Joint submission

UNU Institute in Macau
together with its partners, has prepared a joint submission under the topic of

Human Digital Security and Development

Table of Contents

This document has been sent to: digitalcompact@un.org

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Human Digital Security and Development

This report is the outcome of the consultations which took place in the context of the Global Digital Compact (GDC), organized by the United Nations Office of the Secretary-General's Envoy on Technology.

The topic "Human Digital Security and Development" is inspired by the UNU Macau institute's main research foci, which are participation and systems thinking, connected via collective intelligence and foresight. It is about reducing the threats and negative impacts while enhancing the opportunities and benefits to and for humans from the use and development of data and digital technologies. Digital Human Security and Development is about including, empowering, enhancing capabilities and securing/protecting a human-centered approach in the development and application of digital technologies.

UNU Institute Macau has focused on one health, climate change, technology and ethics and the digital divide. Other areas included under the overall topic can include: cybersecurity, cyberbullying, women's access to technology, AI regulation, data management and knowledge creation, governance of the digital commons, digital identity and digital communities, and others.

The following workflow was followed during the consultation process:
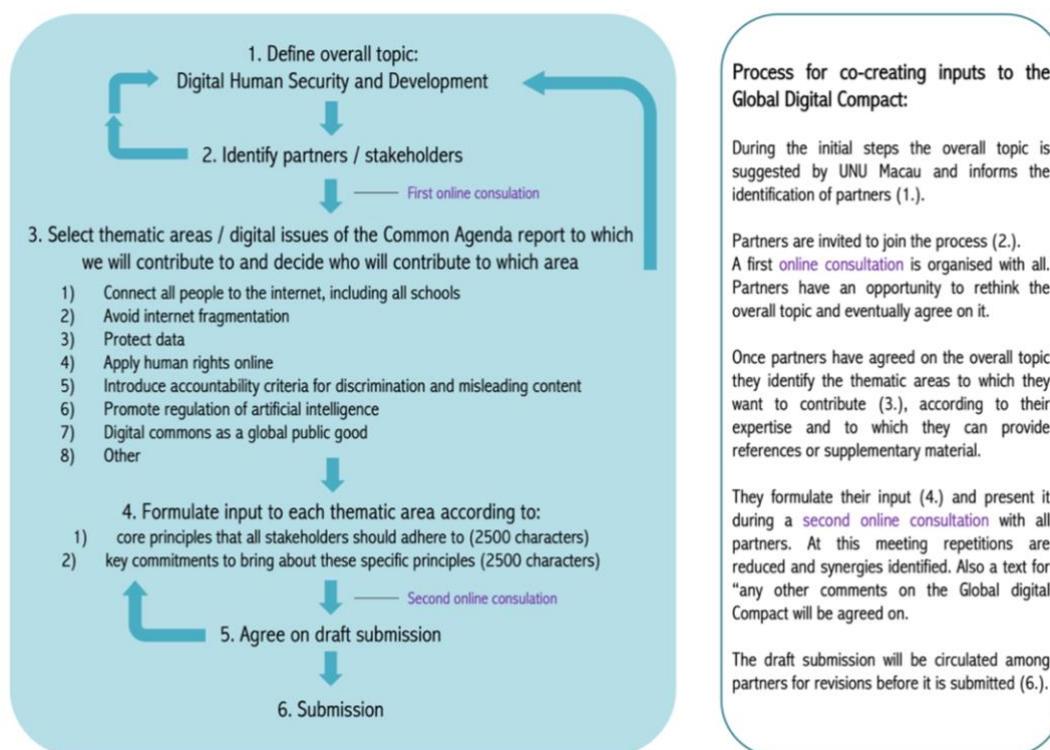
1st online consultation: 13 Dec 2022
2nd online consultation: 14 Dec 2022
3rd online consultation: 14 March 2023
Submission online: 27 March 2023

Active participants in the consultation meetings

The following bullet points do not reflect the full richness of the discussions held in each of the working groups. They merely aim at drawing attention to issues under each of the topics.

1. Connect all people to the internet, including all schools
Members: Abisoye Bello, Helani Galpaya, Karen Bett

Principles:
- Affordability, inclusion, safety, speed, need to contribute to people's wellbeing. Connectivity is a right. Connectivity is not automatically leading to better educational outcomes. Meaningful connectivity is a moving target, the KPI today will be different from KPIs in the future.
- Digital literacy. Having schools connected doesn't guarantee better education. Only when teachers actively use the connectivity and resources online to put in the curriculum, the students can benefit from it, and the educational outcomes would be improved. Funding policies must ensure this is achievable.
- Human rights approach to data moving to connectivity - we cannot connect people if communities don't want to be connected.
- Focus on groups who are equity deserving, underrepresented in AI and digital development and governance: Gender, low-income, age, PWD, minorities. Their access needs to be considered.

Commitments:
- Remove policy barriers to for better connectivity. Governments needs to engage.
- Financial investments in improved investments for better connectivity and capacity to access and engage with new technologies.
- Put digital infrastructure in place to enable innovation. Start-ups and innovation should be enabled by connectivity.
- Engage civil society organizations, non-profit organizations involved in human rights, SDGs, climate action, food security, communities in connectivity improvement, digital infrastructure and access to AI and data.
- Create accessible learning opportunities, creative outreach engagement and conduct continuous assessment of their impact;

2. Protect data
Members: Fabien Pfaender, Thy Try, Khairil Zhafri

Core principles
- Data should be free, open and non-personal to the extent possible, or access made conditional to SDG, mission-oriented purposes.
- Transparency and accountability in compliance with standards, rules and digital economy partnerships focused on green and blue economies.
- Mechanisms for redress and remedy for violations should be in place.
- Confidentiality, data sovereignty and the legality of collection, storage and distribution of data needs to depend on the type and purpose of the data related activity.

Key commitments
- Protection of data and protection of rights of citizens as data subjects.
- Address the dilemma of how to balance competing interests: rights to data need to be protected but can also be used for the public good, by implementing mission-oriented (SDGs, human rights) data collaborative models such as data trusts.
- Put in place international standards on data protection and converge PDP laws.
- Institutionalize discourse processes and dialogues on the use of open data, especially when there are conflicting interests, e.g., individual rights vs public/national interests.
- Put in place interministerial, multidisciplinary workgroups that are enabled to gather data, assess the impact of AI on women, and of women on AI, and setting concrete targets to drive gender balance

3. Apply human rights online

Members: Bryan, Soraj Hongladarom, Malavika Jayaram, Patrick Pang, Cara Antonaccio, Tomasz Janowski, Sophie Hoogenboom, Stephanie Santos

Core Principles
- Data should be free, private and secure.
- Access to common data resources through a data community.
- Right to be forgotten.
- Dignity in online identities.
- UDHR – Universal Declaration on Online Human Rights, fundamental (human) rights in the digital space
- Anonymization of personal data
- Security - free from harassment
- Fair and equal digital education; those unable to access online education should not be harmfully affected by their lack of knowledge stemming from the online world.
- #1 City authorities, not technology corporations, are driving smart city initiatives, on behalf of city residents.
- #2 Government automation initiatives should be human-centered, they should not compromize on human or social rights to achieve economic or efficiency gains.
- #3 Ensure that people from all parts of the world have an equal ability to access the internet and make use of its benefits in order to exercise their human rights.
- #4 The use of public resources to further short-term political goals by sawing division in the digital space and beyond is illegitimate.

Key Commitments
- Internet governance: provide access and enable engagement for different stakeholders and aim at detecting and preventing dis/misinformation without restricting human rights
- Improve digital literacy; and expand concepts of ethics to include social, economic, political, cultural and legal impacts of AI
- Implement global agreements on digital inheritance and the right to be forgotten.
- Materiality of the digital world. Assess the environmental and health effects and digital labor issues (e.g., outsourcing of traumatic labors like content moderation to

global south); use of resources in one locale (electricity/minerals) that are beneficial to another locale.
- #1 Smart city governance bodies to include authorities, businesses and citizens; ongoing monitoring of smart city outcomes against expected benefits and targets; digital channels for citizens to voice their opinions and concerns
- #2 Automation outcomes, particularly on substantive issues, should be subject to human review; automation decisions must rely on well-governed, trusted data; automation initiatives should be supported publicly; they should be part of an overarching digital strategy
- #3 Define what the right to access and benefit from the internet would entail; how this can be implemented (education/regulation) and monitored and by who.
- #4 Countering top-down digital polarization by bottom-up digital solidarity; creating a sense of shared fate; socializing divided groups to work on common projects; delegitimizing the use of public funds to implement divide-and-conquer

4. Accountability for discrimination and misleading content
Members:
Jia Wang, Kerun Sun, Irene Kitsara, Joyee S. Chatterjee

Principles
- Accountability criteria from existing measures, consistent with existing regulations
- Criteria for human rights; freedom of speech
- Accountability regarding mis/disinformation by different stakeholder groups
- Algorithmic biases lead to discrimination
- Balance of values (human rights)

Commitments
- Apply ethical frameworks such as those promoted by the UN, UNESCO, OECD, independent Civil society organizations and NGOs, and Indigenous-led Digital, Data and AI governance frameworks.
- Improve and fund digital literacy
- Actively include marginalized and discriminated groups
- Be aware and avoid language biases
- Identify, monitor and report on gender disparities in the AI value chain and including limitations on decisional power and resource ownership

5. Promote regulation of artificial intelligence
Eleonore, Aim Sinpeng, Moira Patterson, Jake Okechukwu Effoduh, Walter Gehr, Amal El Fallah Seghrouchni

Principles
- Private, civil society and government influences on AI needs to be balanced with particular caution about monopolization by the private sector
- Ensure the accountability of private company behaviour; similar accountability approach like in natural resource extraction.

- Governments are not sufficient in regulating AI, Malaysia: insufficient resources in AI security risks; insuff. gov't capacity for rule making (e.g., digital trade agreements, digital infrastructure, digital silk road...) and adopting digital infrastructure from third countries.
- Liability regime gap
- Focus on education, and an informed engagement of a large number of citizens with diverse perspectives on the social, legal, economic, political, cultural implications of AI.

Committments
- Provide support to governments for rule and norm making
- Put accountability rules and regulations in place
- Provide funding for AI capacity improvement
- Invite indigenous communities to participate/comment and give decisional power
- Weave Indigenous AI and Data Protocols into the value chain for AI systems while promoting traditional matriarchal models of knowledge and environmental protection
- Consider the UNESCO recommendations on the ethics of AI
- Solve tensions between EU and UNESCO AI ethics framework
- Consider the IEEE Global Initiative on Ethics of AI---- Apply ethical frameworks such as those promoted by the UN, UNESCO, OECD, independent Civil society organizations and NGOs, and Indigenous-led Digital, Data and AI governance frameworks.
- Undertake AI human-centered readiness assessments in countries
- Learn from examples: Japan "fine.o" for making technology human-centered
- AI Governance in Japan
- Ensure a broad definition of AI systems to better protect human rights and prevent the proliferation of Lethal Autonomous Weapon Systems
- Prioritize mission-oriented (SDGs, human rights) trade and governance partnerships
- Adopt a holistic flow to the assessment, analysis and evaluation processes of the ESG of AI;

6. Digital commons as a global public good

Members: Francis Crawley (International science and culture program), Jamal Shahin (UNU-CRIS), Vineetha (DEF India) Dr Omar (Alan Turing Institute), Peiling Yap (International Digital Health and AI Research Collaborative)

Principles
- Unpack and clarify common and public goods for digital technologies; conventual categories do not apply; dual discourse
- Clarify relationship between data policy and open science
- Digital commons as a shared good
- Whole of society approach

- STEAM-based (Science, Technology, Engineering, Arts, Mathematics)[1] approaches to AI engagement and learning
- Equitable relationship between science and society
- Clarify the relationship between market, state and citizen.
- Digital commons as a public good need to be further articulated in terms of citizens, science, and the various sectors in society
- The role of open science in the sharing of the goods of science and ensuring science for the benefit of society needs to be promoted
- There is a need for data policy as part of the governance structure of digital commons
- The protection and promotion of human rights, not only within but also through, a digital commons should be considered
- The advancement of an ethics of AI for the digital commons space is now critical
- Equality (public health services)
- Openness
- Participation in defining rights and regulations

Commitments
- Provide public health infrastructure and services
- Provide room for citizens to voice opinions and concerns
- Build digital capacity in governments
- Define the roles of government, citizens, civil society, and industry in the digital commons
- Support the e-systematic engagement of parliaments, subnational authorities, and the private sector (particularly in LMICs) to contribute to democratic and open digital commons
- Develop use of cases around the Sustainable Development Goals (SDGs), particularly regarding health
- Articulate the tools and methods needed for the digital commons
- Develop digital commons policy to prepare for and respond to health emergencies, natural disasters, and conflict situations
- Articulate a governance structure within the digital commons space that safeguards and promotes global values, cultural norms, and ethics in the approach to knowledge, science communication, and social cohesion
- Ensure Indigenous AI and Data Protocols, Intersectional and Gender-Aware AI and Data Strategies are integrated into the value chain of all AI systems, and data sharing (digital economy) partnerships.
- Increase support and access to AI and data resources for CSOs (NGOs, non-profits, social entrepreneurs).
- Facilitate access to and ownership of data collection technologies for women

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[1] References to STEAM and role of artists by the UN in digital governance can be found on pages 3 and 4: https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/09/EGM-CSocD59-Final-Report-1.pdf

7. Other issues: Culture, Education, Peace and Diplomacy. Digital Humanism

Members: Walter Gehr, Franz Gatzweiler

Principles
- Human-centered approach needed to protect people from digitalization and enable people by digital technologies
- Consider SDG 4 (education): educate about data and digital technologies; so that people are in the position to make informed choices
- Mutual cultural understanding can be promoted by digital technologies
- Education and dissemination of scientific and cultural knowledge
- A third common digital culture
- Digitalization as a first encounter for further mutual understanding
- Discourse about culture and science, facilitated by digital technologies
- Gender equality awareness, monitoring and impact assessment of AI systems' deployment.
- Gender and intersectional cyberdiplomacy models

Commitments
- Consider common declaration of Digital Humanism
- Practice digital cultural diplomacy as preparation for actual human interaction
- Promote UN values through digital tools in preparation for actual human interaction
- Develop science diplomacy with the help of digital tools
- Ensure integration of a gender and intersectional lens on all AI, data and digital economy strategies and emerging cyberdiplomacy models

Annexes
- Declaration of Digital Humanism
- AI Governance in Japan
- IEEE Global Initiative on Ethics of AI
- UNESCO recommendations on the ethics of AI

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« STEAM » or otherwise in this case Narrative Ethics (using Theatre) in bioethics and other STEM sciences https://pubmed.ncbi.nlm.nih.gov/16337306/	

Multidisciplinary AI Design and Best practices for art projects exploring AI ethics https://valentinegoddard.medium.com/art-shaped-ai-value-creation-in-the-digital-era-94694f1cea8b	United Nations AI and Data Policy and Governance Expert
Canada's Public Awarenss on AI, Report and Recommendations (See recommendation 5 for reference to the Arts: https://ised-isde.canada.ca/site/advisory-council-artificial-intelligence/en/public-awareness-working-group/learning-together-responsible-artificial-intelligence	Founder and Executive Director, AI Impact Alliance
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