# sensibat

## CELL-INTEGRATED SENSING FUNCTIONALITIES FOR SMART BATTERY SYSTEMS WITH IMPROVED PERFORMANCE AND SAFETY

GA 957273

D7.1 – PROJECT HANDBOOK

LC-BAT-13-2020 - Sensing functionalities for smart battery cell chemistries



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Written By	Eva Bøgelund (UNR)	16-OCT-2020
	Maaike van der Kamp (UNR)	19-OCT-2020
Checked by	Jon Crego (IKE)	17-NOV-2020
Reviewed by	Prasanna Kadirvelayutham (ABEE)	13-NOV-2020
Approved by	Jon Crego (IKE)	17-NOV-2020
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# Summary

Deliverable 7.1 concerns the Project Handbook for the SENSIBAT project. The Handbook contains an overview of management bodies and information about the project needed in the day-to-day project practise. The document is based on Annex I to the Grant Agreement. Next to summarising the project structure, all procedures relevant to the project execution are described. These procedures are intended to improve decision making, progress monitoring, communication and management of changes, innovations, and risks. The procedures intend to assure a high quality of all deliverables in the SENSIBAT project. There are no deviations from the description of this deliverable as given in Annex I of the Grant Agreement.



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# **1** Introduction

This chapter describes how the activities in the SENSIBAT project, organised in Work Packages (WPs) and Tasks, are related to each other. It also further details, where needed, the SENSIBAT management structure, functions and responsibility of the different consortium bodies, as described in the DoA.

#### **1.1 Work Packages**

The SENSIBAT project activities are divided into seven Work Packages. These WPs consist of one management WP, one WP for dissemination, communication, and exploitation activities, and five technical WPs. An overview of the WP and Task structure and interdependencies is presented in Figure 1-1. In the course of the project, this graph might be updated in case changes in the program will appear.

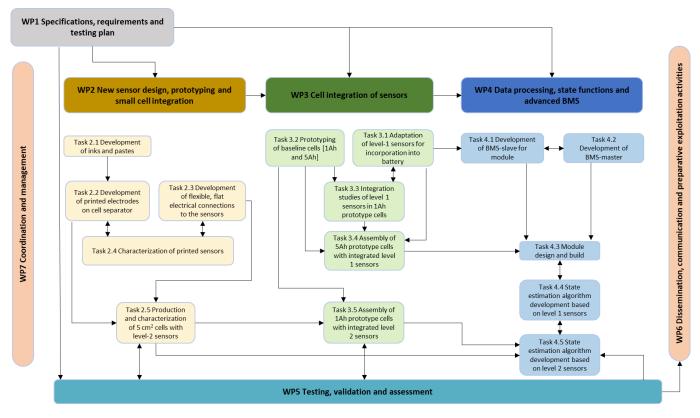


Figure 1-1 SENSIBAT Work Package Structure at the start of the project

**WP1 – Specifications, requirements, and testing plan.** This WP lays out the specifications for the sensing technologies, cells and modules, and drafts the detailed testing plan to be used for validations of cells and modules using these specifications. Crucial parameters will be performance and safety.

WP2 – Level 2 sensor design, prototyping and small cell integration. The main objective of this WP is to realise novel sensing technology consisting of printed auxiliary electrodes that enables i) In situ Electrochemical Impedance Spectroscopy (EIS), and ii) Reliable in operando measurement of the electrolyte conductivity and its change during the cell operation.

**WP3 – Cell integration of sensors.** The main objective of this WP is to realise dedicated battery cell technologies based on NMC Li-ion batteries in pouch format for the baseline cells and with integrated level 1 and level 2 sensor technologies.

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**WP4 – Data processing, state functions and advanced BMS.** In this WP, the BMS will be programmed with novel and improved estimation algorithms and SOS concepts using the data from the level 1 and level 2 sensors.

WP5 – Testing, validation, and assessment (performance, cost, disassembly, and recycling). This WP performs testing and validation of the cells and modules. In addition, the WP also contains a cost benefit assessment as well as a recycling assessment.

**WP6 – Dissemination, communication, and preparative exploitation activities.** The main objective of this WP is to maximise the impact of the results and knowledge generated within the project considering economic, commercial, environmental, educational, scientific, and societal aspects.

**WP7 – Coordination and management.** This WP is to ensure that the project is conducted on time, according to the budget, and is directed towards the overall project objectives.

#### **1.1.1 Activity schedule and Responsible Partners**

The Gantt chart in Figure 1-2 presents an overview of the schedule for each WP and their Tasks. For each WP and Task, the appointed WP/Task Leader (identified with an "L") and involved partners (identified with an "P") are identified. The chart also indicates the timing of Deliverables and Milestones, and the reporting periods.

If changes to the schedule are required, these should be communicated to the Project Management Team as soon as possible by the leader of the WP/task to which the change is linked. The Project Management Team will discuss the changes with the involved partners and update the schedule as needed. The Project Management Team will inform the EC of any changes to the schedule. More details on the management of changes can be found in Section 2.5.

The Gantt-chart will be reviewed and, when required, updated in the quarterly Executive Board-meetings and (when changed) communicated towards the European Commission.

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WP1. Specifications, requirements and testing plan				L									i																							_		
Task 1.1 Review of specifications and requirements				LF			Р	Р	Р				D1.1																									
Task 1.2 Development of Testing Plan	Р			P		F	ΡP	Р	L				Î	D	1.2																							
WP2. New sensor design, prototyping and small cell integration		L											i																						i			
Task 2.1 Development of inks and pastes		L	Ρ										i	D	2.1																							
Task 2.2 Development of printed electrodes on cell components		L	Ρ																								D	02.2							1			
Task 2.3 Development of flexible, flat electrical connections to the sensors		L	Ρ										i i														D	02.3							i.			
Task 2.4 Characterisation of printed sensors		Ρ	L										1																D2.4	.4					ł			
Task 2.5 Production and characterisation of 5 cm2 cells with level-2 sensors		Ρ	L																															D2.5				
WP3. Cell integration of sensors								L											_			l													l			
Task 3.1 Adaptation of level 1 sensors for incorporation into battery cells				L			Р	Ρ																D3.1											7			ļ
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WP4. Data processing, state functions and advanced BMS				L									i																									
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Task 4.3 Module design and build	Ρ			ΡL		F	P	Ρ					1																	T				D4.3	3			
Task 4.4 State estimation algorithm development based on level 1 sensors	L			P	Р	Ρ	Р						- 1																	1					1			D4.4
Task 4.5 State estimation algorithm development based on level 2 sensors	Р			L	P		Р						į									÷			1					1					<u>i</u> t			D4.5
WP5 Testing, validation and assessment									L				t				i													T					1			
Task 5.1 Validation testing of cells and testing of modules	Р			P P	Р	ΡF	P	Р	L				- 1																	i					1	D5	5.1	_
Task 5.2 Cost benefit assessment of cells and modules				P P		F	> L						- I				<u>i</u>					1			1					†					i t	D5	i.2	
Task 5.3 Recycling assessment and integrated validation			Р	P	Р	Р	Р	L	Р				i				1					1								ī.					i			D5.3
WP6 Dissemination, communication and preparative exploitation activities			L																																1			
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WP7 Coordination and management	L																i													i					1			
Task 7.1 Project Coordination	L								P	>		D7.1	1				!													1					!			
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Figure 1-2 Gantt Chart

## **1.2 Management Structure and Consortium Bodies**

An overview of the management structure and the different Consortium Bodies is presented in Figure 1-3. In the following sections the differences between the DoA and the current situation are described where necessary.

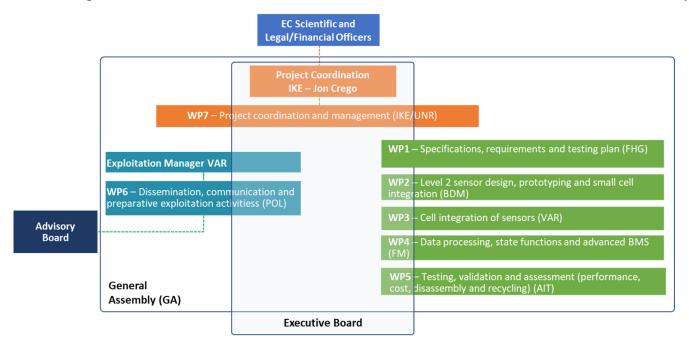


Figure 1-3 SENSIBAT Management Structure

#### **1.2.1 Project Coordinator**

The Project Coordinator (PC) of SENSIBAT is Jon Crego (IKE).

#### **1.2.2 Project Management Team**

In addition to the DoA, a Project Management Team consisting of IKE, ABEE and UNR is established, where IKE & ABEE are responsible for the technical management, and IKE & UNR for the administrative and financial management. For legal, administrative, and technical issues the partners should contact the Project Management Team before contacting the Project Officer. For legal and administrative issues contact Jon Crego (IKE) and Maaike van der Kamp (UNR), with in cc Mette Blom (UNR). For technical issues contact Jon Crego (IKE) and Prasanna Kadirvelayutham (ABEE).

For the technical issues the responsibilities have been divided between IKE and ABEE as follows:

**IKE** is responsible for:

- Technical coordination
- Scientific quality assurance
- Deliverable content

**ABEE** is responsible for:

- Monitoring of technical progress
- Technical planning
- Technical reporting (internal and external); review content of reports

**IKE and ABEE** share the responsibility for:

 Monitoring, coordinating, synchronising the interfaces between the technical activities and controlling the input-output relations and targets



For administrative and financial issues the responsibilities have been divided between IKE and UNR as follows:

**IKE** is responsible for:

- Administration of the EU financial contribution and distribution thereof within the Consortium;
- Management of the technical, financial, and organisational risks in the project

#### **UNR** is responsible for:

- Day to day contractual, administrative management and financial management;
- Set-up and maintenance of web-based tool (Mett®) for internal communication, documentation (archive);
- Monitoring of the project progress;
- Keeping track of the costs and budget situation and create an early-warning system;
- Preparation, organisation, administration, drafting of minutes, and follow up of the meetings of the General Assembly and the Executive Board;
- Collecting administrative documents and transmission to the Commission/Participant Portal;
- Maintaining the Grant Agreement and Consortium Agreement including the preparation of Amendments.

IKE and UNR share the responsibility for:

- Monitoring of compliance by the beneficiaries under the Grant Agreement;
- Arranging the review of Deliverables to safeguard quality;
- Compilation of contractual periodic and final reports (input provided by WP Leaders);
- Set-up and maintenance of adequate communication with the Commission's Project Officer(s) on the project's progression and other relevant issues.



# 2 Management Procedures and Progress Monitoring

In this chapter, all management procedures and tools for the general management and progress monitoring of the SENSIBAT project will be addressed.

## **2.1 External Project Monitoring**

The external project reporting covers all formal periodic reports (project reviews; PR1: from M1-M18 and PR2: from M19-M36) and continuous reports (Deliverables and Milestones). The content of these reports will be outlined in the following sections. Further details can be found in the Grant Agreement, Article 20 – Reporting.

#### 2.1.1 Periodic Reporting

The periodic report (technical and financial) must be submitted by the PC to the EC within 60 days following the end of the reporting period. The periodic report is being prepared based on the input of all partners and must contain:

- 1. A **technical report** including:
  - Part A structured tables from the online grant management system:
    - summary,
    - Web-based tables covering issues related to the project implementation (e.g. work packages, deliverables, milestones, etc.)
    - answers to the 'questionnaire' in the context of the Horizon 2020 key performance indicators and the Horizon 2020 monitoring requirements.
  - Part B Free text, including:
    - an explanation of the work carried out during the reporting period,
    - an overview of the progress towards the project objectives, justifying the deviations from the work expected under Annex 1 of the Grant Agreement, if any,
    - an overview of communication activities.
- 2. A **financial report** consisting of structured forms from the online grant management system, including:
  - individual financial statements (Annex 4 to the GA) for each beneficiary,
  - an explanation of the use of resources and the information on subcontracting and in-kind contributions provided by third parties, from each beneficiary during the reporting period,
  - a periodic summary financial statement including the request for interim payment.

In addition to the periodic reports, the PC must submit the Final Report within 60 days following the end of the last reporting period.

#### **2.1.2 Continuous Reporting: Deliverables and Milestones**

The Project Coordinator must submit the Deliverables identified in Annex 1 of the Grant Agreement in accordance with the timing and conditions set out therein. The deliverables are submitted to the EC via the Single Electronic Data Interchange Area (SEDIA). More information on the monitoring and submission of Deliverables and Milestones can be found in Section 4 – Quality Assurance. This section also details the timeline for the preparation of deliverables and the quality review process that the consortium has agreed on.



## **2.2 Internal Project Monitoring**

General Assembly meetings will be held on a regular basis to facilitate the progress monitoring. The consortium has established the following GA meeting calendar to supervise the progress of the activities:

Meeting	Month	Place	Host
KoM (GA1)	M1 – Sep 2020	Online	n/a
GA2	M6 – Feb 2021	Lommel, Belgium	FM
GA3	M13 – Sep 2021	Munich, Germany	FHG
GA4 & AB Workshop I	M19 – Mar 2022	Genoa, Italy	BDM
Review Meeting		Brussels, Belgium	ABEE
GA5	M25 – Sep 2023	Arrasate/Mondragon, Spain	IKE
GA6	M31 – Mar 2023	Genoa, Italy	BDM
AB Workshop II	M34 – June 2023	Lommel, Belgium	FM
Final Review Meeting		Brussels, Belgium	ABEE

#### Table 2-1 Tentative GA meeting schedule and hosing partners

In addition to the GA meetings, all consortium partners are requested to complete a short internal progress report every 6 months. This report should indicate any problems regarding meeting deadlines, completing the work as planned, and budgets. The purpose of the internal progress report is to set up and maintain an 'early-warning' system (for possible technical and financial risks) via clear, simple, and transparent procedures. Reporting will involve:

- Progress made in the partner's work in specific WPs and deviations from the DoA (if any),
- Status of Deliverables,
- Status of Milestones,
- Financial report (via EU-fin, see Section 2.3.2): a simple overview (per partner) of the costs and Person Months (PMs) spent in the reporting period, including detailed justifications of "other costs". Deviations from the estimated budget in Annex 2 of the Grant Agreement should also be reported.

Furthermore, WP Leaders may be requested to provide a brief report on the major achievements, (novel) risks, and problems encountered (critical or not critical) in the WP during the reporting period. When relevant or deemed necessary, the internal progress reports will be discussed during GA meetings.

In addition, all partners will be requested to evaluate the status of risks as identified in the risk management table (Table 1.3.5 of Annex 1 of the GA). This evaluation should indicate whether risks are properly addressed or if actions are needed (more details in Section 3 – Risk Management); if necessary, extra risks (unforeseen during the proposal preparation) will be added and monitored.

ABEE will review the input provided by the partners and will also provide feedback to the partners. ABEE will use the provided information to monitor the technical progress and planning of SENSIBAT.

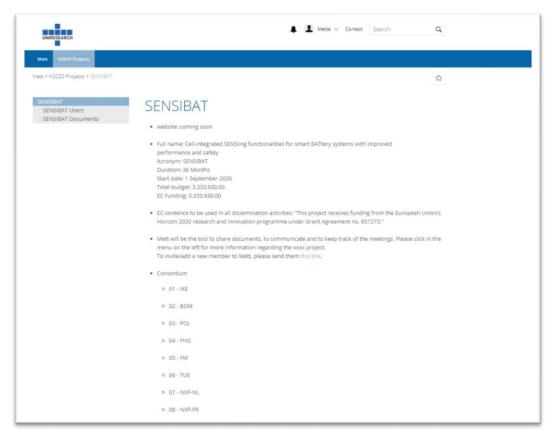


## **2.3 Management Tools**

The following sections will introduce the management tools that will be used for internal project monitoring and reporting. Consortium partner UNR will setup and prepare the tools.

#### **2.3.1 Mett**

The management tool <u>Mett</u> will be used as platform for the consortium partners to exchange and archive documents. The tool is specifically designed for project partner UNR to support projects like SENSIBAT. Special pages are dedicated to the different documents of the project (contracts, deliverables, periodic reports, contact list, meetings, etc). An impression of the Mett interface is presented in Figure 2-1.





#### 2.3.2 EU-fin

The EU-fin tool allows to automatically generate cost reports which compare the actual project expenses with the estimated budget per beneficiary, WP, task, etc. Other functionalities include creating charts for comparing budget planned vs. budget spent, etc. The EU-fin tool is developed for project partner UNR and adapted to the SENSIBAT consortium. The information in EU-fin will also be used as input for the official periodic reports (after M18 and after M36).

The EU-fin tool has standard dashboards that can be used for project monitoring on different levels; monitoring on partner-level (see Figure 2-2 for dashboard that shows an overview of the budgeted vs actual costs of one partner), monitoring on WP-level (see Figure 2-3 for dashboard that shows PMs spent vs budgeted for each partner within a WP) and project monitoring by Project Management Team (see Figure 2-4 for dashboard that includes information on e.g. budget vs actual costs of each partner, budget vs actual costs for each WP).

		Grand Total	
	Planned [€]	Reported [€]	Cost Status [%]
Other direct costs	1,229,081	87,531	7.1%
Personnel Costs	3,965,000	1,339,673	33.8%
Subcontracting	285,000	75,782	26.6%
Travels	208,820	114,011	54.6%
Grand Total	5,687,901	1,616,997	28.4%
Direct Cost overvie	ew per Partner		ß
		Planned [€] ■ Report	ed [€] 📕 Cost status [%]
4M			54.6% 80.0% C
ME E	7.1%	26.6%	54.6% 80.0% Cost status
Ŭ 1M —			20.0% 🖉



Subcontracting

Other direct costs

Travels

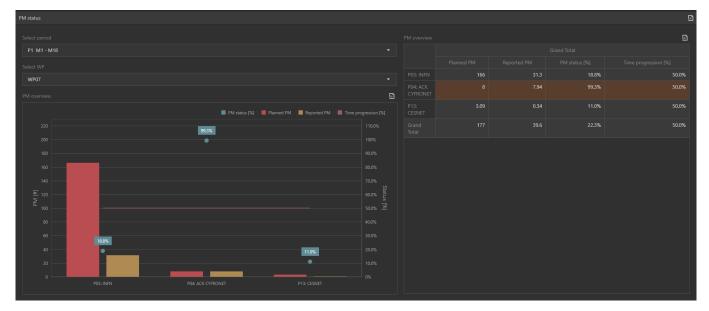


Figure 2-3 EU fin: example overview of reported vs budgeted PMs of one work package

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Figure 2-4 EU fin: example overview of Project Management Team dashboard

At the beginning of the project, a financial planning will be prepared (by UNR) in EU-fin. In this planning, the total project costs for each reporting period will be divided among the different WPs and budget categories, according to the estimated budget prepared during the proposal preparation (Annex 2 of the Grant Agreement). Every 6 months the consortium partners will be asked to report on project costs. Guidelines on how to use EU-fin will be distributed to all partners by UNR before the first internal reporting period.

#### **2.4 Decision Making**

The project will be governed by the Grant Agreement signed with the European Commission and the Consortium Agreement (CA) signed among the partners. The CA, based on the DESCA model, covers all issues necessary for the proper execution of the project such as the responsibilities (including Project Coordinator, Executive Board, General Assemblies, Innovation Manager, and individual parties), liabilities, voting rules, joint-ownership, background knowledge, intellectual property rights, knowledge management, grant distribution, rules for publishing information, conflict resolution, admission of new partners, etc.

#### **2.5 Change Management**

SENSIBAT is a collaborative project, involving 12 partners, so a shift in the 36 months' planning or a change in the budget may happen. Such shifts are not uncommon for a project of this size and duration, but these changes should not come as a surprise. Therefore, the Project Management Team together with all project partners are committed to maintain open and transparent communication throughout the project lifetime.

#### 2.5.1 Changes in Budget

Each consortium partner is requested to:

- Report immediately, as soon as the possibility of a budget modification is considered, to the Project Coordinator and the Management Support Team (UNR),
- Provide a financial report every 6 months that clearly reports on the expenditures and financial planning.



The Project Management Team will evaluate the situation and propose scenarios and possible solutions for the change in budget. The Project Coordinator and the Management Support Team will inform the Project Officer accordingly for further discussion and alignment.

Below a list of the most common situations in which changes to the budget may occur:

- Budget shift at partner level (only one partner involved, the total costs are not changing): some budget needs to be shifted from one WP to another or from one category to another (e.g. from travel to 'other direct costs') → in principle no amendment to the Grant Agreement will be necessary, but this should be discussed with the Project Officer. Convincing justification will need to be provided.
- Budget shift between partners → in principle no amendment to the Grant Agreement will be necessary, but this should be discussed with the Project Officer. Convincing justification will need to be provided.
- Changes in subcontracting/new subcontracting → An amendment to the Grant Agreement is (probably) necessary. Partners should inform the Project Coordinator and Management Support Team as soon as possible and provide convincing justification. The Project Coordinator and the Management Support Team will contact the Project Officer.

#### **2.5.2 Changes in Personnel or Roles**

A project contact list is available on Mett. The list is updated and maintained by UNR with inputs from all consortium partners. Changes in personnel need to be communicated to the Project Management Team (this project is dealing with confidential research information and in case someone leaves the team it is important to remove his/her access to the project document database).

Furthermore:

- Changes at GA and WPL/EB level need to be presented and discussed during the General Assembly and Executive Board meetings,
- In case of change of the Project Coordinator, an Amendment to the Grant Agreement will be required.

#### **2.5.3 Changes in Technical Content and Timing**

Each change related to the technical content and timing of the project activities needs to be reported to the Project Officer (via the Project Coordinator). Minor re-planning and re-alignment of activities may be implemented but in case of changes in the scope/objectives of a specific WP an Amendment to the Grant Agreement will be required. Partners are requested to immediately report possible changes to WP activities and planning to the WP Leader of the WP in question. The WPL will evaluate the situation and inform the Project Management Team.



# **3 Risk Management**

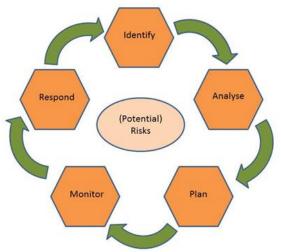
As part of the overall management plan for the SENSIBAT project, this chapter describes the risk management plan. It identifies conditions that may put the project at risk and provides guidance for managing these. It also provides methods for the risk management process and establishes roles and responsibilities of all participants in this process.

## **3.1 Risk Analysis**

Since the probability of failure in research and innovation projects is considerable, risk factors in the SENSIBAT work plan should be analysed on a regular basis. Therefore, WP7 contains the Deliverables 7.2 and 7.4 that are dedicated to the Risk Management Plan. D7.2 will include a detailed risk management plan and will aim to identify possible risks that may hamper the project outcomes or in broader sense the market introduction of the SENSIBAT project. It will also cover mitigation measures and procedures to foresee the risks and implement the mitigation measures before the risk materialises. Deliverable 7.4 is the updated risk management plan that will be made to ensure the proper execution of the final tasks of the project and the consecution of the defined objectives.

Risks are approached according to the steps which together form the "circle" of risk management:

- Identify → In this step, risks are identified, with the moments at which they could occur and the specific symptoms of the risks.
- <u>Analyse</u> → Here, the risk is analysed further, looking also into the potential effects and consequences of the risk.
- <u>Plan</u> → In this step, plans are developed for management of the specific risk, as well as contingency plans.
- Monitor → The actual status of the risk is monitored, using e.g. the risk symptoms as identified in the first step.



 <u>Respond</u> → The specific risk management plan is put into action, when the monitoring step has shown the need for this. Actions are taken here to prevent the risk from happening full force or to avoid undesired consequences of the risk.

The risk management circle formed by these five steps will continuously be performed during the project.

#### **3.2 Critical Risks and Risk Mitigation**

In section 1.3.5 of the Grant Agreement Annex 1 (part A), an overview is presented of the most important risks and potential mitigation strategies. Other risks may materialise and will be reported to the EC (via the portal) at the periodic project reporting moments. The status of risks will be evaluated every 3 months in EB-meetings and each half year as part of the internal project reporting.



## 3.3 Role of the Partners and the PC in Risk Management

The monitoring of risks, and the reporting of new, yet unidentified risks, will be a task for everyone involved in SENSIBAT. The General Assembly assesses the possible occurrence of the risks and decides on the mitigation measures or, when required, a modification of the work plan.

The roles and responsibilities in risk management are:

- **Task Leaders**: will identify risks, develop mitigation strategies and contingency plans for their tasks and monitor risks. Report potential risk factors to their Work Package Leader.
- **Work Package Leaders**: will consolidate risks and develop mitigation strategies and contingency plans on WP level. Work Package Leaders will report potential risk factors to the Project Coordinator and to other WPLs via the Executive Board.
- **Project Coordinator**: is responsible for the risk management of the whole project. Identifies risks, develops mitigation strategies and contingency plans, monitors risks and reports risk status in the periodic progress reports to the EC, including planned contingency measures.



# **4 Quality Assurance**

## 4.1 Quality Assurance for Deliverables

The term "Deliverables" refers to the formal SENSIBAT project Deliverables as described in the Grant Agreement Annex 1 (part A). An overview of all formal SENSIBAT Deliverables is presented in 1.3.2 of the GA. To ensure their quality, all Deliverables will undergo internal review before submission. This review is conducted by the WPL of the WP to which the Deliverable belongs (responsible for checking quality of reporting and consistency, "fit" into the Work Package), a member of the Executive Board appointed by the Project Management Team (responsible for checking fit with DoA, project objectives and if deliverable fulfils expectations of all WPs), and the Project Coordinator (approve deliverable). There always have to be at least two different reviewers. An overview of the assigned reviewers per deliverable as composed by the Project management Team can be found on Mett.

Each reviewer will use the standard review form (see Annex A of this document) to document his/her review findings. After reviewing, the reviewer sends his/her comments to the Deliverable authors. The author(s) revises the Deliverable according to the quality assurance review. The Project Coordinator ensures that the requested updates/improvements are implemented by the author(s) and performs the final review.

Once the Deliverable is approved by the Project Coordinator, the Project Coordinator/Management Support Team submits the Deliverable to the EC in electronic form (PDF) via the Participant Portal. The submitted Deliverables are stored on Mett by UNR.

A template for Deliverables will be provided by UNR on Mett. The template will include the following sections which are mandatory for all technical Deliverables:

- Public executive summary,
- Core content: core technical development in Deliverable with clear descriptions of the work carried out, results, and discussions (based on the provided technical information),
- Risk table: overview and description of encountered risks (if any) and mitigation actions,
- Conclusions and recommendations for future work including foreseen risks/challenges.

The authors should always use the Deliverable template provided on Mett.

#### 4.1.1 Timing for Review and Approval

The review and approval of Deliverables should recognise the following timeline and steps to ensure that all Deliverables are of high quality and submitted on time:

Table 4-1 Deliverable review process and timing

Submission Date (working days)	Action	Action by
Due date – 15 days	Present full final draft of Deliverable for quality review to Reviewers	Author
Due date – 8 days	Comments returned to Author (in case of major modifications following the first round of reviews, revisit review procedure and take measures as necessary)	Reviewers
Due date – 2 days	Finalised Deliverable to Project Coordinator for approval	Author

		•
Submission Date (working days)	Action	Action by
Due date	Submit Deliverable after final review to EC	Project Coordinator

#### 4.2 Milestones

WP Leaders are responsible for the achievement of WP-related milestones. WP Leaders report to the Executive Board with a short milestone achievement report if they think a milestone has been achieved and the means of verification as reported in section 1.3.4 of the Grant Agreement Annex 1 (part A) have been met. The milestone will be discussed in the EB after which the Project Management Team will report it to the EC through the portal. In case of changes, the Project Officer will be contacted.



# **5** Communication

Internal communication will be stimulated as much as possible by the Project Management Team and the GA members. Frequent teleconferences and meetings will be organised among partners.

#### **5.1 Acknowledgement of EU Funding**

#### From Article 29.4 of the Grant Agreement:

Unless the Commission requests or agrees otherwise or unless it is impossible, any dissemination of results (in any form, including electronic) must:

- a) display the EU emblem (see Figure 5-1) and
- b) include the following text:

"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 957273"



Figure 5-1 EU emblem

When displayed together with another logo, the EU emblem must have appropriate prominence. For the purposes of their obligations under this Article, the beneficiaries may use the EU emblem without first obtaining approval from the Commission. This does not however give them the right to exclusive use. Moreover, they may not appropriate the EU emblem or any similar trademark or logo, either by registration or by any other means.

#### From Article 29.5 of the GA:

Any dissemination of results must indicate that it reflects only the author's view and that the Commission is not responsible for any use that may be made of the information it contains.

#### 5.2 BATTERY 2030+

SENSIBAT is part of the BATTERY 2030+ Large-Scale Research Initiative. Therefore, it is strongly advised that any dissemination of SENSIBAT-results contains the BATTERY2030+ logo and a short reference text to the BATTERY 2030+ Large-Scale Research Initiative. Both can be found on Mett. The collaboration between the SENSIBAT Consortium and the BATTERY 2030+ Large-Scale Research Initiative will be governed by a Collaboration Agreement. It is the intention to share detailed information between the SENSIBAT project and the BATTERY 2030+ Large-Scale Research Initiative to maximise the impact of project results.

## **5.3 Internal Communication**

Some simple rules for internal emails:

- Start your message subject with: SENSIBAT
- Use e-mail responsibly: do not overuse/spam
- Use Mett for sharing large documents
- Make clear what you expect from others (detail, timing, how to receive)
- Confidentiality: mark your messages if the info is confidential

#### Contacts:

- Contact list is maintained by UNR
- Partners are responsible for making sure that the correct contact information is with UNR
- The most up-to-date contact list can always be found on Mett

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# 6 Risks

No additional risks linked to D7.1 have been identified.



## Acknowledgement

The author(s) would like to thank the partners in the project for their valuable comments on previous drafts and for performing the review.

#### **Project partners**

#	PARTICIPANT SHORT NAME	PARTNER ORGANISATION NAME	COUNTRY
1	IKE	IKERLAN S. COOP.	Spain
2	BDM	BEDIMENSIONAL SPA	Italy
3	POL	POLITECNICO DI TORINO	Italy
4	FHG	FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V.	Germany
5	FM	FLANDERS MAKE VZW	Belgium
6	TUE	TECHNISCHE UNIVERSITEIT EINDHOVEN	The Netherlands
7	NXP NL	NXP SEMICONDUCTORS NETHERLANDS BV	The Netherlands
8	NXP FR	NXP SEMICONDUCTORS FRANCE SAS	France
9	ABEE	AVESTA BATTERY & ENERGY ENGINEERING	Belgium
10	VAR	VARTA MICRO INNOVATION GMBH	Germany
11	AIT	AIT AUSTRIAN INSTITUTE OF TECHNOLOGY GMBH	Austria
12	UNR	UNIRESEARCH BV	The Netherlands



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# **Annex A – Quality Assurance**

The following questions should be answered by all reviewers (WP Leader, peer reviewer 1, peer reviewer 2 (if applicable) and the technical coordinator) as part of the Quality Assurance Procedure. Questions answered with NO should be motivated.

If any question is answered with NO, the author has to prepare a revised version of the deliverable. When all reviewers have answered all questions with YES, the Deliverable can be submitted to the EC.

NOTE: This Quality Assurance page should be removed before submission.

Question	WP Leader	Peer reviewer 1	Peer reviewer 2	Technical Coordinator
	NAME	NAME	NAME	NAME
1. Do you accept this deliverable as it is?	Yes / No	Yes / No	Yes / No	Yes / No
	(motivate)	(motivate)	(motivate)	(motivate)
2. Is the deliverable completely ready (or are any changes required)?	Yes / No (motivate)	Yes / No (motivate)	Yes / No (motivate)	Yes / No (motivate)
3. Does this deliverable correspond to the DoW?	Yes / No	Yes / No	Yes / No	Yes / No
	(motivate)	(motivate)	(motivate)	(motivate)
4. Is the Deliverable in line with the SENSIBAT objectives?	Yes / No (motivate)	Yes / No (motivate)	Yes / No (motivate)	Yes / No (motivate)
5. WP Objectives?	Yes / No	Yes / No	Yes / No	Yes / No
	(motivate)	(motivate)	(motivate)	(motivate)
6. Task Objectives?	Yes / No	Yes / No	Yes / No	Yes / No
	(motivate)	(motivate)	(motivate)	(motivate)
7. Is the technical quality sufficient?	Yes / No	Yes / No	Yes / No	Yes / No
	(motivate)	(motivate)	(motivate)	(motivate)