

# Tools to operationalize the UNICEF policy guidance on AI for children

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To help governments and businesses operationalize the UNICEF Policy Guidance on AI for Children, we have developed an implementation [roadmap](#) for policymakers and an AI for children [canvas](#) for software teams; applied together, these tools should help to align product and system development with requirements for child-centred AI.

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[Download the  
UNICEF Policy  
Guidance on AI  
for Children](#)



## Roadmap for policymakers

The policy guidance is only useful if it is grounded in the characteristics and needs of the context in which it is being applied, including national AI strategies, regional AI infrastructures, how children are using AI locally and how it can impact children directly and indirectly. Only then can concrete strategies be developed to operationalize this guidance. Given the evolving nature of AI applications, the pace of innovation and adaptation, and the changing needs and interests of children, the operationalization needs to be a cyclical process. This requires a continuous assessment of the usefulness of the policy and where necessary updates or modifications to the strategies.

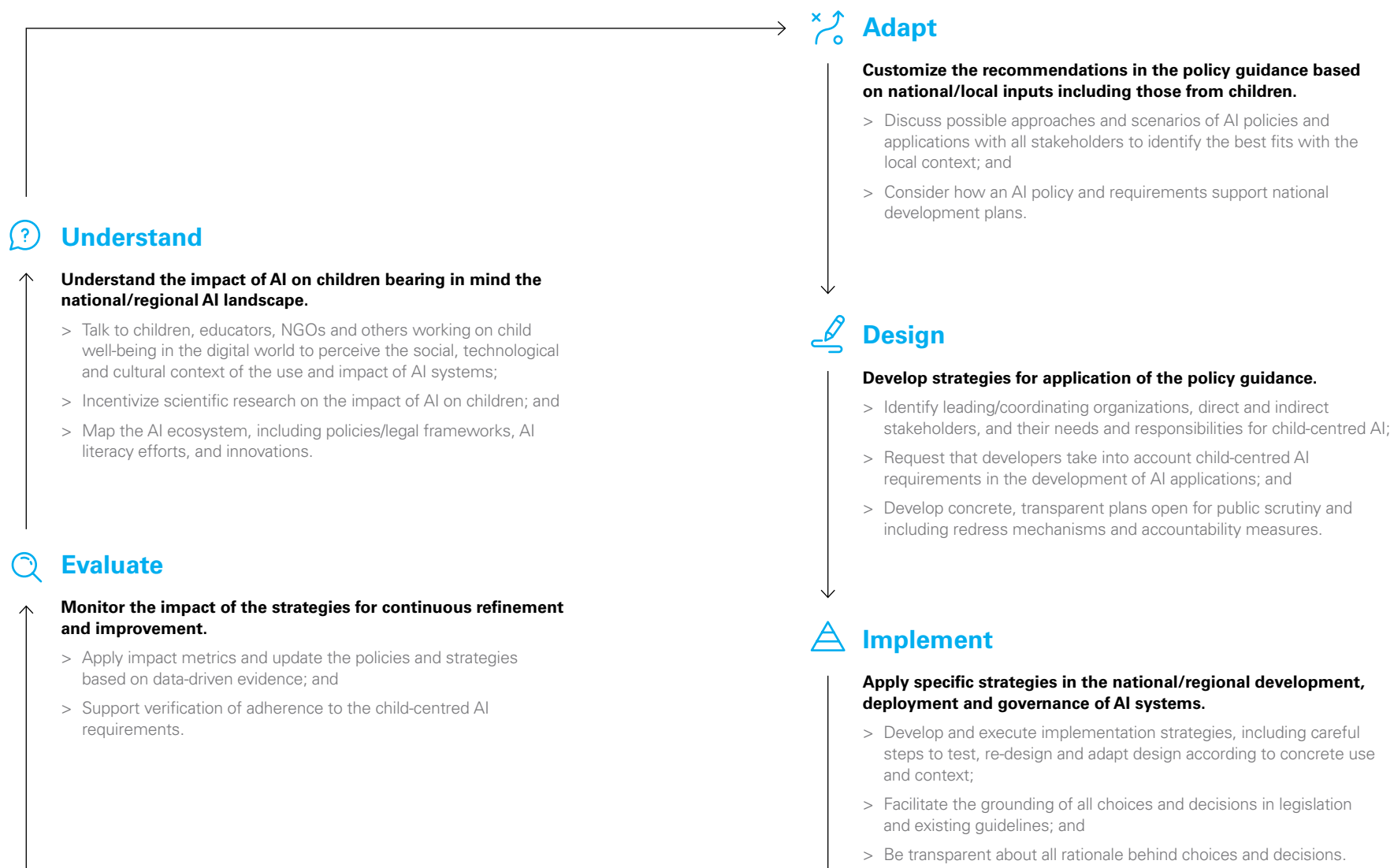
UNICEF proposes the following steps to support the implementation of the recommendations proposed in the policy guidance to ensure the nine requirements for child-centred AI.

We acknowledge that stakeholders will apply them differently according to local contexts, timelines and needs. Central to the policy process is the need to evaluate and adapt methods to constantly renew understanding of how others use and implement their results. AI applications are dynamic systems, learning and adapting to their environment, often in unforeseen ways. Therefore, a responsible approach to the development, use and regulation of child-centred AI systems requires a continuous evaluation and adaptation of the following steps (see roadmap steps below) to guide the setting of policy and the development and use of AI systems.



- 1 Support children's development and well-being**  
*Let AI help me develop to my full potential.*
- 2 Ensure inclusion of and for children**  
*Include me and those around me.*
- 3 Prioritize fairness and non-discrimination for children**  
*AI must be for all children.*
- 4 Protect children's data and privacy**  
*Ensure my privacy in an AI world.*
- 5 Ensure safety for children**  
*I need to be safe in the AI world.*
- 6 Provide transparency, explainability, and accountability for children**  
*I need to know how AI impacts me. You need to be accountable for that.*
- 7 Empower governments and businesses with knowledge of AI and children's rights**  
*You must know what my rights are and uphold them.*
- 8 Prepare children for present and future developments in AI**  
*If I am well prepared now, I can contribute to responsible AI for the future.*
- 9 Create an enabling environment**  
*Make it possible for all to contribute to child-centred AI.*

# Roadmap





## AI for children development canvas

The AI for children development canvas is a tool to support the design and development of AI applications for children. It summarizes all the important factors of the AI system development process, helps teams to structure their plans, visions and concerns about the implications of their projects for children and child rights, and helps to keep a visual description of the overall project. This visual model is designed especially for those who work on the development of AI systems that are used by and/or have an impact on children. Further resources to support the use of the canvas are available [here](#).

The development canvas includes a general description of the project and its purposes and motivations, and how the project deals with the requirements for child-centred AI. Each component reminds developers that evidence for their choices and claims should be produced and stimulates them to reply explicitly to the questions in each box. We recommend continuous updating of the canvas during each development cycle of the AI application.

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[Additional  
resources  
that support  
the use of  
the canvas](#)



# Development canvas

<b>Project/Application title:</b>		
<b>Date:</b>	<b>Version:</b>	<b>Authors:</b>
<b>Purpose/motivation</b> <b>Description:</b> Short description of the project		
<b>Impact on children:</b> <ul style="list-style-type: none"> <li>&gt; How are children impacted (directly or indirectly)?</li> <li>&gt; Who is responsible for the impact of the AI system on children? Who is liable?</li> </ul>	<b>Values/principles:</b> <ul style="list-style-type: none"> <li>&gt; Which child rights, human values and ethical principles are upheld or put at risk?</li> <li>&gt; Have you performed an ethical assessment? How?</li> <li>&gt; Have you followed any specific AI guidelines? Which? Why not?</li> </ul>	<b>Regulation:</b> <ul style="list-style-type: none"> <li>&gt; Which laws/regulations apply to the use of the AI system?</li> </ul>
<b>Design requirements</b>		
<b>Positive effects on children:</b> <ul style="list-style-type: none"> <li>&gt; What are positive effects for children? (e.g. education, health, entertainment)</li> <li>&gt; Are you measuring and communicating positive impact? How?</li> </ul>	<b>Negative effects on children:</b> <ul style="list-style-type: none"> <li>&gt; Can children be negatively affected by this project? If yes, how?</li> <li>&gt; How are limitations and risks dealt with and communicated?</li> </ul>	<b>Child development and well-being:</b> <ul style="list-style-type: none"> <li>&gt; Is the project specific to a particular age or development group? If not, can it be more tailored to the target group?</li> <li>&gt; How does the project contribute to upholding children's rights and improving their well-being?</li> <li>&gt; Does the project support the SDGs? Which ones?</li> </ul>
<b>Data protection and privacy:</b> <ul style="list-style-type: none"> <li>&gt; Which data is used?</li> <li>&gt; How is it collected, managed and protected?</li> <li>&gt; How is children's privacy protected?</li> <li>&gt; Can users opt out of their data being used?</li> </ul>	<b>Fairness/non-discrimination:</b> <ul style="list-style-type: none"> <li>&gt; How do you mitigate against any prejudicial bias?</li> <li>&gt; What (technical) definitions of fairness do you use and what is the motivation of these?</li> <li>&gt; How are you ensuring that all children can benefit from the project?</li> <li>&gt; Have you considered actions to promote awareness on this issue?</li> </ul>	<b>Transparency:</b> <ul style="list-style-type: none"> <li>&gt; How open can you be about this project? Could you publish your methodology, metadata, datasets, code or impact measurements?</li> <li>&gt; Will you publish your actions and answers to this canvas openly?</li> </ul>
<b>Accountability and redress:</b> <ul style="list-style-type: none"> <li>&gt; Are mechanisms for accountability and redress in place?</li> <li>&gt; Are children able, encouraged and supported to voice their concerns and complaints about the system?</li> </ul>	<b>Safety:</b> <ul style="list-style-type: none"> <li>&gt; What mechanisms for child safety are in place?</li> <li>&gt; Have you tested the system with child users?</li> </ul>	<b>Inclusion:</b> <ul style="list-style-type: none"> <li>&gt; How inclusive and diverse is the composition of the development team? Is it multidisciplinary?</li> <li>&gt; Can others, and in particular children, participate and comment on your project?</li> </ul>
<b>Explainability:</b> <ul style="list-style-type: none"> <li>&gt; Is it clear to children that the system uses AI and how? If yes, how do you know this?</li> <li>&gt; Can the system provide explanations understandable by children?</li> </ul>	<b>Conscious users:</b> <ul style="list-style-type: none"> <li>&gt; Are you empowering children to be conscious and critical digital users? How?</li> </ul>	<b>Prepare for future:</b> <ul style="list-style-type: none"> <li>&gt; Are you empowering children as future users/developers/leaders in AI? How?</li> </ul>

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<b>Accountability and redress:</b>	<b>Safety:</b>	<b>Inclusion:</b>
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