Open Mobile API for OEMs:

Enriches Mobile Platforms by Promoting Interoperability and the Highest Levels of Security for Connected Devices



The emergence of smartphones and tablets has had a transformational effect on the creation and delivery of mobile services, resulting in millions of apps from multiple sectors finding their way into the devices and lives of users worldwide. However it has also opened users, and the network, to a proliferation of security threats.

For this reason, the Secure Element (SE) plays a vital role in securing the future delivery of mobile services and the continued growth in the market for mobile devices. A secure component within the connected mobile device, a SE can come in three main form factors: a UICC, an embedded SE (eSE) and a microSD card. The SE provides the application, the network and the user with the appropriate level of security and identity management to assure the safe delivery of a particular service. As a well-established, globally implemented technology, it offers proven interoperability across devices and operating systems (OS); the UICC/SIM/USIM, which is the

commonest form of SE, is the most widely distributed secure application delivery platform in the world. Connecting the application to the SE within the device is the only way to guarantee the highest levels of security for connected mobile devices in an IP world. The SIMalliance Open Mobile API (OMAPI) Specification standardises this process. It allows OEMs to benefit from the increased ease by which application developers can utilise the SE for secure authentication, storage and/or execution of sensitive applications. It delivers resulting security advantages to OEM platforms, allowing them to be enriched by a host of additional secure applications.



The OMAPI Specification:

- Has been developed with input from the entire mobile ecosystem and is the globally recognised standard, which enables mobile applications, across sectors, to connect with all SEs on a device. It is mandated by GSMA on NFC-UICC devices and as a result is already implemented in nearly 250 models of Android (NFC) smartphone. It is also mandated on devices by EMVCo for contactless mobile payments
- Provides an established interface and increasingly powerful functionality and enables fast development and easy delivery for app developers of highly secure busines and consumer mobile applications across all SE form factors and multiple market sectors.
- within several standardisation bodies, including the Global Certification Forum, GlobalPlatform and PTCRB. This ensures that the specification is implemented correctly and consistently across devices.
- In conjunction with GlobalPlatform's SE Access Control, provides a complete framework to ensure secure communication between mobile applications and SEs, in accordance with the industry's security requirements.
- Is available for free download, alongside a corresponding test specification and test suite, from the SIMalliance

Why Should OEMs **Utilise the OMAPI Specification?**

- The OMAPI Specification has been developed over time with the input of actors from all parts of the mobile ecosystem. As a result, the specification is completely stable and includes all features needed by the market.
- In support of the GSMA requirements for handset manufacturers to implement OMAPI, the specification supports smartphone operating systems (OS) that use both procedural and object oriented programming languages. This means that it can be universally implemented on every type of smartphone OS globally.
- It encourages greater standardisation in how mobile applications access different SEs within devices. A
- Test Application, making it easier for handset manufacturers and OS providers to implement, and verify the correct use of, the OMAPI Specification in handsets.
- The OMAPI Specification enables application developers to easily utilise a SE within a device; this encourages the development of a wide variety of secure applications and services, enhancing the attractiveness of the device platform to customers.
- It promotes global interoperability in terms of how mobile applications access different SEs within a device, making it achievable across every type of smartphone model.

The OMAPI Specification is available for free download from SIMalliance:



