Trusted Web White Paper Ver1.0

Executive Summary

1. Background of the White Paper (Main text 1. to 2.)

* Various pain points have arisen, such as concerns about the reliability of data flowing through the Internet and the Web, including fake news, the risk of privacy infringement, the risk of a single point of failure associated with a winner-takes-all situation, and the underutilization of industrial data.
* In the transition to the "Digital Society," the current Internet and the Web, which mainly defines communication protocols, does not sufficiently embody responsibility and a sense of security required in social activities. In this sense, the reconstruction of Trust is essential.

2. Direction that the Trusted Web should pursue (Main text 3. to 5.)

* In the existing trust system, only small portion of facts associated with data exchange can be verified, and we are forced to trust platform operators without checking the facts. The identifier mechanism which can be used to link data also depends on platform operators.
* It is necessary to heighten the degree of trust (the degree to which the other party behaves as expected) by introducing the mechanism of data control and consensus building as well as by increasing the portion of facts that can be verified, without relying on a specific service.
* By overlaying this trust framework on the current Internet (“overlay approach”), diverse entities are empowered to create new values. This is called the “Trusted Web”.
* The Trusted Web allows users to control access to data (Identifier Management function), to verify identities of other parties and data, including review by third parties (Trustable Communication function), to build consensus on conditions in data exchange dynamically reflecting the intentions of both parties (Dynamic Consent function), and to verify the process and fulfillment of the consensus (Trace function). These functions are to be supported by multi-stakeholder governance.
* Creation of new economic values is expected e.g., by making reliable information more valuable and by facilitating data sharing among parties unknown to each other.

3. Roadmap for realizing the Trusted Web (Main text 6.)

This "discussion paper" aims to initiate the further consideration in collaboration with various global communities. The goal of the Trusted Web is to implement the functions mentioned above across the Internet and the Web by 2030 in collaboration with relevant global stakeholders.