

NIX. CZ Association

2020-2025 Strategic Goals

Vision: The Association's primary mission is to operate a stable and secure interconnection node infrastructure and to continue building neutral platforms for its members to communicate and exchange data traffic through peering.

1. Introduction

This document follows upon the previous and highly successful strategy set out by the Association for the 2015-2019 period. With only one exception, the previous strategy required no adjustments throughout its period of validity. Over the last five years, both our membership numbers and exchanged data traffic levels continued to rise. The overall maximum traffic flow in the NIX platform exceeded 1TB/s. Our Association has thus maintained its prestigious position as one of the fifteen largest interconnection nodes worldwide. The exception was agreed on in November 2018, i.e. in the four year of the previous period, in order to interconnect the Prague and Bratislava nodes. This document should therefore be seen as developing and continuing upon the previous strategy.

2. Structure of the Association

The present organisation of the Association is the result of the amendments to the Articles of Association agreed by the General Meeting in December 2012 and of the subsequent changes made in June 2014 and December 2015. The key change among these was increasing the number of Board members, from the original three to five, so as to increase the ratio of representation of our members. We wanted to ensure a wider representation of the different groups in our member base, but also to reflect the growing importance of the Association and the expansion and increasing complexity of our infrastructure. To further improve the responsiveness of the Association, certain powers were transferred from the General Meeting to the Board, specifically the power to make decisions about the opening, modification and closing of NIX.CZ peering nodes, as well as decisions regarding the Association's Pricelist. These changes brought more flexibility to the management of the Association, enhancing its adaptability to the changing situation in the interconnection market.

From its beginnings, the Association has adhered to the principle of the equality of votes of individual members, regardless of their size. This system appears to be fully functional. The latest amendment to the Articles has simply allowed not to include the votes of passive members in the quorum, thus eliminating the thread of de facto paralysing the Association; however, this does not in itself resolve the problem of passive members, who over the long-term fail to participate in General Meetings, work groups and seminars of the Association. The Board will attend to this question and continue looking for suitable ways of encouraging members to take part in work groups and electronic voting.

During this period, we also encountered, for the first time in the history of the Association, the problem of the admission a previously expelled member. The existing Articles turned out to be unsuited to resolving this issue. The Board has thus decided to undertake a revision of the Articles, which will amend the admission process. These changes should also cover the membership of interconnected persons.

3. The Member Base

While NIX.CZ was founded as a local Internet eXchange Point (IXP) catering to the needs of the Czech Internet, over time it has become an important European player. Thanks to its size, it has become attractive to a number of foreign companies, both internet service providers and significant content providers. This benefits first of all its local members, who are able to save a large part of their foreign capacity

by transferring their content to NIX.CZ or NIX.SK, while at the same time decreasing latency and thus improving the quality of service for end users.

The Association will continue actively searching for new customers, especially abroad. Some of our assets can be particularly attractive to new candidates for memberships, namely the Pricelist, volume of traffic transmitted and our members' peering policy, but also their connection to route servers. Thanks to the large share of members who operate an open peering policy and use route servers, a new member can begin exchanging data quickly and with no administrative hurdles. The Association is therefore going to look for ways of motivating its members to adopt this mode of functioning.

In 2012, NIX.CZ created a work group to deal with the legal aspects of our members' entrepreneurial activities. Its initial goal was to build a platform that could for example comment on the draft legislation in the Czech Republic. So far, this initiative has only made comments on the Law on Cyber Security, and then the question of website blocking as part of combating online gambling. Since then, the Association has not identified any other common topics of interest and thus the work group is currently not active. Should other topics appear, the group will be revived.

4. Finance

4.1 Budget strategy

Since its foundation, the Association has been a non-profit organisation. In other words, its objective is not profit creation but providing high-quality services for its members and customers. The revenue side of the budget and thus also the Pricelist of the Association for the individual years are intended to cover the expected costs of running the services. Thanks to the steady increase in newly connected networks, we have been able to continue reducing our prices for individual ports.

4.2 Pricelist

The Pricelist of the Association is public and the price for the services remains the same for all members and customers. Short-term acquisition incentives will be used in order to acquire newly connected networks and increase the number of active ports. Similar incentives will be used for potential new nodes, in order to jumpstart their growth as quickly as possible.

The Association's long-term goal is to continue reducing the price level of the services provided. However, considering other budget goals, prices do not have to be reduced at regular yearly intervals.

4.3 Financial reserve

Thanks to the fact that in the recent years the Association has maintained a conservative budget and was able to keep its costs lower than budgeted, while bringing in higher revenues than planned, it now has a sufficient financial reserve. These funds can serve as a tool of stability and neutrality; they can also be used to deal with unexpected fluctuations or unpredictable natural disasters that could require significant one-off investments to settle possible insured events.

The reserve is also used to invest in developing the technologies crucial to the fulfilment of our primary mission. In this case, such investments are financed from our own resources, without the need for external funding.

In the future, our goal will be to maintain a minimum reserve fund equal to one year of the Association's annual operating costs. Any surplus will be used to invest in the Association's fixed assets, such as our own optical paths, which in the long-term will allow us to reduce our operating costs and maintain our independence from suppliers, while also providing a better return on value than cash assets. These assets will be used solely for the operations of the Association.

The Board will continue to invest the financial reserves in appropriate conservative and secure financial instruments, which will allow sufficient liquidity while ensuring a reasonable rate of return.

However, at least one third of the means will be immediately available in the Association's bank accounts.

5. Services

The Association was founded to operate a neutral interconnection node and therefore its main service continues to be the provision of interconnection ports and capacities. Its infrastructure is currently accessible from ten data centres in Prague and Bratislava. In addition to its public peering VLAN, a private VLAN and the FENIX Project, the Association also connects DNS infrastructure servers to its network by housing DNS ROOT and TLD servers, which makes the overall internet infrastructure more robust. To support the mutual interconnectivity of the connected networks, NIX.CZ also offers a Route server service. Lastly, the Association provides technical and administrative information via extranet.

Although our main goal in the future is to ensure the optimal functioning of all current services for all connected networks and to maintain growth, both in terms of the number of networks and the volume of traffic, the Association will also be looking for ways to increase the future utilization of its infrastructure through new services. It will also seek new ways of financing its operations.

One way of doing so would be to take part in national or European projects or grants. The Association will also look for ways of offering additional services, the sale and operation of which will not put it in competition with its members. It is also crucial that the activities mentioned here do not distract the Association from its key mission. We will also look for suitable ways of monetizing our infrastructure and the systems developed for our own needs.

In the past, the Association introduced a first-layer member linking service called ColorIX. This service has not yet gained significant attention among members and customers. The Association will continue supporting this service and encourage members to use it, and will consider possible adjustments to increase its attractiveness.

Over the course of the last strategic period, the Association expanded geographically, opening new nodes in Prague but also in Bratislava, Slovakia. This strategy has proven successful. The new nodes have shown operating profit following an incubation period, thus repaying the investments made. The Association will therefore continue this practice, as well as continue to establish new passive POPs in telehouses with commercial potential and with the possibility of quality connection to the existing infrastructure. Passive nodes that become attractive to more networks will be converted to active nodes.

The Association will continue to look for suitable locations both in the Czech Republic and abroad, in which to deploy its infrastructure in order to increase the level of services for its members. One concrete example seems to be the possibility of expanding to Vienna: this foreign locality has great commercial potential, while also being geographically close to the existing nodes in Bratislava. The infrastructure of the new national or international localities will be connected to the existing nodes without compromising the Association's neutrality. The investment in creating and running these nodes must be repayable in the medium term.

The topic of security has been of increasing interest to our members and customers, especially in terms of protecting them against DDoS-type attacks. The Association will continue to look for suitable ways to help increase the level of protection of our members.

6. Technology

In 2010, Cisco was chosen as the technology supplier for the Association's infrastructure needs. Its technical solution was rated as optimal for the migration of our infrastructure from "ring" topology to the current "dual star" topology. It has also enabled the smooth implementation of the new 100GE technology. NIX.CZ was the second peering node in the world to include this technology in its offer.

In the coming period, we will continue to monitor the development of new technologies in order to ensure the stability and quality of the services provided, while taking into account the level of investment and subsequent operating costs. We will compare and evaluate our options in terms of implementing technologies from other suppliers. In addition we will also monitor the shared needs of our members to implement and subsequently operate technologies and services that can have a positive influence on the entire infrastructure.

7. Operation of the Association

Over the long-term, the Association is run by a professional team of employees, who are responsible for the full technological functionality of the node, for operating the Association's systems, for activities related to connecting new networks, for the daily operation of the Association and for organising its activities. The structure of the Association is conceived in such a way as to make it highly efficient and compatible with the legislative framework in force, for example by maintaining 24-7 technical support, with at least two trained technicians available at all times. The HR policy is within the responsibilities of the Director of Association.

The current model appears to be effective given the existing range of services. Therefore no significant changes are presently needed. However, the Association will add to its team appropriately to the geographical and technological developments of its infrastructure. Given the negative experience of the previous years and the need to preserve our „know-how“ within the scope of the Association, we do not envision any form of outsourcing our key activities, especially regarding our technical department. Nevertheless, the Association will consider cooperating and sharing costs with certain allied and neutral institutions, such as CESNET or CZ.NIC.

8. The FENIX Project

The FENIX Project was created in 2013 as a reaction to the intensive DoS attacks that affected important Czech media providers, banks and service operators in March of that year. The goal of the project is to make sure that in the case of another DoS attack, internet services remain available among the participating subjects.

Membership in the FENIX Project is voluntary, but it is subject to a number of conditions, which are spelled out in the Connection Rules. By joining in, the participating companies clearly show that they are committed to increasing network security and therefore the security of their customers. The Project should appeal to companies providing connection for key services and wishing to ensure reliable operation even during the most critical situations.

The Association wishes to use this opportunity to educate and raise awareness about the security standards used both within the limits of this project and beyond, while also acting the project's coordinator and an independent arbiter deciding on issues of rule compliance. The initiative will also be presented internationally and promoted among other peering nodes. The Association will continue developing the project and encourage its existing members and customers to join in.

9. Communicating with the Public

Over the past year, NIX.CZ has been trying to increase its communication with the wider public. It has been doing so mainly through press reports, articles in specialized media and presentations at conferences, as well as via interviews and university lectures and presentations.

Thanks to this, our Association is now increasingly perceived as a prestigious technological organization; we will continue to pursue this direction further. Adequate explanation and sufficient understanding of the topics of Internet interconnectivity are limited by the present levels of knowledge and orientation in the field among the wider professional public. NIX.CZ will continue to look for suitable means of educating this target group, for example through educational materials, publishing activities and so on.

10. The Association's International Activities

Over the years, our Association has made an excellent name for itself internationally. We are an active member of the European Internet Exchange Association (EURO-IX), where we are also directly represented on the Board of Directors. We cooperate with organisations such as RIPE NCC or NANOG. Our employees regularly participate in events organized by these groups, where they not only promote our name and values through lectures and presentations, but also gain valuable information and contacts, which then allow the Association

to develop our activities further. NIX.CZ will continue to strengthen our relationships and trade experience with similar peering nodes. Our target regions are Europe and North America

The Association organizes the Peering Day international conference, together with other Central-European peering nodes. This event aims primarily to introduce individual organisations and the interconnection services market in the CEE region. It brings together peering coordinators and other representatives of individual operators and network providers, allowing them to get to know each other and open up new avenues for cooperation, which are not limited to the sphere of interconnectivity.

Our Association has been repeatedly invited to take part in organising the largest peering conference in Europe - the European Peering Forum. This event is co-organised by the four largest European peering nodes and it is our long-term aspiration to become its fifth permanent organizer.

In the coming period, one of our priorities will be therefore to consolidate our existing position internationally by organising the above-mentioned activities and events, but also to seek new partnerships and possibilities of hosting specialized conferences of organisations such as EURO-IX or RIPE NCC. Our Association will primarily focus on hosting events in the regions where it is currently active. At the moment, there are a number of projects of building international alliances between peering nodes. The primary aim of these activities is marketing cooperation, but in subsequent phases they could also include technological and commercial convergence. Our Association will seek to be involved in these efforts in appropriate ways. We will prioritize peering nodes with an ethos similar to ours, i.e. neutral and non-profit associations, as potential partners.