

# Human Rights and Standards Development Organizations

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A Report put out by the Office of the United Nations High Commissioner for Human Rights in July 2023 has supported a view of the responsibility of Standards Development Organizations (SDOs) for the embedding of Human Rights considerations in their work on emerging technologies and Al. This note looks at some of the background circumstance that led to the release of the report "Human rights and technical standard-setting processes for new and emerging digital technologies Report of the Office of the United Nations High Commissioner for Human Rights to the Human Rights Council" (OHCHR Report<sup>1</sup>), gives an overview of the content of the OHCHR Report, and looks at some of the ongoing work of the SDOs and the uptake of the report over the last year.

Human rights policy defines what should be done Technology defines what can be done

Layer 9 Technologies, LLC is a consulting and advisory firm providing a broad range of services and expertise in Internet governance, technology policy, corporate strategy, business and operational transformations, and creation of new organizations.

<sup>&</sup>lt;sup>1</sup> OHCHR Report; A/HRC/53/42 Human rights and technical standard-setting processes for new and emerging digital technologies; Report of the Office of the United Nations High Commissioner for Human Rights\* Human Rights Council; Fifty-third session; 19 June–14 July 2023 https://undocs.org/en/A/HRC/53/42

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# Background

#### General Environment

Historically, there has been a general consensus that science and technology were value neutral and were themselves neither relevant to human rights, nor were human rights relevant to them, a belief that was extended to the Internet. However, prior to the publication of the OHCHR, in October 2017, the Internet Research Task Force (IRTF) included the following in RFC 8280, "Research into Human Rights Protocol Considerations":

The ever-growing interconnectedness of the Internet and society increases the impact of the Internet on the lives of individuals. Because of this, the design and development of the Internet infrastructure also have a growing impact on society. This has led to a broad recognition that human rights [UDHR] [ICCPR] [ICESCR] have a role in the development and management of the Internet [UNGA2013] [NETmundial]. It has also been argued that the Internet should be strengthened as an enabling environment for human rights [Brown²].<sup>3</sup>

This text acknowledged that over the last decade, there had been work done in technical fields that explore this notion of neutrality. A growing group of researchers and practitioners in technology, social science, and human rights activism have started looking at how to bring considerations of human rights into engineering practice. In many ways they have been pioneers, struggling to bring together subjects, and their terminologies, that were not compatible and for which there was no Rosetta Stone. Simultaneously with this, the public, and their governments, have started to believe that the Internet was responsible for harms to society and something had to be done. The OHCHR Report is a major milestone in that it brings the discussions together in a cogent manner.

## Leading up to the OHCHR Report

While human rights has been a concern of the United Nations since the Declaration of Human Rights was adopted in 1948, the role of human rights for technical standard setting for the Internet and emerging digital technologies only

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<sup>&</sup>lt;sup>2</sup> Reference from RFC 8280 [Brown] Ziewitz, M. and I. Brown, Ed., "A Prehistory of Internet Governance", Research Handbook on Governance of the Internet, Part 1, Chapter 1 (pp. 3-26), Edward Elgar Publishing Ltd, Cheltenham, DOI 10.4337/9781849805049, 2013.

<sup>&</sup>lt;sup>3</sup> RFC 8280: https://datatracker.ietf.org/doc/rfc8280/

became a focus of the UN recently. The current discussion in the UN System was initiated with the UN Secretary General's (UNSG) report in 2020 in the "Roadmap of Digital Cooperation" (Roadmap<sup>4</sup>) section on "Human rights and human agency," which stated:

38. Digital technologies provide new means to advocate, defend and exercise human rights, but they can also be used to suppress, limit and violate human rights. 39. Effective due diligence is required to ensure that technology products, policies, practices and terms of service comply with rights human principles and standards.

The Roadmap goes on to discuss specific issues related to data, privacy, identity, surveillance, online violence, and content on the Internet. The UNSG made human rights and digital technologies, including the Internet, a priority for the United Nations System in 2020.

The OHCHR Report follows up on this priority with a review of the technical landscape, the relevance of Human Rights to technical standard setting, and "presents approaches to addressing challenges and provides a set of recommendations for the effective integration of human rights considerations into technical standard-setting processes."5

# The Report

The 2023 annual report of the United Nations High Commissioner for Human Rights to the Human Rights Council "Human rights and technical standardsetting processes for new and emerging digital technologies" is a strong reference for ongoing discussions in the relationship between human rights and technological development. It is based on a survey of current practice and commentary collected in public consultations to give guidelines and suggest norms for development of technology in the future. While it does not recommend mitigations or other changes to current systems, it does use examples from current systems to build up recommendations. The document's focus is on the human rights considerations and technical standard processes for new and emerging technologies.

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<sup>&</sup>lt;sup>4</sup> UNSG Roadmap; A/74/821 Road map for digital cooperation: implementation of the recommendations of the High-Level Panel on Digital Cooperation, Report of the Secretary-General; 29 May 2020, Seventy-fourth session; https://www.un.org/en/content/digital-cooperation-roadmap/

<sup>&</sup>lt;sup>5</sup> OHCHR Report; op. cit. pp. 1

<sup>&</sup>lt;sup>6</sup> OHCHR Report; op. cit.

The Report's scope includes a description of the current standard-setting landscape, the relevance of technical standards and human rights to each other, the challenges to bringing human rights considerations into the standards setting processes, ways to overcome the challenges, and some specific recommendations. Each of these sections is briefly covered below.

# "Technical standard-setting landscape"

The section starts with a definition of standards as referring "to an agreed norm defining a way of doing something in a repeatable manner." (II.A.). It goes on to describe Standards Development Organizations (SDO) and the actors that participate in standard setting.

The section describes two types of SDO; those that are Intergovernmental Organizations (IGO) such as International Electrotechnical Commission (IEC), International Organization for Standardization (ISO), and the International Telecommunication Union (ITU), and those that are the Non Governmental Organizations (NGO), often defined as the Technical Community in Internet governance, such as the Institute of Electrical and Electronic Engineers (IEEE), the Internet Engineering Task Force (IETF), and the World Wide Web Consortium (W3C). The report goes on to give a detailed description of many of these organizations focusing on the IGOs (para 7-9) and the NGOs (para 10-15). Though not an SDO, the report includes a description of ICANN as a key player (para 16). While the OHCHR Report includes a mention that ICANN as a policy setting organization that uses IETF produced standards<sup>8</sup>, it does not go into the relationship that exists between the organizations and the give and take that is practiced between those organizations to come up with policies and protocols that are consistent with each other<sup>9</sup>.

# "Relevance of technical standards for the enjoyment of human rights"

This section focuses on human rights impacts (para 17-25)<sup>10</sup> and on the human rights obligations of states and other actors such as SDOs, businesses, and

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<sup>&</sup>lt;sup>7</sup> Ibid, pp. 2

<sup>&</sup>lt;sup>8</sup> It may be worth noting that ICANN also makes use of ISO and other SDO-produced standards, e.g., ISO-3166-1 Alpha-2 for country code top-level domains.

<sup>&</sup>lt;sup>9</sup> The SDOs are not monolithic nor uninvolved with each others' activities: they frequently have liaisons with each other, and often cooperate.

<sup>&</sup>lt;sup>10</sup> In this section on the OHCHR Report itself references such as ("para *nn*") refer to the OHCHR Report numbered paragraphs.

other organizations that provide the range of Internet infrastructure and services (para 26-34).

In discussing human rights impacts, the OHCHR Report looks at how design decisions have an effect, sometimes positive and sometimes negative, on 'the exercise of human rights" 11 (Para 17). The section also discusses some examples of decisions that have taken human rights concerns into account showing the possible positive value of such considerations (Para 18-21).

There is also an exploration (para 23) that looks at how rights are both enabled and risked by some of the current Internet protocols such as IP, TCP, HTTP, and DNS. A discussion of the protections established over the last decade in security and privacy, including encryption, is included (para 24). These changes increased the trust and resiliency of the system, though they also contributed to a tussle between law enforcement organizations and rights advocacy. An OHCHR analysis on that topic is referenced<sup>12</sup>.

The discussion of impacts concludes by illustrating the difficulty in predicting the longer term effect of protocol considerations, although intended as protections of human rights, which can be turned through implementation or misuse, into their opposites; that is, they become risks to the human rights of the users of the Internet (para 24-25). While technology may not be as value neutral as was claimed or assumed in the past, it still remains the case that most any technological artifact can be used in multiple ways, not all of which contribute to protecting human rights.

The second half of this section looks at the obligations various stakeholders, the actors who shape the standards, have with respect to human rights. The OHCHR Report reminds the State actors that based on "international human rights law, they have a range of obligations and responsibilities."<sup>13</sup>

• "States have obligations to respect, protect, and fulfill human rights." 14 (para 27):

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<sup>&</sup>lt;sup>11</sup> OHCHR Report pp. 5

<sup>&</sup>lt;sup>12</sup> Cf. footnote 42 A/HRC/51/17; A/HRC/29/32; and Interpol, 89th session, resolution No. 9. GA-2021-89-RES-09 (see https://www.interpol.int/content/download/16915/file/GA-2021-89-RES-09%20E%20ChildAbuse.pdf).

<sup>&</sup>lt;sup>13</sup> OHCHR Report pp. 7

<sup>&</sup>lt;sup>14</sup>Cf. OHCHR Report 44 International Covenant on Civil and Political Rights, art. 2; International Covenant on Economic, Social and Cultural Rights, art. 2; International Convention on the Elimination of All Forms of Racial Discrimination, art. 2; Convention on the Elimination of All Forms of Discrimination against Women, art. 2: Convention on the Rights of Persons with Disabilities, art. 4; and Convention on the Rights of Children, art. 2. See also CCPR/C/21/Rev.1/Add.13; and E/C.12/GC/24, paras. 10-24.

States should not, through legislative or other measures, require the private sector to apply standards, the implementation of which

would undermine human rights. (para 28)

 The delegation of regulatory functions by States to standardsetting organizations does not absolve States of their obligations under international human rights law. (para 29). This entails obligations to the rule of law, to accountability, to transparency, and meaningful access to stakeholders. (para 29)

"Under the Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework, businesses have a responsibility to respect all internationally recognized human rights, meaning that they should avoid infringing on the human rights of others and address adverse human rights impacts stemming from or linked to their business activities."<sup>15</sup>.

This includes requirements to:

- (a) avoid causing or contributing to adverse human rights impacts through their own activities and address such impacts when they occur; and
- (b) seek to prevent or mitigate adverse human rights impacts directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts." (para 31)

These responsibilities can be fulfilled through due diligence, which include human rights impact assessments and "meaningful engagement with diverse stakeholders, including with potentially affected rights holders and civil society."<sup>16</sup>

Essentially SDOs inherit the responsibilities of their institutional stakeholders. IGO-based SDOs have the responsibility of States as they are composed of Member States (para 34), while NGO-based SDOs have the responsibilities of businesses (para 33).

<sup>16</sup> OHCHR pp. 8

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<sup>&</sup>lt;sup>15</sup> Guiding Principles, HR/PUB/11/04, 2011, United Nations, https://www.ohchr.org/en/publications/reference-publications/guiding-principles-business-and-human-rights

# "Challenges to integrating human rights considerations in technical standard-setting processes"

This section describes the level of expertise among the SDOs on human rights topics as well as the SDO lack of receptiveness, or as the report puts it "resistance", to integration of human rights as design considerations (para 36-39). The section also covers transparency and participation (para 40-48).

The section covers lack of education/capacity training in human rights for engineers (para 36) and a lack of commitment to human rights by many companies (para 37). There is a discussion of design tradeoff considerations that sometimes sets up a contention among human rights considerations and other design considerations such as efficiency, time to market, or cost (para 38).

The OHCHR Report refers to some of the work being done in SDOs that respects human rights. Examples are given of several efforts such as the IRTF effort in Human Right Protocol Considerations (HRPC)<sup>17</sup>, the IEEE adoption of "ethically aligned design principles for autonomous and intelligent systems that have elevated respect for human rights as their core principle"<sup>18</sup>, and "the ethical web principles of the World Wide Web Consortium Technical Architecture Group emphasize that internationally recognized human rights need to be placed at the core of the web platform."<sup>19</sup> The report also mentions that "States members of ITU have recently called for a human rights-based approach to technical standard-setting processes, including at ITU."<sup>20</sup>

# "Addressing the challenges"

The section discusses the changes that need to be made in SDOs such that they "put people and their human rights, rather than interests of developers of technology or company profits, at the centre of such processes." (para 49). To achieve this SDOs should:

- Recognize their responsibility to respect human rights and reflect that responsibility in policies and procedures (para 50)
- Conduct due diligence that takes human rights into account (para 51)
- Conduct human rights oriented reviews, including impact analysis, by multiple stakeholders (para 52)

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<sup>&</sup>lt;sup>17</sup> HRPC: Human Rights Protocol considerations https://www.irtf.org/hrpc.html

<sup>&</sup>lt;sup>18</sup> Cf. OHCHR fn 65 https://standards.ieee.org/wp-content/uploads/import/documents/other/ead v2.pdf.

<sup>&</sup>lt;sup>19</sup> Cf. OHCHR fn 66 https://w3ctag.github.io/ethical-web-principles/.

<sup>&</sup>lt;sup>20</sup> Cf. OHCHR fn 68 https://www.eeas.europa.eu/delegations/un-geneva/itu-plenipotentiary-conference-joint-policy-statement-human-centric-approach en?s=62.

- Follow through on standards to ensure that implementations are done in a rights respecting manner (para 53)
- Sponsor capacity building and judicious use of knowledgeable staff (para 54)
- Ensure transparency, openness, and inclusiveness. (para 55)
- Provide open access to information about the standard setting processes (para 56)
- Involve multistakeholder and multidisciplinary participation (para 57)
- Ensure diverse representation in standards setting (para 59-60)

#### "Conclusions and recommendations"

The OHCHR Report's recommendations are found in paragraphs 66 - 72. They include:

- Make "human rights considerations an integral part of standard-setting processes, in terms of inclusive participatory processes and assessing human rights impacts more systematically". (para 66)
- The need for greater diversity among those involved in standard setting to address power disparities and the need for including other stakeholders such as civil society, participants from the global south, and greater gender diversity. (para 67)
- The need for sustained multistakeholder and multidimensional effort with active engagement by the OHCHR. (para 68)
- A set of specific recommendation for Member States:
  - (a) Refrain from and prevent the development of standards that could foreseeably facilitate human rights violations and abuses when participating in standard-setting processes; conduct meaningful consultations with all stakeholders to gain a comprehensive picture of the issues at stake and possible solutions; and include human rights experts and experts in technical subject matters in their delegations;
  - (b) Ensure that national, recognized standard-setting organizations are open, transparent and inclusive and that they uniformly apply the standards set out in paragraph 70 below;
  - (c) Ensure, in delegating regulatory functions to standardsetting organizations: that such delegation is carried out in compliance with the human rights obligations of States and that such delegation does not put the enjoyment of human rights at risk, bearing in mind that their human rights obligations are not transferable; that all stakeholders can meaningfully participate throughout standard-developing processes, which may include providing funds to under

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resourced entities and individuals wishing to participate and facilitating inputs from the public; and that that human rights considerations, in addition to other aspects, such as safety, efficiency and technological soundness, are adequately integrated into legally mandated processes;

(d) Provide assistance and support to civil society to develop capacity to meaningfully and independently participate in standard-setting processes. (para 69)<sup>21</sup>

#### • A set of recommendations for SDOs:

- (a) Review their operations in order to assess how they affect the enjoyment of human rights; and identify possible shortcomings and take meaningful action to improve the integration of human rights considerations into their practices, in line with the Guiding Principles on Business and Human Rights;
- (b) Adopt policy commitments to respect human rights throughout their operations, to be reflected in operational policies and procedures and paired with the establishment of accountability mechanisms;
- o (c) Put in place adequate human rights due diligence processes in order to identify, prevent, mitigate and account for adverse human rights impacts, including assessing actual and potential human rights impacts, integrating and upon findings, tracking responses communicating how impacts are addressed; consider, in particular. establishing organization-wide mechanisms to identify, from the get-go, standard-setting processes posing a high risk to the exercise of human rights; monitor the human rights impacts of their standards throughout implementation; and mitigate adverse human rights impacts and provide remedy where harm has occurred:
- (d) Make standard-setting processes as transparent, open and inclusive as possible, ensuring that all relevant documentation is free and publicly available, including working documents, standards under development, information on all participants, meeting minutes and written communications; adopt standards consensually and publish them for general use, ideally without fees; and, when participation in international standard-setting organizations, such as ISO and IEC, is limited to single national entities,

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<sup>&</sup>lt;sup>21</sup> OHCHR Report, pp. 17

apply the same principles to the process for the development of their positions, for example in mirror committees;

- (e) Take proactive steps to facilitate and increase participation by women, experts and stakeholders from underrepresented backgrounds, including from the Global South; and address the critical issue of resource inequity by reducing or dropping fees or granting fee waivers and providing travel funds, as well as by adopting or revising and enforcing codes of conduct and developing mentoring and onboarding programmes;
- (f) Carry out effective public consultations and outreach to experts, groups and individuals who may be affected by specific standards as part of standard-development processes;
- (g) Collect and publish data about participation patterns in their standard-setting processes, including on gender, geographical origin, stakeholder groups of participants and other relevant information in order to assess inclusiveness." (para 70)<sup>22</sup>
- A set of recommendations for businesses:
  - (a) Fully meet their responsibility to respect human rights and strive for coherence of their engagement in standardsetting processes and their commitment to human rights when participating in standard developing processes;
  - (b) Conduct human rights due diligence regarding their participation in standard-setting processes and the resulting standards, including by carrying out adequate human rights impact assessments and meaningful engagement with potentially affected stakeholders; refrain from proposing or supporting standards that could be the basis for or facilitate human rights violations and abuses; and use their leverage to prevent or mitigate adverse impacts that decisions about the design of certain standards may incur;
  - (c) Implement technical standards in the most human rightsrespecting way possible. (para 71)<sup>23</sup>
- An encouragement to civil society:
  - (a) To expand understanding and capacity necessary to enhance participation in standard-setting processes;

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<sup>&</sup>lt;sup>22</sup> OHCHR Report, pp. 17, 18

<sup>&</sup>lt;sup>23</sup> OHCHR Report, pp.18

 (b) To establish mechanisms for information-sharing about ongoing and forthcoming standard-setting processes of relevance to the exercise of human rights. (para 72)<sup>24</sup>

# Other Activity

## Intergovernmental Organizations

The Report coincided with work within the UN system on the human rights area and the Internet. Governments, who have the responsibility of stewardship for human rights, started to explore what effect these rights should have on technology. Part of the work involved informing technology companies of the Human Right Council approved Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework"<sup>25</sup>. that are made available to companies as guidance for how to make their operations consistent with human rights requirements. While the document Guiding Principles is not immediately or easily applicable to the work of the Internet, it does offer clues that can be useful. The OHCHR Report does provide much of the information necessary to apply the Guiding Principles to Internet technology.

As of January 2024, ITU's Telecommunications Standardization Advisory Group (TSAG) reports that it has started taking the OHCHR Report into account and has indicated that "embedding human rights in technical standardization design is intrinsically linked to the achievement of the United Nations' Sustainable Development Goals and to strengthening the inclusion of all in the digital economy"<sup>26</sup>. TSAG lists its current activities as:

- raising awareness of the requirement in ITU-T working groups
- studying the state of embedding human rights at the ITU

At the World Summit on the Information Society (WSIS)+20 High Level Forum, held 26-31 May 2024, the OHCHR Report was mentioned, discussed, and became a subtext in several discussions. In at least three sessions, SDOs and their relationship to the OHCHR, was a specific topic of discussion.

Given the World Telecommunications Standards Assembly (WTSA) role in shaping the work over the next years in terms of ITU-T standardization, it falls to

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<sup>&</sup>lt;sup>24</sup> ibid

<sup>&</sup>lt;sup>25</sup> Op. cit Guiding Principles

<sup>&</sup>lt;sup>26</sup> TSAG activities about Human Rights and Standards; TSAG-TD441R1, pp. 1

WTSA-24 to determine how this can be included in the program of the ITU for the next study period.

UNESCO in its <u>Guidelines for the Governance of Digital Platforms</u><sup>27</sup> made reference to the OHCHR Report in its section of electoral integrity and the role of platforms in supporting democratic institutions.

## **Technical Community Organizations**

Work has been done in non governmental standards development organizations (SDOs) related to Human Rights along the lines recommended by the OHCHR for several years, and at times appears to form a base on which the OHCHR recommendations are made. This is especially the case with the IEEE, the IETF and the W3C.

Institute of Electrical and Electronics Engineers (IEEE)

The IEEE, which is responsible for many of the protocols used in the Internet infrastructure, initiated a project in 2016 with the mission of prioritizing human centric concerns in the Design of Autonomous and Intelligent Systems.

The <u>Global initiative of Ethics of Autonomous and Intelligent Systems</u><sup>28</sup> was established with the mission of

"To ensure every stakeholder<sup>29</sup> involved in the design and development of autonomous and intelligent systems is educated, trained, and empowered to prioritize ethical considerations so that these technologies are advanced for the benefit of humanity."

In 2019 The IEEE Association Board of Governors resolved:

[...] endorses and offers Ethically Aligned Design: A Vision for Prioritizing Human Well-being with Autonomous and Intelligent

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<sup>&</sup>lt;sup>27</sup> UNECO, Guidelines for the Governance of Digital Platforms, ISBN 978-92-3-100620-3, Paris, 2023

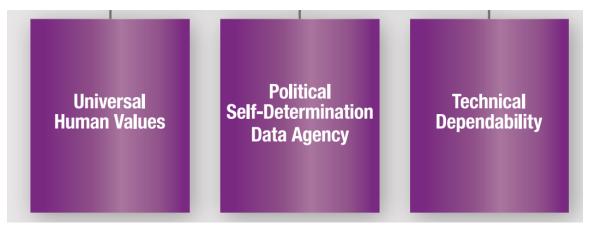
<sup>&</sup>lt;sup>28</sup> EAD: The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems. Ethically Aligned Design: A Vision for Prioritizing Human Well-being with Autonomous and Intelligent Systems, First Edition; IEEE, 2019.

https://standards.ieee.org/content/ieee-standards/en/industry-connections/ec/autonomous-systems.html

<sup>&</sup>lt;sup>29</sup> By "stakeholder" we mean anyone involved in the research, design, manufacture, or messaging around intelligent and autonomous systems—including universities, organizations, governments, and corporations—all of which are making these technologies a reality for society. EAD pp. 282

Systems<sup>30</sup> (A/IS), First Edition to businesses, governments and the public at large for consideration and guidance in the ethical development of autonomous and intelligent systems.<sup>31</sup>

The vision and mission was published in <u>Ethically Aligned Design</u>. The EAD includes three pillars, the first of which is universal human values.



The IEEE has produced an <u>infographic</u> which shows its framework from concept to practice,<sup>32</sup>

In the years since this declaration, the IEEE has engaged in "over twelve standards working groups inspired by Ethically Aligned Design (EAD). The IEEE P7000 standards series addresses key socio-technical issues identified by EAD in pragmatic and actionable ways to put principles into practice for Artificial Intelligence Systems (AIS)."<sup>33</sup>

The P7000 series<sup>34</sup> includes working groups devoted to the following:

- <u>IEEE 7000™-2021 Model Process for Addressing Ethical Concerns</u> <u>During System Design</u>
- IEEE P7001<sup>™</sup> Transparency of Autonomous Systems

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<sup>&</sup>lt;sup>30</sup> AIS - Autonomous and Intelligent Systems is the term used in the IEEE to refer to what is commonly referred to as AI. "Even so, it is inherently difficult to define "intelligence" and "autonomy". One could, however, limit the scope for practical purposes to computational systems using algorithms and data to address complex problems and situations, including the capability of improving their performance based on evaluating previous decisions, and say that such systems could be considered as "intelligent".(EAD pp. 289) As time goes on, by this definition, more and ICT becomes "intelligent" as capabilities are added. The term may also be more future proof than AI.

<sup>&</sup>lt;sup>31</sup> EAD, pp. 289

<sup>&</sup>lt;sup>32</sup> Infographic: <a href="https://standards.ieee.org/wp-content/uploads/2022/01/EAD1e-infographic.pdf">https://standards.ieee.org/wp-content/uploads/2022/01/EAD1e-infographic.pdf</a>

<sup>&</sup>lt;sup>33</sup> https://standards.ieee.org/wp-content/uploads/import/documents/faqs/gieais-faq-11.22.2020.pdf

<sup>34</sup> https://ethicsstandards.org/p7000/

- IEEE P7002™ Data Privacy Process
- IEEE P7003™ Algorithmic Bias Considerations
- <u>IEEE P7004™ Standard on Child and Student Data Governance</u>
- IEEE P7005™ Standard on Employer Data Governance
- IEEE P7007™ Ontological Standard for Ethically driven Robotics and **Automation Systems**
- IEEE P7008™ Standard for Ethically Driven Nudging for Robotic, Intelligent and Autonomous Systems
- IEEE P7009™ Standard for Fail-Safe Design of Autonomous and Semi-**Autonomous Systems**
- <u>IEEE 7010™-2021 Wellbeing Metrics Standard for Ethical Artificial</u> Intelligence and Autonomous Systems
- IEEE P7011<sup>™</sup> Standard for the Process of Identifying & Rating the Trust-worthiness of News Sources
- IEEE P7012™ Standard for Machine Readable Personal Privacy Terms
- IEEE P7014<sup>™</sup> Standard for Ethical considerations in Emulated Empathy in Autonomous and Intelligent Systems

The Internet Architecture Board (IAB), the Internet Engineering Task Force (IETF), and the Internet Research Task Force (IRTF)

The IAB, the IETF, and the IRTF, each have their own scope of responsibility. The IAB focuses primarily on policy, though it also has a role in administrative issues concerning the IETF and IRTF. The IETF deals with creating or revising protocols to make the Internet function, and the IRTF deals with research that may, or may not, flow into Internet architectures and protocols.

An IETF blog<sup>35</sup> documented how the IETF was part of the process of creating the OHCHR Report and has worked on the issue of standards and human rights for several years. The blog discusses an IAB submission<sup>36</sup> to the OHCHR consultations which listed several protocol efforts whose goals involved making "the Internet work better for human rights." The efforts listed included:

• RFC 2804, as early as May 2000, argued that "secure and private communication is a precondition to support human rights"38

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<sup>&</sup>lt;sup>35</sup> IETF News. 16 April 2024. Mallory Knodel, https://www.ietf.org/blog/un-report-calls-fornew-era-for-digital-governance/

<sup>&</sup>lt;sup>36</sup> IAB Response, 3 Mar, 2023 https://datatracker.jetf.org/doc/statement-jab-response-tothe-ohchr-call-for-input-on-the-relationship-between-human-rights-and-technicalstandard/00/pdf/

<sup>&</sup>lt;sup>37</sup> Op. cit. IETF News ibid.

<sup>&</sup>lt;sup>38</sup> Op. cit. IAB Response

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- RFC 6973 that set the requirement that all protocols include a discussion of user security and privacy.
- RFC 7258 entitled "Pervasive Monitoring is an Attack" that aimed to mitigate such attacks.
- RFC 8446 the Transport Layer Security Protocol (TLS) used to "prevent eavesdropping, tampering, and message forgery"39 on the Internet and on the Web.
- RFC 9000, which established a new transport protocol, QUIC: A UDP-Based Multiplexed and Secure Transport to support secure communications by introducing "security measures that ensure confidentiality, integrity, and availability in a range of deployment circumstances."40

While the IETF was looking at many of its most used and important protocols to determine if and how privacy could be enhanced while the protocol was made safer for Internet use, several research groups were established in the IRTF to investigate future directions that protocols could take to facilitate consideration of human rights beyond security and privacy. The Human Rights Protocol Considerations (HRPC) research group, established a set of considerations in RFC 8280 that could be used by protocol designers to guide their design decisions in order to support, or at least not hamper, freedom of expression when using a protocol; they are now involved with a similar document that discusses considerations for freedom of association and assembly. Another IRTF research group, Global Access for Internet for All, (GAIA) is involved in research on ways of bridging the digital gap by looking at innovative methods for meaningful access for disconnected communities.

#### World Wide Web Consortium (W3C)

The World Wide Web Consortium (W3C) has a defined set of principles that include concern for Human Rights. In response to the call from the OHCHR, an unofficial draft on the subject of Human Rights and technical standard-setting for the Web<sup>41</sup> states: "W3C as a standards organization takes responsibility for incorporating human rights considerations into its processes."42

<sup>42</sup> Ibid, pp. 2.

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<sup>39</sup> https://www.rfc-editor.org/rfc/rfc8446

<sup>40</sup> https://www.rfc-editor.org/rfc/rfc9000

<sup>&</sup>lt;sup>41</sup> "Human Rights and technical standard setting for the Web": March 2023 https://www.ohchr.org/sites/default/files/documents/issues/digitalage/cfis/techstandards/subm-standard-setting-digital-space-new-technologies-standard-settingorganizations-w3c-participants-7-input.pdf

The W3C has produced standards, often in cooperation with the IETF, that allowed, for example, the Internet to be used for wide scale communication during the recent pandemic (WebRTC). In order to enable accessibility, a basic right of the disabled as defined in the Convention on the Rights of Persons with Disabilities (CRFD)<sup>43</sup>, the W3C produces a set of Web Content Accessibility Guidelines (WCAG)<sup>44</sup> that are widely deployed and fundamental to making websites accessible.

In the area of privacy and security, W3C worked with the IETF to identify pervasive monitoring as an attack on the Internet with the goal of strengthening the Internet.<sup>45</sup> W3C created specific standards:

to enable broader use of encryption include (but are not limited to) the Web Cryptography API for providing fundamental encryption in the browser [WebCryptoAPI], and Secure Contexts to limit dangerous or powerful functionality to cases where encryption is used [secure-contexts]. Broader than just preventing surveillance, privacy has been deeply considered in a wide range of Web standards, including APIs for access to device sensors (geolocation, cameras and microphones, and virtual reality devices), real-time communications, and permissions.<sup>46</sup>

W3C has a set of web design principles that begins with:

1.1 If a trade-off needs to be made, always put user needs above all.

# Conclusion

The OHCHR Report is an important contribution to support of Human Rights and work being done to protect those rights on the Internet; where people, as declared by the UN Human Rights Council and reported to the General Assembly, have the same rights as they do when not on the Internet.<sup>47</sup> Within the SDOs, the work has been going on for a while and continues unabated. The OHCHR Report has strengthened a movement that has existed within the

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<sup>&</sup>lt;sup>43</sup> Convention on the Rights of Persons with Disabilities. United Nations. 2006. https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html

<sup>&</sup>lt;sup>44</sup> WCAG - Web Content Accessibility Guidelines Rev 2.2, October 2023; https://www.w3.org/TR/WCAG22/

<sup>&</sup>lt;sup>45</sup> Op. cit. IAB Response

<sup>&</sup>lt;sup>46</sup> Op cit. Human Rights and technical standard setting for the Web", pp. 3.

<sup>47</sup> https://digitallibrary.un.org/record/3937534?v=pdf

#### Human Rights and Standards Development Organizations

technical community, since the earliest days of creating an Internet for the public interest.<sup>48</sup> The OHCHR Report, by giving specific advice, has enabled greater focus on continuing standards work that can enable greater concern for human rights online. It has also produced an argument for greater education, corporate commitment, and financial support to this end.

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<sup>&</sup>lt;sup>48</sup> Liddicoat and Doria, Human Rights and Internet Protocols: Comparing Processes and Principles, Internet Society and APC. December 2012, https://www.apc.org/sites/default/files/ISSUE human rights 2 0.pdf