

PHARE'94 - Initial Status Reports

- Bulgaria: [UNICOM-B](#)
- Czech Republic: [Cesnet](#)
- Estonia: [EEnet](#)
- Hungary: [Hungarnet](#)
- Latvia: [LATNET](#)
- Lithuania: [LITNET](#)
- Romania: [RNC-NET](#)
- Slovakia [SANET](#)

Contact information: Istvan.Tetenyi@ella.hu

[PHARE](#)

[January 1996]

Questionnaire of International router operation and installation

Initial status report

UNICOM-B research networking organisation

1. National and international interconnectivity

- Give your present and planned International interconnectivity in respect to the **PHARE** project.
- In respect to the PHARE project there is no present international connectivity.

| From | To | speed kbit/ sec | status | Service Provider |
|-------|-----------|--------------------|---------|---------------------|
| Sofia | Amsterdam | 2 x 64 kbps | planned | EuropaNET |

- Specify the all **other** available international circuit capacity and the international service provider(s).

| From | To | speed kbit/ sec | status | Service Provider |
|-------------|--------|--------------------|-----------------|---------------------|
| Sofia | Vienna | 9.6 kbps | in operation | Ebone |
| Sofia | Vienna | 64 kbps VSAT | in operation | Ebone |
| Blagoevgrad | Vienna | 9.6 kbps | in operation | Ebone |

- Give any **planned upgrades** and **available backup** options.

No line upgrades planned, no backup options available or planned in the near future.

- Please, provide one **schematic map** that shows your organizations national and international interconnectivity **respectively**. The map is to be included to ANNEX A.

2. International router

2.1 International router technical specification

- Please, provide a technical specification of the router you use as international router.

| | |
|--------------------------------------|---------------|
| International router | specification |
| router type | Cisco |
| model | AGS+ |
| manufacturer | Cisco |
| number of serial interfaces | 6 |
| number of ethernet interfaces | 2 |
| RAM memory | 16 MB |
| software version used | 10.0 |
| flash EPROM | yes |
| available routing protocols | |
| line encapsulation protocols | |
| is tftp used for configuration | |
| is tftp used for software image load | |
| is IP accounting used | |
| is SNMP management used | |
| is UPS available ? | yes |
| is packet filtering available | yes |

2.2 Router installation

- Where is your international router installed ? /Give precise address./

Centre of Informatics and Computing Technology (CICT),
 Bulgarian Academy of Science,
 Acad. G. Bonchev Str. 25-A
 BG-1113, Sofia
 Bulgaria

- Who has installed the router ?
-

Not yet installed, all the following statements are as planned:

| | |
|--------------|--|
| vendor | |
| manufacturer | |

| | |
|-------------------------------|----------|
| research network organization | UNICOM-B |
| other, specify | |

The installation should meet the overall requirements of all interested parties.

- State, that the installation follows:

| | |
|---|------------|
| general requirements | yes/ no |
| the vendor requirements concerning the product's installations | yes |
| the local PTT and/or Institute environment general requirements | yes |
| the country's general safety requirements | yes |

Questionnaire of International router operation and installation

Initial status report

CESNET research networking organisation

I. National and international interconnectivity

- Give your present and planned International interconnectivity in respect to the **PHARE** project.

| From | To | speed kbit/ sec | status | Service Provider |
|--------|-----------|--------------------|---------|---------------------|
| Prague | Amsterdam | 512 | present | Dante |
| | | 1024 | planned | |

- Specify the all **other** available international circuit capacity and the international service provider(s).

| From | To | speed kbit/ sec | status | Service Provider |
|--------|--------|--------------------|---------|---------------------|
| Prague | Vienna | 512 | present | EBONE |
| | | 1024 | planned | |

- Give any **planned upgrades** and **available backup** options.

XXXNET link to is to be upgraded from kbit/s capacity to

XXXNET has a mutual backup agreement with

CESNET - DANTE link to Amsterdam is to be upgraded from 512 kb/s capacity to 1024kb/s CESNET - EBONE link to Vienna is to be upgraded from 512kb/s capacity to 1024kb/s

- Please, provide one **schematic map** that shows your organizations national and international interconnectivity **respectively**. The map is to be included to ANNEX A.

I. International router

A. International router technical specification

a) Please, provide a technical specification of the router you use as international router.

| | |
|--------------------------------------|---------------|
| International router | specification |
| router type | CISCO 7010 |
| model | 7010 |
| manufacturer | CISCO |
| number of serial interfaces | 8 |
| number of ethernet interfaces | 6 |
| RAM memory | 64 MB |
| software version used | 10.2(6) |
| flash EPROM | 4 MB |
| available routing protocols | OSPF, BGP4 |
| line encapsulation protocols | HDLC, PPP |
| is tftp used for configuration | Yes |
| is tftp used for software image load | Yes |
| is IP accounting used | Yes |
| is SNMP management used | Yes |
| is UPS available ? | Yes |
| is packet filtering available | Yes |

A. Router installation

a) Where is your international router installed ? /Give precise address./

Czech Technical Univerzity
 computing centre
 Zikova 4
 166 35 Prague6
 The Czech Republic

.....

b) Who has installed the router ?

| | |
|--------|----|
| vendor | No |
|--------|----|

| | |
|-------------------------------|-----|
| manufacturer | No |
| research network organization | Yes |
| other, specify | No |

The installation should meet the overall requirements of all interested parties.

a) State, that the installation follows:

| | |
|---|------------|
| general requirements | yes/ no |
| the vendor requirements concerning the product's installations | Yes |
| the local PTT and/or Institute environment general requirements | Yes |
| the country's general safety requirements | Yes |

d) State that the installation follows the vendor's requirements in respect of:

| | |
|---|------------|
| vendor's requirements | yes/ no |
| general safety recommendations | Yes |
| the safety with electricity procedures | Yes |
| preventing electrostatic discharge damage | Yes |

A. Maintenance

| Maintenance | specification |
|--|---|
| What kind of maintenance contract covers the router ? (none, limited to the end of warranty period, maintenance contract is under negotiation, contract with yearly renewal, other) | ltd. to the end of warranty period, then contract |
| When will the warranty period end ? (Give precise date.) | October 1996 |
| Is back-up router available ? (yes,no) | YES |

| | |
|---|-----|
| Is hot-swap router available ? (yes,no) | YES |
|---|-----|

I. Facility Management

- Housing/Facility**

| Housing/Facility | yes/ no |
|---|--------------------|
| Are the router and the modems rack mounted ? | No |
| Is the room where the router installed climatized ? | Yes |
| Is the router protected from direct sun-shine ? | Yes |
| Is the router protected from dripping water ? | Yes |
| Is UPS available ? | Yes |
| Router is protected against power surges ? | Yes |

- Operation**

| Operation of facilities | specification |
|--|----------------------|
| Specify, how you make sure that the operation of the facilities are kept ? (contract exist, 24 hour supervision, other) | 24 hour supervision |
| State, that the access to the international router is provided 24 hours a day all year long. (yes,no) | Yes |

I. Technical support

- Give detailed information about **configuration management and routing management** procedures:

| configuration management,routing management | yes/ no |
|---|--------------------|
| Is tftp used for configuration loading and saving ? | Yes |
| Are the routing configurations saved historically ? | Yes |
| Is tftp used for router software image load ? | Yes |
| Is flash Eprom available ? | Yes |

| | |
|--|-----|
| Is net admin staff available during week-end ? | Yes |
| Is net admin staff available out of office hours ? | Yes |
| Is AUP defined ? | Yes |

- include your RIPE registered routing policy for XXX-NET AS-s

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from AS1902 100 accept AN4

from AS 1128 100 accept AN4

AS2605 to AS 1128 announce AS 2605

to AS 1128 announce AS 2605

from AS 1922 100 accept AS1922, AS2607

from AS 1755 100 accept ANY

AS1902 from AS 2605 100 accept ANY

to AS 2605 announce AS1902, AS1903, AS1922, AS2607

to AS 1755 announce AS1902, AS2605,AS1903,AS1922,AS2607

to AS 1922 announce AS1902, AS2605, AS1128,AS690.....

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- Please, provide a schematic map of XXX-NET AS interconnections.

.....Actually nobody the person should be set up during 1996

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.....

.....

- Who should issue a trouble ticket and within what period of time ?

.....Actually nobody the person should be set up during 1996

.....

.....

.....

- contact persons/organizations for each of the international **lines**.

| | Name | e-mail | phone | fax |
|-----------------------------|------------------|---------------|--------------------|------------|
| your organizations | CESNET | | 0042- 224352996 | |
| partner organization | DANTE | | 0031- 205928038 | |
| your circuit provider | Czech Telecom | | | |
| partner circuit provider | | | | |

I. Operational support

- Give the following parameters of your ISP, whom you contact in case of problems:

| Name | e-mail | phone | fax |
|-------------|---------------|--------------------|------------|
| DANTE | | 0031- 205928038 | |
| EBONE | | | |

- Give the name and e-mail address of the persons who could create fault reports in **your** organizations

| Name | e-mail | phone | fax |
|------------------|-------------------------|--------------|------------|
| Petr Kral | PKL@ACI.CVUT.CZ | 24352945 | 24316106 |
| Marek Stastny | STASTNY@ACI.CVUT. CZ | 24352934 | 24316106 |
| Martin Míchal | MICHAL@ACI.CVUT-CZ | 24352924 | 24316106 |

Appendix A

Please, include the relevant maps here.

Questionnaire of International router operation and installation

Initial status report

LITNET research networking organisation

1. National and international interconnectivity

- Give your present and planned International interconnectivity in respect to the **PHARE** project.

| From | To | speed kbit/ sec | status | Service Provider |
|--------|-----------|--------------------|-----------|---------------------|
| Kaunas | Stockholm | 64 | operating | Swedish Space Corp. |

- Specify the all **other** available international circuit capacity and the international service provider(s).

| From | To | speed kbit/ sec | status | Service Provider |
|------|----|--------------------|--------|---------------------|
|------|----|--------------------|--------|---------------------|

- Give any **planned upgrades** and **available backup** options.

LITNET link to is to be upgraded from kbit/s capacity to

LITNET has a mutual backup agreement with

- Please, provide one **schematic map** that shows your organizations national and international interconnectivity **respectively**. The map is to be included to ANNEX A.

2. International router

2.1 International router technical specification

- Please, provide a technical specification of the router you use as international router.

| | |
|----------------------|---------------|
| International router | specification |
| router type | CISCO |

| | |
|--------------------------------------|-------------|
| model | 2501 |
| manufacturer | CISCO |
| number of serial interfaces | 2 |
| number of ethernet interfaces | 1 |
| RAM memory | 16MB |
| software version used | 10.2 |
| flash EPROM | 4MB |
| available routing protocols | IGRP, BGP-4 |
| line encapsulation protocols | HDLC |
| is tftp used for configuration | yes |
| is tftp used for software image load | no |
| is IP accounting used | yes |
| is SNMP management used | no |
| is UPS available ? | yes |
| is packet filtering available | yes |

2.2 Router installation

- Where is your international router installed ? /Give precise address./

.....
.....Kaunas University of Technology.....
.....Studentu 48a.....
.....Kaunas
.....Lithuania.....
.....

- Who has installed the router ?

| | |
|-------------------------------|-----|
| vendor | |
| manufacturer | |
| research network organization | yes |
| other, specify | |

The installation should meet the overall requirements of all interested parties.

- State, that the installation follows:

| | |
|---|------------|
| general requirements | yes/ no |
| the vendor requirements concerning the product's installations | yes |
| the local PTT and/or Institute environment general requirements | yes |
| the country's general safety requirements | yes |

d) State that the installation follows the vendor's requirements in respect of:

| | |
|---|------------|
| vendor's requirements | yes/ no |
| general safety recommendations | yes |
| the safety with electricity procedures | yes |
| preventing electrostatic discharge damage | no |

2.3 Maintenance

| Maintenance | specification |
|--|---------------------------------------|
| What kind of maintenance contract covers the router ? (none, limited to the end of warranty period, maintenance contract is under negotiation, contract with yearly renewal, other) | limited to the end of warranty period |
| When will the warranty period end ? (Give precise date.) | 1996 12 31 |
| Is back-up router available ? (yes,no) | yes |
| Is hot-swap router available ? (yes,no) | no |

3. Facility Management

- **Housing/Facility**

| | |
|-------------------------|--------------------|
| Housing/Facility | yes/ no |
|-------------------------|--------------------|

| | |
|---|-----|
| Are the router and the modems rack mounted ? | yes |
| Is the room where the router installed climatized ? | no |
| Is the router protected from direct sun-shine ? | yes |
| Is the router protected from dripping water ? | yes |
| Is UPS available ? | yes |
| Router is protected against power surges ? | no |

- **Operation**

| Operation of facilities | specification |
|--|----------------------|
| Specify, how you make sure that the operation of the facilities are kept ? (contract exist, 24 hour supervision, other) | 24 hour supervision |
| State, that the access to the international router is provided 24 hours a day all year long. (yes,no) | yes |

4.

Technical support

- Give detailed information about **configuration management and routing management** procedures:

| configuration management,routing management | yes/ no |
|---|--------------------|
| Is tftp used for configuration loading and saving ? | yes |
| Are the routing configurations saved historically ? | yes |
| Is tftp used for router software image load ? | no |
| Is flash Eprom available ? | yes |
| Is net admin staff available during week-end ? | yes |
| Is net admin staff available out of office hours ? | yes |
| Is AUP defined ? | yes |

- include your RIPE registered routing policy for LIT-NET AS-s

descr: LITNET, Lithuanian Academic and Research Network

as-in: from AS2603 100 accept ANY

as-in: from AS5377 100 accept AS5377

as-out: to AS2603 announce AS2847

as-out: to AS5377 announce AS2847

default: AS2603 100

guardian: daiva@sc-uni.ktu.lt

admin-c: Daiva Tamulioniene

tech-c: Rimantas Kavaliunas

tech-c: DT78

mnt-by: AS2847-MNT

changed: daiva@sc-uni.ktu.lt 951030

source: RIPE

- Please, provide a schematic map of LITNET AS interconnections.
- Who should issue a trouble ticket and within what period of time ?

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.....

- contact persons/organizations for each of the international **lines**.

| | Name | e-mail | phone | fax |
|--------------------|----------------------------|--------------------------|-------------------|-------------------|
| your organizations | Kazimieras Narusevicius | kanaru@sc-uni.ktu. lt | +370-7- 799782 | +370-7- 799925 |

| | | | | |
|--------------------------|----------------|------------|---------------|---------------|
| partner organization | | | | |
| your circuit provider | Rolf Ingelstam | rin@ssc.se | +46-8-6276309 | +46-8-6276364 |
| partner circuit provider | | | | |

5. Operational support

- Give the following parameters of your ISP, whom you contact in case of problems:

| Name | e-mail | phone | fax |
|----------------|-------------|---------------|--------------|
| Bjorn Carlsson | bc@sUNET.se | +46-8-7906601 | +46-8-241179 |

- Give the name and e-mail address of the persons who could create fault reports in **your** organizations

| Name | e-mail | phone | fax |
|------------------|-----------------------|---------------|---------------|
| Gintaras Gruzdis | gincius@sc-uni.ktu.lt | +370-7-799782 | +370-7-799925 |

Appendix A

Please, include the relevant maps here.

Questionnaire of International router operation and installation

Initial status report

Estonian Educational and Research Network EENet

IT95(04)

12 January, 1996

1. National and international interconnectivity

- Present and planned international interconnectivity in respect to the **PHARE** project.

| From | To | speed kbit/ sec | status | Service Provider |
|----------------------|-----------------------|----------------------------|---------------|-----------------------------|
| Tallinn (Estonia) | Helsinki (Finland) | 256 Kbps | up | FUNET |
| Tallinn (Estonia) | Riga (Latvia) | 64 Kbps | up | EsData |

- Other available international circuit capacity and the international service provider(s).

| From | To | speed kbit/ sec | status | Service Provider |
|----------------------|-----------|----------------------------|---------------|-------------------------|
| Tallinn (Estonia) | Stockholm | 2 Mbps | not in use | Estonian Telephone |

- Planned upgrades and available backup options.

EENet link to Stockholm is to be upgraded from 0 kbit/s capacity to 512 Kbps (timetable not available yet).

EENet has a mutual backup agreement with LATNET (Latvia).

- Schematic map showing EENet's national and international interconnectivity respectively is included to ANNEX A.

2. International router

2.1 International router technical specification

| | |
|--------------------------------------|---------------------------------------|
| International router | specification |
| router type | Cisco 2501 |
| model | 2501 |
| manufacturer | Cisco |
| number of serial interfaces | 2 |
| number of ethernet interfaces | 1 |
| RAM memory | 16 M |
| software version used | 10.0 |
| flash EPROM | 2 M |
| available routing protocols | BGP4, OSPF, IGRP, RIP <i>etc..</i> |
| line encapsulation protocols | HDLC, PPP, LAPB, FFR <i>etc.</i> |
| is tftp used for configuration | yes |
| is tftp used for software image load | yes, if needed |
| is IP accounting used | yes |
| is SNMP management used | yes |
| is UPS available ? | yes |
| is packet filtering available | yes |

2.2 Router installation

- International router is installed in Tallinn International Exchange, Sõle Str. 14., Tallinn, Estonia.
- The router has been installed by

| | |
|-------------------------------|-------|
| vendor | |
| manufacturer | |
| research network organization | EENet |
| other, specify | |

c) The installation follows following requirements:

| | |
|---|--------------------|
| <i>general requirements</i> | <i>yes/ no</i> |
| the vendor requirements concerning the product's installations | yes |
| the local PTT and/or Institute environment general requirements | yes |
| the country's general safety requirements | yes |

d) The installation follows the vendor's requirements in respect of:

| | |
|---|--------------------|
| <i>vendor's requirements</i> | <i>yes/ no</i> |
| general safety recommendations | yes |
| the safety with electricity procedures | yes |
| preventing electrostatic discharge damage | yes |

2.3 Maintenance

| Maintenance | specification |
|--|--|
| What kind of maintenance contract covers the router ? (none, limited to the end of warranty period, maintenance contract is under negotiation, , other) | Contract with yearly renewal. Replacement of corrupted parts in 24 hours. |
| When will the warranty period end ? (Give precise date.) | |
| Is back-up router available ? (yes,no) | no |
| Is hot-swap router available ? (yes,no) | no |

3. Facility Management

- **Housing/Facility**

| | |
|---|--------------------|
| Housing/Facility | yes/ no |
| Are the router and the modems rack mounted ? | yes |
| Is the room where the router installed climatized ? | yes |

| | |
|---|-----|
| Is the router protected from direct sun-shine ? | yes |
| Is the router protected from dripping water ? | yes |
| Is UPS available ? | yes |
| Router is protected against power surges ? | yes |

- **Operation**

| Operation of facilities | specification |
|--|----------------------|
| Specify, how you make sure that the operation of the facilities are kept ? (contract exist, 24 hour supervision, other) | contract exists |
| State, that the access to the international router is provided 24 hours a day all year long. (yes,no) | yes |

4. Technical support

- Detailed information about **configuration management and routing management** procedures:

| configuration management,routing management | yes/no |
|---|----------------|
| Is tftp used for configuration loading and saving ? | yes |
| Are the routing configurations saved historically ? | no |
| Is tftp used for router software image load ? | yes, if needed |
| Is flash Eprom available ? | yes |
| Is net admin staff available during week-end ? | yes, by phone |
| Is net admin staff available out of office hours ? | yes, by phone |
| Is AUP defined ? | yes |

- RIPE registered routing policy for EENet AS-s

aut-num: AS3221

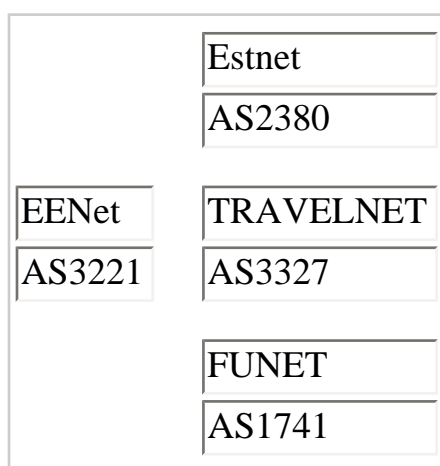
descr: EENet Autonomous System

descr: Estonian Educational and Research Network

descr: EE

as-in: from AS1741 100 accept ANY
 as-in: from AS2380 100 accept AS2380
 as-in: from AS3327 100 accept AS3327
 as-out: to AS1741 announce AS3221
 as-out: to AS2380 announce AS3221
 as-out: to AS3327 announce AS3221
 default: AS1741 100
 guardian: andresb@kbfi.ee
 admin-c: Enok Sein
 tech-c: Andres Bauman
 changed: andresb@kbfi.ee 960110
 source: RIPE

- A schematic map of EENet AS interconnections:



- Following institutions should issue a trouble ticket:

Nösper Ltd; EsData Ltd.; FUNET

- contact persons/organizations for each of the international **lines**.

| | Name | e-mail | phone | fax |
|-------------------------|------------------|-------------------------------|--|-------------------|
| <i>Tallinn-Helsinki</i> | | | | |
| EENet | Enok Sein | enok@eenet.ee | +372 7 433 635 +372 5 230 363 | +372 7 431 980 |
| FUNET | Markus Sadeniemi | Markus.Sadeniemi@funet. fi | +358 0 4572711 | +358 0 4572302 |
| our circuit provider | Telekom Finland | | | |

| | | | | |
|--------------------------|--------------------|------------------|----------------------------------|----------------|
| partner circuit provider | | | | |
| <i>Tallinn-Riga</i> | | | | |
| EENet | Enok Sein | enok@eenet.ee | +372 7 433 635 +372 5 230 363 | +372 7 431 980 |
| LATNET | Janis Kikuts | kikuts@mii.lu.lv | | |
| our circuit provider | Estonian Telephone | | +372 639 7211 | +372 639 7222 |
| partner circuit provider | Lattelekom | | | |

5. Operational support

- In case of problems we contact following people:

| Name | e-mail | phone | fax |
|----------------------------|--------------------------------|-------------------|--------------------|
| Taavi Talvik | taavi@uninet.ee | +372 630 8858 | +372 6317984 |
| Tiit Siida | tiit@estnet.ee | +372 2 527 504 | +372 639 7039 |
| Pekka Kytolaakso, FUNET | Pekka.Kytolaakso @funet. fi | +358 0 4572246 | + 358 0 4572302 |

Appendix A

256K

Neutral LAN (IX-LAN)

64K

Questionnaire of International router operation and installation

Initial status report

Hungarnet research networking organisation

1. National and international interconnectivity

- Give your present and planned International interconnectivity in respect to the **PHARE** project.

| From | To | speed kbit/ sec | status | Service Provider |
|-------------|-----------|----------------------------|---------------|-----------------------------|
| Budapest | Amsterdam | 1984 | operational | Europamet |

- Specify the all **other** available international circuit capacity and the international service provider(s).

| From | To | speed kbit/ sec | status | Service Provider |
|-------------|-----------|----------------------------|---------------|-----------------------------|
| Budapest | Vienna | 256 | operational | EBONE |

- Give any **planned upgrades** and **available backup** options.

XXXNET link to is to be upgraded from kbit/s capacity to

XXXNET has a mutual backup agreement with

- Please, provide one **schematic map** that shows your organizations national and international interconnectivity **respectively**. The map is to be included to ANNEX A.

2. International router

2.1 International router technical specification

- Please, provide a technical specification of the router you use as international router.

| | |
|----------------------|---------------|
| International router | specification |
| router type | CISCO |

| | |
|--------------------------------------|------------------|
| model | 4000 |
| manufacturer | CISCO |
| number of serial interfaces | 4 |
| number of ethernet interfaces | 2 |
| RAM memory | 16 |
| software version used | 10.3 |
| flash EPROM | yes |
| available routing protocols | BGP,IGRP, etc |
| line encapsulation protocols | HDLC |
| is tftp used for configuration | yes |
| is tftp used for software image load | no |
| is IP accounting used | no |
| is SNMP management used | yes |
| is UPS available ? | no |
| is packet filtering available | yes |

2.2 Router installation

- Where is your international router installed ? /Give precise address./

H-1052, Budapest, V. ker Városház u. 18
Hungary

- Who has installed the router ?

| | |
|-------------------------------|-----|
| vendor | |
| manufacturer | |
| research network organization | yes |
| other, specify | |

The installation should meet the overall requirements of all interested parties.

- State, that the installation follows:

| | |
|---|------------|
| general requirements | yes/ no |
| the vendor requirements concerning the product's installations | yes |
| the local PTT and/or Institute environment general requirements | yes |
| the country's general safety requirements | yes |

d) State that the installation follows the vendor's requirements in respect of:

| | |
|---|------------|
| vendor's requirements | yes/ no |
| general safety recommendations | yes |
| the safety with electricity procedures | yes |
| preventing electrostatic discharge damage | yes |

2.3 Maintenance

| Maintenance | specification |
|--|------------------------------|
| What kind of maintenance contract covers the router ? (none, limited to the end of warranty period, maintenance contract is under negotiation, contract with yearly renewal, other) | contract with yearly renewal |
| When will the warranty period end ? (Give precise date.) | 31. December 1996 |
| Is back-up router available ? (yes,no) | yes |
| Is hot-swap router available ? (yes,no) | yes |

3. Facility Management

- **Housing/Facility**

| Housing/Facility | yes/ no |
|---|------------|
| Are the router and the modems rack mounted ? | yes |
| Is the room where the router installed climatized ? | yes |
| Is the router protected from direct sun-shine ? | yes |

| | |
|---|----|
| Is the router protected from dripping water ? | no |
| Is UPS available ? | no |
| Router is protected against power surges ? | no |

- **Operation**

| Operation of facilities | specification |
|--|----------------------|
| Specify, how you make sure that the operation of the facilities are kept ? (contract exist, 24 hour supervision, other) | contract exists |
| State, that the access to the international router is provided 24 hours a day all year long. (yes,no) | yes |

4. Technical support

- Give detailed information about **configuration management and routing management** procedures:

| configuration management,routing management | yes/ no |
|---|--------------------|
| Is tftp used for configuration loading and saving ? | yes |
| Are the routing configurations saved historically ? | yes |
| Is tftp used for router software image load ? | no |
| Is flash Eprom available ? | yes |
| Is net admin staff available during week-end ? | yes |
| Is net admin staff available out of office hours ? | yes |
| Is AUP defined ? | yes |

- include your RIPE registered routing policy for Hungarnet AS

aut-num: AS1955

descr: HUNGARNET

descr: Hungarian Academic and Research Network

as-in: from AS1755 50 accept AS-EBONE

as-in: from AS1128 50 accept ANY

as-in: from AS3219 50 accept AS3219

as-in: from AS2547 50 accept AS2547

as-in: from AS2547 60 accept AS2012 AS3338

as-in: from AS2012 50 accept AS2012

as-in: from AS2012 60 accept AS2547
 as-in: from AS2012 70 accept AS3338
 as-in: from AS3338 50 accept AS3338
 as-in: from AS3338 60 accept AS3337
 as-in: from AS3338 70 accept AS2012 AS2547
 as-in: from AS3337 50 accept AS3337
 as-in: from AS3337 60 accept AS3338
 as-in: from AS3314 50 accept AS3314
 as-in: from AS3346 50 accept AS3346
 as-out: to AS1755 announce AS-HBONE
 as-out: to AS1128 announce AS-HBONE
 as-out: to AS3219 announce AS1955
 as-out: to AS3314 announce AS1955
 as-out: to AS3346 announce AS-HBONE
 as-out: to AS2547 announce AS-HBONE
 as-out: to AS2012 announce AS-HBONE
 as-out: to AS3337 announce AS-HBONE
 as-out: to AS3338 announce AS-HBONE
 guardian: hostmaster@sztaki.hu
 admin-c: BM238
 tech-c: IT1953
 tech-c: GK26-RIPE
 mnt-by: AS1955-MNT
 changed: horvath@sztaki.hu 950207
 changed: kissg@sztaki.hu 951101
 source: RIPE

- Who should issue a trouble ticket and within what period of time ?

net-admin@sztaki.hu, within 4 hours

- contact persons/organizations for each of the international **lines**.

| | Name | e-mail | phone | fax |
|--------------------------|-------------------|-------------------|----------------|----------------|
| your organizations | István Tétényi | tetenyi@sztaki.hu | +361-149-7532 | +361-129-7866 |
| partner organization | Michael Behringer | nmc@dante.org.uk | +441223-302992 | +441223-303005 |
| your circuit provider | Gyula Szilágyi | N/A | +361-266-3995 | N/A |
| partner circuit provider | Michael Kruit | N/A | +31-20-484488 | N/A |

5. Operational support

- Give the following parameters of your ISP, whom you contact in case of problems:

| Name | e-mail | phone | fax |
|-------------------|------------------|----------------|----------------|
| Michael Behringer | nmc@dante.org.uk | +441223-302992 | +441223-303005 |

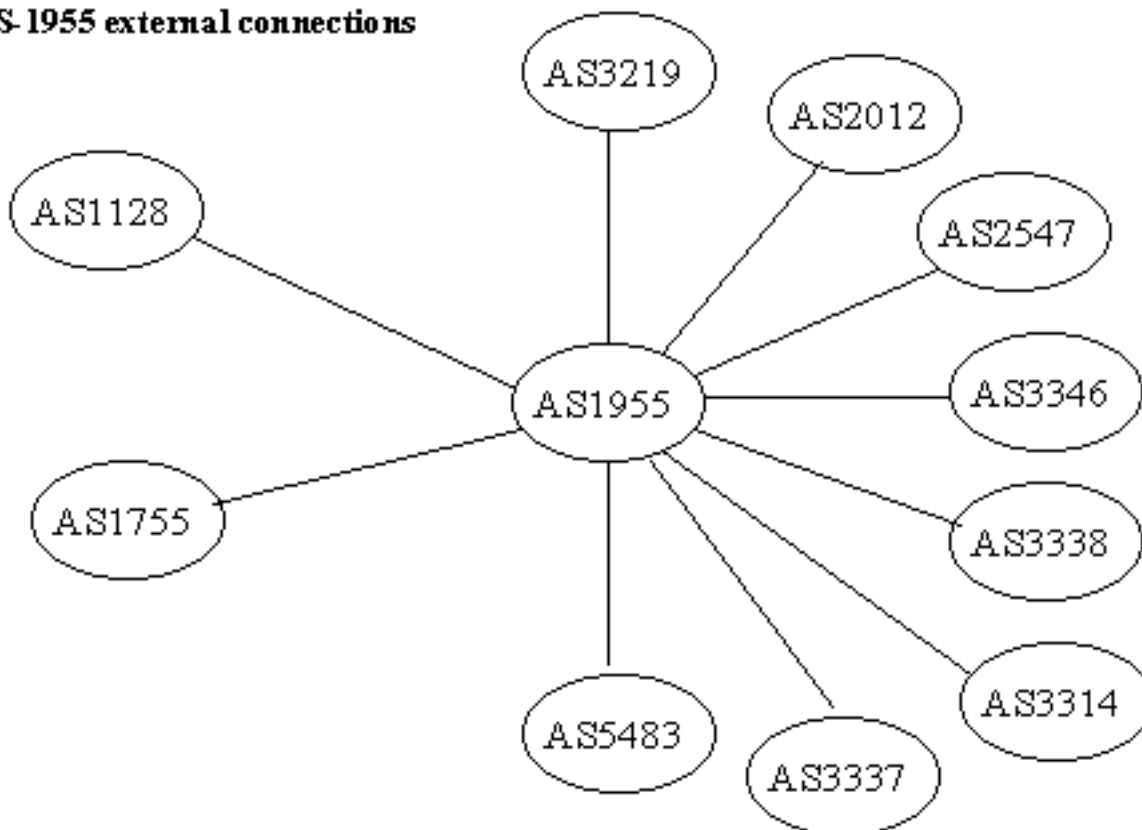
- Give the name and e-mail address of the persons who could create fault reports in **your** organizations

| Name | e-mail | phone | fax |
|----------------|-------------------|---------------|---------------|
| Istvan Tétényi | tetenyi@sztaki.hu | +361-149-7532 | +361-129-7866 |
| Gábor Kiss | kiss@sztaki.hu | +361-149-7532 | +361-129-7866 |

Appendix A

Please, include the relevant maps here.

AS-1955 external connections



The map does not show AS-EBONE internal connections

Questionnaire of International router operation and installation

Initial status report

LATNET research networking of Latvia

1. National and international interconnectivity

- Give your present and planned International interconnectivity in respect to the **PHARE** project.

| From | To | speed kbit/ sec | status | Service Provider |
|------|-----------|--------------------|-------------|---------------------|
| Riga | Stockholm | 128 | operational | Lattelekom |
| Riga | Tallinn | 64 | operational | Lattelekom |

- Specify the all **other** available international circuit capacity and the international service provider(s).

| From | To | speed kbit/ sec | status | Service Provider |
|------|----|--------------------|--------|---------------------|
|------|----|--------------------|--------|---------------------|

- Give any **planned upgrades** and **available backup** options.

LATNET link to Stockholm is to be upgraded from 128 kbit/s capacity to 256kbit/s .

- Please, provide one **schematic map** that shows your organizations national and international interconnectivity **respectively**. The map is to be included to ANNEX A.

2. International router

2.1 International router technical specification

- Please, provide a technical specification of the router you use as international router.

| | |
|----------------------|---------------|
| International router | specification |
| router type | CISCO |
| model | 2514 |

| | |
|--------------------------------------|------------------------|
| manufacturer | CISCO |
| number of serial interfaces | 2 |
| number of ethernet interfaces | 2 |
| RAM memory | 16MB |
| software version used | 10.3 |
| flash EPROM | 4MB |
| available routing protocols | BGP4, OSPF, RIP, EIGRP |
| line encapsulation protocols | HDLC, PPP, LAP-B |
| is tftp used for configuration | yes |
| is tftp used for software image load | yes |
| is IP accounting used | yes |
| is SNMP management used | yes |
| is UPS available ? | yes |
| is packet filtering available | yes |

2.2 Router installation

- Where is your international router installed ? /Give precise address./

Institute of Mathematics and Computer Science

Rainis blvd. 29

Riga, LV1459

LATVIA

phone: +371 7 212427 fax +371 7 820153

- Who has installed the router ?

| | |
|-------------------------------|-------------|
| vendor | |
| manufacturer | |
| research network organization | yes, LATNET |
| other, specify | |

The installation should meet the overall requirements of all interested parties.

- State, that the installation follows:

| | |
|---|------------|
| general requirements | yes/ no |
| the vendor requirements concerning the product's installations | yes |
| the local PTT and/or Institute environment general requirements | yes |
| the country's general safety requirements | yes |

d) State that the installation follows the vendor's requirements in respect of:

| | |
|---|------------|
| vendor's requirements | yes/ no |
| general safety recommendations | yes |
| the safety with electricity procedures | yes |
| preventing electrostatic discharge damage | yes |

2.3 Maintenance

| Maintenance | specification |
|--|-----------------------|
| What kind of maintenance contract covers the router ? (none, limited to the end of warranty period, maintenance contract is under negotiation, contract with yearly renewal, other) | Manufacturer warranty |
| When will the warranty period end ? (Give precise date.) | May 15, 1996 |
| Is back-up router available ? (yes,no) | yes |
| Is hot-swap router available ? (yes,no) | yes |

3. Facility Management

- Housing/Facility

| | |
|------------------|------------|
| Housing/Facility | yes/ no |
|------------------|------------|

| | |
|---|-----|
| Are the router and the modems rack mounted ? | yes |
| Is the room where the router installed climatized ? | yes |
| Is the router protected from direct sun-shine ? | yes |
| Is the router protected from dripping water ? | yes |
| Is UPS available ? | yes |
| Router is protected against power surges ? | yes |

- **Operation**

| Operation of facilities | specification |
|--|-------------------------|
| Specify, how you make sure that the operation of the facilities are kept ? (contract exist, 24 hour supervision, other) | 24h monitoring by pager |
| State, that the access to the international router is provided 24 hours a day all year long. (yes,no) | yes |

4. Technical support

- Give detailed information about **configuration management and routing management** procedures:

| configuration management,routing management | yes/no |
|---|---------------|
| Is tftp used for configuration loading and saving ? | yes |
| Are the routing configurations saved historically ? | yes |
| Is tftp used for router software image load ? | yes |
| Is flash Eprom available ? | yes |
| Is net admin staff available during week-end ? | yes |
| Is net admin staff available out of office hours ? | yes, by pager |
| Is AUP defined ? | |

- include your RIPE registered routing policy for LATNET AS-s

AUT-NUM: AS2588

DESCR: LATNET

AS-IN: FROM AS1741 100 ACCEPT AS1741

AS-IN: FROM AS2603 10 ACCEPT ANY
 AS-OUT: TO AS1741 ANNOUNCE AS2588
 AS-OUT: TO AS2603 ANNOUNCE AS2588
 DEFAULT: AS2603 100
 GUARDIAN: hostmaster@mii.lu.lv
 ADMIN-C: Guntis Barzdins
 TECH-C: Janis Lacis

- Please, provide a schematic map of LATNET AS interconnections.

NORDUNET _____ LATNET _____ FUNET

AS2603 AS2588 AS1741

- Who should issue a trouble ticket and within what period of time ?

Janis Lacis, Guntis Barzdins
 in 30min (during working hours)
 in 2h (weekends, nights)

- contact persons/organizations for each of the international **lines**.

Riga-Stockholm:

| | Name | e-mail | phone | fax |
|--------------------------|-----------------|------------------|---------------|--------------|
| your organizations | LATNET | guntis@mii.lu.lv | +371 9 206943 | +371 7820153 |
| partner organization | KTH | bc@sunet.se | +4687906517 | |
| your circuit provider | Lattelekom | | +3717055616 | |
| partner circuit provider | TELE-2 (Sweden) | | | |

Riga-Tallinn:

| | Name | e-mail | phone | fax |
|--------------------------|--------------|------------------|---------------|--------------|
| your organizations | LATNET | guntis@mii.lu.lv | +371 9 206943 | +371 7820153 |
| partner organization | EENET | enok@eenet.ee | | |
| your circuit provider | Lattelekom | | +3717055616 | |
| partner circuit provider | Esti Telecom | | | |

5. Operational support

- Give the following parameters of your ISP, whom you contact in case of problems:

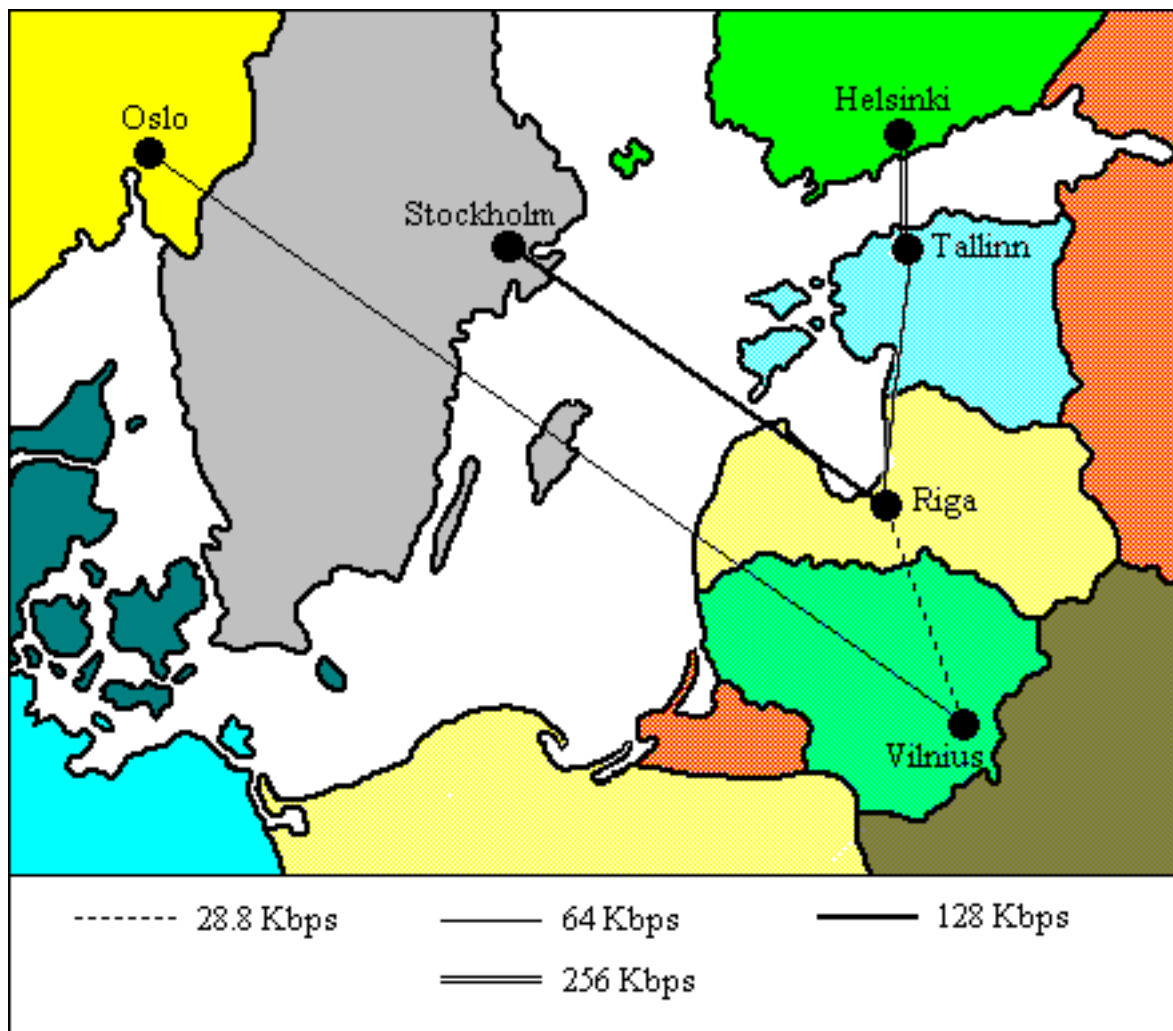
| Name | e-mail | phone | fax |
|------------------|------------------------|--------------|----------|
| KTH, NORDUnet | bc@sUNET.se | +4687906517 | |
| FUNET | sadeniemi@funet. fi | +35804572711 | 04572302 |

- Give the name and e-mail address of the persons who could create fault reports in **your** organizations

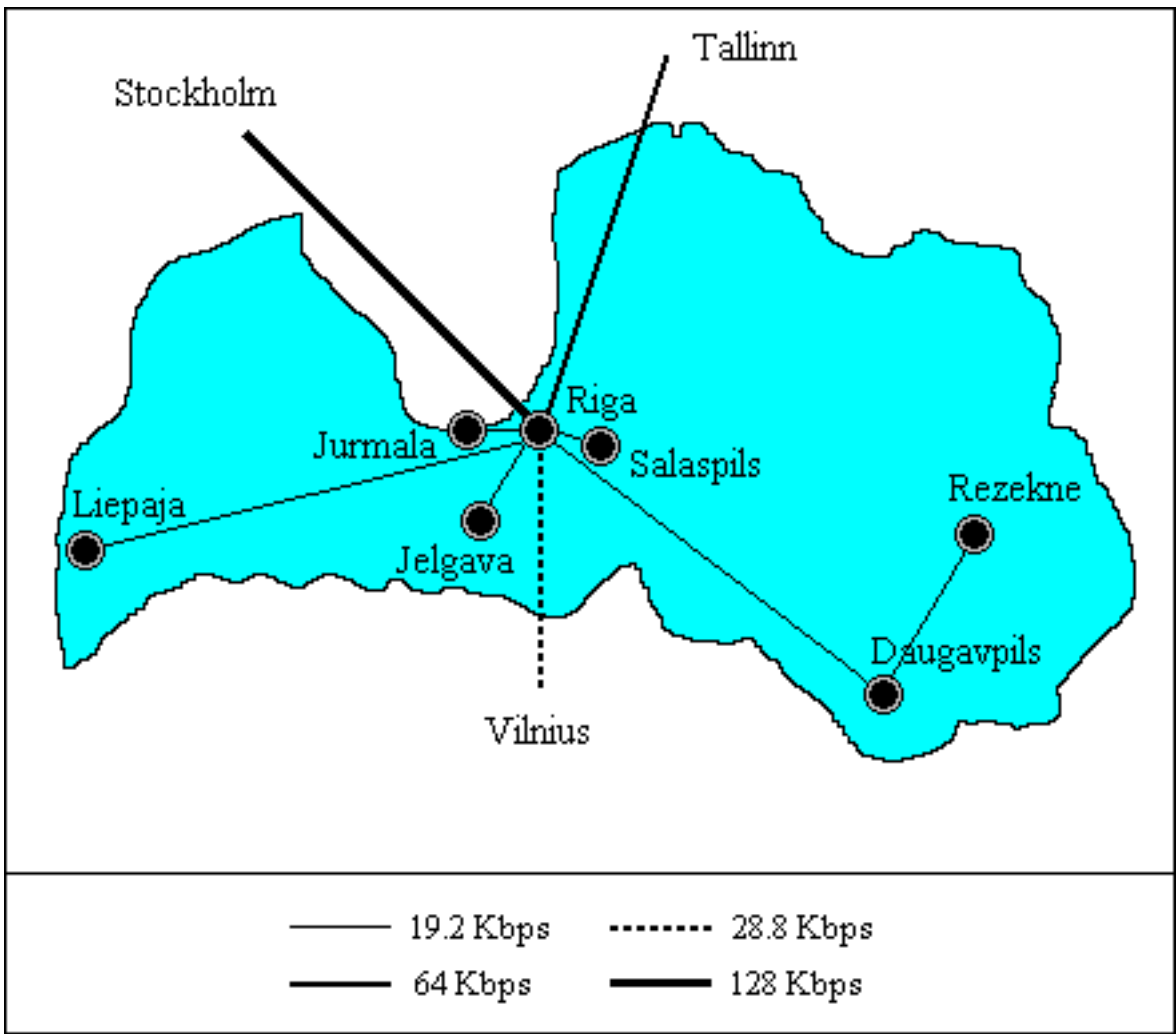
| Name | e-mail | phone | fax |
|--------------------|----------------------|-------------|------------|
| Guntis Barzdins | guntis@mii.lu. lv | +3719206943 | 3717820153 |
| Janis Lacis | janis@mii.lu.lv | +3717212427 | 3717820153 |

Appendix A

International connectivity of LATNET.



National connectivity of LATNET.



Questionnaire of International router operation and installation

Initial status report

RNC-NET research networking organisation

1. National and international interconnectivity

- Give your present and planned International interconnectivity in respect to the **PHARE** project.

| From | To | speed kbit/sec | status | Service Provider |
|-----------|----------|----------------|---------|------------------|
| Bucharest | Vienna | 64 | present | PTT Austria |
| Bucharest | Budapest | 64 | planned | PTT Romania |

- Specify the all **other** available international circuit capacity and the international service provider(s).

| From | To | speed kbit/sec | status | Service Provider |
|-----------|-----------|----------------|---------|------------------|
| Bucharest | Amsterdam | 64 | present | PTT Romania |
| Bucharest | Chisinau | 19,200 | present | PTT Romania |

- Give any **planned upgrades** and **available backup** options.

RNCNET link to Vienna is to be upgraded from 64 kbit/s capacity to 128/256 kbit/s

RNCNET has a mutual backup agreement with - .

- Please, provide one **schematic map** that shows your organizations national and international interconnectivity **respectively**. The map is to be included to ANNEX A.

2. International router

2.1 International router technical specification

- Please, provide a technical specification of the router you use as international router.

| | |
|--------------------------------|---|
| International router | specification |
| router type | CISCO |
| model | AGS+ |
| manufacturer | CISCO |
| number of serial interfaces | 13 |
| number of ethernet interfaces | 3 |
| RAM memory | 16M |
| software version used | IOS GS3 Version 10.0(5) |
| flash EPROM | no |
| available routing protocols | BGP4, EGP, OSPF, IGRP, EIGRP, ISIS, ISO-IGRP, RIP, static |
| line encapsulation protocols | HDLC, PPP, X.25, LAPB |
| is tftp used for configuration | no |

| | |
|--------------------------------------|---------|
| is tftp used for software image load | no |
| is IP accounting used | yes |
| is SNMP management used | not yet |
| is UPS available ? | yes |
| is packet filtering available | not yet |

2.2 Router installation

- Where is your international router installed ? /Give precise address./

RESEARCH INSTITUTE FOR INFORMATICS (ICI)
 Bd. Maresal Averescu 8-10
 Sector 1 Bucharest 71316
 ROMANIA

- Who has installed the router ?

| | |
|-------------------------------|-----|
| vendor | - |
| manufacturer | - |
| research network organization | ICI |
| other, specify | - |

The installation should meet the overall requirements of all interested parties.

- State, that the installation follows:

| | |
|---|------------|
| general requirements | yes/ no |
| the vendor requirements concerning the product's installations | yes |
| the local PTT and/or Institute environment general requirements | yes |
| the country's general safety requirements | yes |

d) State that the installation follows the vendor's requirements in respect of:

| | |
|---|------------|
| vendor's requirements | yes/ no |
| general safety recommendations | yes |
| the safety with electricity procedures | yes |
| preventing electrostatic discharge damage | yes |

2.3 Maintenance

| Maintenance | specification |
|--|---|
| What kind of maintenance contract covers the router ? (none, limited to the end of warranty period, maintenance contract is under negotiation, contract with yearly renewal, other) | contract with yearly renewal after the end of warranty period |

| | |
|--|--------------|
| When will the warranty period end ? (Give precise date.) | 1 March 1997 |
| Is back-up router available ? (yes,no) | no |
| Is hot-swap router available ? (yes,no) | no |

3. Facility Management

- **Housing/Facility**

| Housing/Facility | yes/ no |
|---|--------------------|
| Are the router and the modems rack mounted ? | yes |
| Is the room where the router installed climatized ? | yes |
| Is the router protected from direct sun-shine ? | yes |
| Is the router protected from dripping water ? | yes |
| Is UPS available ? | yes |
| Router is protected against power surges ? | yes |

- **Operation**

| Operation of facilities | specification |
|--|----------------------------|
| Specify, how you make sure that the operation of the facilities are kept ? (contract exist, 24 hour supervision, other) | 24 hour supervision |
| State, that the access to the international router is provided 24 hours a day all year long. (yes, no) | yes |

4. Technical support

- Give detailed information about **configuration management and routing management** procedures:

| configuration management,routing management | yes/ no |
|---|--------------------|
| Is tftp used for configuration loading and saving ? | no |
| Are the routing configurations saved historically ? | yes |
| Is tftp used for router software image load ? | yes |
| Is flash Eprom available ? | yes |
| Is net admin staff available during week-end ? | yes |
| Is net admin staff available out of office hours ? | yes |
| Is AUP defined ? | no |

- include your RIPE registered routing policy for RNC-NET AS-s

aut-num: AS3233

descr: RNC

descr: Research Institute for Informatics

descr: Bucharest, Bd. Averescu 8-10

descr: Sector 1, 71316, Romania

descr: RO

as-in: from AS1755 100 accept ANY

as-out: to AS1755 announce AS3233

default: AS1755 50
 guardian: domain-admin@roearn.ici.ro
 admin-c: ES16
 tech-c: ES16
 tech-c: GM13-RIPE
 mnt-by: AS3233-MNT
 changed: estaicut@roearn.ici.ro 951210
 source: RIPE

- Please, provide a schematic map of RNC-NET AS interconnections.

RNC-NET AS3233 has interconnection with AS1755 (EBONE AS), to accept any from AS1755 and to announce AS.

- Who should issue a trouble ticket and within what period of time ?

RNC team and also ACONET team for Bucharest-Vienna link.

- contact persons/organizations for each of the international **lines**.

| | Name | e-mail | phone | fax |
|--------------------------|-------------------|---------------------------|------------------|------------------|
| your organizations | ICI | net-admin@roearn.ici.ro | 40-1-6656660 | 40-1-3128539 |
| partner organization | Vienna University | net-admin@cc.univie.ac.at | 43-1-4065822-385 | 43-1-4065822-170 |
| your circuit provider | PTT Austria | Krajnik@access.una.ac.at | 43-1-51551-2700 | 43-1-5129538 |
| partner circuit provider | PTT Austria | Krajnik@access.una.ac.at | 43-1-51551-2700 | 43-1-5129538 |

5. Operational support

- Give the following parameters of your ISP, whom you contact in case of problems:

| Name | e-mail | phone | fax |
|-----------------|------------------------|---------------|---------------|
| Eugenie Staicut | estaicut@roearn.ici.ro | +40-1-6656660 | +40-1-3128539 |
| Emil Stanescu | stanescu@u2.ici.ro | +40-1-6656660 | +40-1-3128539 |

- Give the name and e-mail address of the persons who could create fault reports in **your** organizations

| Name | e-mail | phone | fax |
|--------------|----------------------|---------------|---------------|
| George Macri | gmacri@roearn.ici.ro | +40-1-6656660 | +40-1-3128539 |

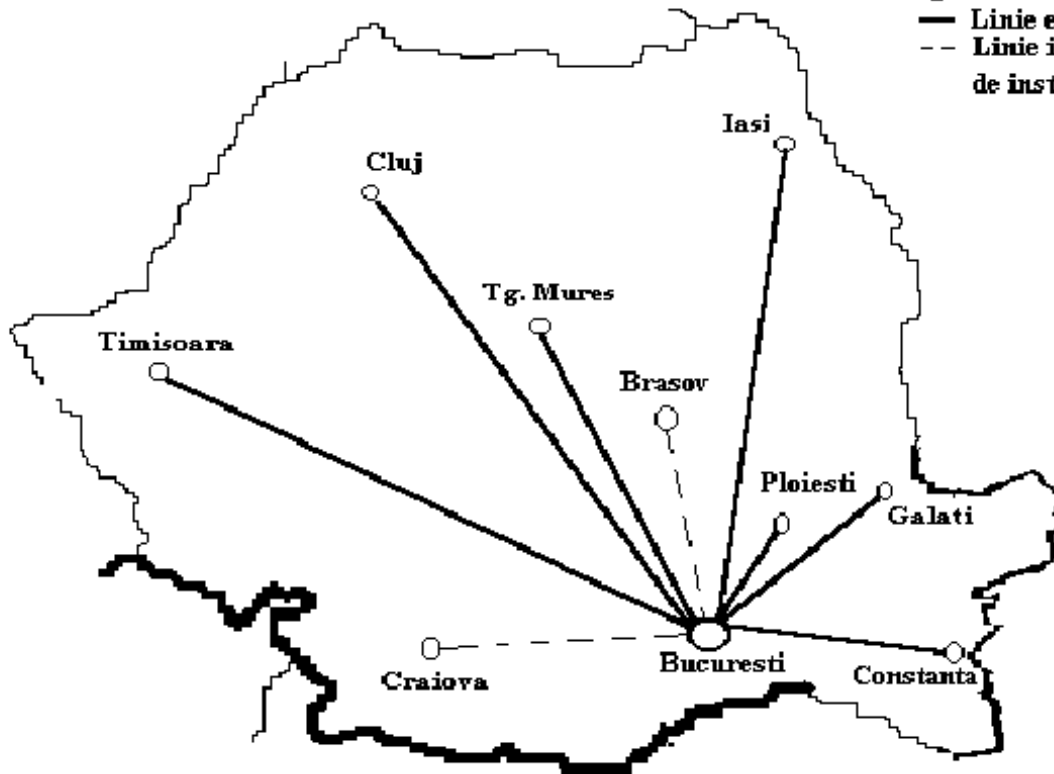
RNC - International and National Interconnectivity

Legenda

○ Nod

— Linie existenta

-- Linie in curs
de instalare



Questionnaire of International router operation and installation

Initial status report

SANET research networking organisation

1. National and international interconnectivity

- Give your present and planned International interconnectivity in respect to the **PHARE** project.

| From | To | speed kbit/ sec | status | Service Provider |
|--------------------|--------|--------------------|-------------|---------------------|
| Banska Bystrica | Prague | 128 | operational | IBM |

- Specify the all **other** available international circuit capacity and the international service provider(s).

| From | To | speed kbit/ sec | status | Service Provider |
|------------|--------|--------------------|-------------|---------------------|
| Bratislava | Vienna | 128 | operational | IBM |

- Give any **planned upgrades** and **available backup** options.

SANET link to Prague is to be upgraded from 128 kbit/s capacity to 256 .

- Please, provide one **schematic map** that shows your organizations national and international interconnectivity **respectively**. The map is to be included to ANNEX A.

2. International router

2.1 International router technical specification

- Please, provide a technical specification of the router you use as international router.

| | |
|----------------------|---------------|
| International router | specification |
| router type | cisco |
| model | 7010 |

| | |
|--------------------------------------|------------------|
| manufacturer | cisco |
| number of serial interfaces | 8 |
| number of ethernet interfaces | 2 |
| RAM memory | 16 |
| software version used | 11.0(2) |
| flash EPROM | 4096 KB |
| available routing protocols | BGP4, RIP ... |
| line encapsulation protocols | PPP |
| is tftp used for configuration | no |
| is tftp used for software image load | no |
| is IP accounting used | no |
| is SNMP management used | yes |
| is UPS available ? | no |
| is packet filtering available | yes |

2.2 Router installation

- Where is your international router installed ? /Give precise address./

UAKOM UMB
 Kyjevské nám. 6
 97401 Banská Bystrica
 Slovakia

- Who has installed the router ?

| | |
|-------------------------------|-----|
| vendor | yes |
| manufacturer | |
| research network organization | |
| other, specify | |

The installation should meet the overall requirements of all interested parties.

- State, that the installation follows:

| | |
|---|------------|
| general requirements | yes/ no |
| the vendor requirements concerning the product's installations | yes |
| the local PTT and/or Institute environment general requirements | yes |
| the country's general safety requirements | yes |

d) State that the installation follows the vendor's requirements in respect of:

| | |
|---|------------|
| vendor's requirements | yes/ no |
| general safety recommendations | yes |
| the safety with electricity procedures | yes |
| preventing electrostatic discharge damage | yes |

2.3 Maintenance

| Maintenance | specification |
|--|-----------------|
| What kind of maintenance contract covers the router ? (none, limited to the end of warranty period, maintenance contract is under negotiation, contract with yearly renewal, other) | warranty period |
| When will the warranty period end ? (Give precise date.) | October 1, 95 |
| Is back-up router available ? (yes,no) | no |
| Is hot-swap router available ? (yes,no) | no |

3. Facility Management

- Housing/Facility

| Housing/Facility | yes/ no |
|---|------------|
| Are the router and the modems rack mounted ? | no |
| Is the room where the router installed climatized ? | yes |
| Is the router protected from direct sun-shine ? | yes |

| | |
|---|-----|
| Is the router protected from dripping water ? | yes |
| Is UPS available ? | no |
| Router is protected against power surges ? | yes |

- **Operation**

| Operation of facilities | specification |
|--|----------------------|
| Specify, how you make sure that the operation of the facilities are kept ? (contract exist, 24 hour supervision, other) | 24hour supervision |
| State, that the access to the international router is provided 24 hours a day all year long. (yes,no) | yes |

4. Technical support

- Give detailed information about **configuration management and routing management** procedures:

| configuration management,routing management | yes/ no |
|---|----------------|
| Is tftp used for configuration loading and saving ? | no |
| Are the routing configurations saved historically ? | yes |
| Is tftp used for router software image load ? | no |
| Is flash Eprom available ? | yes |
| Is net admin staff available during week-end ? | yes |
| Is net admin staff available out of office hours ? | no |
| Is AUP defined ? | yes |

include your RIPE registered routing policy for XXX-NET AS-s..
AS1922

.....

- Please, provide a schematic map of XXX-NET AS interconnections.

AS1902=====AS1922

- Who should issue a trouble ticket and within what period of time ?

SANET operational team / when error occurs

- contact persons/organizations for each of the international **lines**.

| | Name | e-mail | phone | fax |
|-----------------------------|----------------|----------------------|-------------------|------------------|
| your organizations | Lubos Elias | elias@uakom.sk | 42-88-731876 | 42-88731875 |
| partner organization | Petr Král | pk1 @aci.cvut. cz | 42-2- 24352996 | |
| your circuit provider | IBM | | 42-88-744179 | -42-88- 44179 |
| partner circuit provider | | | | |

5. Operational support

- Give the following parameters of your ISP, whom you contact in case of problems:

| Name | e-mail | phone | fax |
|-----------------------------|---------------|--------------------|------------|
| CESNET operational staff | | -42-2- 24352996 | |

- Give the name and e-mail address of the persons who could create fault reports in **your** organizations

| Name | e-mail | phone | fax |
|-------------------|-----------------------|------------------|---------------|
| Peter Maruniak | maruniak@uakom. sk | 42-88- 731876 | ... 731875 |
| Ľuboš Elias | elias@uakom.sk | same | same |
| Peter Gajdoš | gajdos @uakom.sk | same | same |

Appendix A

Please, include the relevant maps here.