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Deliverable D3.1

Stakeholder Engagement Activity and Plan

Deliverable D3.1

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Abstract

This document describes GN4-3's approach to stakeholder engagement, as led by Work Package 3 User and Stakeholder Engagement, and brings together the 2020 engagement plans of each Work Package. It provides an overview of who the stakeholders are and how they are being engaged with, to enable effective oversight by WP3 and ensure an efficient, fully coordinated approach to outreach.

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Executive Summary

This document describes GN4-3's approach to stakeholder engagement, as led by Work Package 3 User and Stakeholder Engagement, and brings together the 2020 engagement plans of each Work Package.

The activities of WP3 underpin and inform the outreach activities of the rest of the project. Their objective is to achieve a successful outcome of the service provision offered by GÉANT and the NRENS by providing both stakeholder engagement and stakeholder management. WP3 works closely with the other Work Packages to ensure a fully coordinated approach to outreach, as well as undertaking engagement activities on behalf of the other WPs.

The methodology proposed and supported by WP3 for each Work Package consists of the following steps:

- Identify stakeholders – the individuals and/or groups who have an interest in, are affected by, can influence or provide input to a Work Package's activities.
- Identify the role of each stakeholder (group), and why engagement is important.
- Define and plan the engagement activity (e.g. type, frequency) appropriate to each stakeholder (group).
- Execute the plan
- With WP3, review the engagement activity to measure progress, evaluate success, identify lessons learned and revise the plan for the next year; with WP3, identify the risks associated with stakeholder engagement and propose mitigations.

GÉANT operates in a complex environment with a wide range of stakeholder groups, both internal to the project and external to the project. Internal stakeholders include NREN partners, Work Package and Task Leaders, individual project participants, product management, project management, Project Management Board and governing bodies. External stakeholders include European NRENS, global partner RRENS and NRENS, users, other e-infrastructure projects and initiatives, other EC-funded network advancement projects that GÉANT supports, Special Interest Groups & Task Forces, international bodies/organisations, vendors, industry representatives, EU institutions, funders, national governments, standards bodies and the general public. Each Work Package has its own subset, both of stakeholders and of reasons for engaging with them.

As with the stakeholder groups themselves, the channels for engagement are wide-ranging. The selection of channel(s) depends on the Work Package activity, the stakeholder, and the nature of the engagement (e.g. strategic, technical, communication). The list includes NREN service reviews, infoshares and webinars, subject- or community-specific meetings, training and workshops, surveys,

websites and wikis, targeted mailings, communications channels facilitated and/or managed by WP2, and event organisation/participation.

Each Work Package reports on its event participation as part of the regular Management Reports. WP3 Task 1 works closely and continuously with all WPs, including the other Tasks of WP3, and areas of the project to identify evolving and/or ad hoc stakeholder engagement needs that must be addressed. Similarly, Task 2 interacts closely with the services Work Packages, as well as with WP2 for outreach activities. In addition, WP3 Task 1 holds 6-monthly reviews with each Work Package and from 2020 onwards will also attend the Project Annual Internal Review (PAIR) meetings between the Project Management Office (PMO) and each WP, to review stakeholder engagement activities to date, identify any omissions and discuss any concerns. Any general issues can be raised at the monthly Project Management Board (PMB) meetings. WP3 has a number of key performance indicators (KPIs) relating to stakeholder engagement, and will investigate the viability of adding further possible indicators of stakeholder engagement effectiveness.

In describing GN4-3's approach to stakeholder engagement, and presenting the plans of each Work Package, this document provides an overview of who the stakeholders are and how they are being engaged with, both enabling and demonstrating effective oversight by WP3 and a coordinated approach to outreach. A framework is in place that ensures the project's engagement activity is proactive, comprehensive, agile and coordinated, thereby maximising the ability of GN4-3 to deliver benefit to and meet the needs of its stakeholders.

Intended to be a practical, working tool, this document will be updated annually as part of Milestones M3.3 (due in Month 24), M3.5 (M36) and M3.7 (M48).

1 Introduction

This deliverable is a practical, working document which describes the project's outreach activities towards all its stakeholders for 2020.

The objective of the document, which combines the engagement activities and plans of each Work Package, is to provide project participants with an overview of who the stakeholders are and how they are being engaged with, to enable effective oversight by Work Package 3 User and Stakeholder Engagement (WP3), and to ensure an efficient, fully coordinated approach to outreach.

It begins with an overview of the User and Stakeholder Engagement Work Package (Section 2) and goes on to outline key aspects of the project's stakeholder engagement: methodology (Section 3), stakeholder identification (Section 4), engagement channels (Section 5) and reporting, monitoring and evaluation (Section 6). It then presents each Work Package's stakeholder engagement plans, including, for WP3, its interactions with other WPs, particularly the other two support Work Packages WP1 Project Management and WP2 Marketing, Communications and Events (Sections 7 and 8). The final section draws some conclusions about the project's stakeholder engagement activity (Section 9).

A consolidated view of the primary stakeholder groups is presented in Appendix A and of the primary stakeholder channels in Appendix B.

The document will be updated annually as part of Milestones M3.3 (due in Month 24), M3.5 (M36) and M3.7 (M48).

2 User and Stakeholder Engagement (WP3)

This section gives an overview of the structure and activities of Work Package 3 User and Stakeholder Engagement (WP3), which underpin and inform the stakeholder engagement activities of the other WPs.

WP3 provides the interface between GÉANT and the communities the project serves and collaborates with, actively engaging with those communities to:

- Offer solutions comprising services and expertise to match user needs.
- Support “co-creation”, forming expert groups to gather feedback on experience of current services and gain insight into future requirements.
- Disseminate the value of the National Research and Education Networks (NRENs) and e-infrastructures in general, and their contribution to the Open Science principles.

All of the above provides intelligence for the other Work Packages that helps define new features or service ideas. WP3 also works with the Work Packages, and the GN4 Phase 3 Network project (GN4-3N), to ensure a fully coordinated approach to outreach, as described in this stakeholder engagement plan, as well as undertaking engagement activities on behalf of the other WPs.

WP3 seeks open, objective-driven communications that are inclusive and collaborative, as is the nature of the GÉANT community. In order to achieve a successful outcome of the service provision offered by GÉANT and the NRENs, WP3 – Task 1 Partner Relations and Engagement especially – must be mindful of the need for both stakeholder engagement (concerned with relationships and influence) and stakeholder management (concerned with processes and management) to deliver success. The methods and channels used to achieve this are outlined in subsequent sections of this document.

WP3’s work is divided between four Tasks as summarised below. The different Tasks are closely linked through everyday interactions representing various elements of the engagement value chain, but also more formally through regular Task Leader meetings and a shared online workspace.

Task 1 Partner Relations and Engagement

The key objective of Task 1 is to ensure that GÉANT provides an excellent engagement service to European NRENs, e-infrastructure projects, wider initiatives such as EOSC and EDI, industry partners and new users in order to facilitate, extend and maximise the use of the GÉANT network and services. It also provides a liaison function with GÉANT’s global partner Regional Research and Education Networks (RRENs) and NRENs.

Partner Relations provides an account management function for GÉANT NRENs, with a focus on supporting and enabling NRENs’ consumption of GÉANT services and supporting the wider

sustainability needs of partners, for example, through enhancing NREN value propositions, especially in targeted countries where NREs are less mature.

The Task also provides an International Relations function, which is responsible for liaison with GÉANT's global partner networks to ensure the implementation of specific service requests to meet the needs of users working across continental boundaries. International Relations also provides a GÉANT presence at global partners' networking events (such as APAN, CAREN, e-AGE, Internet2 Global Summit, TICAL, UbuntuNet-Connect, WACREN Conference) and provides a conduit between global partners and the GÉANT communities on areas of common interest.

In addition, Partner Relations provides a central point for liaison and engagement activities with other e-infrastructure projects and wider initiatives such as EOSC and EDI. This function coordinates the support provided by GÉANT, the NREs and global partners with e-infrastructures, for further alignment of service portfolios and continuation of joint initiatives and partnerships. As part of this function the Task monitors, harmonises and supports the different strands of work outlined in current collaboration agreements (interoperability, consolidation, strategy and service alignment) or joint projects (e.g. PRACE-5IP project) with other EOSC and EDI implementation or e-infrastructure projects (e.g. EOSC Secretariat and HPC-GIG projects). Task 1 also assesses the potential scope/opportunities for and value of engaging with new stakeholder groups, from raising awareness of GÉANT services to potentially undertaking joint activities/collaborations. Groups currently identified for assessment include Digital Innovation Hubs; prospective groups include other industry initiatives and new potential user communities such as the public sector.

Partner Relations also acts as the horizontal layer across the project's stakeholder engagement activities, continuously filling gaps and identifying needs beyond the scheduled events, and looking for opportunities to combine or phase the engagement activities of different areas of the project to ensure that stakeholders are not overloaded.

Primary stakeholder focus: European NREN, global NREN/RREN and e-infrastructure partners.

Task 2 Research Engagement

Task 2's primary focus is user communities. Its key objectives are to:

- Reach out to existing and new user communities to facilitate, extend and maximise the use of the GÉANT network and services.
- Act as the "voice of the customer" within the project to feedback on user needs and to coordinate service proposals.

The Task coordinates the support provided by GÉANT, the NREs and global partners for existing user applications, as well as identifying new potential European and international project users, through:

- Provision of a dedicated account management function for key international user projects and organisations.
- Interaction with e-infrastructure projects (PRACE, EUDAT, EGI, OCRE, Copernicus DIAS, etc.) for their own service needs. Task 2 will also provide support to projects aimed to promote and expand the reach of the European e-infrastructures, such as the European Data Infrastructure, the PRACE IP project, and associated EOSC activities.

- Interaction with international users (CERN, ESA, SKA, ESS, ITER, EMBL, etc.) research infrastructures and expansion of the GÉANT and NRENs user base to new science communities and collaborations, also considering related public sector users.
- Supporting GÉANT service development through use-case analysis, in order to support more “co-creation” and user-centric activity through feedback from users on new and existing services (in conjunction with Task 3).
- Providing a technical business development focus for transnational user organisations, supporting alignment with existing and future community strategies, such as the one-stop-shop concept.
- Promotion of international user collaboration in order to maximise the impact of other EC-funded network advancement projects that GÉANT supports, including: BELLA, AsiaConnect, AfricaConnect3, etc., in coordination with WP1 T6 and WP3 T1.

Primary stakeholder focus: international user communities and organisations, e-infrastructure projects.

Task 3 Stakeholder Insights

The key objectives of Task 3 are to:

- Provide information on developments relevant to the GÉANT project and its users, primarily within NRENs and international research projects, but also relevant to industry, R&E and the public sector, where appropriate.
- Advise on requirements and trends, based on this information, that are important to the planning of future NREN and GÉANT services and infrastructures.

The Task’s mechanisms for collecting information include the annual NREN Satisfaction Survey and the Compendium Survey, resulting in the publicly available Satisfaction Survey report and Compendium resource.

Primary stakeholder focus: reporting *on* the GÉANT community *for* the community.

Task 4 Community Programme

The key objectives of Task 4 are to:

- Facilitate exchange of information and best practice between experts working in the GÉANT NREN community and more widely in the sector.
- Design and progress collaborative work items between individuals from multiple organisations with the objective of improving services, expertise and understanding in the NREN community.
- Provide a platform to promote work from the GN4-3 project, the GÉANT Community, the global NREN community and from industry partners.
- Support the GÉANT Community Committee (GCC) in selecting, monitoring, measuring and closing groups within the GÉANT Community Programme against defined criteria to ensure that working groups are running effectively.

Primary stakeholder focus: community members with shared interests.

3 Methodology and Milestones

The methodology proposed and supported by WP3 for each Work Package consists of the following steps:

- Identify stakeholders – the individuals and/or groups who have an interest in, are affected by, can influence or provide input to a Work Package’s activities.
- Identify the role of each stakeholder (group), and why engagement is important.
- Define and plan the engagement activity (e.g. type, frequency) appropriate to each stakeholder (group).
- Identify the risks associated with stakeholder engagement and propose mitigations.
- Execute the plan.
- With WP3 Task 1, review the engagement activity to measure progress, evaluate success, identify lessons learned and revise the plan for the next year.

These steps are summarised in Figure 3.1 below.

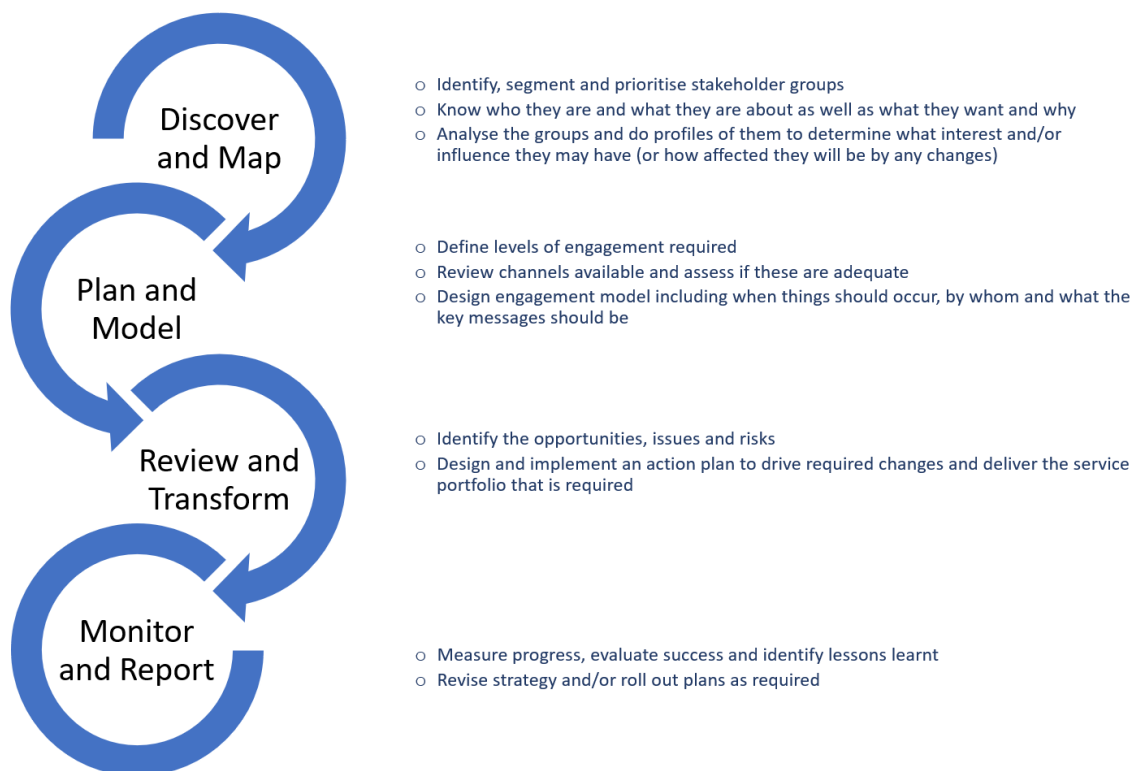


Figure 3.1: Stakeholder engagement methodology

The WPs should keep the appropriate WP3 team(s) informed throughout, involving them on an ad hoc basis if required, as well as in the scheduled joint steps.

Key dates for the coordinated approach to stakeholder engagement are:

Year	Activity / Event	Project Month
2	6-monthly reviews of WP plans completed	M18
	M3.3 Stakeholder Engagement Plan Y2 Update	M24
3	M3.5 Stakeholder Engagement Plan Y3 Update	M30
	6-monthly reviews of WP plans completed	M36
4	M3.7 Stakeholder Engagement Plan Y4 Update	M42
	6-monthly reviews of WP plans completed	M48

Table 3.1: Stakeholder engagement milestones

4 Stakeholder Identification

GÉANT operates in a complex environment with a wide range of stakeholder groups. Each Work Package has its own subset, both of stakeholders and of reasons for engaging with them.

The list includes:

- Internal to the project:
 - NREN partners.
 - Work Package Leaders (WPLs).
 - Task Leaders.
 - Individual project participants.
 - Product management.
 - Project management.
 - Project Management Board (WPLs, Project Management Office (PMO) and Coordinators).
 - Governing body (GÉANT General Assembly (GA), GÉANT Board, Oversight Committee, GÉANT Programme Planning Committee (GPPC), Quality Assurance and Public and External Relations Committee (QASPER), Network Infrastructure Advisory Committee (NIAC), GÉANT Community Committee (GCC), etc.)
- External to the project:
 - European NRENs:
 - Decision makers.
 - Technical and/or specialist staff, e.g. network architects and engineers, information security specialists, cloud service delivery managers (CSDMs), Network Operations Centre (NOC) teams, Access Port Managers (APMs).
 - Global partner RRENs and NRENs.
 - Users:
 - Research and education communities, including large international research institutions, projects and collaborations (such as WLCG, CERN, EMBL-EBI, ELIXIR, SKA).
 - Educational technology organisations and next-generation digital learning environment initiatives (such as EUNIS, IMS, EDUCAUSE and Up2U).
 - Multinational organisations such as ESA, EUMETSAT and GEO.
 - Technical and/or specialist staff.
 - Other e-infrastructure projects and initiatives, e.g. PRACE, EUDAT, EGI, OCRE, EOSC, EDI.
 - Other EC-funded network advancement projects that GÉANT supports, including BELLA, AsiaConnect, EaP, AfricaConnect3, CAREN, EUMEDCONNECT.
 - Special Interest Groups & Task Forces (SIG-MSP, SIG-Marcomms, SIG-NOC).

- International bodies, organisations and activities such as CEO Forum, GNA-G, ANA.
- Vendors.
- Industry representatives.
- EU institutions, including the EC.
- Funders.
- National governments.
- Standards bodies.
- General public.

The stakeholders identified by each Work Package, and the reasons for engagement, are shown in the individual stakeholder engagement plans in Sections 7 and 8; a consolidated table of stakeholders is provided in Appendix A. Gathering the plans and compiling the overview table for this deliverable have highlighted differing definitions of stakeholders across the project. They will be further reviewed and discussed with the WPs to ensure any gaps are identified and addressed, and to ensure consistency of interpretation and level of awareness.

The stakeholders listed above are all, in one way or another, part of the R&E community and have an interest in the service offerings of GÉANT and the NRENs. Depending on the use case, WP3 might engage with any of these stakeholders, in accordance with the overarching objective to support and enable the wider R&E community. WP3 Task 1 has particular responsibility for acting on behalf of the NREN stakeholders, representing and supporting their interests.

5 Engagement Channels

As with the stakeholder groups themselves, the channels for engagement are wide-ranging. The selection of channel(s) depends on the Work Package activity, the stakeholder, and the nature of the engagement (e.g. strategic, technical, communication).

The list includes:

- NREN service reviews.
- Infoshares and webinars.
- Subject- or community-specific meetings:
 - NREN CEO, Directors and Executive meetings.
 - Service and Technology Forum (STF), Task Force (TF) and Special Interest Group (SIG) meetings.
 - SEE Regional Forum.
 - EU institution meetings.
- Event organisation and/or participation:
 - National and international conferences, conventions and summits.
 - NREN conferences.
- Collaborative projects.
- Training and workshops.
- Surveys (with WP3 playing a coordination role, ensuring that results of surveys conducted by all areas of the project are available to the community).
- Focus interviews.
- Targeted mailings.
- Websites and wikis.
- Communications channels facilitated and/or managed by WP2 (see Section 7.5.1.2).

To meet the specific demands of individual use cases, a tailored mix of different channels is used for maximum impact of the targeted outreach.

The engagement channels identified by each Work Package, and the objectives associated with each, are shown in the individual stakeholder engagement plans in Sections 7 and 8; a consolidated table of channels is provided in Appendix B. As with the stakeholder groups, preparing this deliverable has highlighted differing definitions of engagement channels across the project. They will be further reviewed and discussed with the WPs to ensure any gaps are identified and addressed, and to ensure consistency of interpretation and level of awareness.

5.1 Engagement Channels and Resources for Service Development

To illustrate the use of the identified engagement channels specifically for service development, Figure 5.1 below outlines what WP3 seeks to achieve at different stages in the service lifecycle. Figure 5.2 then shows examples of engagement activity, using the outreach toolkit, that WP3 might undertake to achieve these aims (note that these examples are not exhaustive). This work would be complemented by WP2 activity such as *CONNECT* articles, blog posts, tweets and website/webpage creation, etc.

	Concept/ Pre-Pilot	Pilot	Transition	Production	Continuous Development
Want to know	<ul style="list-style-type: none"> ○ Is concept of interest? ○ What business model/market size do they foresee? ○ I.e. is there a market? 	<ul style="list-style-type: none"> ○ Are you interested in piloting? ○ Do you have the scope to pilot? 	<ul style="list-style-type: none"> ○ Do you want to become an early adopter/continue following pilot? 	<ul style="list-style-type: none"> ○ Do you want to adopt? If no, why not? 	<ul style="list-style-type: none"> ○ How do you find the service (good and bad)? ○ What would you like to see enhanced? ○ More broadly, what do you think is missing in the suite? ○ (For new customers – how is set-up going?)
Want to achieve	<ul style="list-style-type: none"> ○ Tentative commitment (enough to green-light the idea) 	<ul style="list-style-type: none"> ○ Commitment to serve on pilot 	<ul style="list-style-type: none"> ○ Convert piloting NRENs to early adopters/customers ○ Get more NRENs interested 	<ul style="list-style-type: none"> ○ Adoption 	<ul style="list-style-type: none"> ○ Feedback (including for the whole suite)
Want to talk to	<ul style="list-style-type: none"> ○ Service portfolio owner with tech consult 	<ul style="list-style-type: none"> ○ Relevant tech coordinator following OK from relevant section lead 	<ul style="list-style-type: none"> ○ Tech person to evangelise internally to Exec: leverage strong sponsor of service 	<ul style="list-style-type: none"> ○ Exec-layer approval following tech interest/lobby 	<ul style="list-style-type: none"> ○ Tech level (possibly Exec level for whole suite)
Info required (each stage builds on previous)	<ul style="list-style-type: none"> ○ What the idea is ○ How it could work ○ Why it's good, ○ What are the tech requirements for NREN/end user 	<ul style="list-style-type: none"> ○ How service would work in theory ○ What NREN is expected to do (how much investment would it be in terms of people and hardware/software etc.) ○ What might it cost once in production 	<ul style="list-style-type: none"> ○ How fits with rest of service suite ○ Costs ○ Delivery method ○ Resource/investment needed 	<ul style="list-style-type: none"> ○ Order/request process ○ How fits with rest of service suite ○ Costs ○ Delivery process/installation ○ Resource/Investment needed 	<ul style="list-style-type: none"> ○ Any new developments ○ What is in pipeline for the service/suite

Figure 5.1: Stakeholder engagement requirements at different stages in the service lifecycle

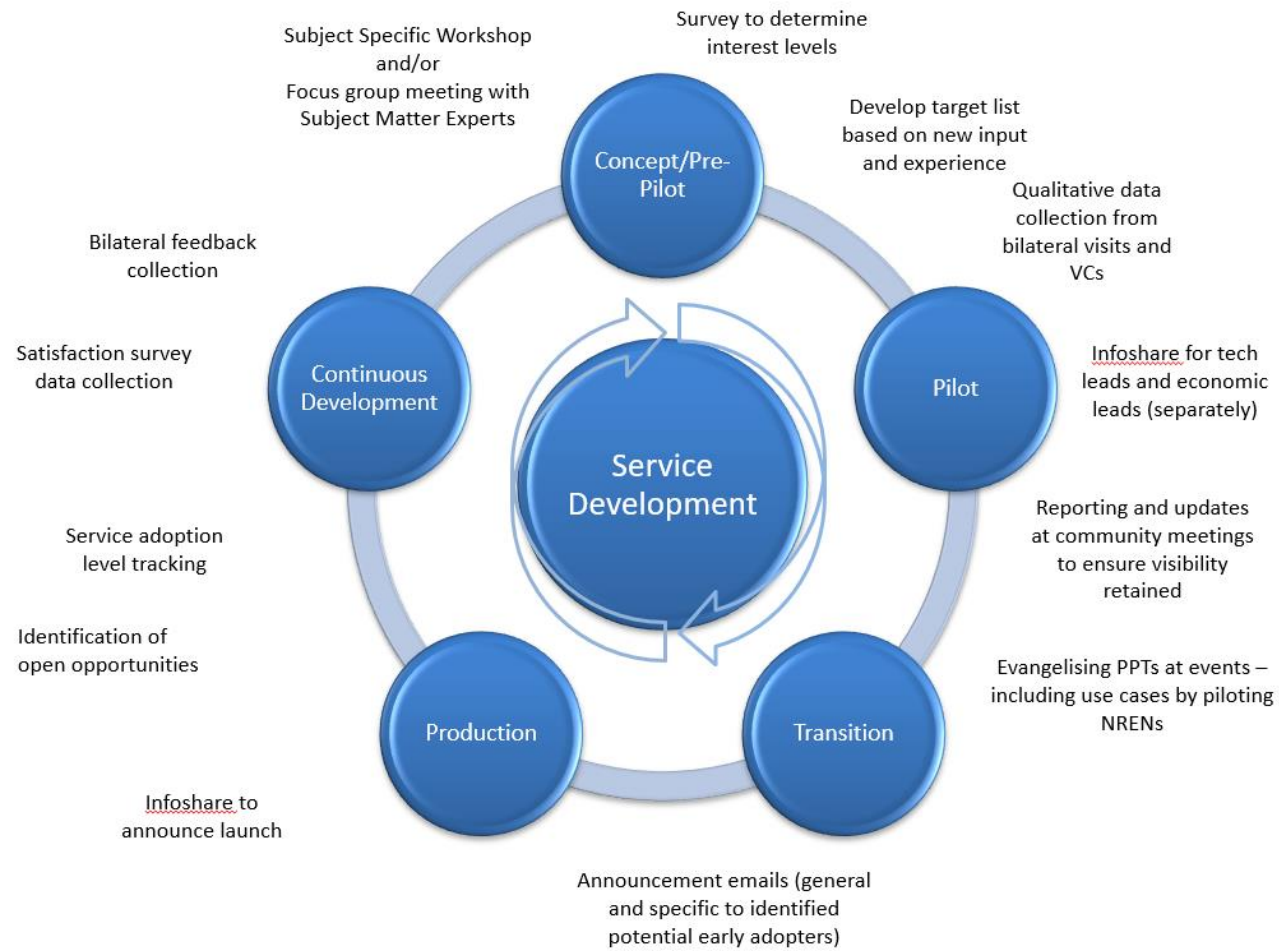


Figure 5.2: Service-related engagement requirements

5.2 Events

A calendar of events at which GÉANT will or may potentially be represented is maintained by WP2 [[Events 2020](#)]; as at 19 February, the list has 72 events for 2020. It is regularly reviewed by WP2 and WP3, to plan and coordinate attendance, and to identify gaps. Actual attendance is reported in the Management Reports (see the next section); the number of reported attendances in the last calendar year of GN4-2 was 204.

The emphasis placed by each Work Package on and the depth of their engagement with the two flagship GÉANT community events – the GN4-3 Symposium and TNC – will vary according to the WP's size, scope of work and available resource.

6 Reporting, Monitoring and Evaluation

6.1 Reporting

Each Work Package reports on its event participation as part of the regular Management Reports. As an additional quality assurance measure, beginning with the first Management Report for Period 2 (Deliverable D1.9, due Month 22), a new column, Purpose of Engagement, will be added to the event participation table, identifying the primary stakeholder engagement reason for attending the event.

6.2 Monitoring

As outlined in Section 7.5, WP3 Task 1 works closely and continuously with all WPs, including the other Tasks of WP3, and areas of the project to identify evolving and/or ad hoc stakeholder engagement needs that must be addressed. Similarly, Task 2 interacts closely with the services Work Packages, as well as with WP2 for outreach activities.

In addition, WP3 Task 1 aims to hold 6-monthly reviews with each Work Package, to discuss:

- Whether the proposed engagement activities took place.
- What *unplanned* engagement activities took place.
- Whether the WP is reaching its stakeholders.
- What WP3 T1 can do to help.
- Whether the plan needs to be adjusted, e.g. a new meeting introduced, either one-off or recurring, to address a specific need and/or specific stakeholders.

As part of this, from 2020 WP3 Task 1 will also attend the Project Annual Internal Review (PAIR) meetings between the Project Management Office (PMO) and each WP, to review stakeholder engagement activities to date, identify any omissions and discuss any concerns.

The results including possible follow up actions of the review will subsequently be shared with the WP3 Leadership Team.

Any general issues can be raised at the monthly Project Management Board (PMB) meetings.

In Year 2, all WP3 Tasks will work with WP1 to develop a customer relationship management (CRM) system specification, with a view to implementing a solution in Year 3 that will facilitate the monitoring and management of stakeholder engagement.

6.3 Evaluation

WP3 key performance indicators (KPIs) relating to stakeholder engagement are shown in Table 6.1 below:

	KPI	Baseline (start of GN4-3)	Projected at end Year 2	Task
1	NRENS' level of satisfaction with the Partner Relations support maintained (measured through the annual Satisfaction Survey).	84% (as at Q1 2019) – answer either “excellent” or “good”	Q1 2021 forecast 86% or better	T1
2	At least 20 NREN service review meetings per year.	20	25	T1
3	Increase of 5% year-on-year of tracked usage statistics and downloads of the Compendium website and deliverables.	Downloads of <i>Compendium 2016</i> : 260 Compendium microsite (launched 2 Nov 2017): Page views: 8,037 Users: 901 Sessions: 3,077 Average time per visit: 05.55 Bounce rate: 72%	+5%	T3
4	Attendance at 25 or more user-specific events per year (GEO, LHC, etc.).	25	30	T2
5	10 news stories resulting from Task Force (TF) and Special Interest Group (SIG) activities per year.	20	30	T4

Table 6.1: WP3 KPIs relating to stakeholder engagement

A further possible indicator of stakeholder engagement effectiveness is increase in service uptake or number of piloting partners. WP3 will investigate the viability of adding this as an annual indicator for Y2; information required would include a breakdown per service of NRENS/User groups engaged with, and any additional statement about their position (e.g. “would like to adopt / pilot the service but need to wait for internal projects to be finalised first”). Such an indicator is in alignment with the increased focus on service-relevant end-user-oriented metrics outlined in Deliverable D1.3 *Key Performance Indicator Update*.

7 User and Stakeholder Engagement Plan (WP3)

Work Package 3’s stakeholder engagement plans as the WP with a supervisory, coordinating and dedicated role in respect of stakeholder engagement, are presented in this section. The individual plans for the other Work Packages are given in Section 8.

7.1 Task 1 Partner Relations and Engagement

Each of WP3 Task 1’s primary stakeholders, the NRENs, has developed a different way to respond to the various engagements initiated by the GÉANT Partner Relations team. A general annual plan is being developed to engage all NRENs which is then tailored according to the individual needs, inclinations and availability of each stakeholder. Partner Relations engages with each NREN as a whole and with dedicated/specialist roles, so the engagement plan is continuously adjusted to achieve the best possible outcome. Also, for the Western Balkans’ NRENs, an additional targeted engagement activity has been planned to address the isolation of these stakeholders. In addition, in 2020, Partner Relations will place particular focus on monitoring and proactively supporting SEE NRENs, as well as monitoring potentially at-risk NRENs who need further assistance with the “Case for NRENs” in their country or to work with their ministries or funders.

The engagement activities for each stakeholder are generally of three types:

- Informative: raising awareness of a new/planned service and/or assessing the deployment of previous services and user service received.
- Strategic: providing insight to enable the stakeholders to make sound choices in relation to their organisational / innovation development plan both internally and in connection with the GÉANT community.
- Technical: understanding and addressing specific technical needs or challenges.

The channels and activities for interacting with the NREN stakeholders are shown in Table 7.1 below.

Activity/Channel	Frequency	Stakeholder	Objective
Service review meeting (face to face)	At least 20 per year	All GÉANT NRENs	Informative, strategic, technical
Service and Technology Forum (STF)	3 per year	All GÉANT NRENs	Informative
Satisfaction Survey, bilateral follow-up	Annual	All GÉANT NRENs	Informative, strategic

Activity/Channel	Frequency	Stakeholder	Objective
NREN-specific events, e.g. conferences, working dinners, anniversary celebrations	As needed	All GÉANT and international NRENS and RENs	Informative, strategic
Infoshares	As needed	All NRENS, subset of NRENS (GA, SMEs, project participants)	Informative, strategic, technical
Workshops, Consultations	As needed	All NRENS and third parties, subset of NRENS	Informative, strategic, technical
Surveys	As needed	All NRENS, subset of NRENS	Informative
Topic-specific meetings	As needed	All GÉANT and third parties, international NRENS and RENs	Informative, strategic, technical
Targeted emailings	As needed	All GÉANT and international NRENS and RENs	Informative
NREN CEO meeting	4–6 per year, as needed	All GÉANT NRENS	Strategic
GA pre/post briefings	3 per year	All NRENS	Strategic
SIG and TF meetings	As needed	All GÉANT NRENS and third parties	Informative, strategic, technical
National and international conferences (e.g. EaPEC, ICT, I2 Global Summit)	As needed	All GÉANT and international NRENS and RENs	Informative, strategic
TNC	Annual	All GÉANT and third parties, international NRENS and RENs	Informative, strategic
Symposium	Bi-annual	All GÉANT and third parties, GN4-3 WPLs & TLs	Informative, strategic
Board meetings	3 per year	GÉANT Board	Informative, strategic
NREN Information Days	As needed	SEE NRENS	Informative
SEE Directors Forum	c. 3 per year	SEE NRENS	Informative, strategic
Partner Portal	Continuous	GÉANT NREN APMs and technical staff, decision makers	Informative, technical
SEE NREN newsletter	Monthly	SEE NRENS	Informative
Emerging NREN Programme	Annual	Emerging NRENS	Informative, technical
NREN EOSC Coordination Meeting	Monthly	All GÉANT NRENS	Informative, strategic
Project Management Activities			
Periodical reporting	Every 4 months	GN4-3 project management, PMB, project participants, EC	Report on achievements and promote the work

Activity/Channel	Frequency	Stakeholder	Objective
Deliverables	1 in 2020	GN4-3 project management, PMB, project participants, EC	Report on achievements and promote the work
Milestones	1 in 2020	GN4-3 project management, PMB, project participants, EC	Report on achievements, review progress, revise approach

Table 7.1: WP3 T1 stakeholder engagement plan – NREN Partner Relations

7.2 Task 2 Research Engagement

The engagement activities for Task 2 spread over a wide horizon, trying to harmonise the engagement actions with the varying size, scope and nature of the stakeholder groups.

There are three main phases of the engagement process:

1. **Lead generation:** Takes place at the beginning of the engagement with new communities. Usually results in collecting contacts and establishing relationships. Usually done while attending user events.
2. **Dissemination:** Introduces GÉANT or illustrates one or more GÉANT services. Usually done by presenting at user events or during visits or meetings.
3. **Support:** Comprises activities that can include different kinds of interactions (e.g. requirements gathering, contractual negotiations, consultancy, service design or deployment). Usually followed by some tangible result (e.g. service description or proposal, contractual proposal, solution analysis, etc.). Sometimes this phase could involve the participation of subject matter experts.

Each phase may or may not happen for each specific user group, depending on the context, the past interactions and the objectives. However, if more than one phase happens, it would be in the order shown above.

The following stakeholders can be identified:

- User community:
 - Management, decision makers.
 - Scientists, researchers, academics.
 - IT support.
- GÉANT/NRENs:
 - Governing bodies.
 - Service owners/managers.
 - Technical teams.

The channels and activities for interacting with the stakeholders are shown in Table 7.2 below.

Activity/Channel	Frequency	Stakeholder	Objective
Lead generation/User events	10–15 per year	<ul style="list-style-type: none"> User community <ul style="list-style-type: none"> Management, decision makers Scientists, researchers, academics 	Gather contacts, establish relations
Dissemination/User events, face-to-face visits, VCs	10–15 per year	<ul style="list-style-type: none"> User community <ul style="list-style-type: none"> Management, decision makers Scientists, researchers, academics IT support GÉANT/NRENS <ul style="list-style-type: none"> Governance Service owners/managers 	Introduce GÉANT or illustrate one or more GÉANT services
Support/face-to-face visits, VCs	As needed	<ul style="list-style-type: none"> User community <ul style="list-style-type: none"> Scientists, researchers, academics IT support GÉANT/NRENS <ul style="list-style-type: none"> Service owners/managers Technical teams 	Requirements gathering, contractual negotiations, consultancy, service design, service deployment, service implementation
Project Management Activities			
Periodical reporting	Every 4 months	GN4-3 project management, PMB, project participants, EC	Report on achievements and promote the work
Deliverables	1 in 2020	GN4-3 project management, PMB, project participants, EC	Report on achievements and promote the work
Milestones	0 in 2020	GN4-3 project management, PMB, project participants, EC	Report on achievements and promote the work

Table 7.2: WP3 T2 stakeholder engagement plan – Research Engagement

7.3 Task 3 Stakeholder Insights

The activities of Task 3 mainly pertain to gathering and analysing information from and about the NREN community GÉANT serves. Task 3 also organises and disseminates this same information within GÉANT, to help and guide strategic decisions and inform practical developments of its network and services. This information is also made available to the NRENS, to help their decision making.

Task 3 has two mainstay activities – the Satisfaction Survey and the Compendium Report – along with some smaller projects, all following the general theme of collating information and making it accessible and usable. All of these have data-collecting aspects as well as dissemination aspects.

- The annual Satisfaction Survey aims to capture NREN satisfaction in a number of areas, including GÉANT services, service delivery and management of the project. Its results are analysed and disseminated to the appropriate stakeholders within GÉANT. A public report is also made available.

As an example of the Survey's effectiveness as a feedback mechanism that in turn directs the other WP3 Tasks in their engagement activity, the results of a recent Survey indicated that a group of NRENs felt they lacked awareness of the GÉANT security services available. Task 1 was able to address this by working with the NRENs to understand their needs and ensure they were properly informed about the security offering.

- The annual Compendium Report captures information about NRENs, their state and activities. It is based on the annual Compendium Survey conducted among the NRENs and on information gathered from other parts of GÉANT that collaborate closely with NRENs in a number of areas (e.g. T&I, security, education). The reports are publicly available on GÉANT's website. The survey data is stored in a database; the Compendium website allows direct access.
- Smaller projects undertaken by the Task are the maintenance of a central list of surveys that are issued by GÉANT to get input from its stakeholders on a number of aspects, and the creation of a central repository for the documents that result from the activity of the various Special Interest Groups and Task Forces (SIGs/TFs) that the community has formed and that are supported by GÉANT.

The following stakeholders can be identified:

- GÉANT's outreach team (WP3), especially Task 1.
- GÉANT's management and decision makers.
- GÉANT's service owners/managers.
- GÉANT's technical teams.
- NRENs.

The channels and activities for interacting with the stakeholders are shown in Table 7.3 below.

Activity/Channel	Frequency	Stakeholder	Objective
Satisfaction Survey	Annual	<ul style="list-style-type: none"> • GÉANT's outreach team, especially Task 1 • GÉANT's management and decision makers • GÉANT's service owners/managers • GÉANT's technical teams • NRENs 	Assess NREN satisfaction in GÉANT services, service delivery and management of the project
Compendium	Annual	<ul style="list-style-type: none"> • GÉANT's outreach team, especially Task 1 • GÉANT's management and decision makers • GÉANT's service owners/managers • NRENs 	Obtain an overview of the NREN landscape illustrating key trends and providing a reference site for NRENs and the wider community

Activity/Channel	Frequency	Stakeholder	Objective
Survey repository	As needed (about quarterly)	<ul style="list-style-type: none"> NREN community GÉANT's service owners/managers GÉANT's technical teams 	Provide an overview of surveys carried out by the GÉANT project and links to their results
SIG/TF repository	Work in progress	<ul style="list-style-type: none"> NREN community GÉANT SIG/TF secretaries 	Provide a searchable repository of recent and passed documents produced by SIG/TFs
Project Management Activities			
Periodical reporting	Every 4 months	GN4-3 project management, PMB, project participants, EC	Report on achievements and promote the work
Deliverables	1 in 2020	GN4-3 project management, PMB, project participants, EC	Report on achievements and promote the work
Milestones	1 in 2020	GN4-3 project management, PMB, project participants, EC	Report on achievements and promote the work

Table 7.3: WP3 T3 stakeholder engagement plan – Stakeholder Insights

7.4 Task 4 Community Programme

The aim of Task 4 Community Programme is to ensure a connected, collaborative and harmonised research and education community. The Task covers a wide range of topic areas that are not yet addressed by the GÉANT project activities, in response to the needs and interests of the European NREN community. These areas are supported by Task Force and Special Interest Group meetings, collaborative projects and specialised workshops. Task 4 gathers and analyses information from the topic expert communities to serve the strategic directions of GÉANT and its members, guiding future developments of networking services, technology and also a variety of non-technical topics for the GÉANT community.

The GÉANT Community Programme is a grassroots, voluntary initiative built by world experts from NRENs, user organisations, research institutions, commercial and industrial sectors. TFs and SIGs provide an effective framework for forums to share information and best practices and to discuss possible innovations and further developments of services.

The main aspects of Task 4's engagement process are as follows:

- Identify and share areas and trends benefiting the NRENs and the wider R&E community by annually providing recommendations from those communities (via the TFs/SIGs, community platform and various expert networks) to GÉANT. Additionally identify gaps and facilitate their closure.
- Manage the lifecycle of groups and activities, with the oversight of the GÉANT Community Committee (GCC).

- Connect people with the right group or activity.
- Facilitate group collaborations (e.g. by providing guidelines, best practices, facilities and checklists for virtual and face-to-face meetings, organising and chairing meetings).
- Raise awareness about the GÉANT Community Programme, with the support of the Communications team.
- Knowledge transfer (e.g. by organising training seminars, staff exchange (mobility of staff temporarily hosted by another NREN), writing best practices (both technical and procedural), tagging all existing documentation (including GNx Deliverables) to make it a searchable database, maintaining “newcomers meet experts” list of experts and organising newcomers programme at TNC).

The following stakeholders can be identified:

- Topic expert community:
 - Technical experts (networking and collaboration specialists, Trust and Identity and access management experts, etc.).
 - Management and decision makers.
 - Scientists, researchers, academics.
 - Educational organisations (EUNIS, IMS, university CIOs/CTOs, EDUCAUSE).
- GÉANT/NRENs:
 - Governance.
 - Service owners/managers.
 - Technical teams.
 - GÉANT’s outreach team, especially Task 1.

The channels and activities for interacting with the stakeholders are shown in Table 7.4 below.

Activity/Channel	Frequency	Stakeholder	Objective
Task Force and Special Interest Group meetings	10–15 per year	<ul style="list-style-type: none"> • Topic expert community • NRENs 	Support the groups with both content and logistics; maintain and establish relations; provide feedback to GÉANT and its members and to the Partner Relations team
Dissemination via presentations, blog posts, webinars	10–15 per year	<ul style="list-style-type: none"> • Topic expert community • GÉANT/NRENs 	Introduce the Community Programme and provide information about the latest activities and topics arising from the groups

Activity/Channel	Frequency	Stakeholder	Objective
Annual report	1 per year	<ul style="list-style-type: none"> Topic expert community GÉANT/NRENS 	Produce an overview of the Community Programme landscape, illustrating key trends and providing a reference resource for NRENS and the wider community
Project Management Activities			
Periodical reporting	Every 4 months	GN4-3 project management, PMB, project participants, EC	Report on achievements and promote the work
Deliverables	0 in 2020	GN4-3 project management, PMB, project participants, EC	Report on achievements and promote the work
Milestones	0 in 2020	GN4-3 project management, PMB, project participants, EC	Report on achievements and promote the work

Table 7.4: WP3 T4 stakeholder engagement plan – Community Programme

7.5 Interaction with Other Work Packages

7.5.1 Management Work Packages

7.5.1.1 Collaboration with WP1

WP3 works closely with and on behalf of Work Package 1 Project Management with regard to both ad hoc and systematic identification of demands and trends in the community and ensuring they are addressed. On a case-by-case basis, identified needs are subject to a Responsible, Accountable, Consulted, and Informed (RACI) assessment. They are then either passed on to the relevant Work Package, service or subject matter (SME) expert to address, with WP3 providing support where needed, or are taken up and resolved by WP3 itself. The latter may happen if the topic has no clear owner within the project, or the WP has insufficient time or resource, or if WP3 has been explicitly asked to lead.

In addition, from 2020, WP3 Task 1 will attend the Project Annual Internal Review (PAIR) meetings between the Project Management Office (PMO) and each WP, to review stakeholder engagement activities to date, identify any omissions and discuss any concerns (see also Section 6.2 Monitoring).

Such vigilance and agility in picking up on demands and adapting to meet them are essential in a project the scope and duration of GN4-3: constant adjustment and evolution are a prerequisite to success.

7.5.1.2 Collaboration with WP2

WP3 works in particularly close collaboration with WP2 Marketing, Communications and Events, helping to develop and implement communications plans that will enable dissemination and promotion, as well as allow dialogue with and feedback from the stakeholder groups. For example, the growing portfolio of social media channels, alongside the web presences, supports “likes”, re-tweets, sharing and incoming enquiries by individuals across all stakeholder groups. Event participation provides opportunities to engage with stakeholder groups and to obtain their comments and input for consideration. A mixture of conventional and digital marketing materials is deployed, and news stories and channels are carefully developed, to ensure each stakeholder group is catered for in the most appropriate manner.

Communications channels facilitated and/or managed by WP2 include the GÉANT website and service microsites; news items; *CONNECT* magazine, website and weekly bulletin; IMPACT website; email distribution lists; Project Office weekly newsletter; social media; events such as TNC and the GÉANT Symposium.

Further information about WP2’s project and services communications plans, including its own analysis of stakeholders, is provided in the deliverables *D2.1 Project Communications Strategy and Plan* and *D2.2 Service Stakeholder Communications Strategic Plan* [[D2.1](#), [D2.2](#)].

7.5.2 Interaction with Other WPs and Areas of the Project – Task 1 Example

As an example of how WP3 interacts with other WPs and areas of the project, Task 1’s work includes regular meetings with the following. The purpose of the meetings is to ensure all developments that may impact or require input from stakeholders are picked up, to monitor what is going on and what is coming up, and to identify whether there is anything WP3 can do to help:

- Work Package Leaders (the bilateral reviews mentioned in Section 6).
- Product management / Product Lifecycle Management (PLM).
- Services marketing.
- Network support.
- GN4-3N.

Engagement actions arising, which may be undertaken by WP3 or by the relevant WP, service or SME, may include:

- Ensure NRENs are informed of new, changed or dropped services.
- Ensure NRENs are informed of feature or price changes.
- Obtain NREN feedback on a particular service.
- Support service/product launch.
- Assess training needs.
- Attend a particular NREN or user-community event to explore opportunities for promoting a service.
- Run a workshop.
- Run a survey.

- Conduct bilateral interviews.
- Organise and host an infoshare.

8 Individual WPs' Stakeholder Engagement Plans

8.1 WP1 Project Management

WP1 Project Management provides a coherent management framework, enabling GN4-3 to deliver results efficiently and effectively, applying quality control, and optimising costs, time and effort. WP1 also covers the project's planning, organisation and staffing, and directs its execution. An additional objective is to identify opportunities to economise, to operate more cost-effectively, and deliver value for money throughout the project.

8.1.1 EU Liaison

EU Liaison is a coordination function within WP1, managing interaction and communication relating to EU liaison across the project. The EU Liaison function has identified three main stakeholder groups:

- GN4-3 project management and PMB.
- NRENs.
- European Union institutions.
- Similar stakeholders in the European sphere.

Stakeholder engagement is essential to EU Liaison for:

- Securing sustainable funding for GÉANT in the long-term.
- Maintaining good relations with our key stakeholders in the European Commission and other institutions.
- Monitoring and digesting information created by the European legislative sphere in order to keep NRENs abreast of recent policy developments.

The channels EU Liaison uses for engaging the stakeholders consist mainly of face-to-face meetings with EC representatives, conferences and events. Although the majority of these take place in Brussels, the EU Liaison function also attends events in Europe which are normally related to the rotating presidency of the Council of the EU. In addition to these channels, EU Liaison uses infoshares and General Assemblies to present the work done by the function to GN4-3 members.

The channels and activities for interacting with the stakeholders are shown in Table 8.1 below:

Activity/Channel	Frequency	Stakeholder	Objective
Face-to-face meetings	As needed	EU institutions	Securing sustainable funding, maintaining good relations, monitoring information
Conferences	As needed	NRENs, EU institutions, similar institutions in Europe	Maintaining good relations, monitoring information
Events	As needed	NRENs, EU institutions, similar institutions in Europe	Maintaining good relations, monitoring information
Infoshares	As needed	NRENs	Present information
GA	At least 3 per year	NRENs	Present information
Project Management Activities			
Periodical reporting	Every 4 months	GÉANT management, NREN management, EC	Present information

Table 8.1: WP6 stakeholder engagement plan activities

8.1.2 Task 5 Human Capital Development

WP1 Task 5 maintains and develops the most important asset of the GN4-3 community – the exceptional skills and experience of its participants – by encouraging collaborative knowledge creation and skills transfer; designing and building learning solutions that foster the sustainability of and enhance the careers of project participants; facilitating continuous learning; and providing a mechanism for centralised support to professional development, learning and innovation, including linking to the coaching and mentorship activities aimed at reducing the digital divide.

WP1 T5 has identified a number of stakeholders:

- GÉANT project:
 - Project Management Board.
 - GN4-3 participants.
- Special Interest Groups & Task Forces (SIG-MSP, SIG-Marcomms, SIG-NOC).
- NRENs:
 - GÉANT partner NRENs.
 - Global NRENs.
- GÉANT Association:
 - Management.
 - Staff.
 - Board members.
 - General Assembly members.
- Other (external):
 - R&E institutions.
 - Research infrastructures, programmes and projects (PRACE, OpenAIRE, EGI, EOSC).
 - TF-CSIRT and its wider community.

- Policy makers (EC, national governments and governmental bodies).
- Suppliers:
 - Training services providers.
 - eLearning development service providers.
 - Content curation providers.
 - Training venue providers.

Stakeholder engagement is essential for Task 5 to fulfil the following objectives:

- To capture, externalise and share GÉANT's community knowledge, focusing on the core knowledge areas: Network, T&I, Security and Cloud.
- To harmonise the level of knowledge and expertise across the European NREN community and foster knowledge sharing.
- To ensure top-class levels of technical competencies and skills within the GÉANT community.
- To ensure flexible, agile and innovative ways of working, and proficiency in the skills of interacting and communicating with wider audiences, managing processes, projects and product development.
- To build a pipeline of young talent and innovative ideas.
- To ensure smooth and seamless use of and access to the up-to-date learning technologies to ensure continuous high levels of professional competencies for GÉANT and the GÉANT community.
- To design and build learning solutions that foster the sustainability of GÉANT careers, increasing their cohesion, attractiveness and flexibility.

The channels WP1 T5 uses for engaging the stakeholders will be different for each group. It will generally be a combination of channels, depending on what exactly the Task needs from that stakeholder, or the stakeholder needs from the Task.

The channels for interacting with the stakeholders are shown in Table 8.2 below.

Activity/Channel	Frequency	Stakeholder	Objective
Website	Ongoing	GN4-3 project participants, global NREs, R&E institutions, programmes and projects	To promote GÉANT Learning and Development (GLAD) portfolio of services; to encourage the uptake of training and development services; to invite feedback for continuous service improvements
eAcademy	Ongoing	GN4-3 project participants, global NREs, R&E institutions, programmes and projects, GÉANT Association	To provide access to a wide range of learning resources (courses, collections of thematic resources) to support independent learning at the point of need; to showcase and share GÉANT community knowledge; to harmonise levels of knowledge and expertise. To gather feedback on the relevance and quality of the published

Activity/Channel	Frequency	Stakeholder	Objective
			resources to maintain their relevance and currency.
Training courses	On demand	GN4-3 project participants, suppliers	To deliver the training identified by the needs analysis; to gather feedback on the relevance and quality of the training provided
Slack	On demand	GN4-3 project participants, global NREs, R&E institutions, programmes and projects, GÉANT Association	To provide quick access to the latest updates to the GLAD portfolio of services and training offers to ensure accessibility and maximum uptake of GLAD services. To use as a 2-way communication channel to get feedback, canvass opinions (polls) and provide answers to queries.
PMO bulletin	Weekly	GN4-3 project participants	To deliver targeted communication of professional development opportunities and learning resources to support the development of technical skills and professional competencies required for the delivery of GN4-3 objectives. To encourage the uptake of services.
<i>CONNECT</i>	Monthly	GN4-3 project participants, global NREs, R&E institutions, programmes and projects	To communicate the benefits and opportunities of learning with GLAD, to foster relationships with GÉANT and the NREN community, to ensure the impact of GLAD activities on the project deliverables and sustainability of NREs
EventR	On demand	GN4-3 project participants, global NREs, R&E institutions, programmes and projects, GÉANT Association	To manage the registration process for training events and post-training communication to maximise the effectiveness of training events
Wiki	Ongoing	GN4-3 project participants, global NREs, GÉANT Association	To act as points of reference (documentation and processes) for particular training initiatives to ensure the uptake of services, funding and financial compliance
GLAD TV channel	On demand	GN4-3 project participants, global NREs, R&E institutions, programmes and projects	To serve as a repository for and point of access to video resources created as part of capturing and sharing the GÉANT community's knowledge
GÉANT Symposium	Bi-annual	GN4-3 project participants	To meet project teams face-to-face in order to continue building an effective rapport, help deliver more targeted communications (i.e.

Activity/Channel	Frequency	Stakeholder	Objective
			<p>focused on most critical developmental needs) and continue a 2-way dialogue to better align evolving training requirements and a range of training solutions.</p> <p>To deliver face-to-face skills development sessions as part of the implementation of the Annual GLAD activities plan based on GN4-3 Learning Needs Analysis.</p>
TNC	Annual	GN4-3 project participants, global NREs, R&E institutions, programmes and projects	<p>To offer skills development at the point of need (prior and/or TNC).</p> <p>To raise the awareness of GLAD activities and support available through side meetings and Lightning Talks to ensure access to its service to all stakeholders.</p> <p>To network with a greater number of stakeholders to develop better understanding of their “pressure points”, in terms of professional competencies, in order to provide effective and relevant support in a timely manner.</p>
Project Management Activities			
Periodical reporting	Every 4 months	GN4-3 project management, PMB, project participants, EC	Report on achievements and promote the work
Deliverables	0 in 2020	GN4-3 project management, PMB, project participants, EC	Report on achievements and promote the work
Milestones	1 in 2020	GN4-3 project management, PMB, project participants, EC	Communicate the Training Work Plan: Period 2

Table 8.2: WP1 Task 5 stakeholder engagement plan

As part of its annual *GLAD Strategy and Projects* document, WP1 T5 produces an annual communications plan, reviewing and identifying the most appropriate and effective mechanisms for the stakeholders (internal document, available on request).

8.1.3 Task 6 Global Partnerships

WP1 Task 6 Global Partnerships consists of three workstreams:

- Global Partnership Coordination.
- Global Service Outreach.
- GÉANT Emerging NREN Programme.

The stakeholders and engagement activities for each of these areas are set out below.

In each case, given the nature of T6 Global Partnerships, stakeholder engagement is essential for fulfilling the fundamental objectives of the Task and workstream.

8.1.3.1 Global Partnership Coordination

This workstream provides an oversight and reporting function for strategic interactions with GÉANT's global partners in alignment with GÉANT's involvement in regional projects outside Europe (e.g. AfricaConnect, AsiaConnect, BELLA, EUMEDCONNECT) and other international activities (e.g. CEO Forum, GNA-G, ANA). The work is carried out primarily through regular videoconferences among team members, with the discussions providing input for feedback to the GÉANT community and the European Commission on global developments. The reports are made available via the Task intranet home page and the GN4-3 Management Reports. Relationship Management and Service Delivery for Global partners is handled in WP3 T1.

The stakeholders in this activity are:

- GN4-3 project participants.
- Global partners.
- Regional projects outside Europe.
- Other international bodies and activities, e.g. CEO Forum, GNA-G, ANA.
- EC, particularly DG CNECT.

Table 8.3 summarises the engagement activities:

Activity/Channel	Frequency	Stakeholder	Objective
Team meetings (VC)	Every 2–3 months	Team members	Discuss global partner developments and gather inputs for reports
Global Partner Development reports via the GN4-3 intranet	Every 2–3 months	GN4-3 community	Disseminate to the GN4-3 community information on interactions with and developments at Global Partner NRENs
Project Management Activities			
Global Partner Development reports via the GN4-3 Management Reports	Every 4 months	European Commission & GN4-3 community	Disseminate to DG CNECT and the GN4-3 community information on interactions with and developments at Global Partner NRENs

Table 8.3: WP1 T6 stakeholder engagement plan – Global Partnership Coordination

8.1.3.2 Global Service Outreach

The purpose of the Global Service Outreach activity is to introduce regional networks outside Europe and their member NRENs to the range of GÉANT services and clarify opportunities for GÉANT to support global partner networks in the extension of GÉANT services to other world regions.

The stakeholders in this activity are:

- GN4-3 Service Work Packages, specifically the Service Owners and Service Experts.
- Decision-makers and service coordinators at GÉANT's global regional network partners (ASREN, CAREN CC, RedCLARA, TEIN*CC, UbuntuNet Alliance and WACREN) and their member networks.

The principle form of engagement is via face-to-face meetings wherever feasible, and videoconferences otherwise. Table 8.4 summarises the engagement activities:

Activity/Channel	Frequency	Stakeholder	Objective
Face-to-face meetings	At start of project and in Year 2 on completion of survey of global partners. Thereafter as required	GÉANT Service Owners and service experts	Agree on options for the sharing of GÉANT services with global partner networks
Face-to-face survey meetings (videoconferences)	Once per year (with additional meetings arranged as required)	Decision makers and service coordinators at GÉANT's global regional network partners (ASREN, CAREN CC, RedCLARA, TEIN*CC, UbuntuNet Alliance and WACREN) and their member networks	Discuss GÉANT services with global partner stakeholders and service areas in which they are interested in collaboration/support regarding service deployment in their respective regions
Project Management Activities			
Global Partner Development reports via the GN4-3 Management Reports	Every 4 months	European Commission & GN4-3 community	Disseminate to DG CNECT and the GN4-3 community information on Global Service Outreach
Deliverables	0 in 2020	European Commission & GN4-3 community	Disseminate to DG CNECT and the GN4-3 community information on Global Service Outreach
Milestones	0 in 2020	European Commission & GN4-3 community	Disseminate to DG CNECT and the GN4-3 community information on Global Service Outreach

Table 8.4: WP1 T6 stakeholder engagement plan – Global Service Outreach

8.1.3.3 GÉANT Emerging NREN Programme

The GÉANT Emerging NREN Programme (ENP) aims to support the integration of emerging NRENs into the wider R&E networking community to improve knowledge-sharing and ensure increased interaction between European NRENs and emerging NRENs, worldwide. This links to the assessment and analysis of regional demands through studies of targeted countries or regions where NRENs are less mature, covered by WP3, and interactions with global partners covered by WP3 Task 1. Specifically, the programme enables technical staff from emerging NRENs in the east and south of Europe, and in other world regions, to participate in the annual TNC conference organised by GÉANT. It enables them to engage in TNC activities, learn about the GÉANT community and activities, and establish relationships with colleagues across Europe and the rest of the world. Candidates are identified via email communications with the corresponding NREN and RREN organisations. Activities are then organised for the selected candidates throughout the TNC conference period, including pairing with a member of GÉANT Association staff or a GN4-3 project participant with a similar work profile, who act as a guide during TNC.

The stakeholders in this activity are:

- Emerging NRENs in the east and south of Europe and in other world regions: decision makers for the selection of programme candidates, and technical staff nominated to participate in the programme.
- GN4-3 WP3.
- GÉANT Association staff and GN4-3 project participants.
- TNC organisers and attendees.

Table 8.5 summarises the engagement activities:

Activity/Channel	Frequency	Stakeholder	Objective
email	Annually	Emerging NRENs in Europe, RRENs and emerging NRENs outside Europe	Identify up to 20 candidates for participation in the GÉANT Emerging NREN Programme
email	Annually	GÉANT Association staff & GN4-3 project participants	To identify suitable pairs in the GÉANT community to act as guides for the ENP participants at TNC
Emerging NREN Programme activities at TNC	Annually	Emerging NREN Programme participants	Enable participants to engage closely with the TNC programme and related activities, gain insights into the GÉANT community and activities
Project Management Activities			
Global Partner Development reports via the GN4-3 Management Reports	Every 4 months	European Commission & GN4-3 community	Disseminate to DG CNECT and the GN4-3 community information on Emerging NREN Programme

Activity/Channel	Frequency	Stakeholder	Objective
Deliverables	0 in 2020	European Commission & GN4-3 community	Disseminate to DG CNECT and the GN4-3 community information on Emerging NREN Programme
Milestones	0 in 2020	European Commission & GN4-3 community	Disseminate to DG CNECT and the GN4-3 community information on Emerging NREN Programme

Table 8.5: WP1 T6 stakeholder engagement plan – GÉANT Emerging NREN Programme

8.1.4 Task 7 Procurement and Supplier Management

WP1 Task 7 is a support service to other GN4-3 Work Packages, providing expert advice and assistance in the procurement of all goods and services for GN4-3. In doing so, it will ensure the project receives value for money and is compliant with all procurement regulations, therefore managing the risk of legal issues from potential suppliers. The Task also applies a supplier performance management framework, which includes regular supplier performance reviews, to ensure service level agreement (SLA) and contractual adherence.

WP1 T7 has identified a number of stakeholder groups:

- GN4-3:
 - WPs and/or NRENs requiring procurement services and support.
 - Decision makers.
 - Project participants.
 - Legal and IP/GDPR advisers.
 - WP2 T1 Communications.
- GN4-3N Procurement Task.
- Global partners in collaborative procurements for intercontinental connectivity.
- National Infrastructure Advisory Committee (NIAC).
- Potential suppliers.
- Contracted suppliers.
- Wholesale telecoms market experts.
- EC:
 - Departments responsible for framing procurement laws and regulations.
 - Project Officer and reviewers.

Stakeholder engagement is essential for WP1 T7 for:

- Understanding procurement requirements and ensuring the products and services procured meet those requirements.
- Ensuring procurements comply with the necessary laws and regulations.
- Helping to build consensus among the community with regard to how resources should be spent, and where and what should be procured.

- Understanding trends and initiatives, and optimising how purchases are made and what is purchased.
- Effective supplier management (business performance and service performance).
- Publicising key procurements and relationships.
- Demonstrating that maximum value is being achieved.

Table 8.6 shows WP1 T7's means of interacting with its stakeholders.

Activity/Channel	Frequency	Stakeholder	Objective
Requirements definition meetings	As required	WPs, NRENs, global partners	Understand requirements
NIAC meetings	Every 4 months	NIAC, GN4-3 decision makers	Understand requirements, help build consensus
Approved procurement process	As required	Potential suppliers	Communicate requirements, ensure requirements are met, ensure compliance with laws and regulations
Supplier business reviews	4 per year per supplier	Key strategic suppliers	Effective supplier management
Supplier performance reviews	~1 per year per supplier	Strategic providers	Effective supplier management
Meetings with WP2 T1	As required	Contracted suppliers, wholesale telecoms market, EC	Publicise key procurements and relationships
Trade events	As required	Potential suppliers, wholesale telecoms market	Raise awareness of GÉANT and its procurement needs to help secure best outcomes (e.g. reduced costs) and engage new suppliers
Project Management Activities			
Management Reports	Every 4 months	GN4-3 decision makers, project participants, EC	Publicise achievements and demonstrate value
Periodic Reports on Procurement and Suppliers deliverables	1 per Period	GN4-3 decision makers, project participants, EC	Publicise achievements and demonstrate value

Table 8.6: WP1 T7 stakeholder engagement plan

8.2 WP2 Marketing, Communications and Events

WP2 provides a professional, integrated marketing communications and events service to the project for outreach and promotion at national, European and international level. It also supports other Work Packages and project partners in their own communications with the project's stakeholders and partners.

The outreach plan for WP2 is described in the deliverables *D2.1 Project Communications Strategy and Plan* and *D2.2 Service Stakeholder Communications Strategic Plan* [[D2.1](#), [D2.2](#)].

8.3 WP3 User and Stakeholder Engagement

See Section 7.

8.4 WP4 Online Services Development and Delivery

WP4 provides a platform for the delivery and development of brokered services (both commercial and community-based offerings). It also fosters stakeholder engagement for the platform, organising support efforts to strengthen the NRENs' national service delivery capabilities and cloud competencies and to stimulate the adoption of the services and the cloud computing paradigm by their institutions and users.

WP4 has identified a number of stakeholders:

- NRENs:
 - Cloud service delivery managers (CSDMs).
 - Decision makers (CEOs, CTOs, etc.).
 - GN4-3 participants.
 - EaPConnect project participants.
 - Global NRENs as Global Cloud Group.
- GÉANT:
 - Management.
 - Project Management Board.
- Special Interest Groups & Task Forces (SIG-CISS, SIG-MSP, SIG-Marcomms, SIG-TNE, TF-EDU, SIG-Multimedia).
- R&E institutions and buyer groups.
- Cloud service providers, suppliers and operators.
- Research infrastructures, programmes and projects (EGI, EOSC).
- Policy makers (EC, national governments and governmental bodies).

Stakeholder engagement is essential to WP4 for:

- Outreach:
 - Establishing and managing the CSDM community, securing resources.
 - Informing about:
 - Offerings and benefits.
 - Options for how to consume.
 - Stimulating the use of the GÉANT cloud offers.
 - Collaboration on clouds.

- Interaction with:
 - Economic operators.
 - R&E community (NREs, institutions, researchers, teachers).
 - Art community.
 - GÉANT internal teams.
- Uptake and usage:
 - Aggregating the demand and requirements (volume of services, legal, national).
 - Advice and support on transitioning to the cloud and using GÉANT cloud portfolio (including GÉANT helpdesk function).
 - Getting feedback for:
 - Case studies as examples for the uptake.
 - Making the adoption support more efficient.
 - Cloud trainings (including in collaboration with cloud providers).
- Forecast and monitoring:
 - Planning the future work.
 - Feedback from institutions to suppliers.
 - Overview about the NREs' cloud services and legal issues.

WP4's engagement activity involves a mix of different channels, means and tools as well as messages.

The means for interacting with the stakeholders are shown in Table 8.7 below.

Activity/Channel	Frequency	Stakeholder	Objective
Cloud Forums (meeting, presentations, discussions)	Bi-weekly	NREN CSDMs	Inform about offerings, discuss processes and issues, record provider presentations with Q&A
Mailing lists	Daily, weekly	NREN CSDMs, WP4 Tasks and teams, R&E institutions	General cloud support for NREs, GÉANT teams and institutions (clouds@geant.org), mailing lists for CSDMs, WP4 Tasks
Internal cloud environments: <ul style="list-style-type: none"> ● GÉANT intranet cloud repository ● IaaS Framework service matrix ● Office365 environment ● GN4-3 WP4 wiki ● WP4 joint calendar 	Daily	NREN CSDMs, WP4 Tasks and teams	<ul style="list-style-type: none"> ● GÉANT cloud document repository – for storing Framework Agreement document packages, preferential quotations, white-labelled slides ● IaaS Framework service matrix – for comparing Framework offerings ● Office365 environment for NREN CSDMs – for working on documents and sharing more restricted cloud material

Activity/Channel	Frequency	Stakeholder	Objective
			<ul style="list-style-type: none"> GN4-3 WP4 wiki and joint calendar for the WP4 teams – for participation at events, holidays, travels, occupancy of the joint VC meeting rooms)
Cloud website	Daily, weekly, monthly	NRENs, GÉANT, R&E institutions and end users, cloud providers, policy makers	Provide a platform for cloud portfolio, news, tools, guidelines, resources, user stories, case studies, introduction videos, NREN and vendor contacts, newsletter subscription, infosheets, posters, presentations
Cloud newsletter	Twice a year	NRENs, GÉANT, R&E institutions and end users, cloud providers, policy makers	Updates and information about cloud portfolio, tools, guidelines, resources, user stories, case studies, introduction videos, NREN and vendor contacts, events, webinars and presentations
Blog posts	Monthly	NREN CSDMs, R&E institutions, end users	For cloud security handbook
Articles (<i>CONNECT</i> magazine, etc.)	Quarterly	NRENs, GÉANT, R&E institutions and end users, cloud providers, policy makers	Informing, showing, highlighting
SIG, TF and other community group meetings	1–3 per year per SIG/TF	NRENs (in Europe and globally), GÉANT	Gather feedback, review documents, advertise services, discuss, etc.
WP4 meetings (Task Leaders, Task members, Contract Management Policy Authority, vendor meetings, etc.) Both face-to-face and virtual meetings	WP4 all hands every 2 years Other meetings – monthly or bi-monthly	GN4-3 WP4 participants	Get feedback, work on and review the documents and processes, advertise services, discuss issues
Trainings and workshops	GÉANT trainings for NRENs – once a year National trainings with providers – on demand	NREN CSDMs, R&E and art institutions	Get feedback, show, inform both publicly and internally in GN4-3 and internally among GÉANT SIGs and teams. Also in collaboration with providers.
TNC	Once a year	NRENs, GÉANT, R&E institutions and end users, cloud providers, policy makers	Forum for cloud presentations, workshops, sessions, demos, posters, meetings (including Global Clouds), cloud café

Activity/Channel	Frequency	Stakeholder	Objective
GN4-3 Symposium	Every 2 years	NREN decision makers, GN4-3 participants, GÉANT management, NREN management and employees	Get feedback, show the work, advertise the services, etc.
Papers and talks at national and international conferences	4–5 per year	NRENs, R&E institutions, end users, policy makers	Get feedback, advertise the GÉANT clouds portfolio and offerings, collaboration
Recorded webinars and infoshares	3–4 per year	NRENs, GÉANT, R&E institutions and end users, policy makers	Inform the NRENs and public about the possibilities and processes of GÉANT clouds and of cloud providers available through GÉANT. Both publicly available recordings and with restricted access for more sensitive data
Chatbot	Daily	All target groups	Replacing ever-growing FAQ in time
Cloud surveys	Once every 2 years	Cloud contacts and decision makers of NRENs and R&E institutions, cloud end users	Get feedback for measuring the needs and problems, advertise the GÉANT clouds portfolio and offerings, plan the future
Project Management Activities			
Periodical reporting	Monthly, every 4 months, annually	GÉANT management, NREN management, EC	Inform about the WP4 work, justify investments, monthly vendor reports about the IaaS Framework consumption for NRENs
Deliverables	3 in 2020	GN4-3 project management, PMB, project participants, EC	Report on achievements and promote the work
Milestones	6 in 2020	GN4-3 project management, PMB, project participants, EC	Report on achievements and promote the work

Table 8.7: WP4 stakeholder engagement plan activities

8.5 WP5 Trust and Identity

WP5 is responsible for the operation, development and innovation of GÉANT trust and identity services, such as eduGAIN and federation services, eduroam and supporting services, Federation as a Service (FaaS), eduTEAMS, and InAcademia.

An overview of the outreach plan for the T&I services that fall under WP5 is given in the WP5 Milestone document *M5.1 Enabling Communities Engagement Plan* [[M5.1](#)].

Its stakeholder groups include:

- GN4-3:
 - WP1 Task 6.
 - WP3 Tasks 1 and 2.
- European and global NRENs.
- T&I communities:
 - Librarians in Federated Identity for Libraries (FIM4L).
 - Researchers in Federated Identity for Research (FIM4R).
 - Collaborative groups in AARC Engagement Group for Infrastructures (AEGIS).
 - Research and Education Federations (REFEDS).
 - Wise Information Security for Collaborating e-Infrastructures (WISE).
- Research collaborations.
- Federation operators.
- Other relevant initiatives and EC-funded projects that pertain to T&I, e.g. EOOSC.

Events at which WP5 plans to hold consultations and obtain community feedback in 2020 include:

- GN4-3 Symposium – 4-5 Feb 2020.
- eduGAIN Town Hall – Q1 2020 (to be scheduled).
- Workshop for T&I and Security for NREN CTOs and decision makers (to be organised).
- Infoshare – Q1 2020.

8.6 WP6 Network Technologies and Services Development

WP6 undertakes network technology evaluation, testing, prototyping and development in the area of network infrastructure and network services innovation (including orchestration, automation and virtualisation), as well as network monitoring and management.

WP6 has identified a number of stakeholders:

- NREN:
 - Decision makers and managers.
 - Network architects, engineers and researchers.
 - NREN service (portfolio) owners.
 - NREN NOC teams.
- Technical teams at end institutions (universities, campuses, schools, etc.).
- GN4-3 and GN4-3N project participants.
- GÉANT project and organisation management and staff.
- International R&E communities.

- Projects involving EU countries and more global international projects.
- End users relevant to WP6 work, such as real-time application users, National Metrological Institutes for time and frequency services, emerging research disciplines, etc.
- Standards bodies.
- General public.

Stakeholder engagement is essential to WP6 for:

- Getting feedback on existing development and services.
- Understanding end-user requirements and existing use of certain technologies.
- Stimulating the use of results of the Work Package, testing and adopting products, and developing appropriate policies and best practices.
- Shaping the WP development work and the existing services to better suit the stakeholders' needs and use cases.
- Reaching out towards new user communities.
- Building user communities for development, pilot and production software and services.
- Achieving and maintaining the support and securing resources to continue the work.
- Providing inputs for future work in WP6.

In order to engage with the identified stakeholders, WP6 will take part in and contribute to the existing events in the community, as well as look for new opportunities, when appropriate and timely, to organise events with relevant stakeholder groups around a topic specific to WP6 tasks.

The channel(s) for engaging with the stakeholders is different for each stakeholder group. It is a mix of workshops, blog posts, surveys, reports, infoshares, presentations and others, depending on the opportunity, needs, stakeholder group and the timing.

The activities that WP6 considers for inclusion in its engagement plan are shown in Table 8.8 below.

Activity/Channel	Frequency	Stakeholder	Objective
Service and Technology Forum (STF)	3 times per year	NREN representatives: APMs, network experts, managers, architects GN4-3 and GN4-3N project participants	Presentation of WP6 work, products and services; gathering feedback
SIG and TF meetings (e.g. NGN, NOC, MSP, PMV, TNE, etc.)	2–3 times per year per SIG/TF	NREN, external and international experts in the relevant area, GN4-3 and GN4-3N project participants	Presentation of WP6 work; gathering feedback
GN4-3 Symposium	Every two years	NREN decision makers, GN4-3 and GN4-3N project participants, GÉANT management, NREN management and employees	Presentation of WP6 work; gathering feedback

Activity/Channel	Frequency	Stakeholder	Objective
NREN annual conferences	1–5 per year	NREN end institutions	Presentation of WP6 work, products and services; gathering feedback
Papers and talks at conferences	4–6 per year	Potentially all WP6's stakeholder groups	Presentation of WP6 work; gathering feedback
Standards body meetings	1–2 per year	Standards bodies	Presentation of WP6 work, products and services; gathering feedback; consultation
Meetings with other GN4-3 project WPs	weekly, bi-weekly, monthly, on demand	WP1 – WP9, PLM team, PMB meetings	Presentation of WP6 work; gathering inputs and feedback; work coordination
GÉANT Ops / IT meetings	weekly, bi-weekly, monthly	GÉANT project and organisation staff relevant for WP6 work	Work coordination
Surveys	1–3 per year	Different stakeholder groups, depending on the topic	To gather feedback about WP6 work, products and services; gather input about the current status; gather inputs for the future work
Articles (<i>CONNECT</i> magazine, etc.)	3–4 per year	Potentially all WP6's stakeholder groups	Presentation of WP6 work, products and services
Technology workshops (perfSONAR User Workshop, NREN management workshop, etc.)	2–4 per year	Potentially all WP6's stakeholder groups, but adjusted to a specific group based on the topic	Presentation of WP6 work, products and services; gathering feedback
Project Management Activities			
Periodical reporting	At least 4 per year	GÉANT management, NREN management, all	Report on the work and promote the outputs of the WP; maintain support base; justify investments
Deliverables	3 in Year 2	All	Report about the achievements; promote the work, products and services
Milestones	1 in Year 2	All	Report about the achievements; promote the work, products and services

Table 8.8: WP6 stakeholder engagement plan activities

The table lists activities that WP6 considers for stakeholder engagement and the dissemination of WP6 work and results. WP6 will not necessarily target all of these activities equally, or cover them with the frequency indicated.

The final list of engagement activities will depend on the results of relevant work items and subtasks, available persons, manpower and travel budget, coordination with project obligations, deliverables and milestones.

8.7 WP7 Network Core Infrastructure and Core Service Evolution and Operations

WP7 provides and develops the GÉANT network infrastructure and services across the core GÉANT network domain. It is responsible for network engineering and operational services, including the provision of IP layer, peering and virtual private networks (VPNs), and progress towards greater automation and network programmability. Also covered is the development and integration of services, such as more interoperable (multi-domain) connection services and other services (e.g. GÉANT Spectrum, GÉANT Testbed Service (GTS)) and the monitoring of industry trends to determine which new technologies are promising enough for the GÉANT community to require further evaluation.

WP7 has identified a number of stakeholders:

- NREN:
 - APMs.
 - Decision makers.
- GN4-3 participants.
- GN4-3N.
- GÉANT management.
- International R&E communities.
- Hardware and software vendors.
- Wider networking community, e.g. Telecom Infra Project (TIP) forum, RIPE members.
- R&E and Big Science networking users.

Stakeholder engagement is essential to WP7 for:

- Getting user feedback to develop roadmaps for the network and network services.
- Showcasing the developed services; presenting the challenges in deploying such services and the benefits of such services and network changes.
- Gaining input from the hardware and software vendors on their product roadmaps.

The means WP7 uses for interacting with its stakeholders are shown in Table 8.9 below.

Activity/Channel	Frequency	Stakeholder	Objective
Attendance and presentation at STF meeting	2/3 per year	NREN APMs	Present the work completed and future roadmap, and get NREN APMs' feedback
GN4-3 Symposium	Bi-annual	NREN decision makers, GN4-3 participants, GÉANT management, NREN	Present the work completed and future roadmap, and get feedback

Activity/Channel	Frequency	Stakeholder	Objective
		management and employees	
Network Services Workshops	Once per year at either TNC or Symposium	NREN engineers, international R&E network participants and vendors	Raise awareness in industry and NREN community of the demand for network services and present the challenges and benefits of such services
Papers and talks at conferences, e.g. TNC, Global Summit, APAN, Technology Exchange, NDN Conference, etc.	2 per year	All	Get feedback, advertise the project, products and services
Articles (<i>CONNECT</i> magazine, etc.)	Minimum 1 per year	All	Inform the public about the work being carried out in WP7 specifically related to network infrastructure and services
Vendor events, e.g. optical and packet equipment vendors event	2–4 per year	Vendors	Gain information about optical and packet equipment from different vendors and understand their future roadmap
Attendance at industry conferences/forums, e.g. TIP, IETF, RIPE, IX Meetings	2 per year	Industry, vendors	Gain information about industry trends and future developments
NREN conferences/event	At least 1 per year	NRENs, R&E and Big Science networking users	Present the work completed and future roadmap, and get feedback from NRENs and their users
Big Science user meetings/conferences, e.g. LHC, SKA, GNA-G, etc.	2 per year	International R&E communities, R&E and Big Science networking users	Gain information about the future developments in different research projects and international networking projects
Project Management Activities			
Periodical reporting	At least 3 per year	GÉANT management, NREN management	Provide information about WP7 work, maintain support base, justify investments
Deliverables	1 in 2020	GN4-3 project management, PMB, project participants, EC	Report on achievements and promote the work
Milestones	1 in 2020	NRENs, Open Community forums	Engage with NRENs and Open Community forums such as Telecom Infra Project (TIP) to define reference architecture for GÉANT Spectrum

Table 8.9: WP7 stakeholder engagement plan

8.8 WP8 Security

WP8 Security works to keep the R&E network safe and secure at the backbone level, and provides security support to the partners in the form of tools, products and services (e.g. Firewall on Demand (FoD), Distributed Denial of Service (DDoS) mitigation strategy and tools, vulnerability assessments, and a Security Operations Centre (SOC) to consolidate information about available solutions in different operational infrastructures), along with documentation and training, generally complementing the NRENs' own security efforts.

WP8 has identified a number of stakeholder groups:

- NREN:
 - Information security officers.
 - Security specialists (architects, Security Operations Centres (SOCs), Computer Security Incident Response Teams (CSIRTs), analysts, etc.).
 - Decision makers.
 - Management and employees.
- GN4-3 participants.
- GÉANT management.
- International R&E security communities.
- General public.

Stakeholder engagement is essential to WP8 for:

- Getting feedback.
- Stimulating the use of the Work Package's results, testing and adopting products, policies and best practices.
- Achieving and maintaining the support base and securing resources.

The channels WP8 uses for engaging the stakeholders will be different for each group. It will always be a mix of workshops, blog posts, reports, infoshares, presentations and other, depending on what exactly the WP needs from that stakeholder, or the stakeholder needs from the WP.

The means for interacting with the stakeholders are shown in Table 8.10 below.

Activity/Channel	Frequency	Stakeholder	Objective
SIG-ISM meetings	3 per year	NREN information security officers	Gather feedback, review of documents, advertise products and services
WISE meetings	2 per year	NREN information security officers NREN security specialists	Get feedback, review of documents, advertise products and services
Security day	Annual at TNC	NREN information security specialists	Get feedback, show what WP8 is doing, maintain support base, advertise products and services

Activity/Channel	Frequency	Stakeholder	Objective
		NREN management and employees	
Blog posts	6+ per year	All (including general public)	Inform the public about the security Work Package, products and services
GN4-3 Symposium	Bi-annual	NREN decision makers, GN4-3 participants, GÉANT management, NREN management and employees	Get feedback, show what WP8 is doing, advertise products and services
Papers and talks at conferences	4–6 per year	All	Get feedback, advertise the project, products and services
Articles (<i>CONNECT</i> magazine, etc.)	1–2 per year	All	Inform the public about the security Work Package, products and services
WP8 – workshops (CLAW, SOC, DDoS)	2–4 per year	NREN information security officers, NREN security specialists, all	Get feedback, advertise the project, products and services
Project Management Activities			
Periodical reporting	Every 4 months	GÉANT management, NREN management	Report on the work and promote the outputs of the WP; maintain support base; justify investments
Deliverables	0 in 2020	GN4-3 project management, PMB, project participants, EC	Report on achievements and promote the work
Milestones	6 in 2020	GN4-3 project management, PMB, project participants, EC	Requirements analysis, understand practices and usage, knowledge transfer, demonstrate progress, audit

Table 8.10: WP8 stakeholder engagement plan

8.9 WP9 Operations Support

WP9 Operations Support is responsible for the first- and second-line support (including training) of the GÉANT backbone network operations, and for the Computer Emergency Response Team (CERT) and service management. It is responsible for GÉANT network service availability 24 x 7, and provides first-line support and escalation at all times. It also supports the GÉANT Software Catalogue, and introduces a general software development methodology framework across the project, including testing processes, tools, training and audits.

GN4-3 WP9 has identified the following stakeholders:

- GÉANT NREN Access Port Managers (APMs).
- Partner Network Operations Centres (NOCs).

- Connectivity providers.
- Outsourced Service Desk.
- Hardware vendors and support organisations.
- GN4-3N project team.
- GN4-3:
 - Network service developers.
 - Software developers.
- GÉANT:
 - Procurement.
 - Partner Relations.
 - International Relations.
 - Research Engagement.
 - Network architects and engineers

Stakeholder engagement is essential to WP9 for:

- Providing information and obtaining feedback.
- Sharing knowledge and experience.
- Promoting policies, processes and best practice.
- Effective management of suppliers (business performance and service performance).
- Planning, prioritisation and alignment.

The means for interacting with the stakeholders are shown in Table 8.11 below.

Activity	Frequency	Stakeholder	Objective
Service and Technology Forum (STF)	Min 2 per year	GÉANT NREN Access Port Managers	Provide information on network and service development, gather feedback
SIG-NOC	3 per year	NOCs	Information and experience exchange with NOCs
Quarterly Business Reviews	4 per year per supplier	Key strategic vendors	Business performance reviews for Infinera and Xantaro (Juniper supplier)
Monthly Service Review	1 per month	Outsourced Service Desk	A review of Service Desk performance, including service credits
Service Reviews	~1 per year per supplier	Strategic Connectivity providers GÉANT Procurement	A review of service performance and upcoming plans on the part of GÉANT and the supplier
PORIG Meetings (Partner relations, Operations, Research engagement,	1 per month	GÉANT internal partners	Alignment and planning between Ops and business development

Activity	Frequency	Stakeholder	Objective
International relations)			
GN4-3 Symposium	Bi-annual	Software Developers	Promotion of GN4-3 SW governance, gather feedback
WP6-7-9 Weekly Meeting	Weekly (when required)	GÉANT network architects, GN4 network service developers	Prioritisation and planning
Articles (<i>CONNECT</i> Magazine)	1–2 per year	All	Raise awareness of, particularly, GN4-3 project software support
Project Management Activities			
Periodical reporting	Every 4 months	GÉANT management, NREN management	Report on achievements and promote the work
Deliverables	2 in 2020	GN4-3 project management, PMB, project participants, EC	Report on achievements and promote the work
Milestones	1 in 2020	GN4-3 project management, PMB, project participants, EC	Demonstrate progress

Table 8.11: WP9 stakeholder engagement plan

9 Conclusions

This document has described GN4-3's approach to stakeholder engagement, as led by Work Package 3 User and Stakeholder Engagement and undertaken by all areas of the project. In doing so, and in presenting the plans of each Work Package, it has provided an overview of who the stakeholders are and how they are being engaged with, both enabling and demonstrating effective oversight by WP3 and a coordinated approach to outreach.

Three new aspects have been or will be introduced to the engagement management process: WP3 T1's attendance of the Project Annual Internal Review (PAIR) meetings, new KPIs and a Purpose of Engagement column in the Management Report event participation table.

A framework is in place that allows engagement gaps across the project to be identified and acted upon; that supports an agile approach, recognising that continuous adjustments are required to meet changing demands over the lifetime of the project; and that makes provision for RACI assessments of one-off engagements to be decided on a case-by-case basis.

As part of the first annual update of the document (Milestone M3.3, due in Month 24), WP3 will review the stakeholder engagement framework and methodology, including the effectiveness of the new engagement management aspects and the outcome of the PAIR meetings, and make adjustments accordingly. It will also consider how to leverage WP3 Task 3 Stakeholder Insights and the CRM system to enhance engagement and help drive the project.

The document has shown the engagement activity to be proactive, comprehensive, agile and coordinated, thereby maximising the ability of GN4-3 to deliver benefit to and meet the needs of its stakeholders.

Appendix A Primary Stakeholder Groups

Table A.1 below shows the primary stakeholder groups, i.e. those specifically listed by two or more Work Packages, and the WPs that engage with them. As mentioned in Section 4, the lists of stakeholders will be further reviewed and discussed with the WPs to ensure any gaps are identified and addressed, and to ensure consistency of interpretation and level of awareness.

Work Package	EU Liaison (WP1 Coord'n Function)	Human Capital Dev't (WP1 T5)	Global Partner- ships (WP1 T6)	Proc't & Supplier Mgmt (WP1 T7)	Mkting, Comms & Events (WP2)	User & Stake- holder Engage't (WP3)	Online Svc's Dev't & Delivery (WP4)	Trust & Identity (WP5)	Network Technol- ogies & Services Dev't (WP6)	Network Core Infra & Service Evolution & Op'ns (WP7)	Security (WP8)	Op'ns Support (WP9)
Stakeholder												
GN4-3												
NREN partners	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y
– Decision makers			Y	Y	Y	Y	Y	Y	Y	Y	Y	
– Technical/ specialist staff			Y		Y	Y	Y	Y	Y	Y	Y	Y
WPLs			Y	Y	Y	Y						
TLs					Y							

Work Package	EU Liaison (WP1 Coord'n Function)	Human Capital Dev't (WP1 T5)	Global Partnerships (WP1 T6)	Proc't & Supplier Mgmt (WP1 T7)	Mkting, Comms & Events (WP2)	User & Stakeholder Engage't (WP3)	Online Svcs Dev't & Delivery (WP4)	Trust & Identity (WP5)	Network Technologies & Services Dev't (WP6)	Network Core Infra & Service Evolution & Op'ns (WP7)	Security (WP8)	Op'ns Support (WP9)
Stakeholder												
Individual participants		Y	Y		Y		Y		Y		Y	
Product management			Y		Y	Y						
Project management	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
PMB	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Governing bodies					Y	Y			Y	Y	Y	
GÉANT Association	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
GN4-3N				Y						Y		Y
External												
European NREs					Y	Y		Y	Y			
– Decision makers			Y		Y	Y		Y	Y			
– Technical/ specialist staff			Y		Y	Y		Y	Y			
Global NREs		Y	Y		Y	Y	Y	Y				

Work Package	EU Liaison (WP1 Coord'n Function)	Human Capital Dev't (WP1 T5)	Global Partner-ships (WP1 T6)	Proc't & Supplier Mgmt (WP1 T7)	Mkting, Comms & Events (WP2)	User & Stake-holder Engage't (WP3)	Online Svcs Dev't & Delivery (WP4)	Trust & Identity (WP5)	Network Technol-ogies & Services Dev't (WP6)	Network Core Infra & Service Evolution & Op'ns (WP7)	Security (WP8)	Op'ns Support (WP9)
Stakeholder												
Global partners			Y	Y	Y	Y						
End users		Y			Y	Y	Y	Y	Y	Y		
Other e-infra projects & initiatives		Y	Y		Y	Y	Y	Y	Y			
Other EC-funded network advancement projects that GÉANT supports (e.g. BELLA)			Y		Y	Y		Y	Y			
SIGS & TFs		Y			Y	Y	Y	Y	Y			
International bodies, organisations & activities			Y		Y	Y		Y		Y		
Vendors/ suppliers		Y		Y	Y		Y			Y		Y
Industry representatives					Y	Y						
EU institutions	Y	Y	Y		Y	Y	Y					

Work Package	EU Liaison (WP1 Coord'n Function)	Human Capital Dev't (WP1 T5)	Global Partnerships (WP1 T6)	Proc't & Supplier Mgmt (WP1 T7)	Mkting, Comms & Events (WP2)	User & Stakeholder Engage't (WP3)	Online Svcs Dev't & Delivery (WP4)	Trust & Identity (WP5)	Network Technologies & Services Dev't (WP6)	Network Core Infra & Service Evolution & Op'ns (WP7)	Security (WP8)	Op'ns Support (WP9)
Stakeholder												
National governments		Y			Y	Y	Y					
Standards bodies					Y				Y			
General public					Y				Y		Y	

Table A.1: Primary stakeholder groups and the WPs that engage with them

Appendix B Primary Engagement Channels

Table B.1 below shows the primary engagement channels, i.e. those specifically listed by two or more Work Packages, and the WPs that use them. As mentioned in Section 5, the lists of channels will be further reviewed and discussed with the WPs to ensure any gaps are identified and addressed, and to ensure consistency of interpretation and level of awareness.

Work Package Engagement Channel	EU Liaison (WP1 Coord'n Function)	Human Capital Dev't (WP1 T5)	Global Partner- ships (WP1 T6)	Proc't & Supplier Mgmt (WP1 T7)	Mkting, Comms & Events (WP2)	User & Stake- holder Engage't (WP3)	Online Svcs Dev't & Delivery (WP4)	Trust & Identity (WP5)	Network Technol- ogies & Services Dev't (WP6)	Network Core Infra & Service Evolution & Op'ns (WP7)	Security (WP8)	Op'ns Support (WP9)
PMO bulletin		Y			Y							
CONNECT		Y			Y		Y		Y	Y	Y	Y
GÉANT events												
– GÉANT Symposium		Y			Y	Y	Y	Y	Y	Y	Y	Y
– TNC		Y	Y		Y	Y	Y					
Meetings	Y		Y			Y	Y	Y			Y	Y

Work Package	EU Liaison (WP1 Coord'n Function)	Human Capital Dev't (WP1 T5)	Global Partner- ships (WP1 T6)	Proc't & Supplier Mgmt (WP1 T7)	Mkting, Comms & Events (WP2)	User & Stake- holder Engage't (WP3)	Online Svcs Dev't & Delivery (WP4)	Trust & Identity (WP5)	Network Technol- ogies & Services Dev't (WP6)	Network Core Infra & Service Evolution & Op'ns (WP7)	Security (WP8)	Op'ns Support (WP9)
Surveys			Y			Y	Y		Y			
Emails / mailing lists			Y		Y	Y						
Intranet			Y									
Websites		Y	Y		Y		Y					
Wikis		Y					Y					
Social media					Y							
News stories					Y							
Newsletters						Y	Y					
Blogs					Y		Y				Y	
Infoshares & webinars	Y					Y	Y	Y	Y			
STF						Y			Y	Y		Y
SIGs & TFs						Y	Y		Y		Y	Y
Other events & conferences	Y					Y	Y		Y	Y		

Work Package	EU Liaison (WP1 Coord'n Function)	Human Capital Dev't (WP1 T5)	Global Partnerships (WP1 T6)	Proc't & Supplier Mgmt (WP1 T7)	Mkting, Comms & Events (WP2)	User & Stakeholder Engage't (WP3)	Online Svcs Dev't & Delivery (WP4)	Trust & Identity (WP5)	Network Technologies & Services Dev't (WP6)	Network Core Infra & Service Evolution & Op'ns (WP7)	Security (WP8)	Op'ns Support (WP9)
Engagement Channel												
Workshops & trainings		Y				Y	Y	Y	Y	Y	Y	
Standards body meetings									Y			
Service reviews						Y						Y
Project Management Activities												
Management Reports	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Deliverables	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Milestones	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Table B.1: Primary engagement channels and the WPs that use them

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- [M5.1] https://www.geant.org/Projects/GEANT_Project_GN4-3/White_Papers_and_Milestones/M5.1_Enabling-Communities-Engagement-Plan.pdf

Glossary

AARC	Authentication and Authorisation for Research and Collaboration
AEGIS	AARC Engagement Group for Infrastructures
AI	Artificial Intelligence
ANA	Advanced North Atlantic Collaboration
APAN	Asia Pacific Advanced Network
APM	Access Port Manager
APRICOT	Asia Pacific Regional Internet Conference on Operational Technologies
ASREN	Arab States Research and Education Network
BELLA	Building the Europe Link to Latin America
BFUG	Bologna Follow-Up Group
CAREN	Central Asia Research and Education Network
CAREN CC	CAREN Coordination Centre
CEO	Chief Executive Officer
CERN	European Organisation for Nuclear Research
CERT	Computer Emergency Response Team
CIO	Chief Information Officer
CLAW	Crisis Management Workshop for the GÉANT Community
COST	Cooperation in Science and Technology
CRM	Customer Relationship Management
CS3	Cloud Services for Synchronisation and Sharing
CSDM	Cloud Service Delivery Manager
CSIRT	Computer Security Incident Response Team
CTO	Chief Technology Officer
DDoS	Distributed Denial of Service
DG CNECT	Directorate-General for Communications Networks, Content and Technology
e-AGE	Integrating Arab e-Infrastructure in a Global Environment
EaP	Eastern Partnership
EaPEC	Eastern Partnership E-infrastructures Conference
EB	Executive Board
EC	European Commission
ECN	Eastern Computer Network
EDI	European Data Infrastructure
EGE	European Group on Ethics
EGI	European Grid Infrastructure
EHEA	European Higher Education Area
e-IRG	e-Infrastructures Reflection Group
EMBL	European Molecular Biology Laboratory
EMBL-EBI	EMBL European Bioinformatics Institute

ENP	Emerging NREN Programme
EOSC	European Open Science Cloud
EQAR	European Quality Assurance Register
ESA	European Space Agency
ESFRI	European Strategy Forum on Research Infrastructures
ESS	European Spallation Source
EU	European Union
EUDAT	European Data Infrastructure
EUMETSAT	European Organisation for the Exploitation of Meteorological Satellites
EUNIS	European University Information Systems
EuroDIG	European Dialogue on Internet Governance
FaaS	Federation as a Service
FIM4L	Federated Identity for Libraries
FIM4R	Federated Identity for Research
FIRST	Forum of Incident Response and Security Teams
FoD	Firewall on Demand
FOSDEM	Free and Open Source Developers
GA	General Assembly
GCC	GÉANT Community Committee
GEO	Group on Earth Observations
GLAD	GÉANT Learning and Development
GN4-3	GÉANT 4 Phase 3 Project
GN4-3N	GÉANT 4 Phase 3 Network Project
GNA-G	Global Network Advancement Group
GPPC	GÉANT Programme Planning Committee
HEPiX	High Energy Physics Forum
HLG ET	High-Level Group on Education and Training
HPC	High Performance Computing
HPC-GIG	HPC Governance Intelligence Gathering
IETF	Internet Engineering Task Force
IMS	Instructional Management Systems
IX	Internet Exchange
KPI	Key Performance Indicator
L&D	Learning and Development
LHC	Large Hadron Collider
LHCONE	Large Hadron Collider Open Network Environment
LHCOPN	Large Hadron Collider Optical Private Network
M	Milestone
M	Month
NDN	NORDUnet
NEC	National Ethical Committees
NIAC	National Infrastructure Advisory Committee
NIS CG	Network and Information Systems Cooperation Group
NOC	Network Operations Centre
NREN	National Research and Education Network
OC	Operations Centre
OCRE	Open Clouds for Research Environments
OJEU	Official Journal of the European Union

OTE	Optical Transmission Equipment
PAIR	Project Annual Internal Review
PLM	Product Lifecycle Management
PMB	Project Management Board
PMO	Project Management Office
PORIG	Partner relations, Operations, Research engagement, International relations
PRACE	Partnership for Advanced Computing in Europe
PRACE-5IP	PRACE Fifth Implementation Phase
Q	Quarter
QASPER	Quality Assurance and Public and External Relations Committee
R&E	Research and Education
RACI	Responsible, Accountable, Consulted and Informed
RDA	Research Data Alliance
REFEDS	Research and Education Federations
RIPE	European IP Networks
RIPE NCC	European IP Networks Network Coordination Centre
RREN	Regional Research and Education Network
SEE	South East Europe
SIG	Special Interest Group
SIG-CISS	SIG on Cloudy Interoperable Software Stacks
SIG-ISM	SIG on Information Security Management
SIG-Marcomms	SIG on Marketing Communications
SIG-MSP	SIG on Management of Service Portfolios
SIG-NGN	SIG on Next-Generation Networks
SIG-NOG	SIG on Network Operations Centres
SIG-PMV	SIG on Performance Monitoring and Verification
SIG-TNE	SIG on Transnational Education
SKA	Square Kilometre Array
SOC	Security Operations Centre
STF	Service and Technology Forum
T&I	Trust and Identity
TEIN	Trans Eurasia Information Network
TEIN*CC	TEIN Cooperation Centre
TF	Task Force
TF-CSIRT	Task Force on Computer Security Incident Response Teams
TF-EDU	Task Force on Educational Technologies and Services
TIME	Trust and Internet Identity Meeting Europe
TIP	Telecom Infra Project
TNC	The Networking Conference
Up2U	Up to University
VC	Videoconference
WACREN	West and Central African Research and Education Network
WG	Working Group
WISE	Wise Information Security for Collaborating e-Infrastructures
WLCG	Worldwide LHC Computing Grid
WP	Work Package
WP1	Work Package 1 Project Management
WP2	Work Package 2 Marketing, Communications and Events

WP3	Work Package 3 User and Stakeholder Engagement
WP4	Work Package 4 Online Services Development and Delivery
WP5	Work Package 5 Trust and Identity
WP6	Work Package 6 Network Technologies and Services Development
WP7	Work Package 7 Network Core Infrastructure and Core Service Evolution and Operations
WP8	Work Package 8 Security
WP9	Work Package 9 Operations Support
WPL	Work Package Leader