

Date: April 29, 2025



Moez EL GHALI

MS Solutions SA
residence ennour rue mahmoud el baroudi
nouvelle ariana 2080
Tunisia

Re: *EMVCo Letter of Approval – EMV 3-D Secure Directory Server Product*

Approval / Reference Number: 3DS_LOA_DIS_MSSS_020301_01010

Approval Date: April 29, 2025

Approval Expiration Date: March 10, 2027

Product Provider Name: MS Solutions SA

Registration Number: MSSS.V 24 0355

Directory Server Name: SPARK DS

Directory Server Version: 1.0.0

Operating System or Virtual Machine Name and Version: Windows Server 2019 Datacenter

Implementation Conformance Statement: 3DS_ICS_DIS_MSSS_020301_01010

EMV 3-D Secure Specification: Version 2.3.1.1
Version 2.2.0

EMV 3-D Secure Specification Bulletin(s): SB214 v3, SB255 v4

3-D Secure Test Plan Names and Versions: EMV 3-D Secure 2.3.1 Test Plan version 2.3.1.13
EMV 3-D Secure 2.2.0 Test Plan version 2.2.0.13

3-D Secure Test Plan Bulletin(s):

EMV 3-D Secure Specification Bulletin(s) tested: SB214 v3, SB255 v4

Dear Moez EL GHALI,

EMVCo, LLC ("EMVCo"), a Delaware limited liability company, has received your request for EMV 3-D Secure approval for the Directory Server identified above. In connection with your request for approval, we have reviewed your report, identified by file number C25REP00-130 which was generated by FIME EMEA.

After assessing such file, EMVCo has determined that the above referenced Directory Server sufficiently conforms to EMV 3-D Secure – Protocol and Core Functions Specification.

EMVCo hereby grants your Directory Server EMV 3-D Secure Approval, based on the requirements stated in the EMV 2.2.0, and/or 2.3.1 Specifications. Please note that EMVCo may publicly identify your Directory Server as an approved Directory Server, including in EMVCo's published list of approved 3DS Products.

EMVCo's grant of Approval status to your Directory Server is subject to the Supported Options as identified in Attachment B hereto and the Tested 3DS Extensions identified in Attachment C hereto and specifically incorporates (i) the terms and conditions of your 3-D Secure Approval Contract with EMVCo, and (ii) the Specific Terms and Conditions to the Letter of Approval attached hereto as Attachment A. Because EMVCo's grant is subject to such limitations, including certain events of termination, you and any third parties should confirm that such approval is current and has not been terminated by referring to the list of approved Directory Server published on the EMVCo website (www.emvco.com)

This Letter of Approval is valid while the approval number is posted on the EMVCo website.

EMVCo, LLC

Authorized by **Jonathan Hancock**

EMVCo 3-D Secure Testing Group Chair

Attachment A

Specific Terms and Conditions to Letter of Approval

During testing, the following issues were identified. Restrictions identified must be disclosed to customers (issuers or other product providers to whom the Product Provider intends to sell the product).

Restrictions, if any:

Comments, if any:

Attachment B Supported Options

This product has been tested for the following DS options:

DS supports Card Range Data File download	<input type="checkbox"/>
DS supports the Partial Cache update	<input type="checkbox"/>
DS supports Card Security Code	<input type="checkbox"/>
DS able to creates the ARes message on the ACS's behalf	<input type="checkbox"/>
Split-SDK Server Signature algorithm supported	<input checked="" type="checkbox"/> PS256 <input type="checkbox"/> ES256

Attachment C Tested 3DS Extensions

This product has been tested for the following 3DS extensions:

Bridging Message Extension	Version 2.0
Recurring data	<input checked="" type="checkbox"/>
Challenge data	N/A
Additional data	<input checked="" type="checkbox"/>
File URL data	<input type="checkbox"/>