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# **Open Exchange Policy**

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Description: Outlines the purpose and governance of the GÉANT Open Exchange facility (GÉANT Open)

Expected Result: For Executive Committee decision

Agenda Item No.: 5A



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### **Executive Summary**

This document outlines the connection and usage policies of the GÉANT Open Exchange facility, ("Open Exchange" in this document).

In its first production release, the eligible connectors to the Open Exchange will be:

- Research and Education Networks (RENs)
- International Research Organisations, including International Research Projects and Laboratories
- Commercial organisations collaborating with or offering services to Research and Education Networks and REN community

The Open Exchange will enable traffic to be exchanged between Research and Education Networks like European NRENs, the GÉANT backbone, regional networks (e.g. CAREN, TEIN, RedCLARA), International R&E networks across the globe (e.g. ESnet, Internet2, CANARIE), and international research organisations. Traffic exchanges between connected commercial organisations and other Research and Education Networks are also allowed.

In the initial production release, GÉANT network services will be connected to the Open Exchange but only Research and Education Networks can switch traffic with GÉANT. Following Production launch, future releases will consider how to further extend the connectivity options between GÉANT IP and the Open Exchange connectors. Approval of future releases will be governed by the GÉANT Executive Committee

## 1 Management of the Open Exchange

The GÉANT Executive Committee will be the governing body for the Open Exchange service.

DANTE will execute the daily operation of the service according to the policies described within this document.

DANTE will be the single point of contact for organizations wanting to approach the Open Exchange regarding operations, and regarding matters of setting up or closing down connections.

## 2 Technical Implementation of the Open Exchange

The Open Exchange consists of the Open Exchange switching fabric and the PoP facilities for maintaining it in active service.

The switching fabric will be operated by the GÉANT Network Operation Centre (NOC) and run by DANTE as part of GÉANT network operations.

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DANTE will responsible for the Open Exchange switch and will manage the GEANT connection(s) to the Open Exchange. Other connectors are responsible for managing their own connections to the switch. The Link between the Open Exchange switching fabric and the GÉANT IP Network is implemented with a L2 switched circuit to the GÉANT network

# 3 Policies for connection to the Open Exchange

The following policies will be followed by DANTE to process any application to connect to the Open Exchange

#### 1. Eligibility Policies:

In its first production release, the eligible connectors (Connector(s)) to the Open Exchange will be:

- a. Research and Education Networks (RENs)
- b. International Research Organisations, including International Research Projects and Laboratories, subject to a dialogue with the Research and Education Network located at the "B" end of the connection onto the Open Exchange. (The "A" end is assumed to be at the Open Exchange)
- c. Commercial organisations collaborating with or offering services to Research and Education Networks and their partners

#### 2. Financial Policy:

Each Connector must:

- a) Finance their own way to the Open Exchange point
- b) Pay an annual connection fee

#### 3. Policies for switching between Connectors

- Any Connector may request a connection to be established to any other Connector, subject to that connection conforming to the Acceptable Usage Policies of both connectors. This is to be determined by the Connectors by mutual agreement
- b) Connections across the switching fabric will be made by sending a service request to DANTE by both connectors.

#### Note:

- 1. Service parameters for the Open Exchange are described in the GÉANT Open Exchange service specification.
- 2. Terms and Conditions of the Open Exchange service are defined in the GÉANT Open Master Service Agreement

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# 4 Policy for interconnection with GÉANT at the Open Exchange

The policy to connect to GÉANT IP at the Open Exchange is defined as follows:

## 4.1 Generic Connector to GÉANT at the Open Exchange

In the first Production release, traffic can be exchanged between a Connector and GÉANT network services according to the following:

- a) The GÉANT service shall only be connected to RENs;
- b) The GÉANT service shall only be connected to research institutes subject to a dialogue with the Research and Education Network located at the "B" end of the connection onto the Open Exchange. (The "A" end is assumed to be at the Open Exchange)

# 4.2 GÉANT consortium NREN Connector to GÉANT at the Open Exchange

Where the NREN is a signatory of the GN3plus consortium agreement and subscribe to GEANT services, then the additional policies apply:

- a. The GÉANT connection policy and cost sharing principles will be applied to this connection and consequently the capacity switched at the Open Exchange to GÉANT IP will be considered to be part of their GÉANT subscription, and;
- b. All GÉANT IP Service polices and AUP remain in force on this connection.

**END** 

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