A.   INTRODUCTION

1.   This contribution is submitted to the Office of the United Nations High Commissioner for Human Rights ("OHCHR") in response to the call for written input to inform the development of the report of the OHCHR on "the relationship between technical standard-setting processes and human rights" issued pursuant to paragraph 3 of resolution 47/23 of the Human Rights Council at its 53rd session.

2.   My name is Ayden Férdeline. I submit this contribution to the OHCHR in my personal capacity. It draws upon my experience serving on the Council of ICANN's Generic Names Supporting Organization, the body which sets policy for generic top-level domain names like .COM and .ORG. In addition, I draw upon research that was commissioned by the National Democratic Institute in 2021 and 2022, where for a project on Internet norms and standards, I investigated how the diversity of Internet coordination and governance bodies could be improved. I am now a Landecker Democracy Fellow with Humanity in Action. These affiliations are noted to help identify the background and locus of expertise of this contribution, however these comments merely reflect my personal positions and are not necessarily the position of any other actor.

B.   RESPONSES TO THE OHCHR'S CALL FOR INPUT PURSUANT TO HUMAN RIGHTS COUNCIL RESOLUTION 47/23

Question 1: How do technical standards for new and emerging digital technologies impact the enjoyment of human rights; what are related risks and opportunities?

3.   Technical standards can harm or enable human rights.[1] Without seeking to prioritize or exclude any rights, some rights that are recognized within the Universal Declaration of Human Rights ("UDHR"), the International Covenant on Civil and Political Rights ("ICCPR") and the International Covenant on Economic, Social and Cultural Rights ("ICESCR") that are relevant to new and emerging digital technologies include:

- Right to equal protection (art. 7 UDHR, art. 2 ICCPR, art. 2 ICESCR); for example, technical standards can ensure that technologies are accessible to all people, including those with visual, auditory, or other impairments.

- Right to freedom of assembly and association (art. 20 UDHR, art. 21-22 ICCPR, art. 8 ICESCR); for example, technical standards can support interoperability and data

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[1] Grover. G and ten Oever, N. (2023). [Draft] Guidelines for Human Rights Protocol and Architecture Considerations. Human Rights Protocol Considerations Research Group. https://www.ietf.org/archive/id/draft-irtf-hrpc-guidelines-17.html.

portability to enable individuals to associate in groups and to communicate, however they can also be used to build technologies that surveil, censor, manipulate or otherwise repress online activities.[2]

- <u>Right to freedom of expression</u> (art. 19 UDHR); for example, technical standards can foster diversity, pluralism, and participation in public debate and in democratic processes.[3]

- <u>Right to freedom of information</u> (art. 19(2) ICCPR, art. 13 ICESCR); for example, technical standards can enable people to request, receive, and consume information from various sources more easily and quickly. But recent and emerging technical standards can also be used to censor, manipulate, or deny individuals access to information. As these standards or protocols are used by different products which target different audiences, they can create inequalities or discrimination, particularly for individuals or groups who do not have equal access or opportunities to 'safer' or more resilient technologies.

- <u>Right to human dignity</u> (art 1. UDHR); for example, technical standards can attempt to ensure that artificial intelligence systems respect human autonomy and agency.

- <u>Right to non-discrimination</u> (art 2. UDHR, art. 2 ICCPR, art. 2 ICESR); for example, technical standards may reflect the values of certain groups over others (disparate treatment), or they may promote bias, exclusion, or harm, intentionally or unintentionally (disparate impact). In addition, a technical standard that may be suitable for certain use cases may become harmful if it is scaled up and/or deployed in ways different from which the standard designers envisioned it being used.

- <u>Right to participate in cultural life, arts and science</u> (art. 27 UDHR); for example, technical standards can influence how digital technologies are used for learning, creating, sharing, and collaborating. Some risks are that standards may exclude some groups or perspectives, or they may not address ethical issues such as accessibility, diversity, or linguistic inclusion. Indeed, it was not until 2010 that the protocols and standards that underpin the Internet's Domain Name System were updated to support domain names in non-Latin scripts like Arabic, Cyrillic, or Mandarin Chinese.

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[2] ten Oever, N., Couture, S., and Knodel, M. (2022). "Internet Protocols and the Human Rights to Freedom of Association and Assembly [Draft]." IETF Human Rights Protocol Considerations Research Group. https://www.rfc-editor.org/rfc/internet-drafts/draft-irtf-hrpc-association-12.html.

[3] Council of Europe (2022). Recommendation CM/Rec(2022)13 of the Committee of Ministers to Member States on the impacts of digital technologies on freedom of expression. https://search.coe.int/cm/Pages/result_details.aspx?ObjectId=0900001680a61729.

- <u>Right to privacy</u> (art. 12 UDHR, art. 17 ICCPR); for example, technical standards can in theory define how data is collected, stored, and processed by various actors. In practice, the extent to which protocol designers can foresee all of the privacy implications of a particular protocol at design time is limited because "an individual protocol may be relatively benign on its own, and it may make use of privacy and security features at lower layers of the protocol stack ... but when deployed within a larger system or used in a way not envisioned at design time, its use may create new privacy risks."[4]

- <u>Right to security</u> (art. 3 UDHR); for example, technical standards provide guidance on developing, deploying, and managing systems that are interoperable and scalable. They can ensure coordination and alignment between various stakeholders on common security goals and challenges so to keep personal information safe from cyberattacks.

Question 2: What are examples that best illustrate the relationship between technical standards for new and emerging digital technologies and human rights?

4. Two examples that illustrate the relationship between technical standards for new and emerging digital technologies and human rights are (I) New IP, and (II) C2PA. Please note that these examples are not an endorsement of any specific technology or standard. I use these examples merely as case studies to illustrate some of the potential impacts on human rights that may arise from different technical standards for new and emerging digital technologies.

I. <u>New IP</u> is a proposed alternative to the current Internet Protocol that routes and addresses packets so that data arrives at its correct destination without being tampered with. It seeks to address two concerns expressed by democratic nations: (1) the growing centralization of Internet infrastructure and applications among a handful of large tech firms, and (2) concerns regarding cybersecurity. Proponents argue that these issues can be resolved using decentralized technologies and through an increased reliance on identification methods to establish trust on the network. However, in practice, Chatham House researchers say the proposed alternative internet infrastructure "would introduce new controls"[5] at the network connection level, thereby facilitating bulk data collection and enabling the tracking

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[4] Cooper, A. et al (2013). "RFC 6973 - Privacy Considerations for Internet Protocols." Internet Architecture Board. https://www.rfc-editor.org/rfc/rfc6973.

[5] Taylor, E., Jones, K. and Caeiro, C. (2022). "Technical Standards and Human Rights: The Case of New IP" in Reclaiming Human Rights in a Changing World Order. Chatham House: London. https://www.chathamhouse.org/2022/10/reclaiming-human-rights-changing-world-order/8-technical-standards-and-human-rights-case.

of users and content "through the use of blockchain and permanent identifiers."[6] These features "could potentially convert New IP into an instrument for state surveillance and social control"[7] by impeding one's ability to exercise their right to privacy, freedom of expression and opinion, and freedom of association. Indeed, as Chatham House has argued, "New IP could strengthen social control programs that make implementation of some human rights conditional on good behavior, which is directly contrary to the principle of the universality of human rights."[8]

II. <u>C2PA</u>, the umbrella term for a set of open technical standards being developed by the Coalition for Content Provenance and Authenticity, provides a technical mechanism for certifying the source, history, and provenance of media content. The stated purpose of the standard(s) is to curb disinformation. The Coalition and its implementers have adopted a Harms, Misuse, and Abuse Framework within which they have modeled various threats.[9] Among these, there is the potential for provenance and/or authenticity data to be misused by malicious actors, which could result in censorship, surveillance, harassment, or manipulation. There could also be the loss of privacy and/or anonymity for content creators or individuals captured in a media file who may not want to reveal their location or identity. Due to the technical specifications required to benefit from the C2PA, marginalized individuals or groups may be excluded from benefiting from C2PA-compliant tools or platforms, and these same communities may be those who stand to benefit the most from its technology. That being said, C2PA presents opportunities for exercising of human rights. Enhancing trust and transparency in digital media, especially for news and information sources, could allow for a healthier information ecosystem to flourish. There could be accountability and justice for human rights violations documented by digital media as there is forensic proof that content has not been manipulated over time.[10]

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[6] Ibid.

[7] Ibid.

[8] Ibid.

[9] C2PA Harms Modelling (undated). https://c2pa.org/specifications/specifications/1.0/security/Harms_Modelling.html.

[10] There are pilot projects experimenting with this idea. For example, the Starling Lab for Data Integrity, housed jointly by Stanford University and the USC Shoah Foundation, has been documenting possible war crimes in Kharkiv, Ukraine using cryptographic technologies and decentralized protocols. This evidence has been submitted to the Office of the Prosecutor of the International Criminal Court. Read more: https://sfi.usc.edu/news/2022/06/33571-starling-lab-and-hala-systems-file-cryptographic-submission-evidence-war-crimes.

Question 3: What are the duties and responsibilities of standard setting organizations and their stakeholders in effectively integrating human rights considerations in technical standard-setting processes for new and emerging digital technologies?

5.   The onus should be on standard-setting organizations to consistently and thoroughly identify the harms that their standards and protocols may cause. While risks can in some cases be accepted, because technology can enable human rights just as it can harm the exercise of human rights, that is an assessment that can only be made based upon a careful analysis of the outputs from threat modeling. As a guiding principle, however, standard-setting organizations have a social responsibility to remove or mitigate against any unacceptable harms to human rights.

6.   It would be desirable, but may be unrealistic, to expect the stakeholders involved in the development of standards and protocols to consider these impacts. Standards and protocols are typically developed in open processes where there are inherent conflicts of interest. Stakeholders are not coming together to achieve a common goal that is in the public interest. Rather, stakeholders participate to further the interests of their business, and their representatives typically have backgrounds in software engineering, not constitutional law, risk management, ethics, or the social sciences.

7.   As institutions are volunteer driven, it cannot be assumed that volunteers are skilled in identifying harms to human rights or even that volunteers are skilled at managing conflicts or elevating the voices of the traditionally-excluded. Standard-setting organizations therefore must step-up and commission independent human rights impact assessments of the standards and protocols that are being developed within their body, have internal operating procedures in place that outline how these impact assessments should be handled by working groups, and where needed, offer capacity building in skills such as cultural awareness and in identifying human rights risks.

Question 4: Which standard-setting processes and organizations are particularly relevant for safeguarding and promoting human rights in the context of new and emerging digital technologies?

8.   I have not conducted a comprehensive landscape analysis of all standard-setting processes and organizations, however I would encourage OHCHR to conduct such a mapping and to evaluate their effectiveness and impact vis-a-vis human rights. That being said, I note that the civil liberties group Article 19, in its Internet Standards Almanac[11], has identified the following bodies as developing standards or protocols for existing, new, and emerging

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[11] Article 19 (2023). Internet Standards Almanac. https://almanac.article19.org.

technologies with potential impacts on human rights: 3GGPP, ATIS, CEN/CENELEC, ETSI, IEEE, IETF, IRTF, ISO/IEC, ITU-R, ITU-T, and W3C.

9.   It is important for OHCHR and others to engage with the above-mentioned standard-setting processes and organizations. However, it is also important to engage with the Internet coordination bodies and processes that focus more on the 'policy side' of how the Internet is governed. These include the United Nations Internet Governance Forum, the United Nations World Summit on the Information Society, and ICANN. These bodies all play important roles in developing and promoting ideas that then inform the development of protocols and standards in other venues.

Question 5: What are common obstacles to effectively integrating human rights considerations in technical standard-setting processes for new and emerging digital technologies?

10.   There are five common obstacles to effectively integrating human rights considerations into technical standard-setting processes. These are:

(I)   <u>A lack of awareness and understanding of human rights principles among standard and/or protocol designers.</u>

The people who currently participate in technical standard-setting bodies often have backgrounds in software engineering and/or hardware design. They do not always have a sufficient understanding of human rights principles and of how they relate to digital technologies.

(II)   <u>No mandate for standard and/or protocol designers to consider human rights impacts.</u>

Standard and/or protocol designers are typically present at standard-setting organizations as representatives appointed by their employer. As these processes are dominated by industry stakeholders, and noncommercial actors may be unable to afford the dues or fees required to participate, these representatives are incentivised to prioritize technical or financial considerations over human rights considerations. Standard-setting bodies may impose some requirements on the development of new standards and/or protocols, like cost controls or a measure of consensus, but they do not require that there be no adverse impacts on human rights.

(II)   Lack of consensus over what level of risk(s) can be accepted.

Sometimes it is envisioned or anticipated that some level of risk to human rights could arise from the use or misuse of a standard or protocol. Standard-setting organizations struggle to balance trade-offs and, in some cases, standard and/or protocol designers may be willing to accept too much risk.

(IV)   A lack of empirical evidence supporting change(s), because the real-world impacts for human rights on existing technical standards and protocols are not traced.

New and emerging digital technologies can be complex and difficult to understand, which can make it challenging to proactively identify and mitigate against human rights implications. However, post-adoption of a standard or protocol, there is no monitoring of the real-world impacts that it is having on individuals or groups. As a result, issues with the instrument may not be addressed and future standards or protocols may not learn from past mistakes.

(V)   A lack of engagement in standard-setting bodies by stakeholders advocating for human rights safeguards.

There is disproportionately little participation from noncommercial actors within standard-setting bodies. When civil society organizations attempt to participate within these environments, given the nature of project-based funding by philanthropic foundations, they often lack the resources to sustain the level of engagement required to see a standard or protocol through to adoption. (It can take five or more years for a standard or protocol to be adopted, and foundations typically fund projects with 12-to-18-month lifespans.) The perspectives of civil society are sometimes discarded by the private sector as too conceptual, too philosophical, or too expensive to implement. The views of civil society are sometimes considered illegitimate because some private sector actors perceive their current customer base as a proxy for democratic support for their ideas.

Question 6: How accessible are standard-setting processes and processes for new and emerging digital technologies for a broad range of stakeholders, in particular for civil society organizations and human rights experts? By which metrics is "access" measured in this context?

11.   Standard-setting processes are inaccessible to many stakeholders because of their steep barriers to entry. These barriers are (I) cultural, (II) procedural, and (III) technical.

I.   As the National Democratic Institute outlined in a 2022 report, the ways of doing business within standard-setting bodies "have developed around a Western European business style that requires one to be assertive and unintimidated by confrontation."[12] They also assume that all participants have the time, interest, and travel funding to support lengthy debates before consensus is reached. These working practices can be uncomfortable or inaccessible for participants who are more junior in their careers, who come from cultures that frown upon aggression or speaking out of turn, or for participants who have less fluency in the language of business of a body.

II. The institutional structures of standard-setting bodies do not necessarily support democratic outcomes. It cannot be assumed that all stakeholders operate in pursuit of a common interest, let alone the public interest. There are power imbalances and different stakeholders want institutions to evolve in different ways. Democratic outputs require democratic processes, but standard-setting organizations are not meritocratic and decisions are made by unelected individuals who in many cases are appointed to their positions by virtue of their employer having the financial resources to pay membership dues and/or being willing to permit them to invest company time and travel resources contributing to a working group.

III. Just as technical experts need human rights expertise, human rights experts need technical expertise. Internet infrastructure is complicated and rapidly evolving. More work needs to be done to bridge the gap between these two communities, including educating the human rights community on emerging technologies.

Question 7: What are the challenges faced by various stakeholders in their meaningful and sustainable participation in technical standard-setting processes for new and emerging digital technologies?

12. In 2022 the National Democratic Institute interviewed individual advocates, civil society organizations, and small businesses who had engaged in standard-setting and adjacent processes about the barriers to participation they believe they face in engaging in coordination and technical fora.[13] These challenges included:

I.   <u>Institutional structures not necessarily supporting democratic outcomes.</u>

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[12] Férdeline, A. (2022). "Influencing the Internet: Democratizing the Politics that Shape Internet Governance Norms and Standards." National Democratic Institute. https://www.ndi.org/publications/influencing-internet-democratizing-politics-shape-internet-governance-norms-and.

[13] Ibid.

Standard-setting organizations are self-selected, unaccountable, technocratic, and elitist organizations that lack sufficient representation from marginalized groups, the Global South, civil society actors, and human rights experts. They operate under narrow technical mandates that ignore or dismiss the broader social, political, economic, and ethical implications of their standards and protocols.

II.   Not all stakeholders operating in the global public interest.

Different actors have different incentives for participating in standard-setting bodies. Because there is no homogenous global public, and ideas about what is in the best interests of five billion Internet users diverge significantly, it is difficult to measure whether the standards and protocols being developed do broadly serve the needs of the public. However, some industry stakeholders have stated in interviews that their motivations for contributing to Internet governance processes is based on commercial interests, rather than a broader desire to strengthen the Internet.

III.   Self-appointed gatekeepers keeping newcomers out.

Different stakeholder groups have different ways of admitting newcomers into their fold. These accreditation processes are often informal or undocumented. In the case of civil society, for example, a handful of veteran participants with a long tenure in an institution function as self-appointed gatekeepers, determining who is, or is not, a legitimate part of this constituency. As is noted in a 2022 National Democratic Institute report, bias influences how new participants are perceived, and bullying can intimidate or hinder the participation of people from traditionally-excluded communities.[14]

IV.   Issues being sensitive and deadlines unforgiving, which makes participation difficult for less-resourced stakeholders.

Standard-setting bodies set arbitrary timelines and workplans for their work, and can develop standards and protocols very quickly or very slowly. The unpredictability of these processes can present challenges for participants trying to engage who are new to a topic area, who are not working full-time on the development of a standard or protocol, and/or do not have the resources to travel for four or more weeks a year, for multiple years, to work on an issue. In addition,

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[14] Ibid, p. 35.

where the impacts of a standard or protocol may adversely affect a community with which the participant identities, this may take an emotional toll on them.

V. <u>Threats of legal action being used to intimidate participation.</u>

While not a common occurrence, there are documented instances of Strategic Lawsuits Against Public Participation being used to stifle the participation of volunteers within Internet coordination bodies.[15] Unlike congressional debates, parliamentary hearings, and meetings of intergovernmental organizations where elected officials and representatives have immunity, most standard-setting organizations are self-regulatory regimes subject to local laws and regulations where such privileges do not exist. For civil society and individual advocates in particular, these lawsuits can have a chilling effect on participation.

VI. <u>Detailed technical explainers are needed to introduce less technical actors to the underlying issues playing out in various fora.</u>

There are sometimes short, entry-level explainers that introduce a technical topic, and these are helpful and appreciated. However, there is also a need for detailed technical explainers that go deeper into the specifics of a protocol. Technical explainers that capture the complexity and nuance of a proposal will help civil society more effectively participate in standard-setting processes and potentially influence their outcomes in a way that respects and promotes human rights.

Question 8: In which ways do these challenges differ depending on the standard-setting organization concerned?

13. Some standard-setting bodies like the IETF have recognized that they do not have a sufficiently diverse cast of participants and are making efforts to outreach to traditionally-excluded communities. However, many other bodies do not actively work to diversify their base of volunteers who are developing standards and protocols. Some standard-setting bodies are resistant to change, lack awareness of the benefits of diversity, or believe diversity carries no benefits. When there are no resources or incentives to implement diversity initiatives, and no accountability or little transparency into their practices, it can be uncomfortable or even unjust to expect presently-excluded stakeholders, who are often women, people of color, or LGBT+, to perform the labor of diversifying a space.

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[15] Ibid, p. 37.

14.   Some bodies have unwritten procedures and customs that have been developed in the course of practice, whereas other bodies have written procedural documents for their volunteers, such as expected standards of behavior. Enforcement of these rules can be haphazard or inconsistent. Often the chairperson of a working group is responsible for enforcing these standards, however not all chairpersons have training or expertise in conflict resolution. Some bodies like ICANN (which although not a standard-setting organization, does develop policies which impact technical standards) have an independent Ombudsperson who is responsible for investigating complaints and can take actions to remedy complaints that are upheld. Organizations which lack an Ombudsperson may benefit from creating such an office and staffing it with an independent staff.

Question 9: What are good practices, mechanisms or models for effective integration of human rights considerations in technical standard-setting processes? Are there particular challenges in their implementation or adoption? What additional measures should be developed and implemented?

15.   OHCHR is well-placed to establish a new directorate or unit to provide timely, detailed guidance to standard-setting bodies on human rights matters and to inform the international human rights community about standardization developments that need a spotlight of attention. You have the legitimacy to speak to these topics that existing stakeholders perceive civil society as not holding, and your headquarters in Geneva are in close proximity to some existing standard-setting bodies, like the ITU. This is the single-most important contribution that OHCHR could make to integrate human rights considerations into technical standard-setting processes.

16.   OHCHR should petition standard-setting bodies to formalize how human rights impacts are evaluated throughout the lifecycle of a standard or protocol, including offering guidance on where, when, and who is responsible for performing this task.

C.   CONCLUSION

17.   I thank the Office of the United Nations High Commissioner for Human Rights for its consideration of this submission and remain at your disposal for any further consultation that would benefit the preparation and drafting of the report on "the relationship between technical standard-setting processes and human rights."

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ENDS.