



FSFE's position to the BIPT's public consultation regarding the "Draft decision of the BIPT Council on the identification of the network termination point for broadband services and TV services (CONSULT-2022-E4)"

October, 2022

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Executive Summary

The FSFE welcomes EETT's efforts to consolidate the regulatory definition of the NTP for broadband networks in Belgium. This step represents a benefit for end-users by clearly defining the boundaries of private and public networks – which have direct impact on the provision of internet services.

For reasons of freedom of choice, privacy and data protection, interoperability, fair competition, and security, end-users must have the possibility to use an own telecommunications terminal equipment (TTE). This will only be freely possible if the network termination point NTP at passive point (Point A of BEREC Guidelines of the NTP). Therefore, **the FSFE strongly supports BIPT's conclusion that the NTP at Point A is the preferred choice to safeguard the legitimate interest of end-users.** This definition should encompass all fixed network topologies, including fiber networks (FTTx), allowing end-users to deploy their own private equipment without the necessity of a media converter or upstream provider modem from ISPs.

Based on empirical data, the FSFE urges BIPT finding a striking balance between business and investments considerations and consumer protection. Besides, the FSFE argues that free choice of terminal equipment is environment-friendly by enabling right to repair. End-users can expand the lifespan of devices with Free and Open Source Software. These are major wins for digital sustainability.

Last but not least, the FSFE calls BIPT to upturn the monitoring efforts over ISPs' commercial practices restricting freedom of terminal equipment



Introduction

The Free Software Foundation Europe (FSFE) acknowledges the transparency on how BIPT has been conducting the evaluation of new regulation concerning end-users' rights and free choice of terminal equipment, allowing the involvement of a broad spectrum of stakeholders in the regulatory process.

We thank BIPT for the comprehensive analysis provided for the public consultation regarding the determination of the Network Termination Point (NTP). Since 2001, the FSFE has been working to protect and enhance end-users' freedoms and gathered [experience](#) in regulatory and legislative processes regarding free choice of terminal equipment all over Europe. We are glad to continue collaborate with the Belgian regulator providing our expertise.

As we further elaborate in this document, the FSFE strongly supports BIPT's conclusions on the location of the NTP at Point A and encourages the Belgian regulator to safeguard this regulatory decision for all types of broadband networks, specially fiber (FTTx). We also urge the regulator to focus on the monitoring of ISPs' unduly commercial practices regarding terminal equipment (Section 6. Decision).

Defining the location of the NTP

BIPT has provided a comprehensive analysis on how the definition of the location of the NTP has a direct impact on end-users ability to choose their equipment to connect to the internet. As noted in the draft document, Article 3(1) of Regulation 2015/2120 as well as Recital 3 of Directive 2008/63/EC unambiguously protects this right. (Section 3. Regulatory Framework)

Besides, the location of the NTP is important for private traffic management, transparency, enforcement and monitoring mechanisms. When accessing the Internet, end-users should be free to choose between various types of equipment that attend to their performance needs.

As seem below, for reasons of **freedom of choice**, **privacy and data protection**, **interoperability**, **fair competition**, **innovation** and **security**, we support that Point A is the only position which respects rights and interests of end-users and concur with BIPT's main conclusions.

- According to Regulation 2015/2120 and Directive 2008/63/EC, end-users must have the right to freely choose the electronic devices in order to connect to the internet, which includes both the modem and the router. This **freedom of choice** enables them to choose devices that suit their individual needs best. (Section 4.4.1.2. Open Internet Regulation)
- Routers and modems are gatekeepers of most online activity for end-users and businesses alike. Therefore, end-users need to be able to pick a device that allows them to use certain **privacy and data protection** features which fulfil their requirements. (4.4.3.4. Data protection)
- End-users regularly change their internet providers. Only if they can continue using their own device, they can port their settings and existing devices to the new provider. If their equipment was owned by the IAP, the **interoperability** to other providers and their specific requirements would be drastically limited. (Section 4.4.3.1. Interoperability between the public network and the domain of the end user and 4.4.3.2. Simplicity of operation of the public network)
- NTP at Point A foster **innovation** on terminal equipment market. End-users are better served by a greater variety of options, providing better adequacy to consumer and business' performance needs. Router/modem manufacturer have better access to market and can supply products to a larger group of consumers. Such manufacturers have a greater incentive to develop products aimed at specific consumer and business niches, fostering innovative solutions. The BEREC Guidelines on NTP explicitly recognizes the Point A contributes to the fostering of innovation and competition in the TTE market and to the availability of TTEs in the TTE market that are tailored to end-users' needs to a higher degree (Section 4.4.2. Impact on the terminal equipment market).
- End-users profit from the free and **fair competition** that guarantees free choice and steady improvement of products. The lack of competition would, eventually, come at the cost of the user because (security) features would be continually reduced and the user-friendliness would drop. A vital equipment market will foster innovation that benefits the European industry and citizens. (Section 4.4.2. Impact on the terminal equipment market)

- NTP at Point A decreases the probability that large parts of the router market is dominated by only one or a few product families or manufacturers. In those settings, major problems or security holes affect an enormous number of users at once. That is particularly problematic when manufacturers and providers are very slow in the delivery of critical updates and users are not allowed to perform updates themselves. A larger number of available types of routers/modems benefits the general **security** of the complete landscape. It enables end-users to take own security precautions and/or commission an equipment manufacturer or service provider to take care of updates and preventive measurements. (Section 4.4.3.3. Network Security)

The FSFE recognizes the conclusions achieved by BIPT that the specification of the NTP in other European countries have not to a substantial reduction in the quality of service in these countries. The FSFE has been [monitoring](#) the regulatory panorama in Europe and confirms the experiences made in Finland, Germany, Italy and the Netherlands serve as a positive example that devices chosen by end-users do not cause technological damages for network operators and other customers. (Paragraph 43).

The FSFE encourages BIPT to specify the position of the NTP at Point A in full compliance with European telecommunication and network neutrality legislation. Allowing end-users to choose and use their own terminal equipment supports their best interests regarding privacy, data protection and security. Freedom of terminal equipment is also key for fair competition, market innovation, technical interoperability and digital sustainability.

The end-user experience with freedom of terminal equipment in Europe

The interests of end-user reflect the necessity to enable freedom of terminal equipment in Europe. The FSFE has launched in 2020 the [Router Freedom survey](#) to study and analyse end-user experience and their relationship with network operators, specially to:

- Collect data on usage of terminal equipment and related problems with ISPs.
- Gather information on security issues regarding various types of networks.
- Identify ISPs' contentious practices (commercial and technical) in relation to terminal equipment.
- Inquire public opinion on principles of free choice of terminal equipment, in particular security, privacy, fair competition and sustainability.

By October 2022, the survey has gathered 1605 responses from end-users all over Europe. From the 1036 participants who informed their country of residence, 260 are from Belgium, as displayed in Figure 1.

What is your country of residence?

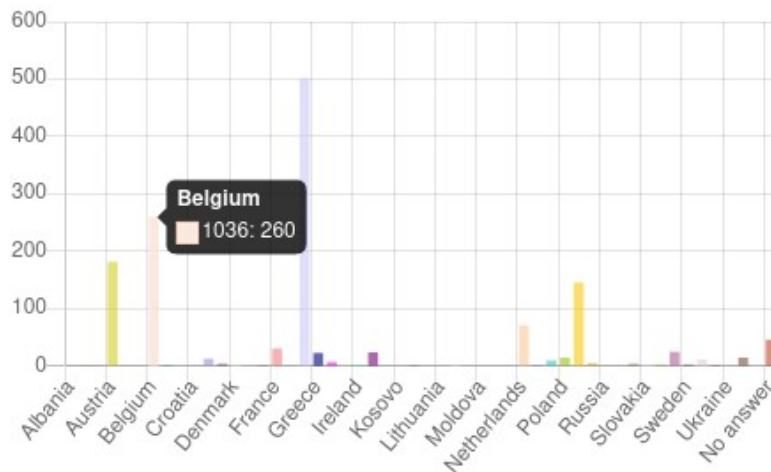
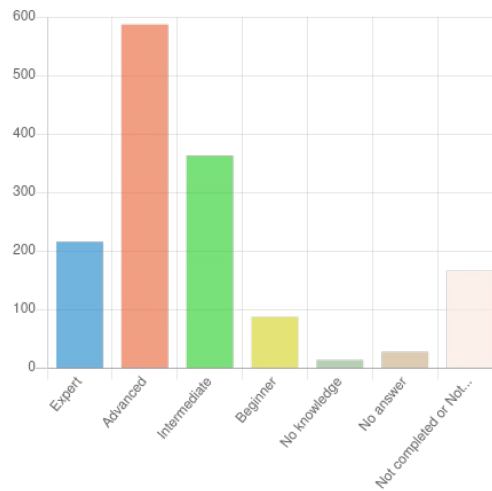


Figure 1: Belgian participants on the Router Freedom survey

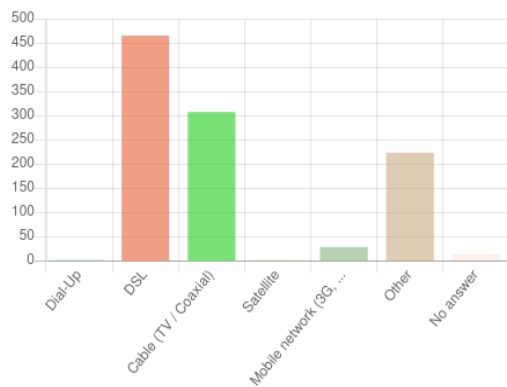
The majority of participants of the survey see themselves having advanced knowledge in topics concerning IT security, configuration of routers and modems, internet technologies and networks (Figure 2).

Figure 2: Level of IT security knowledge of the participants.



Fiber connections are the third most used connection type (column “other” in the first chart), lagging behind DSL and coaxial. The majority of the respondents use their own terminal equipment (Figure 3), which demonstrates the direct interest of the participants in the survey.

What is your internet connection type?



Which router/modem do you use for internet access?

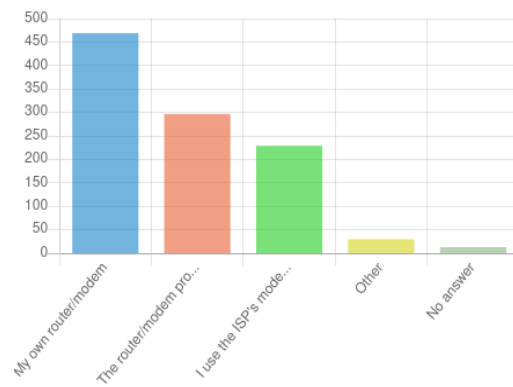


Figure 3: Types of connection and usage of private equipment.

The FSFE has been noted a conservative approach by regulators for the definition of the NTP for fiber networks¹. **In order to support BIPT's decision in favour of the NTP at Point A also for fiber, we relate the reports from end-users experimenting restrictions against private routers and in the provision of services.** The responses report practices of ISPs usually providing free of charge or at some cost the optical network terminal (ONT) or modem/router on stand alone basis or in tandem with a IPTV set-top box. Among the issues encountered, we may quote:

- **Proprietary devices.** Generally the ONT devices are proprietary and owned by ISPs. Being proprietary, end-users are not allowed to inspect the source code of drivers and firmwares running in the devices, raising the level of insecurity and uncertainty of which functions the device is performing.
- **Undeveloped ONT market.** ONT devices are not easily available at retail stores and alternatives are not openly available. There are routers that have ONT built-in, but these alternatives are currently "semi-closed", with proprietary firmware as a consequence. There are, however, fiber routers available for users running Free Software operating systems.
- **Security & Privacy.** Although ISPs argue as an advantage the possibility to remotely accessed and configured, the risks for device security and data protection are high specially when protocols and standards used for such operations are closed and proprietary, which adds a layer of non-transparency avoiding proper public audit.
- **Unlawful technical and commercial hurdles.** Even in countries where free choice of terminal equipment is a reality – like Germany and the Netherlands – ISPs still impose on end-users several barriers to use their own equipment. On these jurisdictions, network topologies would allow the connection of personal equipment without any serious issues, ISPs make it cumbersome to replace the ISP's terminals by not providing login data or other access credentials, not offering technical support for the network as well as threatening end-users with contract termination. These barriers reportedly discourage end-users to deploy their equipment in flagrant non-compliance with telecommunications laws.

1 See for instance: <https://fsfe.org/news/2022/news-20220628-01.html>

End-users demand free choice of terminal equipment

More than a technical issue, freedom of terminal equipment is also a policy demand. Not only in Belgium but all over Europe end-users have manifested their support for regulatory policies safeguarding the right to choose and use routers and modems. The Router Freedom Survey² has inquired participants to share opinion on principles and arguments regarding their ability to freely use personal equipment.

Figure 4 display the vast majority of respondents agree with the statements “Freedom of choice: the right to choose and use routers/modems is fundamental for a technological neutral internet” and “Router Freedom is fundamental for privacy and data protection”.

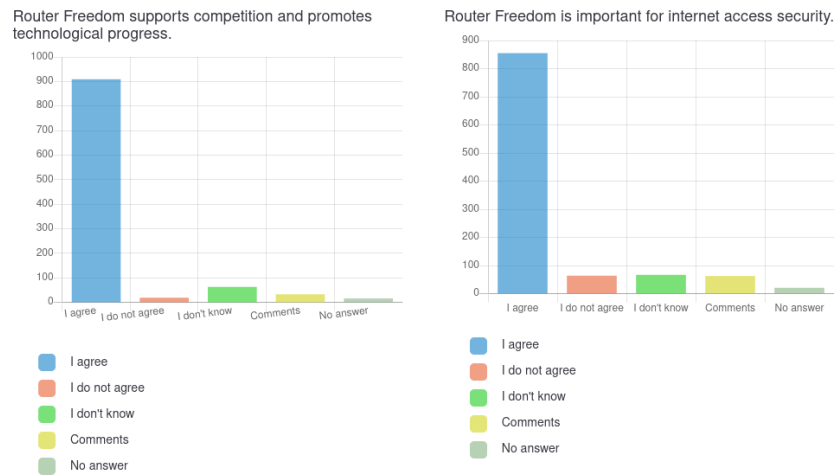


Figure 4. Reactions to arguments in favour of net neutrality, privacy and data protection.

Equally important, the vast majority of respondents categorically support fair competition and security. Figure 5 shows how respondents agree with statements “Router Freedom supports competition and promotes technological progress” and “Router Freedom is important for internet access security”.

2 Similar [survey on public opinion regarding free choice of terminal equipment](#) was conducted independently by VTKE, the router manufacturer industry representative with similar results where European end-users consider free choice of routers and modems a general consensus.

Figure 5. Reactions to arguments in favour of competition and security.



The BIPT has taken a acknowledgeable position to draft the position of the NTP at the passive point, but we reinforce the urge for guaranteeing the free choice of terminal equipment for next generations and emerging technologies. End-users recognise the need to maintain a safe, open and secure internet connection. Allowing them to choose and use their own equipment is a fundamental step in this direction.

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Free choice of terminal equipment and digital sustainability

The draft document does not contemplate information on digital sustainability, so we provide insights on freedom of terminal equipment and the environment. The ongoing digitization of infrastructures and services comes along with a continuously growing number of electronic devices that are connected to the Internet - be it in private, public or business environments. The telecom sector is not an exclusion. The growing expansion of new generation networks pose challenges for the sustainability of the entire industry. Terminal equipment is an important element of the telecom infrastructure, making these kind of devices subject of environmental policies and regulation.

The FSFE has an [expertise](#) with digital sustainability and has been highlighting since 2013 the necessity to consider free choice of terminal equipment a fundamental element of environment-friendly policies for the digital sector. Recently, the FSFE has engaged with BEREC for the [first studies on the sustainability of the telecom sector](#), where we could contextualize the EU fragmented regulatory patchwork involving terminal equipment as a draw back for the environment.

On April, 2022 the FSFE promoted [a coalition of more than 100 organisations in favour of the universal right to install any software on any device, including routers and modems](#). Free choice of terminal equipment foster sustainability of telecom sector by allowing older devices to be supported long after the manufacturer stops making updates. It reduces hardware waste and improves energy consumption.

When ISPs impose specific models on users - which are not best suited for their needs - it can mean unnecessary expense. For the environment, this is unfavourable due to the build-up of hardware waste even though other devices would still work.

During the last years, our experience has demonstrated that no objective technological necessity is observable to exclude the free choice of routers/modems. On the contrary: in countries where free choice of devices is established, a significant number of end-users decided to make use of this freedom, a vital market for terminal equipment is evolving, and there were no such breakdowns in neither the DSL, coaxial and fiber networks.

Free choice of terminal equipment is environment-friendly by enabling right to repair. End-users can expand the lifespan of devices with Free and Open Source Software. These are major wins for digital sustainability.

Upscaling monitoring of unlawful practices

As became clear in this position document, the FSFE strongly supports the designation of the NTP at the passive physical point at which access to the public fixed electronic communications network is provided to the end-user. This definition should encompass all fixed network topologies. Nevertheless, freedom of terminal equipment requires constant monitoring of ISPs' commercial practices. End-user reports relate to ISPs practices that jeopardize this freedom, specially when:

- Customers are forbidden to use their equipment by contract or ISPs impose disproportional disadvantages to users with private routers;
- ISPs do not inform customers about their rights regarding terminal equipment or manipulate users through their customer service In favour of ISP's routers;
- ISPs advertise their routers as the only one compatible with the network, or use non-standard plugs or proprietary protocols;
- ISPs do not provide users the login data to the public network or make no support available to customers.
- ISPs do not offer the same level of service (e.g. IPv6, bandwidth, etc) for customers using their own router.

We acknowledge BIPT tackling some of the points regarding customer support (Paragraph 98) but we urge the regulator to require from ISPs a minimum of support service for issues concerning the connection, so end-users can easily configure their equipment.



Conclusion

The FSFE celebrates the efforts BIPT has dedicated in setting up the regulatory framework for specifying the position of the NTP at the passive physical point. We recognise this an important step for safeguarding consumer protection, security and data protection as well as digital sustainability of the telecom sector. We urge BIPT to keep the efforts in monitoring ISPs practices when implementing these rules to avoid abusive commercial practices.

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