

ID2020 Certification Report

Completed by: Adam Cooper, ID2020

Date: 2019-12-06

Applicant	Kiva
Receipt Date of Application	2019-08-20
Solution Name	Kiva Digital Identity Platform for Economic Activity
Summary Description (from application)	<p>Kiva Protocol is a platform that enables digital identity to be extended to all levels of economic activity. In Sierra Leone, this means that Kiva Protocol:</p> <ol style="list-style-type: none">1. Allows the National Civil Registration Authority (NCRA, the issuer of national Civil ID in Sierra Leone) to extend its digital identity service into a self-sovereign DID system that can be used for eKYC functions at all financial institutions.2. Enables the Bank of Sierra Leone (BSL, the central bank) to provide an eKYC service to all financial institutions through the BSL-run Credit Reference Bureau (CRB).3. Provides an API and services layer to enable simple integrations between all financial service providers (FSPs) -- including the informal sector -- to integrate eKYC and credit reporting into their existing workstreams. Kiva is also performing last-mile integrations assistance to enable full identity and credit reporting.4. Provides white-label applications for financial institutions and the CRB, as well as integration and customization support, to minimize integration costs and friction for those currently lacking digital capacity.5. Provides a wallet service for end users to assign agency if/when possible.

Evaluation Criteria

The Solution has been evaluated in accordance with the following requirements and criteria:

- ID2020 TAC Technical Requirements v1.01

- ID2020 Certification Approval Profile v1.0

Certification Type

SOLUTION: *An integrated set of Products (including business rules and workflow logic) designed to meet the ID2020 Technical Requirements for Digital Identity Solutions, as provided by a single vendor or set of vendors working together. Differences between TAC requirements and customer requirements for the Solution will be reflected in the Certification Report.*

Evaluation Result

PASS

"Kiva Digital Identity Platform for Economic Activity" has been evaluated based on the prescribed requirements, in accordance with the provisions of the ID2020 Certification Approval Profile by the ID2020 Secretariat and Technical Advisory Committee, and has met the specified assurance requirements **with noted exceptions** (see "Differences between TAC Requirements and Customer Requirements").

Major Products

Product	Vendor / Provider
Kiva Protocol	Kiva
Hyperledger Indy	Linux Foundation

Differences between TAC Requirements and Customer Requirements

The following exceptions have been recorded for this certification where the customer is responsible for setting specific requirements or taking specific responsibilities to which the applicant has gained exemption.

Approval Profile Criteria	TAC Technical Requirement Reference	Customer Requirement / Mitigation	Assessor Recommendation	Assessor Rationale
APPLICABILITY -3, Cost effective	1.3	The solution is reliant on ID issuance by third	Cost effectiveness is out of the control of provider.	Applicant cannot be entirely

		party.	Customer needs to ensure long-term cost-effectiveness.	responsible for this requirement. Under normal circumstances the applicant would have been able to make cost effective but ultimately this is the domain of customer.
APPLICABILITY -4, Ease of use	1.4	Issuing agency is responsible for identity proofing and issuance processes.	Ease of use is out of scope of this solution. Customer handles identity proofing and issuance processes.	Applicant cannot be entirely responsible for this requirement. Under normal circumstances the applicant would have been able to realize ease-of-use but ultimately this is the domain of customer.
IDV-7, Failure mode	2.7	Biometric authentication is the primary access method with full finger and thumb prints from both hands (10 total).	Customer handles authentication.	Provider capable of integrating with biometric authentication system with failure mode provision, but ultimately customer must ensure failure mode present.

<p>PRIVACY-4, Controls against adversary</p>	<p>4.4</p>	<p>Issuing agency is responsible for controls.</p>	<p>Controls against adversary are out of scope for solutions as is provided by customer. Customer takes responsibility for this requirement.</p>	<p>Provider capable of integrating with ISP with controls against adversary, but ultimately customer must ensure failure mode present.</p>
<p>PRIVACY-8, Data accuracy</p>	<p>4.8</p>	<p>Existing infrastructure for registering and managing national civil ID must be implemented by customer.</p>	<p>Data accuracy must be maintained by customer; customer takes responsibility for this requirement.</p>	<p>Data accuracy outside provider ken. Customer must ensure data accuracy maintained and support ongoing access and redress processes. Under normal circumstances the applicant would have been able to to ensure processes for data accuracy in place but ultimately this is the domain of customer.</p>
<p>PRIVACY-10, Change of identity</p>	<p>4.10</p>	<p>See 4.8 above</p>	<p>Change of identity must be enabled by customer; customer takes responsibility for this requirement.</p>	<p>Out of provider domain. Under normal circumstances the applicant would have been able to to ensure</p>

				<p>processes for change of identity in place but ultimately this is the domain of customer. Customer will need to ensure change of identity processes in place.</p>
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Full evaluation profile

The following constitutes the full application for certification. Where the applicant has earned an exception it has been denoted as an **Assessor Recommendation**.

Approval Profile Criteria: APPLICABILITY-1
TAC Technical Requirement Reference: 1.1
Assessor Recommendation: Compliant

Approval Profile Criteria: APPLICABILITY-2
TAC Technical Requirement Reference: 1.2
Assessor Recommendation: Compliant

Approval Profile Criteria: APPLICABILITY-3
TAC Technical Requirement Reference: 1.3
Assessor Recommendation: **SEE ABOVE**

Approval Profile Criteria: APPLICABILITY-4
TAC Technical Requirement Reference: 1.4
Assessor Recommendation: Compliant

Approval Profile Criteria: APPLICABILITY-6
TAC Technical Requirement Reference: 1.6
Assessor Recommendation: Compliant

Approval Profile Criteria: IDENTIFICATION AND VERIFICATION-1
TAC Technical Requirement Reference: 2.1

Assessor Recommendation: Compliant

Approval Profile Criteria: IDENTIFICATION AND VERIFICATION-2

TAC Technical Requirement Reference: 2.2

Assessor Recommendation: Compliant

Approval Profile Criteria: IDENTIFICATION AND VERIFICATION-3

TAC Technical Requirement Reference: 2.3

Assessor Recommendation: Compliant

Approval Profile Criteria: IDENTIFICATION AND VERIFICATION-4

TAC Technical Requirement Reference: 2.4

Assessor Recommendation: Compliant

Approval Profile Criteria: IDENTIFICATION AND VERIFICATION-5

TAC Technical Requirement Reference: 2.5

Assessor Recommendation: Compliant

Approval Profile Criteria: IDENTIFICATION AND VERIFICATION-6

TAC Technical Requirement Reference: 2.6

Assessor Recommendation: Compliant

Approval Profile Criteria: IDENTIFICATION AND VERIFICATION-7

TAC Technical Requirement Reference: 2.7

Assessor Recommendation: **SEE ABOVE**

Approval Profile Criteria: IDENTIFICATION AND VERIFICATION-8

TAC Technical Requirement Reference: 2.8

Assessor Recommendation: Compliant

Approval Profile Criteria: IDENTIFICATION AND VERIFICATION-9

TAC Technical Requirement Reference: 2.9

Assessor Recommendation: Compliant

Approval Profile Criteria: AUTHENTICATION-1

TAC Technical Requirement Reference: 3.1

Assessor Recommendation: Compliant

Approval Profile Criteria: AUTHENTICATION-2

TAC Technical Requirement Reference: 3.2

Assessor Recommendation: Compliant

Approval Profile Criteria: AUTHENTICATION-3

TAC Technical Requirement Reference: 3.3

Assessor Recommendation: Compliant

Approval Profile Criteria: AUTHENTICATION-4

TAC Technical Requirement Reference: 3.4

Assessor Recommendation: Compliant

Approval Profile Criteria: PRIVACY AND CONTROL-1

TAC Technical Requirement Reference: 4.1

Assessor Recommendation: Compliant

Approval Profile Criteria: PRIVACY AND CONTROL-2

TAC Technical Requirement Reference: 4.2

Assessor Recommendation: Compliant

Approval Profile Criteria: PRIVACY AND CONTROL-3

TAC Technical Requirement Reference: 4.3

Assessor Recommendation: Compliant

Approval Profile Criteria: PRIVACY AND CONTROL-4

TAC Technical Requirement Reference: 4.4

Assessor Recommendation: SEE ABOVE

Approval Profile Criteria: PRIVACY AND CONTROL-5

TAC Technical Requirement Reference: 4.5

Assessor Recommendation: Compliant

Approval Profile Criteria: PRIVACY AND CONTROL-6

TAC Technical Requirement Reference: 4.6

Assessor Recommendation: Compliant

Approval Profile Criteria: PRIVACY AND CONTROL-7

TAC Technical Requirement Reference: 4.7

Assessor Recommendation: Compliant

Approval Profile Criteria: PRIVACY AND CONTROL-8

TAC Technical Requirement Reference: 4.8

Assessor Recommendation: SEE ABOVE

Approval Profile Criteria: PRIVACY AND CONTROL-9

TAC Technical Requirement Reference: 4.9

Assessor Recommendation: Compliant

Approval Profile Criteria: PRIVACY AND CONTROL-10

TAC Technical Requirement Reference: 4.10

Assessor Recommendation: SEE ABOVE

Approval Profile Criteria: ATTESTATIONS AND TRUST-1

TAC Technical Requirement Reference: 5.1

Assessor Recommendation: Compliant

Approval Profile Criteria: ATTESTATIONS AND TRUST-2

TAC Technical Requirement Reference: 5.2

Assessor Recommendation: Compliant

Approval Profile Criteria: ATTESTATIONS AND TRUST-3

TAC Technical Requirement Reference: 5.3

Assessor Recommendation: Compliant

Approval Profile Criteria: ATTESTATIONS AND TRUST-4

TAC Technical Requirement Reference: 5.4

Assessor Recommendation: Compliant

Approval Profile Criteria: ATTESTATIONS AND TRUST-5

TAC Technical Requirement Reference: 5.5

Assessor Recommendation: Compliant

Approval Profile Criteria: ATTESTATIONS AND TRUST-6

TAC Technical Requirement Reference: 5.6

Assessor Recommendation: Compliant

Approval Profile Criteria: INTEROPERABILITY-1

TAC Technical Requirement Reference: 6.1

Assessor Recommendation: Compliant

Approval Profile Criteria: INTEROPERABILITY-2

TAC Technical Requirement Reference: 6.2

Assessor Recommendation: Compliant

Approval Profile Criteria: INTEROPERABILITY-3

TAC Technical Requirement Reference: 6.3

Assessor Recommendation: Compliant

Approval Profile Criteria: INTEROPERABILITY-4

TAC Technical Requirement Reference: 6.4

Assessor Recommendation: Compliant

Approval Profile Criteria: RECOVERY AND REDRESS-1

TAC Technical Requirement Reference: 7.1

Assessor Recommendation: Compliant

Approval Profile Criteria: RECOVERY AND REDRESS-2

TAC Technical Requirement Reference: 7.2

Assessor Recommendation: Compliant

Approval Profile Criteria: RECOVERY AND REDRESS-3

TAC Technical Requirement Reference: 7.3

Assessor Recommendation: Compliant

Approval Profile Criteria: ACCEPTABLE MANAGEMENT AND SECURITY POLICIES AND PROCEDURES-1

TAC Technical Requirement Reference: 8.1
Assessor Recommendation: Compliant

Approval Profile Criteria: ACCEPTABLE MANAGEMENT AND SECURITY POLICIES AND PROCEDURES-2

TAC Technical Requirement Reference: 8.2
Assessor Recommendation: Compliant

Approval Profile Criteria: ACCEPTABLE MANAGEMENT AND SECURITY POLICIES AND PROCEDURES-3

TAC Technical Requirement Reference: 8.3
Assessor Recommendation: Compliant

Approval Profile Criteria: ACCEPTABLE MANAGEMENT AND SECURITY POLICIES AND PROCEDURES-4

TAC Technical Requirement Reference: 8.4
Assessor Recommendation: Compliant

Approval Profile Criteria: ACCEPTABLE MANAGEMENT AND SECURITY POLICIES AND PROCEDURES-5

TAC Technical Requirement Reference: 8.5
Assessor Recommendation: Compliant

Approval Profile Criteria: ACCEPTABLE MANAGEMENT AND SECURITY POLICIES AND PROCEDURES-6

TAC Technical Requirement Reference: 8.6
Assessor Recommendation: Compliant

Approval Profile Criteria: ACCEPTABLE MANAGEMENT AND SECURITY POLICIES AND PROCEDURES-7

TAC Technical Requirement Reference: 8.7
Applicant Response: Agree and we are in alignment with this approach.
Assessor Recommendation: Compliant

Approval Profile Criteria: ACCEPTABLE MANAGEMENT AND SECURITY POLICIES AND PROCEDURES-8

TAC Technical Requirement Reference: 8.8
Assessor Recommendation: Compliant

Approval Profile Criteria: ACCEPTABLE MANAGEMENT AND SECURITY POLICIES AND PROCEDURES-9

TAC Technical Requirement Reference: 8.9
Assessor Recommendation: Compliant

Approval Profile Criteria: ACCEPTABLE MANAGEMENT AND SECURITY POLICIES AND PROCEDURES-10

TAC Technical Requirement Reference: 8.10
Assessor Recommendation: Compliant

Approval Profile Criteria: ASSURANCE OF THE TECHNICAL INFRASTRUCTURE-1
TAC Technical Requirement Reference: 9.1
Assessor Recommendation: Compliant

Approval Profile Criteria: ASSURANCE OF THE TECHNICAL INFRASTRUCTURE-2
TAC Technical Requirement Reference: 9.2
Assessor Recommendation: Compliant

Approval Profile Criteria: THE SUITABILITY OF PERSONNEL USE (SKILLS AND COMPETENCE)-1
TAC Technical Requirement Reference: 10.1
Assessor Recommendation: Compliant

Approval Profile Criteria: THE SUITABILITY OF PERSONNEL USE (SKILLS AND COMPETENCE)-1
TAC Technical Requirement Reference: 10.2
Assessor Recommendation: Compliant

Approval Profile Criteria: THE SUITABILITY OF PERSONNEL USE (SKILLS AND COMPETENCE)-3
TAC Technical Requirement Reference: 10.3
Assessor Recommendation: Compliant

Approval Profile Criteria: THE SUITABILITY OF PERSONNEL USE (SKILLS AND COMPETENCE)-4
TAC Technical Requirement Reference: 10.4
Assessor Recommendation: Compliant

Approval Profile Criteria: THE SUITABILITY OF PERSONNEL USE (SKILLS AND COMPETENCE)-5
TAC Technical Requirement Reference: 10.5
Assessor Recommendation: Compliant

Approval Profile Criteria: THE SUITABILITY OF PERSONNEL USE (SKILLS AND COMPETENCE)-6
TAC Technical Requirement Reference: 10.6
Assessor Recommendation: Compliant