

Taking a Child Rights-Based Approach to Implementing the UNGPs in the Digital Environment

A contribution to the B-Tech Project



Overview

Digital technologies promise tremendous benefits for children, such as better access to information, education and health tools, opportunities for civic participation, new environments for play and social interaction, and improved accessibility for children with disabilities.

However, the spread of digital technologies can also encompass a broad spectrum of human rights risks and harms to which children can be particularly vulnerable.¹ As such, the full potential of benefits for children can only be realized if such risks of harm are identified, prevented and mitigated. UN Human Rights experts have long highlighted the ways that digital technologies can negatively impact on children's rights, such as the right to education, the right to privacy and directly or indirectly facilitate child sexual exploitation and abuse.² Other risks related to digital technologies that are also faced by adults can be magnified for children. As innovation may outpace safeguards relatively quickly, it is essential to continuously account for harms associated with emerging digital technologies such as generative AI.

Technology companies' responsibility to respect children's rights is a vital component necessary to achieve better outcomes for children in relation to the digital environment. Respect for children's rights must reside within a company's core operations and how it carries out its daily business activities. Sustained and focused efforts are needed to understand and address child rights impacts comprehensively as part of broader efforts to ensure responsible business conduct in the digital age.

Companies that design, develop and deploy digital technologies should proactively identify, prevent and mitigate adverse impacts on human rights including children's rights. The [United Nations Guiding Principles on Business and Human Rights \(UNGPs\)](#) provide a framework for how to do this, along with the [Children's Rights and Business Principles \(CRBPs\)](#), that guide companies on how best to approach children's rights in particular and integrate them into their operations. Both the UNGPs and CRBPs are aligned with international human rights

A child means every human being below the age of eighteen years unless, under the law applicable to the child, majority is attained earlier.

– Convention on the Rights of the Child, article 1

law, including the [Convention on the Rights of the Child \(CRC\)](#), the [Optional Protocol on the Sale of Children, Child Prostitution and Child Pornography \(OPSC\)](#); and [CRC General comment No. 25 \(2021\)](#) on children's rights in relation to the digital environment (GC 25).

The recently adopted [Global Digital Compact](#) sets out how States aim to respond to emerging technologies and contains a substantial focus on children. It reflects global commitment to make the online space safe for all, especially for children, through actions by governments, digital technology companies, developers and social media platforms.

About this Briefing

This briefing was developed with UNICEF as a contribution to the UN Human Rights [B-Tech Project](#). It complements the series of foundational papers published by the B-Tech Project to frame policy, practice or regulatory efforts, both by States and companies, to prevent and address human rights risks related to digital technologies in line with the [UNGPs](#).

The UNGPs encompass three pillars: I) the State duty to protect,³ II) the corporate responsibility to respect and III) access to remedy. The UNGPs, endorsed by the Human Rights Council in 2011, are the global authoritative standard for preventing and addressing human rights harms connected to business activity and are aimed at both States and business enterprises.

The [CRBPs](#) identify a range of actions that all businesses should take to respect children's rights, i.e., to prevent and address any adverse impact on children's human rights in light of their corporate responsibility to respect. Additionally, and beyond the corporate responsibility to respect human rights laid down in the UNGPs, the CRBPs encourage measures by business to commit to support and advance children's rights.

Drawing on a robust background of evidence and guidance and informed by input received following a consultation process on a draft version of this briefing, it outlines key elements for implementing the UNGPs and, as an extension, relevant principles of the CRBPs on the corporate responsibility to respect children's rights in the digital environment, across all three pillars. While not exhaustive, it offers an introduction to core child rights concepts for advancing business and human rights in the context of digital activities that may directly or indirectly impact children. This briefing should be read in conjunction with the foundational papers in the [B-Tech series](#), in particular, [The UN Guiding Principles in the Age of Technology](#).

The aim of this child rights briefing is to provide an overview of the key concepts and frameworks relevant to respecting children's rights in the digital environment, as a foundation for future, more context-specific discussions and work.



Headlines

1. The UNGPs are grounded in recognition of international human rights law, which includes the CRC. This makes the UNGPs an important framework for ensuring business respect for children’s rights in the digital environment.
2. States should apply a “smart mix” of measures to foster technology companies’ respect for children’s rights (Pillar I).
3. Meeting the corporate responsibility to respect human rights in the digital environment requires policies and processes to identify and address child rights impacts (Pillar II).
4. Human rights due diligence requires special attention to children’s views, needs and unique vulnerabilities (Pillar II).
5. Child rights impacts should be considered throughout the technology life cycle. The effectiveness of risk mitigation strategies should be tracked through both internal and independent research, then communicated publicly (Pillar II).
6. Providing remedies that respect children’s rights requires additional considerations and measures to address the heightened barriers children face in accessing justice (Pillar III).

ONE

The UNGPs are grounded in recognition of international human rights law, which includes the CRC. This makes the UNGPs an important framework for ensuring business respect for children’s rights in the digital environment.

The UNGPs are structured around three pillars. **Pillar I** reaffirms the State duty to protect human rights. As asserted in the first principle, “States must protect against human rights abuse within their territory and/or jurisdiction by third parties, including business enterprises.” To foster adequate protection of human rights, which include children’s rights, States should also consider the “full range of permissible preventative and remedial measures, including policies, legislation, regulations and adjudication,” as noted in the commentary on UNGP 1.

Pillar II introduces the concept of corporate responsibility to respect human rights, which applies to all business sectors, including the technology sector. The commentary on UNGP 18 stipulates that business enterprises should respect the human rights of all rights holders, paying “special attention to any particular human rights impacts on individuals from groups or populations that may be at heightened risk of vulnerability or marginalization.” Under UNGP 3, it is noted that this includes children.⁴

Pillar III sets out provisions for access to remedy, both in terms of judicial and non-judicial mechanisms, for those adversely impacted by company conduct, including by business activities in relation to the digital environment (UNGP 25).

THE GUIDING PRINCIPLES THREE PILLARS



International human rights conventions, including the CRC, contain provisions on the State duty to protect individuals and communities from human rights abuses by third parties, and if such abuses occur, to provide effective remedy for victims. The Committee on the Rights of the Child has also recognized the relevance of the UNGPs to children’s rights, further reinforcing the importance of unpacking child rights-based approaches to implementing the UNGPs in the digital environment (see box below).⁵ This incorporates a duty to protect children from all forms of violence, including violence resulting from the use of digital technologies, and to prevent children’s data from being processed in ways that have adverse impacts on their rights. States also have a duty to ensure that children can access information, freely express themselves and participate in civic spaces online, while protecting their right to privacy.⁶

The UNGPs, international human rights law, and the Convention on the Rights of the Child

The UNGPs are underpinned by international human rights law. There are nine core international human rights treaties,⁷ including the CRC. The most widely ratified human rights treaty in history, the CRC contains 54 articles setting out the civil, political, economic, social and cultural rights all children are entitled to, in addition to the rights contained in the other eight treaties. The four guiding principles of the CRC include non-discrimination, best interests of the child, survival and development, and participation.

The CRC also established the Committee on the Rights of the Child, which is the monitoring mechanism comprised of 18 independent experts who oversee the implementation of the Convention by its State parties.

The UNGPs require businesses to embed these human rights into their policies and practices. This means that technology companies should consider children’s rights as well as broader human rights issues as part of their human rights due diligence (HRDD) processes.



TWO

States should apply a “smart mix” of measures to foster technology companies’ respect for children’s rights (Pillar I).

The UNGPs are anchored in the State duty under international human rights law to take appropriate measures to prevent, investigate, punish and redress abuses of human rights, including the rights of children, that involve companies (including technology companies).⁸ As part of the State duty to protect, the UNGPs stipulate that States should adopt a “smart mix” of mandatory and voluntary measures to foster technology companies’ respect for children’s rights (UNGP 1). This includes implementing where appropriate robust laws, regulations and policies to govern the technology sector as well as supporting companies in adopting appropriate measures to respect children’s rights through incentive-based means and voluntary measures. States are required to take “appropriate steps to prevent, investigate, punish and redress” business-related human rights abuses within their territory and/or jurisdiction (UNGP 1) and ensure that children whose rights have been adversely impacted by digital technologies have access to effective remedy. At the same time, States need to ensure that laws and policies governing the operation of business enterprises, such as corporate law, do not constrain but enable business respect for human rights.

Furthermore, UNGP 3 sets out guidance for States to draft and implement regulations that obligate companies to undertake periodical human rights impact assessments (HRIAs) to identify, prevent, mitigate, and account for how they address actual or potential adverse human rights impacts, which includes children’s rights. Many of the recently adopted State frameworks aimed at regulating the technology sector include a mix of both law and policy, and it is important that all of these initiatives thoroughly incorporate children’s rights.⁹

The State duty to ensure business respect for human rights should be combined with engaging in international cooperation for the realization of children’s rights beyond a country’s own territorial borders.

MANDATORY MEASURES: LAWS AND REGULATIONS TO PROMOTE RESPONSIBLE BUSINESS CONDUCT INCLUDING AS IT RELATES TO CHILDREN

The “smart mix” of measures called upon by the UNGPs entails that States introduce or adapt current legislation to effectively require companies in the tech sector to respect human rights, among them children’s rights. A growing number of States and regional bodies are developing legal frameworks to regulate digital technologies (and the services that depend on these technologies) to address adverse child rights impacts in relation to the digital environment.

Building upon the UNGPs, the Committee on the Rights of the Child has also clarified that States should ensure that businesses undertake child rights due diligence that identifies, prevents and mitigates their impacts on children's rights across their business relationships and within their global operations.¹⁰ General Comment No.16 from the Committee on the Rights of the Child also sets out in detail State obligations regarding the impact of the business sector on children's rights.¹¹ Furthermore, the Committee has specified that States should mandate businesses to carry out child rights impact assessments (CRIAs) and disclose them to the public – with special consideration given to the differentiated and at times severe impacts of the digital environment on children.¹²

There are an increasing number of laws and regulations which make aspects of HRDD mandatory for the technology sector.¹³ This reflects a growing global trend towards governments taking a greater interest in mandatory measures related to HRDD more broadly. Where States incorporate children's rights into the scope of such mandatory due diligence legislation, HRDD mechanisms designed to implement legislation are more likely to be responsive to children's rights. At the same time, when legislation requires the implementation of HRDD in content moderation, it is crucial to consider risks to all of children's rights, including freedom of expression and privacy.

Technology companies that have impacts on children vary considerably in size and business models. Regulatory requirements imposed on small and medium-sized enterprises should be proportionate to their size, although when carrying out HRDD, the measures taken should be proportionate to the risks to children identified, rather than proportionate to the size of the company.¹⁴ Smaller companies may require support from the State to meet their due diligence requirements.

It is also important that regulations that require technology companies to mitigate the risks they pose to children do not inadvertently incentivize companies to exclude children from accessing digital platforms and services appropriate to their age and stage of development as a crude way of avoiding these risks. Further, regulations should make it clear that companies cannot, for example, wait to make a certain amount of profit before they attend to their impacts on children's rights, but rather the UNGPs provide that the HRDD process should begin at the design phase and before testing or launching of any product into the market. Furthermore, small and large companies alike need to consider their entire value chain and its impacts on children when carrying out due diligence. States can encourage smaller and medium-sized companies to take part in multi-stakeholder initiatives and cooperate with other businesses to save resources and scale their impact.¹⁵

VOLUNTARY MEASURES: POLICIES, GUIDANCE AND OTHER MEASURES AIMING AT RIGHTS-RESPECTING PRACTICES IN THE TECHNOLOGY SECTOR

Voluntary measures to incentivize or foster business respect for human rights are an essential part of the "smart mix" of measures which a State can put into place for companies to respect human rights. For example, States can publish specific guidance materials for technology companies on how they can implement rights-respecting practices, or issue specific codes that elaborate on regulators' requirements for companies to implement data protection laws for children. Such codes have now been published by numerous countries¹⁶ to address such risks. Voluntary measures should not be construed in a manner that would facilitate or mandate violation of children's rights, including the right to privacy (e.g. unlawful surveillance).

Fostering human rights in the State-business nexus

Incentive-based measures from governments can be another powerful tool to promote corporate respect and ensure adequate risk management for children’s rights. In alignment with the UNGPs, State efforts to promote and incentivize business respect for children’s rights can include a range of measures, such as rules related to public procurement, investment guarantees and trade facilitation. When overseeing the implementation of voluntary measures, UNGP 5 indicates that States ought to make clear the importance of State oversight on technology companies they contract with and conduct independent monitoring targeted at ensuring mitigation of human rights abuses, which includes the rights of the child.

Because technologies are entwined with almost all areas of children’s lives, including public services, governments have an opportunity to support the corporate responsibility to respect children’s rights through procurement. For example, where governments procure technology for public health, education, social welfare, or other public services, there is an opportunity to integrate requirements for companies on HRDD — which includes considering the best interests of the child (see below) — into public procurement processes. This can be done during the bidding phase, or as a requirement as part of the implementation of the public procurement contract with oversight from the relevant public body. The same requirements should be in place where governments enter into public-private partnerships, particularly in high-risk cases for example those involving the use of surveillance technology or the mass processing of data.¹⁷ Another example would be export credit agencies that can require companies to demonstrate robust child rights due diligence processes to be eligible for a government export credit scheme.¹⁸

States themselves should also take steps to investigate whether any business that receives public finance is adversely impacting children’s rights¹⁹ – and they can do this by requiring greater transparency from technology companies about their policies, impacts and practices before they invest in them. While ensuring greater transparency from technology companies is likely to increase the amount and quality of data available to States about the impact of digital technologies on children’s rights, they should also regularly carry out their own representative research involving children.²⁰

International cooperation to foster respect for child rights relating to digital technologies

The State duty to ensure business respect for human rights should be combined with engaging in international cooperation for the realization of children’s rights beyond a country’s own territorial borders.²¹ This is particularly significant in the global market for the vast array of technology platforms, apps and games used by children around the world. While governments and regional bodies that represent the largest markets, such as the United States, Europe and China,²² have significant influence over regulation of digital technologies, some States have not yet established comprehensive regulations. Furthermore, where national regulation does exist, many States struggle to enforce requirements applicable to global platforms headquartered in other countries.²³ Smaller or less well-resourced States can benefit from cooperation with others. Commentary to UNGP 2 notes that some human rights treaty bodies recommend that home States take steps to prevent abuse abroad by business enterprises within their jurisdiction.

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THREE

Meeting the corporate responsibility to respect human rights in the digital environment requires policies and processes to identify and address child rights impacts (Pillar II).

The responsibility of technology companies to respect children’s rights covers a range of expected conduct or requirements, including but not limited to ensuring online safety, as per UNGP Pillar II. Technology companies should take a holistic approach embracing their responsibility to respect all of children’s rights, including taking preventative measures to protect children from harms such as violence and exploitation, infringements of their rights to privacy, freedom of expression, and access to information and education, while also addressing broader human rights impacts that might come into play.²⁴

THE HUMAN RIGHTS
DUE DILIGENCE PROCESS



As part of their responsibility to respect human rights under the UNGPs, technology companies should undertake HRDD to identify, prevent, mitigate and account for how they address impacts on human rights. The HRDD is an ongoing process consisting of four components anchored in strong internal and external stakeholder engagement:

1. Identifying and assessing impacts to gauge the nature and extent of human rights risks
2. Acting to prevent and mitigate risks to people, including via integration within internal functions and processes
3. Tracking of effectiveness of risk mitigation responses over time; and
4. Appropriate communication of performance with respect to addressing human rights impacts.²⁵

Some central considerations when it comes to applying a comprehensive child rights lens across these four components include:

EMBEDDING CHILDREN'S RIGHTS IN PRACTICE

Building on CRBP 5, the corporate responsibility to respect includes the following elements:

- a. Ensuring that testing and research of products and services likely to be used or consumed by children is conducted in line with relevant national and international child rights/human rights standards.
- b. Ensuring that products and services for children or to which children may be exposed are safe and do not cause mental, moral or physical harm, or other unforeseen harm.
- c. Restricting access to products and services that are not suitable for children or that may cause them harm, while ensuring that all such actions align with international standards, including non-discrimination, freedom of expression and access to information.
- d. Taking all reasonable steps to eliminate discrimination against any child or group of children in the provision of products and services.
- e. Seeking to prevent and eliminate the risk that products and services could be used to abuse, exploit or otherwise harm children in any way, even where the harm may not become apparent in childhood.

Technology companies should have in place policies and processes that include provisions specifically dedicated to children's rights as part of their commitment to fulfil the responsibility to respect all human rights, in line with UNGP 15. Such policies and processes should include information pertaining to HRDD, either by thoroughly integrating children's rights into broader HRDD processes or by carrying out dedicated efforts focused on children.

Depending on the size, sector, operational context, ownership and structure of technology companies, the scale and complexity of HRDD can vary (UNGP 14). CRBP 1(b)(i) goes further by guiding companies to publish a statement, which includes its responsibility to respect children's rights, and should be integrated within company policies and processes that are communicated internally and externally.

Technology companies, or companies in other sectors that deploy digital technologies in ways that may impact children, should consider their actual or potential impacts on each of the rights in the CRC when enacting their responsibility to respect human rights in the digital environment throughout their HRDD processes.

HRDD that is focused specifically on children involves conducting a CRIA.²⁶ Dedicated CRIAs and other child rights-specific processes are particularly called for in situations where, for example, companies' existing efforts have not comprehensively addressed the rights of children or where products or services are targeted specifically at children.²⁷

CONSIDERING THE BEST INTERESTS OF THE CHILD

The concept of the “best interests of the child” is a core principle of the CRC.²⁸ Consequently, it is also a central concept that needs to be operationalized when implementing HRDD processes that work for children.²⁹ In all actions concerning children, both in the public and the private spheres, the best interests of the child must be a primary consideration. This includes ensuring respect for all rights contained in the CRC.³⁰

This principle applies in relation to actions directly concerning a child, or that have an effect on a child, an identified group of children or children in general — even if they are not the direct target of the measure.³¹ Inaction, omissions or failure to take action should also be considered in efforts to identify child rights impacts. Further insights are provided in the box below.

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What to think about when considering the best interests of the child

According to the Committee on the Rights of the Child's General Comment No. 14, consideration of the best interests of the child involves multiple elements, including but not limited to:³²

- The child's views, including the views of very young children and the views of children in a vulnerable situation;
- The child's identity, including characteristics such as sex, sexual orientation, national origin, religion and beliefs, cultural identity and personality;
- Preservation of the family environment and maintaining relations with parents or caregivers;
- Care, protection and safety of the child, within a broad sense that is not limited to protecting the child from harm but also encompass ensuring children's well-being and development;
- A situation of vulnerability, such as disability, belonging to a minority group, being a refugee or asylum seeker, a victim or survivor of abuse, or living in a street situation;
- The child's right to health, including the rights of adolescents and, in particular, access to information that is essential for their health and development in order to make appropriate healthy behaviour choices; and
- The child's right to education.

The purpose of assessing and determining the best interests of the child, to be done by or within parameters set by States, is to ensure the full and effective enjoyment of their rights. Therefore measures that involve, for example, shutting children out of or unduly restricting access to services that support the enjoyment of their rights are problematic, as these can have the effect of hindering a child's access to information and communication.³³ If the elements come into conflict in certain cases or circumstances when assessing the best interests of the child, those elements need to be weighed against each other in order to find an appropriate solution.

As detailed in the box above, the Committee on the Rights of the Child has explained that the expression "protection and care" in article 3(2) "must also be read in a broad sense, since their objective is not stated in limited or negative terms (such as 'to protect the child from harm'), but rather in relation to the comprehensive ideal of ensuring the child's 'well-being' and development."³⁴

In some situations, "protection" factors might imply restricting a child's other rights, and these need to be assessed in relation to measures of "empowerment." The balancing of protection and empowerment should be assessed in accordance with the age and maturity of the child, including their physical, emotional, cognitive and social development.³⁵ For example, in the context of the digital environment it follows that this may lead to differentiated access to digital products and services for a child who is 8 years old versus one who is 17 years old.³⁶

TAKING A HOLISTIC APPROACH TO CORPORATE RESPONSIBILITY

All human rights are universal, indivisible and interdependent and interrelated.³⁷ When implementing their corporate responsibility to respect human rights, including the rights of children, technology companies need to take a holistic approach and give due consideration to all of the stakeholders who may be impacted by their products or services.

In relation to child rights and digital technologies, there can be several rights holders who are impacted by both the use of technologies and by their regulation in different ways. This could include the differing needs and interests of children, their parents and caregivers, and adults in the broader population. Therefore, taking a holistic approach may require consulting a number of different stakeholders to elicit a broad range of perspectives.

Competing rights: Debates around understanding and upholding children’s rights in the digital environment have tended to become polarized due to some of the competing rights that can be engaged. For example, the rights that may sometimes be perceived as competing include the child’s right to protection from sexual exploitation and abuse and other forms of online violence on the one side³⁸ and the right to privacy that extends to private communications, including those of children, and freedom of expression, on the other; or the child’s right to privacy in the context of parents sharing images and videos of their children, with the parents’ right to freedom of expression.

To address these complexities, it is essential to carefully consider the basic parameters for approaching competing rights laid out in the international human rights framework. Companies should strive to ensure that all rights are respected, rather than choosing one over another. In cases where a right needs to be restricted, under international human rights law any such restriction of certain human rights must have a legal basis, pursue a legitimate aim, and be necessary and proportionate.³⁹ Companies should also engage affected stakeholders and relevant experts in their decision-making processes and be prepared to explain the logic of their decision-making and actions.⁴⁰

Prioritization of risks: When it is not possible to address all impacts simultaneously, the UNGPs guide companies to prioritize the most severe human rights risks and impacts,⁴¹ and this guidance can be applied when deciding where to focus on situations where different rights and interests coincide. The severity of a particular impact is judged by its scale, scope and irremediable character,⁴² which can be interpreted as follows:

- **Scope** is related to such factors as how widespread the impact is or the number of people who are impacted.
- **Scale** is concerned with how grave or serious the impact is. Note that the Committee on the Rights of the Child emphasizes that there is a particular gravity to child rights violations because they often have severe and long-lasting impacts on child development.⁴³
- **Irremediable** means that an impact cannot be remedied to restore conditions for those affected that are at least the same as, or equivalent to, their situation before the impact.

When addressing child rights risks specifically, technology companies will need to devise ways to mitigate any unintended consequences.

FOUR

Human rights due diligence requires special attention to children's views, needs and unique vulnerabilities.

Children account for nearly one third of the world's total population,⁴⁴ and their lives and daily realities are not homogeneous across the globe. As such, children's rights should always be approached comprehensively, taking account of the different kinds of discrimination, marginality and vulnerability that children can experience.

Risks and harms stemming from digital technologies to children have been highlighted in recent reports by the United Nations Special Rapporteurs on the right to education⁴⁵ and by the Special Rapporteur on the sale and sexual exploitation of children.⁴⁶ Ongoing discussions have highlighted the importance of ensuring a safe, inclusive and empowering digital environment for children and the need to address violence against children — whether online or offline — through a comprehensive child rights-based framework.⁴⁷ In order to obtain evidence to identify any risks to children's rights, technology companies need to carry out research either internally or by engaging external experts, or sometimes both. This should happen at the design phase and then periodically on an ongoing basis as more evidence emerges regarding the impact of the product or service on children over time.

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The processing of children's data for research purposes, or for training AI systems, for example, must have a valid legal basis, meet the highest ethical standards, and respect the principles of data minimization, privacy and explicit consent.⁴⁸ Robust research can include longitudinal and experimental designs, behavioural measures of children's online activity, and disaggregated data on subgroups of users.

When it comes to assessing risks linked to children's rights, embedding child rights considerations into HRDD requires considering specific factors, including:

STAKEHOLDER ENGAGEMENT ON CHILDREN'S RIGHTS

UNGP 18 stipulates that HRDD should draw on external expertise and involve "meaningful consultation with potentially affected" stakeholders.⁴⁹ Affected stakeholders include communities that are directly affected by a technology company's conduct. Through adequate interaction and dialogue with such stakeholders, a company can be better situated to understand and address concerns more effectively. The CRBPs specify that companies must draw on child rights expertise and consult with children to adequately identify and assess actual or potential harms to children's rights (CRBP 1(b)(ii)). Additionally, the CRBPs make clear that gender must be taken into account, as needs and risks can differ significantly.

The CRC and the best interests approach require taking children’s views into account.⁵⁰ Building on the “Lundy model,”⁵¹ meaningful child participation can be facilitated by considering four essential features:

- I. **Space** – Children need safe and inclusive opportunities to learn about an issue, discuss with each other, and form and freely express their opinions;
- II. **Voice** – Children should be able to use the media of their choice to communicate their views and to negotiate decisions;
- III. **Audience** – Children’s views must be respectfully and seriously heard by those with the power and authority to act on them; and
- IV. **Influence** – Children’s views should receive proper consideration, and children should receive timely feedback about the outcome(s) and the extent of their influence, as explained in greater detail in *Child Consultation and Responsible Business Conduct in the Digital Environment – Rights, Risks and Opportunities*.⁵²

EVOLVING CAPACITIES OF THE CHILD

The risks and opportunities children encounter in the digital environment change in accordance with their age and stage of development, and children’s competence and understanding develop unevenly across different areas of skill and activity.⁵³

While children’s capacities may evolve in relation to expressing their own opinions, accessing information and participating in society – according to them greater freedoms as they get older – all children remain entitled to protection from harms under the CRC until they reach age 18. Significantly different approaches are needed to realize the rights of adolescents from those of younger children. Adolescence is a unique defining stage of human development that involves rapid social and brain development, and enhanced cognitive ability as well as significant vulnerability.⁵⁴

It is necessary to find an appropriate balance between respect for the evolving capacities of adolescents and appropriate levels of protection, while ensuring that balance is in the best interests of the child.⁵⁵ Age-appropriate measures in the digital environment should be informed by the best and most up-to-date research available from relevant disciplines, including by prioritising the meaningful participation of children and young people.⁵⁶ It is important that research on the needs and opinions of children is conducted in a broad variety of contexts where companies operate, rather than relying exclusively on research from high-income contexts.

GEOGRAPHICAL CONTEXT

Companies that design, develop and deploy digital technologies need to consider their potential impact on children’s rights in all of the places and contexts where children may be affected by their products, without discrimination. This responsibility under the UNGPs must be sustained even when it is not mandated by national law.

Children’s geographical location may be linked in various ways that expose them to higher risks online and the likelihood of repercussions offline, including some cases that result in physical violence. According to the guidance in CRBP 9, companies operating in sensitive contexts, such as in weak justice systems and conflict-affected areas, should take into account that particular barriers that could exacerbate risks of child rights violations. Some of these risks can be exacerbated in different cultural and legal contexts.

SOCIAL DISADVANTAGE

While some children may benefit from support and regular supervision of their navigation of digital environments by parents or caregivers, this should not be assumed for all children, which means that the provision of parental controls may provide limited risk mitigation in many contexts. Where technological devices used in the home and school require consent from parents or caregivers for processing children's data, parents and caregivers may have varying capacities to read and understand the terms and conditions they are agreeing to, and the implications for the child. This situation is further complicated because devices are shared between several users in many families and communities.⁵⁷

Moreover, CRBP 5(f) and (g) highlights that companies should also consider social disadvantage, and take adequate steps to maximize accessibility and the availability of products and services that are essential to the survival and development of a child or a group of children. Not only should technology companies take actionable steps to reduce the digital divide, but the CRBPs further guide them to develop products and services that support the rights of children by providing them a level playing field. Such voluntary philanthropic efforts must also be guided by the same rigour in relation to ensuring respect for children's rights.

GENDER AND NON-DISCRIMINATION

The UNGPs recognize that certain groups – including women and children – may be particularly vulnerable to adverse impact from business actors. Further, they explicitly state that the principles should be implemented in a non-discriminatory manner, with particular attention given to the rights and needs of individuals from such groups.

Gender is a crucial factor to consider in relation to the impact of technology on children's rights. Globally, women are 7% less likely than men to own a mobile phone.⁵⁸ In South Asia and sub-Saharan Africa – where women are more likely to borrow or share mobile phones, often from a male family member – the gap rises to 23% and 13%, respectively.⁵⁹ Cultural and social norms also need to be addressed as barriers to access. A 2022 analysis of internet access for children in five countries in Eastern and Southern Africa highlighted that perceptions of internet use as being more valuable for boys than for girls and entrenched gender norms reduce girls' access.⁶⁰

Girls can be particularly at risk when their messages or other content shared online is viewed and possibly policed by other family members. In one global study, girls reported that using a phone could lead to punishments ranging from scolding to beatings and forced marriage.⁶¹ The gap in usage and potential risks related to accessing digital technologies exclude many girls from an increasingly digital global economy. Closing the gender-related digital divide⁶² for girls will require specific measures, with particular attention to access, digital literacy, online safety and privacy.⁶³

It is important to take an intersectional approach to children's vulnerability, including but not limited to the factors outlined above. For example, the Committee on the Rights of the Child calls for the prevention of discrimination on the basis of sex, disability, socioeconomic background, ethnic or national origin, language or any other grounds, and discrimination against minority and indigenous children, asylum-seeking, refugee and migrant children, lesbian, gay, bisexual, transgender and intersex children, children who are victims and survivors of trafficking or sexual exploitation, children in alternative care, children deprived of liberty

and children in other vulnerable situations.⁶⁴ All of these factors should be considered by companies when embedding child rights into HRDD. The right to privacy is particularly crucial to children in these vulnerable situations. A particular risk is exposure of the data of children in situations of vulnerability to law enforcement, whereby that vulnerability could lead to unlawful detention or other consequences for them and their families, i.e. irregular migrants, or LGBTQI+ children.

FIVE

Child rights impacts should be considered throughout the technology life cycle. The effectiveness of risk mitigation strategies should be tracked through both internal and independent research, then communicated publicly.

The UNGPs require companies to take proactive steps to consider their impacts on human rights as a continuous, habitual and responsive activity across all their business practices. This includes identifying, preventing, assessing and mitigating the impact of products and services on child rights throughout the technology life cycle, during all stages of product design and onward through the phases of development, roll-out, and ultimately at the end of the company’s life cycle.

Adopting a “child rights by design” approach during the design of products and services is a promising way to ensure that many child rights risks and harms can be prevented.⁶⁵ The full range of human rights that could be adversely impacted by the use of a technology product or service – including the specific rights of children to protection from harm, freedom of expression and privacy – should be considered and addressed during design. Likewise, opportunities to actively promote child well-being through design choices are highly relevant for companies to consider.⁶⁶ Furthermore, potentially competing rights can be addressed when child rights considerations are integrated into a HRIA during the initial stages of a project.

However, child rights by design does not replace the need for HRDD when a product or service is introduced to the market, whether or not it is intended for use by children: As underscored in the UNGPs and CRBPs, human rights harms, and as an extension child rights harms, need to be assessed through a continuous and evolving process, recognizing that a company’s operations and context may change over time.⁶⁷ Tracking the effectiveness of risk mitigation responses is a key part of assessing child rights impacts (see step 3 below). This can be done through internal research and monitoring, and by engaging external researchers, children and mental health experts; when the results are published, it can contribute to better transparency.

The four steps of the HRDD process are further elaborated below.

1. Identifying and assessing impacts to gauge the nature and extent of human rights risks, in particular risks to children

Technology companies can improve transparency by allowing independent researchers and the public to study the impact of their products on children in order to both prevent and respond to risks and harms by, for example:

- Ensuring that informed consent is the basis on which children, parents or caregivers are able to opt-in or opt-out of providing their own data about their online experience to independent researchers;
- Directly providing data to researchers from the business, with the oversight of institutional ethics boards (to assess anonymisation, consent, and related issues), to enable better understanding of subgroups of users at most risk of harm, and of how algorithms are designed and operated;
- Partnering with researchers and experts to analyse the mental health and other impacts of new products and features on children prior to roll-out, and regularly publishing these findings; and
- Enabling a broad range of researchers to review previous research, without binding researchers to a non-disclosure agreement.⁶⁸

2. Acting to prevent and mitigate risks to children, including via integration within internal functions and processes

It is important that findings from research or stakeholder engagements, particularly with children and those most at risk, carried out using children’s data are acted upon to improve outcomes for children in practice. Communicating how impacts are being addressed is a vital way for companies to show they are accountable for how they do business, to both the general public and to those specifically affected (UNGP 3 (d) and CRBP 1 (b)(ii)).

Where the risk is high but the evidence is limited, companies can consider taking a “precautionary” approach to child rights risk management. The precautionary principle provides that where it is possible that an action may cause harm to the public or the environment, but scientific agreement on the issue has yet to be established, precautionary measures should be taken to mitigate this action.⁶⁹ Such a precautionary approach may need to be taken with emergent or rapidly advancing technologies, such as around children’s interaction with artificial intelligence systems or in virtual environments, where current or future impacts are not fully understood. In the case of children’s interaction with the digital environment, applications of this approach should make sure to account for threats to children’s right to information, participation, and other potential benefits of their access to digital technologies.

3. Tracking of effectiveness of risk mitigation responses over time

Companies should build a systematic approach to tracking the effectiveness of risk mitigation responses to child rights impacts as part of their HRDD process.⁷⁰ Active internal research on the impact of their products and services on children through quantitative and qualitative methods is essential, and the results should be published in a way that safeguards children’s privacy, e.g., how the recommendation systems of social media platforms have been reviewed and adapted in order to mitigate adverse impacts on mental health of children.⁷¹ In addition to internal tracking systems, companies should invite external researchers to study their corporate practices, including their use of algorithms, the algorithms themselves, and their impact on children (see also step 1 above).

To help improve tracking processes, assessments that are already being carried out by various teams within technology companies — for example, legal, product safety, internal controls, ethics and compliance, and supply chain monitoring and auditing departments — may provide valuable information about risks to child rights. The HRDD process should also reflect external indicators of risk, for example: the experiences of

other companies in similar operating contexts or with similar products, services or technologies; concerns being raised by non-governmental organizations through reports and campaigns; and social practices and attitudes.⁷² In addition, some circumstances will indicate a need for heightened due diligence, particularly political instability, weak State structures and armed conflict.⁷³

4. Appropriate communication of performance with respect to addressing human rights impacts

The UNGPs require companies to be transparent about how they are addressing human rights risks, which includes sharing progress and challenges, and publishing the results at a significant level of detail. Communication can take different forms, including consultation with affected stakeholders,⁷⁴ which may require consideration of the use of child-friendly language for different age groups where children are concerned, as well as translation into different languages. Companies are also required to report on mitigation steps they have taken to address any adverse impacts.

Such reports should be carefully drafted considering the following factors:⁷⁵

- Not putting affected stakeholders or users at risk or in any way undermining their rights to privacy.
- Exercising responsible and meaningful transparency and ensuring appropriate governance and oversight of technological solutions (e.g., for the detection of child sexual abuse materials) in ways that prevent ill-meaning actors to combat preventions and mitigation steps.
- Ensuring that legitimate concerns about commercial sensitivity do not undermine the importance of accountability, transparency and shared learning.

Technology companies should publicly report on actions taken to mitigate human rights impacts connected with product or service design, development, sales, deployment and use; and on their effectiveness.⁷⁶ This can be achieved through transparency reports that give an account against common benchmarks, so they are comparable, and can be independently audited.⁷⁷ Such reports should also include disaggregated information about regional differences in impacts on children's rights, while at the same time not putting rights holders at risk.

Role of investors

When it comes to mapping the company's child rights impacts, both risks and harms, investors are increasingly requiring companies to report against a range of human rights and specific child rights benchmarks as part of environment, social and governance (ESG) reporting standards. UNICEF's Tool for Investors on Integrating Children's Rights into ESG Assessment sets out indicators for investors to measure corporate performance on managing child rights impacts, across a wide range of issues that may arise through technology companies' use of their products and in their value chains.⁷⁸ The B-Tech project has provided further guidance to institutional investors⁷⁹ as well as venture capital investors⁸⁰ on engaging and assessing human rights risks arising from technology company business models.

SIX

Providing remedies that respect children's rights requires additional considerations and measures to address the heightened barriers children face in accessing justice.

The right to remedy is a core tenet of the international human rights system, and the need for victims of business-related harms to have access to an effective remedy is recognized in the UNGPs under Pillar III (UNGP 25-31).

Pillar III of the UNGPs refers to three categories of grievance mechanisms for accountability and remedy in cases of business-related human rights abuse (see below). For the purpose of this briefing, however, only non-State-based grievance mechanisms, also called operational grievance mechanisms, are discussed.⁸¹

What do we mean by “remediation mechanisms”?

The UNGPs divide mechanisms for seeking and delivering remedies for business-related human rights harms into three main types:

- **“judicial mechanisms”** (i.e. domestic courts, regional courts, regional and international human rights bodies);
- **“State-based non-judicial mechanisms”** (i.e. mechanisms connected with the State which may have the potential to deliver remedies in some shape or form, such as regulators, ombudspersons, inspectorates, public complaints handling bodies, National Contact Points under the OECD Guidelines for Multinational Enterprises and national human rights institutions); and
- **“non-State-based grievance mechanisms”** (i.e. remediation mechanisms that are developed and administered by private entities such as companies or, in some cases, industry associations or multi-stakeholder groups).

Where technology companies identify that they have caused or contributed to adverse human rights impacts or adverse child rights impacts, they should provide for or cooperate in the remediation of any adverse impact that they may have caused or contributed to through legitimate processes (Guiding Principles 22). For any non-judicial mechanism to be effective (i.e. state-based or non-state-based), it should be legitimate, accessible, predictable, equitable, rights-compatible, transparent, a source of continuous learning, and, for operational level grievance mechanisms, based on dialogue and engagement (Guiding Principle 31).

Where an enterprise did not cause or contribute to the adverse impact, but where the impact is directly linked to its operations, products or services by a business relationship, Guiding Principle 19 elaborates on the appropriate action. It may include using any leverage the enterprise may have over its business partner or client to seek to influence it to provide for remediation.

In the light of the great speed and scale of adverse impacts related to technology company conduct, it is important that grievances are addressed early and remediated directly. To do so, business enterprises should establish or participate in effective operational-level grievance mechanisms for individuals and communities who may be adversely impacted (UNGP 29). In specific cases, “where business enterprises identify that they have caused or contributed to adverse impacts, they should provide for or cooperate in their remediation through legitimate processes” (UNGP 22). Companies are also required to use their leverage to address any human rights issues they may be involved in, which includes cases where a company is found to be linked to an adverse impact, even if it did not directly cause or contribute to the adverse impact.⁸²

The UN OHCHR Accountability and Remedy Project (ARP),⁸³ as well as the B-Tech Project’s foundational papers on remedy⁸⁴ that draw on the ARP, provide detailed guidance for States, businesses and other stakeholders on how to improve access to remedy in cases of business-related human rights abuses.

The CRBPs specify that remedies should not only be accessible to children but also to their families and/or guardians. For their part, businesses need to provide for or collaborate in providing a remedy where they identify that they have caused or contributed to harm through the deployment or use of digital technologies.

Providing access to a remedy for children involves both procedural and substantive aspects. It is important to consider appropriate remedies for children in the context of different kinds of harms such as hate speech, unlawful surveillance, cyberbullying, data protection breaches, and child sexual abuse and exploitation in the digital environment.⁸⁵

For technology companies, the “procedural” aspects of access to a remedy for children under the UNGPs include steps that must be taken to establish that a right to a remedy exists, and there must be a “substantive” outcome that is effective for the child after following that procedure.⁸⁶ The UNGPs also require companies to use their leverage to address any human rights issues they may be involved in, which includes cases where a company is found to be linked to an adverse impact, even if it did not directly cause or contribute to the adverse impact.⁸⁷

ESTABLISHING EFFECTIVE GRIEVANCE MECHANISMS

Company-based grievance mechanisms are a key means for technology companies to address and remedy child rights harms directly. Effective grievance mechanisms should be both directly accessible by and tailored to children, and also accessible to parents, caregivers and others in the child’s community acting on behalf of children who may not have the capacity to represent themselves.⁸⁸

CRBP 1 states that grievance mechanisms must meet the effectiveness criteria set out in UNGP 31 — legitimate, accessible, predictable, equitable, transparent, rights-compatible and a source of continuous

Companies should also consult with children and their caregivers on risks they may face in accessing a remedy, such as the fear of reprisals.

learning. They should also be safe to use and include whistle-blower protections. Children must continue to have access to judicial mechanisms while going through company grievance mechanisms, and companies should not impede children’s right to seek access to a remedy elsewhere.

Technology companies will benefit from understanding how their own grievance mechanisms fit within the remedy ecosystem in the countries in which they operate and where children use their products.⁸⁹ According to the UNGPs, technology company operational-level grievance mechanisms should be based on engagement and dialogue with various stakeholder groups as a method to address and resolve harms occurred. Such mechanisms can enable early and direct resolution of grievances related to child rights violations and can be quicker than formal court systems. In some circumstances, however, there will be a need for the involvement of law enforcement bodies and the courts, especially in cases involving child sexual abuse and exploitation, or in cases involving large groups of affected children who are not part of the grievance process.

In all of the contexts in which the company operates, meaningful consultations with children and their caregivers are necessary to understand and address the informational, legal, practical and procedural barriers that children may face in seeking a remedy for child rights harms.⁹⁰ Companies should also consult with children and their caregivers on risks they may face in accessing a remedy, such as the fear of reprisals.

Children and their caregivers may not understand how they are impacted by different technologies, especially when it comes to data processing and its implications on their rights. Technology companies can address this by:

- Publishing transparency reports related to the algorithms they use and explaining such technology in child-friendly language;
- Creating child-friendly terms and conditions; and
- Conducting awareness-raising efforts that use child-friendly language to explain potential risks and harms presented by different kinds of technologies and proposes mitigation strategies.

REMEDIES FOR HARM, INCLUDING SEXUAL EXPLOITATION AND ABUSE, AND BREACHES OF DATA PROTECTION RIGHTS

In relation to online safety, one of the main ways for companies to provide a remedy is to ensure there are effective online reporting mechanisms for children to report sexual exploitation and abuse, cyberbullying, hate speech and other harms.

Essential features for effective reporting mechanisms for children:

- **Visibility:** Reporting mechanisms should be prominently displayed where children can easily find them;
- **Accessibility:** They should be accessible, offering redress in languages spoken by the children who are using the products, and using age-appropriate, understandable language;
- **Responsiveness:** They need to be responsive, informing children about what will happen after they make a report, including details on information sharing and expected remedies;

- **Human-centred design:** They should be created in consultation with children, parents and communities to ensure they meet users’ needs and provide a remedy that children consider to be effective.⁹¹
- **Safety and confidentiality:** They must be designed to take safety and confidentiality concerns into account, for example, recognizing that perpetrators of abuse can be within the child’s close circle.

It is important for technology companies to cooperate with States in providing a remedy for children who have been sexually exploited or abused, because the perpetrators have committed a crime that requires a State response.⁹² For example, where children use reporting mechanisms on platforms, technology companies may be required to pass on certain reports related to child sexual abuse to national law enforcement authorities. Children may also be eligible to access government compensation funds where they have been victims or survivors of sexual abuse and exploitation.⁹³

In cases related to children’s rights and data, companies should ensure that they have child-friendly mechanisms in place that allow children to make data and deletion requests, and to exercise their right to be forgotten where this exists.⁹⁴ Children should be made aware of the existence of these mechanisms and of the procedure to access them.

Children should also be given ways to object to the processing of their data. The highest standards of data protection should be followed by technology companies, including where laws such as the European Union’s General Data Protection Regulation do not apply.⁹⁵

Where remedial mechanisms are provided by a company, children should be informed that they have a concurrent right to seek a remedy through a judicial mechanism or another State-based remedial mechanism. When a decision is made in response to a child’s complaint, reasons should be given for the decision made and communicated to the child in language and form they can understand.

Independent review of decision-making can enhance the credibility of remediation mechanisms. In larger companies, company-based grievance mechanisms can include access to independent review panels, whereas smaller companies might commission specialist companies or experts to carry out independent human rights or child rights due diligence assessments of remediation mechanisms.⁹⁶

In efforts to address adverse child rights impacts in relation to digital technologies, large technology companies may have more leverage to effect change alone, but smaller companies can also exercise leverage by joining private sector or multi-stakeholder coalitions working together to mitigate adverse child rights impacts.

Looking to the Future

At a time when many governments are passing new laws and regulations regarding the digital environment, States have an obligation and an opportunity to ensure that they support the technology sector to include children's rights in their HRDD processes or to produce stand-alone CRIAs, and to hold them accountable when they fall short.

This is also an important time for technology companies to step up and lead the way, and to share examples of best practice to make the digital environment a more child rights respecting place. As such, UNICEF and OHCHR call on all technology companies to engage with this Special Briefing, as well as the many other available resources and guidance, in efforts to deliver better outcomes for children by ensuring children's rights are comprehensively integrated throughout robust HRDD processes.



b-techproject@ohchr.org

UN Human Rights invites engagement from all stakeholders across all focus areas of the B-Tech Project. For more information please see the project [Scoping Paper](#).

Please contact us at OHCHR-B-techproject@un.org if you would like to engage with our work, including if you have recommendations for practical tools, case studies and guidance that will advance company, investor and State implementation of the UNGPs in the technology sector.

Endnotes

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- ³ The State duty to protect in Pillar I aligns closely with the obligation to protect under international human rights law, only that the UNGPs provide a more specific context for business related human rights abuses, emphasizing the need for regulatory and policy measures to ensure business respect for human rights. Thus, the UNGPs build on existing obligations by providing detailed guidance on how States can fulfil their duty to protect in the context of business activities.
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- ¹⁰ Committee on the Rights of the Child, [General comment No. 16](#) (2013) on State obligations regarding the impact of the business sector on children’s rights, CRC/C/GC/16, United Nations, 17 April 2013, para. 45.
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- ¹² Committee on the Rights of the Child, [General comment No. 25](#) (2021) on children’s rights in relation to the digital environment, CRC/C/GC/25, United Nations, 2 March 2021, para. 38.
- ¹³ For example, articles 34 and 35 of the EU Digital Services Act (DSA) mandate risk assessments and risk mitigation measures for very large online platforms – which must have due regard for human rights as enshrined in the EU Charter, including transparency requirements for publishing the results of these assessments. The DSA also specifically requires technology companies to pay due regard to the UNGPs. At the time of writing this briefing, the proposed EU Artificial Intelligence Act (AI Act) imposes risk assessment and mitigation measures on high-risk forms of artificial intelligence that could have an impact on the health and safety of people or an adverse impact on fundamental human rights. Similarly, Brazil’s new AI Bill introduces a risk-based regulatory model for AI systems that requires providers to conduct a preliminary assessment to classify the degree of risk as “Excessive” or “High.”
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- ²⁸ Convention on the Rights of the Child, Article 3(1).
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