

PLEASE USE THE FOLLOWING TEMPLATE TO PROPOSE A GÉANT SPECIAL INTEREST GROUP (SIG)

- General Information:**

SIG Name:	<i>SIG-Quantum</i>
Brief Description:	<i>This special interest group aims at providing a forum for the community working around quantum technologies, including quantum networking, computing, sensing, cryptography and communication across Research and Education Networks. It will gather and exchange experiences, ideas and knowledge on the development, deployment, testing and standardisation of quantum solutions, leading to the development of a coherent quantum strategy across GEANT and the evaluation and testing of suitable quantum technologies. The SIG will have an advisory role to GEANT GPPC and relevant project management/coordination function.</i>
Steering Committee	<p>NRENS: PSNC (Piotr Rydlichowski) GRNET (Ilias Papastamatiou) SURF (Wojciech Kozlowski)</p> <p>International: ESNET (Inder Monga, as a representative from the QUANT-NET Lab https://quantnet.lbl.gov/)</p> <p>Research: CERN Quantum Technology Initiative (Michele Grossi)</p>
Coordinator:	<i>Domenico Vicinanza and Nadelina Sandu</i>
Topics / Keywords:	<i>Quantum Computing Quantum Sensing Quantum Networking Quantum Cryptography White Rabbit</i>
Supporting NRENS:	<i>PSNC, GRNET, SURF</i>
Support (Others):	<i>CESNET, HEANET, SURF, ACONET, CERN, REDIRIS, GARR, BELNET, RESTENA, CARNET, ARNES, GEANT</i>

- Aims:**

1. *To provide a forum for gathering and exchanging experiences, ideas and knowledge on the development, deployment, testing and standardisation of quantum technologies across R&E networks, with a particular focus on quantum computing, networking, communication, cryptography and sensing;
This will be achieved through group meetings (online and face-to-face), the use of online collaborative tools, collating and dissemination of information or organising pilot projects;*
2. *To define agreed objectives and commitment levels related to the operation and management of quantum-based devices and protocols;*
3. *To make recommendations and play the role of a technical adviser*
*To provide a forum for gathering and exchanging experiences, ideas and knowledge on the development, deployment, testing and standardisation of quantum technologies across R&E networks, with a particular focus on quantum computing, networking, communication, cryptography and sensing;
This will be achieved through group meetings (online and face-to-face), the use of online collaborative tools, collating and dissemination of information or organising pilot projects;*
4. *To define agreed objectives and commitment levels related to the operation and management of quantum-based devices and protocols;*
5. *To make recommendations and play the role of a technical adviser.*

- **Background Information:**

This forum, comprising NRENS, research institutes and GÉANT, will aim at making recommendations on how best to invest future funds on behalf of the community, and will have an advisory role on how quantum technologies should be explored, tested, and operated within GÉANT. It is recommended to create a forum that would include representatives from NRENS and suitable quantum research institutes that participate in designing, in implementing, and advising on quantum technologies within the GÉANT network and service portfolio. The forum should be open to including members that are interested to join the forum regardless of they currently participate in providing or using any of the services.

Annex A: Standard Terms of Reference (DO NOT AMEND)

1. Context and principles

1.1 GÉANT Special Interest Groups (SIGs) are established under the auspices of GÉANT in order to create an open forum where experts from its community exchange information, knowledge, ideas and best practices about specific technical or other areas of business relevant to the research and education networking community.

2. Initiation

2.1 A GÉANT SIG can be initiated by any member of the GÉANT community based on the following conditions and steps:

- at least 3 NRENs or other organisations support the creation of the SIG and are willing to actively participate;
- an initial Steering Committee (SC) of 3-5 individuals nominated by the supporting organisations is established by simple agreement of the requesting NRENs or other organisations;
- the SC informs GÉANT about the creation of the SIG by submitting the detailed Charter document;
- if GÉANT agrees, the new SIG has been created.

2.2. Once the SIG has been created, GÉANT will provide continuous support subject to yearly monitoring (also see 4.).

3. Operations, composition, and roles

3.1 A SIG is to keep the strengths and interests of the community, to continue sharing and investigating within the spirit of openness and collaboration.

3.2 A SIG should act as a catalyst, organising virtual and face-to-face meetings, small workshops, training or BoFs co-located with other related group-meetings or relevant conferences.

3.3 Should the SIG produce any kind of results, these shall be made available in the public domain.

3.4 Participation in a GÉANT SIG is open to any clearly identified organisations or individuals, provided that the other SIG participants are sufficiently informed about their interest and intentions.

3.5 A SIG is collectively led by its SC (3-5 voluntary members) nominated by its participants and appointed by GÉANT for a two-year term of office that is interruptible and/or renewable.

3.6 The SC is responsible for the business of the SIG. The SC takes decisions primarily by consensus or by simple majority within the SC. If a decision cannot be made, GÉANT is responsible for the decision.

3.7 The SC is also responsible for producing brief annual reports to GÉANT about the progress of the SIG according to the pre-defined yearly plan and Key Performance Indicators.

4. Termination

4.1 A SIG has no pre-defined mandate or expiration date, but its support, subject to yearly monitoring by GÉANT, can be terminated if one of the following situations occurs:

- the SC has fewer than 3 members for a 3-month period;
- the SC collectively requests the termination of the SIG;
- the yearly assessment results are unsatisfactory;
- any of the SIG participants, subject to detailed investigation by GÉANT, explicitly requests the termination of the SIG;
- GÉANT decides to terminate the SIG.

4.2 Appeals by any of the SIG participants can be submitted to GÉANT; these shall be resolved within 3 months.

4.3 After detailed investigations of the aforementioned situations and potential appeals, the decision of GÉANT about the SIG support is final.

5. Resources and support

5.1 As long as the SIG is supported by GÉANT, GÉANT will provide the following services:

- mailing list(s) and public web archive(s) under the geant.org domain;
- maintenance of wiki page(s);
- website - on request and as decided to be appropriate by GÉANT;
- online survey tool - on request;
- social media, news, and annual report coverage – on request and as decided to be appropriate by GÉANT.

5.2 In the case of termination of GÉANT SIG support, the transition of services a), b), and c) to other providers is ensured by GÉANT.

5.3 Official minutes keeping, AV recording or other archiving is subject to discussion with the GÉANT employee assigned to support the SIG.

5.4 A SIG has no dedicated budget other than the expenses of GÉANT.

5.5 GÉANT may find internal or external funding sources (e.g., projects, commercial sponsors) to cover the expenses of SIG support, as appropriate.