

What can be done about Internet fragmentation, and who should be doing what?

PNIF Webinar, 27 October 2022

Introduction - IGF Policy Network on Internet Fragmentation

The Policy Network on Internet Fragmentation (PNIF) is an intersessional activity of the Internet Governance Forum (IGF), ahead of the 17th annual meeting of the IGF from 28 November to 2 December in Addis Ababa, Ethiopia.

The PNIF was set up to further multistakeholder discussion on Internet fragmentation and offer understanding of what Internet fragmentation is, of its causes and effects, and explore ways to address fragmentation. Avoiding fragmentation of the Internet is one of the *complex digital issues* the UN Secretary-General, in his report *Our Common Agenda*, recommends addressing in a Global Digital Compact.

Internet fragmentation is being discussed in different places by different stakeholders. The IGF as a unique space and multistakeholder platform allows opening the conversation and bringing in different perspectives. The PNIF is open to all interested stakeholders. Its activities are steered by a Multistakeholder Working Group of experts and led by two Co-facilitators, supported by the IGF Secretariat.

This second PNIF webinar builds on the discussion during the earlier webinar titled *What does Internet fragmentation mean to you? Identifying fragmentation and key stakeholders*. ([Summary](#))

Webinar 2 - What can be done about Internet fragmentation, and who should be doing what?

This report summarises the second webinar organised by the Policy Network on Internet Fragmentation (PNIF). The second webinar builds on the discussions of the first webinar ([summary](#)) and aims at bringing stakeholders on the same page.

The discussion was structured in three thematic blocs under the overarching theme *What can be done about Internet fragmentation, and who should be doing what?:* (1) towards common principles all stakeholders can agree about; (2) achieving policy goals without interfering with the Internet's operability; (3) the role of multilateral and multistakeholder spaces, including the IGF. For each section pre-defined discussants were invited to share initial thoughts, followed by an open discussion.

The summary paraphrases the main thoughts as expressed during the webinar. A recording of the meeting is available at https://youtu.be/kYmFsbD_nWM.

Introduction and recap of the first webinar

Ms Sheetal Kumar clarified that one of the aims of the second webinar was to identify key areas where the policy network could work on addressing issues and identifying solutions to commonly identified or agreed concerns.

She highlighted that discussions at the first PNIF webinar had shown that:

- There are a variety of ways in which people conceptualise internet fragmentation;
- There is a desire and need to be more specific and focused in discussions about fragmentation.
- Varying levels of fragmentation are consistent with the internet's development - the internet 'has never been not fragmented'. However, there are concerns that the phenomenon is getting worse and might have an impact on the internet openness and interoperability.
- Inclusive multistakeholder internet governance is inextricably linked with avoiding fragmentation.

Examples of fragmentation and their boundaries - Roundtable discussion setting the scene for webinar 2

Participants to the webinar were invited to share their views on whether three often cited examples of fragmentation - *alternative protocols for the Internet; data localisation measures; and network disruptions* - should be labelled as such.

Alternative protocols for the Internet

- *Yes, an example of fragmentation because ...*
 - It targets internet interoperability and the dominance of the commonly agreed internet protocols.
 - Yes, but only at the waist of the 'hourglass' (internet protocol layer). Alternative protocols on higher layers will not have an impact - also not on lower layers (although having to do a different 'ethernet' would be problematic for roamers.)
- *No, not fragmentation because ...*

Data localization measures

- *Yes, an example of fragmentation because ...*
 - could be considered part of the fragmentation of Internet governance (which could lead to fragmentation at the technical level)
 - If mandatory, perhaps. (if voluntary, not)
 - For those that are affected by it, it fragments the internet (fragmentation of user experience) and impacts the free dataflows.
 - Implementing data localisation requirements (but also privacy, copyright, content moderation, etc. - 'regulatory frameworks') is costly. This may lead to a situation where only larger companies are able to comply, limiting or fragmenting the available choices for the user.
 - It depends - national data localization regimes come in various forms and flavours (see recent ISOC study on digital sovereignty) - from being limited to national critical infrastructure to requirement for all personal data to be located locally.
- *No, not fragmentation because ...*

- It happens beyond/below the Internet technical layer - it does not tackle the common Internet protocols and identifiers.
- Data localization doesn't lead to loss of interoperability and global connectivity (maybe in the future?)
- If voluntary, not. (if mandatory, perhaps)

Network disruptions

- *Yes, an example of fragmentation because ...*
- *No, not fragmentation because ...*
 - It happens beyond/below the Internet technical layer
 - Short term shutdowns, not (long term disruptions may become a root cause for fragmentation.)

Other suggestions / feedback

- **Fragmentation of the geopolitical information system / free flow of information and ideas:** fragmentation of perceptions and information flows, which is related to the free flow of ideas and the ability of the communities to engage in a healthy global dialogue. Examples are the global echo chambers (e.g. around the war in Ukraine). There's a risk that this feeds global issues and discussions and exacerbates a level of conflict among nations.
- **Fragmentation of policies:** resulting from a political will in countries to have a say - their own share of control - on a geographical part of the internet.
- **Fragmentation of the internet vs fragmentation of the user experience,** or fragmentation of the internet vs fragmentation of uses of the internet. Regulatory frameworks may impact the choices available for users.
- The term fragmentation is often used as a **label for undesirable behaviour** of the other party. Using fragmentation in such an alarmist and politicised manner contributes to a fragmentation of internet governance.
- Internet fragmentation has become an **umbrella concept** that covers different things, including user experience, policy, accessibility, access to content, network disruption, etc.
- Internet fragmentation is an all-too-encompassing term, but the key is fragmentation that impacts the technical layer of the Internet and leads to **loss of interconnectivity**.
- There is an interplay and **no strict separation between technical coherence of the internet, social and user experience, and political coherence**. It should not be taken for granted that as long as there is TCP/IP, the internet will be unfragmented. Existing measures, increased data localisation, shutdowns, localised approaches to internet infrastructure, etc. can ultimately affect the technical core of the internet.
- A control over information and information flows can damage the multistakeholder model. A damaged multistakeholder model might damage the current governance of the internet's technical layer and risk connectivity and interoperability.
- There is a duality as some steps multilateral organisations are taking, e.g. with regard to root zone servers and the DNS, can potentially have negative effects on the internet's technical layer. However, at the moment this does not challenge the dominance of the Internet protocol on the technical layer.

Towards common principles all stakeholders can agree about

Discussant: Mr John Hughes.

Input from the 1st webinar: *The internet has never been not fragmented and varying levels of fragmentation are consistent with the development of the internet. However severe fragmentation that causes malfunctioning or breaking the internet is inconsistent with the ideal of an open interoperable internet that respects human rights and allows for critical access.*

questions: What are common principles or a common minimal denominator all stakeholders can and should agree about?

Mr John Hughes, Global Head of Geopolitical Public Policy Strategy at Twitter, made the observation that the PNIF, which was initially technically oriented, added the matter of user experience to its discussion. Getting away from the purely technical approach and including practical considerations about what to avoid now and in the future in order to preserve the benefits of the internet for its users (including people, businesses, governments, civil society, etc.) will increase the relevance of the PNIF.

From a content delivery perspective, and acknowledging that universal access and connectivity is an essential prerequisite, the following baseline considerations apply :

- 1) The open internet should be global, available to all, built on open standards and the protection of human rights;
- 2) Trust is essential and is based on transparency;
- 3) Privacy protection is key, including human choice and control of the own online experience;
- 4) Competition, choice and innovation have to be protected;
- 5) Content moderation should be more than 'leave up or take down'.

Policy approaches to avoid internet fragmentation

Discussant: Mr Greg Nojeim.

Input from the 1st webinar: Fragmentation can be caused by technical, governmental or commercial practices. There's a need for further and precise discussion about fragmentation, practices and what should or shouldn't be done, including a dialogue on how legitimate goals can be achieved without interfering with the internet's operability.

Questions: What are examples of practices to achieve policy goals that are good alternatives to existing activities that risk to affect the interoperability of the internet?

Mr Greg Nojeim, Senior Counsel & Co-Director of Security and Surveillance Project, Center for Democracy and Technology considers the free flow of data across the internet and the policies that limit it as a relevant framework to discuss internet fragmentation. Policies that lead to fragmentation typically address compelling societal problems (terrorism, child abuse, disinformation, etc.). Governments will address these problems. The question is to find policy approaches that reach the objectives while avoiding that they cause fragmentation.

The human rights framework is a useful reference to assess if a measure is proportional to the problem or if there are alternatives that have a lesser impact on human rights. It's important to recognize that not all threats to the free flow of data have a negative effect. The optimal approach is the win-win scenario, where the impact on the free flow of data results in an increase in rights of the people whose data is at stake.

Open discussion and feedback

Mr Chris Buckridge noted that the discussion should focus on fragmentation that should be avoided, in line with the priority suggested in the UN Secretary General's Our Common Agenda. He suggested a distinction between fragmentation of dataflows versus fragmentation that jeopardises the possibility of re-establishing data flows because it irreversibly fragments the internet.

Ms Tatiana Tropina commented that some policies that per definition create fragmentation (such as GDPR) may enhance the user experience. She made the observation that digital authoritarianism and digital democracy are making use of the same tools to protect their own survival or to protect the citizens/users. Policy makers that aim to protect the users and enhance user experience should not target the connectivity on the logical/technical layer. Unfortunately, policy makers often do not understand how the internet works.

Role of multilateral and multistakeholder spaces, including the IGF

Discussant: Ms Tatiana Tropina.

Input from the 1st webinar: Both multilateral and multistakeholder spaces are relevant and have their own role to play. That the narrative of fragmentation is becoming mainstream and its discourse interwoven with security and competition concerns is a worrying evolution that may impact multilateral cooperation and the multistakeholder model supporting the open interoperable internet.

Questions: What are priorities for the different stakeholders? What concerns should be addressed where?

Ms Tatiana Tropina, Assistant Professor in Cybersecurity Governance, Institute of Security and Global Affairs, Leiden University, Netherlands, prefers a techno-centric approach that is focused on what to do to preserve the interoperability of the internet. This approach does not necessarily mean preserving existing standards, but rather ensuring that any new standard that is developed is interoperable and widely adopted. Some governments are supportive of an open and interoperable internet, but when it comes to policies they opt for policies that in practice risk to break it (e.g. the EU proposal targeting the DNS and DNS Root Zone).

In multilateral venues, governments that strongly support the multistakeholder governance of the technical layer of the internet should adhere to this commitment. Stakeholders should remind and push them to do so. Secondly, governments keep their commitment to multistakeholder governance. In recent years the commitment to the multistakeholder governance of the technical layer has watered down significantly, and there are signs of a conceptual reframing from 'multistakeholder governance of the technical layer' to 'need for stakeholder engagement in internet governance'. One should be aware of this changing narrative that points at different underlying concepts.

Multistakeholder spaces are well suited to discuss and map all the kinds of issues that are being included under the label fragmentation, for example related to control, user experience, commercial practices, user empowerment, content moderation, human rights issues etc. . Most of these issues are already being discussed and often practices and solutions are available. An overall framework discussing fragmentation needs to take into account this past and ongoing work. Also multilateral venues such as the OEWG, or the Ad Hoc Committee on Cybercrime touch on issues that can be framed as fragmentation - as far as stakeholder input is allowed, stakeholders should keep on pushing for human rights and free flow of information on the internet.

Open discussion and feedback

Ms Anriette Esterhuysen noted that it is worth asking when and why the debate about fragmentation became so prominent. The term emerged from a geopolitical context and is often used in the context of a Northern/Western response to bad policy making in the global South or countries in the East. The concept is easily used by like-minded countries to demonise what not-like-minded countries are doing in internet policy making. This easily distracts the attention from talking about the actual policy challenges and dealing with the problems.

Ms Lynn St Amour suggested that there might be merit in separating the techno-centric discussion on fragmentation from the discussion on fragmentation of the user experience. This may help to pull in more participation from different communities (e.g. from the technical community) in both discussions and allow to work on two fronts. It may also be valuable to evaluate some issues and threats that historically have been pictured as bad and to be avoided, and frame them in a context of trade-offs.

Ms Tatiana Tropina stressed the importance of educating policy makers and explaining the risks and consequences for the interoperability of the internet of certain measures that intend to address legitimate concerns.

Potential outline for PNIF framework on fragmentation

Based on the discussion, *Ms Sheetal Kumar*, proposed to start exploring a framework that has three different parts:

- (1) Fragmentation of the user experience, information flows and control.
- (2) Technical layer fragmentation.
- (3) 'In-between' where the technical development of the internet tends to lead to fragmentation of the user experience.

It was noted that a framework should also include institutional policy and governance processes, as diverging approaches to internet policy and governance could in the longer run lead to fragmentation. E.g. if there is a disconnect between the technical interoperability of the internet and how we think and act around it from a public policy perspective. In the long run this can break the user experience and even more.

Next steps

The PNIF will set up a working call to further refine and develop a draft framework to then later take to the IGF meeting to further socialise and discuss. The framework could then serve as a starting point for next year's PNIF work.
