A Proposed Network Protocol for Parental Controls

HotRFC, 2nd November 2025

Parental Controls

- Important for child wellbeing
  - Allow families to manage access to digital devices, screen time, content, and purchases

- Many Options
  - EG Operating System / Ecosystem - Apple (Family Sharing), Google (Family Link), Microsoft (Family Safety), Amazon (Parental Controls)
  - Application – eg individual applications
  - Network – eg ISP DNS-based offerings
  - Platform – eg social media platforms

- Proprietary Tools
  - Not interoperable – no coherent management
  - Reduced visibility, consistency, and ultimately effectiveness —parents forced to navigate multiple dashboards, apps, and settings
  - Steep learning curve – eg similar terminology with different definitions, different terminology with same meaning
  - Exacerbates digital inequality

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The PARCEP Concept: A Network Protocol for Parental Controls

PARCEP will establish a framework for **interoperability, consistency, and coordination** across family management systems. Specifically, it will:

- **Define a shared data model** for screen time limits, application restrictions, age ratings, content category restrictions and purchase permissions.
- **Enable synchronised enforcement** of these controls across participating devices, regardless of vendor.
- **Support unified identity and role delegation**, allowing family managers to assign guardianship roles, set rules, and manage children's access across multiple households or care settings.
- **Respect privacy and security by design**, ensuring that data minimisation, user consent, and protection of children's personal information are embedded throughout the protocol.
- **Provide auditability and transparency**, offering families consistent insights into usage patterns, alerts, and override requests across platforms, with visible error messages on devices when any restrictions apply to an action.

It will be **vendor-neutral**, extensible, and adaptable to evolving policy and regulatory frameworks.

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Context: Alignment with Policy and Regulation

The timing of PARCEP aligns with a growing international focus on child online safety and digital rights. Relevant frameworks include:

- **The UK Online Safety Act 2023**, which enshrines a duty of care on platforms to protect children from harmful content.
- **The UN General Comment No. 25 (2021)** on children's rights in the digital environment, which calls for tools that support both autonomy and protection.
- **The EU Digital Services Act**, which mandates risk assessments and mitigations for child users.
- **The US Kids Online Safety Act (KOSA)**, under discussion, which encourages safety tools and transparency mechanisms for families.

There is also growing emphasis on **interoperability as a safeguard in itself** — preventing platform lock-in, enhancing user control, and enabling consistency across digital services.

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Context: The Risk of Doing Nothing

- Continuation of online harm
- Momentum behind mandatory age-gating of Internet access
- Momentum behind the “smartphone free” childhood movement

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Side Meeting: Tuesday 4th November

- Interesting in learning more, contributing to the discussion?
- **Side meeting in Duluth, 19:00-20:00 on Tuesday**
- Join the conversation!

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