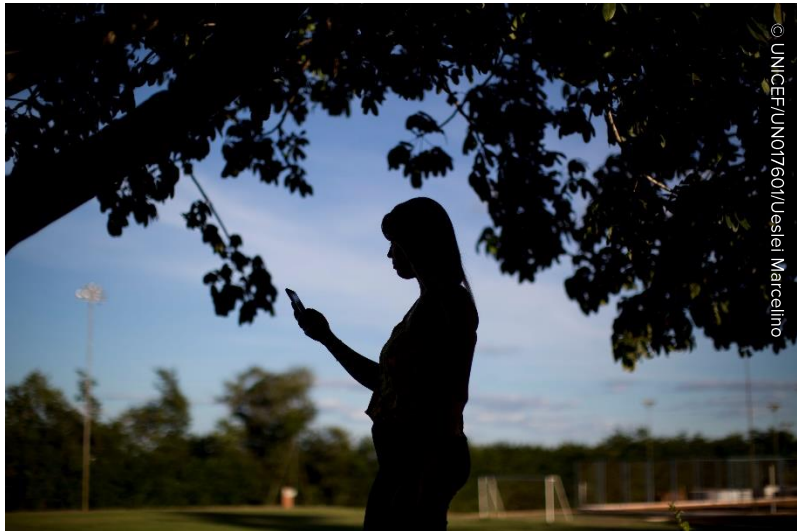


Examples of technological solutions for each objective

Objective 1: Detect, remove and refer known and new child sexual abuse materials (CSAM), including self-generated CSAM in open and closed online environments and mobile networks

- Expansion and universalization of hash-based filtering of CSAM
- Use of crawlers to detect and refer content for removal
- Artificial Intelligence (AI) to detect, classify and refer known CSAM
- AI to detect conversations and behaviour that may indicate (new) CSAM is shared
- Tools to detect and distinguish between adult and child language and behaviour to prevent the self-generation and sharing of CSAM and to refer the child to appropriate guidance or services
- Establishment or strengthening of reporting mechanism (hotlines or other) for CSAM and/or other forms of online and offline child sexual exploitation and abuse (CSEA), with national and international referral channels to facilitate removal and appropriate referral of illegal content



Objective 2: Prevent and disrupt online sexual grooming of children in digital environments

- Lexicon-based, machine learning algorithms and text analysis of chat room conversations to detect online sexual grooming
- Online platforms and games to raise awareness of digital dangers
- Natural language processing chatbots to alert the sites' administrator of the suspected grooming, and/or to pre-empt children if online grooming is suspected and offer real-time support via redirecting the child to appropriate services



Objective 3: Prevent and disrupt the live-streaming of child sexual abuse

- Tools to detect, block and/or refer transactions before they occur, for instance via identifying and disrupting patterns of migration from one platform to another e.g. for introductions, online CSEA and payment
- Tools to disrupt financial transactions and refer victims and/or offenders and potential offenders to appropriate services
- Establishing or strengthening reporting mechanisms to ensure anonymous reporting of known and suspected live-streaming activities

Objective 4: Prevent and disrupt the live-streaming of child sexual abuse

- Chatbots, online helplines with instant messaging, AI powered services, etc. to provide services for child victims, and possibly offenders and adults with sexual interest in children
- Establishment or strengthening of helplines and/or (self) referral mechanisms for offenders and people with a sexual interest in children, including through international exchange of expertise

