

Android Device Longevity

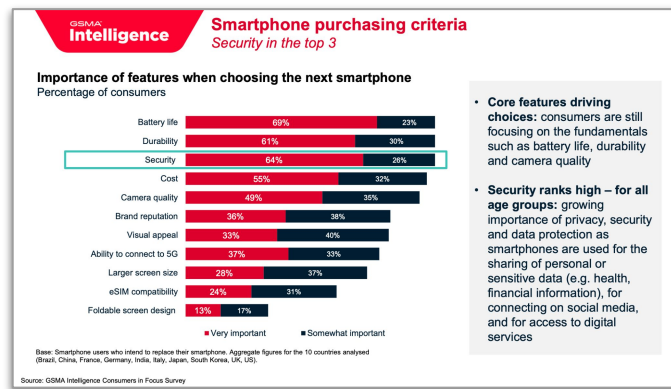
 source.dev

FAIRPHONE



Why should we care about longevity?

1. Users purchase longevity



2. Regulators will enforce it



- Long-term software support (>5 yrs)
- Timely security updates (<4 mo) upgrades (<6 mo)
- Comprehensive supply chain security (SBOM)
- Standardized vulnerability management

What are the top issues making longevity hard?

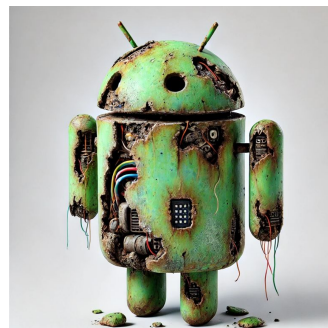
Based on our experience, surveys and [livestream discussions](#)

- AOSP modifications and binary-only BSPs
- Security updates and OS upgrades
- Long-term support beyond the SoC
- Upcoming regulation

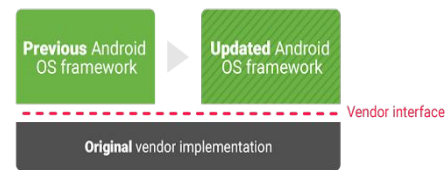
What can we do about AOSP modifications and binary-only BSPs?

Potential solutions to discuss

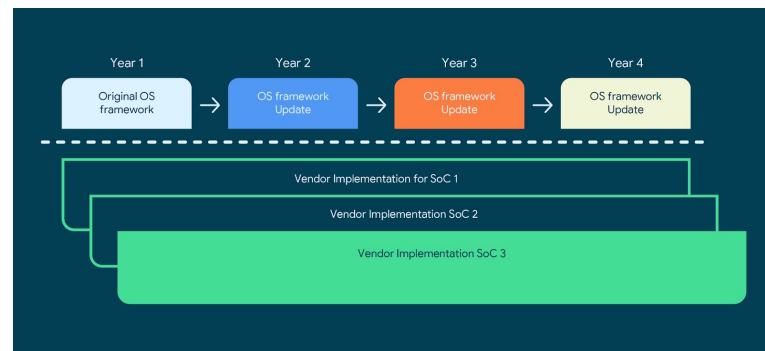
1. Develop for longevity and use Treble



With Treble



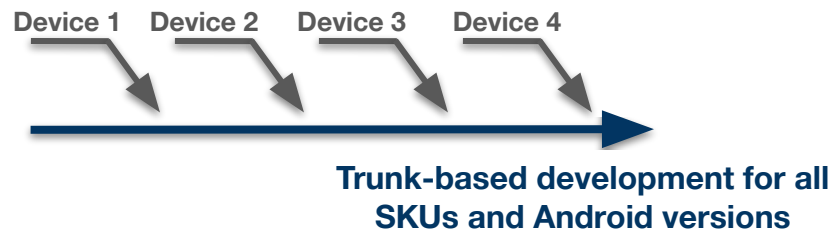
2. Select SoCs that use the Vendor Interface



What can we do about security updates and OS upgrades?

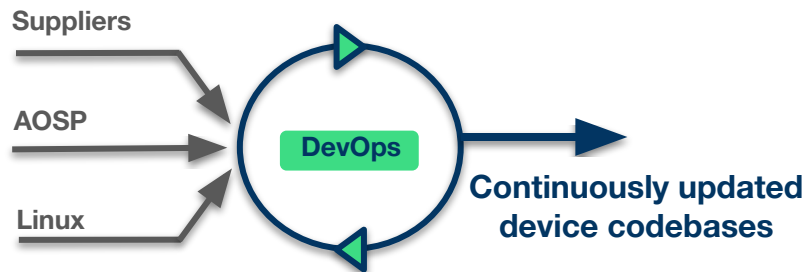
Potential solutions to discuss

1. Adopt Trunk Stable software development



2. Continuously integrate upstream projects

- *Note: You might need support from suppliers to do this*



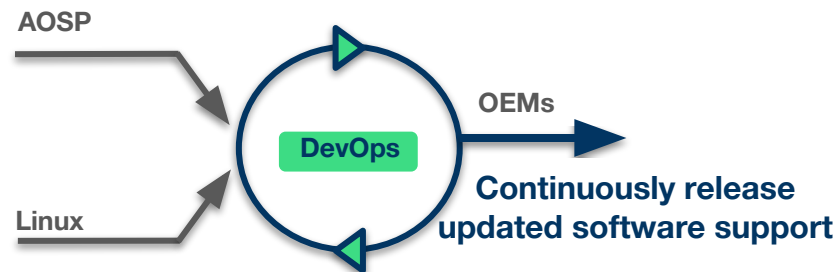
What can we do about long-term support beyond the SoC?

Potential solutions to discuss

1. Supply chain longevity is equally important



2. For suppliers: Continuously release updated code



What can we do about upcoming regulation?

Potential solutions to discuss

1. Become familiar with upcoming regulation

Start with:

- UK PSTI, in effect
- EU EcoDesign, starting 20th June 2025
- EU CyberResilienceAct, starting 2026

2. Discuss interpretation and implementation

- Start with your in-house counsel
 - Use the cheatsheet in the appendix

Appendix: Overview of upcoming regulation affecting device longevity

Theme	Requirement	Regulation	Status	Applies from/to	Commentary
Uniform length of software support	Must provide transparency regarding minimum length of software support	UK PSTI	In effect	29 Apr 2024 / All internet connected	- UK publicly endorsed EU CRA and laid foundation for follow-ups
	Must provide 5 years of security updates and OS upgrades after the last device sale	EU EcoDesign	Approved	20 June 2025 / Smartphone & Tablets	- Over 7 years for some models
	Must provide 5 years of security updates or the intended lifetime of the device	EU CyberResilienceAct	To be approved	Expected approval EoY 2024 followed by a transition period / All internet connected	- Over 10 years for some categories
Frequent software updates	Must provide security updates within 4 months of public disclosure	EU EcoDesign	Approved	20 June 2025 / Smartphone & Tablets	
	Must provide OS upgrades within 6 months of public release	EU EcoDesign	Approved	20 June 2025 / Smartphone & Tablets	- Must not introduce performance regressions without user consent
	Must provide timely security updates	EU CyberResilienceAct	To be approved	Expected approval EoY 2024 followed by a transition period / All internet connected	- To follow EU EcoDesign wording
Thorough supply chain security	Must provide a Software Bill of Materials for devices used by the US government	US Executive Order	In effect	12 May 2021 / Smartphone & Tablets	
	Must provide a Software Bill of Materials for all devices	EU CyberResilienceAct	To be approved	Expected approval EoY 2024 followed by a transition period / All internet connected	
Uniform processes and certification	Must report vulnerabilities following a strict disclosure process	EU CyberResilienceAct	To be approved	Expected approval EoY 2024 followed by a transition period / All internet connected	
	Must certify that the device uses best practices	EU CyberResilienceAct	To be approved	Expected approval EoY 2024 followed by a transition period / All internet connected	- Includes provisions for certifiers and software updates undertakers