Contribution to the October 2019-January 2020 Open Consultation of the ITU CWG-Internet

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Summary

Progress towards every single one of the 17 goals and 169 targets of Agenda 2030 hinges on the effective deployment of digital technologies**.** As the UN Secretary General's High Level Panel on Digital Cooperation has flagged in its 2019 report, this cannot be restricted to the idea of promoting access to connectivity technologies. In the age of digital interdependence, a transformative vision in relation to Agenda 2030 requires building digital ecosystems, including elements such as public data pools and public platforms. Only by overcoming crucial weaknesses in the current data economy will such ecosystems be able to catalyse and sustain progressive socio-economic change. A binding international treaty on data – enabling states to develop national policy frameworks for the governance of their data resources – is necessary for the realisation of the sustainable development goals (SDGs).

Background and Introduction

On 20 September 2019, the CWG-Internet decided that Open Consultations would be convened on the following issue:

> International internet-related public policy issues on harnessing new and emerging telecommunications/ICT for sustainable development. Questions:
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> 1. How will new and emerging telecommunications/ICTs impact both the internet and sustainable development, including the digital economy?
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> 2. What are the opportunities and challenges for the adoption and growth of the new and emerging telecommunications/ICTs and internet?
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> 3. How can governments and the other stakeholders harness the benefits of new and emerging telecommunications/ICTs?
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> 4. What are the best practices for promoting human skills, institutional capacity, innovation and investment for new and emerging telecommunications/ICTs?

1. How will new and emerging telecommunications/ICTs impact both the internet and sustainable development, including the digital economy?

In order to make real progress towards Agenda 2030, it will be necessary to envisage public provisioning of digital infrastructure – that is, treating these resources as a public good that anyone can use without charge (non-excludable) and without preventing others from using it (non-rivalrous). Just to mention a few examples:

a) Estonia's digital citizen identification system and X-road federated data exchange infrastructure founded on privacy-by-design principles has enabled the creation of an inclusive public service delivery system in the country where over 2000 services can be accessed online.

b) In India, the Ministry of Commerce's proposal for re-tooling the Government e Marketplace (GeM) platform for online government procurement into a publicly-owned business to customer (B2C) marketplace can provide a fillip to micro, small and medium enterprises (MSMEs). The common database of health images (anonymised and based on voluntarily donations by patients

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of their personal health data) proposed by the EU could be a valuable resource for public health research.

c) The global platform for Big Data in Agriculture set up by the Consultative Group on International Agricultural Research (CGIAR) Trust Fund and UK-Aid, a public sectoral data repository organised on open data principles, can contribute to innovations for farm productivity and enhance food security.

d) The Institute of Electrical and Electronics Engineers' (IEEE) standards association is currently leading the development of an open standard (P-7003) to eliminate algorithmic bias in autonomous/ intelligent systems – which can be an important contribution to the development of an AI commons.

2. What are the opportunities and challenges for the adoption and growth of the new and emerging telecommunications/ICTs and internet?

The idea of creating digital public goods seems to be gaining traction in global and national development policy spaces: whether it be initiatives in the UN system or national AI strategy road maps. However, there are some significant challenges in this regard, with the arc of public policy in the digital domain having to play catch-up with the arc of industry-led digital innovation. Key challenges include the following:

2.1 Public data pools

Public data pools are pivotal to unlock the public value of data and 'digital intelligence' (the sociological description of AI) and build an inclusive digital innovation environment. This imperative assumes greater significance in a global digital economy founded on the bed rock of data extractivism. However, such data pools prove to be difficult to create, especially in countries of the Global South where legacy public data sets may not exist in annotated and machine-readable form and born-digital data from their territories is captured by transnational digital companies. Instituting mandatory data sharing obligations on the private sector to share data sets that are deemed to be of critical public importance then becomes essential in this scenario.

But evidently, the mere existence of a data sharing mandate cannot ensure compliance from transnational digital corporations who wield immense market power. As the national AI strategy road maps of France and India observe, enforcing such data sharing requirements is possible only through exercising strict control over the transfer of data outside national borders, and claiming jurisdictional sovereignty over data resources generated in one's national territory. Unfortunately, national-level policy measures for data localisation become very difficult to enforce in the current digital trade negotiation climate where the hegemonic view is that of free data flows. Any departure from this stance is cast as trade-impeding digital protectionism by powerful trade blocs. Countries in the Global South thus find it difficult to assert their sovereign right to appropriately regulate data flows in different sectors based on their strategic economic interests.

2.2 Data as an economic resource

Balancing the interests of data principals, innovators who build digital intelligence solutions from data, the rights of individuals/communities affected by such intelligence innovations, and the broader public interest, is necessary to ensure that data resources are deployed towards inclusive and sustainable development.

A framework to govern access, use and control rights in data has to effectively navigate multiple and conflicting interests. This calls for a well-evolved legal imaginary of data ownership. Existing legal

frameworks predominantly account for the rights of database creators/compliers, either through copyright/contract law (the US standard) or a *sui generis* right of database owners preventing reutilisation (the EU standard). In the wake of the privacy debate, emerging frameworks to confer individual control tend to reduce ownership over personal data to consent-based self-determination, which is an unsatisfactory solution. Individual agency and choice in the platform economy is constrained, with users unable to leave dominant monopoly platforms and having to agree to complex and unintelligible terms of use. Further, the boundaries of personal data mining for economic activity also entails societal and public interest, automatically impinging upon a vast user base, and cannot be a matter of individual preference.

There seems to be a silence on the ownership aspects of what may be described as 'community data' – that is, the sum total of aggregate, de-identified personal datasets; data about natural resources; infrastructural artifacts etc., that cannot be traced back to individual data principals. One possibility that has been put forward is that such datasets ought to be treated as the pool over which the nation state can exercise sovereign rights. The governance frameworks for such community data pools need an associated framework of collective rights in data, that is, the rights of political/geographic/interest-based communities underpinning such data. This will be vital to forestall the real threat of misappropriation of community data or the data commons of communities.

In a context where the building blocks of AI innovation are in private hands, a restrictive intellectual property rights regime that impedes the growth of public AI technologies is a matter of concern for developing countries. Most countries in the Global South lack the flexibility to determine national patentability standards or introduce compulsory licensing requirements for data-based digital innovation. As the UN World Economic and Social Survey 2018 has highlighted, the existing Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) regime curtails this policy space. E-commerce proposals mooted by the Global North at the World Trade Organization (WTO) and in other plurilateral forums also call for a complete prohibition on source code/algorithmic disclosure requirements.

2.3 Essential platform utilities

In the digital economy, dominant platforms such as Google, Amazon and Facebook have become crucial mediators of economic and social interactions. These platform behemoths control entire economic ecosystems, exercising three distinct forms of power: gatekeeping power to determine their membership; transmission power to direct, determine and manipulate activity flows among their members; and scoring power for indexing/ranking that influences decisions by actors in the ecosystems they control.

A debate on how competition law needs to be revamped is rapidly gaining momentum in a context where dominant digital platforms are widely noted as abusing their position of dominance. The mainstream policy thinking has been to find solutions centred around user control and choice, such as, protocol interoperability and data interoperability rules that encourage users to multi-home and experiment with new platforms. This approach is rooted in the belief that digital innovation can flourish with greater competition. But this view does not fully account for the self-aggrandising and centralising nature of network-data effects. Today, big platforms are what they are because of the self-propelling might of their algorithms. With a planetary scale user base, they have been able to amass the data that entrenches their first mover advantage. Once in, users find it hard to leave. Thus, dominant platforms assume the character of a quasi-public essential infrastructure. Under these circumstances, interoperability rules may not really help and could even benefit the first mover. For example, a powerful incumbent with a larger user base will be able to benefit much more when reciprocal data interoperability and protocol interoperability arrangements exist. It is better able to leverage the data

from smaller competitors offering allied services, building more stickiness into its offerings. Even in the EU, which is at the forefront of the emerging debate on competition policy for the digital era, a public utility-oriented regulatory approach has been rejected, fearing rigidity and inflexibility.

3. How can governments and the other stakeholders harness the benefits of new and emerging telecommunications/ICTs?

3.1 Specific proposals

Successful public provisioning of digital and data infrastructure is predicated on overcoming the data economy challenges as discussed above. Infrastructural investment in digital public goods and national data and AI strategies or digital economy road maps need to be guided by an effective policy framework. In large part, the policy ask is about breaking and reversing the stranglehold of transnational digital corporations over data and digital infrastructure resources. The following actions need to be undertaken on priority by governments:

- ➔ **Building public data pools**: Digitising and annotating existing public data across sectors, especially, social sectors such as health, and opening up such public data for open public use in a machine readable form is an important step. This can lay the foundation for startups and enterprises to build applications and services. Public support for the development of natural language processing technologies in local languages can create standards across data sets, and allow interoperability at a large scale. Based on the twin principles of collective ownership and individual control, projects like DECODE – Decentralized Citizen Owned Data Ecosystem –, funded by the European Commission, have sought to explore how common benefits from data can be harnessed, while vesting with citizens the ability to give and revoke consent for any or all uses of data. Other ideas proposed by the UNCTAD Digital Economy Report 2019 include, commissioning the private sector to build the necessary infrastructure for extracting data, which can be stored in a public data fund that is part of the national data commons. The city of Barcelona is testing a similar system using public procurement contracts to mandate companies (such as Vodafone) to provide the government with the data they collect which it could use for the benefit of the people.
- ➔ **Adopting a mixed data economy ownership regime:** To enable the effective governance of public data pools in a manner that balances competing and conflicting interests in data, appropriate policy frameworks are needed. They need to recognise different categories of access, use and control rights over individual/personal and social-behavioural/non-personal data sets, along the continuum from public good to private property. In a mixed data economy ownership regime, state agencies will have the powers to create public data pools by encouraging voluntary data sharing by citizens and instituting mandatory data sharing measures for private corporations. In the creation and governance of such public data pools, only de-identified personal data sets may be integrated in order to prevent privacy violations. Private firms may be asked to relinquish their exclusive rights over data collected and processed as part of their business where such data is assessed to be of national importance. In case of cultural/knowledge commons or community data, the terms of inclusion in public data pools must ensure that collective rights of local communities in such data are not compromised. Conditionalities about the type of intelligence innovations that can be created on top of such data sets will be necessary to prevent expropriation of the public data commons for private gain. Preferential access for digital start-ups and public research activities will be important.
- ➔ **Putting in place a strategic framework to govern cross-border transfers of data:** Jurisdictional sovereignty over data resources, including the right to institute data localisation measures as per strategic economic considerations, is a cornerstone principle for governments. Developing countries need to preserve this space in trade policy negotiations.

- ➔ **Introducing public interest exemptions in AI patent licensing:** FRAND (Fair, Reasonable and Non-Discriminatory) licensing and compulsory licensing conditionalities for AI innovation can go a long way in enabling developing countries leapfrog current development trajectories.
- ➔ **Recovering the public utility character of essential platform infrastructure:** Current remedies to curbing the risks of privatisation of essential platform infrastructure focus on a) preventing consumer harm stemming from the abuse of market dominance by powerful platforms and b) introducing tighter rules for mergers and start-up acquisitions through which powerful incumbents could further entrench their market advantage. While these approaches are important, they do not address the core problem of reclaiming the public utility character of foundational digital infrastructure. In this regard, two types of structuralist interventions need to be considered: a) preventing platform companies providing essential platform infrastructure from operating in other parts of the value chain in the digital economy and competing with its clients (such as forcing Amazon to choose between Amazon Web Services and its e-commerce marketplace and divest stakes in one of them; or preventing Facebook from launching digital payments solutions) and b) investment in building public options to dominant platforms.

3.2 Towards an international treaty on data

Undoubtedly, nation states cannot effectively undertake these policy measures without a supporting international framework for the regulation of transnational digital corporations, fair use exemptions for intellectual property rights in AI technologies and the governance of cross-border data flows. In the first two areas, there are already existing processes in the multilateral system that need to be leveraged: the negotiations on the binding treaty on transnational corporations and human rights must be closed out at the earliest with a dedicated section on platform companies; and the prevailing intellectual property rights regime must be revisited so that foundational digital infrastructure is made available as a global public good.

With regard to data, it is imperative that the governance of data flows is removed from the space of trade policy negotiations. The need of the hour is a new binding international treaty on data that recognises the sovereign right of states to evolve national policy frameworks for the governance of their data resources, working within the larger rubric of a data constitutionalism that respects, protects, and promotes the civic-political and economic rights of individuals and communities in data resources. As the Executive Director of the UN High Level Panel on Digital Cooperation (HLPDC) has indicated, a multi-stakeholder policy dialogue forum at the international level to build policy traction on data and AI governance issues may be a useful step in the direction of international cooperation in the digital domain. The UN HLPDC's recommendation to reboot the Internet Governance Forum into a Digital Cooperation Forum with due corrections to its historical weakness of lack of concrete action outcomes and dedicated discussion lines for governments/other stakeholders is a concrete direction in this regard.

Finally, in the highly skewed and exceptionally unequal global digital economy, strengthening ODA contributions to digitalisation for development strategies in the global South must be undertaken. As the UNCTAD has flagged, the share of aid for ICT in aid for trade is only a mere 1.2%, and only 1% of project funding of multilateral development banks in developing countries has gone to ICT projects. This needs to shift immediately, through a dedicated mechanism to coordinate development funding for digital public goods that are integral to the realisation of Agenda 2030.

4. What are the best practices for promoting human skills, institutional capacity, innovation and investment for new and emerging telecommunications/ICTs?

See above.

Further reading

- The age of digital interdependence. Report of the UN Secretary-General's High-level Panel on Digital Cooperation, June 2019, https://digitalcooperation.org.
- UNCTAD Digital Economy Report 2019. Value creation and capture: Implications for developing countries, September 2019, https://unctad.org/en/PublicationsLibrary/der2019_en.pdf
- Platform Planet: Development in the Intelligence Economy. Executive Summary of IT for Change's multi-country research study on policy frameworks for digital platforms, August 2019, https://itforchange.net/sites/default/files/2019-09/Platform-Planet-Development-in-the-Intelligence-Economy_Executive-Summary_Sep2019.pdf

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