

RIPE NCC's responses to the questionnaire on 'Clarifying the functional scope of IPv6'

Respond to consultation

Below are one or more questions that relate to the consultation. You can give your response in the space below the question. In addition, it is possible to add a document to your response, for example if you want to add background information. Do not include any personal data in your response or the document that you add to your response.

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Question 1 of 11

Would you like to respond to the experts' advice to change the functional scope for IPv6 on the Standardisation Forum's 'apply or explain' list (Chapter 1 of the expert advice)?

The RIPE NCC does support the clarification of the functional scope for IPv6 on the Standardisation Forum's 'apply or explain' list.

Question 2 of 11

Would you like to respond to the experts' advice to clarify the name on the list and change it from "IPv6 and IPv4" to "IPv6" (Chapter 1 of the expert advice)?

The RIPE NCC does support the modification on the list from "IPv6 and IPv4" to "IPv6."

Question 3 of 11

Would you like to respond to the argumentation for why the functional scope should be clarified (Chapter 2, paragraph 1 of the expert advice)?

The RIPE NCC agrees with the conclusions of the evaluation study of IPv6 and IPv4 produced in 2020 and encourages public sector bodies to lead by example in accelerating the deployment of future-proof Internet Protocols. We therefore welcome the clarification of functional scope applying IPv6 to public sector electronic services such as websites and email servers, and stress the need for end-user devices to support IPv6. We encourage public sector organisations to prioritise the migration to 'IPv6-only' or 'IPv6-mostly' network environments, while leaving the possibility for transition mechanisms and dual stack solutions. Putting the focus on IPv6 as the primary choice for the IP stack would ultimately enhance its adoption throughout the network while leaving IPv4 as an additional option where absolutely needed.

Question 4 of 11

Would you like to respond to the formulated principle "IPv6 must always be used and in addition IPv4 may be used (for example by means of a transition mechanism or 'dual

stack')", which is attempted to be achieved by clarifying the functional area of application and the name on the list of Open Standards (Chapter 2, paragraph 2 of the expert advice)?

Fostering Internet scalability through IPv6 adoption remains a priority for the RIPE NCC. We welcome the Expert Advice and prioritisation of an IPv6-only approach for public sector entities in the Netherlands and the promotion of the "IPv6-only" or "IPv6-mostly" principles. To achieve a significant increase in the adoption and utilisation of IPv6 in the public sector, we thus support clarifying the functional scope of application as recommended by the expert group and adjusting the name of the list of open standards. We also recommend a gradual approach based on reasonable implementation timeframes.

Question 5 of 11

Would you like to respond to the formulated reasons "growth and innovation of the Internet, direct and fast service provision, and combating fraud" for choosing IPv6 (Chapter 3, paragraph 2 of the expert advice)?

The primary reason for supporting IPv6 adoption in our view is to ensure the growth and scalability of the Internet in the future. We support the recommendation to mandate IPv6 as a primary protocol for public sector organisations. Accelerating the transition towards IPv6 is a necessary step to sustain Internet growth and innovation. It also creates better conditions for a competitive market between operators.

IPv6's adoption will allow networks to be future-proof in the sense that IPv6 is becoming an inherent part of many new technologies such as specific 5G use cases (URLLC, mMTC), transport technologies like SRv6, and massive IoT deployments. Furthermore, IPv6 adoption is increasing worldwide with some countries/networks serving most of their information over IPv6. Increasing IPv6 adoption locally will ensure seamless and native communication with these networks, guaranteeing a stable and secure end user experience.

Question 6 of 11

Would you like to respond to the formulated current obligation frameworks for IPv6 ('apply or explain' and target image agreement (obligation to make efforts regarding commissioning before an agreed date)) (Chapter 3, paragraph 3)?

The RIPE NCC recommends dedicated guidelines for administrators and public sector bodies in order to encourage full transition and incentivise deployment on the client side.

Question 7 of 11

Would you like to respond to the expert advice process (Chapter 4 of the expert advice)?

The RIPE NCC has been an active contributor to the recommendations put forward by the expert group and is supportive of bringing on board diverse perspectives following an inclusive approach. We welcome being consulted on this matter and remain available for additional information and sharing technical expertise.

Question 8 of 11

Would you like to respond to the composition of the expert group (Chapter 5 of the expert advice)?

Bringing together expertise from the non-commercial Internet technical community as well as public and private sectors is crucial. And we understand that the Standardisation Forum and Ministry of Interior will take into account the views of a broader range of stakeholders contributing to the ongoing consultation process. We believe the composition of the expert group could be expanded further to include views from a more diverse range of stakeholders, including subject-matter experts and directly affected stakeholders, e.g. representatives of different industry groups and SMEs.

Question 9 of 11

Would you like to respond to the results of the assessment of the main criteria “added value” and “support” (chapter 6 of the expert advice)?

As the Expert Advice noted, while encouraging the implementation of IPv6 across public sector organisations, it is important to emphasise that the full transition to IPv6 will result in additional work and require resources to support IT staff.

Question 10 of 11

Would you like to respond to the additional adoption advice regarding clarification of application areas 1, 2 and 3 and/or specifically to point 2 on the advice “create and publish an IPv6 roadmap by the end of 2025 at the latest” and/or specifically to point 3 on the advice “determine, in addition to the existing purchase obligation, a final implementation date for IPv6 on the workplace/client side by early 2026, partly based on the roadmaps, via a new target image agreement” (chapter 7 of the expert advice)?

The publication of new roadmaps focused on a path towards full deployment of IPv6 is an important step. In this regard, defining a new target agreement and a proposal for the full transition is welcomed. The definition of reasonable time frames allows all concerned parties to deploy IPv6 in a safe and effective manner, e.g. doing proper testing, vulnerability checks and network hardening. It is reasonable to set a new target image agreement including a final implementation date by the end of 2028 for IPv6 on the workplace/client side.

Question 11 of 11

Would you like to provide additional comments to the Forum for Standardisation and Government-wide Policy Consultation on Digital Government (OBDO) regarding the content of this expert advice or the process followed?

The implementation of IPv6 will benefit from a coordinated approach also involving market operators and encouraging collaboration between public administrations and technical experts. Ensuring broad participation in public consultations, the publication of guidelines and sharing of best practices are essential to support a smooth implementation of IPv6, in particular for those public administrations and semi-public entities that are lagging behind.