

ESRIUM

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Deliverable D6.5 Communication and Dissemination Final Report



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ESRIUM – GA No. 101004181 EGNSS-ENABLED SMART ROAD INFRASTRUCTURE USAGE AND MAINTENANCE FOR INCREASED ENERGY EFFICIENCY AND SAFETY ON EUROPEAN ROAD NETWORKS	
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Abstract

ESRIUM is a multi-national project with the common goal to increase the safety and resource efficiency of mobility on the road. The key innovation will be formed by a homogeneous, accurate and recent digital map of road surface damage and road wear. Further addressed as “road wear map”, it will contain unique information, which is of value to multiple stakeholders: road operators will be able to lower the road maintenance effort by optimal planning. Further, road operators will be able to lower road wear and increase traffic safety especially for heavy vehicles: considering the market introduction of partly automated truck fleets and platoons, the precise track of these vehicles can be adjusted by communicating precise routing recommendations in- and cross-lane. Truck fleet operators following these recommendations can receive tolling benefits and increase the general safety for their vehicle fleet. Especially with the increasing levels of autonomy, systems will utilize infrastructure support to handle the requirements of the automated driving task and additional external requests. In ESRIUM, these opportunities are addressed by utilizing C-ITS infrastructure and EGNSS based localization in planning the trajectories of such automated vehicles. Key to the ESRIUM innovation is a precision localization service, which provides reliable locations of road damages and of the vehicles using the roads. Considering a European-level business-case, only Galileo may provide such a service in homogeneous quality, even at very remote locations on the European continent.

In the following, we give a detailed overview of ESRIUM’s objectives, technical challenges and the business potential.

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EXECUTIVE SUMMARY

The "*Communication and Dissemination Final Report*" (D6.5) is a vital component of Work Package 6 (WP6) titled "*Dissemination, Exploitation.*" This report encompasses a comprehensive review of the communication and dissemination activities carried out throughout the project. It provides an in-depth assessment of their impact, aligning with the project's goals. The report focuses on evaluating the effectiveness of the defined dissemination channels in reaching the specific target groups identified for communication and dissemination.

D6.5 encapsulates the culmination of Task 6.1 "*Communication & Dissemination Activities*", showcasing the meticulous planning, execution, and assessment of communication and dissemination activities. The insights gathered from this report not only serve as a testament to the project's outreach strategies but also provide valuable lessons for future endeavours in similar domains.

The new content mainly affects the following sections:

- Section 4: Updated communication instruments
- Section 6: ESRIUM dissemination activities
- Section 7: Results accomplished
- Section 8: Conclusions
- Attachment I: Dissemination activities report
- Attachment II: Updated general presentation

This project has used a standard methodology already developed in *Cluster 2.0* project (Grant Agreement number: 723265), following EU recommendations. Ad hoc modifications were added to comply with the Grant Agreement conditions for ESRIUM (Grant Agreement number: 101004181).

DOCUMENT REVISION

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0.2	Main body	Boskovic Vesna	Draft	10.11.2023
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1.0	Integrated reviewer comments	Luca Colais	Final	08.01.2024

ACRONYMS USED

Acronym	Explanation
AI	Artificial Intelligence
CDE	Communication, Dissemination, Exploitation
D	Deliverable
EC	European Commission
EU	European Union
EGNSS	European Global Navigation Satellite System
H2020	Horizon 2020

JRD	JOANNEUM RESEARCH Forschungsgesellschaft mbH
KPI	Key Performance Indicators
LoI	Letter of Interest
OEM	Original Equipment Manufacturer
T	Task
WP	Work Package

SECTION 1: INTRODUCTION

1.1 Aim of the project

The ESRIUM project aims to revolutionize road safety and infrastructure management by providing real-time information about road conditions to users and operators while predicting and preventing further damage. Leveraging high-precision vehicle navigation through the GALILEO satellite system and innovative sensor platforms, ESRIUM enables early detection and classification of road damage, allowing for proactive interventions. Drivers receive real-time information by delivering this data through in-vehicle Cooperative Intelligent Transport Systems (C-ITS) units, enabling safe driving practices and prolonging road lifespan. This approach not only enhances road safety but also optimizes resource allocation, delaying repairs and ultimately creating a more sustainable and efficient transportation network.

1.2 Purpose of deliverable

Within the framework of WP6, this deliverable validates ESRIUM's dissemination strategies, carefully crafted to magnify the project's impact across diverse audiences, including the scientific community, industry stakeholders, and society at large. The primary objective has been to effectively deploy the project's outcomes. ESRIUM's dissemination goals were realized by utilizing tailored channels to reach specific communication and dissemination target groups. The methods employed adapted to the project's evolving phases: initial stages emphasized introducing ESRIUM's fundamental concepts, while later phases focused on presenting tangible results and outputs, meticulously detailed in this document.

The provided illustration below offers an overview of the ESRIUM project's structure, showcasing its developmental progression. This report, the deliverable - D6.5, highlights WP6 - *Dissemination and Exploitation*, yet emphasizes the symbiotic relationship between all Work Packages. The visual aids in understanding the project's scope, with WP6 central to ESRIUM's outreach. In this deliverable, we analyze WP6's strategies, achievements, and their alignment with project goals.

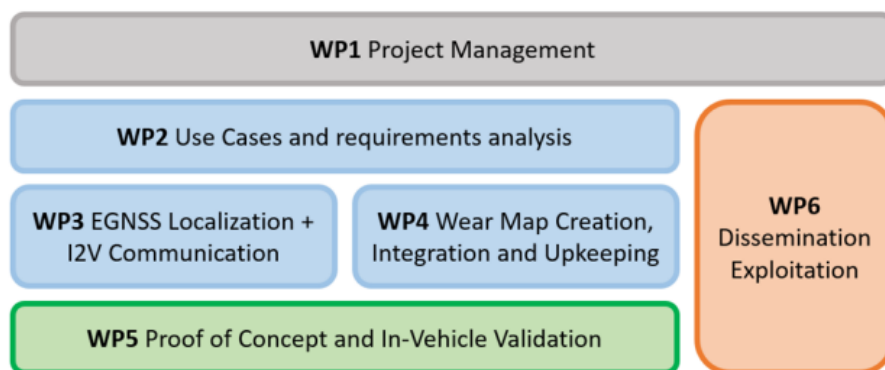


Figure 1: Integration Of Communication and Dissemination Within ESRIUM Work Packages.

Moreover, these dissemination initiatives have played a vital role for the partners within the ESRIUM consortium, showcasing their accomplishments and expertise. Various activities were undertaken, from active participation in numerous events to crafting communication materials and submitting scientific papers to conferences and journals, among other initiatives.

The Dissemination Leader diligently managed these activities, adhering to carefully defined dissemination protocols meticulously outlined in this document.

The recent updates significantly influenced several sections:

- Section 4: Updated communication instruments
- Section 6: ESRIUM dissemination activities
- Section 7: Results accomplished
- Section 8: Conclusions
- Attachement I: Dissemination activities report
- Attachement II: Updated general presentation

SECTION 2: ESRIUM COMMUNICATION AND DISSEMINATION OBJECTIVES

The success of ESRIUM hinges on its strategic dissemination, communication, and exploitation (CDE) objectives, designed to engage a broad spectrum of professionals and users in the value chain. Central to this strategy is the effective communication of the project's intentions and potential impacts, robust dissemination of its findings, and fostering knowledge exchange to stimulate extensive market adoption. The CDE activities are intricately interconnected, aiming to motivate partner networks, articulate project goals to diverse audiences, and showcase ESRIUM's prowess in revolutionizing road infrastructure maintenance through advanced technologies like EGNSS, AI, and sensors. A crucial aspect is ensuring the accessibility of ESRIUM's innovations to decision-makers and standardization bodies, highlighting the profound benefits for European mobility, and permeating scientific circles and everyday lives, thereby elevating public perception and appreciation of ESRIUM's solutions.

SECTION 3: COMMUNICATION AND DISSEMINATION PLAN

The three-tiered approach to dissemination and communication is illustrated below, emphasizing different channels corresponding to each level, as detailed in Task 6.1 *"Communication & Dissemination Activities."*



Figure 2: ESRIUM Communication Strategy at Different Levels.

The figure below showcases the communication and dissemination plan, highlighting the strategic selection of C&D channels and tools tailored to target specific stakeholder groups according to the project's progression stage.

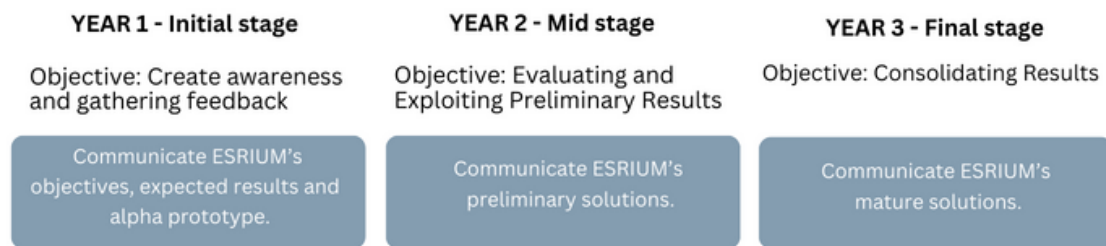


Figure 3: ESRIUM Communication Strategy at Different Stages.

3.1 Initial stage activities

During the kick-off phase of ESRIUM H2020, the focus was on fostering understanding and soliciting input regarding the project. Efforts were centered on relaying the project's intentions, anticipated deliverables, and the early-stage prototype. Outreach was directed at professional sectors, scholarly entities, and the broader audience. Vital informational tools, such as pamphlets and summarizations, were curated and distributed across various forums, symposiums, and gatherings. A dedicated portal was established to ensure timely updates for stakeholders and interested parties. During this span, publications and public pronouncements revolved around ESRIUM's aspirations, foundational research, and groundbreaking approaches. Informing stakeholders took the forefront during this phase, setting the stage for the entire project.

3.2 Mid-stage activities

As the project advanced into the Mid-stage, preliminary results were now available, leading to a shift in communication and dissemination goals. The focus now was on sharing these preliminary results and outlining the remaining tasks. A plethora of publications, articles, and public talks were directed towards target dissemination groups, including the academic community, industry, public decision-makers, and potential users. Throughout this phase, the project's participants engaged in conferences, seminars, and various events, delivering technical papers and presentations. Communication and dissemination materials produced during the initial stage continued to be utilized, with the website being frequently updated to reflect new findings and advancements.

3.3 Final stage activities

Reaching the Final stage, ESRIUM H2020's goal was to consolidate its results and ensure maximum dissemination. The strategies employed involved a multi-pronged approach to reach all target groups effectively. Channels like press and media were utilized to communicate ESRIUM's mature solutions.

Specifically:

- Participation in international conferences and major events;
- Hosting and attending special sessions in major congresses and exhibitions;
- Publishing academic papers and scientific publications;
- Releasing press statements and creating online articles;
- Collaborative dissemination initiatives with other related European R&D projects.

In this period, public deliverables, including the project's most recent developments, were shared on the project's website and social media platforms, ensuring that ESRIUM's consolidated results reached the widest possible audience.

3.4 After project stage

Post the conclusion of the ESRIUM project, there is an anticipation of numerous avenues to promote its findings and to continue creating a meaningful impact on the community. The project website, which houses public deliverables, along with the associated social media channels, remains a transparent resource for the public. These platforms offer essential information regarding project contacts, outcomes, and deliverables. Furthermore, the project's advancements and results will be disseminated through future publications, including conference papers and journal articles, ensuring a lasting footprint in the academic and professional domains.

SECTION 4: ESRIUM'S REVISED COMMUNICATION INSTRUMENTS

In light of our review of ESRIUM H2020's communication and dissemination strategy, this section highlights the diverse tools that have enhanced our communication and dissemination efforts. Specifically, it outlines the improvements and changes made to the original communication resources, as detailed in D6.3 '*Communication Kit - Final version*', aiming to promote the project.

4.1 General presentation

The general project presentation comprising a few slides introducing the main project idea has been replaced by one focusing on the project's main solutions. The general project presentation has been used during different events, both internal, such as project workshops, meetings with stakeholders, testings, etc. and external such as conferences, fairs and exhibitions, webinars and other meetings with logistics industry players. A copy of the updated presentation is available in **Attachment 2**.

4.2 Poster and leaflet

The leaflet offers a concise visual encapsulation of ESRIUM's core ideas, ensuring that readers grasp the fundamental concepts at a glance, while the roll-up banner, presenting challenges, solutions, and partners, serves as a commanding visual anchor at events, reinforcing the project's presence and message. Together, these materials provide a harmonious blend of detailed insight and impactful visibility, ensuring that ESRIUM's objectives resonate deeply with its audience. A preview of the ESRIUM leaflet [esrium leaflet v1](#) and a rollup [esrium-roll-up-8206x20206-v4-scaled.jpg \(1040x2560\)](#) both published on the website, is provided in the image below:

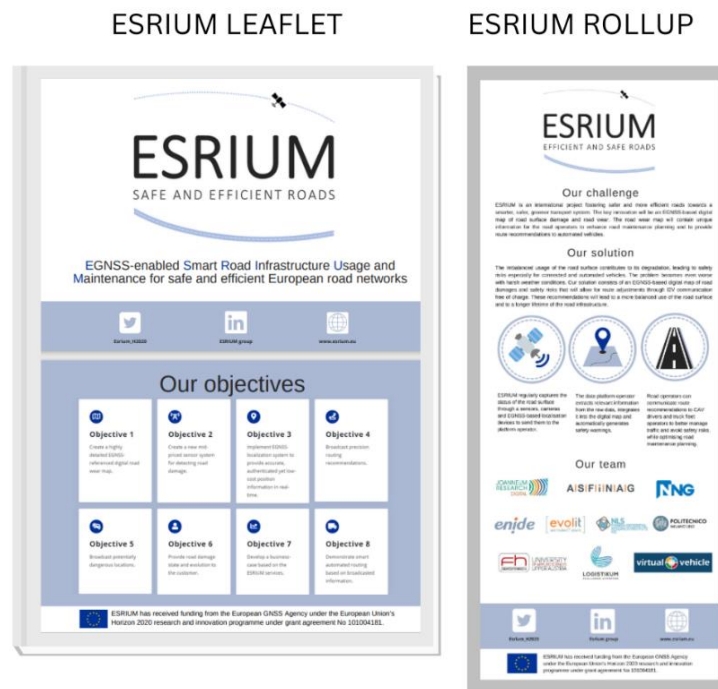


Figure 4: ESRIUM [Initial Leaflet](#) and [Final Rollup](#).

4.3 Brochure

The updated version of the leaflet has evolved into a comprehensive brochure, offering a more detailed and structured insight into ESRIUM's objectives, challenges, and solutions. While the original leaflet provided a succinct overview, the brochure delves deeper, showcasing specific use cases, introducing the team, and offering a clearer distinction between the project's challenges and proposed solutions. The transformation from a simple leaflet to a multi-faceted brochure enhances the project's communicative depth, ensuring a more informed and engaging experience for its audience. A preview of the ESRIUM brochure [BROCHURE \(ESRIUM.EU\)](https://www.esrium.eu/BROCHURE) published on the ESRIUM website, is provided in the image below.



Figure 5: [ESRIUM Final Leaflet \(Brochure\)](#).

4.4 The ESRIUM Workshop #2 materials, including the brochure and banner

This customized material showcased on the ESRIUM website epitomizes the project's commitment to detailed and event-tailored communication. The brochure, prominently labelled "Workshop on Automated Road Condition Monitoring and Wear," lays out a structured schedule of the event, providing attendees with specific timings, topics, and distinguished speakers. This ensures clarity and anticipation for the workshop's key highlights. The accompanying banner beautifully complements the brochure by offering a condensed yet impactful view of ESRIUM's overarching mission, its proposed solutions, and key objectives. Together, these marketing materials provide vital information for the workshop's attendees and reiterate the project's dedication to creating safe and efficient roads in Europe.

ESRIUM Workshop #2 brochure [BROCHURE \(ESRIUM.EU\)](#) and banner [BANNER WORKSHOP \(ESRIUM.EU\)](#) published on the ESRIUM website can be viewed in the image below.

ESRIUM Workshop #2 BROCHURE



ESRIUM Workshop #2 BANNER

Figure 6: ESRIUM Workshop #2 Printed Material [Brochure](#) and [Banner](#).

4.5 Press Releases

Since the inception of the ESRIUM project, we have consistently kept the media and the public informed of our milestones through a series of press releases published in the correspondent section on the project's website [ESRIUM - Download our press releases for free](#). To date, we have disseminated four press releases through various channels such as ESRIUM blogs and social media, each corresponding to significant moments in the project's timeline. These include the initial kick-off meeting, the official launch of the project, two workshops, and the dedicated test week. Each press release provided detailed insights into the objectives, achievements, and future directions of the ESRIUM project, ensuring that our stakeholders and the general public have a comprehensive understanding of our endeavours and accomplishments.

4.6 Videos

During the ESRIUM project, a suite of 14 videos was produced and shared with the public. The highlight among them is the main video which, in under a minute, provides a concise overview of the project, detailing its primary objectives and what it seeks to accomplish. Supplementing this, there are specialized videos like the Mockup roadwear map series. These delve into the technicalities, elucidating ESRIUM's groundbreaking data platform that presents EGNSS-referenced road damage data with incredible centimetre-level precision, termed the "Road Wear Map". This innovative map offers invaluable insights for stakeholders, enabling road operators to optimize maintenance planning and enhance traffic safety. Furthermore, 7 out of the 14 videos are dedicated to the ESRIUM TEST WEEK, which took place from July 31st to August 4th, 2023, focusing on in-vehicle user acceptance measurement among truck drivers. All these insightful videos can be accessed through the ESRIUM website, its associated social media platforms, and its [official YouTube channel](#).

SECTION 5: COMMUNICATION AND DISSEMINATION TARGET GROUPS

Drawing inspiration from the foundational principles delineated in the "Dissemination and Communication Strategy and Plan" document, this section introduces a multi-faceted dissemination and communication methodology, addressing an expansive audience across various governance levels. The ESRIUM project's success is inextricably linked to its prowess in effectively communicating and disseminating its findings to this extensive audience. Acknowledging the heterogeneity in the interests and prerequisites of our stakeholders, our communication strategy is meticulously designed to resonate with distinct target groups. This strategy not only elevates the project's visibility from local to global scales but also guarantees that the delivered information is pertinent, tailored, and prompts actionable insights.

5.1 Industry

A diverse set of players encompasses this category, from road operators, transport fleet operators, map providers, to automotive OEMs. These stakeholders play crucial roles in both the application and the further development of ESRIUM's outcomes, with a keen focus on enhancing existing products, services, and operational practices.

5.2 Public Authorities and Policymakers

Governmental agencies and bodies predominantly concerned with policy settings in realms like road traffic, railway traffic, road safety, and emergency response stand to benefit immensely from ESRIUM's insights. These insights serve as valuable inputs for crafting new regulations, policies and setting research and development priorities.

5.3 Standardization Bodies and Associations

Entities like standardization bodies and associations (e.g., CEN, ISO, ETSI) play a pivotal role in harnessing ESRIUM's results to foster collaborative public and private initiatives. They act as conduits for the identification of common themes, ensuring that ESRIUM's findings are appropriately incorporated into industry standards, white papers, and joint activities that amplify the project's impact.

5.4 Scientific and Academic Institutions

Institutions primarily focused on avant-garde research and expanding their academic horizons are natural recipients of ESRIUM's updated research findings. The continual research after ESRIUM's conclusion, real-life use cases, and connectivity to research institutes across Europe amplify the project's resonance within this group.

5.5 EC staff/politicians and relevant European Organizations.

The press and media play an indispensable role in echoing ESRIUM's innovations and significant milestones to the general public. This involves not only the spotlighting of the project's results but also the crucial role of the European Commission in fostering and supporting such groundbreaking initiatives.

SECTION 6: DISSEMINATION ACTIVITIES

The ESRIUM project's dissemination efforts encompassed a wide array of activities, including participation in external forums, delivery of essential outputs, crafting articles, and other publications. Our primary objective was to raise awareness and relay the fruits of our research to a diverse audience, spanning both the industrial and academic sectors. Section 6 provides a detailed account of the dissemination activities undertaken by our partners. An in-depth analysis of the resultant impact can be found in Section 7.

6.1 Public deliverables and open access

In line with the research and development pursuits of the ESRIUM project, a number of significant project deliverables have been generated. The table below showcases a list of ESRIUM's public deliverables. published in the correspondent section on the project's website [ESRIUM - Download our public deliverables for free.](#)

Deliverable	Deliverable title	WP	Lead	Type	Month
D1.1	Project Handbook and Project Quality Plan	WP1	JRD	Report	3
D1.4	First periodic project report	WP1	JRD	Report	18
D1.5	Second Periodic project report	WP1	JRD	Report	36
D2.1	Use Case Definition	WP2	NNG	Report	6
D3.5	Report on extension of C-ITS by EGNSS Use case	WP3	ASF	Report	30
D5.2	Test scenarios and performance criteria specifications	WP5	NNG	Other	12
D5.3	Test results analysis report	WP5	VIF	Report	36
D5.4	User acceptance analysis repor	WP5	FHO	Report	36
D6.2	Communication kit - Initial version (including website)	WP6	ENI	Other	3
D6.3	Communication kit - Final version	WP6	ENI	Other	36
D6.4	Market & business ecosystem analysis	WP6	NNG	Report	15
D6.5	Communication and dissemination final report	WP6	ENI	Report	36
D6.6	Preliminary exploitation plans	WP6	NNG	Report	18
D6.7	Final exploitation plan	WP6	NNG	Report	36

Table 1: ESRIUM Public Deliverables

6.2 Publications

ESRIUM's academic partners have published 14 scientific papers in international journals and conferences. Annex I provides details of their authors and links to access them. In alignment with the "Guidelines on Open Access to Scientific Publications and Research Data in H2020", the ESRIUM project beneficiaries have ensured open access (either 'gold' or 'green') to all peer-reviewed publications related to the project's results. Moreover, ESRIUM's publications can be accessed on

ZENODO, a permanent Open Access repository, jointly championed by OpenAIRE and CERN (<https://zenodo.org/communities/esrium/>)

6.3 Events

Throughout the course of the ESRIUM project, active participation in a myriad of events, from academic conferences to industry fairs and specialized workshops, has been integral to its progression. These diverse platforms, some organized by ESRIUM and others where ESRIUM was a notable participant, served as essential conduits to disseminate our pivotal findings to a broad spectrum of attendees, including industry specialists and academic scholars. Beyond merely presenting our results, these gatherings provided a unique opportunity for direct engagement with stakeholders, facilitating insightful discussions, idea exchanges, and collaborative brainstorming. Such interactions yielded invaluable feedback and fresh perspectives, shaping the direction, refining objectives, and magnifying the overall impact of the ESRIUM initiative.

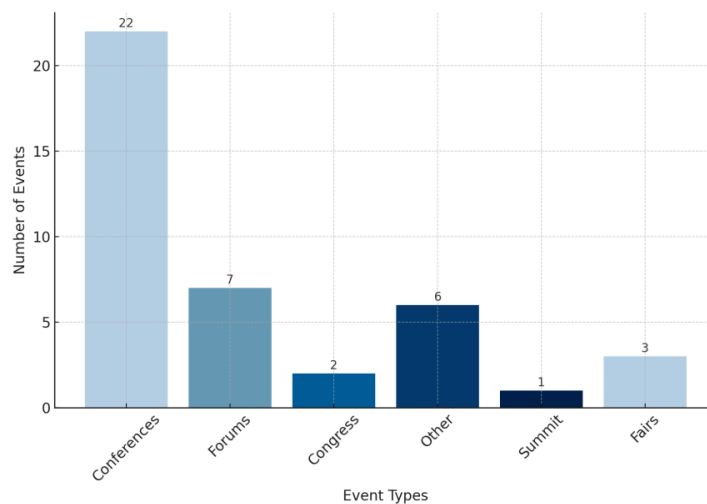


Figure 7: Event Participation Breakdown for ESRIUM.

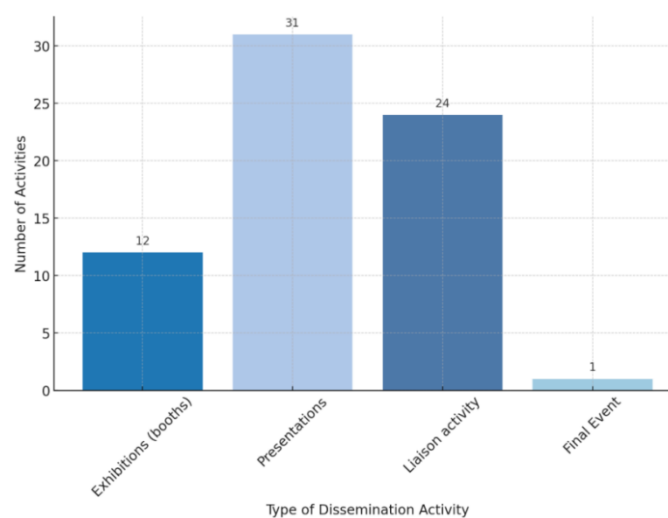


Figure 8: Event Dissemination Activity Breakdown for ESRIUM.

6.3.1 External events and Liaison activities

During the tenure of the ESRIUM initiative, our consortium has demonstrated an unwavering commitment to engagement at various European and international fora. These platforms, encompassing esteemed congresses, strategic conferences, and bespoke workshops, have facilitated pivotal interactions between ESRIUM and an expansive array of stakeholders, ranging from industry leaders, academic luminaries, and representatives from public governance, to the informed general public. A cornerstone of our engagement strategy has been the initiative led by ESRIUM's dissemination directorate to synergize with key H2020 projects such as [DIGEST](#), [AWARD](#), etc. These partnerships underscore a harmonized corporate ethos that pivots around sustainable development and robust environmental stewardship, underlining ESRIUM's commitment to pioneering sustainable solutions in the corporate realm.

A detailed list of events attended by ESRIUM partners is available in Attachment 1.

”

Our roads have evolved pretty much since the early beginnings. Let's keep them in good shape for the future, in a smart and green way. Happy to discuss ESRIUM at EUCAD 2023!

Matthias Rüther - Director of Institute DIGITAL, JOANNEUM RESEARCH Forschungsgesellschaft mbH



Figure 9: ESRIUM at the [EUCAD 2023](#).



Figure 10: ESRIUM event.



Figure 11: ESRIUM at [ISFO 2023](#).



Figure 12: ESRIUM at the [TRA Conference 2022](#).



Figure 13: ESRIUM at the [ITS World Congress 2021](#).

6.3.2 Project events

Throughout the ESRIUM project's progression, two pivotal workshops were organized promoted via the ESRIUM website. Workshop announcements and registration details were posted on the 'Join' landing pages. Following the events, summaries and press releases were published in the 'News' and 'Learn' sections.

On September 24th, 2021, our maiden workshop titled "Workshop on Traffic Infrastructure Mapping and Automated Damage Assessment Systems" was conducted online, spearheaded by JOANNEUM RESEARCH with partners such as ASFINAG, NNG, University of Applied Science Upper Austria, Virtual Vehicle Research GmbH, and ENIDE. Drawing an audience exceeding 25 members from the scientific community, industry, and general public, this event offered a detailed preview of ESRIUM's concept, product vision, and alpha prototype. The event aimed to garner vital insights using interactive online polls to shape future development trajectories.

Subsequently, on August 31st, 2022 a second workshop focused on "Automated Road Condition Monitoring and Wear Map Creation" took place in a hybrid format, hosted in Graz and online. JOANNEUM coordinated this workshop in collaboration with partners like Virtual Vehicle, ASFINAG, and the University of Applied Sciences Upper Austria. With over 15 online registrations and 12 on-site participants, the event centered around the introduction and demonstration of the beta prototype, encapsulating the overarching vision of the ESRIUM initiative. Both these events have significantly amplified our engagement with a broad spectrum of stakeholders and have provided crucial feedback that has been instrumental in refining our project deliverables.



Figure 14: ESRIUM at 2nd Workshop.

6.3.3 ESRIUM Final event

The ESRIUM Final Event, held on November 23, 2023, at the International Mobility Days in Vienna, marked a significant moment for the project. Presenting in front of over 300 attendees, the event featured an ESRIUM booth showcasing EGNSS-enabled road technologies and a session on Digital Twins by Gottfried Allmer from ASFINAG, which drew over 260 participants. Attendees engaged with the latest innovations in road technology and learned about the integration of digital twins into traffic management for safer and more efficient European transport networks.



Figure 15: *ESRIUM Final Event.*



Figure 16: *ESRIUM Final Event Booth.*

SECTION 7: RESULTS ACCOMPLISHED

The effectiveness of communication and dissemination activities has been monitored throughout the project by comparing their performance with a set of relevant indicators and metrics. After a meticulous review of ESRIUM's communication and dissemination endeavors spanning a three-year duration, we can deduce that our preliminary aspirations for the project's activities have largely been met. In fact, several segments of our outreach and engagement, such as *Readership results*, *No. of end users engaged*, *No. of industry representatives involved*, *the Quantity of media coverage achieved*, etc. have surpassed our initial projections. A summary of Key Performance Indicators (KPI) is shown in *Table 2*.

Activity and metric criteria (KPI)		Expected Performance	Month 36
Definition of communication strategy and tool	Communication strategy & plan: annual project review	Positive	Positive
	Website: number of visitors (unique, returning)	233/average month	306/month
	Twitter: total number of followers	500	66
	LinkedIn: total number of group members	265	239
	Social Media Campaign: total number	3	10
	Quantity of media coverage achieved	≥23	55
Dissemination and communication to community	No. of peer review publications	18	14
	Readership results	700	6183
	No. of end users attending ESRIUM workshops	≥80	>100
	No. of project events in conferences/congresses	≥5	4
	No. of presentations	≥25	31
	No. of demonstrations/exhibitions	3	12
	No. of final event attendees	≥50	>300
	No. of public and media attending final event	≥10	>10
Networking/liaison with exploitation/User engagement activities	No. of end users engaged	≥250	2025
	No. of industry representatives involved	≥30	80
	No. of associations and networks involved	≥12	13
	No. of related projects contacted	≥18	18

	No. of liaison activities performed	≥8	24
	No. of discussions in forums, committees & organisations	≥5	7
	No. of standardisation bodies reached	≥6	6

Table 2: KPI.

7.1 Definition of communication strategy and tool

Upon analyzing the communication KPIs (as detailed in the accompanying table 2), it's evident that our communication strategy and annual project review remained consistently on target. Notably, our website's traffic surpassed expectations with an average of 306 visitors per month, as opposed to the projected 233. In the realm of LinkedIn, while our group membership neared the target, the decision to initiate a LinkedIn page was particularly fruitful in reaching our target audience who leans towards this channel, thus the total of LinkedIn page followers was included in the KPI. To clarify, LinkedIn impressions refer to the number of times content is displayed on someone's feed, regardless of clicks or interactions. Our extensive social media campaigns, which highlighted significant events and milestones such as Consortium Meetings, TEST week, EUCAD, use cases, ITS-WC, and workshops, consistently engaged our audience. These multifaceted campaigns, incorporating blog posts, videos, landing pages, and more, yielded LinkedIn impressions varying between 500 to over 1000. Conversely, our presence on Twitter, with 66 followers against a target of 500, was modest. This can be attributed to the platform's declining appeal among our consortium partners, further impacted by Elon Musk's takeover. His occasionally divisive influence and sporadic controversial remarks have instilled a sense of caution among certain stakeholders, reflecting the subdued engagement on Twitter. The media coverage counted 11 external press releases, media blogs, articles, as well as 50 ESRIUM blogs published at the news section of project's website.

7.2 Dissemination and communication to community

In the domain of "Dissemination and Communication to the Community", ESRIUM's endeavors demonstrate a robust commitment to engaging with a broad audience, both academic and industry focused. ESRIUM has actively propagated its research, with 14 imminent papers, of which several have secured spots in renowned scientific journals and conferences, exemplifying the project's dedication to academic dissemination. Astonishingly, the project magnified its readership impact by clocking in at 6183, eclipsing the initial target of 700. Such a monumental reach is attributed to ESRIUM's astute publishing strategy, leveraging platforms like ZENODO, ALICE Knowledge Platform, and its website, ensuring an expansive visibility across diverse audiences. The ESRIUM workshops concluded with impressive results, attracting over 100 participants, far exceeding our initial goal. This turnout, rich with traffic infrastructure experts, underscores the project's commitment to facilitating valuable and quality-driven dialogue. Furthermore, ESRIUM's eminent presence, leading its own activities hosted at key events, including the renowned TRA2022 and ITS Congress, and its milestone International Mobility Days 2023 showcase in Vienna, testify to its active footprint in industry circles. With an exact match to the target for presentations at 31 and a triumphant overshoot in demonstrations/exhibitions, garnering 12 against a goal of 3, ESRIUM has adeptly combined traditional presentation avenues with direct engagement strategies, ensuring a comprehensive and impactful communication and dissemination strategy throughout its journey.

7.3 Networking/liaison with exploitation/User engagement activities

The ESRIUM project, in its commitment to amplifying networking and liaison endeavors, made significant progress, particularly in user engagement. A prominent achievement was the engagement of over 2,025 end users, far surpassing initial targets. Through workshops, panels, and tailored liaison activities, the consortium expanded its reach and fostered key partnerships. Standardization efforts were marked by collaborations with renowned bodies such as TISA, ISO, and CEN. Industrially, Enide's 11 critical interviews spotlighted the inclusion of significant entities like Tom Tom. Moreover, collaborations extended to associations like CAD, ASECAP, Ertrac, and ERTICO, with a notable mention of the engagement with the NDS association, offering potential networking expansion. The project also intersected with initiatives like GIMS, focusing on deformation monitoring, HELMET, targeting eco-friendly transport, and PRoPART, emphasizing high availability positioning. ESRIUM's active participation in forums, including the Open Auto Drive Forum and road damage discussions in Brussels, highlighted its continuous industry engagement and dedication to its objectives.

SECTION 8: CONCLUSIONS

ESRIUM prioritized making a significant impact on its target groups via a strategic communication and dissemination approach. Throughout the project's duration, numerous communication activities were undertaken, adhering to the guidelines set out in D6.1 '*Communication and Dissemination Strategy and Plan*'. Post-validation of ESRIUM's strategic plan, this deliverable assessed the results and impact, culminating in a comprehensive final dissemination report. Specific target groups were effectively reached, and the comparison with predefined KPIs showcased a promising trajectory towards sustainable and efficient European logistics. As highlighted in this report's introductory section, many KPIs were not only met but surpassed. ESRIUM partners played a crucial role in broadcasting project innovations across various levels of stakeholders. They remain committed to further engaging and capitalizing on these outcomes in the coming times.

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ATTACHMENT 1: DISSEMINATION

[Confluence ESRIUM.xlsx](#)

ATTACHMENT 2: UPDATED GENERAL PRESENTATION

[ESRIUM general overview.pptx](#)

ATTACHMENT 3: DISSEMINATION PROCEDURE

Obligation to disseminate results

Unless it goes against their legitimate interests, each beneficiary must — as soon as possible — ‘disseminate’ its results by disclosing them to the public by appropriate means (other than those Resulting from protecting or exploiting the results), including in scientific publications (in any Medium).

This does not change the obligation to protect results in Article 27 of the GA, the confidentiality obligations in Article 36 of the GA, the security obligations in Article 27 of the GA or the obligations to protect personal data in Article 39 of the GA, all of which still apply.

A beneficiary that intends to disseminate its results must give advance notice to the other beneficiaries of — unless agreed otherwise — at least 45 days, together with sufficient information on the results It will disseminate.

Any other beneficiary may object within — unless agreed otherwise — 30 days of receiving notification, if it can show that its legitimate interests in relation to the results or background would be significantly harmed. In such cases, the dissemination may not take place unless appropriate steps are taken to safeguard these legitimate interests.

If a beneficiary intends not to protect its results, it may — under certain conditions (cf. article 26.4.1 of the GA) — need to formally notify the agency before dissemination takes place.

Open Access to scientific publications

Each beneficiary must ensure open access (free of charge online access for any user) to all Peer-reviewed scientific publications relating to its results. In particular, it must:

- (a) as soon as possible and at the latest on publication, deposit a machine-readable electronic Copy of the published version or final peer-reviewed manuscript accepted for publication in a Repository for scientific publications;
Moreover, the beneficiary must aim to deposit at the same time the research data needed to Validate the results presented in the deposited scientific publications.
- (b) ensure open access to the deposited publication — via the repository — at the latest:
 - on publication, if an electronic version is available for free via the publisher, or
 - within six months of publication (twelve months for publications in the social sciences and humanities) in any other case.
 ensure open access — via the repository — to the bibliographic metadata that identify the Deposited publication.
- (c) The bibliographic metadata must be in a standard format and must include all of the following:
 - the terms “European GNSS Agency”, “European Union (EU)” and “Horizon 2020”;
 - the name of the action, acronym and grant number;

- the publication date, and length of embargo period if applicable, and
- a persistent identifier.

The two main routes to open access are:

- Self-archiving / 'green' open access – the author, or a representative, archives (deposits) the published article or the final peer-reviewed manuscript in an online repository before, at the same time as, or after publication. Some publishers request that open access be granted only after an embargo period has elapsed.
- Open access publishing / 'gold' open access - The author will need to pay for immediate open access. This can either be by publishing in specific open access journals or in so called hybrid open access journals, where one pays for online open. In both cases the author gets immediate access to the high-quality PDF of the manuscript. The publication is usually covered by the Creative Commons Attribution (CC-BY) license, meaning that the publisher only gets a license to publish the publication but the actual copyright stays with author(s) .

Information on agency funding

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

- (a) display the agency logo and
- (b) display the EU emblem and
- (c) include the following text:

“This project has received funding from the European GNSS agency under the European Union’s Horizon 2020 research and innovation program under grant agreement no 101004181”.

When displayed together with another logo, the agency logo and the EU emblem must have Appropriate prominence.

For the purposes of their obligations under this article, the beneficiaries may use the agency logo and the EU emblem without first obtaining approval from the agency.

This does not, however, give them the right to exclusive use.

Moreover, they may not appropriate the agency logo and the EU emblem or any similar trademark or logo, either by registration or by any other means.

Disclaimer excluding agency responsibility

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

Consequences of non-compliance

If a beneficiary breaches any of its obligations under this article, the grant may be reduced. Such a breach may also lead to any of the other measures described in the Grant Agreement.

ATTACHMENT 4: DATA PRIVACY ASPECTS RELATED TO DISSEMINATION

In the contemporary digital landscape, the dissemination of information is intrinsically tied to data privacy concerns. As outlined in ARTICLE 39 of the Grant Agreement, there are stringent guidelines in place to manage the processing of personal data. When the Agency and the Commission process any personal data under the Agreement, it's imperative to align with Regulation No 45/2001. This regulation ensures that any data-related operations are notified to the relevant Data Protection Officer (DPO) and are publicly accessible in the DPO register. Moreover, the data controllers are

entrusted with the responsibility to uphold the integrity of the Agreement while safeguarding the financial interests of key stakeholders.

Furthermore, the beneficiaries of this data have to process it in strict accordance with both EU and national data protection laws. This is a pivotal aspect of dissemination as it determines the accessibility and extent of data shared. It's also the responsibility of the beneficiaries to ensure their personnel access only the necessary data for the implementation and management of the Agreement. A notable aspect of this protocol is the emphasis on transparency. Individuals whose personal data is being collected and processed are not only entitled to access and correct their data but must also be duly informed of their rights and the processing operations.

Lastly, it's essential to underscore the significance of adherence. Non-compliance with the stated data privacy guidelines can lead to stringent measures, highlighting the gravitas of proper data management in the age of widespread dissemination.

ATTACHMENT 5: DISSEMINATION VS. COMMUNICATION CHANNELS

Channels	Communication	Dissemination
Website – General webpages	X	
Website – webpages of results		X
Social media	X	
External channels – Generalist	X	
External channels – Specialised, sectorial, targeted		X
events – Presentation of results		X
External events – announcements, brochures and flyers, etc	X	
External events – Presentation of results		X
Publications in scientific journals		X