6G4SOCIETY

FOSTERING INCREASED COLLABORATION BETWEEN EU AND JAPAN TO ADDRESS 6G SOCIETAL AND SUSTAINABILITY CHALLENGES

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664 SOCIETY

6G4SOCIETY is an SNS JU project that supports and promotes the integration of societal, environmental, and economic values in 6G, ensuring its design, development, and adoption contribute to a sustainable future.

- → A Coordination and Support Action Jan 2024/Dec 2025
- → 6 Partners from 6 Different Countries















THE 6G4SOCIETY OBJECTIVES

- 1. Foster public understanding and shared knowledge of the factors influencing 6G acceptance.
- 2. Develop a unified consensus framework for 6G based on sustainable, and ethical values.
- 3. Proactively engage with the public to understand and foster social acceptance of 6G.
- 4. Propose the Social Acceptance of Technology (SAT) to analyse social acceptance in the 6G context
- 5. Define and promote the use of a **common set of Key Value Indicators** (KVIs) for 6G
- 6. Contribute to policy and standardization efforts at the European and potentially global levels

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A MULTI-STAKEHOLDER & MULTI-DISCIPLINARY APPROACH



664SOCIETY

- · Public position on 6G
- · Multi-lingual Information package - video / flyers
- · Technology Acceptance Model
- Key Value Indicators
- · Policy briefs

- · Liaisons and collaborations
- · Expert panel/Joint webinars
- · Input to State Representatives

Models &

Models &

WHICH REQUIRES INTERNATIONAL COLLABORATION BETWEEN MAJOR PLAYERS AND COUNTRIES AT GLOBAL LEVEL



Feed

- · Citizen survey
- · Digital engagement
- · Co-creative workshops

Feed

- · Technology innovations
- Policy and Regulations
- Ethics and governance
- Sustainability
- · Societal impact

- · Community involvement
- · Contributions to SNS JU WGs
- Contributions to 6G-IA WGs





SOCIETAL ASPECTS IN 6G TECHNOLOGY: CONCERNS, ACCEPTANCE MODEL AND KEY VAUE INDICATORS

SOCIETAL ASPECTS AND ACCEPTANCE MODEL





A MULTI-FACETED METHODOLOGY



implications of
hyperconnectivity and
immersive
communication from a
sociological point of view

Analysis of social acceptance controversies, mainly as consequence of governance issues and some times of mis/dis-information

Social Acceptance of Technology (SAT) model, customised for 6G and based on analytical aspects:

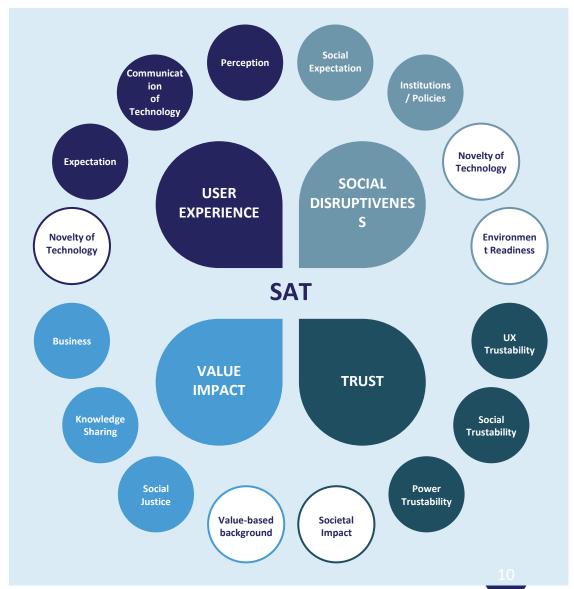
- Social disruptiveness
- Value dimension
- Trust
- <u>UX</u>

Mapping of values, policy and work done so far on 6G design to converge to a set of standards Key Value Indicators (KVIs), including a sub-set of Key Sustainability Indicators (KSIs)

SOCIAL ACCEPTANCE OF TECHNOLOGY FRAMEWORK

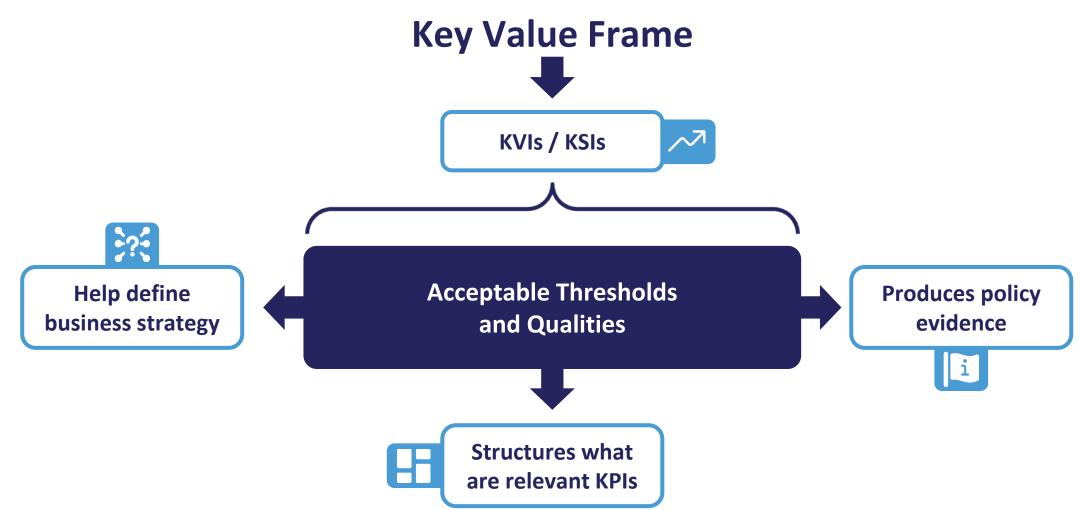


- 6G and SUSTAINABILITY HOW TOGETHER?
 - Sustainable Development Goals
 - Policy drivers, e.g. the EU Green Deal
 - 6G community tech-biased definitions
- ➤ 6G4Society analyses ACCEPTANCE across four dimensions:
 - SOCIAL DISRUPTIVENESS
 - VALUE IMPACT
 - USER EXPERIENCE
 - TRUST
- Read more in deliverable <u>D1.1 Societal</u> aspects in 6G Technology



BUILDING A SUSTAINABILITY VALUE FRAME







Public and Citizen Engagement

CITIZEN SURVEY LAUNCH - TODAY IN JAPAN!



opportunity for citizens to share their
experiences and opinions about
current 5G technology and the
upcoming transition to 6G. It has been
designed to capture a range of insights,
from everyday use of wireless
technology to thoughts on its future
impact.

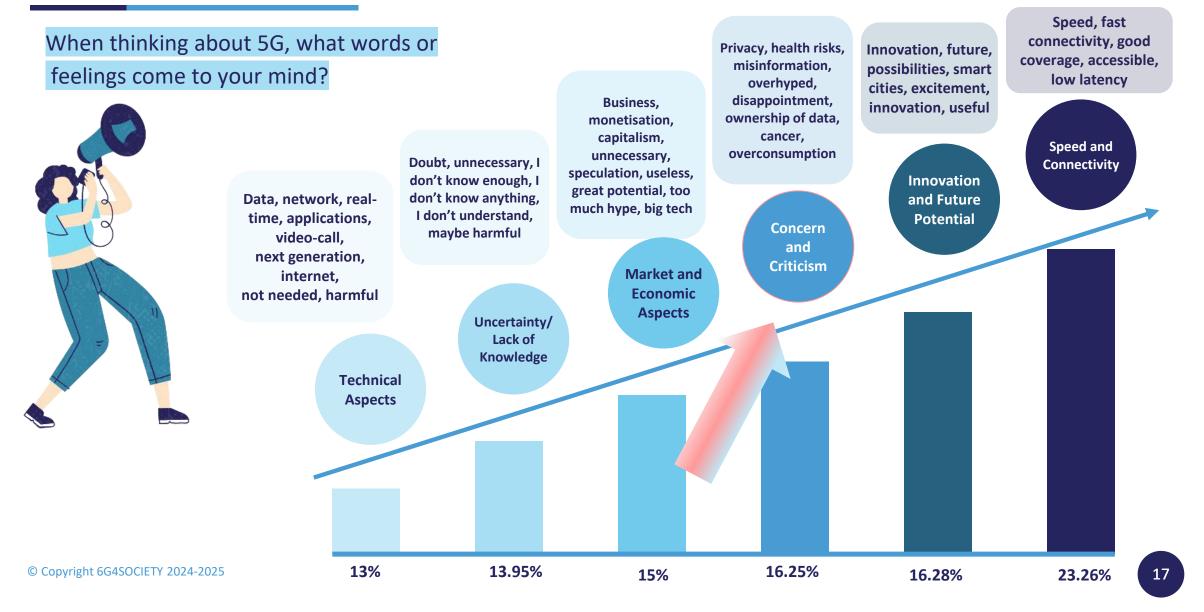
Scan the QR code and let your voice heard!





WHAT PEOPLE THINK ABOUT 5G: KEY INSIGHTS







SUSTAINABLE 6G FOR SUSTAINABILITY AND SOCIAL INCLUSION AN INTERNATIONAL COLLABORATION MATTER

THE IMPERATIVE FOR SUSTAINABLE AND SOCIAL 6G



- Environmental footprint of digital infrastructure and its usage is growing at unsustainable rates
- Digital divide threatens to leave vulnerable populations behind
- Privacy and security concerns increasing with network complexity
- 6G represents opportunity to embed sustainability and social values by design
- Global challenges require collaborative international solutions – i.e., EU-JAPAN



SHARED STRENGTHS AND COMPLEMENTARY APPROACHES



- Deep expertise in advanced communications technologies and infrastructure
- Shared commitment to democratic values and ethical technology deployment
- Strong research ecosystems with world-class universities and R&D facilities
- Mutual focus on addressing aging society challenges through technology
- Common interest in reducing digital environmental footprint and energy consumption
- Potential for combined global leadership in human-centered connectivity standards



POTENTIAL AREAS FOR EU-JAPAN COLLABORATIONS



CONSIDERING SUSTAINABILITY AND SOCIAL ACCEPTANCE OF 6G

- **Energy-efficient infrastructure**: Joint research on energy harvesting and intelligent power management
- Circular economy approaches: Standards for repairability and recyclability
- Inclusive design methodologies: Ensuring accessibility and addressing diverse needs
- Ethical Al integration: Common principles for responsible Al deployment
- **Resilient systems**: Infrastructure that withstands climate disasters and provides critical services

SOME RECCOMENDATIONS FOR ACTION



FOSTERING INCREASED EU-JAPAN COLLABORATION

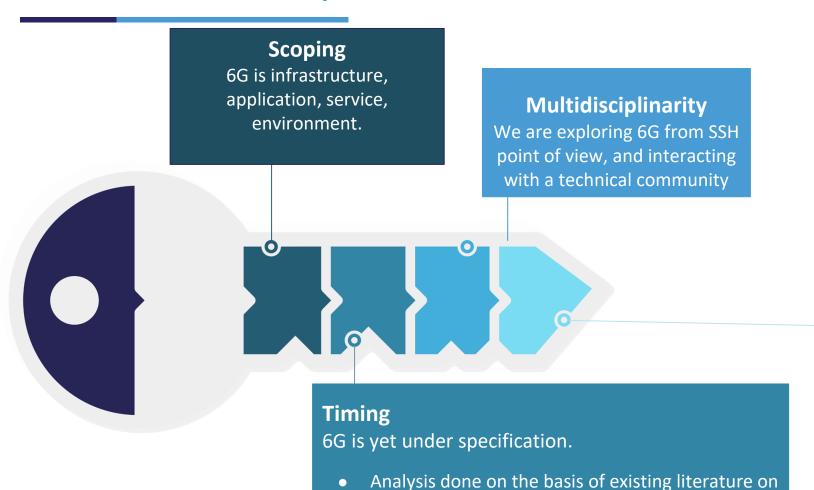
- Synchronize research priorities and funding mechanisms for joint initiatives. Currently, differing funding cycles create administrative challenges.
- Work on developing and harmonizing standards and metrics for measuring societal and environmental impact
- Creating more researcher exchange programs and sabbatical opportunities to strengthen personal connections between institutions and build lasting networks.
 These human relationships often drive successful long-term collaborations.
- Create shared testbeds, living labs, sandboxes to validate social and sustainable aspects besides technological / performance indicators
- Develop joint training programs to build workforce capabilities



THE JOURNEY IS STILL LONG

KEY CHALLENGES, LESSONS LEARNED SO FAR...





Work with the community
Opportunity to ground work on real
needs and concrete challenges.

- Some challenges as concerns availability and openness of the community.
- Also good interest once understood the specific focus and intention

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Different in understanding about what 6G is even

coherent / similar technologies

within the technical community

WRAP UP AND LOOK AHEAD





- Sustainable and socially beneficial 6G requires intentional design from inception
- EU-Japan collaborations are essential to create global standards and solutions
- 6G4Society is keen on supporting these collaborative efforts starting with
 - Exchange of relevant information, documents, initiatives, events
 - Fostering closer collaboration when injecting in standardisation and policy
 - Develop common roadmap for sustainable 6G development jointly
- Together we can create digital infrastructure that serves humanity and protects our planet – synchronised R&I programme and investments...
- The Digital Partnership can become the global benchmark for responsible technological innovation, aiming to embrace other global efforts aligned in values

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