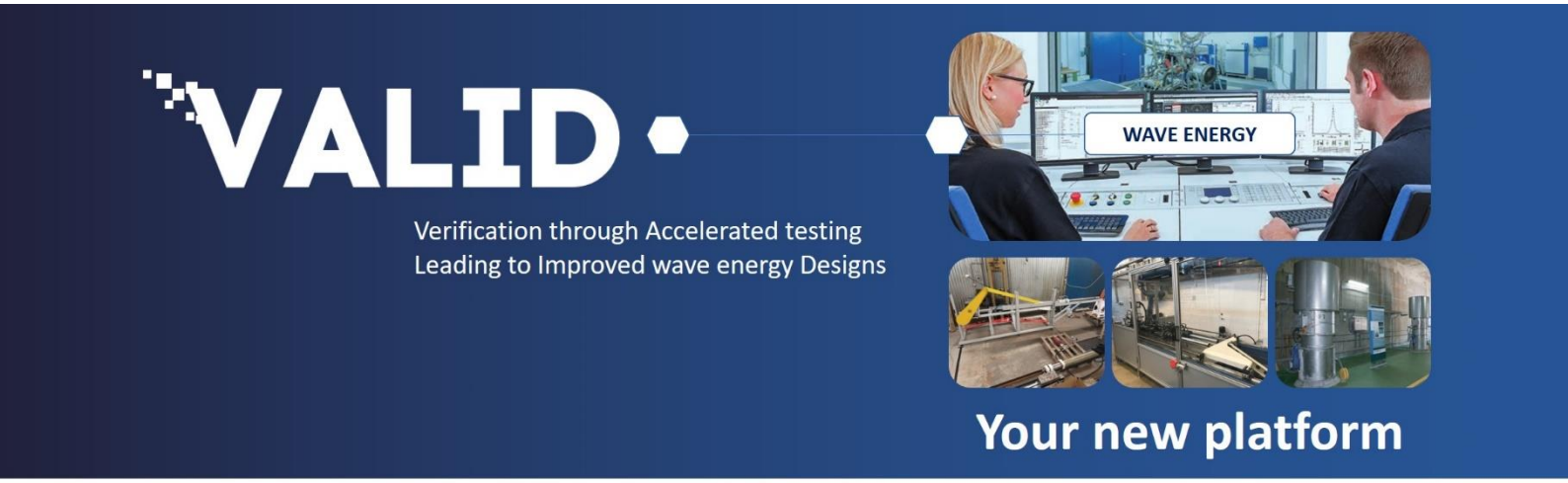
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006927.

Verification through Accelerated testing Leading to Improved wave energy Designs



Deliverable 8.1

Quality Assurance Plan – first version

Version 1.0

2021-03-22

Lead participant: RI

Dissemination level: PU

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006927.

DOCUMENT STATUS

Authors

Name	Organisation
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Approval

Name	Organisation	Signature	Date

Document History

Version	Description	Reviewer	Date
0.1	Report structure and draft compilation	Natalie Williams Portal	2021-02-24
0.2	Modifications based on comments/internal review.	Natalie Williams Portal	2021-03-08
1.0	Finalization of document	Natalie Williams Portal	2021-03-22

Dissemination level

Short	Type	
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

EU PROJECT NO: 101006927

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Executive Summary

Deliverable 8.1 is the first version of the Quality Assurance Plan (QAP) for VALID and will be finalized at **M36** (D8.2). The QAP defines the main set of rules, for VALID consortium partners to consider during the project, to ensure that the technical outcomes of the project are produced following high quality standards. The QAP defines the role and responsibilities of each Party pertaining to quality control, the procedures and templates to be followed when preparing various forms of project documentation, progress reports, risk assessments, financial reporting and innovation management. The QAP also defines the ways of verification that will be implemented during the project before final internal validation and submission of deliverables and milestones to the EC/INEA. This plan will be used by the Project Management Team (PMT) as a guideline to evaluate the content of the technical deliverables and to ensure the technical quality of the project outcomes.

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Project partner names

RISE	RISE Research Institutes of Sweden AB
TECNALIA	Fundacion Tecnalia Research and Innovation
CORPOWER	Corpower Ocean AB
RINA-C	RINA Consulting S.p.A
BiMEP	Biscay Marine Energy Platform SA
IDOM	IDOM Consulting, Engineering, Architecture, S.A.U.
AAU	Aalborg University
AVL	AVL List GMBH
WAVEPISTON	Wavepiston AS
TU DELFT	Delft University of Technology
AQUATERA	Aquatera Sustainability Ireland LTD
JFC	Julia F. Chozas, Consulting Engineer
Y4C	Yavin Four Consultants, Unipessoal LDA

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1 Introduction

This document is intended to provide a Quality Assurance Plan (QAP) for the VALID project Parties. It defines the main set of rules to ensure that the technical outcomes of the Project are produced following high quality standards. The QAP includes procedures for progress monitoring, project risk management, quality control of documentation, financial management and innovation management.

Progress monitoring encompasses both internal and external procedures. Periodic meetings and internal performance monitoring are the main methods which will be applied for internal monitoring. For external monitoring, the EC/INEA require both periodic and final reports, in excess to deliverables, to be able to evaluate the outcome of the Project.

The project risk management plan defines how risks are to be identified, assessed, evaluated and treated over the course of the Project. Roles and the review process are also specified.

Quality control of the documentation section provides the available VALID templates (e.g. meeting agendas and minutes, reports, presentations) for peer reviewers to ensure quality control and review procedures for deliverables and other types of dissemination. Other quality control details coupled to this section are found in D8.3.

The financial management describes payments, individual documentation of costs and financial reporting required in the Project, as per the Grant Agreement and Consortium Agreement.

The innovation management provides insight on the roles and responsibilities for the management of general Intellectual Property Rights (IPR) activities within the Project. Exploitation of project results and result identification are also outlined.

The QAP presented herein will be updated in **D8.2 Quality Assurance Plan – final version**: to be delivered **M36** as the final version of the QAP.

2 Progress Monitoring

2.1 Internal Monitoring

Internal monitoring during the Project will be facilitated by the project management structure (refer to Figure 1, D8.3, D8.4 and D8.5) and will help track the progress of the Project according to regular intervals.

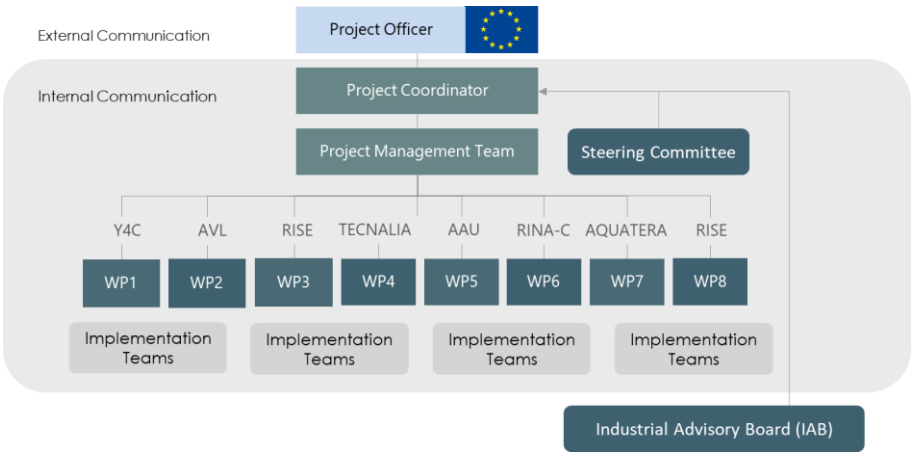

Figure 1: VALID PERT Diagram (from D8.3).

2.1.1 Periodic meetings

Periodic meetings planned in VALID are outlined in Table 1, refer to D8.3, D8.4 and D8.5 for further information.

Table 1: Key project meetings (from D8.3).

Meeting	Date/frequency
Kick-off	December 2020
General assembly	Once a year as agreed by Project Steering Committee or 1/3 of General Assembly
Project Steering Committee	Quarterly (once every 3 months)
Project WP Leaders	Monthly
Stakeholder Groups (SG)	2-3 planned meetings/workshops
Industrial Advisory Board (IAB)	5 planned meetings in 3 years
Final Closing forum	May 2023

2.1.2 Performance monitoring

Performance monitoring in the Project will be ensured by the WPLs, who will lead, monitor and follow up activities within the corresponding WP according to the time plan. WPLs shall report the progress of their WPs in Project Progress Reports (PPRs) to the PC every 6 months to align with the external reviews outlined in Section 2.2.1. These reports will allow to monitor the progress, gather information periodically and will be used as input for the periodic and final reports in VALID. The PC shall review and consolidate the PPRs and inform all WPLs and General Assembly of the progress. The PC will also be able to update the Gantt chart to reflect the progress achieved accordingly. Moreover, the WPLs are also recommended to make use

of the Action list template available for tracking WP specific activities over the course of the Project. Refer to Annex 3 for templates.

2.2 External Monitoring

External monitoring during the Project will be conducted by the EC by means of deliverables and periodic reports. These reports are contractual obligations as per the Grant Agreement. A list of required deliverables has been provided in D8.3. Periodic reports and a final report will also be submitted over the course of the Project.

2.2.1 Periodic reports

Two periodic reports will be submitted at the middle and end of the Project. It is to say that reporting period 1 (RP1) covers **M1**-**M18** and reporting period 2 (RP2) covers **M19**-**M36**. The periodic reports must include the following:

a) Periodic technical report
    a. Explanation of work carried out by beneficiaries.
    b. Overview of progress in line with objectives, milestones, deliverables (Annex 1 in Grant Agreement).
        i. Explanations justifying deviations in work expected/carried out.
        ii. Detail exploitation and dissemination of results.
        iii. Report communication activities.
    c. Summary for publication by EC.
    d. Answers to "questionnaire" related to action implementation and economic and societal impact.

b) Periodic financial statement
    a. Individual financial statements from each beneficiary for RP (see Annex 1 below and Annex 4 template in Grant Agreement)
    b. Explanation of use of resources from each beneficiary for RP.
    c. Periodic summary financial statement created by electronic exchange system for RP.

The periodic reports shall be submitted through the EC portal 60 days following the end of the given RP; this deadline is denoted as 60RP. The procedure to be followed for the compilation of a periodic report in a timely manner is provided in Table 2. The production of the periodic reports will be led by the PC with the input from WPLs and all beneficiaries. The WPLs shall provide details pertaining to the technical aspects of the corresponding WPs, while all beneficiaries shall report the financial status based on the RP.

Table 2: Procedure for compilation of periodic report.

Time	Responsible	Action	File format	Recipient
60RP – 60 days	Coordinator	Outline content of report and distribute for input *WPLs to report on WPs* *All partners to confirm financial status and fill in questionnaire*	WORD	WPLs (technical content) All Parties (financial content, questionnaire)
60RP – 30 days	WPLs All Parties	Provide input to periodic report	WORD	Coordinator
60RP – 15 days	Coordinator	Provide feedback using "track changes" Update document version/history Update summary and fill in questionnaire in EC portal	WORD	WPLs (technical content) All Parties (financial content, questionnaire)
60RP – 5 days	WPLs All Parties	Implement feedback and review Update document version/history	WORD	Coordinator
60RP	Coordinator	Final approval and submission of periodic report through EC portal	PDF	EC

2.2.2 Final report

A final report for the last reporting period shall be submitted through the EC portal 60 days following the end of the last RP. A similar procedure to that stated in Table 2 can be applied for the final report. The final report must include the following:

a) Final technical report with summary for publication
    a. Overview of results and exploitation and dissemination.
    b. Conclusions on the action.
    c. Socio-economic impact of the action.

b) Final financial report
    a. Final summary financial statement created by electronic exchange system.
    b. Certificate on the financial statements for each beneficiary (Annex 5 in Grant Agreement).

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3 Project Risk Management

3.1 Risk management process

Risk management is an integral element of all testing and operational planning and management. The risk management process, shown in Figure 2, is to be followed throughout the Project. The PC will be responsible for overseeing that the risk management process is utilized.

Figure 2: Risk management process for VALID.

Risk identification is the first step of the process, which entails identifying the risks throughout the Project. It is important to note that an initial identification of risks has been compiled in the Grant Agreement, which is the initial input in the Risk register on the EC portal (see Section 3.2). Risks are to be identified and discussed by the PC and WPLs during relevant periodic meetings and communicated to Project Steering Committee (PSC). Upon identification, the risks shall be registered in the project's risk register (Section 3.2) and categorized according to WP. The identified risks shall then undergo *risk assessment* using the risk matrix depicted in Figure 3, wherein both impact and probability are used to assess the criticality of the risks. The highest possible score of 25 (very likely probability and extreme impact) can be categorized as a "no-go" in the Project.

		Probability				
		Rare	Unlikely	Moderate	Likely	Very likely
		1	2	3	4	5
Impact	Extreme 5					
	Major 4					
	Moderate 3					
	Minor 2					
	Trivial 1					

Figure 3: Risk matrix for assessing level of risk.

Risk evaluation is the third step of the process, which entails the identification of mitigation measures required to treat the identified risks. Based on the level of criticality, different mitigation measures can be chosen, as depicted in Figure 4.

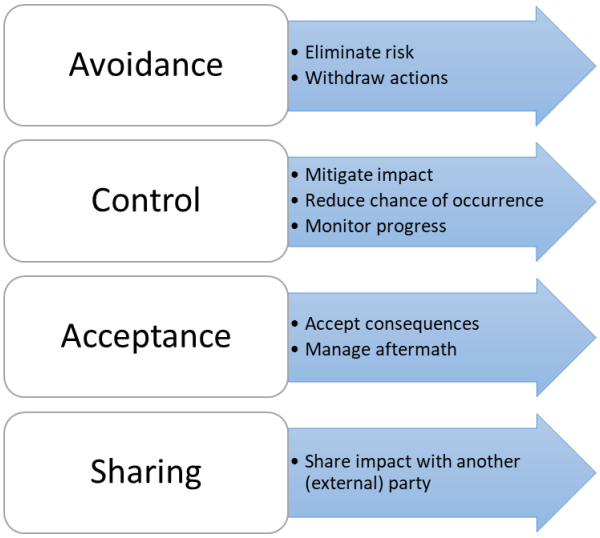

Figure 4: Mitigation measures.

As a last step, *risk treatment* includes monitoring of the registered risks, updating the risk register accordingly and closing risks if deemed appropriate.

3.2 Risk register

Risks will be recorded in the project's risk register located on the EC portal and a copy is available to all project Parties via the Project's SharePoint site. The risk register allows for the risks to be grouped by the project stage/WP to which they relate, such that the risk profile of the Project can be clearly seen. Risks are given a risk number, impacted WP, description and risk mitigation measures, as shown in Annex 2.

The risk register will be reviewed during relevant periodic meetings (every 2 months) between the PC and WPLs. Prior to the meetings, the WPLs shall answer the VALID Risk Assessment form, found on the Project's TEAMS site, to update the status of the registered risks, shown in Annex 2 and accessed here: VALID Risk Assessment. The WPLs will set clear "go" and "no-go" criteria as the Project progresses. The PSC will also be informed to ensure that there is a general agreement regarding the identified risks and established risk treatment.

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4 Quality Control of Documentation

4.1 Templates

Document templates for VALID have been produced to ensure consistency in the dissemination and communication of the project's outcomes. These templates, previously described in D8.3, are uploaded on the Project's SharePoint site. An overview of the templates is provided in Annex 3.

4.2 Peer reviewers

A Peer reviewer is appointed to each WP according to Table 3. If the Peer reviewer is unable to meet the deadline for the appointed review, the WPL should be informed as soon as possible to find a replacement.

Table 3: Appointed Peer reviewers per WP.

Peer reviewer	WP1	WP2	WP3	WP4	WP5	WP6	WP7	WP8
JFC	■							
Y4C		■						
TECNALIA			■					■
RINA-C				■				
AVL					■			
Aquatera						■		
RISE							■	

4.3 Review procedure – deliverables

Each deliverable shall be approved and submitted through the EC portal at the end of the appointed delivery month (DM) at 12:00 CET. For reference, the first month of the project is denoted as M1 (December 2020) and the last month as M36 (November 2023).

The review procedure for deliverables is listed in Table 4 and involves the following key persons:

- Lead beneficiary: responsible Party for the deliverable.
- WP leader: responsible for all deliverables in appointed WP.
- Peer reviewer: responsible for the peer review of the given deliverable.
- Project coordinator (PC): responsible for all deliverables in VALID.

Table 4: Review procedure for deliverables.

Time	Responsible	Action	File format	Recipient
DM – 3 weeks	PC	Confirmation of Peer Reviewer and quality check	WORD	WPL Lead beneficiary
DM – 2 weeks	Lead beneficiary	Submit full deliverable draft	WORD	Peer Reviewer PC
DM – 1 week	Peer reviewer PC	Provide feedback using "track changes" Update document version/history	WORD	Lead beneficiary
DM – 2 workdays	Lead beneficiary	Implement peer review and feedback Update document version/history	WORD	PC
DM	PC	Final approval and submission of deliverable through EC portal	PDF	EC

The Peer reviewer is expected to provide general feedback on the deliverable according to three main aspects: readability, completeness and consistency. These aspects are further exemplified below:

Table 5: Peer review feedback guidelines

Aspect	Check
Readability	Spelling and language
	Abbreviations and acronyms provided in "Nomenclature" section
	Layout and template
	Clarity of figures and tables
Completeness	Does the presented content fulfil the Task/WP objectives?
	Does the content help verify that a milestone has been reached?
	Is there missing content or chapters?
	Is the Executive Summary appropriate (non-confidential and short description)?
	Are other deliverables referenced? (if applicable)
Consistency	Is the deliverable consistent with other deliverables?
	Figure and table referencing
	Referencing (if applicable)

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4.4 Review procedure – other dissemination

Other types of dissemination, such as technical publications, external presentations, interviews etc., shall undergo an internal review prior to final dissemination. It is the responsibility of the author or lead of the dissemination activity to initiate the review procedure with the WP7 leader and the Communications Team (CT). A suggested review procedure for dissemination is listed in Table 6. The review can include both technical and quality assurance aspects, depending on the nature of the dissemination and requested review process.

Table 6: Review procedure for other forms of dissemination.

Time	Responsible	Action	File format	Recipient
DM – 4 weeks	Author	Inform relevant Parties and PC about dissemination Provide brief summary	Email	WP7 leader/CT/PC
DM – 3 weeks	WP7 leader/CT/PC	Respond with approval/disapproval	Email	Author
DM – 3 weeks	Author	Provide document to be reviewed (given approval)	-	WP7 leader/CT/PC
DM – 1 week	WP7 leader/CT/PC	Provide feedback using "track changes" or another format	-	Author
DM	Author	Final submission/presentation of dissemination	-	Relevant dissemination channel

5 Financial Management

5.1 Payments and payment arrangements

The EC makes payments directly to the PC. The following payments will be made to the PC over the course of the Project (see Article 21 in Grant Agreement):

- One pre-financing payment
- One payment of the balance

The PC is then responsible for the receival and distribution of funds to the beneficiaries. It is the responsibility of each beneficiary to provide and approve their current bank account details to the PC.

5.2 Documentation of costs

In accordance with the Grant Agreement, all Parties in the VALID Consortium shall document time for each employee working in the Project on a monthly basis. In addition, costs associated to other expenses, such as travel, subcontracting, in-kind contributions by third parties, shall also be documented concurrently. The documentation of costs is essential for verification in the case of checks, reviews, audits and investigations. Further details are outlined in Article 20 in Grant Agreement – Reporting – Payment requests.

5.3 Financial reports

The main financial reports that need to be submitted during the Project are outlined in Section 2.2. In addition to these main financial reports, all Parties shall submit Periodic Financial Statements (PFS) to the PC for financial monitoring every 6 months. A template for the PFS can be found in Annex 3.

6 Innovation Management

6.1 Roles and responsibilities

The Project Steering Committee (PSC) will be responsible for the management of general Intellectual Property Rights (IPR) activities within the Project. IP Group(s) will be established, if necessary, to address specific joint IPR issues, which will be led by RISE experienced IPR managers acting as a neutral partner to lead discussions on IPR related issues. RISE business strategies directed by the Swedish Government states that IP rights and patents are the property of the industry in order to strengthen their position in international competition. By not claiming any IP rights or patents, RISE is ideal to lead this kind of work to foster innovation and lessen the obstacles for collaboration.

IPR, Access Rights, Confidentiality, Liability and Indemnification will be governed by the relevant stipulations of the Grant Agreement and addressed in the Consortium Agreement (Section 11 and Attachment 1). The provisions for IPR protection will be in accordance with EU regulations, aiming at an efficient use and transfer of the knowledge generated, while considering the scientific and innovation interests of the Consortium participants.

6.2 Exploitation of project results

The main Exploitable Results (ER) that the VALID project will generate along with the proposed Exploitation Plan are provided in Table 7. Further details can be found in the Grant Agreement, D7.4 and D7.5.

Table 7: Proposed Exploitation Plan for Exploitation Results generated by VALID.

ER 1: Consultancy work for adaptations and process integration of the hybrid testing platform	
Partner	Proposed Exploitation Plan
AVL	Main customer(s): wave energy technology developers Market size in volume: 0.2 GW (2030) and 30 GW (2050). Market value: 4 MEUR (2030), 20 MEUR (2050). Value proposition: half the effort in development (compared to current development effort in time and cost). Time to market: four years from present time (2025, one year after project end) IPR strategy: design know-how and background IP rights Anticipated exploitation route: consultancy services and product development
ER 2: Customised Physical Test Rigs	
Partner	Proposed Exploitation Plan
CorPower Wavepiston	Main customer(s): ocean technology developers, standardisation bodies, research community Market size: 10% of the total addressable market of ER 1 Market value: 0.4 MEUR (2030), 2 MEUR (2050). Value proposition: direct reductions in development efforts in time, risk and cost. Time to market: three years from present time (2024, at project end) IPR strategy: know-how

	Anticipated exploitation route: technology developers listed will normally set an agreement with service providers (column below) to use the enhanced test rigs for testing.
BiMEP RISE Tecnalia RINA-C Aquatera	Main customer(s): ocean technology developers, standardisation bodies, research community Market size: 10% of the total addressable market of Exploitation Result 1 Market value: 0.4 MEUR (2030), 2 MEUR (2050). Value proposition: direct reductions in development efforts in time, risk and cost. Time to market: three years from present time (2024, at project end) IPR strategy: know-how Anticipated exploitation route: testing service providers.
ER 3: Services related to New testing procedures	
Partner	Proposed Exploitation Plan
RINA-C Aquatera Tecnalia RISE JFC Y4C	Main customer(s): offshore renewable energy developers and end-users (utilities, IPPs) Market size: 20% of the total addressable market of Exploitation Result 1 Market value: 0.5 MEUR (2030), 5 MEUR (2050). Value proposition: direct reductions in development efforts in time, risk and cost. Time to market: three years from present time (2024, at project end) IPR strategy: know-how Anticipated exploitation route: consultancy services in development strategies, performance improvements, techno-economic analysis, wave to wire models, reliability assessment.
AAU TU DELFT	Main customer(s): offshore renewable energy developers. Market size: 20% of the total addressable market of Exploitation Result 1 Market value: 0.2 MEUR (2030), 1 MEUR (2050). Value proposition: direct reductions in development efforts in time, risks and costs. Time to market: three years from present time (2024, at project end) IPR strategy: know-how Anticipated exploitation route: research-based products and services on development strategies, performance improvements, techno-economic analysis, wave to wire models, reliability assessment

6.3 Result identification

Results generated in VALID will be documented to ensure that they are handled and processed over the course of the Project. WPLs are responsible for documenting the results within their associated WPs, in accordance with D7.1 and D7.2. All generated and collected data and knowledge outputs (KOs) must be validated by the CT before proceeding with an analysis to determine appropriate result dissemination and exploitation activities.

7 Nomenclature

Abbreviations

EC	European Commission
EU	European Union
H2020	Horizon 2020
QAP	Quality Assurance Plan
WP	Work Package
PC	Project Coordinator
PSC	Project Steering Committee
WPL	Work Package Leaders
CT	Communications Team
IPR	Intellectual Property Rights
CET	Central European Time
DM	Delivery Month
RP	Reporting Period
PPR	Project Progress Report
PFS	Periodic Financial Statement

8 References

VALID, Deliverable 7.1 Knowledge Exchange and Dissemination Strategy, version 1.0
VALID, Deliverable 7.2 Data Management Plan, version 1.0
VALID, Deliverable 7.3 Communications Plan, version 1.0
VALID, Deliverable 8.3 Detailed Project Management Plan – first version, version 1.0

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Annex 1 Financial Statement

Found in Annex 4 in Grant Agreement.

ⓘ print format A4 landscape

MODEL ANNEX 4 FOR H2020 GENERAL MGA — MULTI

Associated with document Ref. Ares(2020)6382923 - 05/11/2020

FINANCIAL STATEMENT FOR *[BENEFICIARY [name]/ LINKED THIRD PARTY [name]]* FOR REPORTING PERIOD [reporting period]

	Eligible[1] costs (per budget category)													Receipts	EU contribution			Additional information
	A. Direct personnel costs				B. Direct costs of subcontracting	*[C. Direct costs of fin. support]*	D. Other direct costs			E. Indirect costs[2]	*[F. Costs of ...]*		Total costs	Receipts	Reimbursement rate %	Maximum EU contribution[3]	Requested EU contribution	Information for indirect costs :
	A.1 Employees (or equivalent) A.2 Natural persons under direct contract A.3 Seconded persons *[A.6 Personnel for providing access to research infrastructure]*		A.4 SME owners without salary A.5 Beneficiaries that are natural persons without salary			*[C.1 Financial support]* *[C.2 Prizes]*	D.1 Travel D.2 Equipment D.3 Other goods and services	*[D.4 Costs of large research infrastructure]*	D.5 Costs of internally invoiced goods and services		*[F.1 Costs of ...]*	*[F.2 Costs of ...]*		Receipts of the action, to be reported in the last reporting period, according to Article 5.3.3				Costs of in-kind contributions not used on premises
Form of costs[4]	Actual	Unit	Unit		Actual	Actual	Actual	Actual	Unit	Flat-rate[5] 25%	Unit	*[Unit][Lump sum]*						
	a	Total b	No hours	Total c	d	*[e]*	f	*[g]*	Total h	i=0,25 x (a+b+c+f+*[g]* + h+ *[j1]*[6]+*[j2]*[6]-p)	No units	Total *[j1]*	Total *[j2]*	k = a+b+c+d+*[e]* +f + *[g]* +h+ i + *[j1]* +*[j2]*	l	m	n	o	p
[short name beneficiary/linked third party]																		

The beneficiary/linked third party hereby confirms that:
The information provided is complete, reliable and true.
The costs declared are eligible (see Article 6).
The costs can be substantiated by adequate records and supporting documentation that will be produced upon request or in the context of checks, reviews, audits and investigations (see Articles 17, 18 and 22).
For the last reporting period: that all the receipts have been declared (see Article 5.3.3).

ⓘ Please declare all eligible costs, even if they exceed the amounts indicated in the estimated budget (see Annex 2). Only amounts that were declared in your individual financial statements can be taken into account lateron, in order to replace other costs that are found to be ineligible.

[1] See Article 6 for the eligibility conditions

[2] The indirect costs claimed must be free of any amounts covered by an operating grant (received under any EU or Euratom funding programme; see Article 6.2.E). If you have received an operating grant during this reporting period, you cannot claim indirect costs unless you can demonstrate that the operating grant does not cover any costs of the action.

[3] This is the *theoretical* amount of EU contribution that the system calculates automatically (by multiplying the reimbursement rate by the total costs declared). The amount you request (in the column 'requested EU contribution') may be less,

[4] See Article 5 for the forms of costs

[5] Flat rate : 25% of eligible direct costs, from which are excluded: direct costs of subcontracting, costs of in-kind contributions not used on premises, direct costs of financial support, and unit costs declared under budget category F if they include indirect costs (see Article 6.2.E)

[6] Only specific unit costs that do not include indirect costs

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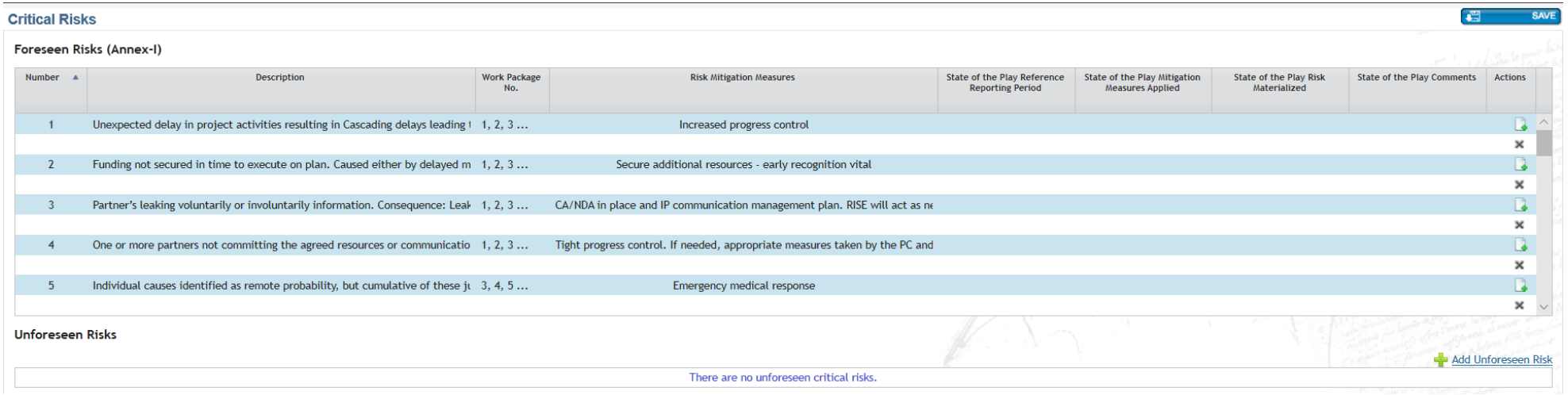
Annex 2 Risk register and risk assessment

Risk register in EC Portal



Critical Risks

SAVE

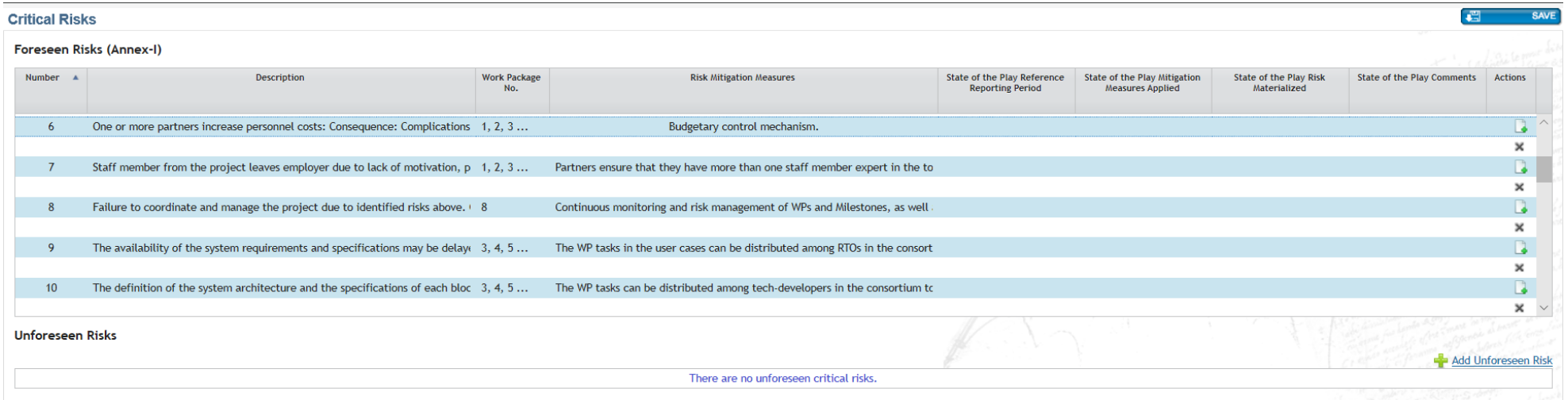
Foreseen Risks (Annex-I)

Number	Description	Work Package No.	Risk Mitigation Measures	State of the Play Reference Reporting Period	State of the Play Mitigation Measures Applied	State of the Play Risk Materialized	State of the Play Comments	Actions
1	Unexpected delay in project activities resulting in Cascading delays leading t	1, 2, 3 ...	Increased progress control					
2	Funding not secured in time to execute on plan. Caused either by delayed m	1, 2, 3 ...	Secure additional resources - early recognition vital					
3	Partner's leaking voluntarily or involuntarily information. Consequence: Leak	1, 2, 3 ...	CA/NDA in place and IP communication management plan. RISE will act as ne					
4	One or more partners not committing the agreed resources or communicatio	1, 2, 3 ...	Tight progress control. If needed, appropriate measures taken by the PC and					
5	Individual causes identified as remote probability, but cumulative of these ju	3, 4, 5 ...	Emergency medical response					

Unforeseen Risks

Add Unforeseen Risk

There are no unforeseen critical risks.



Critical Risks

SAVE

Foreseen Risks (Annex-I)

Number	Description	Work Package No.	Risk Mitigation Measures	State of the Play Reference Reporting Period	State of the Play Mitigation Measures Applied	State of the Play Risk Materialized	State of the Play Comments	Actions
6	One or more partners increase personnel costs: Consequence: Complications	1, 2, 3 ...	Budgetary control mechanism.					
7	Staff member from the project leaves employer due to lack of motivation, p	1, 2, 3 ...	Partners ensure that they have more than one staff member expert in the to					
8	Failure to coordinate and manage the project due to identified risks above.	8	Continuous monitoring and risk management of WPs and Milestones, as well					
9	The availability of the system requirements and specifications may be delay	3, 4, 5 ...	The WP tasks in the user cases can be distributed among RTOs in the consort					
10	The definition of the system architecture and the specifications of each bloc	3, 4, 5 ...	The WP tasks can be distributed among tech-developers in the consortium tc					

Unforeseen Risks

Add Unforeseen Risk

There are no unforeseen critical risks.

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Critical Risks

SAVE

Foreseen Risks (Annex-I)

Number	Description	Work Package No.	Risk Mitigation Measures	State of the Play Reference Reporting Period	State of the Play Mitigation Measures Applied	State of the Play Risk Materialized	State of the Play Comments	Actions
11	Test facilities or technology availability delayed due to not been able to capt	3, 4, 5 ...	Access to test rigs and test facilities will planned 12 months in advanced. Tir					
12	Limitations of the hybrid testing platform to reproduce key input parameter:	1, 2	IAG and stakeholder meetings will play an important role to capture and foll					
13	Interfacing of existing test rigs and numerical models too complex. Consequ	1, 2, 3 ...	Secure early in the process that platform requirements and test beds adapta					
14	Inability to influence standardisation bodies due to the platform is not to be	2, 6, 7 ...	Make sure to integrate end-users requirements to increase the impact.					
15	Test facilities or technology not available due to the testing facilities are dar	3, 4, 5 ...	Time and budget have been allocated for repairs and upgrades on testing eq					

Unforeseen Risks

Add Unforeseen Risk

There are no unforeseen critical risks.

Critical Risks

SAVE

Foreseen Risks (Annex-I)

Number	Description	Work Package No.	Risk Mitigation Measures	State of the Play Reference Reporting Period	State of the Play Mitigation Measures Applied	State of the Play Risk Materialized	State of the Play Comments	Actions
16	Procurement of components for the test rig upgrades. Consequence: Delay ir	3, 4, 5 ...	Secure redundancy in spare parts and subsystems at suppliers.					
17	Data loss or poor quality. Consequence: Delay in deliverables and perhaps te	3, 4, 5 ...	Secure backups and set a standard on data handling.					

Unforeseen Risks

Add Unforeseen Risk

There are no unforeseen critical risks.

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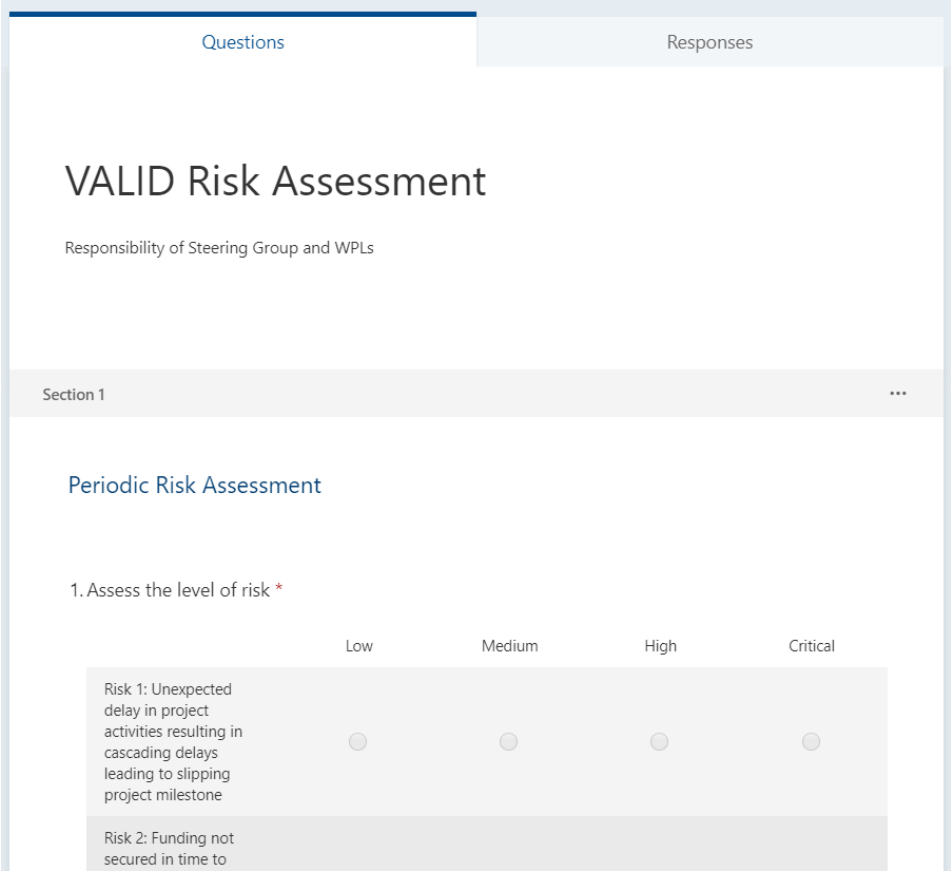
Periodic risk assessment on VALID Team's site → [VALID Risk Assessment]


Questions Responses

VALID Risk Assessment

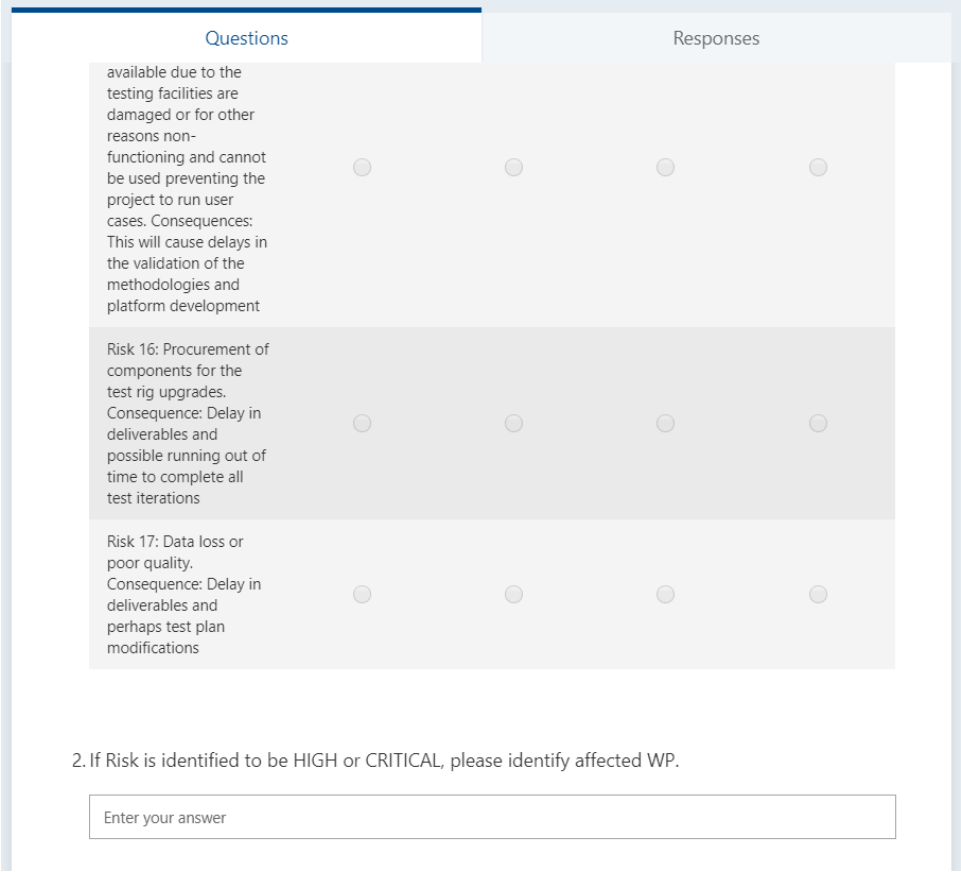
Responsibility of Steering Group and WPLs

Section 1

Periodic Risk Assessment

1. Assess the level of risk *

	Low	Medium	High	Critical
Risk 1: Unexpected delay in project activities resulting in cascading delays leading to slipping project milestone				
Risk 2: Funding not secured in time to				


Questions Responses

available due to the testing facilities are damaged or for other reasons non-functioning and cannot be used preventing the project to run user cases. Consequences: This will cause delays in the validation of the methodologies and platform development				
Risk 16: Procurement of components for the test rig upgrades. Consequence: Delay in deliverables and possible running out of time to complete all test iterations				
Risk 17: Data loss or poor quality. Consequence: Delay in deliverables and perhaps test plan modifications				

2. If Risk is identified to be HIGH or CRITICAL, please identify affected WP.

Enter your answer

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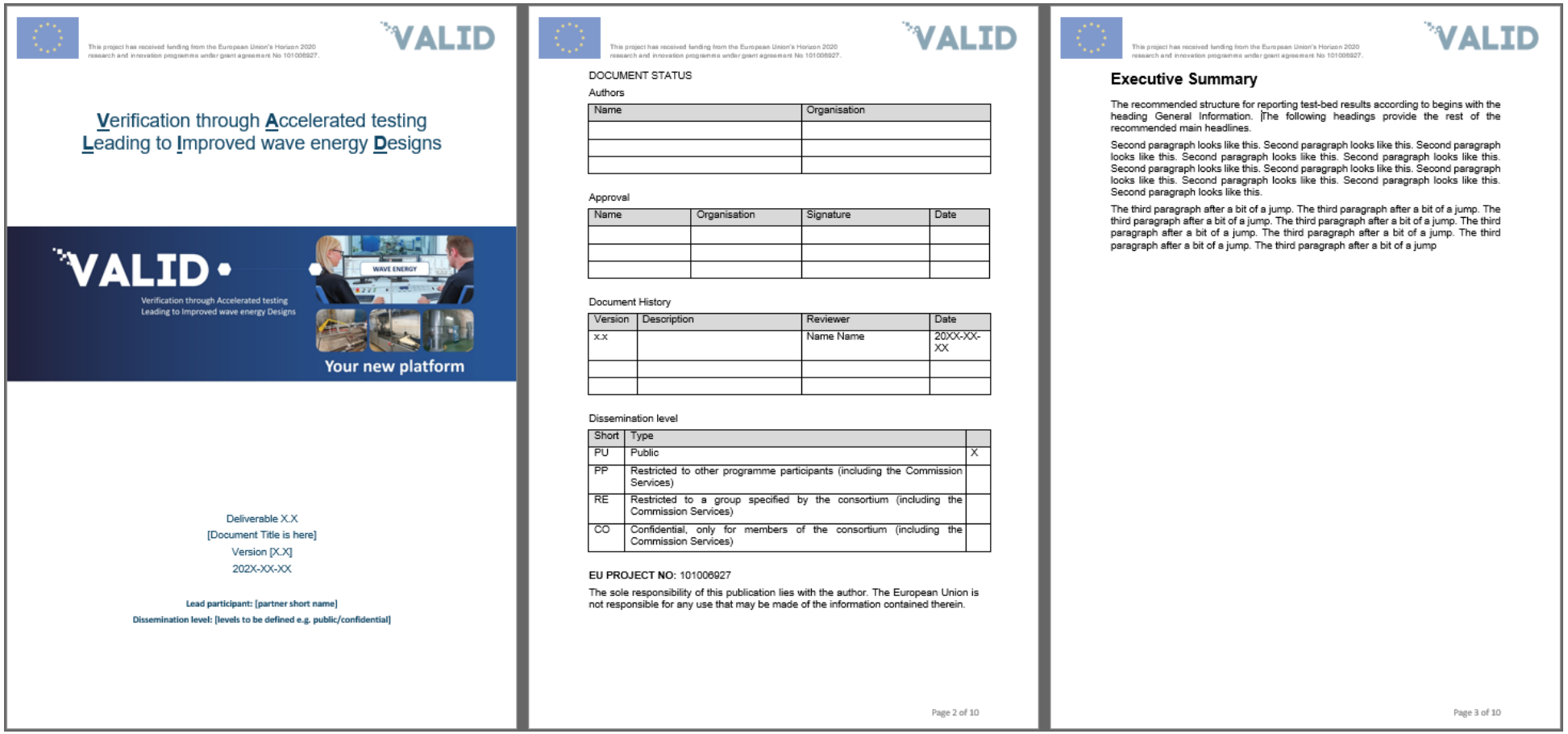
Annex 3 Templates

Report template



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Verification through Accelerated testing
Leading to Improved wave energy Designs

Deliverable X.X
[Document Title is here]
Version [X.X]
202X-XX-XX

Lead participant: [partner short name]
Dissemination level: [levels to be defined e.g. public/confidential]

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DOCUMENT STATUS

Authors

Name	Organisation

Approval

Name	Organisation	Signature	Date

Document History

Version	Description	Reviewer	Date
x.x		Name Name	20XX-XX-XX

Dissemination level

Short	Type	
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

EU PROJECT NO: 101006927

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Executive Summary

The recommended structure for reporting test-bed results according to begins with the heading General Information. The following headings provide the rest of the recommended main headlines.

Second paragraph looks like this. Second paragraph looks like this. Second paragraph looks like this. Second paragraph looks like this. Second paragraph looks like this. Second paragraph looks like this. Second paragraph looks like this. Second paragraph looks like this. Second paragraph looks like this. Second paragraph looks like this.

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Page 3 of 10

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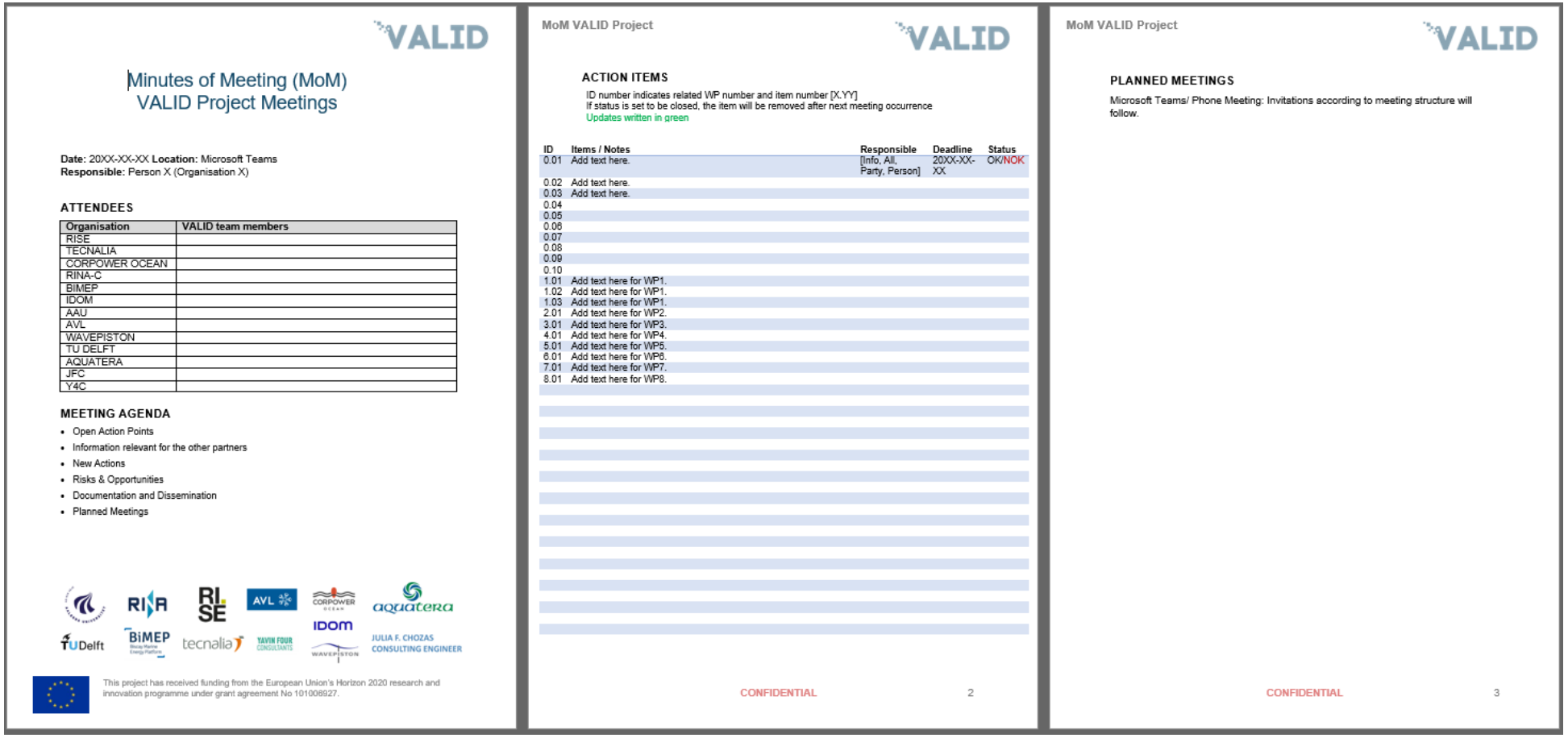
Internal project notes/Meeting agenda template



VALID

Minutes of Meeting (MoM)
VALID Project Meetings

Date: 20XX-XX-XX **Location:** Microsoft Teams
Responsible: Person X (Organisation X)

ATTENDEES

Organisation	VALID team members
RISE	
TECNALIA	
CORPOWER OCEAN	
RINA-C	
BIMEP	
IDOM	
AAU	
AVL	
WAVEPISTON	
TU DELFT	
AQUATERA	
JFC	
Y4C	

MEETING AGENDA

- Open Action Points
- Information relevant for the other partners
- New Actions
- Risks & Opportunities
- Documentation and Dissemination
- Planned Meetings

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ACTION ITEMS

ID number indicates related WP number and item number [X.YY]
If status is set to be closed, the item will be removed after next meeting occurrence
Updates written in green

ID	Items / Notes	Responsible	Deadline	Status
0.01	Add text here.	[Info, All, Party, Person]	20XX-XX-XX	OK/NOK
0.02	Add text here.			
0.03	Add text here.			
0.04				
0.05				
0.06				
0.07				
0.08				
0.09				
0.10				
1.01	Add text here for WP1.			
1.02	Add text here for WP1.			
1.03	Add text here for WP1.			
2.01	Add text here for WP2.			
3.01	Add text here for WP3.			
4.01	Add text here for WP4.			
5.01	Add text here for WP5.			
6.01	Add text here for WP6.			
7.01	Add text here for WP7.			
8.01	Add text here for WP8.			

PLANNED MEETINGS

Microsoft Teams/ Phone Meeting: Invitations according to meeting structure will follow.

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Presentation template

Action list template

Actionlist WPX

VALID

Project Name	VALID	Completed	100%		
Projectnumber:	101006927	In progress	0%		
Start date:	2020-12-01	Planning	0%		
End date:	2023-11-30	Overdue	0%		

Issue	Decision / Action	Solution	Resp.	Start dat	Deadline	Days lef	Status
1. Chose category to be able to filter easier in the future 2. Explain the issue/problem that needs to be adressed	3. Describe actions that is being taken for the described issue <date> (initials) <text> Example: 210201 (PI) contacted PO for further details on GA	4. Explain how the issue was resolved and what the outcome was	Initials	2021-01-11	2021-01-21	-	Completed

Project Progress Report (PPR)

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Verification through Accelerated testing
Leading to Improved wave energy Designs

Work Package X
Project Progress Report (PPR)
Period MX-MX
Version [X.X]
202X-XX-XX

Lead participant: [partner short name]
Dissemination level: Confidential

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Project Periodic Report (PPR)

Explain the progress of the WP according to Project's schedule for the given reporting period. Include an overview of the project results towards the objectives of the action including a summary of completed activities and exploitable results, identified risks and dissemination activities. Provide the status of the cost budget for the given WP, which is coupled to the Periodic Financial Statements (PFS).

1. Are the activities in the WP progressing according to schedule?

☐ YES	☐ NO (Explain below)

Briefly explain the deviations and reasons below:

a) Briefly describe the delayed activities remaining in the WP.

b) Describe how the remaining activities will be managed during the rest of the WP.

2. Have the WPs objectives been achieved according to schedule?

☐ YES	☐ NO (Explain below)	☐ PARTLY (Explain below)

Explain below why the objectives have not been achieved.

3. Short description of the following: (max 2 A4-pages)

a) Completed activities

Explain the work carried out in the WP during the reporting period giving details of the work carried out by each beneficiary/linked third party involved.

b) Results

Provide clear and measurable details: knowledge outputs (KO); deliverables; milestones; reports; dissemination activities, exploitable results.

c) Conclusions based on results achieved so far.

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006927.

4. Are the WPs accrued costs in accordance with the decided cost budget?

☐ YES	☐ NO (Explain below)

Briefly explain deviations and reasons below and state whether the deviations will require and adjustment of the budget for the WP to be able to achieve the objectives.

5. Have you identified any risks that are you consider high or critical for the project?

☐ YES	☐ NO

If YES, briefly explain why you consider these as risks and what WP are they related to?

6. Has your organisation been involved in any activities related to dissemination and exploitation of the project?

☐ YES	☐ NO

If YES, please explain the activities?

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Periodic Financial Statement (PFS)

Partner Budget

Project Type	RIA

Partners					Budget (€)								Funding (€)		
n°	Name	Country	Organization	Type	Direct Cost (€/PM)	(A) Direct Personnel Costs	(B) Other Direct Costs	(C) Direct Costs of Sub-contracting	(D) Direct costs of providing financial support to third parties	(E) Costs of inkind contributions not used on the beneficiary's premises	(F) Indirect Costs (25%*(A+B-E))	(G) Special unit costs covering direct & indirect costs	(H) Total estimated eligible costs/€ (=A+B+C+D+F+G)	(I) Reimbursement rate	(J) Max. grant (=H*I)	(K) Requested grant
1	RISE	Sweden	RTO	Non-Profit	8 200	516 600.00	26 393.00	0.00			135 748.00		**678 741.00**	1.00	678 741.00	**678 741.00**
2	FUNDACION TECNALIA RESEARCH AND INNOVATION	Spain	RTO	Non-Profit	4 800	372 000.00	50 193.00	0.00			105 548.00		**527 741.00**	1.00	527 741.00	**527 741.00**
3	CORPOWER OCEAN AB	Sweden	SME	Profit	6 000	300 000.00	163 693.00	0.00			115 923.00		**579 616.00**	1.00	579 616.00	**579 616.00**
4	RINA CONSULTING SPA	Italy	Large	Profit	5 500	203 500.00	16 954.40	0.00			55 114.00		**275 568.40**	1.00	275 568.40	**275 568.40**
5	BISCAY MARINE ENERGY PLATFORM SA	Spain	RTO	Profit	5 900	113 280.00	52 714.40	0.00			41 499.00		**207 493.40**	1.00	207 493.40	**207 493.40**
6	IDOM INGENIERA Y CONSULTORIA SA	Spain	Large	Profit	5 400	221 400.00	10 954.40	0.00			58 089.00		**290 443.40**	1.00	290 443.40	**290 443.40**
7	AALBORG UNIVERSITY	Denmark	RTO	Non-Profit	7 700	315 700.00	40 154.40	0.00			88 964.00		**444 818.40**	1.00	444 818.40	**444 818.40**
8	AVL	Austria	Large	Profit	8 000	232 000.00	2 738.60	0.00			58 685.00		**293 423.60**	1.00	293 423.60	**293 423.60**
9	WAVEPISTON	Denmark	SME	Profit	7 200	354 240.00	86 054.40	0.00			110 074.00		**550 368.40**	1.00	550 368.40	**550 368.40**
10	TECHNICAL UNIVERSITY OF DELFT	Netherland	RTO	Non-Profit	6 560	198 768.00	13 954.40	0.00			53 181.00		**265 903.40**	1.00	265 903.40	**265 903.40**
11	AQUATERA	Ireland	SME	Profit	5 400	167 400.00	21 393.00	9 500.00			47 198.00		**245 491.00**	1.00	245 491.00	**245 491.00**
12	JULIA F. CHOZAS, CONSULTING ENGINEER	Denmark	SME	Profit	6 400	97 280.00	10 154.40	0.00			26 859.00		**134 293.40**	1.00	134 293.40	**134 293.40**
13	YAVIN FOUR CONSULTANTS	Portugal	SME	Profit	6 250	381 250.00	0.00	0.00			95 313.00		**476 563.00**	1.00	476 563.00	**476 563.00**
	TOTAL					3 473 418.00	495 351.40	9 500.00	0.00	0.00	992 195.00	0.00	**4 970 464.40**	1.00	4 970 464.40	**4 970 464.40**