

EUROPEAN COMMISSION

HORIZON EUROPE PROGRAMME - TOPIC: HORIZON-CL5-2022-D2-01

FASTEST

Fast-track hybrid testing platform for the development of battery systems

Deliverable D7.1 – Dissemination and Communication plan

Primary Author: Daniel Matilla

Organization: Sustainable Innovations

Date: 28/11/2023

Doc.Version: v1.0



Funded by the European Union under grant agreement N° 101103755. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA) Neither the European Union nor CINEA can be held responsible for them.





Document Control Information			
Settings	Value		
Work package:	7		
Deliverable:	Dissemination and communication plan		
Deliverable Type:	Report		
Dissemination Level:	Public		
Due Date:	30.11.2023 (Month 6)		
Actual Submission Date:	30/11/2023		
Pages:	31		
Doc. Version:	Draft 1.0		
GA Number:	101103755		
Project Coordinator:	Alvaro Sanchez ABEE (alvaro.anquela@abeegroup.com)		

Formal Reviewers			
Name	Organization	Date	
Miguel Gallardo	SIE	27/10/2023	
Philipp Brendel	FhG	07/11/2023	
Álvaro Sánchez	ABEE	28/11/2023	

Document History			
Version Date Description Author			
0.1	03.11.2023	First draft sent for internal review	Daniel Matilla (SIE)
0.2	07.11.2023	Internal review by FhG	Philipp Brendel (FhG)
1	28.11.2023	Last quality review	Álvaro Sánchez (ABEE)

Date: 28/11/2023 Page **2** of **31**





Project Abstract

Current methods to evaluate Li-ion batteries safety, performance, reliability and lifetime represent a remarkable resource consumption for the overall battery R&D process. The time or number of tests required, the expensive equipment and a generalised trial-error approach are determining factors, together with a lack of understanding of the complex multiscale and multi-physics phenomena in the battery system. Besides, testing facilities are operated locally, meaning that data management is handled directly in the facility and that experimentation is done on one test bench.

The FASTEST project aims to develop and validate a fast-track testing platform able to deliver a strategy based on Design of Experiments (DoE) and robust testing results, combining multi-scale and multi-physics virtual and physical testing. This will enable an accelerated battery system R&D and more reliable, safer and long-lasting battery system designs. The project's fast-track hybrid testing platform prototype aims for a new holistic and interconnected approach. From a global test facility perspective, additional services like smart DoE algorithms, virtualised benches, and DT data are incorporated into the daily facility operation to reach a new level of efficiency.

During the project, FASTEST consortium aims to develop up to TRL 6 the platform and its components: the optimal DoE strategies according to three different use cases (automotive, stationary, and off-road); two different cell chemistries, 3b and 4 solid-state (oxide polymer electrolyte); the development of a complete set of physic-based and data-driven models able to substitute physical characterisation experiments; and the overarching Digital Twin architecture managing the information flows, and the TRL6 proven and integrated prototype of the hybrid testing platform.

Date: 28/11/2023 Page **3** of **31**





LIST OF ABBREVIATIONS, ACRONYMS AND DEFINITIONS

Acronym	Name
OS	Open science
CINEA	European Climate Infrastructure and Environment Executive Agency
WP	Work Package
KER	Key Exploitable Result
HE	Horizon Europe
DC	Dissemination and Communication
SIE	Sustainable innovations
M	Month
KPI	Key Performance Indicators
R&I	Research and Innovation
DT	Digital Twin
HIL	Hardware-in-the-Loop
LIB	Lithium-ion battery
CBPST	Cell to battery pack system testers
СВМ	Cell and battery manufacturers
ОЕМ	Application & Integration
RSL	Recycling / Second Life
SC	Scientific community
PM	Policy Makers
STC	Standardisation Technical Committees
SO	Standardisation Organizations
GP	General Public
TM	Trade Media
R&A	Research and Academia

Date: 28/11/2023 Page 4 of 31





LIST OF TABLES

Table 1: Targeted results and the stakeholders that they affect	11
LIST OF FIGURES	
Figure 4.3-1: Visual guide pages	14
Figure 4.3-2: Website's homepage	15
Figure 4.3-3: FASTEST's poster	17
Figure 4.3-4: FASTEST's roll-up	
Figure 4.3-5: FASTEST's factsheet	19
Figure 4.3-6: FASTEST's brochure (both sides)	20
Figure 4.3-7: First FASTEST newsletter	21
Figure 4.8-1: FASTEST's presentation	26
Figure 4.8-2: FASTEST's first press release	
Figure 4.8-3: FASTEST's newsletter	





Table of Contents

EXECU [®]	TIVE	SUMMARY	. 8
OBJEC	TIVE	S	. 8
INTRO	DUC	TION	. 8
3.1.	Cont	ext of WP7	. 8
2.1	Obj	ectives of T7.1	. 9
DESCR	IPTI	ON OF WORK	. 9
3.1	Tar	get audiences	. 9
3.2	Key	Messages	11
3.3	Too	ls and channels	12
3.3	3.1	Project identity	13
3.3	3.2	Project website	14
3.3	3.3	Social media	15
3.3	3.4	Printed material	16
3.3	3.5	Newsletters and press releases	20
3.3	3.6	Peer-reviewed articles	21
3.3	3.7	Conferences and events	22
3.4	Ind	icators and targets	23
3.5	Lev	els of dissemination	24
3.5	5.1	European Level – European Commission	24
3.5	5.2	International level – Industry, Scientific community	24
3.6	Met	hodology	24
3.6	5.1	Internal Communication	24
3.6	5.2	External communication	25
3.7	Dev	velopment phases	25
3.7	'.1	Phase 1: awareness phase	25
3.7	'.2	Phase 2: scientific cooperation phase	25
3.7	' .3	Phase 3: Exploitation-focused phase	25
3.8	Act	ivities M1-M6	26
3.8	3.1	Project identity and materials	26
3.8	3.2	Press releases	26
3.8	3.3	Website	28
3.8	3.4	Social media	28





3.8.5	Newsletter	28
3.8.6	Events attended	30
3.8.7	Interaction with other EU initiatives	30
3.8.8	Impacts on media outlets and other relevant websites	30

Date: 28/11/2023 Page **7** of **31**





EXECUTIVE SUMMARY

This document describes the Dissemination and Communication Plan to be adopted by the FASTEST project, whose main objective is ensuring that the project's outcomes (concepts, scientific results, validated work, problem awareness) are disseminated to appropriate target communities. This will be done with a 360 approach, which includes online and offline strategies.

This deliverable is the first version of the Dissemination and Communication strategy, which describes (1) the overarching strategy of the project, and (2) the dissemination and communication activities undertaken so far until M6 of the project. Subsequent deliverables will continue reporting the activities and any changes in the strategy to increase the impact and outreach of the project.

OBJECTIVES

To enable the delivery of the results and main messages of the project to the targeted audiences, as well as contributing to the post-project achievement of the outcomes and the impacts, FASTEST has set a specific plan for the dissemination, usage, and valorisation of research and innovation results, and the communication efforts to inform the public about the utilisation of European funds for R&I projects, social issues, the results of a sustainable and cutting-edge cell manufacturing sector in the EU. Thus, improving the communication between science, business, and society. WP7, "Dissemination, exploitation, and communication," will take the lead on these efforts, liaising with the other partners to ensure the greatest impact is made, and delivering a comprehensive Dissemination and communication Plan by M6. Here is a brief explanation of the main components of this plan.

INTRODUCTION

This document describes the Dissemination and Communication Plan to be adopted by the FASTEST project, whose main objective is to ensure that the project's outputs (concepts, scientific results, validated work, problem awareness) are consequently disseminated and/or communicated to appropriate target communities.

3.1. Context of WP7

The main aim of WP7 is to coordinate the project consortium in the performance of dissemination, communications, and exploitation activities, including IP management. Following the OS approach of the project, partners will maximise the openness of results and the interaction with sectoral stakeholders in a balanced way with IP protection measures established where necessary to ensure the proper exploitation of project KERs. The Consortium will contribute, upon invitation by the CINEA, to common information and dissemination activities to increase the visibility and synergies between HE/H2020 supported actions.

Date: 28/11/2023 Page **8** of **31**





2.1 Objectives of T7.1

A detailed Dissemination and Communication Plan (D&C) will be produced by SIE at the beginning of the project (M6), based on the preliminary indications given in Section 2.2 and in collaboration with all the consortia. It will outline the project's audiences, key messages, and communication channels for dissemination, including roles and responsibilities. The different updates of the plan will offer the monitoring of the different dissemination and communications activities carried out by all partners, evaluated against its KPIs.

DESCRIPTION OF WORK

This document is the first dissemination and communication plan of the FASTEST project. It serves for both setting the basis and good practices in terms of disseminating and communicating the project, its results and main messages, and describing the work done until the date. SIE has coordinated the overall strategy, drafting this deliverable, communicating to partners the importance of maintaining a high involvement in the dissemination and communication activities in the project, and supporting them along the way during the first 6 months of the project as T7.1 leader. On the other hand, ABEE has been in charge of delivering the initial communication and dissemination tools (i.e., branding, website) and materials (i.e., brochures).

Disseminating a project like FASTEST is a central part of the project's strategy to maximise the uptake of its results by different audiences, especially in terms of entities delivering battery and battery cell testing and characterisation commercial services. Scientific advances need to be well-known by the entire society. Our main aims in terms of communication are to show that scientific collaboration makes a difference in social progress and to inspire, to give clues to the rest of the scientific community on our specific topic and to inspire the public to increase their interest in technical and scientific matters.

3.1 Target audiences

A sizable list of stakeholders has been initially established by FASTEST for whom the dissemination and communication tools and materials will be intended. Although the vehicle manufacturing sector is an established industry, the deployment of the cell manufacturing ecosystem in Europe is not, which justifies the value chain strategy used in the project, which is typical of fast-expanding industries. According to the European Battery Alliance, we list the key players in the value chain along with the key findings that will be shared with them throughout the project in the Table 1 below.

Date: 28/11/2023 Page **9** of **31**



Table 1: Targeted results and the stakeholders that they affect.

Targeted results/content	Target group / Stakeholder
The main result of the FASTEST project: "hybrid testing platform with reconfigurable XiL testing environment towards automatic BMS validation"	Cell to battery pack system testers (CBPST), Application & Integration (OEM), Cell and battery manufacturers (CBM), Research and academia (R&A), General Public (GP), Trade Media (TM)
A knowledge-based DoE methodology toolbox	CBPST, CBM, R&A
Physics-based modelling tools to fully understand the battery system	CBPST, CBM, R&A
Data-driven modelling tools to develop online aging estimation	CBPST, CBM, R&A
AI toolchain to simulate and monitor safety and reliability testing	CBPST, CBM, R&A
Digital Twin System to monitor in real time parameters of the battery system	CBPST, CBM, OEM, R&A
Knowledge, reproducibility, etc.	R&A
Standardisation, public roadmaps actualisation, etc.	Policy Makers (PM), Standardisation Organizations (SO)
EC funds, R&I efforts to enable affordable electric mobility.	GP

Table 1 summarises which stakeholder groups will benefit from each of the project results. The dissemination and communication strategy will conduct a thorough stakeholder analysis to better understand the influence and stakeholder interests, and to better adjust the key messages to deliver and how to do so, increasing the likelihood that the project's findings will be disseminated and used.

FASTEST consortium members have preliminary identified a list of key associations and organisations that will allow to enhance the project's results dissemination through mutual collaboration: <u>LiPLANET</u> (Network of battery cell Pilot Lines in Europe), <u>European Battery Alliance</u>, <u>EMIRI</u>, <u>ALISTORE</u>, <u>EMMC</u> (European Materials Modelling Council), <u>BEPA</u> - BATT4EU Partnership, <u>BATTERY 2030</u>+, <u>European Digital SME Alliance</u>, and <u>ERMA</u> (European Raw Materials Alliance).

Consortium partners are a good reflection of the European battery value chain, including research centers, manufacturers, producers, and academia. Nevertheless, FASTEST's intention is to widen its collaboration with other relevant actors from the industry. Thus, a preliminary stakeholder list was prepared, including more than 300 organisations. This list will be regularly updated, and stakeholders will be informed of the project's regular outcomes.

Likewise, similar European and international projects have been identified to seek for synergies: <u>LIBERTY</u>, <u>SEABAT</u>, <u>GIGAGREEN</u>, <u>3beLiEVe</u>, <u>SENSIBAT</u>, <u>SPINMATE</u>, <u>Arrowhead Tools</u>, <u>COBRA</u>, <u>COFBAT H2020</u>, <u>BatWoman</u>, <u>greenSPEED</u>, <u>NoVOC</u>,

Date: 28/11/2023 Page **10** of **31**





<u>NEXTCELL</u>, <u>TEMPEST</u>, <u>AccCellBaT</u> and <u>THOR</u>. FASTEST has created <u>a dedicated</u> <u>section</u> on its website, so stakeholders can easily access all their information.

Finally, a set of trade media contacts was listed, including the most relevant magazines: <u>Autobuild</u>, <u>Autofacil</u>, <u>Automotive news</u>, <u>Autopista</u>, <u>Autovolt</u>, Batteries and energy stories news, <u>Batteries International</u>, <u>Battery Power Magazine</u>, <u>Car and driver</u>, <u>Charged electrical vehicles magazine</u>, <u>Clicacoches.com</u>, <u>Electrick</u>, Electric and hybrid world, <u>Electric cars report</u>, <u>Electric Hybrid vehicles magazine</u>, <u>Electrical India</u>, <u>Energy Magazine Australia</u>, <u>EV Magazine</u>, <u>Inside EVS</u>, <u>KM 77</u>, <u>Motor 16</u>, <u>Motor authority</u>, <u>Motortrend</u>. Also, project partners are expected to generate at least 9 peer review articles targeting Journals like <u>Journal of Materials Chemistry</u>, or <u>Journal of Power Sources</u>, as well as the Open Access journal from the EC <u>Open Research Europe</u>.

3.2 Key Messages

Over the course of six technical work packages (WP), the FASTEST project will generate substantial volumes of data, fostering interest in the value chain of cell batteries and various other sectors. The outputs and messages from produced WPs, as well as the suitable instruments and channels for distribution, must be identified. The essential messages from each WP are displayed in Table 2 below. Additionally, the primary target group(s) and distribution channels are established. The consortium group will keep spreading information about its overall goals and partnership engagement in anticipated activities. This includes private business meetings, presentations to possible clients, and scientific materials, milestones, etc.

Table 2: Key messages and stakeholders of FASTEST's technical WPs

WP	Key message	Target group / Key channels
Specifications and use case definition	Use cases shape regulations, testing specs, and virtualization for digitalized test effort reduction, including battery testing and DT development.	CBPST, OEM, CBM, R&A
Design of Experiments, boundary conditions and methodologies	Improve battery testing via innovative and model-based DoE methods, minimize tests with low-quality information , smart combination of physical and virtual testing for further time and cost reduction.	CBPST, CBM, R&A
Advanced battery ageing and performance modelling	Minimize cell-to-battery test time/cost using diverse digitalization	CBPST, CBM, R&A

Date: 28/11/2023 Page **11** of **31**



	methods for efficient accuracy.	
Battery safety and reliability AI-powered toolchain	Create virtual toolchain for battery safety, covering degradation, failure scenarios, and scalable reliability assessment.	CBPST, CBM, R&A
Digital Twins for Hybrid Test in Battery Development	Establish DTs representing battery systems and components via standardized, adaptable structures, integrating physical testing and models.	CBPST, CBM, R&A
Development of hybrid testing platform	Integrate battery testing technologies from previous WPs, optimizing tests using data, models, and DoE in holistic approach.	CBPST, OEM, CBM, R&A

3.3 Tools and channels

The actions carried out by FASTEST and its results will be disseminated and communicated using a variety of methods and means. The Dissemination and Communication Plan will be more effective since each instrument and channel will be used effectively to speak to various target groups at various stages of the project execution. Table 3 shows the connections between the target audiences, the tools and channels, and the anticipated effects.

Table 3: links between the audiences, the tools, the channels, and the effects

Channels	Tools	Target group	Effects
	Brochure		Create awareness
Printed	Leaflet	All target groups	about the project
materials	Poster		goals, results and expected
	Rollup		outcomes and impacts
	Website	All target groups	Keep the
	Newsletters		audience engaged
Online	Social media		on the project activities, results, and related news, and making them publicly available.
	Scientific papers	CBPST, OEM, CBM, R&A, PM	Guarantee knowledge transfer

Date: 28/11/2023 Page **12** of **31**





	Articles	All target groups	Generate interest in the cell battery production and the state-of-theart technologies developed by FASTEST
Publications	Press releases	ТМ	Regularly inform trade media on the project outcomes and how this impact positively in European lifes in terms of employment, technology development, improvement of environmental footprint, etc
	Workshops	All, except	Disseminate
Events organised by FASTEST	Webinars	general public and TM	specific results of the project to targeted audiences
Events	Conferences	All	Keep the
attended by FASTEST	Tradeshows		audience engaged on the project objectives and outcomes, as well as on achievements, and news.

3.3.1 Project identity

In order to build a visual brand, a distinctive project identity has been created by ABEE (shown in Figure 4.3:1). It provides a set of templates that will make it easier to gain reputation as the project progresses. This involves developing the project's logo and the related style guide. Additional communication materials have been developed and made available on the project <u>website</u>. This includes the project's logo, roll up, poster, factsheet, brochure, and presentation.

Date: 28/11/2023 Page **13** of **31**





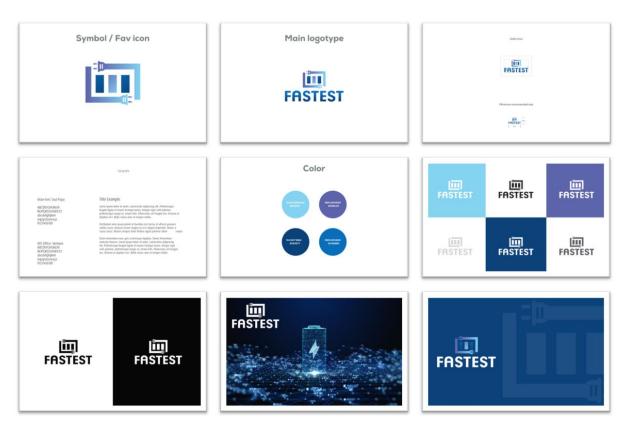


Figure 3.3-1: Visual guide pages

3.3.2 Project website

The FASTEST project <u>website</u> (which homepage is shown in Figure 4.3-2) has been created and it will be continuously updated to be appealing for visitors. It was made available on M2 of the project life and serve as main repository of the project information and outcomes.

In this moment, it has three main sections (apart from the homepage and the contact page):

- About, with four subsections:
 - o **Project**
 - Work Packages
 - o <u>Partners</u>
 - o Related Initiatives
- News
- Downloads

Date: 28/11/2023 Page **14** of **31**





Home

About •

News

Downloads

Contact



Figure 3.3-2: Website's homepage

3.3.3 Social media

To ensure greater diffusion to various age groups and target audiences, FASTEST will have a social media presence on <u>LinkedIn</u>. Social media should be used to promote project updates and, most significantly, to increase website traffic.

To broaden reach, FASTEST-related content has been posted often starting in M1 on LinkedIn. When the project has video content, a YouTube channel will also be made available.

To create an audience for the project results, the social media accounts will distribute updates about the project scope and promote events where FASTEST will be showcased throughout the first phase of the project.

Online media platforms will be supervised to gather data on the metrics, sources, content kinds, and people or organisations who support or spread project messaging. This information will enable communication to be targeted and optimised for maximum reach of news or results. The final dissemination report and interim reports will both include these findings. SIE will be responsible for the social media profiles, assisted by partners.

Consortium members will follow and participate as much as they can in the project's social media platforms. The partners will frequently share posts on their own corporate websites and social media platforms. SIE can advise them on the most effective ways to do so if they require support.

Milestone	WP	Lead partner	Date
Preliminary intelligent DoE for use cases is finished by FHG	WP2	Fraunhofer	M12
Advanced performance, ageing, safety and reliability model for generation 3b for the 3 use cases	WP3, WP4	ABEE	M18

Date: 28/11/2023 Page **15** of **31**





Integration between the DT platform and the Virtual & physical validation platform	WP5, WP6	FEV STS	M28
Advanced performance, ageing, safety and reliability model for generation 4 for the 3 use cases	WP3, WP4	ABEE	M28
Successful integration of WP2 – 5 functionalities in the hybrid testing platform		FEV STS	M30

3.3.4 Printed material

To be distributed at conferences, exhibitions, and other events, as well as to partner networks, ABEE has developed a poster (Figure 4.3-3), a roll-up (Figure 4.3-4), a factsheet (Figure 4.3-5) and a brochure (Figure 4.3-6). General information regarding the research activities, participants, and anticipated outcomes is included in the initial project poster and brochure version. Later in the project life, other materials could be created to publicise findings.

Date: 28/11/2023 Page **16** of **31**







Figure 3.3-3: FASTEST's poster

Date: 28/11/2023 Page **17** of **31**







Figure 3.3-4: FASTEST's roll-up

Date: 28/11/2023 Page **18** of **31**





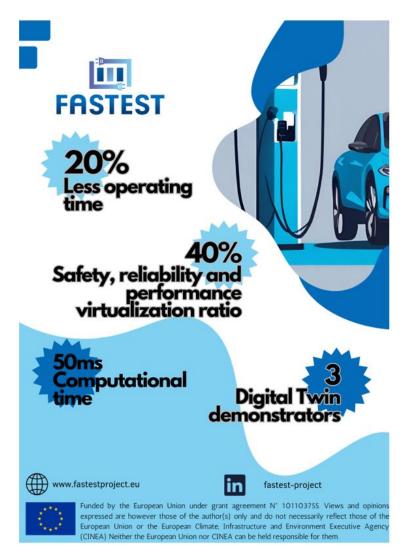


Figure 3.3-5: FASTEST's factsheet

Date: 28/11/2023 Page **19** of **31**







Figure 3.3-6: FASTEST's brochure (both sides)

3.3.5 Newsletters and press releases

Every six months, electronic newsletters containing project updates, news, interviews, and other FASTEST-related information will be created, starting on M5. These newsletters will be sent to stakeholders and partner networks as well as uploaded on the project website. The first newsletter (which can be seen in Figure 4.3-8) was released on October the 4th.

Date: 28/11/2023 Page **20** of **31**



1st Newsletter View this email in your browser



A revolution in battery testing technology

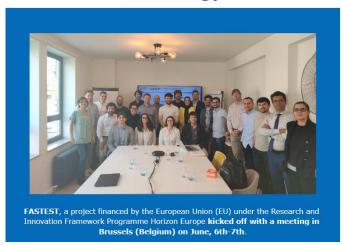


Figure 3.3-7: First FASTEST newsletter

Additionally, project updates could be included in the partners' own newsletters, which are sent electronically to the contacts they have within the relevant industries.

Press releases will be released to announce noteworthy project advancements as they happen. With the support of the project partners, they will be written in English and distributed to the national media and the European press. A first newsletter was written to announce the project's kick off, and sent to 210 media in a first release. A second release was launched in October, sending the newsletter to 347 media.

3.3.6 Peer-reviewed articles

The technical and academic partners will create at least 9 scientific papers, bringing additional benefits like greater transparency in the research process, better opportunities for new scientific collaborations, and increased efficiency in research. It will be done following the Open Science principles (Open Access journals or paying Gold OA fees): making available all research data unless IP restrictions apply, early sharing of pre-prints in the project website, etc. The project's findings will be disseminated both internationally in international journals like <u>Journal of Materials Chemistry</u> or <u>Journal of Power Sources</u>, as well as nationally, primarily in the member states where the partners are based. Open Research Europe is an open source, free of cost alternative as well for partners.

Likewise, the project website will compile all publications and make them available for free download.

Date: 28/11/2023 Page **21** of **31**



3.3.7 Conferences and events

To meet target audiences, other stakeholders, public authorities, and the scientific community, project partners will attend sector-related events, conferences, and workshops. They will also spread the word about the project's goals and outcomes. Access to target audiences at the local, national, European, and worldwide levels will be made possible by these events.

The following conferences and trade shows have been pointed out as being of interest to the FASTEST project:

Battery Experts Forum. November 2023

Thermal management for EV/EHV. November 2023

Battery Inovation Days. November 2023

Future Battery Forum. November 2023

International Motor Show. February-March 2024

E-MOBILITY WORLD. February 2024

E-World Energy & Water. February 2024

Energy Storage Summit. February 2024

TRA Conference. April 2024

Advanced Battery Power. April 2024

All-Energy. May 2024

Vehicle Electrification Expo. May 2024

The Battery Show Europe. June 2024

Electric & hybrid vehicle technology expo. June 2024

Automotive Testing Expo. June 2024

Green Vehicle Expo. June 2024

31 & 32 LCE Conference. June 2024

Life Cycle Innovation Conference. August 2024

In order to ensure that the project is present at events for dissemination, this list of events will be updated often in partnership with the consortia.

Along with attending conferences and trade shows, FASTEST will collaborate with other initiatives under the same call to host at least one workshop by the end of the project to address standardisation and policies, as well as six other webinars to raise awareness on the different project propositions.

Date: 28/11/2023 Page **22** of **31**





3.4 Indicators and targets

The accomplishment of particular targets for various indicators will serve as a gauge for how well the Dissemination and Communication Plan is being implemented.

Tools / channel	Indicator	Target number	Information source
Brochure Poster Factsheet	Number of copies distributed	Material distribution: <300 poor; 300-500 good; >500 excellent	Consortium information, number of copies distributed to target groups / stakeholders
Website	Number of visits	Visits per year: <450 poor; 450 – 900 good; >900 excellent	Website statistics
Social media (LinkedIn)	Number of followers Engagement rate	LinkedIn; (a) Followers: <150 poor; 150 - 300 good; >300 excellent. (b) Engagement rate: <2% poor; 2- 3% good; >3% excellent	Social media analytics
Videos	Number of views Audience in conferences /trade shows	At least 2 in the project. Views: <200 poor; 200 – 300 good; >300 excellent	YouTube, website and social media analytics Attendance to booth /conference
Newsletters	Number of subscribers Number of opens Visits from website / social media	At least one each six months. Subscribers: <100 poor; 100 – 200 good; >300 excellent Opens: <15% poor; 15% – 17% good; >17% excellent	Mailchimp (newsletter service), Website and social media analytics
Press releases	Number of media stakeholders addressed Number of views on website and social media	At least 4. 70 media sources / journalists reached Number of views: < 40 = poor; 40-60 = good; >60 = excellent	Recording of e-mails sent, Website and social media analytics
Scientific publications	Number of views/ downloads	9 publications	Link to site where posted or PDF version of article

Date: 28/11/2023 Page **23** of **31**





Workshops	Number of attendees	1 standardisation / policymaking workshop. 6 scientific dissemination workshops Number of attendees each: <15 = poor; 15-25 = good; >25 = excellent	Registration list/webinar platform analytics (if online)
Conferences Trade fairs	Number of conferences and trade fairs attended Number of exhibitors and participants	Attend 25 conferences per year	Certificate of participation; Proof of registration; Event information

3.5 Levels of dissemination

The geographic levels at which the main target groups operate will affect the communication methods and media used.

3.5.1 European Level – European Commission

The results of the project will be reported to the EC on a regular basis (mid-term review, minutes of periodic meetings, updates to this document) so that they can make any necessary changes to the relevant regulations and suggest collaborating with other projects that are already in progress on dissemination efforts.

3.5.2 International level – Industry, Scientific community

The outcomes will be communicated to the pertinent international organisations. Scientific knowledge can be converted into useful information, regulations, and guidelines. Electronic resources will be distributed by direct mailing to specified organisations and stakeholders to increase public awareness.

For the transmission of knowledge at both the research and industrial levels, technical journals, conferences, and workshops at both the national and international levels, industry meetings, and participation in industrial forums will also be utilised.

3.6 Methodology

To make sure that the FASTEST outcomes are effectively and efficiently conveyed to the project partners, stakeholders, and wider audiences, the following internal and external communication activities will be carried out throughout the project's duration and afterward.

3.6.1 Internal Communication

To effectively share information and guarantee that the deliverables are met, effective internal communication is essential. Therefore, to exchange project information, update progress, and share outcomes, frequent meetings and conference calls will be held. Two times a year, consortium and technical meetings

Date: 28/11/2023 Page **24** of **31**





will be held, and WP collaboration will be facilitated using Microsoft Teams and/or teleconferencing tools.

Apart from individual emails, taking advantage of the project monthly conference call, SIE will ask partners for their support on the upcoming dissemination and communication activities and events to update the Communication & Dissemination Plan and expedite a content curating process. As a result, the partners will be better able to communicate and report on the project while also adopting a more methodical and focused approach. Each FASTEST consortium partner will send a representative to this meeting.

SIE has also set up a Microsoft SharePoint space, which will host the project materials for internal use, including regular updates on the project development, meeting documents (agenda, minutes, and presentations), and project reports. This will help partners communicate effectively with one another.

A login name and password will be required to access this exclusive area.

3.6.2 External communication

The consortium will make every effort to spread the word about its activities through the media, journals, conference presentations, trade shows, workshops, the Commission, and industry associations. The project's findings will be published in reports, academic publications, and articles. To encourage scientific collaboration, all public communications and scientific publications shall be made open access.

The partners will send SIE the text whenever a translation is required, and SIE will take care of modifying the design.

3.7 Development phases

As the project has different development phases, the communication focus would be different across each of them.

3.7.1 Phase 1: awareness phase

In this phase, FASTEST will prioritise the generation of a community of interested stakeholders and of suitable channels. It will comprise from months 1 to 12.

3.7.2 Phase 2: scientific cooperation phase

This second phase will consist of knowledge management for the cooperation of FASTEST with similar projects and initiatives and ensuring the availability of research outputs to targeted audience. It will start in M6 and will last for the project duration.

3.7.3 Phase 3: Exploitation-focused phase

This phase will cover the support to the actual exploitation of project results via marketing towards end users (commercial results) or workshops and roadmaps (non-commercial results and will comprise the final stages of the project (M24-M36).

Date: 28/11/2023 Page **25** of **31**





3.8 Activities M1-M6

3.8.1 Project identity and materials

During the initial stage of the project, FASTEST's visual identity (which can be seen in the only Figure of the section 4.3.1 above) was developed by ABEE, with feedback from SIE. It contained the project's logo and the brand guidelines (typography, colours). A project presentation (Figure 4.8-1), a roll-up, a poster, and a variety of other communication tools were also created (all of them can be seen in the Figures in section 4.3.4 above). The partners were provided with a template for the deliverables (Figure 4.8-2), a Word document template (Figure 4.8-3), and a PowerPoint template (Figure 4.8-4).



Figure 3.8-1: FASTEST's presentation

As soon as the website was online, the first brochure, poster, factsheet, roll-up, and project presentation were uploaded:

3.8.2 Press releases

A press release was launched at the beginning of the project. It was sent to more than 200 local and trade media by SIE and several consortium partners. It was also <u>uploaded to the "Downloads" section</u> of the website and <u>as a post in the "News" section</u>. A second sending was done in October, reaching more than 300 media.

Date: 28/11/2023 Page **26** of **31**







The FASTEST project kicks off to deliver more reliable, safer and long-lasting battery system designs

- FASTEST is a project financed with almost 5 million euros by the European Union within the framework of the research and innovation programme Horizon Europe with the aim of developing a fast-track hybrid testing platform for the development of battery systems.
- The initiative is supported by a multidisciplinary consortium of 14 partners comprising research centres, universities, consultancy companies, material suppliers, and cell manufacturers from 8 European countries.

Brussels, June 13, 2023. FASTEST, an initiative funded by the European Union within the framework of the research and innovation programme Horizon Europe with the aim of developing a fast-track hybrid testing platform for the development of battery systems has just kicked off with a meeting held in Brussels (Belgium).

To develop and market Lithium-ion batteries, manufacturers need to evaluate their **safety**, **performance**, **reliability**, **and lifetime** according to standardised methods that consume a remarkable amount of time and economic resources. The time or number of tests required, the expensive equipment and a generalised trial-error approach are determining factors, together with a lack of understanding of the complex multiscale and multi-physics phenomena in the battery system. Besides, testing facilities are operated locally, meaning that data management is handled directly in the facility, and that experimentation is done on one test bench. When several technology developers are involved, the lack of centralised data management and harmonised design of experiments only hampers the process.

In this context, the FASTEST project, made up of fourteen partners from eight different European countries, will work for thirty-six months on a strategy based on the development of a fast-track hybrid testing platform that capitalizes on a **smart Design of Experiments methodology for the accurate and reliable evaluation of cell, module, and battery pack parameters by combining physical experimentation and multi-scale and multi-physics modelling tools.** This will enable an accelerated battery system research and development process for more **reliable, safer, and long-lasting battery system designs**. Hence, providing a key competitive advantage to European cell and battery manufacturers to provide quickly and efficiently the requested quality product for original equipment manufacturers in the international markets.

This innovative platform and its components will be demonstrated for three representative use cases: automotive, stationary, and off-road vehicles. The tool is aimed to be a flexible platform for any chemistry and application in the three previous scenarios mentioned since it will incorporate a complete set of physic-based and data-driven models able to replace most physical characterisation experiments.



Funded by the European Union under grant agreement N° 101103755. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or [name of the granting authority]. Neither the European Union nor the granting authority can be held responsible for

Figure 3.8-2: FASTEST's first press release

Date: 28/11/2023 Page **27** of **31**



The total impacts for this type of communications reached 547 outlets in total, including media, consortium partners and related projects portals, as shown in section 3.8.8.

3.8.3 Website

The website <u>www.fastestproject.eu</u> was launched on M5 with essential information of the project (as described in section 4.3.2) and will be updated constantly with progress and news from the project and partners.

Apart from the sections mentioned aboved, regarding the News section, 3 posts about the project scope and interviews to the partners have been uploaded by SIE:

- The FASTEST project kicks off to deliver more reliable, safer and long-lasting battery system designs
- Interview with Alvaro Sánchez (ABEE)
- Interview with Foad Gandoman (RSTER)

Caption of the Audience overview (ABEE)

3.8.4 Social media

The LinkedIn account: https://www.linkedin.com/company/fastest-project was created and updated with content on a regular basis since the project's kick off.

During this period, 16 social media posts were shared, reaching out up to 122 followers, and our publications had a total of 8 052 impressions and an average engagement rate of a 0.12 %, as of November 28^{th} .

Captions of the LinkedIn account and metrics.

3.8.5 Newsletter

In M5, <u>the first Newsletter</u> was released, as can be seen in Figure 4.8-3. It was sent to 120 contacts, and was opened by 49 of them, which means a 40,83% open rate.

Date: 28/11/2023 Page **28** of **31**







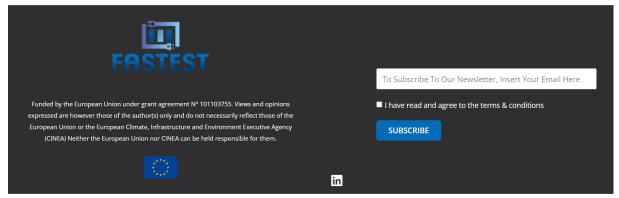
1st Newsletter

A revolution in battery testing technology



Figure 3.8-3: FASTEST's newsletter

To grow the newsletter's subscribers, a subscription form has been added to the webpage footer, as shown in Figure 4.8-4.



*Privacy Policy *© CopyRight 2023. Fastestproject.com

Figure 3.8-4: FASTEST's website footer

Date: 28/11/2023 Page **29** of **31**





3.8.6 Events attended

During M1-M6 of the project, the different FASTEST members did not attend any event. However, SIE has been working to identify the relevant events where partners can disseminate the project, as described in the section 3.3.7.

3.8.7 Interaction with other EU initiatives

The aim of the clustering is to ensure that the project undertakes cooperation and clustering activities at two levels:

- 1. Cooperation with specific projects and EC initiatives (especially under Batt4EU partnership and Battery2030+ initiative) with regards to exchange of information, coordination of methodologies, etc.
- 2. Develop joint communication and dissemination activities i.e., joint workshops to generate a multiplier effect.

In a first stage, SIE will map relevant EU projects and initiatives through desk research and feedback from partners. In a second stage, the project will screen the most interesting initiatives to establish direct communication channels with them, so joint technical, dissemination and communication activities can be agreed (ABEE as coordinator will lead this stage). The projects under the same topic were already detected and will be soon contacted to start clustering activities:

- https://h2020thor.eu/
- AccCellBaT (no website)

Apart from this, FASTEST has also a direct contact with some other projects where SIE is also involved and are also working on the battery field. Coordinated actions have been or will be done, such as supporting communication in social media, conjunct webinars or SIE serving as a point of connexion for technical partners. These projects' websites are:

- https://nextcell.eu/
- https://tempestproject.eu/
- https://gigagreenproject.eu/
- https://defacto-project.eu/

3.8.8 Impacts on media outlets and other relevant websites UNIVERSITY OF LJUBLJANA:

https://www.fs.uni-lj.si/en/project/fast-track-hybrid-testing-platform-for-the-development-of-battery-systems/

RSTER:

https://rster.org/projects/

BE OPEN:

https://beopen.openaire.eu/search/project?projectId=corda he::029998c7e c2d71bcd12329668550c7cb

UKRI:

Date: 28/11/2023 Page **30** of **31**





https://gtr.ukri.org/projects?ref=10078013

SUSTAINABLE INNOVATIONS:

https://sustainableinnovations.eu/fastest-hybrid-platform-test-electric-vehicle-battery/

MONDRAGON UNIVERSITY:

https://www.mondragon.edu/es/-/proyecto-ofrecer-plataforma-pruebas-hibridas-desarrollo-sistemas-bateria

Date: 28/11/2023 Page **31** of **31**