ACTIVITY PLAN 2021

European Internet Exchange Association

The Number One Place for Information about IXPs
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Introduction

The 2021 Activity Plan draws from the core objectives of the 2020 Revised Activity Plan, replacing activities that are not possible to carry out due to the global pandemic.

We intend this document to be the way that Euro-IX Members can learn about, comment on and ultimately shape the direction Euro-IX will take for the duration of the year. Euro-IX views this as an integral part of maintaining the trust of its members, by ensuring high standards of transparency and accountability.

To support the activities we plan to carry out in 2021, we collect feedback from mailing lists, the Membership, community meetings, and lessons learnt from 2020.

New projects undertaken by the Secretariat will be subject to the new Project Process, giving the community a greater level of involvement and transparency in the work of the Secretariat. Members are also encouraged to ask questions and discuss the document on the Euro-IX Members mailing list (all@lists.euro-ix.net).
Mission

Euro-IX’s mission is to be a community driven Membership association for IXPs, aiming to:

- Foster the sharing of ideas, tools and learn from each other.
- Encourage the continuous development towards excellence of IXPs for the good of the Internet.
- Develop the IXP database and tools around it.
- Create a common voice in all forums related to IXPs.

During the 192nd Executive Board Meeting in Athens, January 2020, the Euro-IX Board set the following as our strategic objectives for 2020/2021 in order to fulfil our mission:

- Leading authority on IXPs
- Bring more value to the Membership
- Gain financial stability
Coordination Activities

1.1 Euro-IX Fora

Euro-IX fora usually take place twice a year in the second and last quarter respectively.

In 2020, we were sadly not able to have a physical meeting due to covid-19 and while writing the Activity plan for 2021 we know that the first forum in 2021 is also unlikely as there is still a lot of uncertainty whether the situation is going to improve or not. The health and safety of our attendees comes first.

If we are able to meet in the second half of 2021, we will ensure our focus on topics and items presented and discussed at the fora are relevant and address the needs of the Membership. The secretariat and Forum Program Committee have sought feedback from previous fora, ratings and engaged with the Membership to find out what topics they are interested in and encourage them to participate.

In 2020, we had three new FPC (Forum Program Committee) members, bringing in new and fresh ideas the FPC can explore, for both physical and virtual meetings. If the forum goes ahead in 2021, we will most likely not get the full attendance we are used to, due to the uncertainty of travel in 2021.

We will therefore look into options to offer live streaming to our Membership for those that cannot attend in person. This would add the additional benefit of reaching IXP staff that don’t usually attend the physical meetings.

In 2021, we will continue to focus on key areas that will bring the most value, awareness and learning to our Members.
**Status:** Ongoing

**Activity:** Increase Member participation before and during fora by increasing communication via mailing lists, social media and other resources available.

**Measurable outcome:** In 2021, we hope to increase the number of IXPs attending (both physically and online) and increase the number of Members and Patrons actively involved with the agenda by offering new and different agenda topics.

*Growth, Value, Sharing Ideas, Stability*
1.2 Euro-IX: Keeping the Community Connected

In 2020, with the emergence of Covid-19, the Euro-IX Board made the very difficult decision to cancel both forums due to the health and safety risks posed with travel and gathering large groups of people. In March, Euro-IX began weekly Membership meetings on business continuity. As the weeks progressed, these weekly meetings become bi-weekly calls with the Members and Patrons, facilitating the sharing of experiences on the impact that the Covid-19 virus has had on IXP operations and the Membership. These early conversations were critical in keeping the community connected and sharing vital information which has helped many IXPs. It became clear we needed to find new ways to keep the community connected and continuing to grow, learn and talk about innovative ideas, during these days when we are not able to meet face to face.

To achieve this in 2020, we held a number of virtual meetings, each time tackling new and different topics of interest to the community. Different members of the community led these meetings in order to maximise community involvement. The FPC held a number of virtual meetings, and Euro-IX along with the Members hosted panels and tutorials. By talking and bringing awareness to these topics, we continue to share and learn about topics our industry needs to be aware of. These included;

- Is the Internet Broken – in collaboration with AMS-IX, a series of panels to talk about the ‘flaws’ of the Internet and discuss ways in which we can make it better.
- Let's Talk, Let's Act! – Community led panels, aiming to inspire and motivate us to make positive changes that will bring continued growth and sustainability to the industry.
- Learn With Us - Practical, online tutorials on technical topics for IXPs and the community.

The complete list of virtual events that took place in 2020 can be found here - [https://www.euro-ix.net/en/events/virtual-events/](https://www.euro-ix.net/en/events/virtual-events/)
In 2021, we will continue to host virtual meetings to keep the community connected. The FPC and secretariat will drive topics by listening to what the Members needs are and arrange a platform for these to be discussed.

**Status:** Ongoing

**Activity:** Continue to develop and host various virtual activities that will keep the Membership and Community connected. This can be in the form of presentations, panels, workshops and tutorials on various industry related topics.

**Measurable outcome:** During the last few online meetings, we've had on average 30 attendees, therefore, our goal is to increase participation and engagement from the Membership and Community during 2021 by 30%.

*Growth, Value, Sharing Ideas, Stability*
1.3 Euro-IX Website

The Euro-IX website is our gateway to the rest of the world, to show who we are and what we do. In 2020, we’ve worked on further improvements following feedback from the Members and gave the Euro-IX website a complete new look;

- The menu and navigation have been updated so it’s easier to find items and engage with the website.
- The homepage clearly highlights what we do, how to join and our Activities.
- The Peering Toolbox website was created - https://peeringtoolbox.euro-ix.net/en/
- A new search function on the forum pages allows Members to search through old forum presentations and videos.

In 2021, we plan to;

- Make further improvements to the user interface and back end API’s to the IXPDB.
- Add Membership statistics from the IXPDB on the homepage to encourage engagement and showcase the Euro-IX Members.

We will consult with the Members and Patrons throughout 2021, to see what additional tools and improvements they want to see.

Status: Ongoing

**Activity:** Improve accessibility and toolsets to help Members and Patrons gain detailed information about IXPs and interconnection.
- Include feedback options on website to increase engagement.

**Measurable outcome:** Increased feedback and engagement measured by number of engagements made via the website, using google analytics and direct feedback.

_Growth, Value, Stability, Leading authority on IXPs, Stability_
1.4 Workshops/ Hackathons

In January 2020, we held the first workshop for Marketers, this was a one-and-a-half-day training course on Marketing Strategy led by the Chartered Institute of Marketers, in London. We had 12 attendees from 7 IXPs, feedback from attendees was positive and we’re looking to add more marketing events in the future.

The Membership has shown an interest for more specific focused workshops to continue, as they find it a neutral place to talk about common challenges and find solutions, by working together. In 2021, we will continue to hold workshops as topics of interest come up, some proposals from the Membership have been:

- Routing Security Workshop
- A workshop on peering tools and automation inviting networks to find out about tools they use and data improvements.
- Route Servers – follow up workshop.

**Status**: Ongoing

**Activity**: Host at least two workshops and/or hackathon in 2021.

**Measurable outcome**: Publish as a Euro-IX or community document or new tool on the website.

**Value, Leading authority on IXPs, Stability**
1.5 IXP Database

Due to lack of resources, the IXPDB development has been slow in 2020 and we were not able to complete all the activities we outlined in the 2020 Activity Plan. Some key pieces of work that are complete include:

- A new search/filter to show IXPs that have traffic stats - https://ixpdb.euro-ix.net/en/ixpdb/ixps/?reverse=&sort=name&q=&traffic=on
- API documentation - https://api.ixpdb.net/docs/
- Backend process improvement for the admins
- A standard JSON traffic schema has been agreed - https://github.com/euro-ix/json-traffic/pull/1

In 2020, the IXPDB was also launched as a Euro-IX Community Project, you can see details of the project here - https://www.euro-ix.net/en/services/community-projects/

Thank you to our 2020 Sponsors; LACNIC, ISOC, APNIC and LUC-IX.

In 2021, we plan to:

- Improve the web interface and data visualizations.
- Give IXPs more granular control of the visibility of their data.
- Develop integration tutorials.
- Improve the integration of traffic data.
- Automated reporting (e.g. global, regional, national, and tailored).
- Implement an API for command-line data exports.
- Achieve financial sustainability.
**Status:** Ongoing / New  
**Activity:** Build an IXP Dashboard and interactive map that allows users to analyse IXP and interconnection data visually.  
**Measurable outcome:** At the end of 2020, we had 251+ automated IXP records, which means we reached our goal of 250! By the end of 2021, our aim is to have added another 100 IXPs, so we have 350 IXP automated exports.  
**Value, Leading authority on IXPs**
1.6 Peering Toolbox

The Peering Toolbox is a community led effort to support and provide best practice information for new entrants into the interconnection community. The toolbox will act as a reference / guide that networks and IXPs can use to learn about best practices and highlight items they need to know and understand to become a successful peer or IXP.

This project started in 2019 and a framework on what the tool will look like has been developed. In 2020, the Peering Toolbox team published a survey for IXPs and Networks with the intention to get some insight into what documentation and tools are missing that can support new peers. We had around 30 responses and they will be discussed during a panel.

The Peering Toolbox website was launched in October 2020 and content is being added - [https://peeringtoolbox.euro-ix.net](https://peeringtoolbox.euro-ix.net)

**Status:** Ongoing

**Activity:** Collect, create, communicate and publish best practice material for the Peering Toolbox.

**Measurable outcome:** Engagement and input from the community to make the Peering Toolbox a useful tool for everyone.

*Growth, Value, Leading authority on IXPs, Sharing ideas*
1.7 Euro-IX Benchmarking

Benchmarking is the process of comparing an organisation's operations and internal processes against those of other organisations within its industry. This then allows organisations to develop plans on how to make improvements or adapt specific best practices, usually with the aim of increasing some aspect of performance.

The Euro-IX Benchmarking Club (BMC) was initiated in November 2004 as a means for affiliated IXPs to exchange data about their business, so as to enable them to compare their performance and policies. Considering there is very little market analysis on IXPs we see this as the perfect way to get a little more insight into IXPs.

The benchmark data contributed by individual Members is only reported back in anonymised and aggregated form by Euro-IX, with the final report reviewed by the BMC team.

In 2020, the 15th Benchmarking Survey for Euro-IX was sent to 70 Euro-IX Members. Following the low responses the previous year in 2020, the BMC survey was broken into three parts; operational, commercial and financial.

This resulted in 42.8% of the membership participating in the Benchmarking in 2020, up by 33% and thereby meeting our objective of 40%. We hope that those IXPs that participated and receive the report, will find it useful. We welcome all feedback and input.

Euro-IX Patrons receive a version of the report that contains operational and some commercial analysis. This gives our Patrons further insight into IXP operations and details on specific data, for example ports / traffic at IXPs and the growth over the years.

In 2021, along with the BMC committee, we will explore ways in which we can continue to increase participation and the rate of participation, so that we can release the report earlier in the year.
**Status:** Ongoing

**Activity:** Work with the BMC team to increase participation and encourage early participation.

**Measurable outcome:** Increased participation by 50% of Membership and publish the report by Q2.

**Value, Leading authority on IXPs, Sharing ideas**
1.8 Euro-IX IXP Report

The Euro-IX IXP report gives an overview of the IXPs situation in Europe. In the past this has included details, such as:

- The number of Internet Exchange Points (IXPs) currently operating in Europe and trends related to growth and change.
- Related statistics and trends that are appearing in the European IXP market, for example traffic, hardware seen at IXPs and Route Servers.
- The evolution over the last couple of years.
- With the development of the IXPDB we were not able to produce a report in 2017, the 2018 and 2019 report was published in August 2020. You can view the report on the Euro-IX website - [https://www.euro-ix.net/en/services/euro-ix-reports/](https://www.euro-ix.net/en/services/euro-ix-reports/)

In 2021, we plan to expand on the analysis in the report by using the IXPDB aggregation statistics, and speak to the community on new data sets we can include.

**Status:** Ongoing

**Activity:** Explore new data sets that are interesting for the community and include them in the 2020 report.

**Measurable outcome:** Publish the 2020 European Internet Exchange IXP Report in Q1.

*Value, Leading authority on IXPs, Sharing ideas*
## Draft Budget

(all budget estimates are made in euros)

### INCOME

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<td>Remote</td>
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<td>Forum Registration</td>
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<td><strong>Total Income</strong></td>
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### EXPENDITURE

#### Operational Costs

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<td>Employee Costs</td>
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<td>Contractor Fees*</td>
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<td>Technical Contractor</td>
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<td>Staff training</td>
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<tr>
<td><strong>Total</strong></td>
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#### Outreach & Communications

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<td>Conference travel</td>
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<td><strong>Total</strong></td>
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#### Euro-IX Fora

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<td>Member Accomodation</td>
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<td>Venue &amp; Meeting</td>
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<td>Socials</td>
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<td>Other</td>
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<td>Description</td>
<td>Value</td>
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<td>Extra Attendees</td>
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<td>Cost for two forums</td>
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<td><strong>Workshops</strong></td>
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<td><strong>Total Expenditure</strong></td>
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<td><strong>Results</strong></td>
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<td>Expected cash reserves from previous year</td>
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<td>Projected Reserve balance at end of year</td>
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* Contractor fees include; accounting UK & NL, liabilities and subscriptions such as dropbox, survey monkey etc

* New
Unforeseen Activities

There may be activities that are entirely unforeseen at the time of writing the Euro-IX Activity Plan and Budget 2020 or have started recently and are not at the stage where they can be estimated to have a material financial impact. A quick, well-focused reaction to the changing environment and new requirements of Euro-IX Members and other stakeholders is always a goal of Euro-IX.

In line with good corporate governance, any unforeseen activities that may arise are developed in close consultation with the Euro-IX Executive Board, and when there is any material financial impact, the Executive Board must approve the resulting action to be taken.

Measurable Outcome

In order for Members to easily identify and track development of Euro-IX activities year on year, the measurable outcomes will be given twice per year at Euro-IX fora. Any additional benefits to the membership identified from new activities will be provided in subsequent activity plans, in addition to any significant changes, costs and the status of activities (new, ongoing).

Features in this Activity Plan

The status of all activities within the document is provided as:

- "New": An activity that is making a first appearance in the Activity Plan.
- "Ongoing": A recurring activity.
- "Ongoing / New": An activity that is ongoing with a new measurable outcome.

We also state with each activity what that activity brings to the Membership.