

BIX Charter

Rules of operation and use of BIX

Last modified: by the ISzT General Meeting on 11 December 2018

Effective as of 1st January 2019

1. The overall purpose of the BIX (**B**udapest **I**nternet **E**xchange) is to prevent the Hungarian and regional internet traffic between the different internet service providers from overloading the international connections of the internet service providers and to provide a platform for exchanging IP based traffic between different internet service providers.
2. Terms
 - a) *BIX*: is a network system distributed geographically, which consists of *BIX service access points (BIX nodes)* and data transmission connections connecting them. Users of the BIX - the *BIX members* - can connect their own networks at the BIX service access points.
 - b) *BIX member*: an internet service provider connected to the BIX with its own network via a BIX service access point (using the proper device or data transmission connection). A BIX member can only be an internet service provider that fulfils the requirements defined in Section 3 and accepts and adheres to the rules of the operation and use of the BIX defined hereunder. Regarding the connection to the BIX, BIX members may at their own discretion select their BIX service access points.
 - c) *BIX operator*: BIX is operated by Internet Szolgáltatók Tanácsa (full name: Magyarországi Internet Szolgáltatók Tanácsa - Council of Hungarian Internet Service Providers, address: 1132 Budapest, Victor Hugo u. 18-22.), hereinafter: IszT. BIX operator qualifies as an electronic telecommunication service provider duly registered in the public records of the National Media and Communications Authority under Act C of 2003 on electronic communication (hereinafter: Eht.).
 - d) *BIX Committee*: a body within the framework of IszT, which sets the rules of using the BIX and supervises its operation. Members of the BIX Committee are those IszT members who are also BIX members at the same time. Each member of the BIX Committee has one vote. The chairman of the BIX Committee is elected by the General Assembly of IszT every year. It is the duty of the chairman to coordinate the activities of the BIX Committee, to convene Committee meetings and to administer membership application procedures. All BIX members are entitled to join the open meetings of the BIX Committee.
 - e) *BIX service*: Service provided by the BIX service provider to the BIX members connecting the network of the BIX members to the BIX internet exchange. Conditions of the BIX service not regulated in this document are subject to the separate BIX service agreement between the BIX service provider and the BIX member.
 - f) *BIX basic fee services*: Optical breakout service (according to 4 / f) furthermore 1 x

endpoint of optical patchcord of maximum 12 strands (as per Point 2/e) in the BIX Optical distribution cabinet

- g) *BIX service basic fee*: the annual lump-sum flat fee payable by the BIX contracting party during the term of the contract, which enables the use of the basic services
- h) *BIX service fee*: the amount due for any additional service beyond the BIX basic fee service.

3. Eligibility requirements concerning BIX membership

- a) Any service provider is entitled to BIX membership if:
 - They have their own AS Number and IP address domain and the related objects in the RIPE Database (aut-num, inetnum, inet6num, route, route6).
 - Service providers conforming to these requirements are eligible for a simplified membership application procedure. The requirements must be met continuously. Eligibility is checked at half year intervals and membership can be cancelled in case of not conforming to the requirements.
- b) Furthermore, a provider is eligible for BIX membership if the application - justified by special reasons - is approved by the BIX Committee during the General Assembly of ISzT by a majority vote. The decision of the special judgment details the duration and the conditions of the special membership.
- c) In case of special obligation by law an "authority specific" service can be provided to the authorized organization. The terms of this service may be different than those of the general BIX services.

4. Traffic exchanging (peering) categories and services

Every BIX member is free to decide how to exchange traffic with other BIX members, whereby based on the exchanging of traffic the following categories may be chosen:

- a) **Open/Free peering**: Unlimited and mutually free peering with other BIX members. Members of the "Open/Free peering" category shall observe the following:
 - I. BIX members shall use the BIX Route servers.
 - II. If any BIX member is requested by another BIX member (regardless of category) to provide free peering within Hungary, then the BIX member shall be obliged to comply, except that:
 - i. the BIX member is not obliged to peer through its own BIX with any user of its own IP-Transit service, or
 - ii. the BIX member is not obliged to peer through its own BIX with members whom it has a private peering connection with.
- b) **Selective peering**: peering with other BIX members based on request of the other BIX member using a case-by-case decision.

- c) **Restrictive peering:** The BIX member would not like to receive peering requests, peering with other BIX members only by own initiative.
- d) **Optical connection (crossconnect):** Direct connection of two BIX members on the same optical distribution board of BIX (an existing patch panel) through patch cables. (On the Victor Hugo BIX node available only.)
- e) **Endpoint of optical patchcord:** Endpoint of n x 12-strand monomode optical cable in the BIX distribution cabinet, for which the BIX side patch panel is provided by BIX. (On the Victor Hugo BIX node available only.)
- f) **10G Ethernet data transmission:** Ethernet based data transmission service set up between two BIX nodes. A maximum of 1 VLAN and a maximum of 10 MAC addresses may be used on a protected data transmission pathway.
- g) **Wavelength service:** Optical wavelength service set up between two BIX nodes. Provision of passive wavelength along a non-protected optical pathway according to ITU C-Band 100 GHz. The required DWDM optical (1G or 10G) modules are provided by the BIX member.
- h) **Dual Wavelength service:** Optical wavelength service set up between two BIX nodes. Provision of passive wavelength along two non-protected optical pathways according to ITU C-Band 100 GHz. The required DWDM optical (1G or 10G) modules are provided by the BIX member.
- i) **Co-Location service:** Network device(s) owned by a BIX member; hosted by BIX provider on a BIX node.

5. BIX service fees

- a) The BIX service fees are proposed by the BIX Committee.
- b) The BIX service fee consists of the annual basic fee and the service fee due for any services used in addition to the basic service.
- c) The current BIX service fees are published in the Appendix "BIX Fees".
- d) In line with the basic BIX policy the BIX Committee encourages the free and unlimited peering of the domestic traffic. BIX members willing to offer free peering pay the fees of the Open/Free peering category.
- e) BIX offers discounted fees for additional BIX peering connections, that can be the following:
 - I. Additional BIX peering port, at the BIX service point identical with the active port.
 Additional peering port, as part of the active AG (Link Aggregation Group - combining a number of ports for higher bandwidth) - in this case the number of additional ports may not exceed the number of active ports.
 - II. Additional BIX peering port, at a BIX service point other than the active port.

6. Suspension or transfer of BIX service

- I. BIX service may be temporarily suspended, or suspension may be terminated - for each port - from the first day of the month following the request. A monthly fee is payable after each suspended BIX port.
- II. Existing BIX ports may only be transferred to other BIX members. A one-off administration fee is payable for each transferred BIX port. Both the transferor and the recipient need to make a clear declaration to confirm the transfer.

7. Technical requirements concerning BIX connections

- a) BIX members can connect to the BIX Ethernet switches via a router or a Layer3 switch for which the ports are set for Layer3 mode.
- b) Only transparent, Layer1 or Layer 2 (e.g.: optical fibre pair, EoDWDM, EoMPLS) data transmission is allowed between the Ethernet switch and tag the router of BIX, Layer 2 connection (e.g.: via VPLS, VLAN Layer2 switch) is not allowed.
- c) One MAC is allowed to be used at one port of the BIX switch (per VLAN). At BIX only ARP, IPv4, and IPv6 is allowed as a Layer2/3 protocol, the usage of other protocols (e.g.: CDP, LLDP, Spanning-Tree) is forbidden.
- d) One member may be connected to BIX via several ports and/or BIX service points.
- e) BIX itself is a geographically distributed system. The distributed system consists of BIX service access points, connected to each other with direct layer 2 (data connection level) connections with backup. BIX members can connect to BIX using the interfaces of BIX Ethernet switch(es) located at BIX service access points. The optical transceiver (corresponding to the selected connection type) at the BIX switch is part of the BIX service. The BIX member is obliged - at its own expense - to ensure that its connecting interface is compatible with the selected connection type.
- f) Members have to use single mode optical distribution frame (ODF) connection to the BIX service access points, other optical connection and copper cable connections are not allowed.
- g) Only BGP4 external routing protocol can be used on BIX. The possession of a valid, registered AS number by the service provider and the internet accessibility of networks that are going to be advertised are prerequisites of BIX membership.
- h) IP addresses used on BIX shall be allocated from an independent address block dedicated to this purpose. Addresses are allocated by the BIX service provider.
- i) There are route servers in operation on BIX, based on the information located in the RIPE objects (route, aut-num).
- j) The BIX member is obliged to maintain the RIPE object entries according to the actual situation.
- k) The BIX member is entitled to advertise on BIX only networks that fall
 - within its own address range,

- within the address range of its customers,
- within the address range of its backup partners.

The advertisements must be aligned with the RIPE entries.

- l) The BIX member may forward to BIX only IP packages with source addresses that can also be advertised by that member. In order to ensure this, the BIX member is obliged to apply properly set filters in its routers.
8. Traffic of the Ethernet switches operated at the BIX service access points is measured and supervised by the BIX service provider, the traffic information is made available to the public on the BIX website.
 9. In order fulfil its legal obligations, BIX operator, as an electronic telecommunication service provider undertakes the followings:
 - a) ensures uniform operation of the BIX network and cooperation with BIX members in good faith providing equal opportunities, and ensuring access to the necessary technical data;
 - b) cooperates in preparing the technical, contractual and economic framework facilitating the common usage of the electronic telecommunication structures;
 - c) ensures network security against unauthorized access;
 - d) cooperates with other service providers in emergency periods according to the provisions of the relevant legal regulations
 - e) complies with and ensures compliance with the regulations regarding the usage of the site and the property as well as the legal regulations regarding the protection of the environment, life, physical integrity, protection of health and exposure to electromagnetic fields;
 - f) undertakes to use any business secret obtained in connection with the individual contracts exclusively in relation to the service provision and may not disclose any business secret to other parties or divisions to gain unfair competitive advantage.

Emergency period means a period from the start date of the special legal order until its termination, in accordance with situations specified in clause 48-54 of the Hungarian Constitution (state of national crisis, state of emergency, preventive protection measures, terrorist threat, unexpected attack, danger).

10. BIX service provider commits to provide any kind of assistance and contribution - within reasonable frames of the technical possibilities - to the BIX member in order to implement the access to the equipment installed on BIX using the telecommunication solution owned by or available to the BIX member, including access to the building (cable, antenna) and the establishment of the admission within the building (the related expenses must be compensated by the member).

11. The right for BIX membership (or losing such rights) is investigated and determined by the BIX Committee. It is also investigated and identified by the BIX Committee, which conditions are met by the members and whether they adhere to the rules. An appeal against the resolution of the BIX Committee is to be submitted to the IszT General Assembly, which investigates the justification of the resolution.
12. Applications for the BIX membership can be submitted in writing to the BIX Committee (posted or electronically, using the bix@iszt.hu e-mail address). All certifications and information making possible the resolution of the Committee regarding the rights of the applicant must be enclosed. The application - if conditions of the simplified procedure are met - is approved by the BIX Committee on-line: the application is forwarded to the BIX members for comments or questions within a week. If there are no questions or the answers are satisfactory, the Chairman of the BIX Committee notifies the applicant and the prospective member can proceed by signing the BIX service contract with the BIX service provider. Applications not eligible for the simplified procedure will be discussed at the next General Assembly of ISzT.
13. In case if - after multiple notices - the BIX member does not adhere to the rules set forth, then the BIX Committee conducts an investigation and after considering all circumstances (does the breach of the rules occur by the negligence of the BIX member or it is due to external reasons; is the breach a first instance or it occurs repeatedly, etc.) the BIX service provider may bind the BIX member to pay an extra charge (between HUF 100,000.00 and 500,000.00 not including VAT). In very serious cases the right of BIX membership shall be revoked.
14. Access of BIX members causing continued operational disturbances or failures of the BIX operation can be restricted by the BIX service provider without prior notice. The BIX service provider must notify the restricted BIX members about the fact of and reasons for the restriction within 24 hours.
15. BIX members are obliged to:
 - a) publish a public e-mail address on the BIX web site to receive error messages from the BIX members and BIX service provider. BIX member is obliged to reply the error messages sent to its e-mail address within 24 hours,
 - b) provide an emergency telephone number to the BIX service provider, available 24 hours a day.
16. BIX members may attend the sessions of the BIX Committee held periodically.
17. Peering connections established on BIX are regarded by BIX members as effective peering connections based on mutual agreement.
18. Data protection requirements:
 - a) As BIX service is not considered to be public electronic telecommunication service, BIX operator declares that it does not fall within the scope of Decree 4/2012. (I.

24.) of the National Media and Infocommunications Authority on data protection and confidentiality obligation, special conditions of data management and confidentiality, safety and integrity of networks and services, management of traffic and invoicing data and regulations on calling line identification and call forwarding applicable to electronic telecommunication services.

- b) BIX operator declares that it exclusively handles the data of BIX members strictly necessary for the provision of BIX services and included in specific contracts. Data is stored various ways (machine processing and/or paper-based storage). Data may be managed until the termination of the time limitation of claims arising out of the legal regulations according to the civil law, that is 5 years following the termination of the contract. The legal ground of data management is the prescribed by the law, based on the approval of the party concerned and the implementation of the contractual obligations. The exact legal regulation regulating data management: Act C of 2003 on electronic telecommunication.
- c) BIX operator may forward any fact, data or information related to a BIX member or the service provided to the BIX member exclusively in order to comply with the relevant legal regulations and the legal obligations specified in clause 17.
- d) BIX operator declares that data management is carried out in compliance with the data protection requirements of the effective legal regulations. In order to ensure this, technical and organisational measures are taken to guarantee the safety of the BIX service and the protection of the data of BIX members managed during the service provision. The safety of the service includes the safety of the data management related to the service.
- e) BIX operator declares that it considers any business information related to the BIX member and obtained during the provision of the BIX service as a business secret and may not disclose it to any third party or use it either for its own purposes or the interests of any third party.
- f) The person concerned may require information about the personal data managed by BIX operator as well as the relevant data management process and may also ask modification, correction or deletion of such data. BIX operator shall perform any request to delete data without delay, unless it is obligated to manage the data according to the provisions of the relevant legal regulation.

19. In order fulfil its legal obligations specified in Section 92-92/C of the Act on Electronic Communications, BIX operator, as an electronic telecommunication service provider, undertakes the followings:

- a. cooperates with the competent authorities to support secret information collection and data acquisition, in case of an emergency period or for the interest of national defence.
- BIX operator is obliged to cooperate with organizations authorized by a specific law to perform secret information collection or data acquisition. BIX operator shall

perform its electronic telecommunication activity without excluding or impeding secret information collection or data acquisition.

- BIX operator shall inform directly the Special Service for National Security about any activity, service, product or any relevant changes related to them, that can affect or during the normal operation, influence the conditions, instruments, methods or procedures provided by or the provision of which falls within the scope of electronic telecommunication service provider for the collection of confidential information or acquisition of confidential data.
 - BIX operator shall ensure the conditions to use the tools and methods required to access messages and other communication transferred in the electronic telecommunication network as well as the confidential data managed by the service provider with methods used for secret information collection and data acquisition. Furthermore, BIX operator shall ensure the tools to be used to the exit point in case of new services launched, to the extent necessary for secret information collection and data acquisition.
 - BIX operator shall install a technical system - especially a monitoring subsystem - appropriate for the BIX service in accordance with the requirements specified above and ensure access in the network to the Special Service for National Security to the exit point within six months following the acquisition of the written information regarding the basic technical requirements.
 - Upon special request, BIX operator shall provide a service to organisations having an authorization for secret information collection and data acquisition.
- b. cooperates with the competent authorities to ensure inaccessibility of the electronic data temporarily and permanently.
- Upon notification sent by the Authority, BIX operator shall ensure temporary or permanent inaccessibility of the data disclosed via the electronic telecommunication network upon the order of the court in connection with a criminal case or an authority regulated by a specific law to prevent access to such data, without delay but no later than within one day following such notification.
 - BIX operator shall inform any BIX member about the legal grounds of temporary or permanent inaccessibility of the content.
- c. cooperates with the incident management centre of the government.

BIX operator shall cooperate with the incident management centre of the government for the performance of the tasks covered by Act on the safety of electronic information of the state and local government bodies. BIX operator shall inform the incident management centre of the government in case of any event affecting the BIX system, or any threat it becomes aware of.

19. The following Appendices are an integral part of the present Charter:

Appendix 1 – Network Use Policy supported by ISZT

Document entitled (AUP - Acceptable Use Policy)

<http://www.iszt.hu/iszt/egyebek/aup.html>

Appendix 2 - BIX Fees

