



AGREEMENT for adhesion to the Belnet EDUROAM Service

(Non-binding English translation – not for signature)

BETWEEN:	Belnet, the Belgian telematic research network, a State Department with Separate Management, created in the context of the Federal Scientific Policy 231, avenue Louise - 1050 Brussels, hereinafter called "BELNET",	
Represented I	by Mr Jan Torreele, acting Director	
AND:		
	(Name Institution/Service Provider) Located at(Street)	
	(Town/city)	
Represented by (Name)		
	(function)	
	Signatory of the Agreement for Delivery of Internet Services:	
	(Reference)	
	Hereinafter called the " CUSTOMER",	
	Hereinafter referred to together as the " PARTIES",	



DEFINITIONS

For the purpose hereto of this agreement (hereinafter the "AGREEMENT"), the following terms are defined as follows:

- Resource provider: organisation supplying an eduroam internet access to users with an eduroam account.
- Eduroam service provider: organisation which manages the eduroam infrastructure nationally.
- Identity provider: organisation supplying an authentication mechanism to its users, in order for them to be able to access the eduroam service.
- Home organization: parent organisation of a user, guaranteeing his or her identity and his or her authentication.
- Visited organization: organisation supplying an eduroam access to a user, for whom it does not manage the identity or the authentication.

IT IS EXPRESSLY AGREED BETWEEN THE PARTIES

The eduroam service, named hereinafter **"the SERVICE"**, is only accessible to customers who have signed an Agreement for Delivery of Internet Services with BELNET. The general delivery conditions of BELNET's internet service are applicable to this AGREEMENT as far as it is not waived hereinafter.

Suspension or termination of the agreement relative to the delivery of Internet services will automatically lead to suspension or termination of the SERVICE. Suspension or termination of this AGREEMENT does not affect the other contracts concluded between the PARTIES.

Article 1 Purpose of the Agreement

This document sets out guidelines that cover the control of the supply and receipt of roaming internet access for educational and research purposes.

"Eduroam" is a TERENA registered trademark and is an abbreviation for "educational roaming" that originated from a European national education and research networks project to deliver a user-friendly, secure and scalable internet access solution for visitors.

More information about eduroam is available at http://www.eduroam.org.

THE SERVICE can be used only by end-users related to a recognised institution with a core activity in research and/or education

Article 2 Roles and Responsibilities

2.1 BELNET, the eduroam service provider





BELNET is responsible for the national eduroam service. BELNET will act as the federation's eduroam policy authority, in accordance with the European eduroam confederation policy.

BELNET's role is threefold:

- 1. to coordinate and support the SERVICE to designated technical contacts of participating organizations exclusively,
- 2. to maintain links with the European eduroam community and their authentication servers.
- 3. to contribute to the further development of the eduroam concept.

BELNET is responsible for maintaining and developing a national authentication server network that connects to participating organizations. The eduroam service provider assumes no liability for any impact as a result of a loss or disruption of service.

BELNET is responsible for managing a second line technical support function covering pre-connection and ongoing technical support and maintenance of a dedicated website containing technical, service, policy and process information.

BELNET is responsible for coordinating communications between participating organizations so that policies and procedures contained herein are adhered to in a timely manner and as a matter of last resort has the right to impose technical sanctions.

BELNET will work with the nominated eduroam registered users of a participating organization to test one or more of the following aspects:

- 1. initial connectivity,
- 2. authentication and authorization processes,
- 3. authorized services offered, and review of the logging activities and the relevant authentication server configuration for compliance with the policy.

2.2 Eduroam identity providers

The role of the eduroam identity provider (also named "home organization") is to act as the credential provider for registered staff and students. It will also provide technical and service support for its users who want to access eduroam services at eduroam resource providers (visited sites). Only designated technical contacts or registered users can escalate technical support, service support or security issues to BELNET on behalf of their users.

Identity providers must cooperate with BELNET in case of security incidents, misuse, etc. BELNET will open security cases using its own security incident handling service to follow the incident and take measures according to its Acceptable Use Policy (AUP).

2.3 Eduroam resource providers

The role of the eduroam resource providers is to supply internet access to users via eduroam (based on the trust that the user's identity provider (home organization) authentication check and response is valid). The eduroam resource provider authorizes the use of any service it provides.

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Where user activity is monitored, the eduroam resource provider must clearly announce this fact including how this is monitored, stored and accessed so as to comply with national legislation.

The eduroam resource provider must abide by this policy and follow BELNET's service processes and guidelines listed herein.

The eduroam resource provider must cooperate with BELNET in case of technical problem, security incidents, misuse, etc.

Except for the express derogation mentioned in the special conditions of this AGREEMENT, an organisation cannot assume the status of "eduroam identity provider" without also assuming that of "eduroam resource provider" and the related responsibilities.

2.4 Eduroam users

The CUSTOMER quarantees that its users respect the following points:

- 1. the user is responsible for the usage of his credentials
- 2. a user's role is in principle always a visitor who wants internet access at an eduroam resource provider. The user must abide by their identity providers (home organization's) AUP or equivalent and respect the visited organization's AUP or equivalent. Where regulations differ the more restrictive applies. Users must as a minimum abide by relevant law of the country where he is physically situated, home or abroad
- 3. the user is responsible for taking reasonable steps to ensure that they are connected to a genuine eduroam service (as directed by their home organization) prior to entering their login credentials
- 4. the user is responsible for their credentials and the use of any service they might provide
- 5. if credentials are thought to have been compromised, the user must immediately report back to his home organization
- 6. the user is obliged to inform the visited organization (where possible) and home organization of any faults with the SERVICE.

Article 3. Activation and technical requirements

Each party must deploy an authentication server in accordance with eduroam technical and policy guidelines available at http://www.eduroam.be.

A secondary authentication server is recommended for redundancy purposes.

The communication of data relative to the execution of the SERVICE by the CUSTOMER will be carried out via the www.eduroam.be website and in accordance with the instructions mentioned in Annex 1 of the AGREEMENT.

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Article 4. Registered users and BELNET support

4.1 Registered users

The eduroam identity provider must provide BELNET with contact details of two or more registered technical contacts or 'registered users' who are mandated by the CUSTOMER to technically manage and operate the SERVICE at their institution. These registered users have access to BELNET support services and are responsible to test, activate and communicate all necessary data regarding the SERVICE with BELNET.

The registered user(s) are also responsible to handle all security issues. This may be the same person designated as the nominated registered user, or the SCP (Security Contact Person) as known in the "Internet Service Agreement"

Participating organizations must notify BELNET in a timely manner of the following incidents:

- 1. security breaches
- 2. misuse or abuse
- service faults
- 4. changes to access controls (e.g. permit or deny of a user or realm)

The registered users and contacts of the CUSTOMER are mentioned in annex 2 in this convention. Any changes to contact details must be notified to BELNET in a timely manner.

4.2 BELNET support

- For any sales or contractual question, the CUSTOMER can contact BELNET's Customer Relations Department via e-mail (<u>customer@belnet.be</u>) or by telephone (00 32 (0) 2/790.33.33). This department can only be contacted during office hours (from 9 AM to 5 PM).
- 2) For any technical-related question concerning the SERVICE, the CUSTOMER can contact BELNET's Service Support Department via e-mail (<u>support@belnet.be</u>) or by telephone (00 32 (0) 2/790.33.33). This department can only be contacted during office hours (from 9 AM to 5 PM).
- 3) For any technical incident (complete breakdown or serious deterioration in the quality of the SERVICE), the CUSTOMER can contact BELNET's Helpdesk via e-mail (helpdesk@belnet.be) during office hours or by telephone (00 32 (0) 2/790.33.00) 24 hours a day, 7 days a week.



Article 5. Authority, Compliance & Sanctions

In cases where immediate action is required to protect the integrity and security of the SERVICE, BELNET has the right to suspend the SERVICE or restrict eduroam access to only those participating organizations that can comply with the required changes. To do so, BELNET will notify participating organizations of such incidents, outages and remedial.

BELNET will notify by email to the nominated technical and/or security contact of the participating organization of any technical or policy breach or incident that requires resolution. Where such notifications are not acted upon in a timely manner, or where the breach or incident may impact on the security and integrity of eduroam, BELNET has the right to block eduroam access to that organization.

Eduroam resource providers may prevent use of their networks by all users from a particular eduroam identity provider by configuring their authentication server(s) to reject that realm. In some cases an eduroam resource provider may also be able to block a single visiting user. Such a measure can only be implemented with the aim of protecting against any abuse by the eduroam resource provider. If there is any suspicion of abuse, BELNET can require that the eduroam resource provider proves the non-arbitrary nature of this measure and, if applicable, demand that it is terminated.

Eduroam identity providers may withdraw an individual user's ability to use the eduroam by configuring their own authentication server or removing that user from their authentication database.

Such a measure can only be implemented with the aim of protecting against any abuse by the eduroam identity provider. If there is suspicion of abuse, BELNET can require that the eduroam identity provider proves the non-arbitrary nature of this measure and, if applicable, demand that it is terminated.

Eduroam identity providers must also ensure that their computing regulations enable users who breach this policy to be subject to an appropriate internal disciplinary process irrespective of their location at the time.

Article 6. Tariffs & Invoicing

The SERVICE is based on a shared access model where eduroam resource providers supply and receive internet access for their users.

The SERVICE is supplied by BELNET free of charge.

The CUSTOMER is not allowed to charge for eduroam access to eduroam users.



Annexes:

- 1. Eduroam technical policy
- 2. Contact persons registered for the use of the SERVICE
- 3. Special conditions

The annexes constitute an integral part of this agreement and must – initialled per page – be

mailed together with this sig and returned by BELNET	ned agreement in duplicate, after which 1 copy will be signed
Executed in Brussels, on having received its copy.	, in two copies, each party recognizing
For BELNET,	For the CUSTOMER,
Mr Jan. Torreele acting Director	(name):

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Annex 1 – eduroam technical policy

This document has been written following the template found within TERENA's "Deliverable DJ5.1.3: Roaming policy and legal framework document Part 2: Policy document".

This policy has been ratified by Belnet, the National Research and Education Network. Its content is also available on the www.eduroam.be website.

BELNET reserves the right to modify the content of this policy in order to reflect any modifications made by the Eduroam Service Activity Organisation, holder of the said policy (more information on www.eduroam.org). Any modification of the content of this policy will be communicated via the www.eduroam.be website. The new version will automatically replace the previous model of the Eduroam Technical Policy without the need to establish a new agreement.

1. Activation procedure

The eduroam identity provider authentication server(s) must be reachable from the BELNET RADIUS proxies for authentication and accounting purposes.

The identity provider must create an eduroam test account (eduroam username and password credential) that will be made accessible to assist in pre-connection testing, ongoing monitoring, support and fault finding activities. If the test account's password is changed, BELNET must be notified by the home organization in a timely manner.

The eduroam resource provider may offer any media; however as a minimum, wireless LAN IEEE 802.11b is required whilst 802.11g is also recommended.

The eduroam resource provider must deploy the SSID 'eduroam' and IEEE 802.1X Extensible Authentication Protocol (EAP) authentication (excluding EAP-MD5) to promote a consistent service and minimum level of security. The SSID eduroam should be broadcast.

The eduroam resource provider must as a minimum implement IEEE 802.1X and WPA/TKIP, or better. It is strongly recommended that WPA2/AES is implemented.

The eduroam resource provider must as a minimum offer:

- Standard IPSec VPN: IP protocols 50 (ESP) and 51 (AH) egress; UDP/500 (IKE) egress only
- OpenVPN 2.0: UDP/1194
- IPsec NAT-Traversal UDP/4500
- Cisco IPSec VPN over TCP: TCP/10000 egress only
- PPTP VPN: IP protocol 47 (GRE) ingress and egress; TCP/1723 egress
- SSH: TCP/22 egress only
- HTTP: TCP/80 egress only
- HTTPS: TCP/443 egress only
- IMAP2+4: TCP/143 egress only
- IMAP3: TCP/220 egress only

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• IMAPS: TCP/993 egress only

- POP: TCP/110 egress only
- POP3S: TCP/995 egress only
- Passive (S)FTP: TCP/21 egress only
- SMTPS: TCP/465 egress only
- SMTP submit with STARTTLS: TCP/587 egress only
- RDP: TCP/3389 egress only

The eduroam resource provider should offer:

- Standard IPSec VPN: IP protocols 50 (ESP) and 51 (AH) ingress
- IPv6 Tunnel Broker service: IP protocol 41 ingress and egress

The eduroam resource provider should implement a visitor virtual local area network (VLAN) for eduroam-authenticated users that is not to be shared with other network services.

2. Logging

Eduroam identity providers must log all authentication and accounting requests; the following information must be recorded:

- 1. the date and time the authentication request was received
- 2. the RADIUS request's identifier
- 3. the authentication result returned by the authentication database
- 4. the reason given if the authentication was denied or failed.
- 5. the value of the request's accounting status type.

The eduroam identity provider must keep a log of all authentication and accounting requests for a minimum of twelve months and a maximum of twenty-four months. Cooperation about the content of these logs will be restricted to the eduroam registered users and BELNET technical contact to assist in resolving specific security or abuse issues that have been reported to BELNET.

The eduroam resource provider must log all DHCP transactions including:

- 1. the date and time of issue of the client's DHCP lease
- 2. the MAC address of the client
- 3. the client's allocated IP address.

The eduroam resource provider must keep a log of DHCP transactions for a minimum of twelve months and a maximum of twenty-four months. Cooperation about the content of these logs will be restricted to the eduroam registered users and BELNET support services to assist in resolving specific security or abuse issues that have been reported to BELNET.

The eduroam resource provider must not log any passwords.

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3. Eduroam user support and guidance

The identity provider must provide support to their users requesting access at an eduroam resource provider.

The eduroam resource provider should provide support to users from other eduroam identity providers that are requesting eduroam services at their eduroam identity provider campus.

The eduroam resource provider must publish local information about eduroam services on dedicated web pages on their organization website containing the following minimum information:

- 1. a text (including an url link) that confirms adherence to this policy (document published on http://www.eduroam.be)
- 2. a hyperlink to a website to eduroam resource providers' acceptable use policy or equivalent
- 3. a list or map showing eduroam access coverage areas
- 4. details of the broadcast or non-broadcast SSID as eduroam
- 5. details of the authentication process and authorized services offered
- 6. details about the use of a non-transparent application proxy including user configuration guidelines (if applicable)
- 7. a hyperlink to the website http://www.eduroam.be and posting of the eduroam logo and trademark statement
- 8. where user activity is monitored, the eduroam resource provider must clearly announce this fact including how this is monitored so as to meet with national legislation, including how long the information will be held for and who has access to it
- 9. the contact details of the appropriate technical support that is responsible for eduroam services.

4. Glossary of acronyms

In the framework of the implementation and execution of the service, the acronyms used will have the following meaning:

AH: Authentication Header AUP: Acceptable Usage Policy

CERT: Computer Emergency Response Team DHCP: Dynamic Host Configuration Protocol EAP: Extensible Authentication Protocol

Eduroam: educational roaming

ESP: Encapsulating Security Payload

FTP: File Transfer Protocol

GRE: Generic Routing Encapsulation HTTP: Hypertext Transfer Protocol

HTTPS: Secured HTTP

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IEEE: Institute of Electrical and Electronics Engineers

IKE: Internet Key Exchange

IMAP: Internet Message Access Protocol

IMAPS: Secured IMAP
IP: Internet Protocol
IPSec: IP Secured

LAN: Local Area Network
MAC: Media Access Control

MD5: Message Digest algorithm (version 5)

NAT: Network Address Translation

POP3: Post Office Protocol

PPTP: Point to Point Tunneling Protocol

RADIUS: Remote Authentication Dial In User Service

RDP: Remote Desktop Protocol
RFC: Request For Comments
SMTP: Simple Mail Transfer Protocol

SMTPS: Secured SMTP SSH: Secured Shell

SSID: Service Set Identifier

TCP: Transmission Control Protocol

TERENA: Trans European Research and Education Networking Association

TKIP: Temporal Key Integrity Protocol

TLS: Transport Layer Security

TTLS: Tunneled TLS

UDP: User Datagram Protocol

VLAN: Virtual LAN

VPN: Virtual Private Network WEP: Wired Equivalent Privacy

Wifi: Wireless Fidelity
WPA: Wifi Protected Access

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Annex 2 - Contact persons registered for the use of the SERVICE

The CUSTOMER authorizes BELNET to communicate the connection data necessary for access to the SERVICE to the following CUSTOMER contact persons (at least 1):

1) First name + surname:
Position:
Tel. No.:
E-mail:
2) First name + surname:
Position:
Tel. No.:
3) First name + surname:
Position:
Tel. No.:
E-mail:

BELNET declares that it respects the legislation relative to personal data protection and undertakes to only use the information received for the execution of the SERVICE.

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Annex 3 - Special conditions:



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