SNS OPS – Supporting the SNS JU Operations

D5.4: Period 2 Report on Infrastructure provision and usage

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Abstract

This deliverable summarises the activities that were undertaken by the SNS OPS project to provide bespoke IT Services and support for the SNS JU in period 2 of the project. It primarily involves the actions that provision, maintain and develop inter-project collaboration facilities and the technical support for the various collaborative tools and websites. It also presents statistics and information about the scale and use of the IT services as employed for the SNS JU community.

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[1] http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US

Executive Summary

This deliverable gives an overview of the evolution of the IT infrastructure and tools, that are necessary to support the SNS JU activities in the 2nd period of the SNS OPS project.

The IT workload has expanded in the second period of SNS OPS as the number of projects participating has grown to 79. All 79 of these SNS JU projects are beginning to deliver results both individually and collectively. Every support, mail list and communication activity has had to be expanded proportionally to accommodate all participants for so many projects running in parallel.

The deliverable is structured into 3 main topics:

a) the SNS JU webpage and the support necessary for its operation:

The development of the website is an ongoing process and SNS OPS continues to add pages, functionalities, events and publications as. Many of the SNS JU projects are now maturing and producing results to be published and promoted. In addition, a number of SNS position papers are now being generated from the cross-project working groups or the TB and these also need to be published and promoted.

The SNS JU website CMS platform is using WordPress and there are a number of software licenses needed to support the aspects from the design theme of the website, integration tools to for example show our Linked-in feed all the way to special European tools to perform the data analytics on website access and use.

There is a separate set of tools needed for network security and firewall provision and additional DDoS protection is provided by Deutsche Telekom AG. Beyond that there is other software for load balancing and application delivery in addition to the underlying web hosting & database management systems.

The SNS JU website now has over 350 pages of different types to be maintained and they are based on almost 28,000 individual data files with a total size of over 7.9 Gigabytes. Each file must be secured, protected and tested.

The number of visits to the website has grown by over 60% and the downloads from the website have more than doubled - showing that the SNS stakeholders are interested in the SNS output material and want to access the website content.

b) the SNS JU document repository – the BSCW - which is used for programme-wide collaborative editing, storage and dissemination of SNS JU documents:

The SNS JU BSCW repository[2] currently supports 192 login accounts, many of which are project level accounts being used by multiple users, i.e. by all project participants.

The SNS JU BSCW repository is operational since September 2023 and currently has 7,688 (Dec 2023: 5,712) documents stored in 1,761 (Dec 2023: 1,363) folders with a total size of 135.5 Gigabytes (Dec 2023: 36 Gigabytes).

c) an overview of other tools employed in SNS JU:

The SNS JU mail list server has distributed 1,7 million (until 31 Dec 2023: 1.3 million) emails with a traffic size of more than 341 Gigabytes (until 31 Dec 2023: 268 Gigabytes)

Online questionnaires, consultations and event registration facilities have been created used for a number of interactions with the SNS Stakeholder community. They use of a unique web-based form for each interaction which gathers the information into a database and automatically sends an acknowledgement to the registrant.

The complete SNS support infrastructure is regularly updated to cater for ever improving security requirements, hacking protection, identity management, as well as the usual performance improvement and scaling requirements. SNS OPS also has to cater for the growth of the community, the increasing numbers of events, workshops, and the increasing frequency of publications with the available resources.

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[2] https://bscw.sns-ju.eu/

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Abbreviations

3GPP	Third Generation Partnership Project
5G	5th Generation Wireless Systems
5G PPP	5G Public Private Partnership
6G-IA	6G Smart Networks and Services Industry Association
BSCW	Basic Support for Cooperative Work
CEF	Connecting Europe Facility
CEPT	European Conference of Postal and Telecommunications Administrations
CMS	Content Management System
CSA	Coordination and Support Action
DIH	Digital Innovation Hub
DDoS	Distributed Denial of Service
EC	European Commission
ECCC	European Cybersecurity Competence Centre
ECSO	European Cybersecurity Organisation
ETSI	European Telecommunication Standards Institute
EuCNC	European Conference on Networks and Communications
F6G	6th generation fixed network
FSTP	Financial Support to Third Party
G5GE	Global 5G Event
GB	Governing Board
GDPR	General Data Protection Regulation
H2020	Horizon 2020
HE	Horizon Europe
KPI	Key Performance Indicator
MWC	Mobile World Congress
PCG	3GPP Project Coordination Group
PPDR	Public Protection and Disaster Relief
PSM	Pre-Structuring Model
R&I	Research and Innovation
SB	Steering Board
SNS-I	Smart Network and Services-Initiative
SNS JU	Smart Network and Services Joint Undertaking
SNS OC TF	SNS Open Calls Task Force
SRIA	Strategic Research and Innovation Agenda
TB	Technology Board
WG	Working Group

1   The SNS JU website

1.1   Background of the SNS JU website

The Smart Networks and Services Joint Undertaking (SNS JU) web presence was created originally by the 6GStart project and then taken over by the SNS OPS project. The actions of the SNS OPS project have been to continually develop the SNS JU web presence as a robust, secure, and compliant website that aligns with the stringent standards of the European Commission.

The SNS JU website is hosted by Eurescom GmbH in Germany and is managed in strict adherence to the European Union's General Data Protection Regulation (GDPR).

The selected domain for the SNS JU website is https://smart-networks.europa.eu/, which operates as a subdomain of the European Commission's main site, europa.eu. Due to this affiliation, the website is required to adhere to rigorous security, compliance, and quality control standards decided by the EC for all JUs. The website's detailed design was conceptualised by the Eurescom GmbH team and finalized in close collaboration with the SNS JU Office.

The development of the website is an ongoing process and SNS OPS continues to add pages, functionalities, events and publications as the number of projects participating has grown to 79. Many of the SNS JU projects are now maturing and producing results to be published and promoted. In addition, a number of SNS position papers are now being generated from the cross-project working groups and these also need to be published and promoted.

The SNS JU Office has now established its own agenda for dissemination and promotion activities, as outlined in their Communications Plan, which need to be supported by SNS OPS via the website and tools in an integrated way.

The SNS OPS project is proud to report that the website has now been online for the life of the project without any outages.

It must be noted that while the SNS website was initially designed as the SNS project and collaborative community support structure, it has also evolved as the official website of the SNS JU Office. This dual role initially presented challenges, particularly in balancing the prioritization and placement of news.

The SNS OPS support team successfully addressed this issue by working with the SNS JU office to strike a balance between supporting the SNS project needs and efficiently relaying SNS Office information. This has been achieved through a well-structured design that highlights both project-related news— e.g. within a dedicated project news section—and SNS office updates, which are prominently featured through press releases, events, and highlighted news.

In direct support of the SNS JU Office, SNS OPS provides the hosting and maintenance of the formal part of the SNS website with the official information on calls, funding opportunities, events, publications, and procurements. The official publications of the SNS JU Office, including all the decisions of the SNS JU GB, are available on the SNS JU website as well.

1.2   Ongoing Maintenance and Development of the SNS JU website

The maintenance of the SNS JU website is along two streams: Technical support to ensure the website is secure and functioning in line with the requirements of an EC JU website and technical development to support ever growing demands for features and functions by the community and the SNS JU Office.

The workload has expanded in the second period as all 79 SNS JU projects begin to deliver results both individually and collectively. Every mail list and communication activity has had to be expanded to proportionally to accommodate all participants for so many projects running in Parallel. This means that even relatively simple tasks, like the mail list maintenance has grown. In fact, the mail list support has grown even more as more and more of the project participant mail servers include new protocols – many of which are not correctly configured by the server owners – making the support of the customers a significant and time-consuming challenge.

Over this second period, from January 2024 to March 2025, 43 new projects were launch which meant including them in all support activities and hosting some of their information and achievements.

27 of these projects started in January 2024 from Call 2 and 16 more projects in January 2025 from Call 3. It is anticipated that some of the call one projects will be completed in 2025 but we also expect new call 4 projects to join the community by mid-2026.

The SNS JU website CMS platform is using WordPress and there are a number of software licenses needed to support the aspects from the design theme of the website, integration tools to for example show our Linked-in feed all the way to special European tools to perform the data analytics on website access and use.

There is a separate set of tools needed Network Security and firewall provision and additional DDoS protection is provided by Deutsche Telekom AG. Beyond that there is other software for Load balancing & Application delivery in addition to then the underlying web hosting & database management systems (DBMS).

Figure 1: SNS JU homepage

The website's structure was strategically designed to be scalable, allowing seamless integration of additional project phases in the future. As of the current status, the website encompasses:

Table 1: SNS JU content size

	Active Pages	**Published Posts**	**Scheduled Events**	**Stored Files**	**Total Website Size**
11/01/2024	116	54	65	8,325	4.8 Gigabytes
06/03/2025	147	114	102	27,920	7.9 Gigabytes

These figures highlight the extensive scope of the website and indicate the scale of information being managed and disseminated through this platform, that has almost doubled for the posts (mainly projects information: results, events, achievements) and the events (SNS office and community events).

1.2.1   Technical Support of the SNS Website

During the past period the SNS website infrastructure has been updated several times to ensure all software is the most secure and robust version available.

The website is based on the WordPress[3] CMS platform and is hosted on multiple private cloud Linux based virtual machines. The physical hosting servers are self-hosted at Eurescom in Heidelberg (Germany). In addition, off-site cloud servers are deployed in the IONOS Cloud and the Open Telekom Cloud.

To ensure service availability and protect against network attacks, various security mechanisms are implemented: untrusted network traffic is blocked by a Linux based network firewall and by a WordPress application firewall.

Additional protection was required in 2024 when the SNS site on Eurescom servers were under massive Distributed Denial of Service (DDoS) attacks. Local firewalls were not sufficient to protect against these attacks and the protection of the SNS site required the blocking of incoming untrusted traffic in the provider backbone. Deutsche Telekom provided an additional DDoS protection service which was used from April to October 2024 until the additional measures in both the network and the website overcame those attacks.

To ensure continuity and resilience in the face of such attacks, daily backups of the SNS JU website are made to an offsite storage provider. Furthermore, the virtual machine on which the website is hosted can be relocated quickly to another on- or off-site physical host if needed for host maintenance or physical disaster recovery.

Update and configuration management of the SNS website and the hosted SNS project and brokerage websites, is done centrally by means of an integrated WordPress management tool. This ensures all WordPress sites are always up to date.

The site is technically managed by 3 technical administrators. Whereas the creation and authoring of the website content for the SNS Community is done by up to 10 different authors.

The WordPress functionality of the SNS website is extended by the addition of third-party plug-ins (see section 1.2.2 for more details) which are needed to accommodate the demands for ever more complex features and functionalities beyond the basic word press capabilities. These plug-ins also need regular maintenance, updates and configuration changes to ensure they are secure and reliable.

1.2.2   Technical Development of the SNS JU Website - Functional Upgrades

The SNS website is continually having new features and functions added to support the community demands and allow the most effective presentation of the contents. Each time a new functionality, not directly supported by WordPress, is requested a process is launched to find the appropriate functionality, test the module offered in an offline environment, and then, if it is safe and secure, to procure and licence the plug-in for use in the website.

To date more than 14 running plug-ins, of which 6 were added during the second period, with their software licenses, have been found, tested and then installed and maintained in the SNS JU website to support the increasingly ambitious community requests for enhanced features.

For each purchased plug-in multiple options were tested until a suitable tool for the demands of the SNS service was found - in each case this had then to be tested for compatibility with the already implemented plug-ins as it is not uncommon for plug-ins to affect existing functionality. Only when such testing is complete and it is clear that a new function will not impact any existing function can a new plug in be added to the live website.

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[3] https://wordpress.org/

Table 2: Main features of plug-ins & software licenses added to the SNS website

Plug-in/ Software Function	Features supported
First period	
Web Analytics	Locally stored web analytics tool for tracking visitor behaviour and website performance, ensuring GDPR compliance.
SEO Optimizer	Enhances search engine rankings and improves content readability for better SEO (search engine optimization).
Content Layout	Organizes posts and events with flexible display structures and tag classification.
Email Encoder	Encodes email addresses to prevent spam and harvesting.
Font Manager	Unifies fonts across plug-ins, titles, and external sources.
Theme Builder	Creates and manages website themes with customization options and local storage.
Interactive Image	Highlights sections of images to create interactive visuals.
Caching Service	Optimizes browsing performance by serving cached content.
Second period	
File Viewer	Reads images, PDFs, and HTML files as a flipping book.
X Feed Display	Embeds personalized X (Twitter) feeds on webpages.
LinkedIn Feed Display	Displays personalized LinkedIn feeds on webpages.
Image Scaler	Compresses and resizes images for faster load times and responsiveness.
YouTube Video Embedder	Integrates YouTube videos into webpages for an optimized and engaging viewing experience.
Gallery Showcasing	Displays photo galleries and albums with multiple view options, visual appealing and mobile-friendly experience.

1.2.3　　　Website Analytics and User Tracking

To monitor the SNS website traffic and user engagement effectively, the website employs the "Matomo Analytics – Ethical Stats. Powerful Insights." plug-in. This analytics tool, hosted on Eurescom's local server, is ensuring our data tracking is in compliance with EC GDPR policies and avoids reliance on external US-based services such as Google Analytics.

Matomo Analytics offers valuable insights into user interactions while respecting privacy regulations. It exclusively tracks human visitors by requiring JavaScript execution, a feature that most bots do not support. Consequently, the reported SNS website statistics focus primarily on genuine human interactions rather than automated bot activity. Additional definitions and explanations regarding user categories such as "New," "Returning," and "Unique" visitors are available through the official Matomo Glossary at https://glossary.matomo.org/.

1.3　　　Traffic Report for the Second Period 01/01/2024 - 31/12/2024

1.3.1　　Website Analytics for Period 2 and Period 1

The following statistics show the SNS JU website data for the 2nd Period and also compare the website's visits and user engagement across the two periods of the SNS OPS project: the first period (from its launch on 1st December 2022 to 31st December 2023) and the second period (from 1st January 2024 to 6th March 2025).

During the second period, the website experienced a 61.6% increase in visits, rising from 59,149 in the first period to 95,604. The average visit duration slightly decreased from 2 minutes 43 seconds to 2 minutes 30 seconds (-8%), while the bounce rate increased from 57% to 60% (+5.3%), see Figure 2.

User interaction improved, with actions per visit increasing from 2.4 to 2.7 (+12.5%), and the maximum number of actions in a single visit skyrocketing from 283 to 5,968 (+2,008.8%).

In terms of content engagement, pageviews grew by 56.6%, from 124,994 to 195,836, while unique pageviews rose from 101,189 to 150,039. Website searches more than doubled, reaching 1,494 total searches (+146.1%) with 664 unique keywords which may be link to the SNS JU visibility increasing within the community but also worldwide, see Section 1.4.

Downloads and external interactions also saw significant increases. Total downloads surged by 110.7%, reaching 19,751, with 17,467 unique downloads. Outlinks jumped by 341.9%, from 8,480 in the first period to 37,474 in the second, with 18,553 unique outlinks. This reflects the role of the website as a reference source where it is increasingly used to find the necessary information (e.g. links to projects etc.)

These numbers highlight the continued growth and expanding reach of the SNS JU website, reinforcing its role as a key information hub for the initiative.
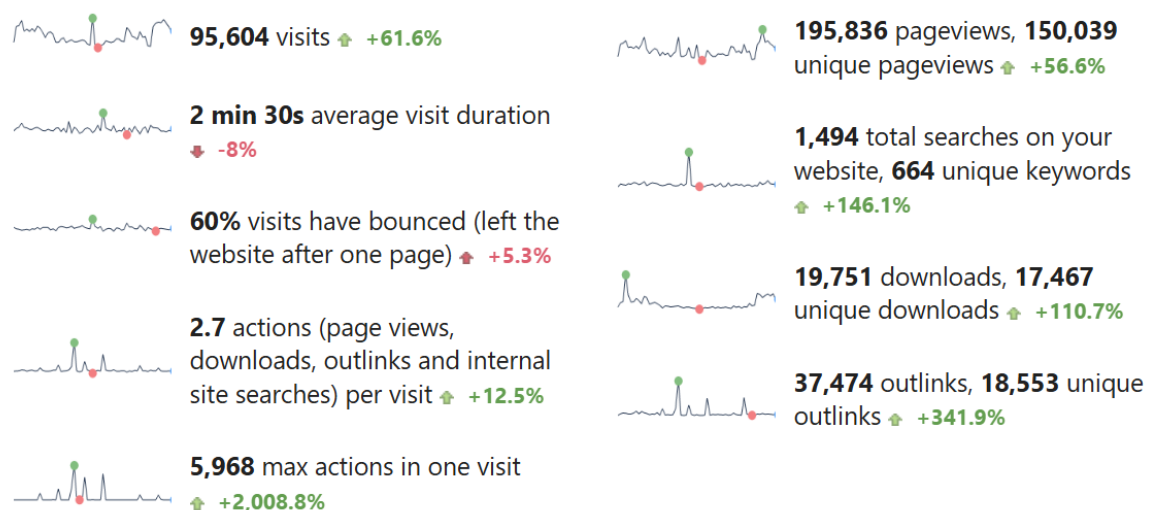
Visits Overview

Figure 2: SNS JU Visits Overview for the second period (01/01/2024 to 06/03/2025)

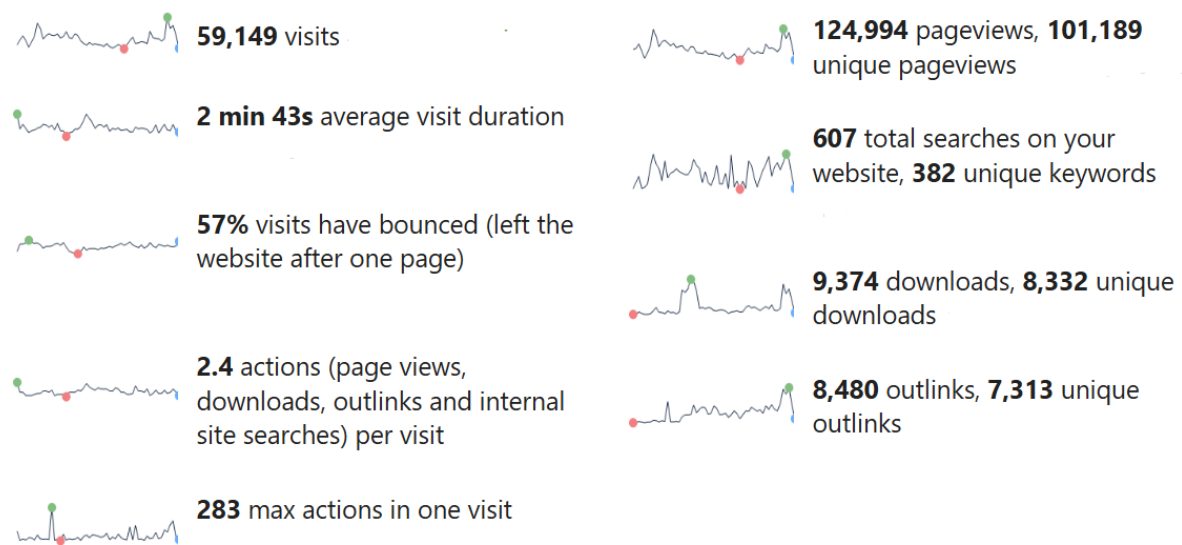Period 1 figures are included below for comparison.

Visits Overview

59,149 visits

2 min 43s average visit duration

57% visits have bounced (left the website after one page)

2.4 actions (page views, downloads, outlinks and internal site searches) per visit

283 max actions in one visit

124,994 pageviews, **101,189** unique pageviews

607 total searches on your website, **382** unique keywords

9,374 downloads, **8,332** unique downloads

8,480 outlinks, **7,313** unique outlinks

Figure 3: SNS JU Visits Overview for the first period (01/12/2022 to 31/12/2023)

1.3.2   Website Analytics for Period 1 & 2 Collectively

The tables and charts below present statistics for the SNS JU website including the full period from its launch on the 1st of December 2022 to the 6th of March 2025 and some more detailed analytics regarding the second period from the 1st January 2024 to the 6th of March 2025. The SNS JU website has successfully served as the central information hub for the SNS JU initiative for two and a half years and has grown in content and volume flexibly, as originally intended. Since its official launch on 1st December 2022, the SNS JU website has recorded a total of 154,753 visitors, with 251,228 unique page views and an average visit duration of 2 minutes and 35 seconds.

Visits Overview

154,753 visits

2 min 35s average visit duration

58% visits have bounced (left the website after one page)

2.6 actions (page views, downloads, outlinks and internal site searches) per visit

5,968 max actions in one visit

320,830 pageviews, **251,228** unique pageviews

2,101 total searches on your website, **968** unique keywords

29,125 downloads, **25,799** unique downloads
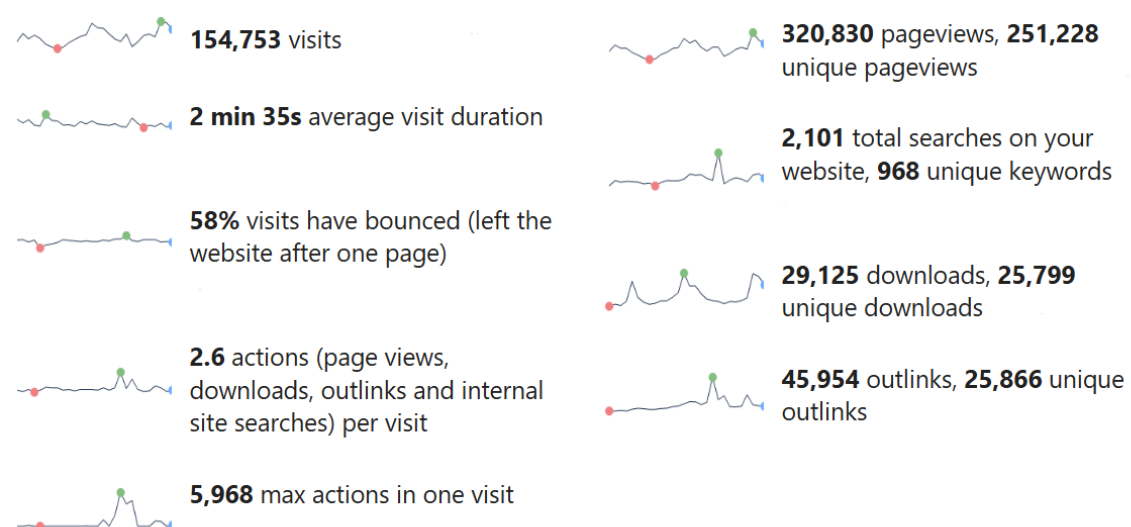
45,954 outlinks, **25,866** unique outlinks

Figure 4: SNS JU Visits Overview in its lifetime (01/12/2022 to 06/03/2025)

As the SNS JU initiative continues to expand, the challenge will be to accommodate its growth – scaling from 35 projects in Call 1 to 79 projects with Calls 2 and 3 – while ensuring that relevant information remains accessible and user-friendly.

As observed through annual trends, the popularity of the SNS site is in line with times when information about forthcoming calls is published or key webinars are organised. Lower traffic periods tend to correspond to the holiday periods. The two peaks in traffic recorded were in January 2023 for the announcement of the Call 2 results and in January 2024 for the announcement of the Call 3 project results.
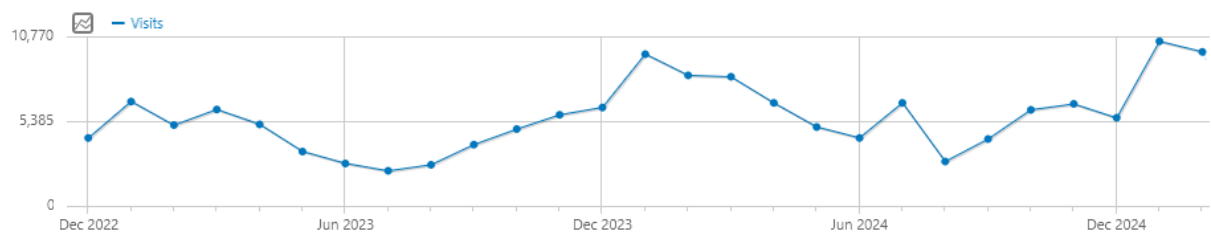

Figure 5: SNS JU Website Visits Over Time in its lifetime (01/12/2022 to 06/03/2025)

1.4   Top 25 Countries Accessing the SNS JU Website

European countries dominate the top 25 locations visiting the SNS JU portal reflecting the European interest in the initiative's goal of fostering industrial leadership in 5G and 6G networks and services within Europe.

COUNTRY	▼ VISITS
🇩🇪 Germany	17,385
🇪🇸 Spain	16,312
🇬🇷 Greece	11,090
🇫🇷 France	10,378
🇧🇪 Belgium	9,261
🇬🇧 United Kingdom	8,796
🇮🇹 Italy	8,422
🇺🇸 United States	8,388
🇱🇺 Luxembourg	7,887
🇹🇷 Türkiye	4,954
🇫🇮 Finland	4,699
🇳🇱 Netherlands	3,872
🇸🇪 Sweden	3,601
🇵🇹 Portugal	3,289
🇹🇼 Taiwan	3,151
🇨🇭 Switzerland	2,408
🇮🇪 Ireland	2,375
🇮🇳 India	2,090
🇯🇵 Japan	1,966
🇦🇹 Austria	1,832
🇵🇱 Poland	1,807
🇳🇴 Norway	1,432
🇷🇴 Romania	1,281
🇨🇳 China	1,270
🇨🇾 Cyprus	1,162

Figure 6: SNS JU visits by country (01/12/2022 to 06/03/2025)

However, the data also shows significant interest from outside the region.

The USA ranks as the 8th most frequent visitor with 8,388 views, while India and Japan hold the 18th and 19th positions with 2,090 and 1,966 views, respectively.

This indicates that the SNS JU's activities have garnered attention beyond Europe, reflecting global interest in its work over the past years.

1.5   Top 15 Page Titles Accessed by Visitors

1.5.1   Top Pages accessed in Period 2 and Period 1

During the second period of SNS OPS we noticed a shift in the most accessed page, after the home page. In the first period there was a high interest in the open posts in the SNS JU Office but in Period 2, the main interest has been in the pages on the open calls.

Clearly as the office no longer had so many posts to fill and the number of participants in the SNS JU is growing, the community interest has moved to the calls for new projects.

PAGE TITLE	▼ PAGEVIEWS	UNIQUE PAGEVIEWS	BOUNCE RATE	AVG. TIME ON PAGE	EXIT RATE	AVG. PAGE LOAD TIME
HOME - SNS JU	40,962	25,252	46%	00:00:42	53%	12.78s
Current Call for Proposals - SNS JU	11,365	9,578	48%	00:01:15	63%	5.68s
Open Calls from SNS Projects - SNS JU	5,980	4,947	65%	00:01:37	65%	5.08s
Missions & Objectives - SNS JU	4,795	4,263	57%	00:01:16	54%	4.33s
Project Portfolio - SNS JU	4,709	3,683	44%	00:01:47	48%	3.84s
EU invests more than 500 million EUR to boost 6G research an...	4,081	3,588	82%	00:00:59	87%	7.88s
SNS JU R&I Work Programme 2025 Released - SNS JU	3,591	3,102	51%	00:01:32	80%	5.32s
Our Team - SNS JU	3,278	2,936	65%	00:01:05	58%	4.21s
Phase 2 Stream B - SNS JU	3,256	2,545	70%	00:01:45	65%	5.63s
FAQ Call 3 - SNS JU	3,106	2,662	64%	00:01:40	76%	3.8s
SNS Call for Proposals 2024 – Information Day 22nd January 2...	2,583	2,126	60%	00:01:44	78%	4.47s
Phase 1 Stream B - Research for revolutionary technology adva...	2,440	1,928	77%	00:01:56	65%	4.8s
SNS JU Working Groups - SNS JU	2,357	1,967	65%	00:01:28	71%	3.73s
Vacancies - SNS JU	2,304	2,172	87%	00:00:38	79%	5.31s
Reference Documents - SNS JU	2,263	1,834	29%	00:02:31	71%	3.82s

Figure 7: SNS JU top 15 most visited pages for the second period (01/01/2024 to 06/03/2025)

The table below shows the period 1 figures for comparison.

PAGE TITLE	▼ PAGEVIEWS	UNIQUE PAGEVIEWS	BOUNCE RATE	AVG. TIME ON PAGE	EXIT RATE	AVG. PAGE LOAD TIME
HOME - SNS JU	23,079	18,506	42%	00:01:05	52%	6.98s
Current Vacancies - SNS JU	6,688	6,054	55%	00:00:46	87%	4.17s
Current Call for Proposals - SNS JU	6,480	5,196	48%	00:01:13	56%	3.56s
SNS Phase 1 - SNS JU	4,619	3,633	47%	00:01:09	41%	5.37s
Stream B - Research for revolutionary technology advancement tow...	4,381	3,470	77%	00:01:40	73%	5.51s
Missions & Objectives - SNS JU	3,324	2,811	58%	00:01:32	47%	3.49s
SNS Call For Proposals 2023 - Information Day - SNS JU	3,147	2,458	72%	00:01:45	81%	3.27s
FAQ Call 2 – Frequently Asked Questions - SNS JU	2,959	2,450	75%	00:01:32	76%	4.4s
Our Team - SNS JU	2,888	2,547	71%	00:01:12	52%	3.78s
6G research gets a 130 million EUR EU funding boost in Europe - S...	2,703	2,335	79%	00:01:06	85%	9.27s
Open Calls from SNS Projects - SNS JU	2,426	1,875	64%	00:02:01	69%	6.73s
Project Portfolio - SNS JU	2,301	1,740	33%	00:00:50	20%	2.96s
Reference Documents - SNS JU	2,270	1,414	32%	00:02:19	69%	3.08s
Stream A - Smart communication components, systems and networ...	2,030	1,579	63%	00:01:44	45%	3.17s
SNS Phase 2 - SNS JU	1,889	1,498	44%	00:00:46	25%	3.13s

Figure 8: SNS JU top 15 most visited pages for the first period (01/12/2022 to 01/12/2023)

1.5.2   Top Pages accessed in Period 1 & 2 collectively

The most visited page on the SNS JU website is, unsurprisingly, the Homepage, which accounts for 64,041 pageviews. Following this, the "Current Call for Proposals" page (17,845 views) and the "Open Calls from SNS Projects" page (8,406 views) have attracted significant traffic.

PAGE TITLE	▼ PAGEVIEWS	UNIQUE PAGEVIEWS	BOUNCE RATE	AVG. TIME ON PAGE	EXIT RATE	AVG. PAGE LOAD TIME
HOME - SNS JU	64,041	43,758	44%	00:00:50	52%	10.62s
Current Call for Proposals - SNS JU	17,845	14,774	48%	00:01:14	60%	4.87s
Open Calls from SNS Projects - SNS JU	8,406	6,822	65%	00:01:44	67%	5.57s
Missions & Objectives - SNS JU	8,119	7,074	57%	00:01:23	51%	3.96s
Project Portfolio - SNS JU	7,010	5,423	42%	00:01:29	39%	3.62s
SNS Phase 1 - SNS JU	6,692	5,336	46%	00:01:05	40%	5.32s
Current Vacancies - SNS JU	6,688	6,054	55%	00:00:46	87%	4.17s
Our Team - SNS JU	6,166	5,483	67%	00:01:08	55%	4.02s
6G research gets a 130 million EUR EU fundi...	4,541	3,980	77%	00:01:06	83%	7.45s
Reference Documents - SNS JU	4,533	3,248	31%	00:02:25	70%	3.42s
Stream B - Research for revolutionary techn...	4,381	3,470	77%	00:01:40	73%	5.51s
Phase 1 Stream B - Research for revolutiona...	4,310	3,279	77%	00:01:52	67%	5.42s
EU invests more than 500 million EUR to bo...	4,081	3,588	82%	00:00:59	87%	7.88s
FAQ Call 2 – Frequently Asked Questions - S...	3,825	3,183	71%	00:01:28	73%	4.32s
Governance - SNS JU	3,708	2,945	48%	00:01:03	34%	3.68s

Figure 9: SNS JU top 15 most visited pages in website lifetime (01/12/2022 to 06/03/2025)

Over time, the focus of visitor interest has shifted towards call-related pages, FAQs, and project information, reflecting the natural evolution of SNS JU activities and increasing engagement with its funding opportunities: as the "Current Call for Proposals" page saw a significant increase in views (from 6,480 to 11,365 views), same as for the "Open Calls from SNS Projects" page grew (from 2,426 to 5,980 views) indicating greater engagement with SNS JU funding mechanisms.

Additionally, pages such as "Missions & Objectives" (8,119 views) and "Project Portfolio" (7,010 views) remain key resources for visitors seeking insights into the initiative's strategic direction and supported projects.

Overall, the continued growth in page views across funding, research, and projects demonstrates the increasing visibility and impact of the SNS JU initiative.

1.6   Highlights of Web Traffic (Top Downloads)

1.6.1   Top Downloads in Period 2 and Period 1

Over the second period, other notable documents included the SNS Journal 2024 (303 unique downloads), the AI & ML White Paper (298 unique downloads), and the SoftNet WG Whitepaper (185 unique downloads) have seemed to raise an interest in the SNS JU community.

DOWNLOAD URL	▼ UNIQUE DOWNLOADS	DOWNLOADS
⊟ smart-networks.europa.eu	16,813	19,020
/wp-content/uploads/2023/11/sns-ri-work-programme-2024.pdf	2,621	2,925
/wp-content/uploads/2024/12/sns-work-programme-2025_final-publication.pdf	1,754	2,058
/wp-content/uploads/2024/12/sns-ju-ri-wp-2025_final-publication.pdf	1,505	1,706
/wp-content/uploads/2023/11/sns-ju-annual-work-programme-2024.pdf	574	638
/wp-content/uploads/2022/12/sns_ri_wp_2023-24.pdf	529	588
/wp-content/uploads/2024/05/sns-journal-2024-web_.pdf	303	339
/wp-content/uploads/2025/02/ai_ml_white-paper-sns_tb_v1.0.pdf	298	332
/wp-content/uploads/2025/01/softnet-whitepaper2024-v1.0_final.pdf	185	207
/wp-content/uploads/2025/02/white-paper-kpis_17_2_2025_for-rel_.pdf	185	225
/wp-content/uploads/2024/07/sns-ju_annual_activity_report-2023-ef-esigned.pdf	179	209

Figure 10: SNS JU top 10 most downloads for the second period (01/01/2024 to 06/03/2025)

The table below shows the Period 1 downloads for comparison.

DOWNLOAD URL	▼ UNIQUE DOWNLOADS	DOWNLOADS
⊟ smart-networks.europa.eu	8,176	9,179
/wp-content/uploads/2022/12/sns_ri_wp_2023-24.pdf	1,439	1,616
/wp-content/uploads/2023/03/sns_ca_fgiv_2023_01_vn_project_officer_call_coordinator.pdf	1,050	1,114
/wp-content/uploads/2023/04/sns_ca_fgiv_2023_01_vn_projectofficer_call_coordinator2.pdf	797	856
/wp-content/uploads/2023/11/sns-ri-work-programme-2024.pdf	776	898
/wp-content/uploads/2023/03/sns_ca_fgiv_2023_01_application_form_projectofficer_call_coordinat...	399	449
/wp-content/uploads/2023/11/sns-ju-annual-work-programme-2024.pdf	313	366
/wp-content/uploads/2022/12/sns-work-programme-2023.pdf	204	246
/wp-content/uploads/2022/10/snsriworkprogramme20212022_ckvqrabs7gkb08dhgl6wh73cwqa_82...	163	169
/wp-content/uploads/2023/05/sns-journal-2023-web-1.pdf	147	165
/wp-content/uploads/2022/12/sns_ri_wp_2023-24-1.pdf	112	160

Figure 11: SNS JU top 10 most downloads for the first period (01/12/2022 to 31/12/2023)

1.6.2   Top Downloads in Period 1 & 2 Collectively

The download trends on the SNS JU website mirror the shifts observed in page visits. Over the past year, the number of unique downloads has surged, reaching a total of 24,989—three times more than the 8,176 unique downloads recorded previously in the first period.

Initially, downloads were primarily focused on SNS JU job notices, but the trend has evolved towards a strong interest in key strategic documents, particularly the latest Annual Work Programmes. The most downloaded document is the SNS RI Work Programme 2024 (3,397 unique downloads), followed by previous and upcoming work programmes, including the 2023-24 edition (1,968 downloads) and the 2025 final publication (1,754 downloads).

This shift highlights could be showing an increasing engagement with the initiative's long-term planning and funding opportunities, but also the growing interest in SNS JU publications, highlighting the platform's role in disseminating key documents to a wider audience.

DOWNLOAD URL	▼ UNIQUE DOWNLOADS	DOWNLOADS
⊟ smart-networks.europa.eu	24,989	28,199
/wp-content/uploads/2023/11/sns-ri-work-programme-2024.pdf	3,397	3,823
/wp-content/uploads/2022/12/sns_ri_wp_2023-24.pdf	1,968	2,204
/wp-content/uploads/2024/12/sns-work-programme-2025_final-publication.pdf	1,754	2,058
/wp-content/uploads/2024/12/sns-ju-ri-wp-2025_final-publication.pdf	1,505	1,706
/wp-content/uploads/2023/03/sns_ca_fgiv_2023_01_vn_project_officer_call_coordinator.pdf	1,050	1,114
/wp-content/uploads/2023/04/sns_ca_fgiv_2023_01_vn_projectofficer_call_coordinator2.pdf	915	981
/wp-content/uploads/2023/11/sns-ju-annual-work-programme-2024.pdf	887	1,004
/wp-content/uploads/2023/03/sns_ca_fgiv_2023_01_application_form_projectofficer_call_coordinator2.docx	399	449
/wp-content/uploads/2024/05/sns-journal-2024-web-.pdf	303	339
/wp-content/uploads/2025/02/ai_ml_white-paper-sns_tb_v1.0.pdf	298	332

Figure 12: SNS JU top 10 most downloads in website lifetime (01/12/2022 to 06/03/2025)

1.7 Top 25 Outlinks Through Which Visitors Exit

The outlink trends on the SNS JU website provide valuable insights into visitor interests and engagement.

1.7.1 Outlinks for Period 2 and Period 1

The table below shows that Cordis continues to be the most used external link from the SNS JU website. The commission sites with call details are the second most used links and the social media news site Linked has moved up into being the third most used link. This somehow reflects the evolution of the SNS JU form being focussed on creating the project and the innovative work towards more promotion and dissemination of the achievements, both collectively and from the individual projects.

The traffic to the Brokerage site depends on the proximity of open calls - as the calls in Period 2 are delayed, the brokerage traffic is lower in Period 2.

CLICKED OUTLINK	▼ UNIQUE CLICKS	CLICKS
⊞ cordis.europa.eu	4,006	4,666
⊞ ec.europa.eu	1,245	1,353
⊞ www.linkedin.com	978	6,297
⊞ 6g-ia.eu	707	807
⊞ www.youtube.com	701	9,302
⊞ sns-brokerage.eu	655	726
⊞ 6g-bricks.eu	493	541
⊞ outlook.office.com	487	531
⊞ twitter.com	402	2,597
⊞ imagineb5g.eu	396	433
⊞ youtu.be	346	379
⊞ 6g-sandbox.eu	328	368
⊞ www.6g-xr.eu	328	367
⊞ www.google.com	321	329
⊞ sns-trackers.sns-ju.eu	314	1,006

Figure 13: SNS JU outlinks most used in the second period (01/01/2024 to 06/03/2025)

The table below shows which outlinks were most used in Period 1.

CLICKED OUTLINK	▼ UNIQUE CLICKS	CLICKS
⊞ ec.europa.eu	700	759
⊞ www.linkedin.com	449	694
⊞ sns-brokerage.eu	332	357
⊞ fidal-he.eu	267	300
⊞ 6g-ia.eu	247	286
⊞ 6g-sandbox.eu	243	295
⊞ imagineb5g.eu	228	275
⊞ www.youtube.com	215	275
⊞ outlook.office.com	211	231
⊞ 6g-bricks.eu	210	244
⊞ youtu.be	207	239
⊞ www.google.com	177	178
⊞ twitter.com	170	213
⊞ www.eucnc.eu	165	183
⊞ target-x.fundingbox.com	153	166

Figure 14: SNS JU outlinks most used in the first period (01/12/2022 to 31/12/2023)

1.7.2   Outlinks for Period 1 & 2 Collectively

The most frequently clicked external link is cordis.europa.eu, accounting for 16% of unique clicks (4,134), which primarily leads to project pages. This indicates a strong interest among users in exploring detailed project information beyond what is available on the SNS JU website.

Conversely, ec.europa.eu, which is the second most clicked external link (7.5% of unique clicks), is primarily associated with call-related pages. This suggests that a significant portion of visitors is focused on funding opportunities and the broader European Commission ecosystem supporting SNS JU initiatives.

In addition to these, social media and community-driven platforms also play a key role in driving engagement. LinkedIn (5.5% of unique clicks) and YouTube (3.5%) receive substantial outbound traffic, highlighting the importance of professional networking and multimedia content in disseminating SNS JU updates. The SNS Brokerage platform (sns-brokerage.eu, 3.8%) and key initiative websites like 6G-IA (3.7%) further illustrate the growing ecosystem of collaboration and information exchange within the SNS JU community.

CLICKED OUTLINK	▼ UNIQUE CLICKS	CLICKS
⊞ cordis.europa.eu	4,134	4,812
⊞ ec.europa.eu	1,945	2,112
⊞ www.linkedin.com	1,427	6,991
⊞ sns-brokerage.eu	987	1,083
⊞ 6g-ia.eu	954	1,093
⊞ www.youtube.com	916	9,577
⊞ 6g-bricks.eu	703	785
⊞ outlook.office.com	698	762
⊞ imagineb5g.eu	624	708
⊞ twitter.com	572	2,810
⊞ 6g-sandbox.eu	571	663
⊞ youtu.be	553	618
⊞ fidal-he.eu	513	583
⊞ www.google.com	498	507
⊞ www.6g-xr.eu	473	529
⊞ www.eucnc.eu	447	511
⊞ sns-trackers.sns-ju.eu	314	1,006
⊞ hexa-x-ii.eu	302	346
⊞ digital-strategy.ec.europa.eu	298	335
⊞ target-x.eu	285	325
⊞ 6g-xr.eu	257	279
⊞ www.etsi.org	253	287
⊞ webcal:	229	291
⊞ www.mwcbarcelona.com	212	243
⊞ urldefense.com	201	222

Figure 15: Top 25 outlinks (01/12/2022 to 06/03/2025)

The table below gives and insight into which pages the traffic going to Cordis is directed. It seems that it is the individual project pages where the contractual details can be found.

CLICKED OUTLINK	▼ UNIQUE CLICKS	CLICKS
⊟ cordis.europa.eu	4,134	4,812
↗ /project/id/101136314	158	196
↗ /project/id/101096573	116	147
↗ /project/id/101096954	100	118
↗ /project/id/101139282	92	104
↗ /project/id/101139048	91	107
↗ /project/id/101096479	88	102
↗ /project/id/101139257	85	105
↗ /project/id/101139120	84	105
↗ /project/id/101139068	83	99
↗ /project/id/101139031	82	95

Figure 16: Top 10 Cordis Europa outlinks (01/12/2022 to 06/03/2025)

The table below gives and insight into which pages the traffic going to ec.europa.eu is directed. It is clear that most are following links to get the contractual information about open calls and/or calls for tender.

⊟ ec.europa.eu	1,945	2,112
↗ /info/funding-tenders/opportunities/portal/screen/opportunities/topic-search?keywords=SNS&callIdenti...	421	447
↗ /info/funding-tenders/opportunities/portal/screen/opportunities/topic-search;callCode=null;freeTextSear...	309	332
↗ /info/funding-tenders/opportunities/portal/screen/opportunities/topic-search?keywords=SNS&program...	291	315
↗ /info/funding-tenders/opportunities/portal/screen/opportunities/topic-search;callCode=null;freeTextSear...	290	313
↗ /info/funding-tenders/opportunities/portal/screen/home	168	185
↗ /info/funding-tenders/opportunities/portal/screen/opportunities/topic-search;callCode=null;freeTextSear...	83	90
↗ /eusurvey/runner/RegistrationIAFADIH	62	70
↗ /info/funding-tenders/opportunities/portal/screen/opportunities/topic-search;callCode=null;freeTextSear...	60	66
↗ /inea/en/connecting-europe-facility	32	36
↗ /info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/hori...	22	23

Figure 17: Top 10 EC-Europa outlinks (01/12/2022 to 06/03/2025)

Overall, the outlink data reinforces two key trends already observe in the first period: a strong interest in project insights and an ongoing demand for funding-related information, both of which shape how visitors navigate the SNS JU digital space.

2   Programme Document Repository

A document sharing web service BSCW has been set up to provide a document repository for the various bodies and working groups of the SNS JU. It also acts as a repository for deliverables and documents shared between projects. The SNS JU BSCW repository supports co-editing documents in real time. This was achieved by integration of the ONLYOFFICE Docs service[4] into BSCW[5].

The SNS JU BSCW repository[6] currently supports 192 login accounts, many of which are project level accounts being used by multiple users, i.e. by all project participants.

The SNS JU BSCW repository is operational since September 2023 and currently has 7,688 (Dec 2023: 5,712) documents stored in 1,761 (Dec 2023: 1,363) folders with a total size of 135.5 Gigabytes (Dec 2023: 36 Gigabytes).
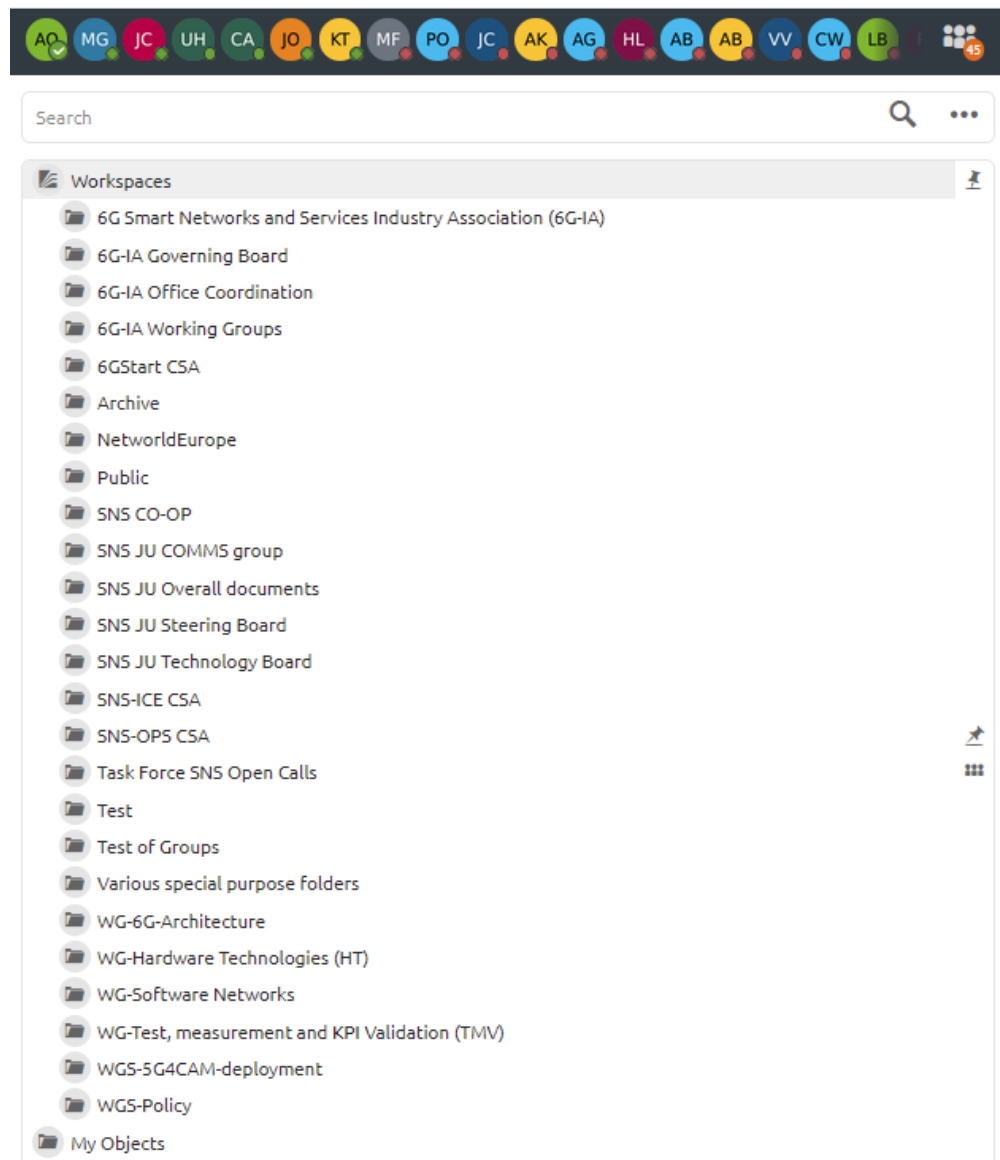
Figure 18: Main Document Workspaces (December 2024)

Since the successful setup of BSCW for SNS JU in 2023, the support activities related to BSCW have focused in period 2 on the various actions related to access management, content management and

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[4] https://www.onlyoffice.com/office-suite.aspx

[5] https://www.bscw.de/social/

[6] https://bscw.sns-ju.eu/

technical management and support.

All SNS projects receive a project-specific login account to enable them to access to the SNS document repository (BSCW), and more specifically all (and only those) directories to which they should have access. By default, these are the directories for the Steering Board, the Technology Board, the Communications Task Force, and one directory for overall documents and information. These logins are generated for the projects of each SNS Call when they kick off but are only distributed to each project when all beneficiaries of that projects have fully signed the SNS Collaboration Agreement.

Besides these standard working directories for SNS projects, various other directories have been created, e.g. for the Working Groups of the SNS-Initiative (i.e. the inter-project WGs), those of the 6G-IA in many of which also SNS projects participate, and the Strategic WGs of the SNS General Board (GB). All of them have their own and specific access policy which has to be observed when granting the various groups and stakeholders in SNS access to these directories. This is not a one-time action but a permanent activity where new access is granted and others need to be removed when a person or group joins or leaves the activities.

Moreover, there are always also a number of special-purpose directories that are setup on demand, e.g. in the context of the preparation of a Whitepaper where only editors do have access with a personal login that often needs to be created and later removed. Further cases where special directories are required are e.g. the SNS preparatory workshops, the preparation of the SNS Trials & Pilots brochure, a joint folder between SNS OPS and the SNS Office or the 3GPP Use case definition activity that was organised in May 2024.

Besides the creation of folders and access management, SNS OPS also takes care of organising the structure for some of the directories, creates new subdirectories or takes care of moving directories and/or files e.g. when an activity has ended or when it was uploaded not to the right location. SNS OPS also takes care of managing the content of certain files, e.g. for the Excel spreadsheet where SNS projects enter their representatives in SNS Working Groups.

There is an obligation of SNS projects to upload their project Deliverables to BSCW. In the spirit of the SNS Collaboration Agreement, all SNS projects are asked to upload their Deliverables to BSCW. This is a permanent obligation throughout the whole duration of the SNS JU. All projects, no matter at what period of the SNS they were running, will have access to the Deliverables of all projects throughout SNS. SNS OPS is monitoring this activity and checks at intervals if projects fulfil this requirement.

A major activity is also the support to BSCW users, i.e. everyone in SNS who has access and uses BSCW. This support spans a wide area and different types of actions. Difficulties in logging in and getting access is a major reason for asking for support. Even though the project coordinators are asked to distribute the project-specific login to all partners in the project it is often not done, which means that e.g. project experts do not have access to the work directory of a WG. Sometimes even coordinators don't remember they received their project login. Sometimes wrong login credentials are used e.g. if a project participant is also 6G-IA member and uses the password of the "wrong" group. Other topics where support is requested includes e.g. the use of the joint document editing feature, recovery of accidentally deleted files (only noticed when others miss a file), the assignment of specific access permissions, enquiries about where to find what, etc.

Finally to mention, BSCW requires also the usual maintenance of an IT system, upgrading to a newer software release, bug fixing, backups, purchase and management of licences (each user login created requires one licence), creation and deletion of individual person or group accounts, etc.

Overall, the operation, management and user support of the SNS BSCW is a sophisticated task that requires highly skilled support staff, that besides the technical competence in the team also requires having a good overview and knowledge over the various groups of users in SNs, their needs, confidentiality requirements and ways of working.

3   Brokerage Service

3.1   Introduction to Brokerage Service

As a support means for facilitating consortium building for SNS JU project proposals, a brokerage service had been created and introduced. This service allows people to submit either proposal ideas or expertise offer profiles to the Brokerage platform. Each submission is published after approval by the brokerage platform moderator team from the SNS OPS CSA. Proposal ideas may be posted without publishing the idea owner's identity if they only wish to be contacted via the Brokerage platform.

The platform offers search and contact request forms which allows idea proposers to find matching partners for a project consortium and companies to find interesting proposal ideas to cooperate in.

The Brokerage Service[7] is operational to support Horizon Europe proposals and SNS JU calls since December 2023.

Submit a proposal/ idea

1. For Idea owners or proposal leaders: To post your project ideas so prospective partners can ask to join with you.

The key information needed if you want to announce your idea or proposal is: what you want to do, exactly which call of the work programme you plan to address, which SNS goals will you contribute to, and what competences or participants (SMEs, academics, industry, etc.,) do you need. You may do this as the potential coordinator of a proposal or you may do it with your idea just to find like-minded people to form a consortium. Proposal or Idea owners may keep their identity private and any interests in your proposal/idea will be forwarded to you.

Submit your expertise

2. For offers of Expertise: (participants looking for projects) To post your profile and indicate your interests so prospective partners can find you.

Here you can share your profile and competence for all to consider. The key information needed here is what sort of organisation you are (SMEs, academics, industry, etc.,), if you are a member of the 6G IA and can contribute to the IKOP assessment and what expertise you can offer. You should also say specifically which aspects of the call you want to address. (the form allows multiple key words and target areas to be chosen by re-selecting in the drop down lists multiple times). In principle such an offer must include your contact email so you may be contacted. This contact will be made public. PLEASE NOTE: your should avoid multiple postings for individual organisations as these may not be accepted and do not improve your visibility in the search function.

Browse proposals/ideas

3. Link to browse Submitted Proposal Ideas To browse or search project ideas to see if there are any you would like to offer your participation to.

Key information about ideas and proposals are shared here: what they want to do, exactly which call of the work programme they plan to address, which SNS goals they will contribute to, and what competencies or participants (SMEs, academics, industry, etc.,) do the proposer(s) need. Proposal or Idea owners may keep their identity private and any interest in their proposal/idea will be forwarded to them.

Browse profiles

4. Link to browse Submitted Expertise Offerings To browse or search up loaded profiles to find the competence you need in your proposal(s)

Here you can look for profiles and competencies you may be interested in your project idea. The key information needed is provided and if the interesting profile you are looking is a member of the 6G IA your can their IKOP assessment and what expertise they can offer. You will be able to see which aspects of the call they want to address. (selected through multiple keywords and target areas chosen by re-selecting in the drop-down lists multiple times). In principle, their email address is shared so they can be contacted.
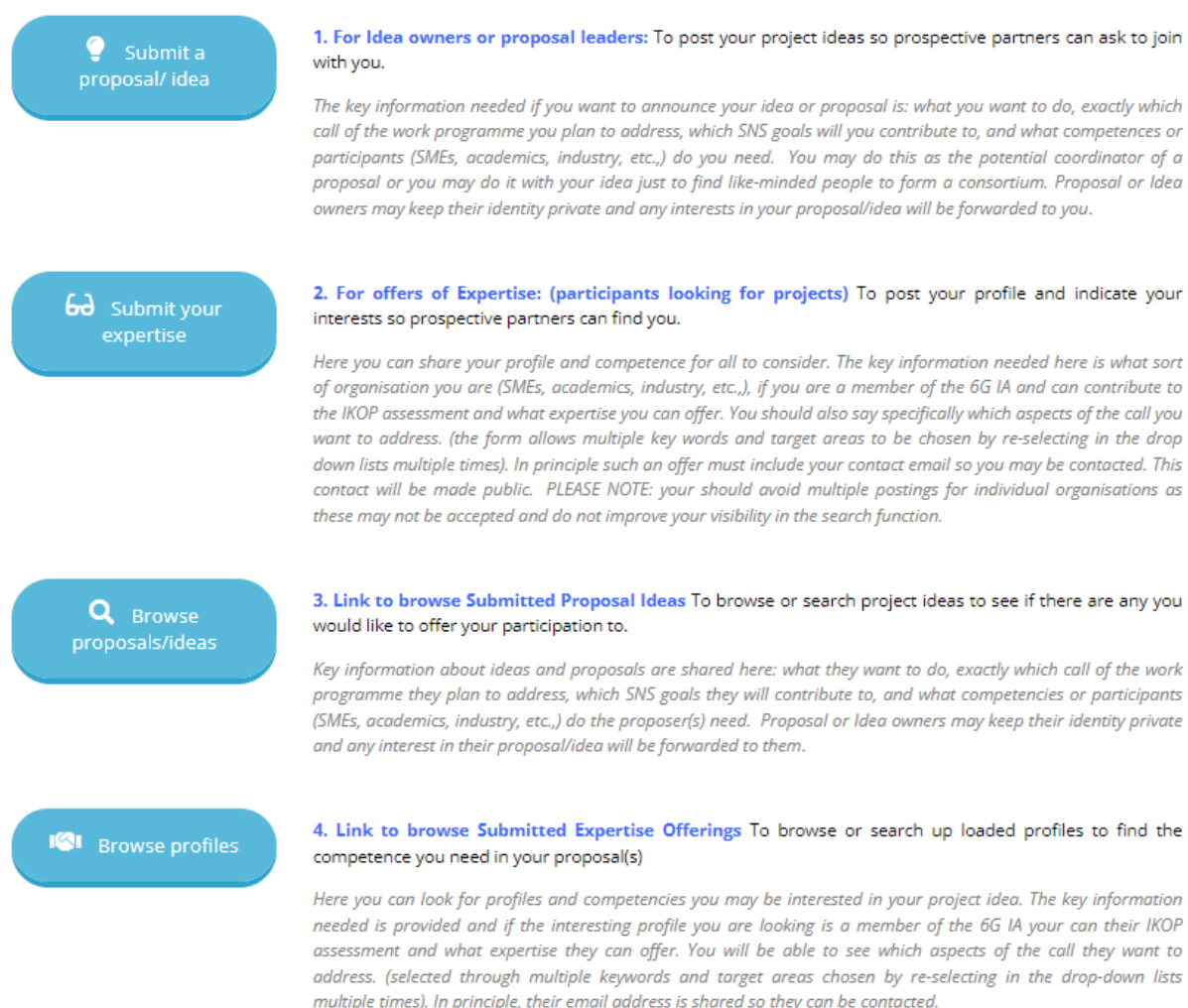
Figure 19: Brokerage Service functionalities

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[7] https://sns-brokerage.eu/

3.2 Activities hosted on Brokerage Platform during 2024

In 2024 proposals/ideas and expertise profiles could be submitted for the following call topics:

HORIZON-JU-SNS-2024-STREAM-B (RIA)

01-01: System Architecture

01-02: Wireless Communication Technologies and Signal Processing

01-03: Communication Infrastructure Technologies and Devices

01-04: Reliable Services and Smart Security

01-05: International Collaboration – EU-JP

01-06: International Collaboration – EU-KOR

01-07: Sustainability Lighthouse

01-08: Reliable AI for 6G Communications Systems and Services

HORIZON-JU-SNS-2024-STREAM-C (RIA)

01-01: SNS Microelectronics Lighthouse

HORIZON-JU-SNS-2024-STREAM-D (IA)

01-01: SNS Large Scale Trials and Pilots (LST&Ps) with Verticals (IA)

HORIZON-JU-SNS-2024-STREAM-CSA (CSA)

01-01: SNS Operations and Output optimisation 4.0 HORIZON-ER-JU-2024-FA2-SNS

EU-RAIL – SNS SYNERGY:

Digital & Automated testing and operational validation of the next EU rail communication system

4   Mailing Lists

Over 60 mailing lists have been set up for SNS JU and NetworldEurope ETP. The number is quite dynamic and new communication groups are evolving quite frequently. Older lists are retired if not used so the number of lists does also reflect some churn.

The SNS JU mail list server has distributed 1,7 million (until 31 Dec 2023: 1.3 million) emails with a traffic size of more than 341 Gigabytes (until 31 Dec 2023: 268 Gigabytes).

An increasing problem with the support of the mail servers is that many participant domain mail servers are being updated to have stricter policies on the mails that can be accepted. Each time this happens there has to be an investigation into the particular circumstances to determine if the receiving server needs to "whitelist" the SNS Domain and/or if the SNS mail servers need to be reconfigured. As there are now 460 unique organisations participating in the SNS JU projects and many other stakeholders in mail lists, the overhead of ensuring all mails are technically compatible with the server configurations all recipients, is becoming a large unplanned task.

A specific role of the mail server is to support the newsletter distribution. Everyone interested in receiving regular news from SNS JU can subscribe to SNS JU Newsflashes & Newsletters, using the subscription form on the SNS JU web page. After confirming the link in the confirmation email (i.e. double opt-in) the email address is automatically added to the newsletter mailing lists newsletter@sns-ju.eu. The same forms can also be used for unsubscribing. Currently a total of 4,114 (2023: 3,533) email addresses are subscribed to these lists.

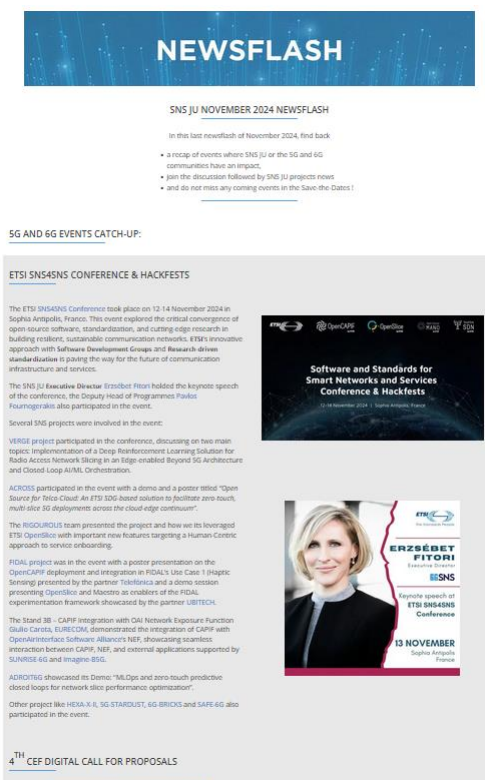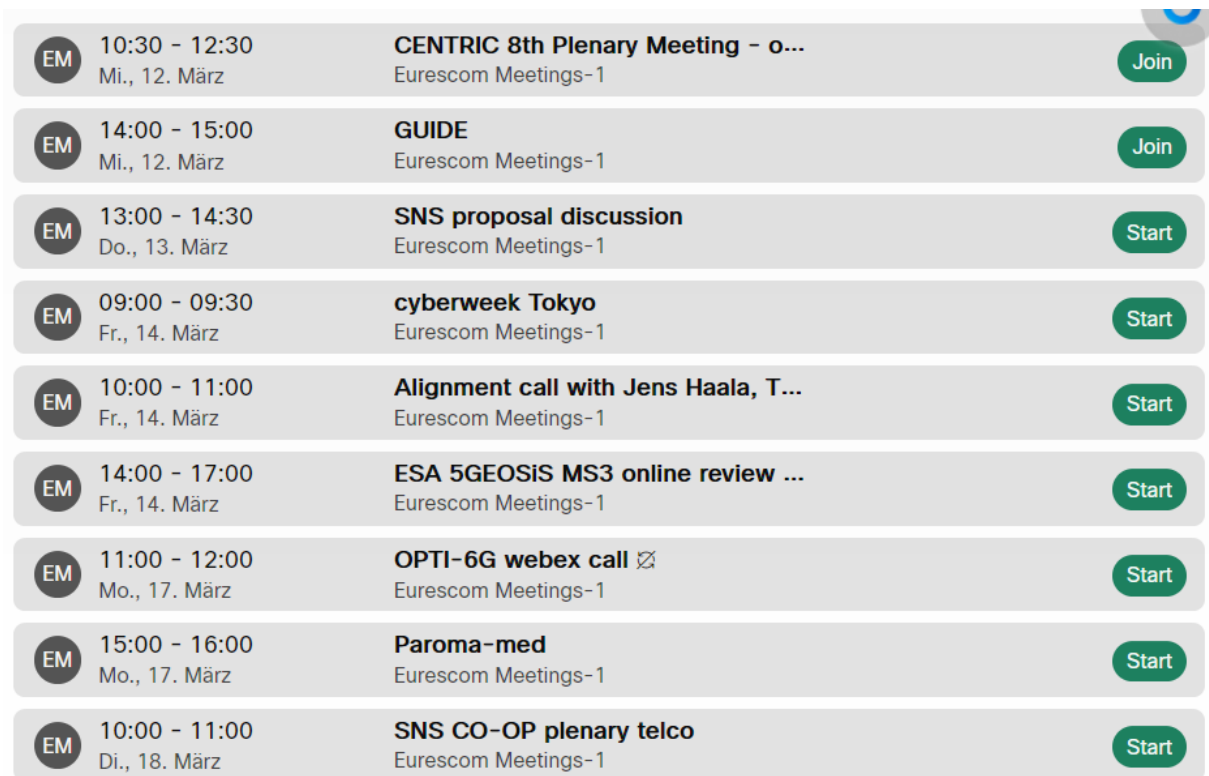| Number of newsflashes and newsletters sent out per year:	− in 2023:
	    o 7 newsflashes
	    o 2 newsletters
	− In 2024:
	    o 12 newsflashes
	    o 3 newsletters

Figure 20: Newsflash November 2024

5   Audio and Web Conferences

The Web-conferencing tool, based on WebEx, has been used extensively in the past 12 months by the SNS JU, 6G-IA, SNS JU Projects and Working Groups. In fact, over 800 (2023: 600) virtual meetings, involving nearly 13,000 (2023: 10,000) participants have been hosted in the past period so far. The majority were internal meetings and there was a significant number of public webinars and external/dissemination events. Having these facilities mean we are enabling the SNS JU to perform much more dissemination than when they used to rely on in person events and operate much more sustainably by reducing travel.

Four meeting rooms are used to support the increasing number of meetings. The figure below shows scheduled meetings in one of the four meeting rooms:

EM	10:30 – 12:30 Mi., 12. März	**CENTRIC 8th Plenary Meeting – o...** Eurescom Meetings-1	Join
EM	14:00 – 15:00 Mi., 12. März	**GUIDE** Eurescom Meetings-1	Join
EM	13:00 – 14:30 Do., 13. März	**SNS proposal discussion** Eurescom Meetings-1	Start
EM	09:00 – 09:30 Fr., 14. März	**cyberweek Tokyo** Eurescom Meetings-1	Start
EM	10:00 – 11:00 Fr., 14. März	**Alignment call with Jens Haala, T...** Eurescom Meetings-1	Start
EM	14:00 – 17:00 Fr., 14. März	**ESA 5GEOSiS MS3 online review ...** Eurescom Meetings-1	Start
EM	11:00 – 12:00 Mo., 17. März	**OPTI-6G webex call ✉** Eurescom Meetings-1	Start
EM	15:00 – 16:00 Mo., 17. März	**Paroma-med** Eurescom Meetings-1	Start
EM	10:00 – 11:00 Di., 18. März	**SNS CO-OP plenary telco** Eurescom Meetings-1	Start

Figure 21: Scheduled WebEx meetings in one of the four meeting rooms

6   Event Registration and Questionnaire Services

Online registration facilities have been used for a number of workshops and information days. They consist of a web-based form which gathers information into a database and automatically sends an acknowledgement to the registrant.

The database information is then used to prepare participant lists and send updated information to the participants.

Similar forms have also been used to enable the community to submit feedback in public consultations e.g. on White Papers or the Pre-structuring model. In these cases, an online form captures the information and it is stored in a database. Then the key information is exported to a spreadsheet which the editors of the document under consultation use to produce the next version of the document. In 2024, 8 events were fully organised by the SNS OPS support team. This included creation of the registration form and the database and post-event management.

Figure 22: Example of an event banner on the SNS Website

Questionnaires for collecting data from projects on behalf of the CSA support project and the office are implemented and hosted on the web site.

In 2024, 12 questionnaires were implemented by the SNS OPS support team. This work involves taking the questions prepared by the project and designing a suitable form that allows the projects or whoever is responding to logically proceed through the questions and submit the desired answers. The answers must be captured in a unique database instance and made available to the project team to process the data. Acknowledgements are also sent to the data submitters.

For SNS OPS this work has involved the creation of multiple forms, database management and the processing and distribution of the submitted results – anonymised where appropriate. Each questionnaire must also be checked to ensure GDPR compliance and only to ask for necessary and useful data.

T6: Which standardization/specification bodies will your projects target for contributions? (if n

3GPP:
—Please choose an option—   ▼   —Please choose an option—   ▼

ETSI:
—Please choose an option—   ▼   —Please choose an option—   ▼

ITU:
—Please choose an option—   ▼   —Please choose an option—   ▼

IETF/IRTF:
—Please choose an option—   ▼   —Please choose an option—   ▼

ITU(2):
—Please choose an option—   ▼   —Please choose an option—   ▼

O-RAN:
—Please choose an option—   ▼   —Please choose an option—   ▼

IEEE:
—Please choose an option—   ▼   —Please choose an option—   ▼

Please elaborate any "other" standards addressed here

T7: What type of (End User) Equipment will be used for testing/trialing in your project?

☐ Mobile Phone
☐ CPE
☐ Modem/Router
☐ On Board Unit (V2X)
☐ Drone

Figure 23: Example of part of a Questionnaire form

7   eVoting Tool

This tool enables decisions and elections to be held electronically using a secure system where the access and voting rights are controlled.

In the reporting period, the tool has been successfully used for decision making and voting in the NetworldEurope ETP. These include e.g. the election of the Vice-Chairs of the NetworldEurope Steering Board for the period 2025-2026. The SB Vice-Chairs were elected using the eVoting tool given that physical meetings of the NetworldEurope SB to perform a secret election could not be organised.

The graphical interface of the tool showing an example of the most recent election of the tool usage in the period is given in Figure 24.
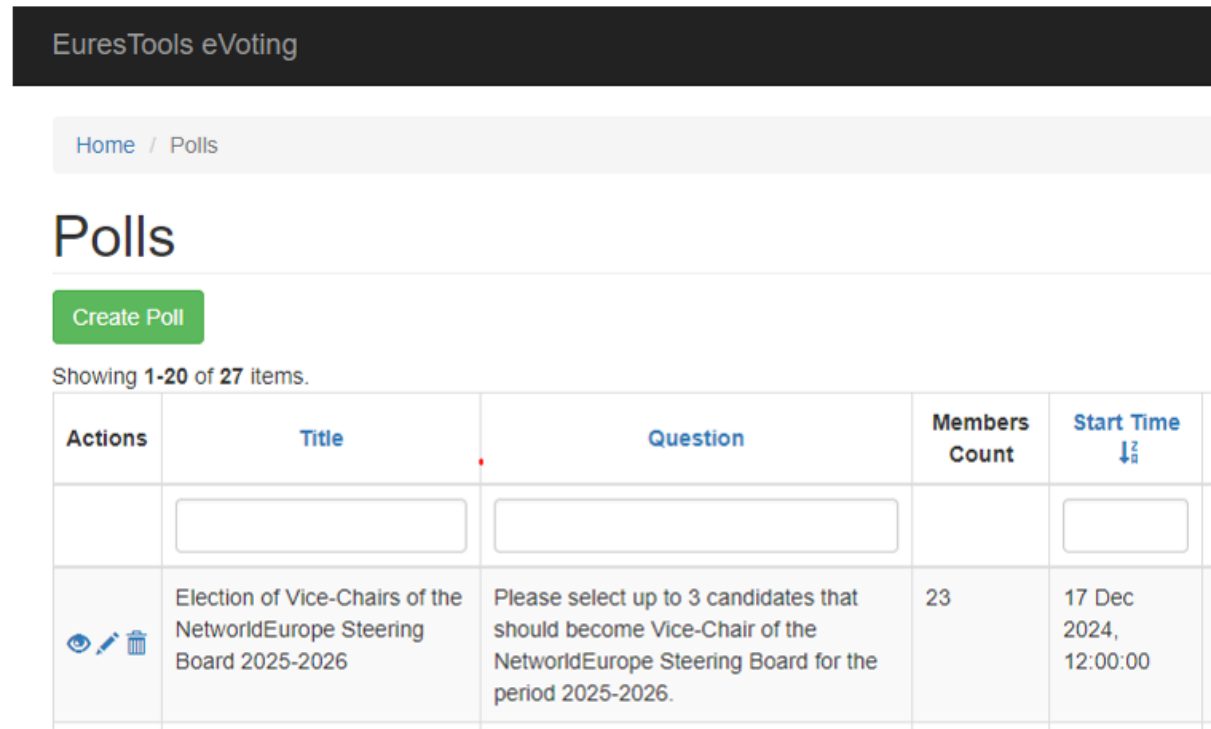
Figure 24: E-voting tool graphical interface (admin view)

8   GDPR Compliance

All personal information collected in scope of the support activities of SNS OPS is strictly handled in line with the EU General Data Protection Regulation (GDPR). Details on the data handling policy are available on the SNS JU web at https://smart-networks.europa.eu/data-protection-declaration/

In 2024, a centrally managed Central Register Data Protection tool was integrated to the EU general data protection regulation (GDPR) on the SNS JU website. This tool allows users to check how the SNS JU is processing data of data subject categories for different purposes.

The below Figure 25 and Figure 26 show the parts of the Data Protection Declaration on the SNS JU site with the Central Register Data Protection tool.

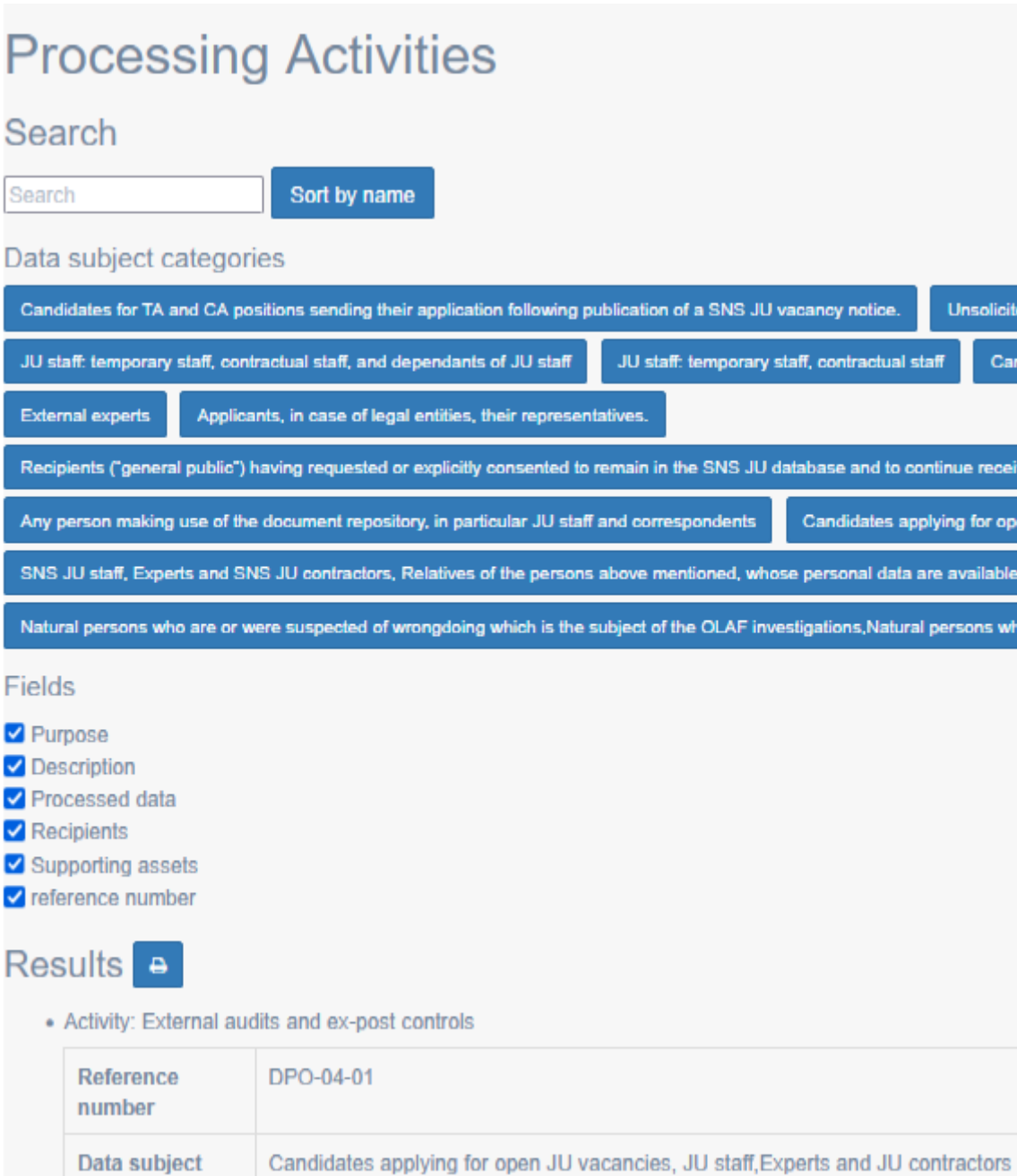*Figure 25: Data Protection Declaration on the SNS-JU site*

Figure 26: Central Register Data Protection tool

The website analytics tool is GDPR compliant (see Section 1.2.3) and for supporting cookies the EC Cookie Consent Kit and Banner (CCK)[8] is used which is also GDPR compliant.

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[8] https://webgate.ec.europa.eu/fpfis/wikis/display/webtools/Cookie+Consent+Kit+Banner

9   Conclusions and Outlook

During the second period of SNS OPS the community being supported by the SNS website has more than doubled.

In addition, the SNS JU Office has become more active and has sought support for a range of communications activities that were not foreseen in the original project planning.

The SNS OPS project has provided all the required support and responded dynamically to the needs of the Community and the SNS JU Office in a flexible and constructive way.

By the end of Q1 2025, all the new projects from Call 3 have been integrated into the Updated SNS JU Collaboration agreement which gives them access rights to the SNS repository – BSCW – and increasing the numbers of participants in all SNS activities from 35 project in call one to 79 Projects across calls 1,2 & 3.

There are 460 individual organisations in these 79 projects and a number of individuals from each organisation in the different SNS activities. This has resulted in a proportionally large growth in the size and number of mail lists and the complexity of their maintenance.

Also, in Q1 2025 the handover of the Support activities from SNS OPS to the New Support Project: SNS CO-OP has begun. By the end of Q1 SNS CO-OP will have the full responsibility for all aspects of the website, the document repository and all other tools in the infrastructure provided to the SNS JU.

Looking forward, we expect some projects from Call 1 to be completed in 2025 so one of the important actions to be considered now is to capture the results from these projects and preserve them in the community to be built upon in future phases of the Joint Undertaking. All (non-sensitive) deliverables from SNS projects will be stored in the SNS BSCW Repository by the end of the respective project.