

## **EMVCo Announces Development of EMV® Contactless Kernel Specification to Simplify and Advance Global Contactless Acceptance**

*Draft specification now available for public review.*

**09 May 2022** – Global technical body [EMVCo](#) has announced that it is developing an EMV Contactless Kernel Specification to simplify and advance global contactless payment acceptance. Following a detailed review with EMVCo Associates in February and March, a draft specification is now available on the EMVCo website for public review. EMVCo aims to release the final specification later in 2022 once its publication is approved by the EMVCo Board of Advisors.

A contactless kernel provides a set of functions for payment acceptance devices (such as point-of-sale terminals and ATMs) to process contactless transactions. Currently, there are more than 20 different payment system contactless kernels in use around the world, which technology vendors use to provide products that enable merchants to accept contactless payments. The complexity and cost of maintaining this multi-kernel environment is a growing challenge for the payments community. The EMV Contactless Kernel Specification aims to address this challenge by delivering an EMV kernel specification that all stakeholders over time can use for global contactless payment acceptance, under the same royalty-free conditions as the EMV Contact Chip Specification.

“EMVCo is developing the EMV Contactless Kernel Specification to address industry demand for an EMV contactless kernel that is made available in the same way as EMV Contact Chip to streamline global payment acceptance,” said Robin Trickel, EMVCo Executive Committee Chair. “Ultimately, this can over time help reduce the number of contactless kernels that stakeholders need to support and maintain, creating opportunities for merchants, hardware providers and payment systems to reduce costs, and improve roll-out speed and time to market.”

EMVCo has engaged extensively with EMVCo stakeholders and the wider payments industry to understand marketplace needs and determine the best approach for an EMV contactless kernel specification. This included a feasibility study, conducted by two independent consulting research firms.

The draft specification reflects this input with requirements and features designed to support the evolution of contactless and mobile payments, including advanced security technologies to protect against future threats. Key features include Secure Channel for privacy protection of sensitive data, Elliptic Curve Cryptography (ECC) for card authentication, biometric and mobile card verification

methods, an architecture that supports physical or cloud implementations, and on-card data storage.

EMVCo will also provide approval testing for the EMV Contactless Kernel Specification through EMVCo accredited and audited laboratories and publish a list of all approved EMV contactless kernels on the EMVCo website.

Following a detailed review with EMVCo Associates in February and March, the draft specification is now released for public review, which is open until 20 June. Submissions made during this review will be evaluated, and amendments will be made to the draft specification as appropriate. The EMVCo Board of Advisors will then review the final specification and vote on whether to approve its publication.

To participate in the public review of the draft EMV Contactless Kernel Specification, visit the [EMVCo website](#). Read the EMV Contactless Kernel FAQ to learn more about this initiative.

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For further EMVCo media information please contact David Amos / Chloe Mercer – Tel: +44 113 3501922 or email: [david@iseepr.co.uk](mailto:david@iseepr.co.uk) / [chloe@iseepr.co.uk](mailto:chloe@iseepr.co.uk)

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**Notes to Editors:**

EMV® is a registered trademark in the U.S. and other countries and an unregistered trademark elsewhere. The EMV trademark is owned by EMVCo, LLC.

**About EMVCo:**

EMVCo creates and manages EMV Specifications and programmes that enable seamless and secure card-based payments for businesses and consumers worldwide.

EMV Specifications support technologies including EMV Chip [Contact](#), EMV Chip [Contactless](#), [Mobile](#), [QR Code](#), [Secure Remote Commerce](#) (SRC), [3-D Secure](#) (3DS) and [Payment Tokenisation](#) and are widely used by the payments industry to develop products and services that deliver trusted and convenient in-store, online and remote card-based payments.

As a global technical body, EMVCo is collectively owned by American Express, Discover, JCB, Mastercard, UnionPay and Visa. Hundreds of payments stakeholders, including merchants, banks and technology providers, participate as EMVCo [Associates](#) and [Subscribers](#) to develop, evolve and enhance flexible EMV Specifications that support innovation and address marketplace needs. All EMV Specifications are available royalty free on the EMVCo website.

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