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# OPERATING RULES OF NIX.CZ ASSOCIATION

(Version 8.0 dated 4.6.2008 with effect from 4.6.2008)

## Article I.
## PREREQUISITES FOR MEMBERSHIP IN ASSOCIATION

1.1 Each legal entity applying for membership in NIX.CZ Association shall comply with the following conditions:

a) carries out activities related to the Internet;

b) has been assigned their own autonomous system number (ASN). In case any legal entity applying for membership in NIX.CZ Association have not been assigned their own ASN, it is necessary to provide written permission from the owner of the ASN.

## Article II.
## PREREQUISITES FOR ENTERING INTO CUSTOMER CONTRACT WITH ASSOCIATION

2.1 Each legal entity requesting to enter into a customer contract with NIX.CZ Association shall comply with the following conditions:

a) Complies with the conditions set out in Clause 1.1.

b) Undertakes to comply with the conditions set out in these Operating Rules of NIX.CZ Association and in the Pricelist of NIX.CZ Association.

## Article III.
## OPERATING CONDITIONS

3.1 Connection to NIX.CZ nodes shall be permitted after the relevant membership fee has been paid (by a member of the Association) or the service contract has been signed and installation fee has been paid according to the service contract(by a customer of the Association).

3.2 Each member/customer is obliged to cooperate with the employee of NIX.CZ Association who is in charge of establishing or maintaining the connection to NIX.CZ nodes. Any data circuit, cable or fibre connected to the NIX.CZ infrastructure shall be clearly identified by the name of the supplier and the name of the member/customer the service is provided to.
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3.3 Before connecting to the NIX.CZ infrastructure, each member/customer is obliged to enter and keep updated the following information on the Intranet of the Association:

a) operation contact containing:
   i) telephone number available 24 hours a day, 7 days a week
   ii) e-mail address to their NOC (Network Operation Centre);

b) e-mail addresses to be listed in the NIX.CZ contact register for the purpose of correspondence between members/customers;

c) autonomous system number (ASN) assigned to the relevant member/customer;

d) full canonical name for member's/customer's router to be registered in the reverse domains (in-addr.arpa and Ip6.arpa) within the domain name system assigned to NIX.CZ Association.;

e) URL to member's/customer's website, if the member/customer requires a link from the website of the Association;

f) e-mail address for sending peering requests;

g) member's/customer's contact information.

3.4 Members/customers are not entitled to use the NIX.CZ infrastructure for internal connection of their networks.

3.5 Each member/customer shall be connected to the NIX.CZ node under their own autonomous system number (ASN). In case a member/customer is not the owner of the connected AS, it is necessary to provide written permission from the owner of the relevant AS connected to the NIX.CZ node.

3.6 In case the stability and functionality of NIX.CZ equipment gets jeopardized by an equipment/connection belonging to a member/customer, the Association shall be entitled to block the relevant member's/customer's port until the problem has been resolved by the member/customer. Association employees will, in such a case, immediately inform the NOC contact (as registered on the Association Intranet) by e-mail. This obligation to inform does not apply to the automatic port blocking pursuant to Item PI/12 hereof.

3.7 Technical operating conditions are set out in Annex I to these Operating Rules.

## Article IV
## OTHER CONDITIONS OF USING NIX.CZ NODE

4.1 Members/customers shall make sure that their connection to the NIX.CZ node does not hamper the use of NIX.CZ services by other members/customers.

4.2 Members/customers shall not use NIX.CZ to carry out any illegal activities.

4.3 Members/customers shall not, in particular, monitor and record data transmitted through the common segment, except for short-term monitoring of the BGP-4 update, serving to trace routing problems. NIX.CZ Association may implement systems for statistical purposes and for monitoring the traffic through NIX.CZ in order to identify and remedy potential problems in individual members'/customers' peering and in the NIX.CZ network workload.

## Article V
## INSURANCE AND LIABILITY

5.1 In the event of any claims for damage caused by any member/customer of the Association to another member/customer or to the Association itself, the case shall proceed pursuant to the provisions of the Commercial Code.

## Article VI
## RULES FOR ENTERING NIX.CZ NODES

6.1 The premises of NIX.CZ nodes may only be entered by member's/customer's employees if accompanied by the Association Director or an authorised person.

6.2 Members/customers entering the premises of NIX.CZ nodes shall observe the safety regulations in the buildings where the NIX.CZ nodes are located.

**Annexes:**
Annex I – Technical Operating Conditions

**Annex I**
**TECHNICAL OPERATING CONDITIONS**

PI/1. The common network segment of the NIX.CZ nodes is based on Ethernet technology (IEEE 802.3).

PI/2. The NIX.CZ offers the following interfaces:

a) a 10/100/1000 mbps port RJ45 – certain nodes only;
b) GBIC or SFP for 1Gbps – certain nodes only;
c) XENPAK for 10 Gbps;
d) others as specified by responsible employees of the Association.

PI/3. The modules listed in PI/2 b) and PI/2 c) shall be supplied by the member/customer based on the specification by the Director or responsible employees of the NIX.CZ Association.

PI/4. Several physical ports of one member/customer of at least 1 GB link speed terminated on the same NIX.CZ switch can be grouped into one logical port (Etherchannel). Ports group is configured statically, no dynamic negotiation protocols are allowed. Each member/customer undertakes to realize such connection by means of direct connections to their border router without any additional L2 equipment.

PI/5. Each member/customer single-channel link is limited to 2 source dynamic MAC addresses. A multiple channel connection (Etherchannel) is limited to 1 MAC address only on the logical port (configured by Association employees).

PI/6. Ethernet frames forwarded by the connected equipment into the common network segment shall have of one of the following ether-types:

a) 0x0800 – IPv4;
b) 0x0806 – ARP;
c) 0x86dd – IPv6;
d) 0x9000 – loopback/keepalive.

PI/7. All frames forwarded into the common network segment shall not be addressed to the multi-cast or broadcast MAC address, with the following exceptions:

a) ARP broadcast;
b) IPv6 neighbour discovery
c) others based on permission by NIX.CZ Association

PI/8. Traffic for link-local (see Item PI/9) protocol shall not be forwarded into the common network segment, with the following exceptions:

a) ARP (except Proxy-ARP);
b) IPv6 neighbour discovery.

PI/9. Link-local protocols (PI/8.) include but are not limited to the following list: IRDP, ICMP redirect, IEEE 802 Spanning Tree, vendor discovery protocols (CDP etc.), internal routing protocols (OSPF, ISIS, EIGRP), BOOTP/DHCP, PIM-SM/PIM-DM, DMVRP, IPv6 router advertisement and others.

PI/10. Traffic generated by ARP shall not exceed 20 packets per second.

PI/11. Newly installed ports are initially connected to the isolated testing segment to verify whether the member's/customer's equipment is configured correctly. Connection to the production network is possible only after all detected defects are removed.

PI/12. In the event of exceeding the maximum number of allowed MAC addresses at one port/link, the related switch port is automatically blocked to ensure stability for the switches of the Association.

PI/13. Ports connected to the common network segment shall use only the IP address and network mask assigned by the responsible employee of NIX.CZ Association. One physical (logical) ports is assigned with one IP address IPv4 and potentially with one IPv6 address (if required by the member/customer).

PI/14. IPv6 addresses shall be statically configured (no use of automatic configuration). IPv6 site local addresses shall not be used.

PI/15. Member's/customer's port shall not forward to the common network segment any IP packets with the broadcast address of the common network segment.

PI/16. The routing protocol of NIX.CZ nodes is BGP-4 (RFC-4271) with possible extension to MP-BPG-4 (RFC4760, RFC-2545) – only unicast IPv4 and IPv6.

PI/17. Addresses of the common network segment shall not be advertised to other networks without explicit permission of NIX.CZ Association.

PI/18. Traffic from the port of one member/customer can be forwarded to the address of another member/customer only upon peering agreement and only via BGP-4 protocol (see PI/16.).

PI/19. All routes advertised across the common network segment shall point to the router advertising it unless an agreement has been made in advance in writing by NIX.CZ and the members involved.

PI/20. The members/customers are recommended to:

a) register their routing policy for each connected ASN in the RIPE database and keep it updated;
b) for all networks advertised via BGP register a route (or route6) object in the RIPE database or similar register and keep it updated;
c) not generate useless "route flap";
d) not advertise useless specific routes when peering with other members/customers of the NIX.CZ Association;
e) use an as-set object registered in RIPE database or similar register.