Table of contents

1. Towards a PNIF framework for discussing fragmentation 2
   1.1. Introduction 2
   1.2. Purpose of the framework 2
   1.3. Overview of the draft framework 3
   1.4. Unpacking the draft framework 4
      1.4.1. Fragmentation of the User Experience 4
      1.4.2. Fragmentation of the Internet’s Technical layer 5
      1.4.3. Fragmentation of the Internet Governance and Coordination 5

2. Feedback 6

Acknowledgements 6
1. Towards a PNIF framework for discussing fragmentation

1.1. Introduction

Internet fragmentation is a complex issue. The many views, diverse opinions, different conceptualisations and definitions of what is and what is not internet fragmentation, or what fragmentation - in the context of the UN Secretary General’s Our Common Agenda - should be avoided or addressed can hinder an open and inclusive dialogue, and discussions on common guidelines or principles.

The PNIF webinars and discussions\(^1\) confirmed this diversity of opinions, and an attempt to deduct a common definition of internet fragmentation via a survey launched earlier in the year hasn’t been successful. Through the discussions, however, emerged elements of a framework that could serve to guide and orient future discussions.

The draft framework for discussing internet fragmentation constructed in this document is unfinished. It will be discussed at the PNIF session during the upcoming IGF meeting, and remains open for comment. The aim is to have a refined and more mature framework ready for the second phase of the PNIF in 2023, focused on identifying potential causes of fragmentation and defining solutions and policy approaches to avoid fragmentation.

1.2. Purpose of the framework

The overall goal of the framework is to serve as a general guiding and orienting tool for continuing the dialogue about fragmentation and bringing in more people and stakeholders. The framework should allow a more holistic and inclusive debate, and at the same time, create space for focused discussion and work towards concrete solutions, policy approaches and guidelines.

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\(^1\) Recordings and summaries at https://www.intgovforum.org/en/content/policy-network-on-internet-fragmentation
1.3. Overview of the draft framework

The elements of the draft framework emerged during the PNIF webinars and subsequent working session. The PNIF is seeking community feedback on its draft framework during the IGF meeting or via the feedback form at https://forms.gle/f1C7fP3QWuoJ715q9.

The draft Framework that emerged from the PNIF discussions conceptualises three key dimensions of fragmentation:

- fragmentation of the user experience,
- fragmentation of the Internet’s technical layer, and
- fragmentation of Internet Governance & coordination.

The Framework indicates that technical, political and commercial developments and their intended or unintended consequences may or may not have an impact on fragmentation.

The Framework captures potential relationships and overlap between the dimensions, between technical fragmentation, user experience fragmentation, as well as governance fragmentation.

This year the PNIF is focussing on conceptualising the framework, to then next year populate the framework with concrete examples and facilitate focused dialogues on policy approaches and explore guidelines to avoid internet fragmentation.
1.4. Unpacking the draft framework

This section unpacks the draft framework and provides an overview of the current state of the discussions.

1.4.1. Fragmentation of the User Experience

**Conceptualisation**

Fragmentation that results in a different user experience of the Internet, depending on where one is accessing from (or not accessing).

Fragmentation with regard to the user experience can result from
- not having effective or affordable access* to infrastructure;
- interventions by states (e.g. blocking, shutdowns, censorship);
- or corporations (content control, walled gardens, etc.).

(*intended are differences in access among internet users; it was argued that the divide between the unconnected and those connected to the internet should not be considered internet fragmentation)

**Reference framework to assess fragmentation**

The Human rights framework and need to maintain a free flow of data could be used to evaluate measures that impact the user experience and assess if the measures enhance the user experience or have a negative impact and as such should be avoided.

**Potential overlap and links with other dimensions of fragmentation**

- Potential link with technical layer fragmentation when a continued disruption of the access to the free flow of data (e.g. because of blocking or filtering) leads to creation of alternative and separate applications and services that constitute separate ecosystems not interoperable with the internet.

**Comments**

- Important to understand and map the concrete measure-specific impact on fragmentation of the user experience;
- Some issues related to fragmentation of the user experience are already being discussed and addressed as issues relating to access in other venues, and so the specific nature of how these issues relate to/map onto the issue of internet fragmentation should be further explored
1.4.2. Fragmentation of the Internet’s Technical layer

*Conceptualisation*

**Fragmentation that challenges the interoperability of the internet**

Fragmentation of the technical layer that makes the internet work caused by
- Interference with the public core* of the internet.
- The creation of ‘national internets’ limited within geographic borders;
- Routing of internet traffic via the private infrastructure by big tech companies.

(*the public core is not universally defined)

*Reference framework to assess fragmentation*

The interoperability of the global internet infrastructure.

*Comments*
- It is important to differentiate between the fragmentation that has a negative impact on the interoperability on the transport layer and existing decentralisation in the organisation of the internet infrastructure (e.g. related to the management of the IP address space or the Domain Name System).

1.4.3. Fragmentation of the Internet Governance and Coordination

*Conceptualisation*

**Fragmentation of Internet Governance and Coordination** that manifests through
- a changing commitment to the Multistakeholder management of the technical layer of the Internet;
- a lack of a global commitment and framework across multilateral and multistakeholder venues, governments and stakeholders to address global internet policy issues from a human rights and free flow of data perspective.

*Reference framework to assess fragmentation*

*Potential impact on other dimensions of fragmentation*
- Fragmentation of multistakeholder governance (i.e. competition or duplication between standards bodies like IETF or ETSI) can drive fragmentation at the technical layer (competing alternative protocols for transport security for example)
Comments

- Policy makers should refrain from intervening in the technical layer of the internet to advance their own objectives. When developing policy or regulation they should aim at strengthening the multistakeholder governance model of the internet and protecting key characteristics of the internet’s technical layer.

2. Feedback

Join the PNIF session at the IGF 2022 in person or online.
Wednesday 30 November 2022, 9:30-11:00 am (6:30-8:00 am UTC)

and/or

Provide feedback via the online form at https://forms.gle/f1C7fP3QWuoJ715q9.

Acknowledgements

The Policy Network on Internet Fragmentation (PNIF) is an intersessional activity of the Internet Governance Forum (IGF).

PNIF webpage
https://www.intgovforum.org/en/content/policy-network-on-internet-fragmentation

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