D2.1 PUBLIC ENGAGEMENT STRATEGY AND PLAN

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Abstract	This document outlines a proactive strategy to engage the public and promote acceptance of 6G technology through targeted communication and engagement initiatives. It examines current 5G communication strategies and public reactions during the COVID-19 pandemic, drawing insights from international case studies. Tailored approaches are proposed for different public attitudes towards technology, emphasizing transparency, dialogue, and data-driven insights from a Citizen Survey. The strategy aims to foster consensus and positive perceptions towards 6G technology through informed decision-making and inclusive engagement efforts.
Keywords	6G, 5G, society, acceptance, trust, transparency, public engagement, dialogue

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DISCLAIMER

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EXECUTIVE SUMMARY

The deliverable *D2.1: Public Engagement Strategy and Plan* outlines comprehensive approaches to address public concerns and foster acceptance of 6G technology through strategic communication and targeted engagement initiatives.

The learnings from what went wrong with 5G in terms of communication and acceptance have been analysed to identify what critical factors should be addressed from the very early stage of 6G technologies and solutions design and development. One of the key principles behind the 6G4Society project is to ensure early engagement of all relevant stakeholders and of the large public to drive research, development, regulatory and policy making efforts in a way that considers important societal and environmental aspects which are essential for a human-centric and sustainable development of our society and economy.

In this respect, this document first explores the **current landscape of 5G rollout and communication strategies**, examining public reactions amidst the backdrop of the COVID-19 pandemic.

Next, the document **categorises the public into five distinct groups**: the Uninformed, the Skeptical, the Supportive, the Engaged and Informed, and the Adverse. Each group requires tailored approaches to effectively address concerns and promote acceptance of upcoming 6G technology. Understanding these groups and their requirements allows for targeted communication strategies that resonate with their specific interests and concerns.

Central to the engagement strategy are **key principles of public engagement for emerging technologies and next-generation connectivity,** such as building trust, ensuring transparency, fostering dialogue through active listening and exchange, and acknowledging uncertainty inherent in emerging technologies. These principles underpin the development of core messages for communication and the implementation of an engagement matrix that targets diverse audiences through dedicated online and offline activities.

A cornerstone of the strategy is the development of a dedicated **Citizen Survey,** designed to gauge current perceptions and attitudes towards both 5G and 6G technologies. The survey aims to provide crucial insights that inform policy recommendations and contribute to refining the model for 6G Social Acceptance of Technology (SAT) – developed under the lead of Work Package 1, WP1. By integrating survey data into strategic planning and by aligning with findings and work done by other SNS JU projects and 6G-IA Working Groups, 6G4Society aims to mobilise, besides industry/SMEs, academia, regulators and policy makers, the public at large to achieve widespread acceptance of a human-centric and environmental-aware 6G. This will be done by close collaboration of WP2 with all other project's work packages.

In conclusion, the Public Engagement Strategy and Plan outlines a proactive approach to engage diverse stakeholders, address concerns, and foster informed decision-making regarding the introduction of 6G technology. Through transparent communication, targeted engagement initiatives, and data-driven insights, the main ambition is to build consensus and raise awareness towards 6G technologies and solutions. This will be done by aligning efforts also with other projects and initiatives at the SNS JU level and beyond.

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ABBREVIATIONS

4G	4th generation
5G	5th generation
6G	6th generation
D	Deliverable
EMF	Electric and Magnetic Fields
GSMA	Global System for Mobile Communications Association
IoT	Internet of Things
NIMBY	Not In My Backyard
SAT	Social Acceptance of Technology

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1 THE COMMUNICATION CONTEXT ON 5G

Before we can begin to analyse the appropriate approach to public engagement and communication regarding 6G, it is imperative to examine how 5G was communicated and the current context in which we find ourselves. Understanding the successes and shortcomings of 5G communication strategies, as well as the public's reception and the controversies that arose, will provide valuable insights, help us learn from past experiences and develop more effective methods for introducing and integrating 6G technology, ensuring clearer expectations and addressing potential concerns proactively.

1.1 THE CURRENT STATUS AND NARRATIVES ON 5G

The communication surrounding 5G technology was characterised by the promise to revolutionise various aspects of modern life, emphasizing several key benefits:

- **Increased Speed and Bandwidth**: 5G was marketed as providing significantly faster internet speeds compared to 4G, enabling seamless streaming, quicker downloads, and enhanced real-time communication.
- **Low Latency:** Promises of ultra-low latency were made, suggesting that 5G would be critical for applications requiring near-instantaneous data transmission, such as autonomous vehicles, remote surgeries, and real-time gaming.
- **Massive Connectivity:** The technology was touted as capable of supporting a massive number of connected devices simultaneously, paving the way for the Internet of Things (IoT) to flourish with smart homes, cities, and industries.
- **Economic and Social Transformation:** 5G was framed as a catalyst for economic growth, job creation, and social advancement, with potential applications in education, healthcare, manufacturing, and beyond.

Based on these premises, much of the communication originating from the technology providers, governmental establishments and related media, used terminologies such as “revolutionary”, “life changing”, “transformative”, and focused on all the things 5G could do that 4G could not.

In addition, it has also seen the spread of controversies, which have significantly influenced public perception and acceptance. These controversies include:

- **Health Concerns:** There has been public anxiety and debate over the potential health effects of 5G radiation, despite assurances from regulatory bodies and scientific communities that it is safe. Conspiracy theories linking 5G to various health issues, including COVID-19, have exacerbated these fears.
- **Security Issues:** The deployment of 5G has raised national and international security concerns, with fears of espionage and cyber-attacks leading to bans and restrictions on various companies in several countries.
- **Environmental Impact:** The environmental impact of deploying a vast number of 5G towers and small cells, as well as the increased energy consumption associated with maintaining 5G networks, has also been a point of contention among environmentalists.
- **Regulatory and Legal Challenges:** The rapid deployment of 5G infrastructure has sometimes clashed with local regulations and public opinion, leading to legal battles and delays. Issues related to property rights, aesthetic concerns, and local autonomy have been prominent in many areas.

1.2 THE ROLLOUT OF 5G IN 2020 AND BEYOND

The COVID-19 pandemic has intensified debates and incidents of vandalism targeting 5G infrastructure worldwide. The telecom industry lobby group GSMA recorded over 221 attacks across 18 countries, with the UK (87), France (50), and the Netherlands (30) being the most affected[1]. While these attacks are often attributed to conspiracy theories linking 5G to COVID-19, concerns about health, environmental impacts, and privacy issues are longstanding and more complex.

Protestors' main concerns included potential health risks from EMF (Electromagnetic fields) radiation, increased energy consumption and its environmental impact, visual blight from new antennas, and enhanced privacy and surveillance risks due to 5G's advanced data collection capabilities. These genuine apprehensions have driven protests and resistance against 5G, reflecting deeper issues beyond mere disinformation.

It is important to bear in mind that public concerns about the health, environmental, privacy, and economic impacts of mobile communications technologies date back many decades. Various citizens' groups, activists, and associations have long raised questions about the potential health risks from EMF radiation, negative effects on property values, visual blight from antennas, and lack of public consultation on infrastructure deployment.

1.3 ACKNOWLEDGING PUBLIC CONCERNS FOR EFFECTIVE COMMUNICATION

The 5G controversy in Europe underscores the need for more inclusive, transparent, and responsive governance of emerging technologies. The top-down, industry-driven approach to 5G deployment has sparked significant resistance from local communities who feel their concerns are ignored in favor of economic and technological progress.

To address these challenges, policymakers and industry leaders must develop new models of innovation governance that prioritise public engagement, scientific assessment, and local participation. This necessitates rethinking the balance between national and local authority and engaging with the legitimate concerns of citizens and communities.

A balanced perspective should acknowledge the problem of disinformation while recognizing the legitimate concerns driving grassroots opposition to 5G. Understanding the historical context of resistance to mobile infrastructure can inform efforts to develop more inclusive and democratic approaches to technological governance.

Further information on these issues and a more in-depth discussion will be found in the Deliverable 1.1 "Societal aspects in 6G Technology: concerns, acceptance models and sustainability indicators."

[1] https://www.politico.eu/article/eu-needs-plan-to-counter-anti-5g-movement-capitals-say/

2 THE PUBLIC

When engaging with the public on a controversial technology such as 5G and 6G, it's crucial to understand the various types of public and their attitudes towards the technology, in order to properly tailor the engagement approach for best results. Here are four key types of audiences that we chose to take into consideration for our strategy:

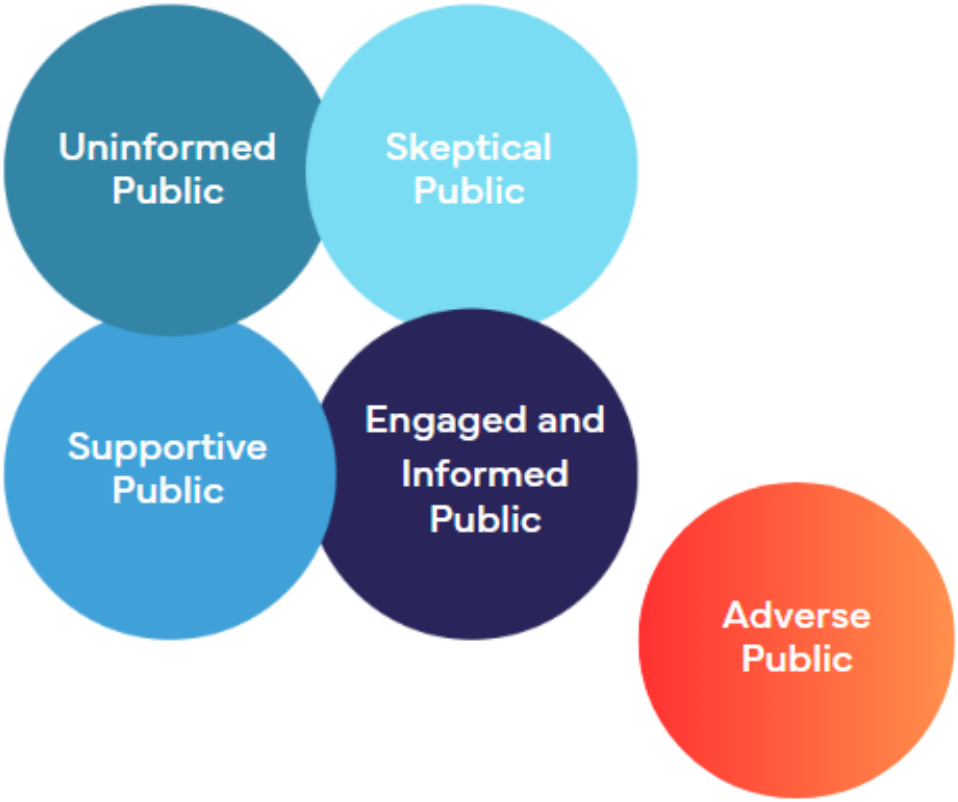

FIGURE 1: TYPES OF PUBLIC FOR 6G ENGAGEMENT

Uninformed Public

- **Characteristics**: Individuals who have limited knowledge or awareness of next-generation connectivity technologies and their implications. They may not actively seek information or engage in discussions about the controversial technology.
- **Approach:** Focus on primary education and awareness-building efforts through general media campaigns, introductory workshops, and easily accessible information resources. The goal is to raise awareness and spark initial interest in learning more about the technology.

Skeptical Public

- **Characteristics:** People who have doubts, reservations, or skepticism about the technology's benefits, safety, or ethical implications. They may be influenced by negative perceptions, misinformation, or concerns raised by advocacy groups or media coverage.
- **Approach:** Address concerns directly and transparently by providing evidence-based information, expert opinions, and factual data to counter misconceptions. Foster open

dialogue through public forums, Q&A sessions, and consultations to address specific concerns and build trust. Engage in spaces for active listening to ensure to properly tackle the roots of skepticism.

Supportive Public

- **Characteristics:** Individuals who are enthusiastic, optimistic, or supportive of the technology. They may see potential benefits in terms of innovation, economic growth, or societal advancement towards 6G.
- **Approach:** Acknowledge and amplify positive sentiments by showcasing success stories, highlighting potential benefits, and promoting opportunities for involvement or participation in pilot projects or trials. Encourage advocacy and positive word-of-mouth through social media campaigns and community endorsements.

Engaged and Informed Public

- **Characteristics**: Stakeholders who are well-informed, actively engaged, and interested in deeper discussions about the technology. They may include experts, policymakers, industry leaders, and informed community members.
- **Approach**: Facilitate in-depth conversations, expert panels, roundtable discussions, and stakeholder consultations. Provide platforms for knowledge-sharing, collaboration on research or policy development, and participation in decision-making processes. Foster a community of practice to exchange ideas, best practices, and lessons learned.

Adverse Public

- **Characteristics:** Individuals or groups who are actively opposed to next-generation connectivity technologies due to strong beliefs, perceived threats, or negative experiences. They may view the technology as harmful to health, privacy, the environment, or societal well-being. This public is often vocal and organised, leveraging advocacy groups, media outlets, or social networks to amplify their concerns and mobilise opposition.

This type of public does not fall under our sphere of action because our focus is on educating, informing, and engaging with those who are open to discussion and potential persuasion. Actively attempting to convince the adverse public often leads to entrenched positions and increased resistance, which can be counterproductive. Instead, our efforts are better directed towards citizens who are either uninformed, sceptical, supportive, or engaged, where constructive dialogue and positive outcomes are more achievable. The consortium is actively pursuing a better understanding of this issues for future work, even without direct contact.

By understanding these distinctions and adapting communication approaches accordingly, we aim to foster meaningful dialogue, build trust, and promote informed decision-making among diverse stakeholder groups. Effective engagement not only enhances transparency but also cultivates support and acceptance for the responsible development and deployment of 6G.

3 ENGAGEMENT STRATEGY AND PLAN

The engagement strategy and plan is outlined focusing first on:

- addressing uncertainty, misinformation and challenges to acceptance;
- the key messages derived from the identified key elements of communication;
- the four stages of the Engagement Matrix;
- the target audiences and respective approaches;
- the online and offline activities

3.1 ADDRESSING UNCERTAINTY, MISINFORMATION AND CHALLENGES TO ACCEPTANCE

When communicating to the public about an emerging technology like 6G, it is crucial to address the uncertainty and misinformation surrounding 5G, which present significant challenges to public acceptance. Misinformation about 5G, spanning health risks, security concerns, and environmental impacts, has deeply influenced public perception and trust. The main identified challenges to acceptance of 6G are:

- **The NIMBY effect (Not In My Backyard):** People may support 6G in general but resist its implementation near their homes due to concerns about health, environmental impact, or aesthetics. Addressing this requires transparent communication, demonstrating local benefits, and involving communities in planning.
- **Trust (in Institutions, Corporate Entities, etc.):** Erosion of trust in institutions due to past misinformation or unethical practices leads to skepticism. Rebuilding trust involves honest communication, third-party validations, ethical standards, and proactive public engagement.
- **Values (Technology Respects and Reflects My Values or Societal Values):** 6G must align with personal and societal values such as sustainability, equity, and social justice. This requires value-driven design, public input, and ensuring 6G promotes inclusivity and ethical use.
- **Acceptance Follows Unpredictable Dynamics:** Public acceptance is influenced by cultural shifts, media narratives, and political changes, which can quickly alter opinions. Effective strategies include agile communication, monitoring public sentiment, and swiftly addressing concerns or leveraging positive developments.

Misinformation and uncertainty often stem from pre-existing fears, individualistic perceptions and social desires, often not evidence-based, and are reinforced through social interactions and channels, making them resistant to factual correction alone. Therefore, effective communication must emphasise several key principles:

- **Build Trust and Transparency.** Establishing trust through transparent communication about 6G technology is essential and needs to be the foundation of the engagement approach. This includes openly discussing both the benefits and potential risks, and outlining the measures in place to mitigate those risks. Avoiding *"fact-bombing"* and focusing on the values of the population to build a real connection with the public.
- **Have a conversation, not an argument:** Public Engagement and Dialogue. Structuring conversations about 6G technology as constructive dialogues rather than debates or

arguments fosters understanding and collaboration. Organised discussions often lead to increased support for policies and initiatives addressing technological risks and benefits. Engaging stakeholders, including scientists, healthcare professionals, environmentalists, and community leaders, helps validate information and enhance credibility. Structured discussions and forums allow for meaningful dialogue, addressing concerns and fostering understanding.

- **Start with what you know, then what you don't know:** Acknowledging Uncertainty. Recognizing and openly discussing uncertainties associated with emerging technologies like 6G is crucial. It involves communicating what is known, what is still being studied, and how decisions are made in the face of uncertainty.
- **Addressing Conflicting Messages.** Addressing conflicting information by providing clear, consistent messaging is vital. This involves countering false claims promptly with evidence-based responses, and avoiding false balance between scientifically supported views and fringe opinions.
- **Demographic, Cultural and Social Context.** Recognizing that communication about controversial technologies operates within specific demographic, socio-historical and cultural contexts is essential. Tailoring communication strategies to local beliefs, values, and concerns can improve resonance and acceptance.
- **Telling stories to build connections.** Story-telling is a powerful method to foster connections and illustrate the relevance of 6G technology in people's daily lives. Effective communication about 6G must go beyond technical jargon and statistics; it requires engaging language and relatable narratives that resonate with the audience. By crafting stories that highlight real-life scenarios, we can make the technology more tangible.

Effective communication about 6G must navigate uncertainty and misinformation by prioritizing **trust, transparency, public engagement**, and **dialogue**. By addressing these principles, stakeholders can build a more informed and supportive environment for the adoption and integration of emerging technologies.

3.2 KEY MESSAGES

Aligned with key principles of communication and engagement, the 6G4Society project aims to effectively convey the following essential messages:

1. **Explain Clearly and Objectively What is 6G:** Serve as a reliable source of easy-to-understand information about 6G technology, objectively explaining its potentials, positives, and negatives.
2. **Trust in Credible Sources and Transparency:** Emphasise transparency and build trust by relying on sources with scientific credibility when discussing 6G technology. Provide clear, evidence-based information about 6G and address potential risks openly.
3. **Constructive dialogue and understanding between the public, the scientific community, technology providers, and policymakers:** Promote open dialogues among diverse stakeholders, including scientists, experts, and community leaders, to deepen understanding of 6G's implications. Encourage collaboration and informed discussions to address concerns and foster broad public support.
4. **Acknowledge Uncertainty and Informed Decision-Making:** Acknowledge uncertainties associated with 6G and emphasise the importance of informed decision-making based on scientific insights. Provide clear explanations of ongoing research, potential impacts, and decision criteria to empower public understanding and participation.

3.3 ENGAGEMENT MATRIX

The 6G4Society project aims at facilitating communication and dialogue with the population about 6G. Given that the objective of the project is not to promote 6G, but rather focus on the acceptance and fostering dialogues, the 6G4Society engagement matrix is a visual representation of how we aim to progressively engage the public through **four distinct stages**.

FIGURE 2: 6G4SOCIETY PUBLIC ENGAGEMENT MATRIX

Awareness, exploration and introduction

- **Objective:** Introduce the public to the 6G4Society project and the concept and potential of 6G technology.
- **Strategies:**
  - **Awareness Campaigns:** Launch targeted campaigns across various media to raise awareness about 6G4Society's objectives.
  - **Expert Insights:** Provide thought leadership articles and interviews to explain the implications and benefits of 6G.
  - **Provide accessible knowledge:** Create easy-to-understand explanatory material, such as videos and infographics, about 6G.

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Building Trust

- **Objective:** Establish trust and credibility regarding the information communicated about 6G technology and the sources of information
- **Strategies:**
  - **Transparency approach and initiatives:** Communicate openly about the development, safety measures, and potential risks associated with 6G.
  - **Expert Insights:** Leverage endorsements from trusted experts and institutions to validate the information diffused about 6G.
  - **Case Studies:** Share success stories and real-world applications of 6G to illustrate its practical use cases.

Community and dialogue building

- **Objective:** Foster Foster open dialogue, address skepticism, and encourage active engagement.
- **Strategies:**
  - **Citizen Survey:** The Citizen Survey is aimed at engaging the population on their experience with 5G and their thoughts regarding the future of 6G. It aims to initiate dialogue and debates and give the population some food-for-thought as an interactive tool for communication with a wider spectrum. The Survey also acts as a structured feedback loop to gather public input, address misconceptions promptly, and adapt communication strategies based on community feedback.
  - **Community Forums:** Host town hall meetings, online forums, and interactive sessions where the population can voice concerns, ask questions, and participate in discussions.
  - **Expert Panels:** Convene diverse panels to discuss the potential societal impacts, ethical considerations, and future implications of 6G technology.
  - **Influencer engagement:** Engage with media outlets and policy makers to help echo the messages of the project and reach a wider audience.
  - **Local Relevance:** Tailor communication efforts to resonate with local values, priorities, and cultural contexts, demonstrating how 6G can address specific community needs and challenges.

Empowerment and implementation

- **Objective:** Enable stakeholders to take informed actions, promote constructive dialogue and empower informed decision-making processes.
- **Strategies:**
  - **Education and Resources:** Provide comprehensive Information Package, serving as a toolkit for easy-to-access information, applications, data from the population and answers to concerns on 6G technology.

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- **Partnerships and Alliances:** Collaborate with industry partners, academia, and local communities to co-create solutions and initiatives leveraging 6G.

3.4 TARGET AUDIENCES

The 6G4Society project aims to engage a diverse range of target audiences to facilitate understanding, foster dialogue, and promote informed decision-making regarding 6G technology.

General Public: Youth

- **Objective:** Inspire curiosity and interest in 6G technology among the younger generation.
- **Strategies:**
  - **Educational Campaigns:** Develop engaging content tailored to the interests and digital literacy of youth.
  - **Digital Platforms:** Utilise social media and online channels to disseminate accessible and visually appealing information about 6G.
  - **Youth Ambassadors:** Empower young advocates to share their perspectives and encourage peer-to-peer learning.
  - **Workshops:** Organise interactive workshops within schools and universities to stimulate dialogues and information sharing.

General Public: Adults and Elderly

- **Objective:** Provide clear and relevant information about 6G and implications for everyday life.
- **Strategies:**
  - **Public Awareness Campaigns:** Launch multimedia campaigns targeting adults through dedicated channels.
  - **Community Workshops:** Organise informative sessions in community centers and to discuss 6G in practical terms.
  - **Accessibility:** Ensure information is presented in plain language and accessible formats for elderly audiences.
  - **Local Engagement:** Partner with consumers' associations, neighborhood associations and senior groups to address specific concerns and interests related to 6G.

Influencers: Media

- **Objective:** Shape accurate and balanced media coverage of 6G technology.
- **Strategies:**
  - **Expert Interviews:** Provide access to credible experts and researchers for in-depth discussions on technical advancements and societal impacts.

- **Local media engagement:** Build relationships with local media outlets to reach a wider audience and contribute to the narrative surrounding 6G and next-generation connectivity.

Influencers: Policymakers

- **Objective:** Inform policymakers about the opportunities and challenges of integrating 6G into national and local policies.
- **Strategies:**
  - **Policy Workshops:** Organise workshops and roundtable discussions to explore regulatory frameworks and policy implications of 6G.
  - **Policy Briefs:** Produce concise and evidence-based briefs outlining the economic, social, and technological benefits of 6G.
  - **Engagement Platforms:** Create platforms for policymakers to interact with industry leaders, researchers, and community stakeholders.
  - **Advocacy Campaigns:** Advocate for supportive policies through alliances with think tanks, industry associations, and advocacy groups.

By strategically targeting these diverse audiences—youth, adults and elderly, media influencers, and policymakers—the 6G4Society project aims to foster broad understanding, promote constructive dialogue, and empower informed decision-making regarding the future adoption and integration of 6G technology. This approach ensures that stakeholders across society are equipped with the knowledge and resources necessary to embrace 6G's potential while addressing its societal impacts responsibly.

3.5 ONLINE AND OFFLINE ACTIVITIES

Among the mentioned activities, below are some key strategic online and offline activities that have been implemented so far and others that will be rolled-out within the next few months.

3.5.1 Offline activities

Educational Workshops and Seminars

Description: Organise interactive workshops and seminars in schools, colleges, and youth centers to educate young people about 6G. Include hands-on activities, demonstrations, and discussions on how 6G can impact future careers and daily life. For youth engagement, we aim to engage young people of consent age, therefore not minors, and have tools set up to appropriately ensure protection and consent processes.

- On the 28th of May 2024, the first 6G4Society workshop "**Crea il futuro del 6G"** with the youth was organised in Rome, involving university students. The workshop served as a first piloting interaction with the youth to start building a dialogue on the topic of 6G and its implications on society. Within the workshop, we first
  - introduced the project;
  - gave a brief yet extensive introduction on what is 5G and what is 6G;

- presented the Citizen Survey and encouraged the students to fill it in to start thinking about their perception on the 6G technology;
- engaged the participants in an interactive activity, asking them to debate on various questions related to 6G and connectivity.

FIGURE 3: YOUTH ENGAGEMENT WORKSHOP IN ROME

Citizen Forums and Town Halls

Description: Host regular forums and town hall meetings in community centers and public venues to discuss 6G technology, its implications, and address public concerns. Encourage participation from local residents, providing a platform for open dialogue and feedback.

Policy Workshops and Expert Roundtables

Description: Host policy-focused workshops and expert roundtable discussions with policymakers, industry experts, and stakeholders. Discuss regulatory frameworks, economic benefits, and ethical considerations of 6G technology integration into public policies.

- On the 4th of June 2024, an expert panel was organised within the context of the *EuCNC and 6G Summit 2024,* . The Special Session **"Towards a sustainable and socially accepted 6G for society"** reunited representatives from the European Commission and experts from industries, academia and social science, to engage in an informative discussion and debate.

FIGURE 4: EUCNC & 6G SUMMIT PANEL DISCUSSION

- On the 4th and 5th of June, 6G4Society was presented in Vienna at **the Public Safety Communication Europe (PSCE) Spring Conference** and we had the possibility to engage in interesting exchanges with representatives from industries focusing on the expectations from 6G following the outcomes of the roll-out of 5G, the changes in 6G demand across sectors (e.g. the relevance of 6G across sectors and industries) and how the project is trying to gather more data on the social acceptance of technologies among the general population.

FIGURE 5: PSCE CONFERENCE

- Project partner Digital for Planet attended the **ESEE-Degrowth 2024 Conference** held in Pontevedra, Spain, from 18–21 June 2024. Titled '**Science, Technology, and Innovation beyond Growth: Cultivating Collective Creativity for a Sustainable Future',** the event focused on advancing **human** and **environmental well-being**, promoting cooperation, democracy, inclusiveness, and transparency. During the Conference, the 6G4Society project and the Citizen Survey were presented via the promotional material to engage with the audience.

FIGURE 6: PONTEVEDRA ESEE-DEGROWTH 2024 CONFERENCE

3.5.2 Online activities

Youth Engagement on Instagram

Description: Launch interactive campaigns on the 6G4Society Instagram channel (**@6g4society_eu**) using stories, polls, and interactive quizzes to engage young audiences with 6G topics. Share user-generated content and success stories to inspire interest and creativity. Engage scientific and youth-oriented influencers to co-create content and reach a wider audience.

FIGURE 7: 6G4SOCIETY INSTAGRAM CHANNEL

Facebook and LinkedIn groups for Community Dialogue

Description: Join dedicated Facebook and LinkedIn groups where adults engage in discussions, ask questions, and share experiences related to 6G. Encourage peer-to-peer support and knowledge exchange, facilitated by regular posts, articles, and expert insights.

Twitter Chats with Media Influencers

Description: Organise Twitter chats with journalists and media influencers to discuss key developments and debunk myths surrounding 6G technology. Use hashtags to promote the chats and encourage real-time engagement and debate.

By implementing a mix of offline and online activities tailored to specific target audiences, the 6G4Society project aims to maximise engagement, foster dialogue, and promote informed decision-making regarding 6G technology. These activities not only educate and empower stakeholders across generations but also ensure inclusive participation and constructive feedback, driving towards a more informed and supportive adoption of 6G technology in society.

4 CITIZEN SURVEY

The 6G4Society Citizen Survey has been designed to capture a wide range of insights from the public about their experience with the rollout of 5G and their concerns and/or expectations for 6G, including insights about their everyday use of wireless technology to their thoughts about its potential impact in the future.

The Survey has been officially launched on the 15th of May 2024 and it is available in **8 languages** (English, French, Italian, Spanish, German, Greek, Russian, Hungarian and Portugues) – notice the choice of the languages was related to more immediate capacity to translate from English to others, according to the native speakers across the consortium. Other languages might come – we are evaluating the translation costs, but also what would be the costs for the project to possibly run campaigns in the various languages.

An alternative we are exploring is to engage other SNS JU projects in providing support to engage the audience in various other countries

The survey

The Survey has been developed with the collaboration of the whole consortium, with the aim of developing a short yet comprehensive set of questions that would be able to give valuable insights into the perception of the public, at this early stage of the 6G history, while paying attention not to steer the opinions or bias the responses in any way. It has been crucial to pose the questions in as much of a neutral way as possible, shading light on both the potential benefits and drawbacks of the technology, trying to stimulate the thinking process among the participants.

Some of the key questions are provided hereby:

- *What was your experience with the integration of 5G into your mobile device?*
- *With the anticipated launch of 6G promising faster speeds and wider connectivity, what are your thoughts on the potential impact this technology could have on the spread of disinformation and its influence on democratic processes between now and 2030?*
- *In your own words, how do you feel about 5G/6G?*

The survey will be subject to edits and updates based on the developments of the project, its research findings and general feedback from the participants.

As of end of June 2024, the survey counts 206 responses, with the goal of obtaining 1000 responses by the first quarter of 2025.

Survey landing page

The Citizen Survey's primary access point is through the dedicated landing page hosted on the 6G4Society website at 6g4society.eu/citizen-survey. Designed to be engaging and captivating, the page offers a comprehensive overview of the survey's purpose and significance. It invites visitors to participate by clearly outlining the survey's objectives, emphasizing the importance of public input in shaping the future of 6G technology. The page strives to be informative yet accessible, encouraging broad participation by highlighting how individual contributions can influence decisions surrounding 6G's development and integration into society.

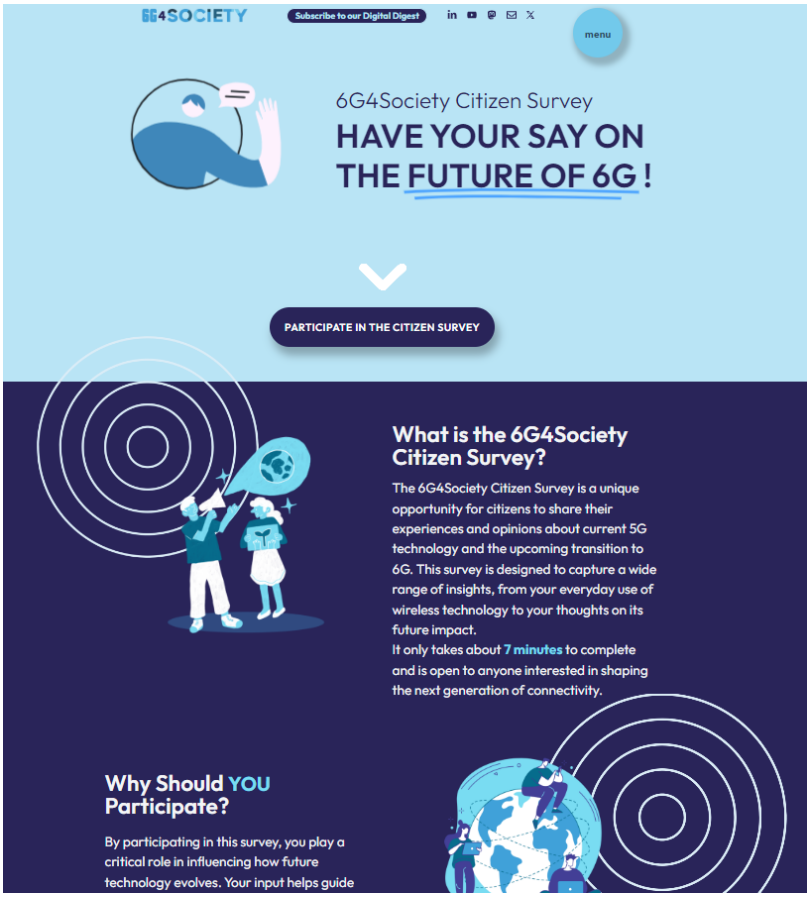

FIGURE 8: CITIZEN SURVEY LANDING PAGE

Online promotion

The survey is being promoted on all 6G4Society online channels including LinkedIn, Twitter and Instagram, through both organic and paid activities. Targeted citizen groups have been identified to better funnel the promotional efforts, also focusing on local and language-specific groups, based on the languages the survey is available in.

FIGURE 9: CITIZEN SURVEY ONLINE PROMOTION

Offline promotion

Various promotional materials and activities have been developed and planned for the promotion of the Citizen Survey.

The survey has been promoted at all in-person events in which we took part, especially via a dedicated QR code redirecting to the survey web page.

Materials promoting the survey include:

- Stickers with QR code
- Flyers
- Posters

FIGURE 10: CITIZEN SURVEY PROMOTIONAL MATERIALS

4.1 SURVEY DATA ANALYSIS, VISUALIZATION AND INFORMATION PACKAGE

Once a substantial number of responses have been gathered (about half of the expected target), the survey data will undergo rigorous analysis to extract meaningful insights. These findings will be meticulously curated into visually appealing and easily understandable formats, including:

- **Factsheets and Presentations:** Developing informative materials and presentations that showcase survey findings in a clear and concise manner for stakeholders and the general public.
- **Promotional Material:** Utilizing key survey results in outreach campaigns to highlight public interest and concerns regarding 6G technology.
- **Information Package:** Enhancing the comprehensive information package with updated insights and statistics derived from the survey responses.

Moreover, these insights will serve as foundational data for other critical components within the project, including:

- **Model for Social Acceptance of Technology (SAT)**
- **Policy Recommendations:** Informing policy advice and recommendations by identifying and addressing public attitudes, concerns, and aspirations regarding 6G.

By integrating these survey findings into various project activities, the initiative aims to foster informed decision-making and policy development that aligns with societal expectations and enhances public trust in 6G technology. This comprehensive approach ensures that the survey not only gathers insights but also translates them into actionable steps that drive meaningful advancements in the field.

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5 EXTERNAL COLLABORATIONS AND LIAISONS

5.1 LIAISONS WITH THE SNS-JU

6G4Society is dedicated to engaging with stakeholders such as policymakers, financing bodies, standardization organizations, and open-source groups to ensure comprehensive coverage of perspectives. Collaboration with SNS projects and their members, the SNS JU Office, the SNS JU Governing Board, and the 6G Smart Networks and Services Industry Association (6G-IA) will facilitate knowledge exchange and coordination efforts. By leveraging existing work and establishing proper coordination, 6G4S aims to identify links with international and European authorities, committees, and working groups on issues of acceptability, inclusiveness, security, and sustainability of next-generation smart networks and services.

Additionally, the project will scout strategic initiatives to build synergies and explore opportunities for collaboration. Priority targets include running and future SNS projects under streams A, B, C, and D, with a focus on validating the Technology Acceptance Model, engaging stakeholders, and addressing cross-cutting topics such as KVIs and Key Sustainability Indicators (KSIs). Furthermore, 6G4Society will position itself within relevant Working Groups (WGs), proposing the establishment of new groups if necessary, to contribute to discussions and share insights on technology acceptance models and sustainability indicators for 6G technology.

Leveraging Activities of other SNS Projects

At the Public engagement level, the project aims to leverage activities planned by other SNS projects to maximize outreach and impact. This includes echoing the project activities such as the Citizen Survey, the public engagement and community outreach. This approach ensures that the project activities and stakeholders reach a broad audience, enhancing data collection and expert engagement.

A planned coordinated workshop will be organized in collaboration with the HEXA-X-II project, aimed to facilitate knowledge exchange, foster innovative ideas, and promote collaboration on common themes related to the sustainable implementation of 6G.

Coordination and Collaboration with SNS and IG-IA Working Groups

Effective coordination and collaboration with other SNS and 6G-IA Working Groups (WGs) and sub-WGs is vital for aligning efforts and sharing knowledge. 6G4Society will actively engage with these groups to ensure cohesive progress towards common goals. The targeted groups include:

- 6G-IA SNVC SG (Societal needs and value-creation sub-group)
- 6G-IA TMV KVI SG (Test, Measurement, and KPIs Validation Key Value Indicators sub-group)
- 6G-IA Vertical Task Force

By participating in these WGs we aim to contribute to the broader SNS objectives and integrate insights from various projects and experts.

SNS Task Forces

Among others, the SNS JU has established two critical task forces that 6G4Society actively participates in: the **Communication Task Force** and the **Sustainability Task Force.**

- **Communication Task Force:** This task force groups all Communication Managers from the SNS JU projects. This community is leveraged to network, stay updated with communication plans of other SNS projects, and promote relevant activities such as workshops or the citizens' survey.
- **Sustainability Task Force**: This task force aligns all SNS projects working on sustainability and Key Value Indicators (KVIs). By engaging with this task force, 6G4Society collaborates with other projects to on how to ensure that sustainability considerations are integrated into project activities and that best practices are shared across the SNS JU network.

Alignment with National and International 6G Initiatives

Aligning with national and international 6G initiatives is essential for reaching a broader audience and enhancing public engagement. 6G4Society will actively seek collaborations with these initiatives to ensure more direct access to the public in various countries. This alignment will help in disseminating information, gathering public feedback, and fostering a global understanding of 6G technology and its implications.

5.2 RELEVANT EU POLICY CONTEXT AND RELATING PROJECT'S ENDEAVOURS

6G4Society operates within a comprehensive framework of EU regulations, policies, initiatives and such like (hereinafter, EU policy context) aimed at fostering the development of next-generation SNSs. The project's alignment with applicable EU policy context ensures that its goals of inclusiveness, security, sustainability, and broad stakeholder engagement are met effectively. The sub-section first outlines the most relevant EU policy context (*5.2.1*) and then highlights the project's efforts in line with EU policy context (*5.2.2*).

5.2.1 Key EU regulatory policies and initiatives

European Green Deal

The European Green Deal strives for a sustainable and climate-neutral Europe by 2050.

Digital Decade Policy Programme 2030

Europe's Digital Decade sets out the EU's targets for the digital for 2030, focusing on connectivity, digital skills, digital public services, and the digital transformation of businesses, and, among others, directly targeting energy consumption reduction with lower energy/high-rate connectivity solutions.

State of the European Union speech of 2020

State of the European Union speech of 2020 identifies 6G as reliable, broadband connectivity and as key driver for **European digital sovereignty**.

White Paper "How to master Europe's digital infrastructure needs?"

The Commission's White Paper *How to master Europe's digital infrastructure needs? Outlines* a number of key technological challenges and strategic areas, including connectivity.

Common Foreign Security Policy

EU Common Foreign Security Policy (CFSP) lists, among many other things, **key enabling technologies of the EU**.

Action Plan for civil, defence, and space industries synergy

The 2021 Action Plan for civil, defence, and space industries synergy, is devised against the background that, for the first time, EU funding presents opportunities to **reinforce European innovation** by exploring and exploiting the **disruptive potential of technologies** at the interface between defence, space and civil uses, such as cloud, processors, cyber, quantum and artificial intelligence.

Security Union Strategy

The 2020 Security Union Strategy focuses on priority areas where the EU can bring value to support Member States in fostering security for all those living in Europe, thus also focusing on **critical infrastructure resilience** and advancing research and innovation.

Strategic Planning and Coordination with the Smart Networks and Services Joint Undertaking (SNS JU)

The SNS JU, a public-private partnership, supports EU leadership in 6G.

Next Generation EU Recovery Plan

NextGenerationEU is a €806.9 billion[2] plan to support member states in recovering from the COVID-19 pandemic, with a significant emphasis on (i) fighting climate change, with 30% of the EU funds, the highest share ever of the European budget, (ii) on fair climate and digital transitions, via the Just Transition Fund and the Digital Europe Programme, mentioned just above, and (iii) on research and innovation, via Horizon Europe (see below).

Horizon Europe

Horizon Europe is the EU's key funding programme for research and innovation.

5.2.2 Project's alignment, participation, and contribution

At the outset, the project's goals fully align with the above Horizon Europe programme's priorities, particularly in areas such as digital and industry, which support technological advancements and the green and digital transitions. Regarding EU policy context, here is a summary of 6G4Society's endeavours in terms of each instrument listed above.

6G4Society's focus on Key Sustainability Indicators (KSIs) aligns with the Green Deal's objectives by ensuring that 6G networks contribute to **environmental sustainability**. Regarding the Digital Decade, our project supports its targets by promoting the development

[2] This figure is in current prices. It amounts to €750 billion in 2018 prices. https://commission.europa.eu/strategy-and-policy/recovery-plan-europe_en

and acceptance of **6G technologies** and ensuring they are **sustainable, inclusive and secure**. More specifically, 6G4Society contributes to the European Commission's priority of establishing secure, resilient, performant, and sustainable digital infrastructures, as per Article 4 of the Digital Decade, touching upon the Commission's priority '**A Europe Fit for the Digital Age**', fostering **innovation** and increasing **resource-use efficiency**.

Our project's collaboration with SNS JU projects, the Governing Board, and the Industry Association (6G-IA) ensures alignment with the **broader EU strategy for smart networks and services**.

The project aligns with three out of four key areas (all four are: Skills, Infrastructures, Business, Government) highlighted in EU Digital Compass for the 2030 Digital Decade Initiative, namely:

1. *Skills:* 6G4Society seeks to foster digitally-skilled, and, in particular, 6G-skilled citizens and highly skilled 6G professionals;
2. *Infrastructures:* 6G4Society aims to promote secure, performant, and sustainable 6G infrastructure; and
3. *Business:* 6G4Society contributes to the sustainable digital transformation of businesses.

6G4Society contributes, both directly and indirectly, to the **competitiveness of the European Union's technology ecosystem**, in line with the priorities outlined in the State of the European Union speech of 2020, identifying 6G and reliable, broadband connectivity as key driver for **European digital sovereignty**. The project also directly addresses a number of key technological challenges outlined in the Commission's White Paper *How to master Europe's digital infrastructure needs?*, with particular reference to 6G networks and non-terrestrial networks integration.

The project also contributes to the 6G development endeavour, which listed among the **key enabling technologies** by the CFSP and to the definition of a 6G standard, which in turn is in line with the general Commission's efforts on standardisation. 6G4Society is in line with the 2021 Action Plan for civil, defence, and space industries synergy, highlighting the NTN importance. Finally, and importantly, it aligns with the 2020 Security Union Strategy, focusing on critical infrastructure resilience and advancing research and innovation.

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6 CONCLUSIONS

In reflecting on the Public Engagement Strategy and Plan, it becomes evident that understanding how 5G was introduced and received by the public provides valuable insights for shaping effective engagement strategies and help define a comprehensive and effective Technology Acceptance Model for 6G. The experience with the rollout of 5G underscored the importance of clear communication and proactive engagement with diverse stakeholders.

It is imperative to recognise that perceptions of emerging technologies such as 6G, are shaped not only by their potential benefits but also by public concerns and apprehensions. Embedding dialogue, trust, and transparency in all activities is crucial to fostering acceptance. By actively listening to and genuinely addressing public concerns, the 6G4Society consortium can help build mutual understanding and trust.

Transparent communication, underpinned by evidence-based insights and targeted engagement initiatives, serves as a bridge between stakeholders. This approach facilitates informed decision-making that aligns with societal expectations and values. Moreover, it cultivates support for the responsible development and deployment of 6G technology, ensuring that it meets both technological advancements and public needs.

Regarding project's activities in the context of most vital EU policies, developed in sub-section 5.2 above, 6G4Society is deeply integrated within the most critical EU policy context aimed at advancing secure and inclusive digital transformation and sustainability. By engaging with a broad range of stakeholders and aligning with strategic EU programmes and initiatives, 6G4Society ensures that the development of 6G technology is inclusive, secure, and sustainable, supporting the EU's broader objectives for a green and digital future, and for Europe's globally leading role in it.

Moving forward, the strategy aims to enhance public engagement efforts through continuous dialogue, stakeholder consultations, and the integration of citizen feedback. By leveraging data-driven insights from surveys and engagement activities, the plan seeks to bridge the gap between technological innovation and societal acceptance. This proactive approach not only fosters support for 6G but also lays the foundation for its successful integration into communities worldwide.

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