

# 1 Basic Information

## 1.0 NRENs that have responded to the Questionnaire

49 NRENs responded to the survey, from 47 different countries\*. Not all NRENs were able to answer all of the questions, but many were. The following map and table give an overview of the NRENs that sent their replies and gives an impression of the completeness of those replies.

In most of the tables and graphs the English-language abbreviation of the NREN's name has been used in order to denote the NREN. Table 1.0.1 provides a list of countries and the abbreviations of the NREN(s) from those countries that submitted information. Table 1.0.2 provides a list of some countries where we know that research networking exist, but from which no replies were received.

NRENs have been asked to double-check and update their replies.

Two projects are relevant in this context:

\* the EUMEDCONNECT project aims at the Mediterranean region. For more information see:  
<http://www.dante.net/eumedconnect/>;

\* the Virtual Silk Highway project is aimed at Central Asian countries. For more information see:  
<http://www.silkproject.org/>.

CEENet maintains contacts and provides support to many NRENs in Central and Eastern Europe and the Former Soviet Union. For more information see:  
<http://www.ceenet.org/>.

\* The full survey is at: [http://www.compendium/TSsec\(05\)Compq05.rtf](http://www.compendium/TSsec(05)Compq05.rtf)



Table 1.0.1 NRENs and urls. NRENs in bold are TERENA members

#	Country	NREN	URL
1	Algeria	CERIST	<a href="http://www.cerist.dz">http://www.cerist.dz</a>
2	Azerbaijan	AzNET	<a href="http://www.aznet.org">http://www.aznet.org</a>
	Azerbaijan	AzRENA	<a href="http://www.azrena.org/index_en.htm">http://www.azrena.org/index_en.htm</a>
3	Belarus	BASNET	<a href="http://www.basnet.by">http://www.basnet.by</a>
4	Belgium	BELNET	<a href="http://www.belnet.be">http://www.belnet.be</a>
5	Bulgaria	IST Foundation	<a href="http://www.ist.bg">http://www.ist.bg</a>
6	Croatia	CARNet	<a href="http://www.carnet.hr">http://www.carnet.hr</a>
7	Cyprus	CYNET	<a href="http://www.cynet.ac.cy">http://www.cynet.ac.cy</a>
8	Czech Republic	CESNET	<a href="http://www.cesnet.cz">http://www.cesnet.cz</a> , <a href="http://www.ces.net">http://www.ces.net</a>
9	Denmark	UNI•C	<a href="http://www.forskningsnettet.dk/eng/">http://www.forskningsnettet.dk/eng/</a>
10	Egypt	EUN	<a href="http://www.eun.eg">http://www.eun.eg</a>
11	Estonia	EENet	<a href="http://www.eenet.ee">http://www.eenet.ee</a>
12	Finland	FUNET	<a href="http://www.csc.fi/">http://www.csc.fi/</a>
13	France	RENATER	<a href="http://www.renater.fr">http://www.renater.fr</a>
14	Georgia	GRENA	<a href="http://www.grena.ge">http://www.grena.ge</a>
15	Germany	DFN	<a href="http://www.dfn.de">http://www.dfn.de</a>
16	Greece	GRNET	<a href="http://www.grnet.gr/en">http://www.grnet.gr/en</a>
17	Hungary	NiIF/ HUNGARNET	<a href="http://www.hungarnet.hu">http://www.hungarnet.hu</a> <a href="http://www.niif.hu">http://www.niif.hu</a>
18	Iceland	RHnet	<a href="http://www.rhnet.is">http://www.rhnet.is</a>
19	Ireland	HEAnet	<a href="http://www.heanet.ie">http://www.heanet.ie</a>
20	Israel	IUCC	<a href="http://www.iucc.ac.il">http://www.iucc.ac.il</a>
21	Italy	GARR	<a href="http://www.garr.it">http://www.garr.it</a>
22	Kazakhstan	KazRENA	<a href="http://www.kazrena.kz">http://www.kazrena.kz</a>
23	Kyrgyzstan	KRENA- AKNET	<a href="http://aknet.kg">http://aknet.kg</a>
24	Latvia	LANET	<a href="http://www.lanet.lv">http://www.lanet.lv</a>
	Latvia	LATNET	<a href="http://info.latnet.lv/En/">http://info.latnet.lv/En/</a>
25	Lebanon	CNRS	<a href="http://www.cnrs.edu.lb">http://www.cnrs.edu.lb</a>
26	Lithuania	LITNET	<a href="http://www.litnet.lt">http://www.litnet.lt</a>
27	Luxembourg	RESTENA	<a href="http://www.restena.lu/">http://www.restena.lu/</a>

#	Country	NREN	URL
28	Macedonia, FYRo	MARNet	
29	Malta	CSC	<a href="http://www.um.edu.mt/csc.html">http://www.um.edu.mt/csc.html</a>
30	Moldova	RENAM	<a href="http://www.renam.md">http://www.renam.md</a>
31	Morocco	MARWAN	<a href="http://www.marwan.ma">http://www.marwan.ma</a>
32	Netherlands	SURFnet	<a href="http://www.surfnet.nl">http://www.surfnet.nl</a>
33	Norway	UNINETT	<a href="http://www.uninett.no">http://www.uninett.no</a>
34	Poland	PIONIER	<a href="http://www.pionier.gov.pl">http://www.pionier.gov.pl</a>
35	Portugal	FCCN	<a href="http://www.fccn.pt">http://www.fccn.pt</a>
36	Romania	RNC	<a href="http://www.rnc.ro">http://www.rnc.ro</a>
	Romania	RoEduNet	<a href="http://www.roedu.net/">http://www.roedu.net/</a>
37	Russian Federation	RBNet/ RUNNet	<a href="http://www.ripn.net">http://www.ripn.net</a> <a href="http://www.runnet.ru">http://www.runnet.ru</a>
38	Serbia / Montenegro	AMREJ	<a href="http://amrej.rcub.bg.ac.yu">http://amrej.rcub.bg.ac.yu</a>
39	Slovakia	SANET	<a href="http://www.sanet.sk">http://www.sanet.sk</a>
40	Slovenia	ARNES	<a href="http://www.arnes.si/">http://www.arnes.si/</a>
41	Spain	RedIRIS	<a href="http://www.rediris.es">http://www.rediris.es</a> <a href="http://www.red.es">http://www.red.es</a>
42	Sweden	SUNET	<a href="http://www.sunet.se/">http://www.sunet.se/</a>
43	Switzerland	SWITCH	<a href="http://www.switch.ch">http://www.switch.ch</a>
44	Syria	SHERN	<a href="http://www.shern.net">http://www.shern.net</a>
45	Turkey	ULAKBIM	<a href="http://www.ulakbim.gov.tr">http://www.ulakbim.gov.tr</a>
46	Ukraine	UARNet	<a href="http://www.uar.net">http://www.uar.net</a>
	Ukraine	URAN	<a href="http://www.uran.net.ua">http://www.uran.net.ua</a>
47	United Kingdom	UKERNA	<a href="http://www.ukerna.ac.uk">http://www.ukerna.ac.uk</a>
48	Uzbekistan	UzSciNet	<a href="http://www.uzsci.net">http://www.uzsci.net</a>

Table 1.0.2 NRENs not included in the Compendium

	Armenia	ARENA	<a href="http://www.arena.am">http://www.arena.am</a>
	Austria	ACOnet	<a href="http://www.aco.net/">http://www.aco.net/</a>
	Iran	IRANET	<a href="http://www.iranet.ir">http://www.iranet.ir</a>
	Jordan	NITC	<a href="http://www.nic.gov.jo">http://www.nic.gov.jo</a>

## 1.1 Legal Form

NRENs have many different legal forms. Names and their translations may be misleading: what is called a 'foundation' in one country may be something very different from that which is called a 'foundation' in another country. The same is true for many other designations. In this section, two parameters are distinguished that together help to characterise the legal form of NRENs

### Separate legal entity

Many NRENs operate as a separate legal entity; many others form part of a larger organisation (often either a Ministry, a University or a research institution). A few NRENs have a special status in the sense that they do not operate as a separate legal body but are not part of a larger organisation either, for example because they operate on a project basis. Typically, the final institutional identity of these NRENs has not yet been decided.

### Relationship with the Government

Those NRENs that are a government agency or part of a government ministry are typically directly controlled by the government, even though in some cases (e.g. Turkey) such agencies can enjoy a reasonable degree of autonomy, comparable to that of some of the NRENs that are separate legal entities (marked 'direct' in the table 1.1.1).

A number of NRENs that are separate legal entities have governing boards that are at least half government-appointed. Those NRENs are marked with 'Government appoints at least half' in table 1.1.1 and with 'appoints' in table 1. 1.2. Many NRENs have a mixed model, being governed both by government representatives and representatives from the research and education community.

In Table 1.1.1, 'indirect' means an indirect relationship, for example if at least half the members of the NREN's Governing body are appointed by research and education institutions that in itself are (largely) government-funded.

Table 1.1.2. shows the relationship between the two parameters.

As can be seen from table 1.1.1, the most common model in the 'EU-15/EFTA' group of countries is an NREN which is a separate legal entity. This separate legal entity is controlled by the research and education community which itself is (largely) government funded. This model is chosen by a small majority (53%) of the NRENs.

In the new member states and in the other GÉANT2 partner countries, a larger variety exists. The model described above is chosen by a third of the NRENs in these countries.

The largest variety exists in the other countries, with eight models found among 13 NRENs. The legal status of five of these NRENs has not yet been finally settled.

It seems clear that NREN development requires the commitment of all major stakeholders, such as funders and users. A governing model that allows the participation of these stakeholders would seem to be the most appropriate; such a situation can be achieved in a number of different ways.

NRENs that can operate with a certain amount of independence from Government may have certain advantages, such as easier decision-making procedures and the ability to offer staff attractive terms of employment. This may help to explain why this model is more common in countries where research networking has developed over many years and is now well-established.

Table 1.1.1 Aggregated information on the legal form of NRENs

Relationship with Government	Separate legal entity	Part of larger organisation	Other	Total
EU – 15/EFTA				
Indirect	9			9
Government appoints at least half		1		1
Direct		3		3
Other	3	1		4
None				
<b>Total</b>	<b>12</b>	<b>5</b>		<b>17</b>
EU – new member states				
Indirect	3	2		5
Government appoints at least half	1			1
Direct	1	1		2
Other	2	1		3
None				
<b>Total</b>	<b>7</b>	<b>4</b>		<b>11</b>
Non-EU/EFTA – GÉANT2 partners				
Indirect	3			3
Government appoints at least half				
Direct	2			2
Other	1	1		2
None				
<b>Total</b>	<b>6</b>	<b>1</b>		<b>7</b>
Other countries				
Indirect	3	2	2	7
Government appoints at least half		1		1
Direct	1		2	3
Other			1	1
None	1			1
<b>Total</b>	<b>5</b>	<b>3</b>	<b>5</b>	<b>13</b>

Table 1.1.2 Relationship with Government

Country	NREN	Separate legal entity?	Relationship with Government	Remarks/Parent Organisation
<b>'EU-15' and EFTA countries</b>				
<b>Belgium</b>	BELNET	no	direct	Ministry of Science Policy
<b>Denmark</b>	UNI•C	no	direct	For Forskningsnet: Danish ministry of Science,Technology and Innovation, For UNI•C: Danish ministry of Education
<b>Finland</b>	FUNET	no	appoints	CSC - Scientific Computing Ltd., owned by the Ministry of Education
<b>France</b>	RENATER	yes	indirect	
<b>Germany</b>	DFN	yes	indirect	
<b>Greece</b>	GRNET	yes	appoints	GRNET was founded by Presidential Decree 29/1998 and is a property of the Ministry of Development, under the supervision of the General Secretariat of Research and Technology. The Ministry of Development assigns the Members of the Board of Directors. The Greek government provides funding for operation of GRNET.
<b>Iceland</b>	RHnet	yes	indirect	
<b>Ireland</b>	HEAnet	yes	indirect	
<b>Italy</b>	GARR	yes	indirect	
<b>Luxembourg</b>	RESTENA	yes	indirect	
<b>Netherlands</b>	SURFnet	yes	indirect	Stichting SURF (English: SURF Foundation)
<b>Norway</b>	UNINETT	yes	other	Limited company wholly owned by the Department of Education and Research
<b>Portugal</b>	FCCN	yes	indirect	
<b>Spain</b>	RedIRIS	no	direct	Entidad pública empresarial RED.ES
<b>Sweden</b>	SUNET	no	other	The Swedish Research Council (the parent organisation) is a government agency and part of the funding comes directly from the government
<b>Switzerland</b>	SWITCH	yes	other	The government has delegates in the governing body, the council of foundation.
<b>United Kingdom</b>	UKERNA	yes	indirect	
<b>EU - new member states</b>				
<b>Cyprus</b>	CYNET	yes	other	The governing body consists of representatives from education, research and government agencies.
<b>Czech Republic</b>	CESNET	yes	indirect	
<b>Estonia</b>	EENet	yes	direct	EENet is a public institution operating under the administration of the Estonian Ministry of Education and Research
<b>Hungary</b>	NIIF/ HUNGARNET	yes	other	Joint NREN function by HUNGARNET (independent) and NIIF (government supervised).
<b>Latvia</b>	LANET	no	indirect	Ministry of Education and Science
<b>Latvia</b>	LATNET	no	indirect	The LATNET network is working as a financially independent subunit (department) of the Institute of Mathematics and Computer Science that is an independent unit of Latvia University.
<b>Lithuania</b>	LITNET	no	direct	Ministry of Science and Education of Lithuania

Country	NREN	Separate legal entity?	Relationship with Government	Remarks/Parent Organisation
Malta	CSC	no		University of Malta
Poland	PIONIER	yes	indirect	
Slovakia	SANET	yes	indirect	
Slovenia	ARNES	yes	appoints	
<b>Non-EU/EFTA GÉANT2 partners</b>				
Bulgaria	IST Foundation	yes	indirect	
Croatia	CARNet	yes	direct	
Israel	IUCC	yes	indirect	
Romania	RoEduNet	yes	direct	
Russian Federation	RBNet/RUNNet	yes	both	The NREN is controlled partly by the Government and partly by the research community.
Turkey	ULAKBIM	no	other	The Scientific and Technical Research Council of Turkey (TUBITAK). TUBITAK is a Semi independent government agency.
<b>Other countries</b>				
Algeria	CERIST	no	appoints	Ministry of higher education and scientific research
Azerbaijan	AzNET	neither	indirect	United Nations Development Programme (UNDP) Country Office in Azerbaijan
Azerbaijan	AzRENA		indirect	
Belarus	BASNET	no	indirect	National Academy of Sciences of Belarus
Georgia	GRENA	yes	indirect	
Kazakhstan	KazRENA		other	KazRENA works closely with the Ministry of Education and Science of Kazakhstan on a state programme.
Kyrgyzstan	KRENA-AKNET	yes	none	
Macedonia, FYRo	MARNet	no	none	Ss. Cyril & Methodius University in Skopje
Moldova	RENAM	yes	indirect	
Morocco	MARWAN	neither	direct	National Scientific and Technical Research Centre (CNRST)
Serbia / Montenegro	AMREJ	neither	direct	
Syria	SHERN	yes	direct	Ministry of Higher Education
Ukraine	URAN	no	indirect	Centre for European Integration Ltd. (CEI)
Uzbekistan	UzSciNet	yes	indirect	

