



# **Request for Proposal**

**Consultant for**

**EMV<sup>®\*</sup> Level 1 Working Group - Contactless Activities**

**December 2015**

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\* EMV is a registered trademark or trademark of EMVCo LLC in the United States and other countries.



## **Statement of Purpose**

EMVCo is seeking a technical consultant(s) to support EMV Level 1 contactless testing and specification related activities.

The purpose of this Request for Proposal (RFP) is to request a formal cost proposal from bidders based on the requirements and deliverables identified in this document.

## **Timeline and Submission of Formal Proposal**

Bidders must provide responses to this RFP for consideration by EMVCo according to the following timeline:

<b><i>Milestone/Deliverable</i></b>	<b><i>Deadline</i></b>
The bidder may submit questions on RFP	January 15th
The bidder must submit a formal proposal to EMVCo	January 29th

EMVCo will review proposals after receipt, and anticipates communicating its responses and decisions to bidders according to the following timeline:

<b><i>Milestone/Deliverable</i></b>	<b><i>Deadline</i></b>
EMVCo to review proposals from bidders and submit additional questions to bidders	February 12th
EMVCo to communicate decision to the bidders	February 26th

EMVCo will be the contact point for bidders.

The proposal should be submitted by email (preferred) or post to:

EMVCo  
Attention: EMVCo L1WG Chair  
Mr Fawad Nisar  
Discover Financial Services  
201 Talgarth Road, Level one Hammersmith London,  
W6 8BJ

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E-mail: [fawadnisar@discover.com](mailto:fawadnisar@discover.com)

## **EMVCo**

EMVCo LLC was formed in February 1999 by Europay, MasterCard and Visa to manage, maintain and enhance the EMV® Integrated Circuit Card Specifications for Payment Systems. With the acquisition of Europay by MasterCard in 2002, JCB joining the organisation in 2004, American Express becoming its fourth member in 2009, and UnionPay and Discover becoming its fifth and sixth members, respectively, in 2013, EMVCo is currently operated by American Express, UnionPay, Discover, JCB, MasterCard and Visa.

EMVCo's primary role is to manage, maintain and enhance the EMV Integrated Circuit Card Specifications to enable interoperability and acceptance of payment system integrated circuit cards on a worldwide basis.

EMVCo also manages type approval processes to test terminal compliance and Common Core Definitions (CCD) and Common Payment Application (CPA) card compliance with the EMV Specifications. These processes provide to terminal and card suppliers a single terminal approval and a single CCD/CPA card approval service that assures a high level of compliance with the EMV specifications in order to ensure an interoperable acceptance infrastructure independently of the individual payment systems. Additional information can be found at [www.emvco.com](http://www.emvco.com).

## **EMVCo Organisational Structure**

EMVCo is governed by the Board of Managers under the guidance and direction of the Executive Committee. The Executive Committee, in turn, receives input from the Board of Advisors on business and strategic issues. The organisation has established several Working Groups composed of representatives from the member payment systems to carry out the work of EMVCo. The Board of Managers assigns work items, functions and responsibilities to the Working Groups as appropriate.

More information on EMVCo may be obtained from the EMVCo website [www.emvco.com](http://www.emvco.com).

## **RFP Background**

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The EMV Level 1 Working Group supports all EMVCo contact and contactless Level 1 activities including but not limited to:

- Maintaining and enhancing the Level 1 specifications for contact (Book 1) and contactless (Book D);
- Providing and maintaining the minimal Level 1 interoperability requirements for contact and contactless applications;
- Responding to Level 1 specification-related queries;
- Publishing on-going bulletins, errata and application notes when required; and
- Potentially taking on Level 1 related work items assigned by the Next Gen Task-Force.

The L1WG maintains a close working relationship with, and provides technical support and feedback to other EMVCo working groups and the EMVCo Technical Associates, especially with respect to type approval testing.

The introduction of new payment methods and products, particularly in the mobile sphere, and the evolution of new technologies associated with these has resulted in the need to review support for these in the EMV specifications and testing services.

The current EMV TEST equipment (PCD, PICC and CMR) was designed to confirm the compliance of PCDs and ID1 cards (the most common payment instrument in use today) with the contactless analogue requirements in Book D. However with the potential introduction of new payment instruments (e.g. a mobile phone used as a PICC or PCD) and related new technologies (e.g. I/Q modulation and higher communication speeds) EMVCo is seeking to re-design or enhance the current TEST equipment to ensure that type approval testing is more robust across the full range of new products and technologies.

This is being conducted in two phases by independent technical experts and the L1WG needs additional resource to evaluate the proposals stemming from this project and in particular to equate them to interoperability issues reported from the field, to determine if the proposals will actually prove effective in reducing mobile phone operability issues.

The objective of this RFP is to invite contactless RF experts to submit proposals for undertaking the work defined in the 'Scope of Services and Deliverables' section below.

### **Relevant EMV Specifications and Manuals**

- EMV Contactless Communication Protocol Specification – Book D, Version 2.5, February 2015

This specification can be obtained at no cost from the EMVCo website.  
(<http://www.emvco.com/specifications.aspx?id=21>).

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- Level 1 - Test Equipment Specifications - PICC Manual
- Level 1 - Test Equipment Specifications - PCD Manual
- Level 1 - Test Equipment Specifications - CMR Manual

The Test Equipment Manuals can be obtained from EMVCo.

### **Scope of Services and Deliverables:**

The selected consultant will be required to:

- Support the Level 1 Working Group with respect to the test enhancement work of the group and in particular the evaluation and proofing of proposals for enhancement of the EMVCo contactless Test Equipment, including IQ modulation. This is intended to improve the testing and thus acceptance of new form factor devices, such as mobile phones, tablets, fobs and other personal payment devices.
- Evaluate reported field interoperability problems between EMV readers and contactless devices, using laboratory equipment to determine the engineering reasons for the issues. Apply the learnings from this to the above enhancement of the Test Equipment and refinement of the specification.
- Participate in regular conference calls, typically on a 2/3 week roster, lasting 2 hours each.
- Participate in other ad hoc conference calls in EMVCo or with external parties based on need. In particular this will include involvement and contribution to the understanding and inclusion of IQ modulation.
- Participate in face to face meetings as needed that may occur 4 to 5 times a year in various locations around the world.
- Evaluate technical proposals for enhancement of the contactless Test Equipment, including changes to the reference PICC, reference PCD and CMR board.
- Conduct detailed technical evaluation of accepted proposals using physical test configurations and laboratory instruments. Evaluate the effectiveness of the proposals to resolve the identified technical issues.
- Prepare reports and any other relevant documentation in support of the above.

Some of the above tasks will require the consultant to have access to representative contactless test implementations and general electronic laboratory instruments. The successful applicant, will have access to EMVCo owned equipment. It could also involve the consultant visiting Payment System or EMVCo laboratory test facilities.

### **Formal Proposal Content**

Formal proposal packages must include: (1) background information regarding the bidder's organisation and experience, and (2) a complete, detailed cost proposal for the bidder to

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perform the tasks described above. Specific requirements for each component of the proposal packages are as follows:

## **(1) Bidder Organisation and Experience**

To familiarise EMVCo with your company, please respond to the following requests for information about your company's organisation and experience related to EMV implementations and specifications. Your responses to the following questions will help EMVCo to understand the depth of your or your organisation's experience. Please feel free to expand on any section with information that you feel will be helpful with regard to this project.

### **Organisation**

For you and/or your organisation provide an overview of your background and areas of expertise both at the overall level and at the level of the individual consultant(s) who may be assigned to this proposal. Include details of any ownership or access to laboratory instruments and test implementations.

### **Expertise and Professional Qualifications**

Describe any experience you and/or your organisation has relevant to EMVCo Contactless Specifications for payment, as well as to the ISO/IEC 14443 series of standards and the relevant NFC Forum Specifications, particularly with respect to the RF analogue related sections. Although it is not a requirement, being able to demonstrate that you or your organisation has direct expertise in these areas is a plus. Also, partial expertise on certain areas of such specifications, or no expertise on such specifications but industry experience on related topics and general electrical engineering background will be considered by EMVCo. Descriptions of individuals should include at least their electrical engineering or equivalent background, and their familiarity with the relevant specifications and standards (mobile handsets, ETSI, HCI, SWP will be a plus).

### **Required Skills**

Familiarity with the use of laboratory equipment and diagnostic techniques.  
Excellent analytical and communication skills.  
Fluency in English (both written and oral).  
Ability to work independently with minimum supervision.  
Ability to report in a clear and timely manner.

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## **Past or Current Relationships with EMVCo or EMVCo Payment System Members**

Describe your or your organisation's past or current relationship with EMVCo, if any. Alternatively, describe you or your organisation's past experience with American Express, UnionPay, Discover, JCB, MasterCard, and/or Visa specifically related to EMV programs and/or specifications, if any.

## **Client References**

Provide any client references that can provide relevant feedback on you or your organisation's performance. Provide a brief summary of the work completed for each reference and how it may be related to this proposal.

## **Conflict of Interest**

The bidder must declare any potential conflict of interest with EMV qualified test tools and laboratories and product vendors.

## **(2) Cost Proposal**

Please provide a complete, detailed cost proposal to perform the tasks described above.

## **EMVCo's Role**

EMVCo's role in supporting the selected consultant's performance of the tasks described above will include the following:

- EMVCo to provide a primary point of contact for the selected consultant.
- Guidance, direction and priority of the work to be undertaken.
- Facilitation of identifying field reported issues and access to laboratory equipment for evaluation.

## **Confidentiality**

The bidder must strictly maintain the confidentiality of all EMVCo information that they see, hear or encounter.

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EMVCo may disclose confidential material to the bidder so that the bidder may complete the proposal. Prior to any such disclosure, and upon request by EMVCo, bidders must execute a Non-Disclosure Agreement provided by EMVCo.

## **Intellectual Property Rights**

The bidder must declare any intellectual property that could be used as part of this project. Pursuant to the contract to be signed by EMVCo and the selected bidder, EMVCo will be the sole owner of any intellectual property disclosed to the bidders by EMVCo in connection with this project. EMVCo will be the sole owner of any intellectual property that is jointly or independently developed, created or delivered to EMVCo as part of the proposed deliverables by the selected bidder. EMVCo will be the sole owner of any derivative work or any intellectual property created in connection with this project.

## **Derivative Services**

It is recognised that the bidder may be able to offer derivative services based upon the work developed as part of this project. If the bidder provides derivative services based on the work developed as part of this project, the bidder must provide a copy of the work to EMVCo and such work is subject to the Intellectual Property Rights provisions set forth above.

## **Costs Incurred**

Any cost incurred by the bidder in the preparation of the formal proposal will be borne solely by the bidder.

## **Commencement of Work**

No work shall commence and no invoices will be paid until the selected bidder has signed a final Services Agreement (including a Statement of Work) with EMVCo.

## **Reservation of Rights**

EMVCo reserves the right to reject any and/or all proposals. EMVCo also reserves the right to negotiate further with bidders or to reopen the bidding process to new potential bidders.

## **Modifications to Proposals**

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Bidders may submit modifications to their proposals at any time before the deadline as described above, and may submit modifications to proposals in response to EMVCo amendment of the RFP. Bidders may withdraw proposals at any time before contract award.

## **Disposition of Documents**

All materials delivered to EMVCo in response to this RFP will not be returned and will not be treated as confidential or proprietary. If the bidder requires certain information to be treated confidentially by EMVCo, the bidder may request to discuss with EMVCo the possibility of entering a separate non-disclosure agreement regarding such information.

## **News Releases/Publicity**

Public statements, news releases, public announcements, advertisements, or other forms of publicity related to the subject matter of this RFP shall not be made by bidder without the prior written consent of EMVCo.

## **Disclaimer**

EMVCo does not guarantee that an actual agreement will result from this RFP and bid evaluation process. Neither this RFP nor EMVCo's selection of a bidder shall be construed in any manner to create an obligation on the part of EMVCo to enter into a contract with any organisation, or to serve as a basis for any claim whatsoever for reimbursement of costs for proposal efforts expended, regardless of whether or not any organisation is successful in receiving a contract as a result of this RFP. EMVCo has no contractual obligation to any bidder for the services described in this RFP until a written Statement of Work is executed by both parties. Furthermore, the scope of procurement may be revised at the option of EMVCo at any time. EMVCo reserves the right to reject any or all proposals submitted for any reason. EMVCo shall be held free from any liability resulting from the use or implied use of any proposal submitted. Submission of a proposal will constitute the bidder's acknowledgment and acceptance of this disclaimer notice.

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