastructure management and transport transport

- 87 million passengers/year and freight transport







- Workforce over 1900
- 1301 circulations per day with minimum frequency of 112" in Barcelona-Vallès line
- Rail network stretching over 290 km of track with international, narrow and Iberian gauges
- 107 stations
- The only 2 rack railways existing of Spain
- 4 funicular cable cars
- Touristic activities: 47 ski lifts and 146 km of ski runs, touristic trains



The two <u>main railway lines</u>, Barcelona – Vallès (BV) and Llobregat – Anoia (LLA), have metro services inside Barcelona city and commuter services with Barcelona surrounding areas. BV has 53 km of double track with international gauge, 46 passenger trains, 62 million passengers per year and 32 trains at peak hour with a frequency of 112". LLA has 140 km of double and single track in some sections with metric gauge, 42 passenger trains, 22 million passengers per year and freight transport. FGC also manages A regional Line Lleida – La Pobla (LLP), it has regional services in a rural area with 90 km of Iberian gauge and non-electrified track, with 10 trains in each direction in working days and 200.000 passengers per year. FGC has 100% of their installations in these three lines adapted to people with reduced mobility.

Regarding freight transport FGC is an important local operator which manages transport of mining products from Suria mine to Bacelona Port, new vehicles from SEAT factory and Bacerlona Port, and car pieces between Barcelona Port and SEAT factory.

FGC does and manages infrastructure and rolling stock maintenance. There are two workshops with one of them approved for interoperable equipment maintenance.

6.5 UIC

UIC is the worldwide organisation for international cooperation among railways and the promotion of rail transport at a global level. Founded in 1922, it currently gathers 200 members on all 5 continents, among them rail operators, infrastructure managers, etc. The mission of the association is to promote rail transport at world level with the objective of optimally meeting







current and future challenges of mobility and sustainable development.

UIC maintains close cooperation links with all actors in the rail transport domain right around the world, including manufacturers, railway associations, public authorities and stakeholders in other domains and sectors whose experiences may be beneficial to rail development. The UIC's main tasks include understanding the business needs of the rail community, developing programmes of innovation to identify solutions to those needs and preparing and publishing a series of documents known as IRS that facilitate the implementation of the innovative solutions.

The specific areas of activity are to:

- Promote interoperability, improve the overall coherence of the rail system, create new world standards for railways (including common standards with other transport modes).
- Develop and facilitate all forms of international cooperation among Members, facilitate the sharing of best practices (benchmarking).
- Propose new ways to improve the technical and environmental performance of rail transport, reduce costs.

6.6 Vibratec

VibraTec is an engineering, consulting, and research company, specializing in structural dynamics, vibrations and acoustics in various industrial fields. The company was founded in 1986 by a team of passionate engineers. Now, 30 years later, the company has grown to 120 employees and a turnover of 11m EURO. It is 100% the property of its employees.

VibraTec's customers are the R&D and maintenance services of many different industries such as railway, automotive, energy, aeronautics, defence ... Assistance is provided at product's design, development, and testing, as well as its integration in larger systems and along its life cycle.

The VibraTec group invests 20% of its turnover in R&D activities in form of internal development or taking part in collaborative research projects of various scales. VibraTec regularly publishes results in peer-reviewed papers and conferences.

VibraTec's know how is based both on experimental and simulation techniques, from multi-physics finite element modelling to experimental modal analysis nd acoustic imaging. Its consulting activity is shared between diagnosis, mechanical design, and training. A large part of this activity is performed on the customer's premises by high-level, versatile experts to respond quickly to customer's request.

6.7 Tasks and Responsibilities

Partner	Role Within LOCATE
EVOLEO	EVOLEO is the project coordinator and the WP leader for WP1 (Project Management) and WP2 (Requirements and Specifications). Besides being the Project Coordinator, it will focus on the development and implementation of critical electronic components, particularly for data collection and communication, as well as for data processing. It will also contribute to the development of a functional Software to showcase the project results.
IST	IST will lead WP4 (Reference Behaviour) and will participate in the other work packages (WP1, WP2, WP3, WP5, WP6 and WP7). Since IST is an Engineering University, it will pay special attention also to the dissemination part of the project (WP7).
HUD	HUD will lead WP5 on 'Operational Behaviour' and will support the overall delivery and management of the other work packages.
FGC	FGC is the end-user of the product developed within the project. Regarding the development FGC contributes with his expertise to define the requirements and facilitates the infrastructure required





Horizon 2020 European Union Funding for Research & Innovation



	for the demos and pilots.
UIC	It assists FGC in the modification of the schemes and the organization of the maintenance of the locomotives to which the project relates by working on the operational use of the tools developed by the other members of this project. At the end of the project, the UIC guaranties the dissemination of the conclusions and the good practices defined on this occasion. Other railway companies of all sizes need to benefit from this experience.
Vibratec	It will lead the design of the measurement chain necessary for monitoring the selected components: sensor, acquisition hardware, communication to on-board unit, etc. It will implement the integration, test and verification of the demonstrator. It will support the construction of the required computer models.

6.8 Advisory Board

Table 1 lists the Advisory Board Composition in regards to entities and their representatives.

Entity	Contact
DB CARGO / FR8RAIL III	Martin Haas
DB CARGO / FR8RAIL III	Norbert Kahl
Trafikverket	Jan Bergstrand
GMF Railway Maintenance Services	Guillem Fortuny Masdeu
SNCF	Jean-pierre Gielen
SBB	Urs Gehrig

Table 16-1 – Advisory Board Composition

7 Progress Monitoring

The LOCATE project is structured around 7 Work Packages (WPs) with a total duration of 24 months according to the structure of Figure 1.



Figure 17-1 – Work packages structure.

Project reports should be the main instrument serving as practical measurement of project progress on a regular basis.

WP leaders manage and monitor the progress of the tasks of their WP through a continuous intermediation with the Task Leaders.

GA 881805







Each WP leader reports on the progress of their WP to the Project Coordinator (PC) and in the consortium meetings and will be responsible for the detailed planning of the subtasks and activities identified, coordinating the work performed and information flow required by the various interdependencies.

The WP leaders, collects, compiles and submits consolidated technical and financial details in the form of 'Periodic Reports', every 12 months. They should also inform the Scientific and Technical Committee (STC) and the Project Advisory Board (PAB) on the progress achieved, results obtained, and problems encountered before every consortium meeting and participate in the preparation of the Review Meetings with the Commission.

7.1 Deliverables

Each work package leader is responsible for each deliverable and responsible for ensuring that the deliverable meets the quality assurance requirements.

The Project Coordinator (PC) should ensure that the deliverables are prepared in due time. As such, the deliverables should be sent for approval by the Due Date Month as defined in the Table 2 below.

ID	Deliverable name	WP	Lead	Туре	Dissem	Due
D1.1	Gender Strategy Plan	1	EVO	R	PU	M2
D1.2	Quality Assurance Plan	1	EVO	R	PU	M3
D1.3	Data Management Plan	1	EVO	R	PU	M3
D2.1	Use Cases Description	2	UIC	R	PU	M3
D2.2	Report on Standard and Regulations	2	UIC	R	PU	M3
D2.3	FMECA Analysis	2	EVO	R	PU	M5
D2.4	Requirements and Architecture Specification	2	VIB	R	PU	M6
D3.1	Available technologies assessment report	3	VIB	R	PU	M6
D3.2	Impact on safety levels assessment report	3	UIC	R	PU	M15
D3.3	List of Selected Sensors and Devices	3	VIB	R	CO	M12
D3.4	LOCATE OBU Specification	3	EVO	R	CO	M18
D3.5	Datasets Specification	3	IST	R	CO	M21
D3.6	Alert Limits Specification	3	EVO	R	CO	M21
D4.1	Available Models Assessment Report	4	IST	R	PU	M6
D4.2	Computational Models Specification	4	EVO	R	CO	M9
D4.3	Simulation and Post Processing Results Report	4	IST	R	PU	M21
D4.4	Behavior Prediction Report	4	VIB	R	PU	M24
D5.1	Operational Constraints Identification Report	5	UIC	R	PU	M6
D5.2	Monitoring and Thresholds Rules Specification	5	UIC	R	PU	M8
D5.3	Scheduling Flowchart	5	IST	R	CO	M12
D5.4	Assessment report of unplanned events on planned maintenance	5	FGC	R	PU	M24
D5.5	LOCATE Software user manual	5	EVO	R	CO	M24
D6.1	System Integration Report	6	FGC	R	CO	M21

Table 2 7-1 – LOCATE deliverables







D6.2	RAMS Analysis Report	6	EVO	R	СО	M21
D6.3	Tests Report	6	VIB	R	CO	M22
	Predictive Maintenance Program Implementation and Results					N424
D6.4	Report	6.5	UIC	R	PU	10124
D7.1	Dissemination and Communication Plan	7	UIC	R	PU	M4
D7.2	Report on dissemination activities	7	UIC	R	PU	M24
D7.3	Exploitation Plan	7	EVO	R	PU	M24
D7.4	Recommendations Brochure	7	UIC	R	PU	M24

Work in Progress Deliverables which are documents, are shared by Office 365, with an edition link, so that everyone one involved can actively contribute. Documents will be edited in "Track changes" mode so that the leader of the deliverable can clearly identify updates performed on the document by other partners.

All the documentation developed under the project, will be referenced according to:



All documents are present in a list of documents and controlled by Product Assurance (PA) manager. This list allows the control and management of the documents associated with the project.

All the revisions are clearly identified within the document.

Figure 2 shows the document review flowchart.









Figure 27-1 - Document review flowchart.

After each deliverable being revised and approved, it will be uploaded to the official project repository workspace.

• http://extranet.uic.org/

In the case it is a Public Deliverable, it will also be uploaded in Shift2Raill cooperation tool website so they could become available in Shift2rail web page:

https://projects.shift2rail.org/s2r ip5 n.aspx?p=S2R LOCATE

7.2 Project Meetings

Discussions and brainstorming sessions in the consortium meetings will be essential to incorporate in LOCATE potential new research and technical developments, as well as to update, if necessary, the needs identified by the end user's partners.

There will be regular LOCATE Consortium meetings (expected every 3 months) which will involve all partners and enable them to get together to receive a briefing on the project's status and coordinate the project's management and technical work.

The foreseen regular LOCATE project meetings include:







- project work progress meeting every two weeks (conference call).
- work progress face to face meeting every three months.

7.3 Risk Management

A number of risk factors related to project implementation have been identified. For each risk, mitigation strategies are proposed. The implementation of each risk-mitigation measure will be tightly controlled by the responsible management body.

The LOCATE risk management process includes identification, mitigation and action plans to reduce and/or eliminate any risk that may arise. It will comprise the following steps:

- Description of risk
- WP(s)
- Severity
- Probability
- Proposed Risk Mitigation Measures

The purpose of the risk mitigation planning is to reduce the impact or the probability for the event to occur, to a level that can be managed by the project. It determines when and what needs to be done to reduce or eliminate the risk.

There are several categories of risks:

- Technical technical objectives are in danger or cannot be fulfilled
- Schedule risks causing delays and affecting the overall schedule
- Cost risks adding cost to the project or envisioned products

The continuous risk management process is based on early identification and fast reaction to events that can negatively affect the outcome of the project. The frequent meetings of the project bodies therefore serve as the main forum for risk identification. The identified risks are then analysed and graded, based on impact and probability of occurrence.

7.4 Advisory Board

LOCATE's Advisory Board will comprise a high-level international panel of experts from different areas of knowledge that will provide an additional form of quality control, advice, and validation of the vision, global impact and outreach of the project.

Members of the FR8RAIL III and FR8HUB consortiums were invited for the Advisory Board and as such will participate in regular meetings with the LOCATE consortium.

The Advisory Board communicate with the STC throughout the project lifetime, and make use of their networks to disseminate and exploit the project results, at the European and international level.

The representatives of the Advisor Board should attend in LOCATE Project Advisory Board Meetings along with consortium members in months 3, 6, 12, 18 and 24.







7.5 Cooperation with FR8RAIL III Project

Table 3 provides the exchanged information between LOCATE and the complementary CFM project FR8RAIL III.

FR8RAIL III core activities for	LOCATE core activities for collaboration	
collaboration		
Task 1.1: Analyse FR8RAIL I+II use	WP2: Requirements and Specifications	
cases for fleets in European	Task 2.1 - Use Cases Definition	
countries	 Task 2.2 – Standards and Regulations Constraints 	
Task 1.2: Analysis of untapped use	Task 2.3 - Requirements & FMECA Analysis	
cases and business opportunities	Task 2.5 - Architecture Specification	
related to CBM		
Task 1.3: Component-specific	WP3: Measured Behaviour	
analysis	 Task 3.1 - Assessment of Available Technologies 	
	 Task 3.2 – Assessment of Impact on Safety Levels 	
	 Task 3.5 – Definition of Proper Data Sets 	
	Task 3.6 - Definition of Alert Limits	
	WP4: Reference Behaviour	
	 Task 4.1 - Assessment of available Models 	
	Task 4.2 – Data Collection & Design of Computational	
	Experiments	
	Task 4.3 - Vehicle Dynamic Simulation and Post Processing	
	 Task 4.4 – Minimum Digital Twin Modelling 	
	Task 4.5 - Comparison of Reference and Measured	
	Behavior	
Task 1.4: User-centric design of CBM	WP5: Operational Behaviour	
dashboards	 Task 5.1 - Operational Constraints 	
	 Task 5.2 – Monitoring and Thresholds Rules Definition 	
	 Task 5.3 – Reviewing the Current Methods of Decision 	
	Making	
	 Task 5.4 – Framework of Tactical and Operational 	
	Maintenance Scheduling	
	Task 5.5 - Implementation of Predictive Maintenance	
	Program	
	Task 5.6 – Impact Assessment of Preventive and Predictive	
	Maintenance	

Table 3 7-2 – Information between LOCATE and FR8RAIL III.

8 IPR POLICY

The Intellectual Property Rights (IPR) policy of LOCATE project is handled in line with general EC policies regarding ownership, exploitation rights, confidentiality, availability of information, deliverables, etc., to other EU funded projects and disclaiming rules.

The rules applied for the management of intellectual property within the frame of LOCATE project and for the future exploitation of project's results are fully compatible with the Grant Agreement and are specified in the IPRs Consortium Agreement.

The IPR policy of the LOCATE project will be monitored by the coordinator.

GA 881805







9 Information Flow

9.1 Project Documentation

Dedicated templates will be used for uniform internal and/or external presentations of the project. The office 365 (support by EVOLEO) should be used to elaborate the deliverables.

9.2 Project Mailing Lists

Email will be the most common way of exchange between all consortium members. For a better organisation of the internal communication, it was created the following email: <u>locate@locate-project.eu</u>

Repositories

A repository (extranet) was created to share documentation, among partners. Each partner user will have a unique ID and Password to ensure confidentiality of the deliverables. The extranet link is the following: http://extranet.uic.org/

9.3 Website

To share projects results, news, and information to the public, a project website was created with the link http://locate-project.eu

END OF DOCUMENT