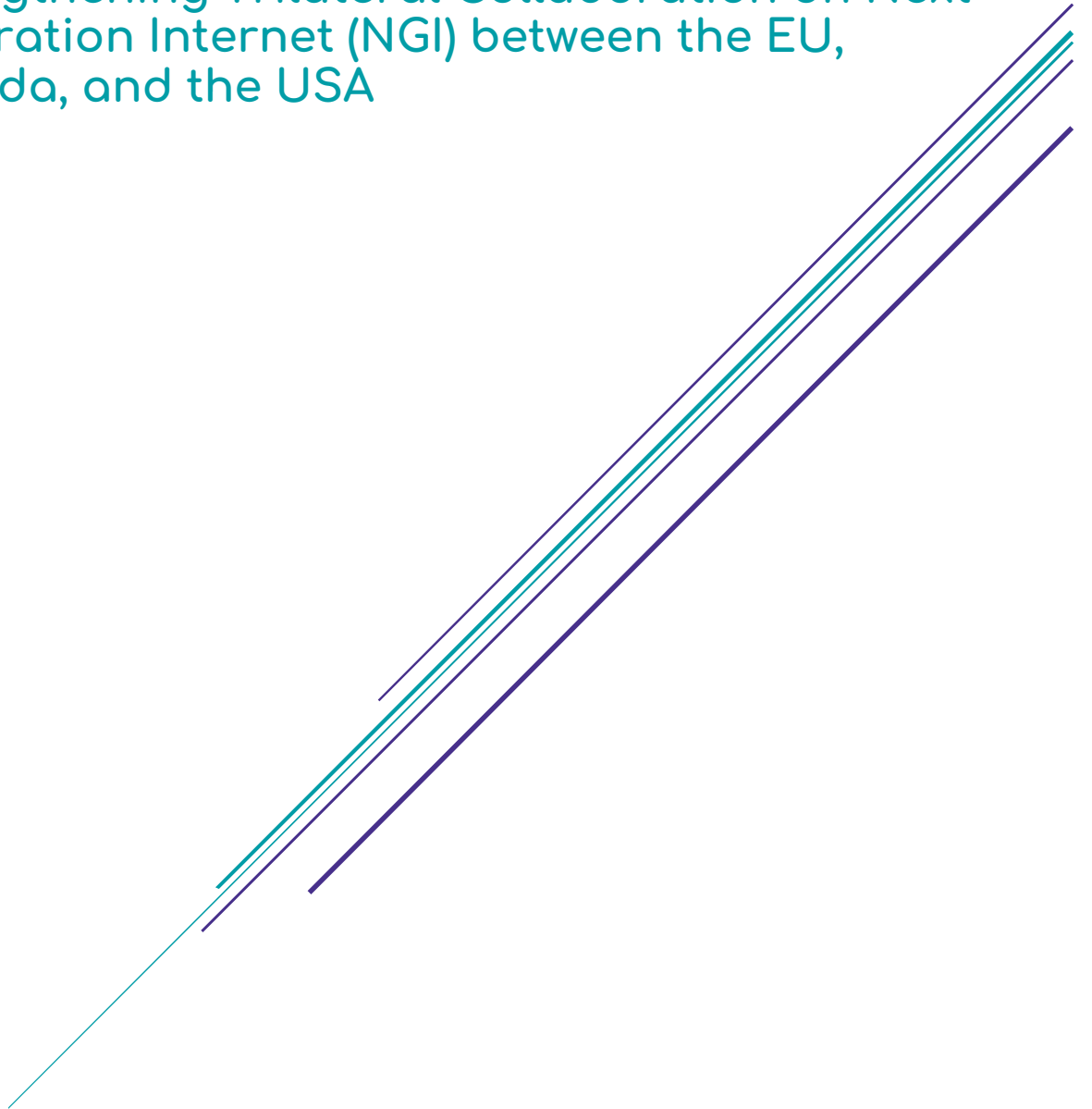




SARGASSO

D5.3 POLICY BRIEF

Strengthening Trilateral Collaboration on Next Generation Internet (NGI) between the EU, Canada, and the USA



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Executive Summary

This policy brief presents **strategic recommendations for strengthening trilateral collaboration on the Next Generation Internet (NGI)** initiative among the European Union, Canada, and the United States. It highlights the critical need for **synchronized policies, joint research initiatives, and uniform standards** that bolster innovation, security, and inclusivity within the NGI framework.

Through initiatives like NGI Sargasso, collaboration between these regions has already laid the groundwork for more resilient, trustworthy, and inclusive internet infrastructures. However, persistent challenges such as differing regulatory environments, inconsistent resource allocation, emerging cybersecurity threats, and technical interoperability barriers continue to impede progress.

Insights from academia, industry, and government underscore these issues and advocate for clear solutions. The brief recommends forming a formal trilateral agreement, initiating collaborative research and innovation programs, aligning data protection laws, creating **shared cybersecurity strategies, promoting academic and professional exchanges, and simplifying administrative procedures.** These steps aim to streamline collaboration and maximize the collective expertise and resources of the EU, Canada, and the USA.

By addressing these challenges through coordinated efforts, this trilateral partnership can lead in shaping a robust, secure, and user-centric global internet infrastructure.

Introduction

NGI Sargasso shares the common values that connect all projects funded under the umbrella Next Generation Internet (NGI) initiative. As such it fosters, through a series of open calls, projects that can contribute actively to building a more **human-centric internet that is resilient, trustworthy, and inclusive**. The true innovation of NGI Sargasso lies in its **fundamental requirement for collaboration between the EU states, the USA, and Canada**. This international cooperation enables beneficiary teams to elevate their projects by leveraging shared values and complementary strengths, ultimately achieving their goals more effectively. Such enhanced cooperation **fosters joint research projects, shared standards, and a stronger global influence on internet governance**.

The NGI initiative seeks to improve the internet infrastructure to meet future needs, focusing on key areas such as **cybersecurity, data privacy, artificial intelligence (AI), and blockchain technologies**. Given the technological prowess and innovative capabilities of the EU, Canada, and the USA, a trilateral partnership can significantly accelerate progress in these areas, ensuring that the NGI framework is robust, secure, and beneficial for all users.

Building on the collaborative foundation established by NGI Sargasso, a robust network of stakeholders and experts has emerged through previous Open Calls. This network is well-versed in various aspects of interoperability, technology, policy, and international laws. The project has nurtured these connections in multiple ways. For instance, AUSTRALO has linked with numerous innovation hubs, national contact points, research centers, and universities during the recruitment phase for potential applicants, such as Linux Foundation Europe and EURAXESS North America. Meanwhile, Mobile World Capital, tasked with developing and maintaining the on-campus program, has formed relationships with key industry experts, providing beneficiaries with valuable insights and inspirational talks.

Consequently, **we have become a platform for discussion and gathered valuable recommendations for strengthening trilateral collaboration on Next Generation Internet (NGI) between the EU, Canada, and the USA**. This was achieved both by soliciting the opinions of our beneficiaries, who are the direct subjects of our project, and by leveraging the connections with newly

acquired key experts. These experts discussed challenges and issues and provided recommendations to facilitate this mission.

Problem Description

Despite the potential benefits of collaboration, several challenges hinder effective trilateral cooperation. These include:

- 1. Regulatory Divergence:** Differing regulatory frameworks and privacy standards across the regions. For example, the General Data Protection Regulation (GDPR) in the EU sets stringent data protection standards that are not mirrored in the US or Canada, creating compliance challenges for companies operating internationally.
- 2. Resource Allocation:** Varied levels of investment in NGI research and development. While the EU has significant funding mechanisms like Horizon Europe, the US and Canada have different funding landscapes that may not always align in terms of priorities or timing.
- 3. Security Concerns:** Cybersecurity threats and the need for robust, unified defense mechanisms. The increasing frequency and sophistication of cyberattacks necessitate a collaborative approach to develop and deploy effective countermeasures.
- 4. Interoperability Issues:** Lack of common technical standards hindering seamless technology integration. For instance, differences in internet protocols and data exchange formats can impede the development of interoperable systems and services.
- 5. Administrative Burdens:** Perceptions of burdensome EU funding processes that deter potential collaborators from the US and Canada. Historical stereotypes about the complexity of EU funding applications can discourage participation, even as recent reforms have aimed to simplify these processes.

Stakeholder Feedback

Stakeholders from academia and industry across the three regions have provided insights into these challenges and potential solutions:

Academia

- **Emphasize Collaborative Research:** Universities and research institutions stress the importance of joint research programs to share knowledge and resources, particularly in emerging technologies such as AI, quantum computing, and cybersecurity. Collaborative platforms like joint research centers and virtual labs can facilitate seamless cooperation.
- **Harmonize Educational Standards:** Aligning curricula and accreditation can facilitate student and faculty exchanges, enhancing the talent pool. Joint degree programs and international internships can further integrate educational efforts across borders.

Industry

- **Promote Innovation Hubs:** Companies advocate for the creation of cross-border innovation hubs to foster startup growth and technology development. These hubs can serve as focal points for collaborative research and development, providing resources and support for innovators.
- **Facilitate Market Access:** Simplifying regulatory procedures can enable companies to enter and operate in all three regions more effectively. Creating streamlined pathways for regulatory approval and market entry can boost cross-border trade and investment.
- **Address Misconceptions about EU Funding:** Highlight that under Horizon Europe, administrative burdens have been significantly reduced compared to past EU framework programs. Providing clear guidance and support for applicants can help overcome these misconceptions.

Government

- **Coordinate Policy Frameworks:** Governments highlight the need for harmonized regulations and policies to ensure consistent data privacy

and security standards. Developing mutual recognition agreements and harmonized standards can reduce regulatory friction.

- **Increase Funding for Joint Initiatives:** Investment in shared research projects and infrastructure is crucial for long-term collaboration. Coordinated funding calls and joint funding mechanisms can align financial resources and research priorities.
- **Improve Communication and Coordination:** Built upon existing communication channels with US and/or Canadian institutions and further develop them. In addition, improve understanding of the decision making and funding processes across borders, to leverage funding opportunities and calls that have similar objectives. Regular dialogues and joint committees can enhance coordination and cooperation between European and international funding institutions like the National Science Foundation (NSF) in the US, in the benefit of all.

Specific Insights from Research

Cyber Resilience Act

The new Cyber Resilience Act in Europe will significantly impact software security and product liability. Stakeholders in the US and Canada are generally unaware of this, which may affect their operations in the EU market. Increasing awareness through information sessions and briefings can prepare international partners for these regulatory changes.

Legal and Regulatory Differences

The difference in legal systems (common law vs. continental law) is a barrier. American companies often perceive EU regulations as overreaching. Emphasizing the protective intent behind these regulations could help mitigate this perception. Providing comparative legal analyses and compliance support can aid companies in navigating these differences.

Need for a Common Research Agenda

Aligning the political implementation and practical funding timelines between the regions is essential. Successful models, such as the NSF's "Dear Colleague Letter" (DCL) with Japan, can be replicated for EU-US collaboration.

Establishing joint research agendas and synchronized funding cycles can streamline collaborative efforts.

Administrative Support

Cascade funding programs like NGI Sargasso are beneficial for startups and SMEs. Providing support to navigate these programs is crucial. Offering dedicated advisory services and application assistance can enhance participation and success rates.

Recommendations

1. Develop a Trilateral NGI Charter

- **Establish a Formal Agreement:** Create a trilateral charter outlining shared goals, principles, and standards for NGI development. This charter should include commitments to open data, cybersecurity, and digital rights.
- **Create a Governance Structure:** Form a trilateral NGI steering committee to oversee and facilitate collaboration. This committee can coordinate efforts, monitor progress, and address emerging challenges.

2. Launch Joint Research and Innovation Programs

- **Fund Collaborative Research Initiatives:** Focus on key NGI areas such as AI, cybersecurity, and internet governance. Joint funding calls can attract high-quality proposals and foster innovation.
- **Promote Public-Private Partnerships:** Leverage industry expertise and resources to complement academic research. Collaborative projects can accelerate the commercialization of innovative technologies.

3. Harmonize Regulations and Standards

- **Align Data Privacy Laws:** Develop mutual recognition agreements for data protection standards. Harmonizing regulations can reduce compliance costs and enhance data flows.
- **Develop Common Technical Standards:** Ensure interoperability of NGI technologies by adopting shared standards. Joint technical committees can facilitate the development and adoption of these standards.

4. Enhance Cybersecurity Cooperation

- **Create a Trilateral Cybersecurity Task Force:** Address shared threats and vulnerabilities through coordinated efforts. This task force can conduct joint threat assessments and develop unified response strategies.
- **Share Best Practices and Technologies:** Improve collective defense mechanisms by sharing successful cybersecurity practices and advanced technologies.

5. Promote Talent Exchange and Capacity Building

- **Facilitate Academic and Professional Exchanges:** Build a diverse and skilled workforce through student and faculty exchange programs. Joint training initiatives can enhance the capabilities of future leaders in NGI technologies.
- **Invest in Joint Educational Programs:** Develop curricula and training programs focused on NGI priorities. Collaborative educational efforts can prepare the next generation of researchers and innovators.

6. Streamline Administrative Processes

- **Highlight Improvements in EU Funding Processes:** Emphasize the reduced administrative burdens under Horizon Europe. Clear communication and support can attract more participants.
- **Provide Support for Potential Partners:** Assist in navigating funding applications and compliance requirements. Dedicated advisory services can increase participation and success rates.

7. Leverage Dissemination Partners

- **Collaborate with Key Organizations:** Engage with ECCIR in Canada, the European-American Chamber of Commerce in the U.S., ENRICH in the USA, the EU Delegation's office in San Francisco, European researcher diaspora networks in the U.S., and European embassies and consulates in the U.S. and Canada.

Conclusion

Strengthening trilateral collaboration on the Next Generation Internet between the EU, Canada, and the USA offers significant **benefits in driving innovation, ensuring security, and fostering inclusivity**. By addressing regulatory, resource, and interoperability challenges through coordinated efforts, these regions can lead the way in creating a resilient and human-centric internet for the future. The recommendations outlined in this brief provide a **roadmap for achieving these goals through strategic collaboration and mutual support**.