CALL FOR INPUTS

QUESTIONNAIRES TO INFORM THE ANNUAL THEMATIC REPORT OF THE SPECIAL RAPPORTEUR ON THE RIGHTS OF PERSONS WITH DISABILITIES ON ARTIFICIAL INTELLIGENCE AND DISABILITY, TO BE PRESENTED TO THE HUMAN RIGHTS COUNCIL AT ITS 49th SESSION IN MARCH 2022

Context

The Special Rapporteur on the rights of persons with disabilities, Gerard Quinn, intends to undertake innovative research concerning the impact of new technologies involving Artificial Intelligence (AI), Machine Learning (ML) and Automated Decision Making (ADM) on the rights of persons with disabilities.

In view of their rapid worldwide deployment, the Special Rapporteur wishes to examine how new technologies can help the promotion, protection and enjoyment of the rights of persons with disabilities and, equally important, the ways in which their potential to be discriminatory can be identified, reduced and eliminated.

The Special Rapporteur notes the work already undertaken by the United Nations, including the report of the High Commissioner for Human Rights on the right to privacy in the digital age, presented to the Human Rights Council at its 48th session (A/HRC/48/31). He wishes to take forward this work by referencing specifically the rights of persons with disabilities as set out in the Convention on the Rights of Persons with Disabilities (CRPD), and the United Nations Flagship Report on Disability and Sustainable Development Goals (the Flagship Report).

After engaging with all relevant actors (States, civil society, national human rights institutions (NHRIs), organisations of persons with disabilities (OPDs) and commercial undertakings and other stakeholders), the Special Rapporteur expects that his report will identify emerging good practices but also propose “red lines” prohibiting harmful uses contrary to established human rights norms.

The Special Rapporteur also expects his report will propose that relevant actors engage with a cyclical three-stage process, which includes:

(a) **Mapping:** Relevant actors should (1) Identify the use of new technologies within their territories, their potential to enhance the rights of persons with disabilities and the extent to which they risk infringing them, (2) Examine the reach, effectiveness and accessibility of existing legal protections of the rights of persons with disabilities in order to protect and enhance rights; and, (3) Review the extent to which national protections and incentives are “fit for purpose” to protect and enhance the rights of persons with disabilities.

(b) **Action:** Having identified gaps in existing protection under (a), relevant actors should (4) Develop and execute an appropriate “action plan” with measures such as capacity building, education, guidance, increasing resources to meet identified needs, propose legislative change, and plan other targeted measures which will
guard and enhance the rights of persons with disabilities.

(c) Assessment: Having formulated a plan of action, relevant actors should (5) Monitor their deployment, and, (6) Assess and evaluate its achievements and change course, where necessary.

There are many areas where AI, ML and ADM is being used. The Special Rapporteur wishes to focus on the benefits and potential for discriminatory outcomes in relation to the following key areas:

1. Interactions between persons with disabilities and State bodies;
2. the status of persons with disabilities as beneficiaries in relation to the providers of goods and services;
3. the role of persons with disabilities as workers/employees in relation to their employers and potential employers;
4. the ways in which persons with disabilities can access education and information; and
5. all aspects facilitating the independent living of persons with disabilities.

B) Questionnaire for NHRIs, OPDs, human rights defenders, and civil society

The Special Rapporteur is interested to learn the extent to which NHRIs, OPDs, human rights defenders and other parts of civil society (including particularly those concerned with the rights of persons with disabilities or with the development, control and monitoring of ethical and lawful uses of these new technologies) are engaging with States and private industry on the development of policy and usage in line with the CRPD in relation to these technologies, the types of engagement, if any, that have taken place, and the dangers and benefits of these technologies in improving the inclusion of persons of disabilities.

Please note: this set of questions seeks information from non-state actors regarding the opportunities for persons with disabilities and the threats to their rights from the deployment of AI, ML and ADM and associated technologies.

The Special Rapporteur invites contributions that address both good practices as well as the problems and deficits that have yet to be resolved.

Please attach links to official documents, policies, and/or legislation as appropriate.

QUESTIONS

1. Please provide information about the extent to which technologies such as AI, ML and ADM are used in engagements between the individual and State bodies and private bodies in a way that allows persons with disabilities to better engage positively in society.

EDF response: As demonstrated from answers to sub-questions under question 2, there is broader evidence of AI use for improving accessibility for persons with disabilities, and supporting their right to independent living and social participation by private entities and persons with disabilities themselves, than by public authorities. This does not mean that public authorities do not use AI for the benefit of persons with disabilities, but rather shows the need to fill in this information gap. In fact, EU legal framework provides good ground
for ensuring that state-procured AI brings benefit to persons with disabilities given that EU public procurement legislation has accessibility conditionalities for public bodies when procuring services and products. These must meet the accessibility requirements of the European Accessibility Act which was adopted by the EU in 2019 (See further details in answer to 2 (i)). Similarly, when EU funds are used, awarding criteria include accessibility, which means when EU funding is used to develop new technologies such as artificial intelligence, these must be accessible for persons with disabilities.

2. The following relationships are of particular interest:

(i) the individual and State bodies (for example: the distribution of social advantages, the determination of appropriate taxation/monitoring for taxation fraud, security including border control, the determination/monitoring of immigration status, humanitarian responses including during times of military conflict);

EDF response: As the European Union has started the process of developing legislation to regulate Artificial Intelligence in the EU, it would be useful to collect best practice examples of AI use by State bodies such as public administration and public services that benefit persons with disabilities. Now most AI development and deployment beneficial for persons with disabilities seems to be limited to the private sector (see 2. (ii), (iii)) and personal use by persons with disabilities as assistive or mainstream technologies (see 2 (v)). When it comes to use of AI by public bodies, rights-holder representatives and equality bodies have put more attention on potential risks and committed infringements on the rights of persons with disabilities (see answer to question 3).

In the meantime, EU has good legal basis to ensure accessible and inclusive AI that will benefit persons with disabilities, which must be reinforced by the coming EU Artificial Intelligence Regulation (this is still lacking in the legal proposal of the European Commission). Namely, the European Union has the responsibility to define the award rules of public procurement contracts that must be applied in all EU Member States by public authorities. EDF contributed to the revision of pas legislation to make sure that the specific needs of persons with disabilities in this area were not forgotten. In January 2014 the EU adopted a new Directive on Public Procurement. Several provisions refer to persons with disabilities. It is worthwhile to note that new award criteria for the most advantageous economic tenders include specific references to accessibility for persons with disabilities and design for all users as part of the quality of a tender. In addition, accessibility and design for all users’ criteria become an obligation when drawing up technical specifications for all goods and services that are intended to be used by the public or staff. This also applies to digital products and service procured by public authorities, including AI, ML and ADM. Furthermore, public authorities can include employing persons with disabilities as a condition to award a contract (see more on EDF webpage on public procurement).

EU funds Regulations also note that, “accessibility for persons with disabilities shall be taken into account throughout the preparation and implementation of programmes” (art. 7 of the Common Provisions Regulation).

Under the European Accessibility Act, its accessibility requirements will be mandatory for the products and services covered by the Act that are procured by public authorities for the use of individuals from the public or staff of the contracting authority (Art. 24.1). For example, if a public transport service procured by a city use AI-powered systems for delivery of transport service information, including real time travel information, these must comply with the requirements of the Act: these systems must be accessible not only for commuters but also for staff with disabilities that manages them.
Additionally, for any publicly procured product which is not covered by the scope of the European Accessibility Act, the accessibility requirements provided in Section VI of Annex I of the Act can also provide presumption of conformity (Art. 24.2), meaning that if public bodies request these requirements in the technical specifications of a public contract, they will be respecting the accessibility obligations. For example, if a municipality buys AI-powered tools for public administration, they can ensure its accessibility by meeting the requirements of the Act (see further in EDF toolkit on transposition of the European Accessibility Act – chapter 2.9).

So, the legal ground to ensure that state bodies deploy accessible for persons with disabilities AI technologies is there (note that the European Accessibility Act is still to be transposed by Member States by June 2022 and mostly applied from June 2025), effective implementation should follow. It is vital that the coming EU Regulation on Artificial Intelligence further reinforces accessibility of AI systems and their use for persons with disabilities by making clear reference to the European Accessibility Act.

A specific area of use of state-supported AI for the benefit of persons with disabilities is AI use in assistive technologies (AT). Advances in Artificial Intelligence offer the potential to develop and enhance AT, as well as the possibility of gaining new insights into the scale and nature of need for ATs around the world. World-wide only 10% of those who need AT have access to it (see EDF web article - Powering Inclusion: Artificial Intelligence and Assistive Technology). As for the EU, there is not a single market when it comes to AT, because of different certification schemes at national level. Persons with disabilities must go through lengthy and complex administrative processes, sometimes very medical oriented, to access AT, and they often lack the necessary information and the possibility to select the most appropriate piece of AT for them. Moreover, the different AT provision systems are not sufficiently flexible, and person-centred, and in some cases these models even discriminate against certain persons with disabilities, based on their age or work status (see EDF position paper on AT).

(ii) consumers and providers of goods and services (for example: advertising, pricing, accessing goods and services, paying for goods and services, the trend toward e-platforms to replace traditional service provision, and the development of appropriate products and services);

EDF response: One of the common uses of AI by digital services is AI-powered predictive text (e.g. in Gmail) and providing descriptions of online content. The latter is especially useful for blind, deafblind or partially sighted persons as it helps them access visual information otherwise non-accessible to these users. In April 2016 Facebook launched a new tool called "Automatic Alternative Text"; it uses AI to recognise objects or scenes in an image and reads a description aloud. In 2017 facial recognition technology also enabled users to find out which individuals were in the picture they were trying to view, even if they were not tagged in that picture by the uploader. Similarly, Microsoft delivered the ‘Seeing AI’ app, which provides image description to those who are blind or partially sighted. Microsoft is also working on a ‘Hearing AI’ app, aimed at people who are hard of hearing; this app would translate sound into visual representations. Another similar app is the one developed by Aipoly, which stores any ‘lessons learnt’ about the identification of objects while connected to the Internet, so can also be used offline.

Captioning and Sign Language make TV, video, and events accessible to people who are hard of hearing, deaf or deafblind. AI can enable automatic captioning; for example, YouTube provides this feature, however the current accuracy level is not high and the uploader needs to edit this captioning in order to ensure 100% accuracy. Microsoft’s Presentation Translator can automatically provide real-time subtitles for PowerPoint presentations whilst keeping the presentation’s formatting. This enables people to follow the presentation in a different language and it also enables better inclusion for those who
cannot hear the presentation, although their accuracy levels do not currently enable full participation.

The European Accessibility Act requires accessibility of a range of products and services in the EU, with a heavy digital focus. Such products and services include, payment and other self-service terminals, e-readers and e-books, e-commerce, consumer banking services, websites and mobile apps of transport services (excluding urban, suburban and regional services), among others (see full scope in EDF toolkit for transposition of the European Accessibility Act – Part 2.1). These requirements should also apply when economic operators provide services and offer goods which are powered by artificial intelligence.

(iii) workers/employees and employers (for example: recruitment, access to decent work, access to work, reasonable adjustments and other accommodations, health and safety monitoring and support, training and personal development, and disciplinary and termination procedures);

EDF response: Many technology companies such as Microsoft, Facebook, and Google have initiatives to diversify their workforce and employ more persons with disabilities. Often persons with disabilities are part of teams of developing accessible technologies (see EDF event report on Artificial Intelligence 2018)

(iv) learners and the providers of education (for example: the development of equal access to education, inclusive education, and to information, in particular in identifying and remedying deficits in access, providing specific accommodations for persons with disabilities, raising the quality of education, and the utility, relevance, and reliability, of information); and

EDF response: EDF Plug and Play report (see Part 1.2 Reality technologies) highlights opportunities AI technologies can create for learners with disabilities. As some people learn more effectively when engaging with images or experience rather than text, and for them, reality technologies offer new ways to acquire knowledge. Digital learning environments are not new, but their use to support learning for persons with disabilities has been somewhat limited until fairly recently. People with dyslexia for example, often struggle with reading, spelling and memory, therefore traditional forms of education are less accessible to them and result in barriers to achievement. Many children with dyslexia find education stressful and research shows that virtual environments can help them focus and enjoy learning.

(v) individuals and their right to live independently and being included in the community (for example: policies and practices in support of independent living, including access to appropriate housing, essential services, healthcare, transport, and financial security).

EDF response: As already noted under question 2 (i), potential of AI as assistive technologies to ensure greater access, independent living and social participation of persons with disabilities is great. Due to the progress on technology and disability related legislation that requires accessibility, the distinction between AT and accessible technologies is blurring. In some cases what was needed before as a standalone piece of AT is now built into mainstream technologies, such as smartphones, tablets, or computers. AI-enabled tools initially used to help people with vision, hearing, mobility and learning disabilities in areas such as predictive text, visual recognition, speech-to-text transcription, and captioning have experienced great advances in the last few years and become mainstream technologies, while continuing to be of great value for persons with disabilities.
There are many examples of opportunities that emerging technologies bring for persons with disabilities mentioned in part 1 of the EDF Plug and Pray report. Some of these include apps that use artificial intelligence to bring greater independence to those that are blind or have low-vision using Google glasses, smart environments, and smart home and connected devices, potential use of 'social robots', and smart exoskeletons, Virtual Reality (VR) applications, applications that use AI to configure complex texts and information so it is more easily digested by readers, and AI translating sign language into written text.

3. Please provide information about the extent to which technologies such as AI, ML and ADM pose a risk to the rights of persons with disabilities when deployed in relation to the areas highlighted in question 1.

EDF response: EDF Plug and Pray report and EDF Position Paper on Regulating Artificial Intelligence in the EU state potential risks stemming from inaccessible or otherwise discriminatory AI systems and their use.

Part 2. Challenges and risks of emerging technologies of the EDF Plug and Pray report highlight challenges linked to accessibility and usability, interoperability and standardisation, discrimination, privacy and security, affordability and digital skills in view of AI impact on rights of persons with disabilities.

While the noted report addresses these challenges in relation to technologies themselves, the EDF recent position paper identifies the gaps and issues in the legislative draft proposed by the European Commission which aims to regulate the development and to a lesser extent use of AI in the EU. EDF has nevertheless welcomed the European Commission’s proposal for regulating Artificial Intelligence (AI) in the EU. The proposed Regulation for AI will help ensure protection of fundamental rights of persons with disabilities in the context of new technologies. The Regulation can also help promote AI that will improve accessibility for persons with disabilities and support their participation in society. However, we have stated that the Commission proposal needs significant improvements with strong safeguards against potential discrimination by AI systems and practices (consistent with wider view from social stakeholders such as digital and consumer rights networks), and proactive measures to promote AI that will benefit accessibility and equality of persons with disabilities.

In particular, the proposal lacks horizontal and mandatory requirements to ensure accessible AI development and use. It makes no reference to the UN CRPD and EU accessibility legislation, namely the European Accessibility Act (see more detailed in the position paper).

Furthermore, the proposal lists certain areas of use of AI applications, categorising them as high risk in relation to fundamental rights of persons, while allowing their use (Annex III of draft regulation). Such areas are practices of biometric identification and categorisation of natural persons, AI systems determining individuals’ opportunities to access education, employment, access to and enjoyment of essential private services and public services and benefits, use of AI by law enforcement including for predictive policing, and for use in migration, asylum and border control management, including emotion recognition and assessing if a person is potential health or other risk to the EU or Member State. Whereas in all these areas the risk to the rights of persons with disabilities is already disproportionately high, we have highlighted that use of AI risks exacerbating and amplifying discrimination towards persons with disabilities and therefore should be prohibited.

When it comes to data protection and privacy, the draft regulation allows intrusive and controversial uses of AI systems, such as for biometric identification and categorisation,
as well as emotion recognition by public and private entities. In view of privacy and data protection it is important to recall that the EU Data Protection Regulation (GDPR) does not sufficiently protect all persons with disabilities, in that not all persons with disabilities will be able to refuse consent for processing their data by AI systems. This is the case for many persons with intellectual and psychosocial disabilities who are ‘legally incapable of giving consent’ due to prevalence of discriminatory and outdated guardianship laws which persist throughout Europe.

As raised by the European Consumer Organisation (BEUC), the EC proposal lacks measures to protect the rights of consumers, including their right to contest an algorithmic decision and obtain human oversight. There are also no remedies foreseen in case something goes wrong. Similar concerns have been expressed by the European Digital Rights network (EDRi), which notes that the proposal does not outline any mechanisms by which those harmed by AI systems may seek recourse and redress from the user of AI systems. We have echoed this concern in the EDF position paper and noted that all measures for feedback, complaint, redress and remedy should be accessible for persons with disabilities.

Further, the proposal also leaves assessment of high-risk AI systems to providers themselves. Leaving high-risk AI to self-regulation by companies which have commercial interest in declaring AI to comply with the requirements of the Regulation is not a sufficient way of safeguarding individuals against potential harm from the application of high-risk AI. Conformity assessment is also intended for AI developers but not ‘users’ (which in the proposal means companies and public agencies not individual persons). We agree with BEUC’s position that third party assessment should be the rule to assess the conformity of ‘high-risk AI systems’. We also support EDRi and the European Center for Not-for-Profit Law (ECNL) calls to mandate users to conduct and publish an ex ante human rights impact assessment before putting a high risk AI system into use. We highlight that conformity assessments should include accessibility of AI systems and their use for persons with disabilities.

The current proposal aims to regulate all providers and users of AI which effect people within the EU. It does not matter if a provider or user is established in or outside the EU. For example, an American or Chinese AI provider or user must obey the EU AI Regulation when their AI is affecting people in the EU (Article 2). The Regulation does not apply to providers and users established in the EU which will affect individuals in third countries. This is contrary to the objective of ‘shaping global norms and standards for trustworthy AI consistent with EU values’ as stated in the explanatory memorandum of the Proposal (page 5). This means European companies can develop AI systems and sell to third countries or companies based there even if there is reason to believe the system can be used in a manner which is harmful for persons with disabilities outside of the EU.

Lastly, the proposal does not ensure involvement of persons with disabilities through their representing organisations in the development, implementation, and monitoring of European and national AI policies, or promote their involvement in AI development projects and teams through legal or other incentives. It only notes that ‘non-high risk’ AI developers can include accessibility and diversity of development teams in their codes of conducts, reducing right of persons with disabilities under the CRPD to favours by companies developing ‘non-high risk’ AI applications.

Annex I of EDF position paper includes examples of actual and potential discriminatory AI use in education, employment, public and private services and healthcare effecting persons with disabilities.

Equinet report on Regulating AI (2020) contains further examples of AI detrimental to
fundamental rights of individuals.

Further disability-focused issues addressed can also be found in Disability, Bias, and AI by Meredith Whittaker et al.

4. Please provide information on any formal complaints, official investigations, and related jurisprudence arising from allegations of discrimination against persons with disabilities in relation to the matters highlighted in response to question 2.

**EDF response:** Some of the examples mentioned in the EDF position paper Annex I of discriminator AI are based on the Equinet report on Regulating AI (2020). This report is informed by the work of equality bodies mandated by EU law to counter discrimination and promote equality in Member States of the EU. For relevant information about jurisprudence and formal complaints and official investigations regarding discriminatory AI, it is advisable to contact the Equinet network.

Similarly, when it comes to AI infringement on data protection and privacy, the EU Data Protection Board and Supervisor are beset placed to address these (see for example case of Swedish Data Protection authority issuing a fine to a municipality using facial recognition in schools).

5. Please provide information about all relevant criminal and civil laws, codes, regulatory mechanisms, cases and other determinations that address the rights of persons with disabilities and the matters highlighted in response to question 2.

**EDF response:** At EU level, the proposed EU Regulation on Artificial Intelligence will be the main legislation. Some AI-related issues, for example in relation to use of AI for recommender systems and targeted advertisement are being discussed within the proposed EU Digital Services and Digital Markets Acts by EU legislators (vote on Parliament position expected in December).

The European Accessibility Act provides the necessary accessibility requirements for products and services, and if referenced in the EU AI regulation can ensure that AI systems and their use are accessible for persons with disabilities.

Other relevant EU acts include EU non-discrimination and equality law, including Council Directive 2000/78/EC on equal treatment in employment and occupation, which protects persons with disabilities, among others, from discrimination in employment; EU General Data Protection Regulation, EU product safety and liability legislation.

6. Please explain the effectiveness of these laws, codes and regulatory mechanisms in relation to the protection and advancement of the rights of persons with disabilities (for example: the reach of those rights, access to courts and tribunals and other enforcement mechanisms).

**EDF response:** EU non-discrimination, data protection, liability and product safety legislation have gaps when it comes to protecting rights of persons with disabilities during deployment of AI systems. For example, EU non-discrimination law only protects persons with disabilities in employment and vocational training, while GDPR does not protect persons with disabilities under guardianship. Therefore the AI Regulation should address these gaps directly.

7. Please provide information on the extent to which persons with disabilities, civil society and organizations of persons with disabilities (OPDs) are consulted and
participate in the development of policy and practices in relation to the matters outlined in questions 1 to 2 and the extent to which they are included on the same basis as others.

**EDF response:** EDF has participated in the public consultation process leading to the publication of the European Commission’s proposal for Regulating AI in the EU. We have given feedback to the public consultations and raised accessibility and other rights of persons with disabilities when developing the legal act. However, our feedback has been largely ignored as demonstrated by the lack of attention to accessibility requirements in the European Commission proposal for Regulating AI (this has also been the case for the Commission proposals for Digital Services Act and Digital Markets Act). Other civil society actors have raised that there is great imbalance of influence between civil society and industrial stakeholders and that often participation in EU discussions and consultations for development of the AI Regulation proposal has been a performative act rather than a meaningful dialogue with rightsholders resulting their feedback and views being reflected in the proposal text.

To our knowledge EDF members have not been involved the development of the EU coordinated AI plan or in the development, implementation and assessment of national plans, although this information would need to be further verified.

As a general rule, civil society dialogue with the European Parliament is quite open and collaborative, while influencing the Council and Member States’ positions remains a challenge, due to lack of transparency of the procedures in this EU institution.

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**Please submit your inputs by 3 November 2021 at 6 p.m. CET via email to ohchr-sr.disability@un.org**