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Project Name: Reconfigurable Intelligent Sustainable Environments for 6G Wireless Networks (RISE-6G)

# Deliverable D1.1

# **Quality Plan**

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# Deliverable D1.1 Quality Plan

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#### Abstract

This deliverable presents the RISE-6G quality plan. With this deliverable we provide the internal rules and the guidelines for the realization of the RISE-6G project, making of progress reports (such as internal reports and deliverables), communication procedures, and publications.

#### Keywords

Quality plan, quality, project management, organization, deliverables, internal reports, milestones, reporting, confidentiality, publications, communications.



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# 1 Introduction

This deliverable presents the RISE-6G quality plan. The internal rules and the guidelines for the realization of the RISE-6G project, making of progress reports (such as internal reports and deliverables), communication procedures, and publications, are provided. Therefore, a methodology shared by all partners that relies on the best practices of collaborative projects is necessary to ensure an effective use of the resource of the project, so as high standard of the results of the research activities carried out within the project. The project produces deliverables and reports but also publications, software, hardware prototypes, etc.

Section 2 shows how the project is organized, how meetings are arranged and how the risks are managed. Section 3 gives the rules for the preparation of documents produced by the project, including confidential documents. Section 4 details the process for the deliverables and internal reports preparation. Publication and public presentations issues are dealt with in section 5.

Each partner of the RISE-6G project can use this deliverable as a basis for the organization of the project. It is a living document that could be updated during the lifetime of the project (under approval of the Project Management Team).

# 2 **Project organization**

The consortium of the RISE-6G project is made up of thirteen European partners. The consortium includes cellular operators, industrial equipment manufacturers, technology providers and network & systems developers. It is a fair consortium of academic, industry and research institutes, distributed amongst seven different European countries. Financial support comes from the H2020 Program of European Union, ICT-52 call.

Table 2-1 shows the partners of RISE-6G

Participant No	Participant organisation name	Participant short name	Country
1 (Coordinator)	COMMISSARIAT A l'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	CEA	FRANCE
2	NEC LABORATORIES EUROPE GMBH	NEC	GERMANY
3	ORANGE SA	ORA	FRANCE
4	TELECOM ITALIA SPA	ТІМ	ITALY
5	GREENERWAVE	GNW	FRANCE
6	CHALMERS TEKNISKA HOEGSKOLA AB	CHAL	SWEDEN
7	AALBORG UNIVERSITET	AAU	DENMARK
8	ETHNIKO KAI KAPODISTRIAKO PANEPISTHMIO ATHINON	NKUA	GREECE
9	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE TELECOMUNICAZIONI	CNIT	ITALY
10	CENTRE NATIONAL DE LA RECHERCHE SCIEN- TIFIQUE	CNRS	FRANCE
11	UNIVERSITY OF NOTTINGHAM	UNOT	UNITED KINGDOM

#### Table 2-1: European project consortium

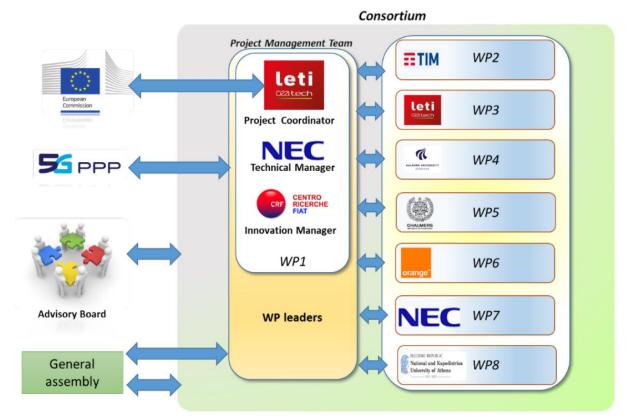
5002	Date:	H2020-ICT-52/RISE-6G/D1.1 29/07/2021	Security:	
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12	SOCIETE NATIONALE DES CHEMINS DE FER FRANCAIS	SNCF	FRANCE
13	CENTRO RICERCHE FIAT S.C.P.A.	CRF	ITALY

#### 2.1 Structure of the management

The RISE-6G project direction has been conceived to provide a light and adaptable management system, Figure 2-2, that allows:

- ensuring an open and productive dialogue between partners on scientific and strategic issues;
- making quick and effective decisions on technical or organizational matters;
- complete conformity with the Funding authorities' contractual requests;
- the conception, implementation and monitoring of the project's technological infrastructure



#### Figure 2-1 : RISE-6G management structure

Figure 2-2: Project governance structure.



**CEA-LETI** is the Coordinator of the project, and chairs the Project Management Team (PMT). CEA-LETI is in charge of the coordination and overall management of the project, and also in charge of the Periodic Reporting.

**NEC** is the Technical Manager of the project, in charge in ensuring that the scientific and technical developments of the consortium are in line with the expectations of the objectives.

**CRF** is Innovation Manager of the project, ensuring that the technical proposals of the partners agree with the level of novelty that the project is willing to address.

Any modification in the scope, or towards progress, of the project must be agreed by the Project Management Team (PMT).

The overall responsibility for the administrative and legal aspects of the organisation, technical and scientific coordination, as well as project planning and control, is assumed by the Coordinator.

The interface with the European Commission is carried out by the Coordinator. The Coordinator also ensures that reports are submitted on time. The Coordinator is responsible for the proper administration of the project, and collects, monitors and integrates the partners' administrative data periodically and prepares them for submission to the Project Officer of the European Commission. He co-chairs management meetings and coordinates technical aspects of the project.

The defined procedures ensure that:

- the goals are clearly identified and well understood,
- work packages and activities represent a good division of labour and include the expertise necessary to achieve objectives
- responsibilities are properly allocated
- the communication channels between participants are clear

Each work package has a well-identified head who is responsible for coordinating the technical work within the work package, in direct collaboration with the project coordinator, establishing in-depth objectives and milestones for the work package.

The achievement of all project's technical objectives is based on research, prototyping and associated validations. Several work packages are carried out at the same time but a frequent and iterative exchange of information and elements is planned between them, namely during WP tele-conferences as well as quarterly consortium meetings or tele-conferences.

Work package leaders, with the assistance of the Coordinator, manage these interactions between work packages and tasks.

The work package leaders, assisted by the project Coordinator, determine the technical options to achieve the main objectives of each work package and schedule changes to the technical approach in the case of unfavorable results.

RISE-6G project management structure is described in Table 2-2.



#### Table 2-2: Project management key elements

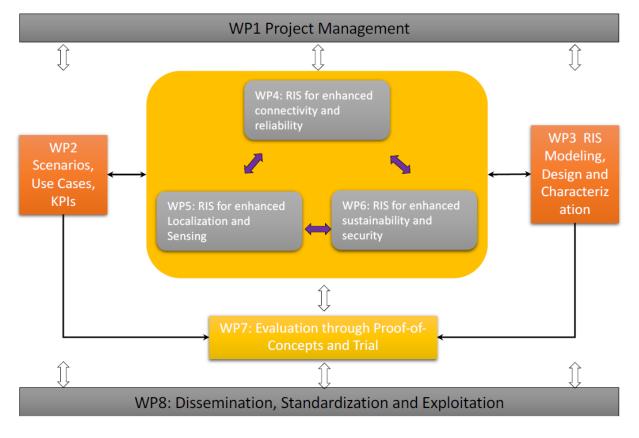
Project Management Team	<ul> <li>The Project Management Team (PMT) will be composed of the Coordinator and WP leaders. The procedures for making decision will be set in a Consortium Agreement on a basis of a text approved by the partners based on European standard agreements, amended to guarantee efficient governance of the Consortium and approved by the Funding Authorities. The PMT will be responsible of:</li> <li>continuous reviewing the Project Vision, in the light of the results of the project, of other pertinent scientific, technological, standardization or market developments and of the long term policies of the Funding Authorities and of the Project Partners;</li> <li>continuously defining and reviewing orientations for specific research activities within the project;</li> <li>analyzing and solving strategic problems in the implementation of the Project Work Plan;</li> <li>approving work plan modifications proposed by the WP leaders (see below);</li> <li>discussing and solving problems among partners or Work Packages;</li> <li>defining plans for the extension and exploitation of research carried out within the framework of the project.</li> </ul>
WP leaders	project except where key choices are necessary. The Work Package leaders will be in charge of the daily management of the tech- nical work in their respective WP. They will monitor progress of individual Work Packages and continuous review of the Project Work Plan. They will also be in charge of maintaining a good level of exchanges between the WP in order to align contributions and make the RISE-6G project providing with some coherent overall outcomes.
Task Leaders	The Task Leaders will be in charge of the daily management of the technical work in their respective tasks. They will be in charge of reporting any issue to the WP leaders, that may impact the WP work, and will be assisted by the WP leaders to overcome these and ensure the success of RISE-6G outcomes.Task Leaders will be responsible for reporting the information of interest in order for the WP leaders to produce a valuable reporting to the Coordinator and Technical Manager.

#### 2.2 Work packages and work organization

The relations between WPs and Tasks are shown on Figure 2-3. Deliverables and internal reports materialize the exchanges at pre-defined dates (milestones). Nevertheless, ongoing exchanges between partners, even between different WPs and tasks, are fostered.



#### Figure 2-3: Project work package interdependencies.



#### 2.2.1 Work package structure

A work plan has been created in the aim of achieving the high technical and scientific goals. This work plan provides the principal activity of technical research. It is complemented by appropriate engagement activities with concerned partners and field tests. The work plan is divided into six work packages (WPs) with the objectives described below:

- WP1 "Project Management" undertakes all project coordination activities, interfacing with the European Commission (EC), day-to-day project coordination, contract and financial management, quality control and knowledge management, and participation in 5GPPP Infrastructure Meetings.
- WP 2 "Scenarios, Use Cases & KPIs" identifies the RIS scenarios and the associated business, operational and technical requirements, KPIs and architectures, with emphasis on connectivity, localization, and sustainability. The WP main outputs are fully defined RISE-6G scenarios and use cases, metrics and KPIs, and RIS network architectures and deployment strategies.
- WP 3 "RIS modelling, Dezsign & Characterization" models, designs, and characterizes the RIS components as a part of the overall 6G system by addressing the main issues related to the electromagnetic modelling and technology constraints. WP3 outputs are beyond-SoTA RIS models and system level abstractions, new RIS empowered propagation models, and the design of different RIS-embracing 6G bands from below 6 GHz to above 100 GHz as well as technology benchmarks.



- WP 4 "RIS for enhanced connectivity and reliability" investigates the fundamental performance limits of RIS based systems and develop algorithms, protocols and deployment strategies. The enhanced wireless connectivity and reliability in boosted areas enables, for example, seamless Edge Computing. WP4 outputs are specific communication-oriented architectures, control schemes and deployment strategies at both RIS and system level, communication and edge computing oriented RIS control protocols and algorithms, and performance evaluation in terms of communication-specific performance metrics.
- WP 5 "RIS for enhanced Localization and Sensing" designs, specifies and evaluates specific control mechanisms and estimation algorithms exploiting RIS reconfigurability for advanced environmental awareness applications (incl. 6D localization, mapping and sensing) in boosted areas. WP5 outputs are specific localization-oriented architectures and control schemes at both RIS and system levels, adaptive detection and estimation algorithms for RISE localization, mapping and/or sensing applications, performance evaluation in terms of location and sensing-specific performance metrics
- WP 6 "RIS for enhanced Sustainability and Security" investigates and develops innovative technical enablers for a smart radio environment based on intelligent reflective metasurfaces and smart antennas for wireless communication that are improved in terms of EE and EMFEE and SSE (as defined in Section 1.4.5), compared to state-ofthe-art techniques. WP6 outputs are the identification of "EMFEE boosted areas" and "SSE boosted areas" and, where there is a business case, recommendations on network architectures, RIS deployment, and best innovative PHY-MAC schemes for EMFEE and SSE improvement. Recommendations on best innovative PHY-MAC schemes to obtain a trade-off between EE and EMFEE or EE and SSE when EMFEE/SSE is improved at the expense of EE, and realistic performance assessment of proposed schemes based on actual RISs of the project and statistical results
- WP 7 "Evaluation through Proof-of-Concepts & Trial" develops lab PoCs and trials to validate (i) RIS components at different frequency bands; (ii) RIS integration towards different applications; (iii) two RIS-based proof-of-concepts (the train station in Rennes and CRF premises). The WP7 outputs are RIS-based components, integration, and demonstration, as well as results from 2 RISE field trials.
- WP 8 "Dissemination, Standardization & Exploitation" coordinates outputs from all WPs to disseminate the outcomes of the project in the form of top-level publications, conferences, workshops, special sessions, tutorials, and regulation bodies (AR-CEP/ANFR in France, OFCOM in UK, AGCOM in Italy, EETT in Greece), as well as to contribute towards standardization in 3GPP, ITU, and ETSI. Additionally, a results exploitation plan for industry and relevant business will be put in place. WP8 outputs are dissemination activities, standardization of RIS wireless communications, and an industrial exploitation plan

Work Packages goals are described in the tables below.



#### Table 2-3: Work package results

WP1	Ensure a successful completion of the project goals on time, within the budget and having the ex- pected impacts achieved.
	Investigate high relevance Beyond-5G (B5G) scenarios and use cases where RIS technology can be
	successfully exploited.
	Select suitable KPIs as well as new ones
	Perform a closed-loop analysis, jointly with WP4, WP5 and WP6, in order to find the most
WP2	suitable network architectures and deployment strategies in different application areas. Investigate the applicability of both sub-6GHz and mmWave frequency bands and the impact on
	spectrum and EMF emission regulations, for each selected scenario
	Define reference scenarios and identify benefits of RISE wireless systems
	Define target KPIs for RISE wireless systems
	Establish RISE network architectures and deployment strategies
	Model, design, and characterize the RIS components as a part of the overall system for enhanced
	connectivity (WP4), localisation and sensing (WP5), as well as sustainability (WP6).
WP3	Provide an electromagnetic RIS model and a system level abstraction Design, prototype and characterize the RISs and control logic for the PoC
	Characterize and model the RIS-empowered reconfigurable radio channel
	Design and optimise RIS systems for enhanced connectivity for legacy frequencies and higher-fre-
	quency bands.
	Design the most suitable RISE network architectures and deployment strategies including RIS
	control signalling for enhanced connectivity
WP4	Establish the fundamentals of communication for RISE systems
	Design and optimise protocols and methods for RIS control and resource allocation to support high reliability, coverage, low latency and high two-way data rate
	Design resource allocation and offloading strategies to unlock seamless, reliable and effec-
	tively distributed smart end-to-end joint communication and (edge) computing services
	Show that RIS networks can outperform RIS-free approaches in terms of accuracy, reliability, and EE
	situational awareness.
	Target high accuracy (10x improvement over the SoTA in 3GPP) and high availability in dedicated
	boosted localisation areas with a flexible and adaptive RISE architecture that exploits the trade-off be- tween accuracy, reliability and EE.
WP5	Demonstrate that these targets can be met without needing additional BSs or costly time syn-
	chronization.
	Develop a network architecture for RIS deployment and control to optimise above localisation
	and sensing KPIs
	Develop and evaluate algorithms that enable RIS-based localisation and sensing, for localisa- tion devices, building dynamic environments and radio maps as well as passive sensing
	Propose deployments and architectures of RIS networks and innovative PHY-MAC technical enablers
	to boost the performance of wireless networks in terms of EE, EMFEE, SSE.
	EE improvement up to a factor of 10 compared to SoTA
WP6	EMFEE improvement up to a factor of 10 compared to SoTA
	SSE improvement of at least a factor of 2 compared to SoTA. The EE, EMFEE, SSE are all effi-
	ciency metrics requiring novel network architectures & deployment strategies with RIS, novel PHY-MAC RIS solutions and novel assessment methods, adapted to efficiency metrics.
	Devise and assemble the overall RIS-based solution and fine-tuning realistic equipment settings.
	Validate innovations and demonstrate the feasibility of technological proposals by means of two field-
	trials.
	Demonstrate the main two innovative aspects of RISE-6G: i) extreme coverage enhancement in
	crowded environments and ii) advanced localisation solutions in indoor scenarios supporting the digi-
	tal twin in a smart factory environment. Validation of various RIS components developed in WP3 at wide frequency band from sub-6
WP7	GHz to sub-millimetre wave (>100 GHz)
	Development of RIS components integration solutions for easy scaling in number of RIS chan-
	nels towards different applications. The RIS configuration, control interface will be jointly de-
	veloped with WP3 maximizing the impact of RIS-based channel manipulation algorithms
	Deployment and validation of RIS communication and EMFEE at Rennes Train Station field
	trial Deployment and validation of a RIS indoor localisation supporting the digital twin at CRF
	premises
	P. 0111000



	Disseminate and spread the knowledge and achievements of RISE-6G to the global research com- munities.
WP8	Promote standardization activities for technologies developed by the project in the B5G and 6G sys- tem definition mainly at the standardisation bodies 3GPP, ITU, and ETSI. Communicate and disseminate the project results and vision to a wider audience, and to max- imise the potential of adoption of the project results, and the overall impact of the project Facilitate interaction with other related projects and activities in industry, academia, and soci- ety as a whole, and to use the project results for training and education purposes To identify the needs for regulation and standardisation for RISE networks and ensure the in-
	troduction of the project results in relevant standardisation activities
	To give the project consortium a clear picture of the project's main interests and most im- portant results in order to enforce exploitation of the project results, especially for the indus- trial partners
	Organise a dedicated final event (RISE-6G final workshop) to disseminate the project results consolidated through the two project trials and to contribute to the social acceptance of B5G/6G future technologies

Role	RISE-6G project team	
Project Coordinator	Emilio CALVANESE STRINATI	(CEA)
Technical Manager	Vincenzo SCIANCALEPORE	(NEC)
WP2 Leader	Maurizio CROZZOLI	(TIM)
WP3 Leader	Raffaele D'ERRICO	(CEA)
WP4 Leader	Elisabeth DE CARVALHO	(AAU)
WP5 Leader	Henk WYMEERSCH	(CHA)
WP6 Leader	Dinh-Thuy PHAN HUY	(ORA)
WP7 Leader	Vincenzo SCIANCALEPORE	(NEC)
WP8 Leader	George ALEXANDROPOULOS	(NKUA)

#### Table 2-4: Work package leaders

#### Table 2-5: Task leaders

WP	Task	RISE-6G project team	
1	1.1	Emilio CALVANESE STRINATI	(CEA)
	1.2	Vincenzo SCIANCALEPORE	(NEC)
	1.3	Julien MASCOLO	(CRF)
	2.1	Maurizio CROZZOLI	(TIM)
2	2.2	Vincenzo SCIANCALEPORE	(NEC)
	2.3	Henk WYMEERSCH	(CHA)
	3.1	Gabriele GRADONI	(UNOT)
3	3.2	Geoffroy LEROSEY	(GNW)
	3.3	Raffaele D'ERRICO	(CEA)
	4.1	Vincenzo SCIANCALEPORE	(NEC)
4	4.2	Marco DI RENZO	(CNRS)
4	4.3	George ALEXANDROPOULOS	(NKUA)
	4.4	Paolo DI LORENZO	(CNIT)
5	5.1	Henk WYMEERSCH	(CHA)
5	5.2	Benoit DENIS	(CEA)
	6.1	George ALEXANDROPOULOS	(NKUA)
6	6.2	Dinh-Thuy PHAN HUY	(ORA)
	6.3	Franco MOGLIE	(CNIT)
	7.1	Henk WYMEERSCH	(CHA)
7	7.2	Mathieu BELOUAR	(SNCF)
	7.3	Julien MASCOLO	(CRF)
	8.1	George ALEXANDROPOULOS	(NKUA)
8	8.2	Vincenzo SCIANCALEPORE	(NEC)
	8.3	Dinh-Thuy PHAN HUY	(ORA)



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#### **Table 2-6: Deliverables**

Del. No.	Deliverable name	WP No.	Lead editor	Nature	Dissemi- nation level	Delivery date
D1.1	Quality plan	1	CEA	R	PU	M03
D1.2	First project management periodic report	1	CEA	R	PU	M18
D1.3	Final project management report	1	CEA	R	PU	M36
D2.1	Reference system, scenarios and use cases analysis: first results	2	TIM	R	PU	M06
D2.2	Metrics and KPIs for RISE wireless sys- tems analysis: first results	2	NEC	R	PU	M06
D2.3	Reference system, scenarios and use cases analysis: final results	2	TIM	R	PU	M12
D2.4	Metrics and KPIs for RISE wireless systems analysis: final results	2	NEC	R	PU	M12
D2.5	RISE network architectures and deploy- ment strategies analysis: first result	2	CHAL	R	PU	M18
D2.6	RISE network architectures and deploy- ment strategies analysis: final results	2	CHAL	R	PU	M36
D3.1	Preliminary RIS model and measurement campaigns	3	CEA	R	PU	M10
D3.2	RIS designs, and first prototypes charac- terization	3	GNW	R	PU	M18
D3.3	RISE-6G RISE environment final model	3	UNOT	R	PU	M24
D3.4	Optimised RIS prototypes for PoCs and model assessment	3	CEA	R	PU	M36
D4.1	Deployment and control strategies of RIS based connectivity (Intermediary Specifi- cations)	4	CNIT	R	PU	M16
D4.2	Multi-user techniques and connectivity of RIS based communication and mobile edge computing (Intermediary Specifica- tions)	4	CNRS	R	PU	M18
D4.3	Deployment and control strategies of RIS based connectivity (Final Specifications)	4	NEC	R	PU	M30
D4.4	Multi-user techniques and connectivity of RIS based communication and mobile edge computing (Final Specifications)	4	CNIT	R	PU	M33
D5.1	Control for RIS-based localisation and sensing (Intermediary Specifications)	5	CHAL	R	PU	M16
D5.2	Algorithms for RIS-based localisation and sensing (Intermediary Specifications)	5	AAU	R	PU	M18
D5.3	Control for RIS-based localisation, map- ping and sensing (Final Specifications)	5	CEA	R	PU	M30
D5.4	Estimation Algorithms for RIS-based lo- calisation, mapping and sensing (Final Specifications)	5	NEC	R	PU	M33
D6.1	Network architectures & deployment strat- egies with RIS for enhanced EE, EMFEE and SSE (Intermediary Specifications)	6	NKUA	R	PU	M16
D6.2	Sustainable RIS solutions design for EE, EMFEE and SSE (Intermediary Specifica- tions)	6	ORA	R	PU	M18
D6.3	Network architectures & deployment strat- egies with RIS for enhanced EE, EMFEE and SSE (Final Specifications)	6	NKUA	R	PU	M30
D6.4	Sustainable RIS solutions design for EE, EMFEE and SSE (Final Specifications)	6	ORA	R	PU	M33



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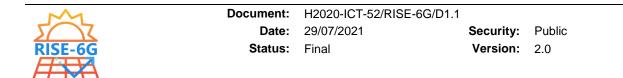
D7.1	Integration methodology and impact measurements through advanced KPIs	7	CHAL	R	PU	M18
D7.2	Final results on the platform integration and validation	7	NEC	R	PU	M30
D7.3	Final results of public demonstrations	7	ORA	R	PU	M36
D8.1	Dissemination plan and project website	8	CEA	R	PU	M04
D8.2	Standardisation Action Plan	8	NEC	R	PU	M06
D8.3	Intermediate dissemination and standardi- sation activity report	8	NEC	R	PU	M18
D8.4	Final report on exploitation of knowledge and results	8	TIM	R	PU	M36
D8.5	Final dissemination and standardisation activity report	8	NKUA	R	PU	M36

#### Table 2-7: Milestones

Milestone number	Milestone name	Related work pack- age(s)	Due date (in month)	Means of verifica- tion
M1	Project public website, social media launched	WP8	M03	D1.1, D8.1 and project website URL accessible.
M2	RISE-6G vision: Use cases, requirements and KPIs	WP2, WP8	M12	D2.1, D2.2, D2.3, D2.4, D8.2
M3	RISE-6G network architecture, building blocks & preliminary RIS models and channel characterisation	WP2-WP6	M18	D2.5, D4.1, D5.1, D6.1, D7.1 (net- work architecture) D4.2,D5.2, D6.2 (building blocks) D3.1, D3.2, (RIS models and chan- nel characterisa- tion)
M4	Intermediate project results & Exploitation and Standardisation	WP8	M18	D8.3
M5	First integration review with first running version of PoCs	WP7	M30	D3.4, D7.2
M6	Field trials with verticals & RISE-6G Train- ing Workshop	WP7, WP8	M34	D7.3, D8.4

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RISE-6G Status:	Final			Version:	20		
KISE-0G Status.	гіпаі			version.	2.0		
	Phase 1	Vision, sp	ecification, modelling phase				
	Phase 2		Initial solution:	and hardware characteriza	tion phase		
	Phase 3				Final solutions, integratio	n and trials phase	
	Mile-	M1	M2	M3		M5	M6 M
	stones			M4			
WP1: Project Management	Lead	1 2 3 4 5 6 7	8 9 10 11 12 13 14 15	16 17 18 19 20 21	22 23 24 25 26 27	28 29 30 31	32 33 34 35 3
	CEA	D1.1		D1.2			D
T1.1: Administrative Project Management	NEC	01.1		01.2			U
T1.2: Technical, Quality and Impact Management							
T1.3: Innovation Management	CFR					_	
WP2: Scenarios, Use Cases, KPIs	TIM						
T2.1: Reference System, Scenarios and Use Cases	TIM	D2.1	D2.3				
T2.2: Metrics and KPIs for RISE Wireless Systems	NEC	D2.2	D2.4				
T2.3: RISE Network Architectures and Deployment Strategies	CHAL			D2.5		_	D
WP3: RIS Modeling, Design and Characterization	CEA						
T3.1: Advanced Models and Design of Metasurface Elements and RIS	UNOT		D3.1		D3.3		
T3.2: RIS Hardware Prototyping and Characterization	GNW			D3.2		D3.4	
T3.3: RIS Radio Environment Sounding and Modelling	CEA				D3.3		_
WP4: RIS for Enhanced Connectivity	AAU						
T4.1: Network Architectures and Deployment Strategies with RIS for Enhanced Connectivity	NEC			D4.1		D4.3	
T4.2: Fundamentals of Multi-User Network Connectivity for RISE Systems	CNRS						
T4.3: Design of Multi-User Techniques for RISE Communications	NKUA			D4.2			D4.4
T4.4: Design of Multi-User Techniques for RIS-Empowered Mobile Edge Computing	CNIT						
WP5: RIS for Enhanced Localisation and Sensing	CHAL						
T5.1: Network Architectures and RIS Deployment Strategies for Localisation and Sensing	CHAL			D5.1		D5.3	
T5.2: Flexible Estimation and Detection Algorithms for RIS-based Localisation, Mapping and Sensing	CEA			D5.2			D5.4
WP6: RIS for Enhanced Sustainability and Security	ORA NKUA			D6.1		D6.3	
T6.1: Network Architectures & Deployment Strategies with RIS for Enhanced EE, EMFEE and SSE				D6.1 D6.2		06.3	D6.4
T6.2: Sustainable RIS Solutions Design for EE, EMFEE and SSE	ORA			06.2			06.4
T6.3: Assessment of EE, EM FEE and SSE Improvements	CNIT						
WP7: Evaluation through Proof-of-Concepts and Field Trials T7.1: RIS-based Functional Components and Integration	NEC CHAL			D7.1		D7.2	
	SNCF			07.1		07.2	D
17.2: Field Trial Demonstration: Extreme Coverage Enhancement at Rennes Train Station 17.3: Field Trial demonstration: Accurate Indoor Localisation for Continuous Broadband Connectivity with AGVs at CRF Premises	CRF						D
17.3: Held That demonstration: Accurate Indoor Localisation for Continuous Broadband Connectivity with AGVs at CKE Premises WP8: Dissemination, Standardisation, and Exploitation	CRF NKUA						
WP8: Dissemination, Standardisation, and Exploitation T8.1:Dissemination and Training	NKUA	D8.1		D8.3			D
18.1:Dissemination and Training T8.2: Standardisation and Regulation	NEC	D8.1 D8.2		00.5			U
18.2: Standardisation and Regulation T8.3: Industrial Exploitation	TIM	08.2					D
16.5: Industrial Exploration	1 IM						D





#### 2.3 Project public and collaborative websites

A public and a collaborative websites have been created. A LinkedIn group has also been set.

• A collaborative SHAREPOINT site hosted by CEA-LETI

E → C G		P1.aspx		re Fe
ROWSE PAGE				
fork Packages	WP1			
WP2 WP3	Add information (WP objectives, leader,)			
WP4 WP5	🕏 WP1 Tasks			
WP6 WP7	July 2021	Today August 2021		September 2021
WP8		Add task	s with dates to the timeline	
WP9				
cycle Bin	• new task or edit this list			
EDIT LINKS	🗸 📝 Title Due Date Assigned To	0		
	There are no items to show in this view o	f the "WP1 Tasks" list.		
	🖻 WP1 Documents			
	✓ 🗋 Name		Modified	Modified By
	😰 2021 01 - RISE-6G - KO Virtual Mee	ting - Wrap up - Emilio	June 29	CALVANESE STRINATI Emilio 21340
	2021 06 - RISE-6G - Virtual Plenary	Meeting 3 - WP1 - Emilio	June 30	CROZZOLI Maurizio RISE-6G
	2021 30 06 - RISE-6G Virtual meetin	ng 3 - Agenda V1.0	••• June 29	CALVANESE STRINATI Emilio 21340
	RISE-6G_DX.Y Template		••• Wednesday at 10:16 AM	MERCIER Eric 213106
	RISE-6G-PowerPoint-Template		*** May 6	CALVANESE STRINATI Emilio 213409

Figure 2-5: SharePoint overview dedicated to internal RISE-6G exchanges

- Public website: <u>https://RISE-6G.eu</u> (currently under development)
- LinkedIn group: <u>https://www.linkedin.com/groups/12492572/</u>

#### 2.4 Consortium and grant agreement

Two contractual documents rule the project:

- **Consortium agreement** defining the relations between the partners of the consortium, and their rights and obligations. This Consortium Agreement has been validated and signed by all partners in April, 2021.
- **Grant agreement** defining the legal obligations agreed between the European Commission and the coordinator, and acceded by the consortium partners. The grant agreement n° 101017011 has been signed on December, the 8<sup>th</sup>, 2020 by the EU. It has been communicated to all partners and is available on the collaborative web site.

#### 2.5 **Project meetings**

Consortium meeting are ruled by the Consortium Agreement. Consortium meeting will be set approximatively every 3 months, once a quarter, with early notice to the partners. Meeting information (agenda, venue) will be available on the collaborative website. Due to the sanitary situation, it is foreseen that the first meetings will be held virtually.



The project Coordinator prepares the draft agenda and submit it to the consortium two weeks prior to the meeting. Project coordinator and work package take the meeting minutes and submit it to the consortium at the latest three weeks after the meeting. Objections and remarks must then be done within fifteen days.

#### 2.6 Risk management

The Project Management Team is responsible for the management of the risks of the project. A risk table per WP is maintained by the Work Package leader. It must contain:

- The description of the identified risk;
- The level of the risk: 1 (low probability, low impact), 2 (high probability, low impact), 3 (low probability, high impact), 4 (high probability, high impact);
- The possible action to take to mitigate the risk.

The Project Management Team periodically reviews the risk tables during meetings. If a risk occurs, the plan for mitigation is applied by the Work Package leader, after concertation with the Project Management Team. If an agreement on the action to take is not possible at the Project Management Team level, the decision is to be taken by the project Coordinator with the Technical Manager and Innovation Manager advisory.

## 3 General rules for documents preparation

#### 3.1 Logo

A project logo has been created and must be affixed to all RISE-6G documents. The logo can be found on the exchange server.

#### 3.2 Templates

Documents created during the RISE-6G project (reports, presentations, agenda, etc.) must use the templates that are made available on the exchange server. This guarantees a consistent format of all the data produced by the project.

#### 3.3 File and document naming

The names of the documents must respect the rules below.

Final versions of deliverables:

- Start with "RISE-6G\_";
- Followed by the number of the deliverable, e.g. "D1.1\_";

Presentations:

- Start with "RISE-6G\_";
- Followed by the main title of the document, e.g. "YYYYMM\_F2F\_Location\_"
- Followed by the subtitle if any, e.g. "Agenda" or "Minutes";

Other documents:

- Start with "RISE-6G "
- Followed by the workpackage number "WPx\_"
- Followed by the main title of the document, without spaces.

Generally speaking, spaces must be avoided in documents names.

#### 3.4 Confidentiality

There are several identified levels for the confidentiality of the documents:



- Public documents: most of the RISE-6G deliverables are public in the description of work. Also, presentations from workshops or conference may be made available. One must note that only the final version of any public document is public.
- Confidential documents: some deliverables, internal reports, the minutes of the meetings are confidential. They nevertheless can be exchanged between partners by using the exchange server.
- Restricted documents: documents that include proprietary information and that cannot be shared with the whole consortium.

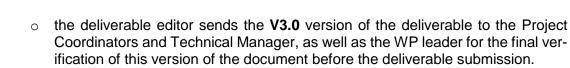
The level of confidentiality of a document must be mentioned on the first page. The Consortium Agreement rules the management of confidentiality and the non-disclosure obligations. One must note that the Industrial Advisory Board members do not belong to the consortium and must be considered in accordance regarding these confidentiality rules..

## 4 Deliverables and internal reports

#### 4.1 **Preparation and review**

Partners are held to the highest technical level and highest formal quality for project deliverables and internal reports. The following rules must therefore be respected:

- 3 months before the delivery date:
  - The deliverable editor proposes the table of contents; prepares a skeleton document and assigns responsible partners for each section.
  - WP contributors are informed about the leadtime
- **2 months** before the delivery date:
  - First versions of the contributions are exchanged by the contributors.
- **30 days** before the delivery date:
  - The deliverable editor sends a **DRAFT / V0.0** version of the deliverable to the project Coordinator and the Technical manager, as well as to the WP contributors to this deliverable.
  - This version is reviewed by all abovementioned partners, and versioning are considered under the supervision of the editor.
  - It is recommended to proceed to a naming of the deliverable using **V0.x** versioning.
- 15 days before the delivery date:
  - The deliverable editor sends a **V1.0** version of the deliverable to the project Coordinator and the Technical manager, as well as to the WP contributors to this deliverable.
  - This version is reviewed by all abovementioned partners, and versioning are considered under the supervision of the editor.
  - It is recommended to proceed to a naming of the deliverable using V1.x versioning.
  - This version will be reviewed also by 3 selected reviewers amongst the consortium. These reviewers will be designated by the Coordinator, the Technical Manager and the WP leader.
- 7 days before the delivery date:
  - the deliverable editor sends the V2.0 version of the deliverable to the Project Coordinators and Technical Manager, as well as the WP contributors for final proof-reading.
  - It is recommended to proceed to a naming of the deliverable using V2.x versioning.
- **1 day** before the delivery date:



It has to be noticed the various versions of the deliverables must include a table indicating the versioning (V0.x, V1.x, V2.x ...) with comments about the major modifications in the document.

#### 4.2 Document updates

The version number of a document is automatically updated thanks to a "locking – modifying – unlocking" system on the shared workspace. The corrections and changes made by a partner shall be clearly visible, for instance using the "track changes" function of the editing software. The document is stored on the project server hosted by CEA-LETI and an editing process is defined for avoiding overwriting of other partner's contributions.

#### 4.3 Disclaimer and copyright

Written material must include the disclaimer and copyright:

- Disclaimer: This document reflects the contribution of the participants of the research project RISE-6G. It is provided without any warranty as to its content and the use made of for any particular purpose.
- All rights reserved: This document is proprietary of the RISE-6G consortium members. No copying or distributing, in any form or by any means, is allowed without the prior written consent of the RISE-6G consortium.

#### 4.4 **Project annual reports**

The advancement of the project must be closely supervised in order to quickly detect difficulties and find appropriate solutions. The status of the project will be presented every 18 months, so M18 and M36 for a complete review of carried-out works. They provide in detail the status of each Work Package. These reports will be prepared under the supervision of the project Coordinator and the Work Package Leaders.

In the meantime, the Coordinator and Project Management Team will require for the WP Leaders some intermediate reporting about the advances of the work, every 6 months. These intermediate reports will made it possible to simplify the overall 18 months review.

## 5 Publications and public presentations

#### 5.1 Publications

Article 29 of the Grant Agreement and Section 8.4 of the Consortium Agreement rules the activities of dissemination (presentations and publications included). All partners must be informed of a publication within the project 30 days before submission. Possible objections must be given not latter than 20 days after information. Tolerable objections are listed in section 8.4 of the Consortium Agreement. The list of presentations and publication will be available on the exchange server.

#### 5.2 Interviews

Press requests are of major interest for RISE-6G, as they allow to inform the public about the project activities. They must therefore be treated timely and with care. After receiving a request, any partner must coordinate the answer with the project coordinator.



Interviews by phone must remain exceptional, and the project coordinator must be informed. The interviewed person may ask the support of a public relation professional or of a colleague. A draft of the media must be requested before public release, that will be circulated between consortium partners.

Any partner who answers to a press request on behalf of RISE-6G must represent the whole consortium and not only its own organization interests.

#### 5.3 Acknowledgment

The acknowledgement below must be included in any article published in a conference or in a journal:

• "This work has been supported by the EU H2020 RISE-6G project under grant number n°101017011."

#### 5.4 Copyright

The copyright below must be included in any public presentation:

"© yyyy RISE-6G consortium" with yyyy the current year..