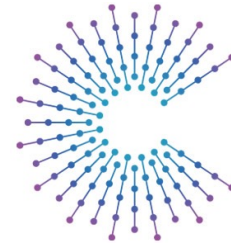




A Fragment of Your Imagination - Ending AOSP App Framework Fragmentation for Automotive

Automotive AOSP App Framework Standardization Expert Group

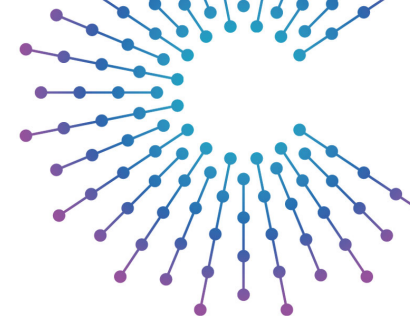
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COVESA

Accelerating the future of connected vehicles

Expert Group Focus



- The majority of the vehicle OEMs are adopting Android Automotive Operating System as a base IVI platform that runs pre-installed Android System applications as well as 3rd Party (3P) Android Applications.
- The ecosystem of 3P applications is likely to be a critical element in allowing end-consumers to access to their favorite digital content safely in the car. Hence, the primary objective is above all to avoid market fragmentation in solutions and tools.
- There are two ways for vehicle OEMs to bring 3P Android Applications to their vehicles:
 - 1) By using the Google Automotive Services (GAS), a bundle containing the Google Play Store next to the Google Assistant and Google Maps.
 - 2) Making use of a white label Android App Store and services (e.g. Faurecia Aptoide, Harman Ignite) on AOSP
- There are gaps in the Google standards when using a white label App Store, especially for the vehicle OEMs.

Snapshot of expert group topics

	What is already considered by AAOS (Android Automotive Operating System) ?	What does GAS include?	What this Expert Group might develop further ?
AOSP Emulator	No Cross-OEM AOSP emulator without Google dependencies available	E.g. Polestar Emulator with dependencies to Google-specific services	Cross-OEM AOSP Emulator enabling App Developers to test their apps for Non-GAS OEMs
Vehicle data collection (incl. GDPR consideration) and Sensor interface definition	<p>Vehicle data collection using vehicle properties (common and extended)</p> <p>Android Sensor interface and AIDL (Android Interface Definition Language) including EVS (exterior view system) for Camera</p>	<p>Support for additional mandatory vehicle properties</p> <p>Support for ADAS (Advanced Driver Assistance Systems) oriented applications</p>	<p>Reduce the number of extended vehicle properties to common vehicle properties</p> <p>Anonymity of Data and Consent management</p> <p>Define standard interfaces for sensors which are not supported yet by AAOS</p>
Push notifications	Notification Interface + Notification Center	Firestore Cloud Messaging is mandatory	<p>Define standard implementation of Notification Center</p> <p>Document alternative to Firestore such as Unified Push</p>