

# Android

The GPRO team is interested in applying the activities and the knowledge gathered in the previous months into the topic of interoperability between Android and AUTOSAR ECUs.

As an outcome of the Munich AMM, Android is recognized as the emerging trend for Automotive IVI.

The GPRO team will study existing gaps in the scope of protocol interoperability between Android and AUTOSAR (Adaptive) ECUs and will provide proposals and eventually PoC.

## SOME/IP on Android

1. We need to understand is there is a need and a wish for SOA in Android.
2. Do we want to expose the SOA APIs to the JAVA/Kotlin world or integrate SOME/IP only at BSP level?
3. How would look like the architecture of and Android system with SOME/IP integrated?
4. Investigation of current messaging communication approaches in Android:
  - a. Messenger (+AIDL)
  - b. HIDL
5. Use cases for android integration:
  - a. read-only access to vehicle signals from 3rd party app
  - b. proprietary android app that doesn't expose apis
  - c. offload computation to android (bsp level)

Options for the Android developer:

- Use an explicit someip java/kotlin interface
- Use a (configurable) gateway (like vsomeipd) for translating preferred messaging Android-native system to some/ip (outwards and inwards)
- other options?

## vsomeip on Android

1. How to integrate vsomeipd and crosscompile the libraries in android? (problems with partitions, crosscompiling..?)
2. vsomeip could be available for android soon: [vsomeip/issues/55](#)
3. Which kind of PoC we can support for demonstrating Android/AdaptiveAutosar interoperability via SOME/IP?
4. Could there be an update of the scope of the FARA tool? Or need a different tooling? Shall it be an IntelliJ-integratable tooling?