Australian Red Cross
THE POWER OF HUMANITY

Submission to the Human Rights and Technology project

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Foreword

Technology is changing our world in profound ways as the speed and scale of technological innovation and adoption transform the way people live and work, and how they connect with each other and with institutions.

Advancements in technology have an immense potential to help address some of humanity's most wicked problems by improving safety and protection in times of crises and introducing new forms of civic, social and economic participation.

The sheer speed and pervasiveness of new technologies also means that as a society we are struggling to keep pace to ensure that new technologies are developed and used responsibly and inclusively. Poorly designed or maliciously used technology perpetuates vulnerability and marginalisation. We need to act so that technological advancements deliver improved human dignity and safety; so that they benefit humanity, not undermine it.

Australian Red Cross is committed to understanding the intersection of technology and humanity, leveraging new and emerging technologies to solve complex social and humanitarian issues and create new futures and possibilities for humanity. Our mandate and values to support and empower people and communities in times of vulnerability, compel us to ensure that technology serves humanity by putting people at the centre of technological design.

With its focus on responsible and inclusive technological innovation and adoption, the Australian Human Rights Commission project on human rights and technology opens up a much needed conversation about how our society and institutions can adapt to create those new opportunities, while mitigating inequalities and protecting individuals.

The challenge and opportunity for us as Australians is to ensure that the benefits of new technologies are widely shared, to imagine and chase the possibilities for all, and to ensure so that people and communities with less access to wealth and power are not further marginalised.

We welcome the consultations on the Australian Human Rights Commission' human rights and technology project and have addressed the broad themes of the consultation in our submission.

Most of all, we encourage the Commission to see both the potential and the risks in our common future, and design and solve for both.

We look forward to further engagement as the project evolves.

Sincerely,

Judy Slatyer
Chief Executive Officer
AUSTRALIAN RED CROSS

Australian Red Cross

Red Cross mobilises the power of humanity – the powerful action of people helping people that can make a real difference to and unlock the strengths in those who are vulnerable.

We save lives. We walk alongside and support people who are going through tough times. We support people before and after disasters strike or who are dislocated from daily life. We work to alleviate suffering during wars and conflict. We promote humanitarian laws and values.

More than 800,000 Australians engage with us every year. Our volunteers, members and staff work from 397 sites around the country and in 14 countries in Asia-Pacific region.

We work in areas as diverse as health, migration and disaster risk management. Together we are part of the world's largest humanitarian network present in 191 countries. As a member of the International Red Cross Red Crescent Movement we are bound by our Fundamental Principles[1] which oblige us to work according only to the urgency of needs; without discrimination as to nationality, religious beliefs, class or political opinions; independently at all times; and ensuring that we maintain the confidence of everyone by not taking sides in matters of a political nature.

Submission to the Human Rights and Technology project

Guided by our Fundamental Principles we have positioned our submission in a broader humanitarian context by addressing the themes of opportunity, concerns, impact on particular groups, and responsible innovation rather than responding to the specific consultation questions.

The power of technology to build and amplify social progress

Artificial intelligence (AI), machine learning, digital connectivity, distributed ledger and other technologies are changing how the world works — how we create products and services, how we relate to each other, and how we connect with people, places and things. These technologies are advancing fast and reaching far, enabling both individuals and institutions to know, share, automate, monitor and customise more[2]. The tools, systems and platforms of this technological revolution present us with an incredible opportunity to have a positive social impact.

We have seen over the last decade how digital tools and connectivity have democratised access to information and introduced new forms of participation. Individuals and groups can increasingly self-mobilise and respond to people's needs. Traditional hierarchies and rules are being disrupted as technology amplifies previously marginalised voices and influence in decision-making.

Decentralisation can help amplify efforts to achieve social change. For example, Be Earth Foundation, a United Nations' Intergovernmental Organisation, is joining forces with an Australian startup Horizon State to leverage Horizon State's blockchain technology - which enables secure and immediate voting processes - to help accelerate change on Sustainable Development Goal 16 on

[1] Fundamental Principles: humanity, impartiality, neutrality, independence, voluntarism, universality and unity
[2] https://lippincott.com/customer-of-the-future/meet-dawn/

peace, justice, and strong institutions[3]. By embracing approaches like blockchain-enabled voting and devolved decision-making, institutions can crowdsource ideas to make their strategies and services relevant, and create a sense of shared value, meaningful engagement and trust.

More than a billion people in the world lack access to recognised identification depriving them from access to basic services, protections and rights. Technologies such as connectivity, blockchain and biometrics are paving the way for the creation of a verified, secure and portable digital identity. Red Cross is partnering with TyepHuman, FlexDapps, the global ID 2020 alliance and other partners to help solve the challenges of identity for these people through technology[4].

Technology is also helping humanitarian organisations better prepare for and respond to disasters. Red Cross is increasingly using digital and tech tools such as social media analysis, satellite and drone imagery and 'digital humanitarians' to map damage caused by disasters and provide targeted help. Even better, many weather-related hazards can be forecast and we can use the window between a forecast and an event to help communities get ready before disaster strikes. For example, in Peru, Red Cross[5] worked with the government to develop procedures to release help to communities in advance of forecasted cold snaps, a common weather risk in the Andes. Through good use of data and technology we can deploy the right kind of aid at the right time to where it is needed most.

Better access to help when you need it, genuine participation for all, greater self-agency and controls for those who are vulnerable, giving voice to marginalised communities, documenting the undocumented – the ability of technology to help us tackle some of the hardest social and humanitarian challenges is immense. With the shifts underway we all have the opportunity, if we all choose to take it, to put the needs of humanity first and to ensure that respect for human dignity and safety are prioritised and firmly at the heart of how society adapts and evolves in this era of change.

Case study: Humanitech* – an initiative of Australian Red Cross

Humanitech is a new initiative of Australian Red Cross which seeks to progress humanitarian outcomes through the use of new and emerging technology such as blockchain, artificial intelligence and robotics. Humanitech puts the spotlight on how we use technology for good, how we can mitigate the negative impacts and create the best outcome for humanity. Through Humanitech we will create an innovative and entrepreneurial environment in which to collaborate with other organisations, thought leaders, institutions and government in order to explore, understand and develop unique insights into the impact of emerging technology on humanity. We will pioneer new solutions through sharing, collaboration and experimentation and help amplify ideas and solutions with the greatest potential for scale and impact.

Humanitech is a trade mark of the Australian Red Cross Society which is accepted and is pending registration.

[3] https://www.smartcompany.com.au/startupsmart/news-analysis/voting-blockchain-startup-horizon-state-locks-partnership-united-nations-gears-partnerships/

[4] https://id2020.org/

[5] Peru Red Cross, 510 – Netherlands Red Cross and Red Cross Red Crescent Climate Centre

Types and application of technology that raise particular concerns for humanity

New and emerging technologies can be both beneficial and detrimental to society: while they improve our access to information, services and social connection they also present risks that require us to build in safeguards to protect people's dignity and safety. Now is the time for governments, organisations and communities to act to ensure that these technologies are designed and developed around human needs.

Artificial intelligence and AI-informed decision making

Artificial intelligence is becoming pervasive in our lives, as algorithms and machine learning are increasingly used to predict human behaviours and risks for insurance, legal and health decisions, and access to social services. For example, a research project at Melbourne University is using AI-based facial recognition to decipher people's personality[6], while City of Perth is using similar technology to identify 'troublemakers' for its 'Black Watchlist'[7]. Legislation is currently before the Australian Parliament to create a national biometric database[8], and internationally, China is well on the way towards creating an AI-enabled surveillance state[9]. Incursion of AI-technology into our daily lives is putting people – and especially poorer communities, minorities and activists - at risk of ***algorithmic discrimination*** as technology and the data that 'feeds' it reflect societal and policy biases and can therefore replicate existing inequalities and vulnerabilities[10].

Case study: Automated decision-making and society

In order to understand and respond effectively to the dynamics of the new wave of automation, we need to look beyond technology to the social, economic, legal and cultural dimensions of change. How do we ensure that the actions of increasingly intelligent technologies are responsible, ethical, and inclusive, in ways that are consistent with our freedoms, citizenship and accountabilities? To help answer these questions, Australian Red Cross is partnering with RMIT University in a bid to develop a Centre of Excellence in automated decision-making and society. The proposed Centre will be a collaborative, national research body, purpose-built to generate knowledge in this emerging field, inform public and industry understanding, educate and train students and practitioners, design and develop useful tools, and formulate world-leading policy and practice for public, private and social good sectors.

AI drives the content we see on digital platforms increasingly creating 'echo chambers' that reinforce personal beliefs. Shutting out contrasting worldviews disables engagement across ideological lines and fuels social division and mistrust. Personal data can be used to narrowly target people via social media – so-called narrowcasting - to influence their opinions and voting preferences. Such ***digital manipulation of public opinion***, including the rise of false news and deepfakes, has grave consequences for democracy and the way people connect and participate in society[11].

[6] http://newsroom.melbourne.edu/news/biometric-mirror-highlights-flaws-artificial-intelligence
[7] https://www.perthnow.com.au/technology/security/facial-recognition-cctv-cameras-how-city-of-perth-will-spy-on-you-ng-b88902734z
[8] https://theconversation.com/close-up-the-governments-facial-recognition-plan-could-reveal-more-than-just-your-identity-92261
[9] http://www.abc.net.au/news/2018-04-17/chinese-man-caught-by-facial-recognition-arrested-at-concert/9668608
[10] https://www.technologyreview.com/s/608248/biased-algorithms-are-everywhere-and-no-one-seems-to-care/
[11] Edelman. 2017. Global Trust Barometer.

Australian Red Cross, as a member of the global Red Cross Red Crescent Movement, has a mandate under international law to ensure that everyone understands the laws of war, also known as international humanitarian law (IHL), both in times of peace and times of war.

An important challenge for the application of IHL is the development of increasingly ***autonomous weapons*** – that is, weapons with a degree of autonomy over critical functions such as targeting. IHL places responsibilities upon combatants, including the responsibility to differentiate between legitimate military targets and people and objects that are protected, and to balance the potential for civilian losses against an attack's anticipated military advantage. The nature and degree of human control over autonomous weapons is therefore a major issue, which States, including Australia, will continue to need to consider as part of their obligation to review the legality of newly developed weapons[12].

Responsible use of technology and data

New technologies and data analytics are fast becoming critical tools for humanitarian work. Satellite imagery, on-the-ground drone footage, biometrics, and crowd-sourced mapping are already strengthening response efforts to disasters. However, there is a risk that humanitarian innovation can slide into ***human experimentation*** without accountability or consent, which may both cause harm and violate humanitarian principle of 'do no harm'. As the below case study illustrates, investing in ethics and evidence on the impact of new technologies is needed to better understand both the opportunities and the potential harms they may present[13].

Case study: Humanitarian experimentation

Cargo ***drones*** have been presented as a means to help deliver assistance to places that aid agencies otherwise find difficult, and sometimes impossible, to reach. ***Biometrics*** is said to speed up cumbersome registration processes, thereby allowing faster access to aid for people in need (who can only receive assistance upon registration). And, in the case of responding to the 2014 outbreak of Ebola in West Africa, ***data modelling*** was seen as a way to help in this response. However, these examples illustrate a host of potential harms, from breaching the privacy obligations concerning violation of collecting personally identifiable information personal (including sensitive) information, to commercial gains obtained from suspending restrictions on testing technology products on people, to the distribution of resources in ways that serve technologies or private-sector actors over the needs of populations in these unregulated contexts. Biometric procedures can be set up in a way that violates international refugee and human rights law – for example, where matching of data across humanitarian and national databases increases exposure to new forms of intrusion and insecurity. The abuse of data rights causes direct harm not only for the people humanitarians serve, but also for humanitarian organisations, including loss of legitimacy and reputational damage, failure of operations, or litigation.

Source: Sandvik, K., Jacobsen, K., & McDonald, S. (2017). Do no harm: A taxonomy of the challenges of humanitarian experimentation. International Review of the Red Cross, 99(904), 319-344. doi:10.1017/S181638311700042X. and http://blogs.icrc.org/law-and-policy/2017/11/28/humanitarian-experimentation/

[12] https://www.icrc.org/en/document/views-icrc-autonomous-weapon-system
[13] http://blogs.icrc.org/law-and-policy/2017/11/28/humanitarian-experimentation/

Opportunities of using data and technology for good go hand in hand with the need to develop ***ethical standards*** on how to use them in a responsible manner. This means understanding the consequences that the use of data and tech could have on vulnerable people and taking measures to avoid putting individuals or communities at risk[14]. With the convergence of global trends – connectivity, blockchain, biometrics, consumer demand - pointing to the opportunity to develop a universal ***digital identity***, it is imperative to improve the security and protection of personal data and ensure that the control of data rests with the individual[15].

Case study: Identity Alliance

As part of Humanitech, Australian Red Cross is partnering with Type Human to develop a blockchain identity solution including to support the onboarding and management of volunteers and staff for domestic and international mobilisation. One of the use cases we aim to develop as part of the identity solution is to ensure that humanitarian workers have the necessary checks and qualifications and can be deployed quickly and safely. The solution is guided by the principles of self-sovereign identity – meaning that it is permanent, portable and private.

Case study: Signal Code

The Signal Code is the result of a six month study by the Signal Program on Human Security and Technology at the Harvard Humanitarian Initiative (HHI) to identify *what rights people have to information during disasters*. The Signal Code identifies five rights from multiple sources of international human rights and humanitarian law and standards that already exist and apply to humanitarian information activities (HIAs): right to information, right to protection, right to privacy and security, right to data agency, and right to rectification and redress. The goal of the Signal Code is to provide a foundation for the future development of ethical obligations for humanitarian actors and minimum technical standards for the safe, ethical, and responsible conduct of HIAs before, during, and after disasters strike.

Source: http://hhi.harvard.edu/publications/signal-code-human-rights-approach-information-during-crisis

Technological displacement of human labour

In the workplace, artificial intelligence, robotics, and quantum computing promise to radically reduce the need for human labour and replace whole categories of employment, though unevenly, across many industries[16]. A 2015 study estimated that up to 5 million or 40 percent of Australian jobs, including highly skilled roles, could be automated by 2030[17]. Like previous revolutions in the modes of production, from heavy industry, telecommunications and electricity, and digital computation, this period of disruption is expected to create new types of jobs in the long-run while displacing countless ones in the short-term[18]. There may also be a reframing of the workplace, with machines doing routine work, while humans apply emotional intelligence, cognitive flexibility, social

[14] https://www.510.global/510-data-responsibility-policy/
[15] https://id2020.org/digital-identity-1/
[16] https://medium.com/@TimJDunlop/why-the-future-is-workless-introduction-a269213d97b7
[17] https://www.ceda.com.au/Research-and-policy/All-CEDA-research/Research-catalogue/Australia-s-future-workforce
[18] http://blogs.worldbank.org/psd/future-jobs-and-fourth-industrial-revolution-business-usual-unusual-business

skills, critical thinking, and complex problem-solving[19,20].

The pace and scale of change raises concern there may not be enough paid work to support a decent standard of living for ordinary people, trapping many into poverty. Fears about the ***future of work*** have spurred experimentation with concepts such as Universal Basic Income[21] - an unconditional cash payment to all citizens sufficient to meet basic needs - and broader debates about reforming the global economic system to ensure a more equitable future. Displacement of human labour will have broader social implications – exclusion from workforce is isolating as it diminishes opportunities for people, and especially migrants and refugees, to establish connections, learn and adapt to a new society. A joined up effort by governments, private sector and the community will be needed to ensure Australia not only manages but thrives in the digital economy.

Implications of new technologies for different groups of people in our community

As digital technologies become increasingly central to public and private life, a lack of access can intensify existing social, economic and cultural inequalities. The growing use of technology-based solutions for access to public services, including Centrelink, Medicare and My Aged Care, poses significant challenges for more than four million Australians who live in households without fixed internet connection[22]. Beyond internet connectivity, vulnerable Australians' digital access is further curtailed by unaffordable energy[23] needed to power all those devices, as well as low digital literacy that prohibits them from using technology to learn, connect and participate[24].

People aged 65 and over, Australians with low levels of income, education and employment, and those living outside of metropolitan centres are significantly less digitally connected than the national average. The gaps are narrowing for people with disability and Aboriginal and Torres Strait Islanders, but they continue to experience lower levels of digital inclusion compared to the rest of the population. The digital divide between younger and older, richer and poorer, and urban and rural Australians is a significant barrier to service access and participation in the digital economy[25].

Pervasive service digitisation and dependence on technology in our private and public lives can further disadvantage vulnerable Australians. Improving ***digital inclusion*** is critical to ensure that everyone in our community is empowered to participate and contribute. Technology can empower people in so many ways – they can stay connected and involved with their social and community networks, access knowledge and services to help them stay well, or link to learning and job opportunities. By putting humans at the centre of technology, we can design it to enable self-agency, to put control and decisions in people's hands, and drive participation, collaboration and healthy social connections.

[19] http://www.fya.org.au/wp-content/uploads/2015/08/fya-future-of-work-report-final-lr.pdf
[20] http://amp.weforum.org/agenda/2017/08/automation-may-take-our-jobs-but-it-ll-restore-our-humanity
[21] https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/ pubs/rp/rp1617/BasicIncome
[22] https://digitalinclusionindex.org.au/wp-content/uploads/2018/08/Australian-digital-inclusion-index-2018.pdf
[23] https://www.bsl.org.au/advocacy/equity-and-climate-change/energy-affordability/
[24] https://digitalinclusionindex.org.au/wp-content/uploads/2018/08/Australian-digital-inclusion-index-2018.pdf
[25] Ibid.

Encouraging responsible and inclusive development and use of new technologies

The world of intelligent machines – where technologies and people who build them are now shaping our social and economic systems - requires smart and adaptive governance models. We need to strengthen our laws and regulatory frameworks and work alongside the private sector – the primary producer of technology – to ensure responsible innovation.

Regulation and design of technology must be guided by the values of ***humanity, safety, trust, participation*** and ***responsibility***. We must place humans at the centre and in control of technology. We must build safeguards and shared values into technology using human-centred design. We can build trust by involving the broader community in co-design of ethical and regulatory frameworks. We must ensure that the benefits apply to everyone and that communities with less access to wealth and power are not further marginalised. And we must develop standards and practices to use technology responsibly. A value-driven approach will allow us to leverage the tools, systems and platforms of the technological revolution to create the future we can all aspire to.

In addition to approaches canvassed in the Issues Paper, we'd like to add the following developments to inform your thinking about responsible innovation:

- *Community Principles on Ethical Data Practices* – also referred to as the Hippocratic Oath for data scientists. They were developed in February 2018 by Data for Good Exchange and focus on "defining ethical and responsible behaviours for sourcing, sharing and implementing data in a manner that will cause no harm and maximise positive impact."[26,27].
- *The Copenhagen Catalog* – 150 principles for a new direction in tech crowdsourced at an event dedicated to democratising technology[28]. Their manifesto calls for a "move from human-centred design to humanity-centred design" of technology[29].
- *ID2020 Alliance* – they are investigating what constitutes a 'good' digital identity and looking into standardisation of credentials in digital identity solutions - how data is stored in digital identities, how can it be reused safely by multiple organisations, and how can it lower the demand on the person to provide the same data in multiple formats. Their aim is to ensure digital identity standards that are applicable globally and from birth to death[30].

As noted in the Issues Paper, oversight of new technology is a cross-jurisdictional issue. It is critical that Australia keeps its efforts to develop a sufficiently robust yet flexible regulatory environment in step with global developments. We note the breadth of international regulatory approaches detailed in the Issues Paper and look forward to examining the White Paper on regulation co-authored by the Commission and the World Economic Forum that is due in early 2019.

As the role of technology in society grows, so does the urgency of diversifying the technology sector. When it comes to making decisions about hiring someone for a job, giving them health

[26] https://datapractices.org/community-principles-on-ethical-data-sharing/
[27] https://virginia-eubanks.com/2018/02/21/a-hippocratic-oath-for-data-science/
[28] https://www.copenhagencatalog.org/
[29] https://copenhagenletter.org/
[30] https://id2020.org/

insurance, or identifying them as a crime suspect, human bias plays a significant role. When this bias is transferred into powerful AI technologies, it can perpetuate and even amplify social inequalities. Without increasing diversity in the tech sector, we are not going to be able to address problems that are faced by the majority of people in the world, and we risk creating worse outcomes for those already on the margins[31].

Embedding diversity and values in technological design will in part determine whether technology serves humanity. This highlights an important role for civil society organisations to both develop technology and the ethical standards and practice for its use. Coming from a 'social good' position and with deep grassroots networks we can ensure that the needs of people and communities we work with are at the centre of technology.

Given the transformational nature of change and the opportunity this brings for humanity, Australian Red Cross commends the Commission's efforts in pursuing this important project and engaging widely across the Australian community, including with government, business, civil society and individuals, to jointly ensure inclusive, accountable, and ethical design and application of technology.

[31] https://www.newscientist.com/article/2166207-discriminating-algorithms-5-times-ai-showed-prejudice/