

Request for Proposal - Digital IDentity

Ecosystem Development Fund (EDF) - IOTA Foundation

Berlin, Germany

0.0 Summary

Identity is a crucial concept which shapes the way in which humans interact with the individuals, companies and governments around them. As time progresses identity will shift away from centralised or owned identity solutions towards ones rooted in technology that empowers personal ownership of one's identity. This will improve the ability to communicate an identity in a secure, seamless and most importantly a manner that respects the individual whom it relates to.

The majority of current identity solutions are based on systems that are owned by corporations or governments. These solutions, such as [Facebook Login](#) or [Google OAuth](#), reduce the complexity of managing identity but crucially exclude the individual from owning their identity. While independant solutions, such as [OpenID](#), exist the adoption by individuals is often stifled by technical barriers.

The Ecosystem Development Fund is seeking proposals for a Digital Identity standard & example implementation that utilizes the IOTA protocol and is compatible with the [W3C's DID](#) Specification. This standard should be able to service both machines and humans. Allowing both groups to maintain their own Self-Sovereign Digital Identity as needed.

1.0 Project Description

1.1 Compatibility

- Function natively on top of the IOTA protocol
- Provide export & import functionality to the W3C DiD Specification

1.2 Basic Functionality

- Create a DID
- Read/Verify a DID
- Update a DID
- Deactivate a DID

1.3 Extended Functionality

- Fine-grained privacy controls

2.0 Deliverables

2.1 Documentation

- Clearly documented Github repository
- Multi-page document describing the design of the DID system. This must include in depth sections covering security, privacy, resilience and
- Flow diagrams showing the various states of the standard

2.2 Code

- A library, implemented in Javascript, Java Go or C, that is able to perform at a minimum the functions of the W3C DID specification.
- An example application which demonstrates the features of the library. To be used as a blueprint for those integrating the library.
- A test suite that covers, at a minimum, 80% of the code.

2.3 Communications

- 3 progress reports at regular intervals during the course of the grant.
- Active participation in IOTA community discord regarding progress and discussion around the spec during the length of the grant.

3.0 Timeline

3.1 This RFP will support **up to 3** grant proposals. However, given the quality and cost of proposals the RFP may be withdrawn without funding a proposal.

4.0 Requirements & Submissions

4.1 All submissions must use the following template and fill out each section comprehensively. If a section is left uncompleted the grant proposal will be rejected.

4.2 All submissions must be submitted via the following form in order to be considered for approval of the project will be open-source under the MIT License. This is to ensure the funds of the grant are able to be utilised by everyone within the community.

4.3 The entirety of the project will be open-source under the MIT License. This is to ensure the funds of the grant are able to be utilised by everyone within the community.

5.0 Contact

5.1 To ask questions about this RFP please contact Mark.Schmidt@iota.org