D7.1: Dissemination and Communication Plan

Revision: v.1.0

Work package	WP 7
Task	Task 7.1
Due date	31.05.2023
Submission date	01/06/2023
Deliverable lead	Martel Innovate (MAR)
Version	1.0.F
Authors	Flavia Maragno (Martel Innovate), Galileo Disperati (Martel Innovate)
Reviewers	Marius Caus (CTTC)
Abstract	This deliverable outlines the communication and dissemination plan that will ensure the project's actions and results receive widespread visibility, promotion, and adoption. It outlines the steps followed throughout the project's initial four months as well as the intended metrics. In particular, it focuses on the first reporting period while outlining the anticipated activities for the entire project's lifespan.
Keywords	Communication, Dissemination, Community Building

Document Revision History

Version	Date	Description of change	List of contributor(s)
V0.1	10/02/2023	First version of template	Galileo Disperati (Martel Innovate)
V0.2	03/05/2023	ToC	Flavia Maragno (Martel Innovate)
V0.3	17/05/2023	Content editing	Flavia Maragno (Martel Innovate), Galileo Disperati (Martel Innovate)

Co-funded by the European Union 6GSNS
Grant Agreement No.: 101096573
Call: HORIZON-JU-SNS-2022
Topic: HORIZON-JU-SNS-2022-STREAM-A-01-02
Type of action: HORIZON-JU-RIA

V0.4	26/05/2023	Review	Marius Caus (CTTC)
V1.0.D	01/06/2023	Approval process	Tomaso de Cola (DLR)
V1.0.F	01/06/2023	Final version for submission to EC portal	Tomaso de Cola (DLR)

DISCLAIMER

5G-STARDUST (*Satellite and Terrestrial Access for Distributed, Ubiquitous, and Smart Telecommunications*) project has received funding from the Smart Networks and Services Joint Undertaking (SNS JU) under the European Union's Horizon Europe research and innovation programme under Grant Agreement No 101096573.

COPYRIGHT NOTICE

Project co-funded by the European Commission in the Horizon Europe Programme		
Nature of the deliverable:	**R***	
Dissemination Level		
PU	*Public, fully open, e.g. web (Deliverables flagged as public will be automatically published in CORDIS project's page)*	✓
SEN	*Sensitive, limited under the conditions of the Grant Agreement*	
Classified R-UE/ EU-R	*EU RESTRICTED under the Commission Decision No2015/ 444*	
Classified C-UE/ EU-C	*EU CONFIDENTIAL under the Commission Decision No2015/ 444*	
Classified S-UE/ EU-S	*EU SECRET under the Commission Decision No2015/ 444*	

* R: Document, report (excluding the periodic and final reports)

DEM: Demonstrator, pilot, prototype, plan designs

DEC: Websites, patents filing, press & media actions, videos, etc.

DATA: Data sets, microdata, etc.

DMP: Data management plan

ETHICS: Deliverables related to ethics issues.

SECURITY: Deliverables related to security issues

OTHER: Software, technical diagram, algorithms, models, etc.

EXECUTIVE SUMMARY

This deliverable provides a comprehensive overview of 5G-STARDUST's communication and dissemination strategy. It encompasses details about the project's organizational structure and outreach plan, provides an overview of the activities carried out during the period from M01 to M05 and presents the planned initiatives for the future. Additionally, the deliverable includes a framework for measuring the impact of these activities, aiming to achieve the project's objectives and provide support to project partners in their day-to-day activities.

The strategy outlined in this document provides the consortium with clear guidelines and serves as a comprehensive manual for project partners to follow on their activities to ensure a cohesive approach to dissemination efforts.

After the introduction, the first half of the document provides a detailed description of the Communication and Dissemination Plan. It covers various aspects such as the overall strategy, the activities that have been implemented thus far, and the synergy activities undertaken. The primary goals of the 5G-STARDUST Strategy and Plan are outlined below:

1. **Raise Awareness and Visibility:** The strategy aims to generate widespread awareness and visibility for the 5G-STARDUST project. It focuses on disseminating information about the project and its outcomes to ensure broad recognition. Additionally, it aims to establish a distinctive and recognizable project identity that will support marketing activities.

2. **Reach and Engage Target Stakeholders:** The strategy aims to reach and engage a significant number of target stakeholders. By effectively showcasing the project's results, it seeks to attract the attention and involvement of stakeholders from various sectors in order to validate and improve the developed technologies and concepts and promoting their adoption in targeted vertical sectors.

3. **Establish Liaisons and Collaboration:** The strategy emphasizes the importance of establishing liaisons with related activities and actors in the research and innovation domains. It aims to foster collaboration with relevant initiatives, working groups, and bodies within the **Smart Networks and Services Joint Undertaking (SNS JU)** and other relevant organizations. This collaboration ensures close alignment with the broader research and innovation landscape and facilitates knowledge sharing and mutual support.

The latter portion of the document focuses on delineating the forthcoming actions regarding communication and dissemination activities, aiming to contribute significantly to the overall success of 5G-STARDUST. A specific objective is to directly assist in the growth and solidification of the SNS JU as a pivotal project in propelling the European innovation ecosystem with next-generation satellite communication.

5G-STARDUST will actively involve itself in dissemination efforts, communication endeavours, and community building across various sectors, including industries, infrastructure providers, SMEs, standardization bodies, researchers, as well as citizens, initiatives, policy makers, and relevant communities and projects associated with 5G/6G and NTN development.

TABLE OF CONTENTS

LIST OF FIGURES

FIGURE 1: 5G-STARDUST COMMUNICATION AND DISSEMINATION PHASES 11
FIGURE 2: 5G-STARDUST LOGO AND CORPORATE COLOURS 14
FIGURE 3: 5G-STARDUST DELIVERABLE TEMPLATE 15
FIGURE 4: 5G-STARDUST PRESENTATION TEMPLATE 15
FIGURE 5: 5G-STARDUST PRESS RELEASE TEMPLATE 16
FIGURE 6: 5G-STARDUST WEBSITE WIREFRAME 17
FIGURE 7: 5G-STARDUST WEBSITE 18
FIGURE 8: 5G-STARDUST WEBSITE ANALYTICS 19
FIGURE 9: 5G-STARDUST TWITTER PAGE 20
FIGURE 10: 5G-STARDUST LINKEDIN PAGE 21
FIGURE 11: 5G-STARDUST PROJECT POSTER 24
FIGURE 12: 5G-STARDUST PROJECT FLYER 25
FIGURE 13: EU EMBLEM AND 6G SNS LOGO COMPOSITIONS 26
FIGURE 14: 5G-STARDUST AT ETSI CONFERENCE 2023 28
FIGURE 15: 5G-STARDUST AT SNS LUNCHTIME WEBINAR 28
FIGURE 16: 5G-STARDUST AT MWC 2023 29

LIST OF TABLES

ABBREVIATIONS

IP	Internet Protocol
TCP	Transmission Control Protocol
TN	Terrestrial Networks
NTN	Non-Terrestrial Networks

1 INTRODUCTION

1.1 5G-STARDUST'S AMBITION

5-STARDUST (Satellite and Terrestrial Access for Distributed, Ubiquitous, and Smart Telecommunications) has the mission to design, develop and demonstrate a deeper integration of TN and NTN: Deliver a fully integrated 5G-NTN autonomous system with novel self-adapting end-to-end connectivity models for enabling ubiquitous radio access.

The main objectives of the project are to:

- Define an integrated terrestrial-satellite network building on 5G-compliant regenerative satellite payloads, enabling cost-effective connectivity in un(der)served areas.
- Define a self-organised end-to-end network architecture able to adapt to diverse verticals' requirements and to time-varying network operations (e.g., data traffic loads and topology changes).
- Ensure a more efficient user connectivity concept by providing geographic coverage according to user-centric approaches (i.e. cell-free strategies).
- Provide end-to-end network flexibility by means of data driven AI-based multi-connectivity and resource allocation strategies.
- Guarantee cost reduction and capability to scale up the integration of satellite with terrestrial infrastructures to efficiently manage the deployment and operation of massive capacity networks.

1.2 DOCUMENT COMPOSITION

The sections of the Deliverable 7.1 are arranged as follows, following the introductory **Section 1:**

- **Section 2** presents a comprehensive summary of the Communication and Dissemination Strategy, outlining the three phases of the strategy, the project's main stakeholders and the sustainable approach;
- **Section 3** provides an outline of the activities conducted up to Month 5;
- **Section 4** focuses on the liaisons and cluster activities with other initiatives, with emphasis on the SNS JU;
- **Section 5** describes the plans for the future activities and events;
- **Section 6** outlines the current status of activities at M05 against the planned KPIs;
- **Section 7** draws the conclusions.

2 5G-STARDUST COMMUNICATION AND DISSEMINATION STRATEGY

All work packages closely integrate their communication and dissemination efforts to create a cohesive strategy and have an impact on the European 5G and satellite ecosystem. In order to broaden the scope of the project's efforts and maximize the impact 5G-STARDUST activities will have, the consortium pursues and ensures close coordination with the European Commission, other ongoing 5G and satellite-communication projects such as 6G-NTN and ETHER, and other pertinent initiatives in closely related domains, such as the 6G SNS JU, BDVA AIOTI, and GAIA-X.

5G-STARDUST conducts a comprehensive set of actions with the aim of optimizing its anticipated impact by closely integrating the communication and dissemination activities with the exploitation efforts.

Through a number of targeted outreach and communication initiatives, the following goals will be reached:

- **Amplify** the project's widespread visibility and adoption throughout the European 5G and satellite communication community, raise awareness of 5G-STARDUST's results and benefits.
- **Ensure** that the project's outcomes are effectively presented and that the generated technologies and concepts are further developed by reaching out and engaging with relevant stakeholders.
- **Establish** a distinctive and recognizable brand identity to assist all promotional campaigns.
- **Create** and **grow** the project's community and foster connections with other initiatives, with an emphasis on 6G SNS, and EU-funded projects on comparable topics to promote growth and knowledge exchange.
- As required, **promote** major contributions to important open source initiatives, standardization bodies, and scientific domains.

2.1 COMMUNICATION AND DISSEMINATION PHASES

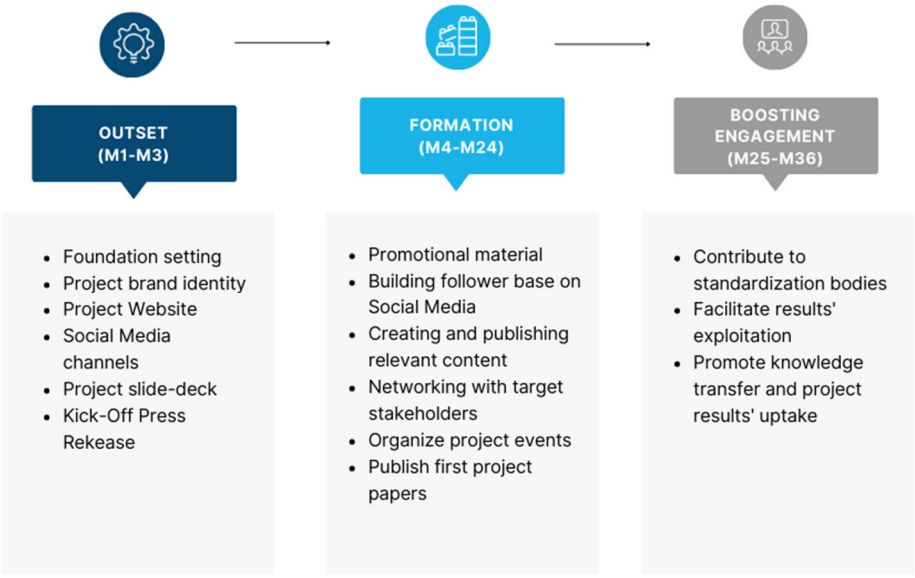


Figure 1: 5G-STARDUST Communication and Dissemination Phases

2.2 MAIN STAKEHOLDERS AND OUTREACH

5G-STARDUST will engage with target stakeholders to acquaint them with the project's objectives, benefits, and business/commercial opportunities that the project aims to create.

As different stakeholder groups have varied expectations and interests, they will be reached through various means, as outlined in Table 1. Additionally, in order to better meet their requirements, the messaging and activities will be adapted accordingly. The outreach of 5G-STARDUST will extend beyond the typical set of business, academic, and policymaking stakeholders to reach a wider audience, including the mass media and the general people.

Table 1: 5G-STARDUST Target Stakeholders and Interaction Channels

Target Stakeholder	Interaction channels
Satellite/telco operators and other industry players **(SMEs, Digital Innovation Hubs)**	• Press and media communications • Publications in magazines and dedicated press • Organisation of and participation in industry-focused events • Business exploitation and sustainability efforts.
5G, satellite communication, and terrestrial researchers and academia	• Participation in and presentation at scientific events • Publications in international conferences and magazines • Demos and exhibitions • Targeted communications, workshops, and online and offline presence and materials
Public authorities, public & private initiatives, and policy makers (e.g., European Commission, national government initiatives, Smart Networks and Services Joint Undertaking (SNS JU), 5GPPP, 6G-IA, NetWorldEurope)	• Targeted communications showcasing and community building activities • Direct liaisons • Participation in relevant events • Promo material and online presence
Standardisation and opensource bodies (e.g., ETSI, 3GPP, IEEE, O-RAN)	• Collaborate with standardisation bodies to identify where and how standards should evolve • Monitor the standardization bodies and other related open-source initiatives to identify opportunities to contribute and progress • Targeted communications and participation in events
Citizens / general public	• Presentations, participation in events • Promo materials • Demos and showcasing, especially via participation in major 6G SNS events
General press	Website, media, videos, presentations, articles, publications, events' attendance, etc.

2.3 SUSTAINABLE APPROACH

When organizing events and developing communication materials, the 5G-STARDUST dissemination and communication strategy places a major emphasis on the sustainability approach. In order to do this, 5G-STARDUST will:

- Avoid using excessive physical resources whenever possible (for instance, print fewer flyers than required and encourage online downloads, make promotional materials from recyclable materials, and avoid single-use goods).

- Whenever possible, substitute virtual meetings and workshops with in-person events.
- Encourage attendees to use public transportation or bicycles when attending 5G-STARDUST events and reward these actions to help cut emissions.
- Make a conscious effort to estimate and mitigate the emissions caused by partners' travel to distribution events.
- Work with suppliers (printers, caterers, etc.) who use eco-friendly supplies and products.
- Host the project website through provider GreenGeeks, a platform designed to be as energy efficient as possible and limit waste of resources.

3 KICK-OFF OF THE COMMUNICATION AND DISSEMINATION ACTIVITIES

This section outlines the communication and dissemination initiatives accomplished until Month 5 of the project.

3.1 5G-STARDUST BRAND IDENTITY

The visual identity and guidelines were defined at the outset of the project in order to build a strong and recognizable brand. They will be incorporated into all marketing and distribution materials developed throughout the project and used by all project partners in their communication activities.

The visual components of the 5G-STARDUST brand's identity, including its logo, colour scheme, and typography, are made to convey a specific message and distinguish it from other initiatives. It shapes the public's perceptions of the brand and sets how they engage with it. The "look and feel" of the brand identity is uniform and consistent throughout all sources, including digital and printed visual media. The idea behind the logo and the brand identity connects with space-related imagery, and the palette of corporate colours chosen aligns with the branding of the 6G SNS initiative.

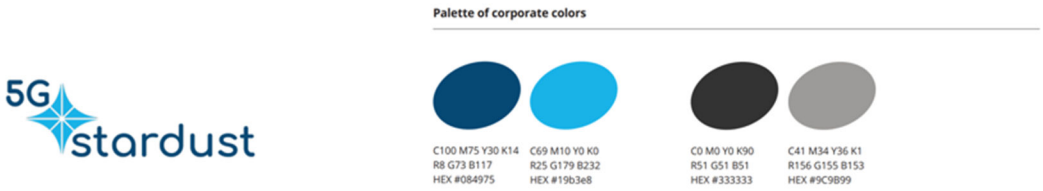


Figure 2: 5G-STARDUST Logo and Corporate Colours

The complete 5G-STARDUST Brand Guidelines can be found in **Appendix B.**

3.1.1 TEMPLATES

A word document template for the **project's deliverables** has been made, and all partners must utilize it for all deliverables during the project:

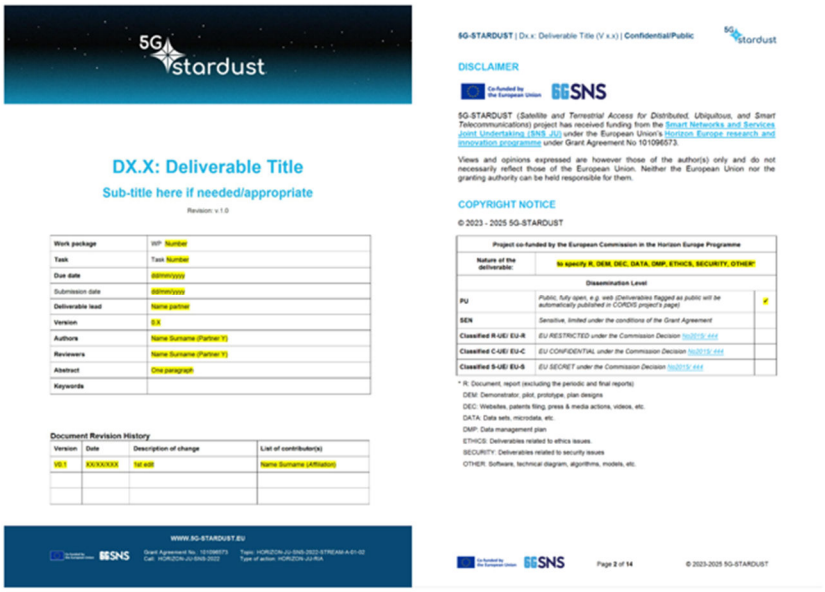


Figure 3: 5G-STARDUST Deliverable Template

A standardized **PowerPoint presentation template** has been developed for all partners to utilize during external events and meetings to showcase 5G-STARDUST. Additionally, this template is also applicable for internal 5G-STARDUST meetings.

Figure 4: 5G-STARDUST Presentation Template

In light of the first Kick-Off Press Release, a **Press Release template** has been designed to serve as a consistent format for all future releases. This template will be utilized to ensure uniformity and coherence across all press communications going forward.

Press release
February 2, 2023

5G-STARDUST Project Kicks-Off: Partners come together in Munich to design, develop and demonstrate a deeper integration of TN and NTN.

Providing connectivity to underserved areas and communities will be of critical importance in the upcoming decades. The Europe's Digital Decade plan from the European Commission expects all households to be covered by the Gigabit network and all populated areas covered by 5G by year 2030, with ensured offered data rate of at least 100 Mbit/s already by year 2025. In this perspective, the role and evolution of 5G is expected to deliver services to the overall society according to an anywhere, anytime, any device paradigm, and will therefore call for the design of a holistic communication platform integrating terrestrial and non-terrestrial networks.

5G-STARDUST's ambition is to deliver a fully integrated 5G-NTN autonomous system with novel self-adapting end-to-end connectivity models for enabling ubiquitous radio access.

To this aim, the project will design, develop, and demonstrate a flexible satellite system integrated with the terrestrial infrastructure by means of self-organised network architecture, and will deliver an innovative framework to support the operation of multi-orbit constellations, with transparent and regenerative space nodes, to deliver 5G/6G NTN services.

5G-STARDUST is among the first selected projects to be funded under Horizon Europe's European Smart Networks and Services Joint Undertaking (SNS JU), a public-private partnership that aims to enable the evolution of 5G ecosystems and promote 6G research in Europe.

Who's in?

The 5G-STARDUST consortium is ideally assorted to effectively contribute to the integration of Satellite Communication (SatCom) into future terrestrial networks thanks to the strong and uniquely positioned satellite on board, terrestrial players and engaged actors in the 5G satellite and terrestrial scenes. Led by the German Aerospace Center (DLR), the partners include strong positioned satellite and ICT enterprises, namely Thales Alenia Space (France and Luxembourg), Orange and Hispasat; three dynamic SMEs, namely Software Radio Systems, Advanced Wireless Solutions and Services (AW2S) and Martel Innovate; and top academia and research institutions, namely Centre Tecnologic de Telecomunicacions de Catalunya, Consorzio Nazionale Italiano per le Telecomunicazioni, and Fraunhofer.

The work officially started on January 1st, 2023, and all partners met at the Kick-Off meeting held in Munich on January 24-25. The team is looking forward to working together and taking forward the 5G STARDUST ambitions and design, develop and demonstrate a deeper integration of TN and NTN.

Press Contact and Social Media

- E-mail | info@5g-stardust.eu
- Twitter | @5G_Stardust
- LinkedIn | https://www.linkedin.com/company/92466502/

Figure 5: 5G-STARDUST Press Release Template

3.2 5G-STARDUST PROJECT WEBSITE

The 5G-STARDUST website (www.5g-stardust.eu) serves as the primary gateway for the project to engage with all key stakeholders. It has been meticulously structured with dedicated sections to ensure easy access to comprehensive information related to projects, outcomes, events, milestones, developments, and more. The website serves as a centralized platform where visitors can conveniently explore and retrieve essential documents, including public deliverables, that are relevant to the consortium's work.

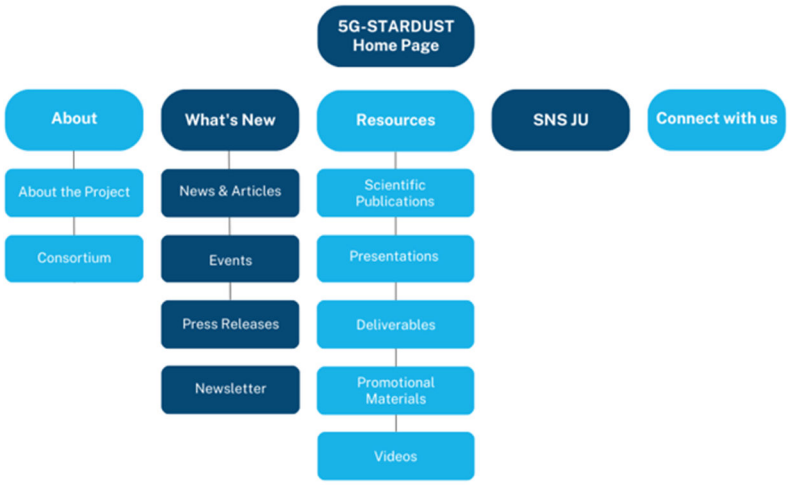


Figure 6: 5G-STARDUST Website Wireframe

The website is designed to be fully responsive to keep it appealing and readable on all devices (desktops, tablets, and phones) and it is organized among the following sections:

Home Page: The Home Page interface includes the basic information about the project, including the mission and objectives, overview of the consortium, prompt to subscribe to the newsletter, the latest news and events and links to the social media channels.

About: This section gives more detailed information about the project's mission and the members of the consortium.

What's New: The purpose of this section is to provide the most recent updates on the project's activities, both upcoming and past events, as well as news. It also serves as a repository for all the Newsletters associated with the project, making them easily accessible to users.

Resources: Within this section, you will find a comprehensive collection of publicly available documents and files that have been generated throughout the project's duration. This repository includes a wide range of materials, including public deliverables, presentations delivered at events and workshops, scientific publications, and promotional materials such as flyers and posters. It serves as a centralized location for accessing and retrieving these resources related to the project.

SNS JU: This section is dedicated to the SNS Joint Undertaking and includes information about the other projects part of the Stream A – Smart Communication Components, systems and Networks for 5G Mid-Term Evolution Systems.

Connect with us: This section contains a form that allows the public to contact the members of the projects via a dedicated email address (info@5g-stardust.eu) for any question or input.

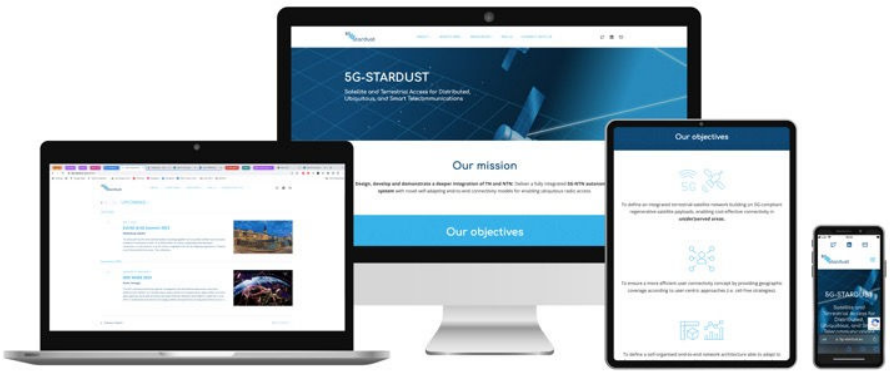


Figure 7: 5G-STARDUST Website

To establish the website as a central hub for promoting and showcasing all project activities, all partners are encouraged to contribute their project-related news. By submitting their updates, partners can enhance the relevance of the website and foster connections with their respective networks and communities. This collaborative approach ensures that the website becomes a dynamic platform that effectively highlights the project's progress and engages a wider audience.

The website data is subjected to meticulous and consistent analysis to assess its performance and facilitate adjustments to the content strategy as needed. Matomo, a chosen platform analytics software, is employed for this purpose, as it enables the collection of comprehensive reports on communication campaigns, website visits, and acquisitions, providing valuable insights for decision-making. It is worth noting that Matomo adheres to European GDPR standards, ensuring compliance with data protection regulations and safeguarding the ownership of the collected data.

From the launch of the first fully functional iteration in M02 (February 2023) to May 30, 2023, the time of writing (M05), the website has already counted 542 visits and 1,484 page views.

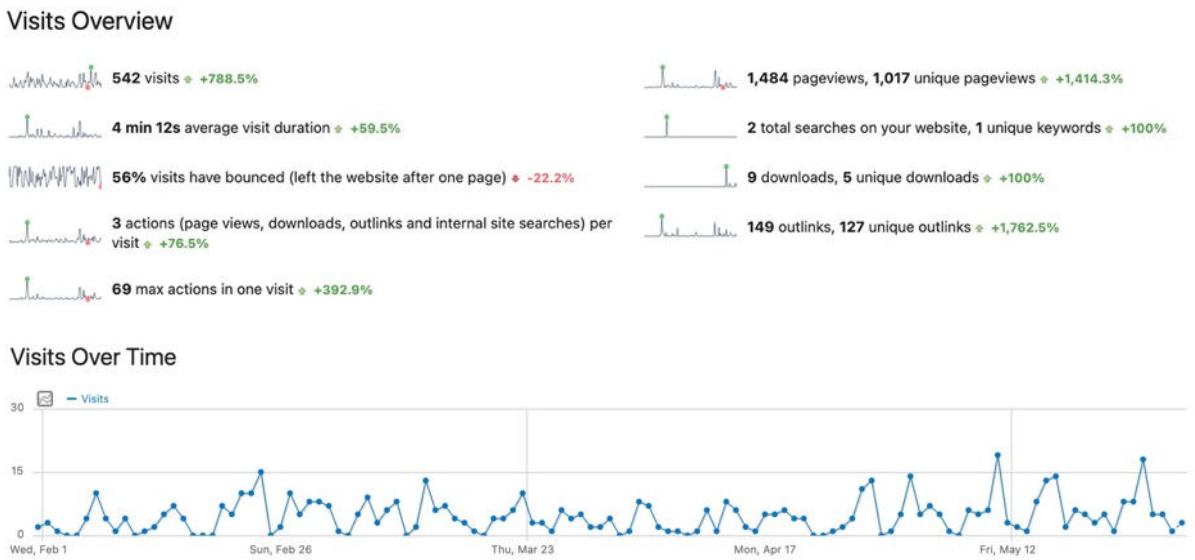


Figure 8: 5G-STARDUST Website Analytics

3.3 SOCIAL MEDIA PRESENCE

In order to promote the project's activities and outcomes effectively, several social media channels have been established and linked to the project website. These social media platforms are intended to encourage discussions on 5G, NTN and satellite communication technologies, as well as related topics, while actively promoting the project's achievements and cultivating an engaged community. Below is an overview of the social media platforms developed for 5G-STARDUST:

Twitter: The project maintains an official Twitter account, which serves as a platform for sharing real-time updates, project news, events, and relevant industry insights. The 5G-STARDUST Twitter account, **@5GStardust_eu** (https://twitter.com/5GStardust_eu) has been established in December 2022 and currently counts **37** followers and over **38** posts.

Figure 9: 5G-STARDUST Twitter Page

The project utilizes Twitter as a means to build meaningful relationships with various stakeholders such as the European Commission, related Directorates-General, policymakers, industry stakeholders, SMEs, and the general public. Through these connections, valuable opportunities may arise within the stakeholder network. Twitter also acts as a real-time communication tool, keeping everyone informed about project workshops, events, and other activities.

To ensure that the project's content reaches the target audience, increases views, likes, shares, and drives traffic to the 5G-STARDUST website, suitable hashtags and accounts have been identified. By utilizing these hashtags and mentioning relevant accounts, the reach and coverage of the 5G-STARDUST Twitter channel are maximized, leading to increased visibility and engagement.

LinkedIn: A dedicated LinkedIn page has been created to connect professionals, researchers, and organizations interested in 5G-STARDUST. It serves as a platform for sharing project-related information, publications, and networking opportunities.

Prior to the official commencement of the project in December 2022, a project LinkedIn corporate page was established to engage with the intended LinkedIn stakeholders.

The page administrator of the project's LinkedIn corporate page actively seeks opportunities to foster engagement and increase visibility by linking to partners' LinkedIn profiles. This strategy allows for relevant exchanges and mutually beneficial interactions within the professional network.

To broaden the social media audience and diversify the user base of the page, a plan has been devised to involve European research and innovation projects and initiatives in the dialogue on this platform. By engaging with these stakeholders and promoting the activities of 5G-STARDUST in relevant LinkedIn groups, the project aims to stimulate discussions, share insights, and establish connections.

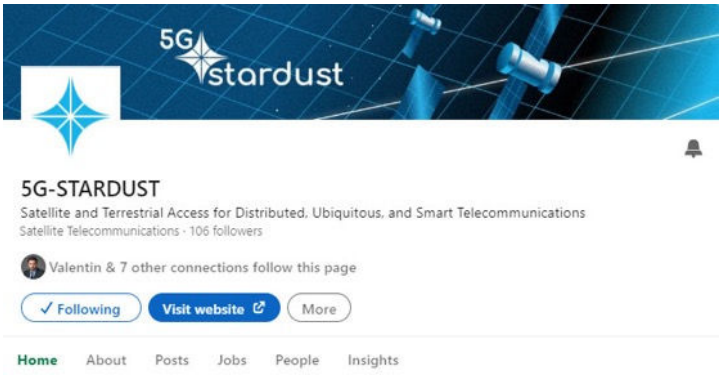


Figure 10: 5G-STARDUST LinkedIn Page

The page currently counts **106** followers and generated over 266 views (with 99 unique visitors and 37 custom button clicks).

These social media platforms collectively aim to foster a vibrant and interactive online community around 5G-STARDUST, enabling the dissemination of project outcomes, stimulating conversations, and encouraging knowledge exchange within the field.

To foster dialogues, interactions, and maximize the impact of the project on social media platforms, several hashtags and handles have been identified for tagging in relevant tweets and posts. These tags and handles can help increase the visibility of the project's content, engage with relevant communities, and encourage discussions.

Table 2: 5G-STARDUST Target Hashtags, Twitter and LinkedIn handles

Hashtags	**#HorizonEU** **#6G** **#5G** **#DigitalDecade** **#SNS** **#EUResearch** #FutureConnectivity #NTN #NonTerrestrialNetworks #SatCom #SatelliteCommunication #EUSpace
LinkedIn Handles	• 6G Smart Networks and Services Industry Association • Smart Networks and Services Joint Undertaking (SNS JU) • EU Digital & Tech • EU Science, Research and Innovation
Twitter Handles	• @HorizonEU • @DigitalEU • @EU_Commission • @6G_SNS • @esa • @ITU • @NetTechEU • @one6GGlobal

To promote engagement within the consortium and amplify the project's impact, 5G-STARDUST actively monitors and keeps track of all partners' social media profiles. Whenever appropriate, the project tags and mentions partners in relevant posts and content. By doing so, 5G-STARDUST aims to foster collaboration and create a significant ripple effect across the consortium. Tagging partners not only increases their visibility but also encourages them to engage with the project's social media activities, resulting in a more cohesive and impactful online presence.

Table 3: 5G-STARDUST Consortium Social Media Accounts

5G-STARDUST Partner	LinkedIn Handle	Twitter Handle
German Aerospace Center (DLR)	German Aerospace Center (DLR)	@DLR_en
Advanced Wireless Solutions and Services (AW2S)	AW2S	#AW2S
Consorzio Nazionale Italiano per le Telecomunicazioni (CNIT)	CNIT - Consorzio Nazionale Interuniversitario per le Telecomunicazioni	@CNIT_TLC
Centre Tecnologic de Telecomunicacions de Catalunya	Centre Tecnològic de Telecomunicacions de Catalunya (CTTC)	@CttcTech
Fraunhofer	Fraunhofer-Gesellschaft	@Fraunhofer_FOKUS
Hispasat	Hispasat	@Hispasat
Martel Innovate	Martel Innovate	@Martel_Innovate
Orange	Orange	@orange
Software Radio Systems	Software Radio Systems	@SrsSystems
Thales Alenia Space	Thales Alenia Space	@Thales_Alenia_S

A dedicated social media campaign aimed at highlighting the consortium and each partner contribution has been planned, for the partners to be featured on the social media channels and the 5G-STARDUST Website.

3.4 PROMOTIONAL MATERIAL

Throughout the project's duration, a multitude of documents, deliverables, technical reports, posters, webinars, and presentations will be generated. These materials serve to document and communicate the progress, findings, and outcomes of the project and contribute to the dissemination of knowledge to provide valuable insights to stakeholders and the wider community.

A **project poster** has been created in January 2023 to provide information on the project's mission and objectives. The poster has been utilized in occasion of the ETSI 2023 Conference and allowed for the project to gain visibility to relevant stakeholders within the 5G, NTN and standardization domains.

Figure 11: 5G-STARDUST Project Poster

A **project flyer** has been created in February 2023 and has been utilized at the MWC 2023 Conference. The flyer represents a gateway to learn about the main project's objectives and online channels, including a QR code redirecting to the 5G-STARDUST website. The flyer has been updated in May 2023 to fit more closely the 6G SNS guidelines.

Figure 12: 5G-STARDUST Project Flyer

An **official Project Slide Deck** has been created to outline the main project's objectives, activities and key technologies. It has been utilized in occasion of the SNS Lunch Time Webinar that took place on February 20. The deck is available for all partners to use in any external event where 5G-STARDUST is presented and will be regularly updated to reflect the ongoing activities and outcomes of the project. The complete slide deck can be found in **Appendix C.**

Roll-ups and brochures will be designed to align with the website's aesthetics and overall brand identity, ensuring consistency in future applications. All promotional materials will be crafted in English, with consideration to local languages when appropriate or necessary, in order to raise awareness among stakeholders and various relevant audiences. These materials will feature concise textual and graphical content, effectively conveying information about the project. The design will be easily customizable to accommodate specific requirements of individual partners, should an additional or more tailored version be needed. Each promotional material will prominently display the project logo, the EU flag, the acknowledgment of the SNS JU, the 5G-STARDUST website, and relevant social media links.

To acknowledge the origin of EU funding and co-funding and ensure visibility, the EU emblem holds significant importance as the primary visual brand. In the case of the SNS JU program, being a co-funded EU partnership, specific guidelines dictate the use of the EU emblem in

conjunction with the SNS logo. Consequently, all promotional materials associated with 5-STARDUST will adhere to these dedicated guidelines.

Figure 13: EU Emblem and 6G SNS logo compositions

Videos

A video has been created in occasion of the ETSI Conference in the form of interview to Project Coordinator Tomaso de Cola (DLR) about 5G-STARDUST standardization ambitions and activities. The video will be released on all project's channels in the upcoming weeks (i.e. during June 2023 timeframe).

In the second quarter of 2023, 5G-STARDUST aims to establish a dedicated YouTube channel as a platform to release videos. These videos will serve the purpose of introducing the project to the community and will be utilized to enhance the publicity of 5G-STARDUST through various channels, including social media.

The planned videos on the YouTube channel will not only provide updates on the project but also convey its vision and accomplishments. They will also highlight the expertise and involvement of stakeholders, featuring partner interviews, participation in events, and marketing-related content. By creating and disseminating such videos, the project aims to increase awareness, engage stakeholders, and promote the utilization of project outcomes and newly developed technologies.

3.5 NEWSLETTERS & PRESS RELEASES

Press Release

In conjunction with the Project Kick-Off meeting, an initial Press Release was released. This press release provides a comprehensive overview of the project's primary objectives, highlights the collaborative efforts of the partners, and outlines future plans for project activities. It has been published on the official 5G-STARDUST website and effectively disseminated to specific media outlets through the Prowly tool.

For further details, the complete Press Release can be referred to in **Appendix A.**

Newsletter

The 5G-STARDUST will release a bi-yearly Newsletter, with the first one set to be published on M06 (June 2023).

The newsletter will provide regular updates on the technologies covered within 5G-STARDUST (such as 5G, 6G, TN/NTN integration, satellite communication, ubiquitous radio access) and the trends in innovation. It will also share news from industrial partners, project findings, and results. Additionally, the newsletter aims to inform the public about how they can participate in the project and related efforts by including information about future assignments and events. Therefore, each newsletter will feature highlights, important results, links, contacts, diffusion efforts, relevant news, announcements, and a calendar of significant upcoming events.

The design of each newsletter will adhere to the 5G-STARDUST brand identity and be fully responsive, ensuring it can be easily read on any device. The underlying technology of the newsletter will be adaptable to meet the project's communication requirements. All published newsletters will be available in their dedicated section on the project website.

To distribute the newsletter to a wide audience, a mailing list has been created based on subscriptions. Interested users can sign up for the newsletter through the registration feature on the project website. Data protection guidelines, as outlined in the General Data Protection Regulation (GDPR), will be strictly followed for all activities.

The MailerLite application, known for its accessibility and privacy options, will be used as the platform to create and distribute the newsletter. This application ensures the production of an easy-to-view and use newsletter for all users.

3.6 EVENTS

The consortium participated in various events with the aim of promoting awareness about the project's mission, activities, and future plans:

- **ETSI Research Conference, 6-8 February 2023, Sophia Antipolis (France):** Project Coordinator Tomaso de Cola (DLR) and 5G-STARDUST partner Mohamed El Jaafari (Thales Alenia Space) presented 5G-STARDUST plans for standardisation. The event was promoted on 5G-STARDUST's communication channels. The presentation and a news item featuring the participation to the event are available on the 5G-STARDUST website.

Figure 14: 5G-STARDUST at ETSI Conference 2023

- **SNS Lunchtime Webinar 2 – Introducing the SNS projects, 20 February 2023 (Online):** Project Coordinator Tomaso de Cola (DLR), presented 5G-STARDUST at the webinar organized by 6GSNS presenting the projects part of stream A addressing: Smart Communication Components, Systems and Networks for 5G Evolution Systems.

Figure 15: 5G-STARDUST at SNS Lunchtime Webinar

- **Mobile World Congress, 27 Feb-2 March 2023, Barcelona (Spain):** Project Coordinator Tomaso de Cola (DLR) and other partners including CTTC, Hispasat, Fraunhofer FOKUS and Orange attended the conference and promoted 5G-STARDUST among relevant stakeholders with promotional flyers. The event and the project's participation was promoted on the 5G-STARDUST online channels.

Figure 16: 5G-STARDUST at MWC 2023

- **SatNEx School 2023 – "Satellite 6G: Challenges and Solutions" Conference, April 18-20, Siena (Italy):** Project Coordinator Tomaso de Cola joined the event speaking about Satellite 6G's challenges and solutions and presented 5G-STARDUST's mission.

Figure 17: 5G-STARDUST at SatNEx V School Event

3.7 INTERNAL COMMUNICATION

To ensure effective communication among partners and facilitate task management and deadline tracking, two primary internal communication tools have been implemented. The objective is to avoid overcommunication and enable the consortium to stay updated and easily access the necessary resources.

As the primary means of storing internal files and official documents (such as reports, presentations, deliverables, and graphic assets), a dedicated **internal SharePoint repository** has been established, hosted on the DLR server.

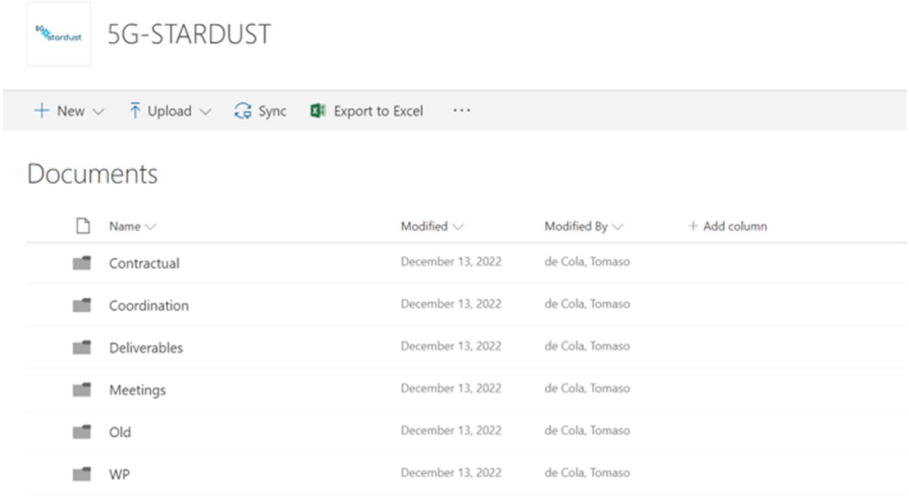


Figure 18: 5G-STARDUST SharePoint internal repository

To facilitate communication among different groups and working groups, **dedicated mailing lists** have been set up:

- 5g-stardust@dlr.de
- 5g-stardust-wp1@dlr.de
- 5g-stardust-wp2@dlr.de
- 5g-stardust-wp3@dlr.de
- 5g-stardust-wp4@dlr.de
- 5g-stardust-wp5@dlr.de
- 5g-stardust-wp6@dlr.de
- 5g-stardust-wp7@dlr.de

4 JOINT EFFORTS AND SYNERGIES WITH COMMON INITIATIVES

4.1 SNS JU & SNS OPS

5G-STARDUST is part of the Smart Networks and Services Joint Undertaking (SNS JU) under Stream A. This Public-Private Partnership aims to foster and advance industrial leadership in Europe regarding 5G and 6G networks and services.

By collaborating with the SNS OPS CSA, which supports cooperation and synergies among SNS JU projects, 5G-STARDUST has already begun actively engaging with other 6G SNS projects such as 6G-NTN, ETHER and 6G-SANDBOX. These connections allow 5G-STARDUST to stay informed about ongoing activities and strengthen mutual development within the era of satellite communication and NTN technologies.

Key highlights of 5G-STARDUST's involvement in the SNS JU ecosystem include:

- 5G-STARDUST will take part in **EuCNC & 6G Summit (Gothenburg, Sweden; 6-9 June 2023)** with the Workshop **Aligning European NTN Convergence and Integration.** The first session of this workshop will bring together a number of **SNS projects** including **5G-STARDUST, ETHER, 6G-NTN** and **6G-SANDBOX.** The ambition of the workshop is to provide an overview of the activities and see how the various initiatives can contribute to a coherent strategy to achieve NTN/TN convergence in Europe. For this occasion, 5G-STARDUST will present the project and will partake in a group video interview with other SNS projects.

- 5G-STARDUST is prominently featured among the SNS projects on the **6G SNS website**, actively contributing to and amplifying SNS JU's social media endeavours.

- 5G-STARDUST participated in the **SNS Lunchtime Webinar 2**, which introduced the SNS projects. This webinar showcased Stream A projects focusing on Smart Communication Components, Systems and Networks for 5G Evolution Systems.

- 5G-STARDUST contributed an article to the **7th edition of the European 6G Annual Journal by SNS OPS**. The article provides an overview of the project's objectives, key technologies, and its scheduled release is set for May 2023.

- 5G-STARDUST actively participates in the **SNS JU Communication Task Force** Meetings held on a monthly basis. These meetings facilitate alignment among communication and dissemination representatives from all SNS projects, fostering collaboration, knowledge sharing, and updates on SNS initiatives.

4.2 OTHER RELEVANT INITIATIVES AND PROJECTS

To ensure widespread awareness of the project's outcomes and its contributions to the scientific, satellite and radio communication communities, it is essential to actively engage in dissemination, communication, and community-building efforts.

To achieve comprehensive dissemination, targeted collaborations and synergies will be established. These strategic partnerships will facilitate the effective distribution and adoption of 5G-STARDUST's advancements.

The 6G Smart Networks and Services Industry Association (6G-IA) is the voice of European Industry and Research for next generation networks and services. Its primary objective is to contribute to Europe's leadership on 5G, 5G evolution and SNS/6G research. The 6G-IA represents the private side in both the 5G Public Private Partnership (5G-PPP) and the Smart Networks and Services Joint Undertaking (SNS JU) and the European Commission represents the public side.

The 6G-IA brings together a global industry community of telecoms & digital actors, such as operators, manufacturers, research institutes, universities, verticals, SMEs and ICT associations.

The European Space Agency (ESA) is Europe's gateway to space. Its mission is to shape the development of Europe's space capability and ensure that investment in space continues to deliver benefits to the citizens of Europe and the world. Cooperating and partnering with ESA is a great opportunity to tackle the main stakeholders and researchers in the space and satellite domains.

One6G is a membership organization focused on evolving, testing and promoting next generation cellular and wireless technology-based communications solutions. By supporting global 6G research and standardization efforts, the goal is to accelerate its adoption and overall market penetration, while addressing societal and industry-driven needs for enhanced connected mobility. The shared network of the One 6G initiative, alongside the knowledge base will on one hand result in additional inputs for the project (both on technical and business-related manners), and will also create broader awareness amongst the key stakeholders of 5G-STARDUST.

Alliance for the IoT and Edge Computing Innovation (AIOTI) aims to lead, promote, bridge and collaborate in IoT and Edge Computing and other converging technologies research and innovation, standardisation and ecosystem building, providing IoT and Edge Computing deployment for European businesses creating benefits for European society. They cooperate with other global regions to ensure removal of barriers to development of the IoT and Edge Computing market while preserving European values, including privacy and consumer protection.

6G-NTN (HORIZON-JU-SNS-2022) is a 6G SNS-funded project that aims to design and validate NTN's key technical, regulatory, and standardisation enablers for the integration of TN and NTN components into 6G, focusing on multidimensional network infrastructure, multi-constraint RANs, and multi-user terminals.

ETHER (HORIZON-JU-SNS-2022) is a 6G SNS-funded project that aims at developing solutions for a Unified Radio Access Network (RAN) and for the energy-efficient, AI-enabled resource management across the terrestrial, aerial and space domains, while creating the business plans driving future investments in the area.

5 MOVING FORWARD: PLANNED ACTIVITIES

5.1 WORKSHOPS AND EVENTS

Throughout the project's duration, organizing events in various formats such as webinars, sessions, workshops, booths, and demos will play a pivotal role. These events will contribute to increasing the visibility of developed technologies and trials, showcasing achievements, and promoting the wider adoption of the project's outcomes.

As part of this effort, 5G-STARDUST plans to organize inception and demo workshops as well as a final event presenting project results ad their exploitation potentials and aims to organize at least 2 events by project end to be co-organized with other related projects and co-located with flagship conferences. These workshops will involve key industry stakeholders and groups, aiming to attract attention to the project's advancements and trials.

To keep track of upcoming important events, 5G-STARDUST maintains an internal events overview sheet. All partners regularly update this list when they attend or plan to attend an event or conference, ensuring comprehensive coverage of relevant activities.

- **IEEE WiSEE 2023, 6-8 September 2023, Aveiro (Portugal):** This IEEE conference will bring together investigators from the National Aeronautics and Space Administration (NASA), the Canadian Space Agency (CSA), the European Space Agency (ESA), and other space agencies, along with aerospace and space defense industries and academic researchers, in an effort to understand and solve the emerging problems facing wireless sensing and communication in space and related extreme environments.

  The “Non-Terrestrial Networks for 6G Systems (NTN6G)” workshop at the event will be co-chaired by 5G-STARDUST Project Coordinator Tomaso de Cola (DLR), together with partners Alessandro Guidotti (University of Bologna, CNIT), Alessandro Vanelli (University of Bologna) and Mohammed El Jaafari (Thales Alenia Space France).

Figure 19: Promotion of IEEE WiSEE 2023 Workshop

5.2 TARGET PUBLICATIONS AND EXTERNAL EVENTS

The objective the dissemination activities are to showcase the project's work and present novel findings at carefully selected conferences, venues, panels, and other relevant platforms, as well as in esteemed magazines and journals. A list of conferences and publications where the consortium plans to promote 5G-STARDUST is provided in Table 4 and Table 5. Currently, the list includes events and publications that within the project's first year. However, project partners will continuously update the list to incorporate conferences scheduled for later years. For information on the attended events, the D7.2 Dissemination, Communication Report and Exploitation strategy interim and final report respectively at M18 and M36 contain additional details.

Table 4: 5G-STARDUST Targeted external events

Event	Date, Location	Type of Audience
EuCNC & 6G Summit	Gothenburg, Sweden. 6-9 June 2023	Academia and industry (Communication, 6G).
Fiware Global Summit	Vienna, Austria. 12-13 June 2023	Academia and industry (Communication, Technology).
European Space Forum	Brussels, Belgium. 5-6 July 2023	Academia and industry (Communication, Satellite, Technology)
European Space Power Conference	Elche, Spain, 2-6 October 2023	Academia and industry (Communication, Space, Satellite).
Ka and Broadband Communications Conference	Bradford, UK. 23-26 October 2023	Academia and industry (Communication, Technology).
IEEE Future Networks World Forum	Baltimore, USA. 13-15 November 2023	Academia and industry (Communication, Network operators)
IEEE Globecom	Kuala Lumpur, Malaysia. 4-8 December 2023	Academia and industry (Communication, Technology).
IEEE WiSEE	Aveiro, Portugal. 6-8 September 2023	Academia and industry (Communication, Space, Technology).

Table 5: 5G-STARDUST Targeted Scientific Publications

Publication Type	Submission To
Scientific Peer Reviewed Publication	European 6G Annual Journal
Scientific Peer Reviewed Publication	Frontiers in Space Technologies
Scientific Peer Reviewed Publication	IEEE Communications Magazine
Scientific Peer Reviewed Publication	IEEE International Journal of Satellite Communications and Networking
Scientific Peer Reviewed Publication	IEEE Transactions on Wireless Communications
Scientific Peer Reviewed Publication	IEEE Transactions on Aerospace and Electronic Systems
Scientific Peer Reviewed Publication	IEEE Transactions on Communications
Scientific Peer Reviewed Publication	IEEE Wireless Communication Magazine
Scientific Peer Reviewed Publication	IEEE Vehicular Technology Magazine
Scientific Peer Reviewed Publication	IEEE Network Magazine
Scientific Peer Reviewed Publication	IEEE Journal on Selected Areas in Communications
Scientific Peer Reviewed Publication	IEEE Communication Surveys & Tutorials
Scientific Peer Reviewed Publication	IEEE Wireless Communications Letters
Scientific Peer Reviewed Publication	IEEE Access

Together with the EU emblem, all 5G-STARDUST publications, as part of the SNS JU, should add the following disclaimer:

"Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them".

6 IMPACT ASSESSMENT

Throughout the project, close monitoring and updating of the 5G-STARDUST Communication and Dissemination Plan will be conducted to ensure the project's overall success. To accurately assess the impact and effectiveness of communication and distribution efforts, a set of Key Performance Indicators (KPIs) has been developed. Table 6 presents these KPIs, indicating their relevance to the tools and channels used, the target value, and the current status as of M05.

Tool/Activity	Indicators	Target	Status at M05
Website	Total visits (yearly)	1500	542
Social media	# followers (by project end) on Twitter # followers (by project end) on LinkedIn #visits to YouTube channel (by project end)	300 100 500	37 106 -
Press releases	#published press releases (by project end)	≥ 3	1
News items on the website	#published news items (yearly)	≥ 12	1
Newsletter	#newsletters sent out	6	0
Flyers/brochures **Posters/roll-ups**	#developed flyers/brochures (incl. digital brochures) #produced posters/roll-ups	3 ≥ 2	1 (+update) 1
Videos	#produced videos	≥ 4	0
Events (attendance, incl. Online events)	#attended events (by project end)	≥ 15	4
Events (organisation)	#organised events (by project end) #participants in each event	≥ 2 60+	0

7 CONCLUSIONS

As outlined in this report, the initial five months of the project have been highly demanding for the Dissemination and Communication team, as they focused on establishing processes and tools to drive communication activities across different media and regions. This document provides an overview of the planned promotional activities for the coming months, outlines the actions taken during the period from M1 to M5, and presents the initial strategy for communication, dissemination, and community development. It also highlights the role of the SNS JU and European Commission, two crucial partners in the execution of this programme.

This plan is designed to achieve the following objectives:

- Ensure that all outreach initiatives align with the provided guidelines and are executed according to the predetermined schedule.
- Maintain consistency and high quality in the messaging conveyed through various communication channels.
- Encourage active participation from all consortium members in promoting the project.

It is important to note that 5G-STARDUST's work aligns with various initiatives and the broader discourse on the technological and economic impacts of satellite and NTN technologies in Europe and beyond. Consequently, 5G-STARDUST will ensure that partners remain attentive to opportunities that contribute to this ongoing debate, utilizing the consortium's expertise and project outputs. To reach and engage a wider audience, including the media and the general public, a dedicated communication approach will be adopted, emphasizing the key messages.

The 1st interim Dissemination, Communication Report and Exploitation strategy scheduled for submission at M18 will provide comprehensive details on the progress of the Dissemination & Communication Plan, the achieved Key Performance Indicators (KPIs), the events attended and organized, and the effectiveness of online communication efforts.

APPENDIX A : PRESS RELEASE

Press release

February 2, 2023

5G-STARDUST Project Kicks-Off: Partners come together in Munich to design, develop and demonstrate a deeper integration of TN and NTN.

Providing connectivity to underserved areas and communities will be of critical importance in the upcoming decades. The Europe's Digital Decade plan from the European Commission expects all households to be covered by the Gigabit network and all populated areas covered by 5G by year 2030, with ensured offered data rate of at least 100 Mbit/s already by year 2025. In this perspective, the role and evolution of 5G is expected to deliver services to the overall society according to an anywhere, anytime, any device paradigm, and will therefore call for the design of a holistic communication platform integrating terrestrial and non-terrestrial networks.

5G-STARDUST's ambition is to deliver a fully integrated 5G-NTN autonomous system with novel self-adapting end-to-end connectivity models for enabling ubiquitous radio access.

To this aim, the project will design, develop, and demonstrate a flexible satellite system integrated with the terrestrial infrastructure by means of self-organised network architecture, and will deliver an innovative framework to support the operation of multi-orbit constellations, with transparent and regenerative space nodes, to deliver 5G/6G NTN services.

5G-STARDUST is among the first selected projects to be funded under Horizon Europe's European Smart Networks and Services Joint Undertaking (SNS JU), a public-private partnership that aims to enable the evolution of 5G ecosystems and promote 6G research in Europe.

 1

Who's in?

The 5G-STARDUST consortium is ideally assorted to effectively contribute to the integration of Satellite Communication (SatCom) into future terrestrial networks thanks to the strong and uniquely positioned satellite on board, terrestrial players and engaged actors in the 5G satellite and terrestrial scenes. Led by the German Aerospace Center (DLR), the partners include strong positioned satellite and ICT enterprises, namely Thales Alenia Space (France and Luxembourg), Orange and Hispasat; three dynamic SMEs, namely Software Radio Systems, Advanced Wireless Solutions and Services (AW2S) and Martel Innovate; and top academia and research institutions, namely Centre Tecnologic de Telecomunicacions de Catalunya, Consorzio Nazionale Italiano per le Telecomunicazioni, and Fraunhofer.

The work officially started on January 1st, 2023, and all partners met at the Kick-Off meeting held in Munich on January 24-25. The team is looking forward to working together and taking forward the 5G STARDUST ambitions and design, develop and demonstrate a deeper integration of TN and NTN.

Press Contact and Social Media

- E-mail | info@5g-stardust.eu
- Twitter | @5G_Stardust
- LinkedIn | https://www.linkedin.com/company/92466502/

Co-funded by the European Union 6GSNS

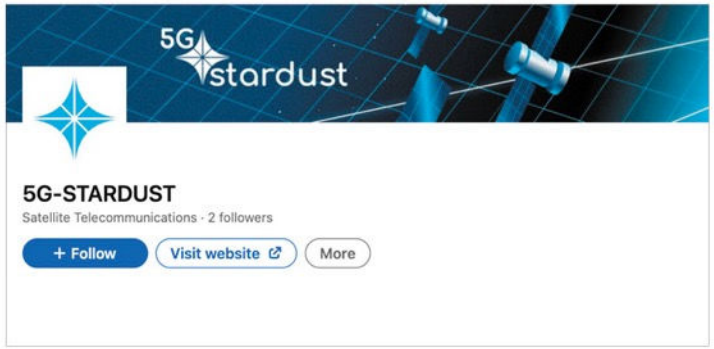
5G-STARDUST project has received funding from the Smart Networks and Services Joint Undertaking (SNS JU) under the European Union's Horizon Europe research and innovation programme under Grant Agreement No 101096573.
Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.

APPENDIX B: 5G-STARDUST BRAND GUIDELINES

What is a brand identity?

A brand identity allows you to recognize a consistent look and feel across all outlets (electronic and printed visual media). It defines how those who come into contact with the brand should perceive it and influences their opinion of the brand.
This document lists and explains the visual identity elements of 5G-STARDUST project. These are rules and values to help you create and compose visual designs using its identity.

Examples of 5G-STARDUST's brand identity across different outlets (Twitter and LinkedIn accounts):



Logo

Main version of the 5G-STARDUST logo with some basic recommendations.

Main version

Safe area

With added tagline

Icon version (for social media outlets)

Minimum size

2

Logo variations

The main logo is also provided in the variations depicted here below, to allow readability over dark backgrounds or for black and white printing purposes.

Greyscale version

Negative version

Black&White version

3

Dos and dont's

Basic instructions on how to use the main logo - and its variations - over different types of backgrounds.

Dos

Negative version on high contrasted background.

Main version on background assuring high contrast.

Don'ts

Not enough contrasted background.

Not enough contrasted background.

Corporate colours

A main palette of 2 colours based on the logo colour scheme.
In combination with the main colours palette, two more greyscale colours can be used.

For slide presentations and deliverables: the colour of standard elements has been defined and locked in the respective templates, as those documents are likely to be mainly edited outside design departments.

To change colours (icons or additional text), editors will find the corporate colour palette in the templates.

Palette of corporate colors

C100 M75 Y30 K14 R8 G73 B117 HEX #084975	C69 M10 Y0 K0 R25 G179 B232 HEX #19b3e8	C0 M0 Y0 K90 R51 G51 B51 HEX #333333	C41 M34 Y36 K1 R156 G155 B153 HEX #9C9B99

5

Font types

5G-STARDUST's brand uses Google Fonts' open source font Comfortaa for headings (Bold version) and Open Sans for body copy (Regular and Bold versions). This applies to the website and all other promotional materials.

For deliverables and presentations, the system font Arial (only Regular and Bold versions) should be used instead, to avoid missing font issues, as those documents are likely to be mainly edited outside design departments.

Headings
(website and all promotional materials)

Comfortaa bold
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz 1234567890

Alternative body copy and headings
(for deliverables and presentations)

Arial regular
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz 1234567890

Arial bold
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz 1234567890

Body copy
(website, other promotional materials)

Open Sans regular
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz 1234567890

Open Sans bold
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz 1234567890

6

EC Acknowledgement - Scientific publications/press releases/blogs/deliverables

For all the EC funded projects under Horizon Europe, it is not mandatory anymore to show the extended acknowledgement to the EC fund in all Dissemination & Communication materials.

However, the following disclaimer MUST be used, together with the EU flag and 6GSNS logo composition, in scientific publications/press releases/blogs/deliverables (which feature authors and in which opinions/comments/conclusions are stated). Project acronym and Grant Agreement number could be added at the top, in the format shown here below.

5G-STARDUST project has received funding from the Smart Networks and Services Joint Undertaking (SNS JU) under the European Union's Horizon Europe research and innovation programme under Grant Agreement No 101096573.

Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.

7

EC Acknowledgement - Promo materials

For merchandising or any other promo materials (bookmarks/roll-ups/flyers/posters/ brochures/presentations), which usually only contain information on vision/phases/ objectives, the disclaimer is not mandatory. However, **the combination of EU emblem + recognition and 6GSNS logo MUST be used, in the arrangements shown here below.**

All these assets will be available in the project repository.

Negative version

8

APPENDIX C: PROJECT SLIDE-DECK

Project Overview

Full name: *Satellite and Terrestrial Access for Distributed, Ubiquitous and Smart Telecommunications*

Stream: *A-01-02 Ubiquitous Radio Access*

Project Coordinator: *Tomaso De Cola, DLR*

Technical Manager: *Mathieu Arnaud, Thales Alenia Space (F)*

5G-STARDUST.EU © 2023-2025 5G-STARDUST 2

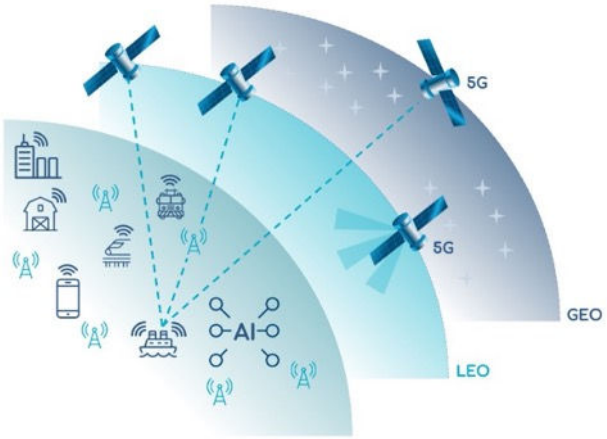
The Consortium

Co-funded by the European Union 6GSNS

Project Objectives

- Study, design, a **5G-based satellite network**, implementing onboard processing and storage capabilities towards effective networking and mobile computing in the sky.
- Define, design **data-driven management system components**, building on AI/ML based solutions for resource allocation and service provision in highly dynamic integrated hybrid networks.
- Design, implement, and demonstrate **E2E services over a fully integrated TN-NTN** advanced network architecture with regenerative space nodes.
- Contribute to the development of a **European Research and Technology roadmap** to ensure strategic positioning and global competitiveness of Europe in integrated TN-NTN communications.

KEY TECHNOLOGIES

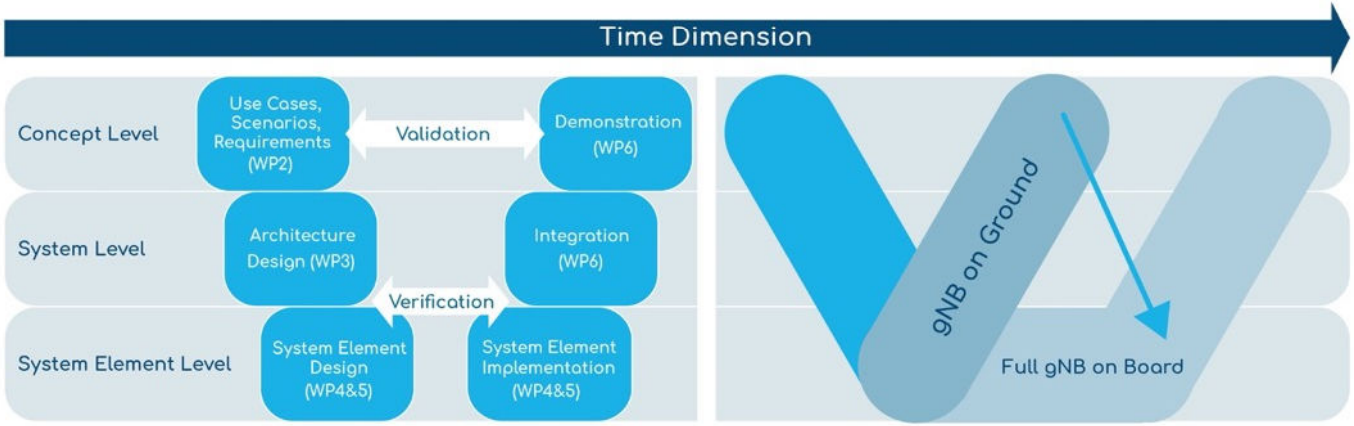


- *Regenerative payloads for GEO and NGSO systems*
- *Unified radio interface for cost-effective converged TN/NTN multi-tenant networks*
- *Softwarised self-organised network architecture*
- *E2E AI-Driven Network Design*

5G-STARDUST.EU © 2023-2025 5G-STARDUST 6

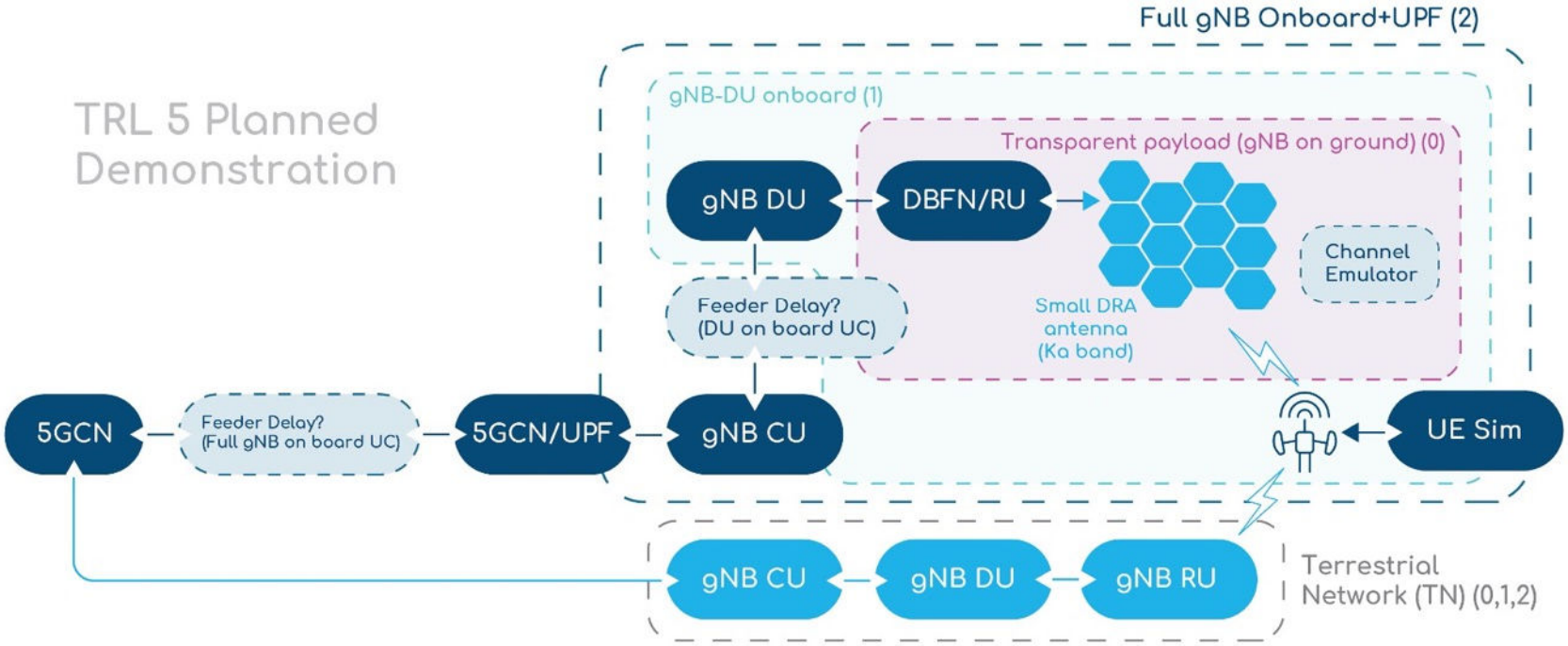
Project Methodology

- System engineering approach based on the Vee-model with multiple increments:
  - From gNB on ground towards full gNB onboard NTN nodes
  - Concept, System, and System Element Level



5G-STARDUST.EU © 2023-2025 5G-STARDUST 7

TRL 5 Planned Demonstration



Interaction with other SNS projects

5G-STARDUST.EU © 2023-2025 5G-STARDUST 9

GET IN TOUCH

Website
5g-stardust.eu

Email
info@5g-stardust.eu

Twitter
@5G_Stardust

Co-funded by the European Union

6GSNS

5G-STARDUST project has received funding from the Smart Networks and Services Joint Undertaking (SNS JU) under the European Union's Horizon Europe research and innovation programme under Grant Agreement No 101096573.