

WATOTO FRAMEWORK

*An Africa-Led, Child-Centred, Safety-by-Design Standard
for Digital Products, Platforms, and AI Systems
Serving Children in Africa and the Global South*

SUMMARY



OFFICE OF THE
SPECIAL ENVOY ON
TECHNOLOGY



WATOTO FRAMEWORK

RESPONSIBLE INNOVATION IN TECHNOLOGY FOR AFRICAN CHILDREN

Who is the WATOTO Framework for?

The WATOTO Framework is for anyone involved in building, procuring, governing, or funding digital products, platforms, and AI systems that reach children in Africa and the Global South. This includes product designers, engineers, AI developers, UX and research teams, Trust and Safety professionals, government regulators, school procurement officers, civil society advocates, funders, and development partners.

WATOTO is also explicitly for children themselves who are not the subjects of this framework but its primary constituency. Children are the people whose lives, futures, identities, and rights are shaped by the digital systems this framework evaluates.

What is WATOTO?

WATOTO Wellbeing, Agency, Transparency, Opportunity, Trust, Ownership is an Africa-led, child-centred Safety-by-Design standard for digital products, platforms, and AI systems serving children in Africa and the Global South. **WATOTO** takes its name from the Swahili word for children.

The Framework is developed by **Kutunga Design Academy & Innovation Lab** and **Mtoto News International**, grounded in the documented voices of 599 children across 14 African countries, in the African philosophical and developmental traditions of Nsamenang, Mbiti, Menkiti, and van Genneep, and in six African Union continental instruments.

The WATOTO project has produced three types of outputs:

- Research: the Right.AI: Kenya study (2025) with 15 children in in-depth AI interviews; the DFC Spotlight on Africa (2026) documenting the voices of 599 children aged 9–18 across 14 countries; and the Kigali Children’s AI Summit Outcome Statement (2025) from seven African nations. Led by Mtoto News International and the Digital Futures for Children programme at the London School of Economics.
- The WATOTO Framework V6.9 (2026): ten Design Standards and ten Guiding Principles that translate children’s voices and African continental policy into engineering-level requirements for technology companies, governments, and AI developers.
- The WATOTO Diagnostic Tool: an interactive self-assessment tool for organisations to evaluate their products against the ten Standards. Available at kutunga.org/watoto.

What is Safety by Design? How is it related to children’s rights?

Children’s digital safety is related to, but distinct from, children’s rights.

Children’s rights are fundamental legal principles established by the UN Convention on the Rights of the Child (UNCRC, 1989) and the African Charter on the Rights and Welfare of the Child (ACRWC, 1990). The ACRWC’s Article 31 uniquely African, absent from the UNCRC establishes children’s reciprocal responsibilities to their family, community, state, and international community. Children’s rights apply equally in online and offline spaces (UNCRC General Comment No. 25 on children’s rights in the digital environment, adopted 2 March 2021).



Safety by Design is the principle that digital safety must be embedded in products at the architecture stage not as a post-launch retrofit, a compliance appendix, or a parental-control setting. Under Safety by Design, the burden of protection does not fall on the child or the caregiver. It falls on the platform and developer, before the product reaches children.

WATOTO extends Safety by Design into three dimensions no existing global framework addresses:

- The communal ontology of African childhood: data about a child is data about their community. Community-level governance is not optional it is ontologically required.
- The developmental architecture of African transitions: every age-band crossing must be a community-witnessed Rites of Passage event, never a silent algorithmic trigger.
- The colonial conditions of the global digital safety ecosystem: frameworks, platforms, training data, and capital flows run from the Global North to the Global South with no accountability to African communities.

Although children’s rights and Safety by Design are closely related, they are not equivalent. The rights framework establishes what children are entitled to. Safety by Design establishes how technology must be built to honour those entitlements.

Which age groups does WATOTO focus on?

WATOTO focuses on children from birth through age 18, with a specific developmental architecture of seven age bands. The ACRWC defines a child as any human being below the age of 18 years (Article 2). From a developmental perspective, each band has distinct capabilities, vulnerabilities, and community roles.

- 0–3:** Infancy — Caregiver-mediated entirely. Zero data collection.
- 4–6:** Early Childhood — Play-based design. Voice-first interfaces. Curated content only.
- 7–9:** Middle Childhood — Peer socialisation as primary mechanism. Moderated peer interaction.
- 10–12:** Late Childhood — Active co-design appropriate. THE PRIMARY DIGITAL RITE OF PASSAGE.
- 13–15:** Early Adolescence — Near-full access with community-designed transparency controls.
- 16–18:** Late Adolescence — Full data portability. Near-peer mentorship as primary platform role.
- 19–21:** Transition to Adulthood — WATOTO extension; full digital guardianship responsibilities.

Additional factors that shape children’s needs include cultural context, language, geography, disability, gender, displacement, and access to devices and connectivity. WATOTO requires contextual mapping before market entry in each new African country to account for these dimensions.

How can WATOTO aid design teams?

The WATOTO Framework provides practical tools for design and product teams:

- Ten Design Standards: named in African languages (MA’AT, PALAVER, BWAMI, JELIYA, UBUNTU, BARAZA, UKAMA, ISITHUNZI, SANKOFA, HARAMBEE), each with specific engineering requirements, Red Line Prohibitions, and a Good Practice Note illustrating implementation in African contexts.
- Ten Guiding Principles: the philosophical architecture beneath the Standards (UZIMA, BOTHO, TSARO, ASA, UFULU, BIRUH, UCHE, UBUMWE, LETSEMA, BONDEKO), each with African-language grounding and practical engineering requirements.
- The WATOTO Diagnostic Tool: a self-assessment scoring tool at kutunga.org/watoto enabling product teams to



identify compliance gaps and priority actions before they reach children.

- Age Band Specifications: detailed rights and responsibilities at every developmental transition, with specific product requirements per band.
- The Digital Covenant: a practical three-column tool specifying Technology Responsibility, Child Responsibility, and Community Responsibility at every age-band crossing.
- CRIA (Child Rights Impact Assessment): a structured methodology, contextualised for African realities, for assessing how a product affects children’s rights before launch.
- Certification tiers (WATOTO Pre-Compliant, Compliant, Certified, Gold) providing a progression pathway for organisations seeking to improve their standards over time.
- The JAZA Activation Guide: practical tools for each of the Seven Structural Gaps, specifying who does what, with whom, and how you know the gap is being filled.

How was the WATOTO Framework developed?

The WATOTO Framework was developed through three bodies of primary research with African children:

- Right.AI: Kenya (2025): In-depth interviews with 15 Kenyan children aged 13–17 on their experiences of generative AI. Conducted by Mtoto News International and the Digital Futures for Children programme at LSE.
- DFC Spotlight on Africa (2026): Documenting the voices of 599 children aged 9–18 across 14 African countries. Led by the Digital Futures for Children programme at LSE and 5Rights Foundation.
- Children Global AI Summit on Africa, Kigali (April 2025): Children from seven African nations produced a child-led continental AI governance outcome statement the first of its kind in African history.

The Framework is also grounded in the African philosophical and developmental scholarship of A. Bame Nsamenang (social ontogenesis), John Mbiti (Ubuntu and communitarian personhood), Ifeanyi Menkiti (personhood as developmental achievement), and Arnold van Gennep and Victor Turner (Rites of Passage). These scholars were selected because they describe, with greater precision than any WEIRD-default framework, what a child is and how children develop in African contexts.

The Framework is aligned with six African Union continental instruments: the ACRWC, Agenda 2063, the AU Child Online Safety and Empowerment Policy (2024), the AU Continental AI Strategy (2024), the Malabo Convention (2014), and the AU Digital Transformation Strategy (2020–2030). It has undergone six major iterations and has been peer-reviewed by colleagues at the Berkman Klein Center at Harvard University, the African Union Commission, and the ACERWC civil society network.

How can companies use the WATOTO Framework?

The WATOTO Framework, the WATOTO Diagnostic Tool, and the accompanying implementation guides are freely available at kutunga.org/watoto for organisations to access. To cite the Framework:

Kaberi, J., & Makumbe, C. (2026). The WATOTO Framework: An Africa-Led, Child-Centred, Safety-by-Design Standard (Version 6.9). Kutunga Design Academy & Innovation Lab.

WATOTO Certification is available through Kutunga Design Academy at three tiers: Compliant (score 40–46/50), Certified (47–49/50), and Gold (50/50). Certification requires a completed Child Rights Impact Assessment (CRIA), zero Red Line Prohibitions, and an independent anti-tokenism audit for products that include co-design claims.

Requests from AU member states for adaptation of WATOTO into national Child Online Safety policies are welcomed



and will be expedited. For permissions, certification enquiries, or partnership discussions, contact: info@kutunga.org.

How are Kutunga Design Academy and Mtoto News International related to WATOTO?

Kutunga Design Academy & Innovation Lab is the institutional home of the WATOTO Framework. Kutunga leads the Framework's development, certification programme, diagnostic tools, and policy engagement. Co-founded by Jennifer Kaberi (CTO) and Caroline Makumbe (CEO and Director of Policy), Kutunga operates at the intersection of child development, design, and digital rights governance.

Mtoto News International is a pan-African independent children's media and civic participation network operating across 12+ African countries. Mtoto News leads the primary research underpinning WATOTO — including the Right.AI: Kenya study, the GEAR Model of Child Participation, and the Sauti Zetu digital literacy programme. The WATOTO Framework draws on over eight years of practice-based research with African children as content creators, civic actors, and digital rights advocates.

If a product meets all ten Standards, is it better for children?

Not necessarily.

- No single product can address all dimensions equally for all children, just as children do not all have the same needs, contexts, or developmental stages.
- Different products may serve different Standards more naturally depending on their design purpose. An EdTech platform will naturally engage more deeply with Standard 9 (SANKOFA Epistemic Sovereignty) than a social media platform; a messaging app will engage more deeply with Standard 2 (PALAVER Child Participation).
- The ten Standards are not a checklist to be ticked. However, Standards 1 (MA'AT) and 5 (UBUNTU) are foundational: no product can be considered WATOTO-compliant without meeting their minimum requirements.
- Any product that triggers three or more Red Line Prohibitions is disqualified from all certification tiers regardless of performance on other Standards.
- The primary measure of whether a product is genuinely working is the child's own reported experience: safety, dignity, agency, and belonging. A product that scores well on all ten Standards but whose child users report feeling unsafe, anxious, or disrespected has not met WATOTO's standard.

If my company has its own design framework, can WATOTO still be used?

Yes. WATOTO is not a framework that must be implemented in isolation. It is designed to function alongside existing frameworks, adding the African contextual layer that global frameworks currently lack.

WATOTO's ten Standards map directly to the provisions of the UK Age Appropriate Design Code (AADC), the EU AI Act, and UNCRC General Comment No. 25 in many areas extending beyond them. A product already implementing the UK Children's Code will find significant overlap with WATOTO Standards 1, 2, and 5. WATOTO adds the African-context requirements those frameworks do not address: communal ontology, linguistic equity, offline-first infrastructure, cultural representation, and data sovereignty.

WATOTO also introduces a shared vocabulary for product teams to discuss children's needs and rights in African contexts including the Digital Covenant, the Digital Rites of Passage Transition Protocol, and the GEAR Model of Child Participation. These can be incorporated alongside any existing company design framework.



How does WATOTO relate to other frameworks for children’s digital safety?

From its inception, the WATOTO Framework was designed to build on existing efforts and to function as a complementary layer that existing frameworks lack: the Africa-specific contextual implementation standard. WATOTO does not compete with global frameworks it provides what they cannot.

The tools and frameworks below vary in their target audience, age groups, theoretical grounding, and real-world applications. They all recognise the importance of protecting and empowering children in digital spaces. We believe that by sharing related initiatives, teams can find the tools or combination of tools best suited to their context.

<p>WATOTO Framework V6.9 <i>Kutunga Design Academy & Innovation Lab / Mtoto News International</i></p>	<p>The Africa-Led, Child-Centred, Safety-by-Design Standard for digital products, platforms, and AI systems serving children in Africa and the Global South. Ten Design Standards, ten Guiding Principles, seven age bands, CRIA methodology, and certification programme. Grounded in African philosophy, African developmental theory, and six AU continental instruments.</p>
<p>UK Age Appropriate Design Code (Children’s Code) <i>UK Information Commissioner’s Office (ICO)</i></p>	<p>Fifteen standards for online services likely to be accessed by children under 18. Legal instrument under UK data protection law. WATOTO aligns with and extends the Children’s Code, adding African context, communal data governance, and the Digital Rites of Passage architecture.</p>
<p>UNCRC General Comment No. 25 (GC25) <i>UN Committee on the Rights of the Child, 2021</i></p>	<p>The authoritative international statement on how all UNCRC rights apply in the digital environment. Covers data protection, algorithmic accountability, and design obligations. GC25 is the normative foundation of WATOTO; WATOTO provides the African-context engineering-level implementation layer GC25 calls for but does not specify.</p>
<p>AU Child Online Safety and Empowerment Policy <i>African Union Commission, 2024</i></p>	<p>The world’s first continental child digital safety policy. Eight pillars including child participation, Safety by Design, content governance, and cross-border accountability. WATOTO is the implementation mechanism for this Policy translating its eight pillars into testable product requirements for the first time.</p>
<p>RITEC-8 Framework and RITEC Design Toolbox <i>UNICEF & The LEGO Group, 2024</i></p>	<p>An evidence-based framework with 787 children in 18 countries, identifying eight dimensions of well-being in children’s digital play. Focuses on the gaming industry. WATOTO complements RITEC-8 by providing the continental African governance architecture and the Safety-by-Design standard within which RITEC-8’s well-being dimensions are operationalised.</p>
<p>UNICEF Policy Guidance on AI for Children <i>UNICEF, 2021</i></p>	<p>Nine requirements for child-centred AI systems. Covers data protection, algorithmic accountability, inclusive AI, and child participation in AI governance. WATOTO directly implements these requirements in African contexts, adding the African-language NLP requirements, communal data governance, and the BARAZA Standard for GenAI-specific risks.</p>



<p>Child Rights by Design <i>Digital Futures Commission / 5Rights Foundation</i></p>	<p>Eleven principles for realising children’s rights when designing digital products and services. WATOTO’s Standards directly operationalise these principles for African contexts, with specific engineering requirements, Red Line Prohibitions, and Good Practice Notes.</p>
<p>GEAR Model of Child Participation <i>Mtoto News International / Jennifer Kaberi, 2025</i></p>	<p>The Africa-authored model for genuine child participation in digital spaces: Preparation (equipping children to participate), Platform (Space, Voice, Audience, Influence incorporating the Lundy Model), and Feedback (children see within 90 days how their participation changed outcomes). The WATOTO Child Participation Minimum Standard, required under Standard 2 PALAVER.</p>

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