



Challenges  
& opportunities  
under the DSA  
(Art.28)

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[@SIGIR2025](#)

AI

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AI

the Rights of the Child

An infographic of the UN Convention on the Rights of the Child. It features a grid of 42 numbered icons, each representing a different article of the convention. The icons are arranged in a 6x7 grid, with the last row containing only 4 icons. The background is blue with white silhouettes of children.

UNCRC

1989

General Comment n.25

2021

unicef for every child

CONVENTION ON THE RIGHTS OF THE CHILD

Celebrating 30 years in South Asia 1989-2019

An infographic of the UN Convention on the Rights of the Child. It features a grid of 42 numbered icons, each representing a different article of the convention. The icons are arranged in a 6x7 grid, with the last row containing only 4 icons. The background is blue with white silhouettes of children.

## Principles

### Article 2

All children have these rights, no matter who they are, where they live, what their parents do, what language they speak, what their religion is, whether they are a boy or girl, what their culture is, whether they have a disability, or whether they are rich or poor. No child should be treated unfairly on any basis.

### Article 3

All adults should do what is best for you. When adults make decisions, they should think about how their decisions will affect children.

### Article 4

The government has a responsibility to make sure your rights are protected. They must help your family protect your rights and create an environment where you can grow and reach your potential.

## The 3P's Model

### Provision

For education, health care and adequate standard living

### Participation

Listening to children's views and respecting their evolving capacities

### Protection

From abuse, exploitation and harmful substances



Cast your choice?

- 1. Provision?
- 2. Protection?
- 3. Participation?

**Article 19**  
You have the right to be protected from being hurt and mistreated, in body or mind.

**Article 36**  
You have the right to protection from any kind of exploitation (being taken advantage of).

**Article 16**  
You have the right to privacy.

**Article 34**  
You have the right to be free from sexual abuse.

- 1. Provision?
- 2. Protection?
- 3. Participation?

**Article 12**  
You have the right to give your opinion, and for adults to listen and take it seriously.

**Article 13**  
You have the right to find out things and share what you think with others, by talking, drawing, writing or in any other way unless it harms or offends other people.

**Article 15**  
You have the right to choose your own friends and join or set up groups, as long as it isn't harmful to others.

**Article 17**  
You have the right to get information that is important to your well-being, from radio, newspaper, books, computers and other sources. Adults should make sure that the information you are getting is not harmful, and help you find and understand the information you need.

- 1. Provision?
- 2. Protection?
- 3. Participation?

**Article 27**  
You have the right to food, clothing, a safe place to live and to have your basic needs met. You should not be disadvantaged so that you can't do many of the things other kids can do.

**Article 28**  
You have the right to a good quality education. You should be encouraged to go to school to the highest level you can.

**Article 29**  
Your education should help you use and develop your talents and abilities. It should also help you learn to live peacefully, protect the environment and respect other people.

**Article 31**  
You have the right to play and rest.

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Evolving Context

SMART GRID  
SMART CITY

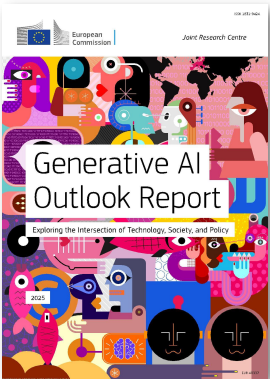
SMART HOUSE

IoT - AIoT

IoB - AIoB

IoE - AIoE

ABENDROTH DIAS, K.,  
ARIAS CABARCOS, P.,  
BACCO, F.M., BASSANI, E.,  
BERTOLETTI, A. et al.,  
**Generative AI Outlook  
Report - Exploring the  
Intersection of  
Technology, Society and  
Policy**, NAVAJAS  
CAWOOD, E., VESPE, M.,  
KOTSEV, A. and VAN  
BAVEL, R. (editors),  
Publications Office of the  
European Union,  
Luxembourg, 2025,  
  
<https://publications.irc.ec.europa.eu/repository/handle/IRC142598>



Challenges

Opportunities

Provision



For education, health care and adequate standard living

Challenges

Opportunities

Participation



Listening to children's views and respecting their evolving capacities




Challenges

Opportunities




Protection



From abuse, exploitation and harmful substances

AI tools & Risks		AI-based applications		
		Recommender systems	Conversational Agents	Social robots
 Recommender systems	Limited accuracy		✓	✓
	Augmentation of inequities		✓	
	Data disclosure / Privacy violation	✓	✓	✓
 Conversational agents	Overtrust		✓	✓
	Bias / discrimination	✓	✓	✓
 Social robots	Over-exposure to similar content	✓		
	Inappropriate content	✓	✓	
	Reduction of child autonomy in relation to the system	✓	✓	✓

Source: EC, in Charisi et al., 2022, p.25.

AI tools & Opportunities		AI-based applications		
		Recommender systems	Conversational Agents	Social robots
 Recommender systems	Accessibility	✓	✓	✓
	Engagement for learning	✓	✓	✓
	Adaptation	✓	✓	✓
 Conversational agents	Social interaction	✓	✓	✓
	Health	✓	✓	✓
 Social robots	Transparency	✓		✓
	Inclusivity/Diversification	✓		✓
	Acceptance		✓	✓
	Physical interaction			✓

Source: EC, in Charisi et al., 2022, p.25.



Article 28, Online protection of minors - the Digital Services Act (DSA) - 2022

Providers of online platforms accessible to minors shall put in place appropriate and proportionate measures to ensure a high level of privacy, safety, and security of minors, on their service.

# DSA (Art.28) Challenges

- Possible conflict of values : The best interest of the child must prevail even under precautionary principles (§ 24)
- Children are not homogeneous group
- Cognitive capacities in development
- Evolving capacities in time
- Prevalence of individual usage from early age which is challenging for parenting



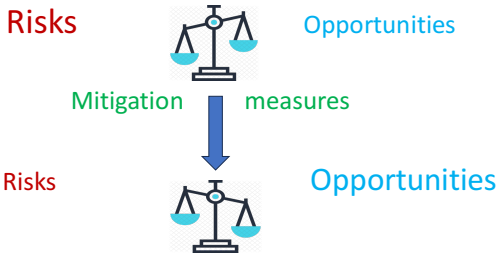
# EC Guidelines on the protection of minors - 14/07/2025

- Setting minors' accounts to private by default (...).
- Modifying the platforms' recommender systems to lower the risk of children encountering harmful content or getting stuck in rabbit holes of specific content, including by advising platforms to prioritise explicit signals from children over behavioural signals as well as empowering children to be more in control of their feeds.
- Disabling by default features that contribute to excessive use, like (...) " autoplay, or push notifications, as well as removing removing persuasive design features aimed predominantly at engagement (...).
- Introducing measures to improve moderation and reporting tools, requiring prompt feedback, and minimum requirements for parental control tools.



<https://digital-strategy.ec.europa.eu/en/library/commission-publishes-guidelines-protection-minors>

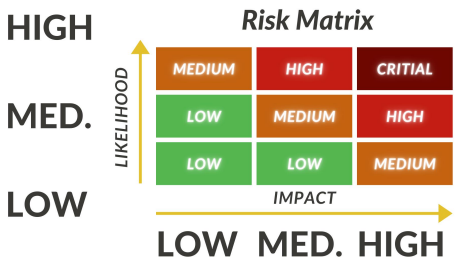
# CRIA Children's Rights Impact Assessment



# IDENTIFY Online Risks Typology - 5Cs

Risks for Children in the Digital Environment				
Risk Categories	Content Risks	Conduct Risks	Contact Risks	Consumer Risks
Cross-cutting Risks*	Privacy Risks (Interpersonal, Institutional, Commercial)			
	Advanced Technology Risks (e.g. AI, IoT, Predictive Analytics, Biometrics)			
	Risks on Health & Wellbeing			
Risk Manifestations	Hateful Content	Hateful Behaviour	Hateful Encounters	Marketing Risks
	Harmful Content	Harmful Behaviour	Harmful Encounters	Commercial Profiling Risks
	Illegal Content	Illegal Behaviour	Illegal Encounters	Financial Risks
	Disinformation	Problematic Behaviour	Problematic Encounters	Security Risks

# ASSESS Online Risks





## MITIGATE Online Risks – RS & Search Engines

- Recommender systems shape what minors see online, affecting their safety, privacy, and wellbeing.
- Risks include exposure to harmful content (e.g. unrealistic beauty standards, radicalisation) and excessive tracking.
- EU Regulation (EU) 2022/2065 (DSA) mandates transparency and safety obligations, especially for VLOPs/VLOSEs.



**Clear Feedback:** Enable minors to influence recommendations and understand why content is suggested.

### 6.5.1 Testing and adaptation of the design and functioning of recommender systems for minors

65. Providers of online platforms accessible to minors that use recommender systems in the provision of their service should:
- g. Prioritise ‘explicit user-provided signals’ to determine the content displayed and recommended to minors. The selection of such signals should be justified in the best interests of the minor, taking into account the principles of data minimisation and transparency, which will help to ensure that they contribute to a high level of safety and security for minors. For the purposes of the present guidelines, ‘explicit user-provided signals’ shall be understood as referring to user feedback and interactions that indicate users’ explicit preferences, both positive and negative, including the stated and deliberative selection of topics of interest, surveys, reporting <sup>(55)</sup>, and other quality-based signals.

## MITIGATE Online Risks – RS & Search Engines

## EC Guidelines DSA (Art.28) § 6.5

- **Testing & Adaptation:** Systems must be regularly tested with input from minors, caregivers, and experts.
- **Data Protection:** Avoid or limit behavioural data use; prioritise privacy and age-appropriate content.
- **Inclusive Design:** Consider age, disability, and accessibility needs; focus on fairness and inclusivity.
- **Content Filtering:** Block or deprioritise harmful or illegal content in recommendations and search features.
- **User Control:** Let minors reset recommendations and choose non-profiling options.
- **Clear Feedback:** Enable minors to influence recommendations and understand why content is suggested.
- **Accessible Settings:** Use clear, age-appropriate language in interfaces and terms.
- **Explainability:** Clearly explain why content is recommended and allow users to adjust preferences.
- **Ongoing Engagement:** Offer content control options during onboarding and throughout use.

**Clear Feedback:** Enable minors to influence recommendations and understand why content is suggested. (65) For exam

## HOW TO RENDER EFFICIENT THE BUTTON: 'I don't like this' ?

<sup>(6)</sup> For example, minors' feedback about content, activities, individuals, accounts or groups that make them feel uncomfortable or that they want to see more or less of should be taken into account in the ranking of the recommender systems. This includes feedback such as "Show me less/more," "I don't want to see/I am not interested in," "I don't want to see content from this account," "This makes me feel uncomfortable," "Hide this," "I don't like this," or "This is not for me." See also Section 7.1 on user reporting, feedback and complaints of the present guidelines.

## You Don't Bring Me Flowers: Mitigating Unwanted Recommendations Through Conformal Risk Control

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# Thank you



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