

Notice of Inquiry Response

# U.S. Department of Commerce

## National Institute of Standards and Technology (NIST)

Models for a Governance Structure for the National Strategy for Trusted Identities in Cyberspace (NSTIC)

Docket Number: 110524296-1289-02

## National Institute of Standards and Technology (NIST)

### Models for a Governance Structure for the National Strategy for Trusted Identities in Cyberspace (NSTIC)

Docket Number: 110524296-1289-02

#### Notice of Inquiry

---

July 22, 2011

#### Presented by

**Deloitte & Touche LLP**  
1750 Tysons Blvd  
McLean, VA 22102

#### Authorized Technical POC:

Carey Miller, Director  
Tel: 571-882-6975  
Email: [caremiller@deloitte.com](mailto:caremiller@deloitte.com)

#### Contracts POC:

Darin Poulsen, Contracts Administrator  
Tel.: 703-251-1675  
Email: [dpoulsen@deloitte.com](mailto:dpoulsen@deloitte.com)

#### Submitted To:

Annie Sokol  
Information Technology Laboratory  
National Institute of Standards and Technology  
U.S. Department of Commerce  
100 Bureau Drive  
Mailstop 8930  
Gaithersburg, MD 20899  
Tel.: 301-975-2006  
Email: [NSTICnoi@nist.gov](mailto:NSTICnoi@nist.gov)

July 22, 2011  
Annie Sokol  
National Institute of Standards and Technology  
100 Bureau Drive, Mailstop 8930  
Gaithersburg, MD 20899

RE: Notice of Inquiry Response to Models for a Governance Structure for the National Strategy for Trusted Identities in Cyberspace (NSTIC)

Dear Ms. Sokol:

Deloitte<sup>1</sup> is pleased to submit our response to the Notice of Inquiry to serve NIST. We are excited by the prospect of working with you, and we believe our response demonstrates our strong qualifications, broad experience, and deep resources necessary for this program. We have a long-standing working relationship with the Department of Commerce and its programs.

We hope our response conveys our enthusiastic commitment to provide distinctive client service and highly specialized talent to NIST, as you undertake a project with so much importance to our Nation. If you have any questions or require additional information, please contact me at 571-882-6975. Should you have any contractual questions, please contact Darin Poulsen, Contracts Administrator, at 703-251-1675.

Sincerely,



Carey Miller, Director  
Deloitte & Touche LLP

---

<sup>1</sup> As used in this document, "Deloitte" means Deloitte & Touche LLP, which provides Identity, Credentialing & Access Management advisory services and Deloitte Consulting LLP, which provides Human Capital, Strategic Communications, and Knowledge Management System advisory services. These entities are separate subsidiaries of Deloitte LLP. Please see [www.deloitte.com/us/about](http://www.deloitte.com/us/about) for a detailed description of the legal structure of Deloitte LLP and its subsidiaries

---

# Table of Contents

- CRITICAL GOVERNANCE ATTRIBUTES FOR THE IDENTITY ECOSYSTEM ..... 2**
  - STRUCTURE THAT EMBODIES FLEXIBILITY & SUSTAINABILITY ..... 2
  - BALANCED REPRESENTATION OF STAKEHOLDERS ..... 3
  - COLLABORATIVE & ADAPTABLE GOVERNMENT ROLE ..... 5
  - EFFECTIVE PARTICIPATION OF STANDARDS DEVELOPMENT ORGANIZATIONS (SDOs) ..... 5
  - TRANSPARENCY & OPEN PUBLIC INVOLVEMENT ..... 7
- POTENTIAL GOVERNANCE MODELS ..... 8**

## Critical Governance Attributes for the Identity Ecosystem

Recognizing that the Identity Ecosystem and NSTIC stakeholders not only are vast in number, but also constitute a wide variety of roles, industries and functions, it becomes increasingly evident that getting the structure, composition and representation of the Steering Group “right” will be a critical success factor for the Identity Ecosystem initiative.

With the expectation that NIST will receive numerous responses to the specific questions posed in the NOI, the Deloitte team has taken a different approach and is providing a deep dive on one aspect of governance management. An important process in selecting a governance model is to determine a set of critical attributes that will be necessary for the organization to fulfill its mission, meet its purpose and execute on its objectives. Thus, our approach will be to focus and expand on a specific aspect of governance management – identification of key governance model attributes.

Our team has in-depth knowledge of NSTIC’s vision for the Identity Ecosystem, extensive experience with the service providers that will be governed by the Steering Group as well as with setting up and documenting governance structures for public and private organizations. Leveraging that experience, we will describe and recommend five governance attributes for NIST’s consideration:

- Structure that Embodies Flexibility & Sustainability
- Balanced Representation of Stakeholders
- Collaborative & Adaptive Government Role
- Effective Participation with Standards Development Organizations (SDOs)
- Transparency & Open Public Involvement

### Structure that Embodies Flexibility & Sustainability

As stated in the *National Strategy for Trusted Identities in Cyberspace (NSTIC)*, the Identity Ecosystem is envisioned as “an online environment where individuals and organizations will be able to trust each other because they follow agreed upon standards to obtain and authenticate their digital identities—and the digital identities of devices.” The Identity Ecosystem is a far-reaching initiative and a successful implementation will deliver interoperability and significantly heightened security for the authentication of identities across public and private sectors.

The NSTIC defines the Steering Group as a body that “will administer the process for policy and standards development for the Identity Ecosystem Framework in accordance with the Guiding Principles in this Strategy. The Steering Group also will ensure that accreditation authorities validate participant’s adherence to the requirements of the Identity Ecosystem Framework.” The Steering Group needs not only to include representation from all stakeholder groups, but also to be structured in a manner that provides stakeholders the ability to adopt and create new policies and standards and to enforce those policies and procedures. Nonetheless, because participation in the Identity Ecosystem will be largely voluntary, inducing stakeholder involvement and agreement will be critically important.

The scope of this effort is wide and impacts a broad cross-section of stakeholders including federal, state, local and tribal, and public advocacy government groups, as well as private sector stakeholders to include standards development organizations, Internet organizations, identity issuers, relying parties, and Internet users. The scope also encompasses key vertical markets in which identities are likely to play a substantial role, e.g., financial services, energy and health. Development of the Identity Ecosystem governing structure under the Steering Group (governing body) must consider the scope of the Identity Ecosystem Framework, market factors and stakeholders, and the role of government throughout the Steering Group’s lifecycle. As form follows function, the structure of the Steering Group – organization, composition and management – is essential to the Identity Ecosystem’s ultimate operational success.

As a preliminary step, the Steering Group should produce a charter that describes its purpose and major objectives, criteria for success, organizational structure, scope of activities and funding mechanism. The charter will serve as a foundation for the Steering Group Bylaws. Governance through the Steering Group will be embodied and formalized through its governance documents, which will document the structure and rules by which the Steering Group will operate. The primary documents include the charter and bylaws. They can also include (but are not limited to) membership agreements, Intellectual Property Policy, Security Policy, Anti-Trust Policy

Identity Ecosystem Trustmark Policy and Standards Organizations Policy (describes how the IE Steering Group will interact with standards and specifications organizations). As the Identity Ecosystem initiative migrates towards the operational phase, additional governance documents will be produced, namely the IE Trustmark Operating Rules and Accreditation Guidelines.

Structure is a broad attribute, which can be broken down into sub-attributes that further define flexibility and sustainability. Described below are five sub-attributes related to structure with illustrative examples of how governance can be applied to facilitate their implementation.

**Promotes Broad Participation.** Structure must include discrete and meaningful membership groups and sufficient committee and working group participation to assure stakeholders that their voices will be heard and heeded in terms of their contributions. In addition, if membership includes dues and fees, they must be tiered in a manner that enables participation of smaller organizations. *Examples:*

- A member category is established for each discrete stakeholder group.
- Each stakeholder group is conferred with voting rights.

**Organizationally Flexible.** The Steering Group's structure must have the flexibility to effectively migrate through the organizational stages from initiation to launch to operations. The government will need to have a more predominant role in the early organizational stages and a less predominant role as the initiative reaches the implementation and operations stages when the private sector will take over. *Examples:*

- Special (temporary) Committees and/or working groups are assigned organizational tasks and granted specific authority for a set period of time, e.g., Bylaws Committee and Operating Rules Committee.
- A Government Committee is established, whose recommendations are considered by the voting body.

**Accommodates Government's Special Role.** The structure must also promote independence from government control of Identity Ecosystem operations; while at the same time ensure government involvement in protection of the public interest. *Examples:*

- The government has no formal voting rights; however, the Steering Group establishes a set of items in the Bylaws pertaining to "public interest" over which the government has veto power.
- The government is granted voting rights to accomplish organizational tasks until a pre-established milestone.

**Balances Power and Representation.** Balanced does not necessarily mean that all stakeholder groups have equal weight. The structure of the Steering Group must be formulated so that representation accurately reflects marketplace size and span of influence and encourage participation accordingly. For example, the Identity Ecosystem cannot be successful without a critical mass of relying parties, and there are thousands of potential relying parties. All things being equal, there is no overwhelming reason for many relying parties to participate. Issuers on the other hand are more likely to see a compelling reason to join – acceptance and increased sales of their identity credentials. It may not be effective to have a Relying Party stakeholder group and an Issuer stakeholder group, each with one representative voting member. *Examples:*

- Voting allocations are established in accordance with the number of participants in the group. Or -
- Stakeholder groups with more than a pre-established number of members are allocated two votes (instead of one).

**Reflects Purpose.** For the Identity Ecosystem to be successful the Steering Group will perform numerous functions; some will be more important than others and the structure must reflect this hierarchy of purpose. For example, a critical role of the Steering Group will be to facilitate the development of standards and accreditation processes. As such, it can be assumed that the participation and input of the standards organizations will be important. It can also be assumed that decisions related to standards will be important. The prominence of standards and related decisions need to be reflected in the structure and Bylaws. *Examples:*

- The Steering Group establishes a Standing (permanent) Standards Development Committee.
- The Governing Body establishes a set of issues, such as decisions on standards, which requires a supermajority vote rather than a simple majority.

## Balanced Representation of Stakeholders

Broad stakeholder participation and acceptance are critical to the success of NSTIC. Although NSTIC carries the weight of the President's signature, it is not to be accompanied by an Executive Order, rulemaking, or Congressional mandate. The Federal government is optimistic that the impact of the Presidential signature, coupled with the establishment of the National Program Office

(NPO) and its aggressive moves into implementation planning and execution, will be sufficient to provide the clarity industry needs to move forward.

The effects of the Ecosystem will have a significant impact on every sector of government and industry, impacting individuals as well as international groups and organizations. The ability for these groups to have a voice in the Steering Group, helping to shape the development and maintenance of the Ecosystem, will provide the best opportunity to keep it on a balance providing for the needs of all while minimizing the domination of a single or a small set of interests.

Who are the potential stakeholders of the Identity Ecosystem? In short, everyone who uses the internet – hundreds of millions of people, organizations, and businesses in the US and billions world-wide. This significantly increases the challenge of providing stakeholder representation within a small, focused governing body. The voluntary nature of NSTIC is a compelling reason to work diligently toward the incorporation of as many different views and stakeholder groups as possible. Thus, stakeholder representation needs to be diverse. It must:

- Represent all the different service providers within the Identity Ecosystem (e.g., individuals, identity providers, attribute providers, relying parties, accreditation authorities);
- Represent different industries, which often have different business drivers and regulations (e.g., healthcare, financial sector, Federal Government); and,
- Represent different functional and technical competencies (e.g., legal, expertise in technologies, privacy, consumer advocacy, economic, etc.).

Individual members of the Steering Group could represent a specific role, industry, and set of functional or technical competencies. As such, it will be important to identify the affiliations and skills of potential Steering Group members during the selection process. Additionally, the By-laws should identify key roles, industries, and competencies that are required for sufficient representation within the Steering Group.

Stakeholder representation also must be balanced internally. Certain stakeholder groups that are comprised of businesses with funds to dedicate to Identity Ecosystem activities will inherently be more vocal and may seek to exert their influence. The structure needs to ensure that the voices and opinions of the less vocal stakeholders (e.g., individuals, privacy advocates) have an equal opportunity to be heard. By-laws and procedures of the Steering Group should account for hearing and recording majority and minority opinions. Additionally, experts should be invited on a regular basis to brief the group where additional perspectives are needed to inform a decision.

As stakeholder groups are given a voice, not only to speak, but also to contribute to the decision-making process, their willingness to promote the use of the Ecosystem will increase. Broadening the base of advocates will not only help promote the Ecosystem in more areas, but it also will help ensure that the messages being conveyed are appropriate to the audience, as it will be coming from their own advocates. Beyond initial implementation, having continued influence from a broad range of stakeholders will ensure that the Steering Group, and the Identity Ecosystem as a whole, continues to grow to meet new challenges, take advantage of new opportunities and have a positive overall impact over time.

### Considerations

**Group Size.** Given the enormous size of the stakeholder base for NSTIC, it will be a challenge to create a small steering group that can be deemed to be fully representative of all groups and interests.

**Willingness of all Stakeholders to Participate.** Several important stakeholder groups, including the privacy-advocacy and consumer-advocacy communities, will not likely be willing to participate in the same capacity as other stakeholders (i.e., becoming members of the steering group or larger governance body) to prevent any perceived conflicts associated with endorsing the activities of the NSTIC. It will be important to identify an alternate way for these stakeholders to have representation, if not through membership, then possibly as an advisory body or through requests for expert briefings and point-of-view presentations to the governance body.

**Selection of Representatives.** In order to provide diversity in the representation of the steering body, it will be important to develop an impartial process for selecting members. In the early stages of the steering body, the NPO will likely need to have a stronger hand in this process; however, over time, open membership voting in accordance with well-defined requirements from the charter could help ensure diversity.

### Collaborative & Adaptable Government Role

The Identity Ecosystem program will have high public visibility. The public will scrutinize the program to assure it is not designed to turn over control of the population's identities to the Federal government; at the same time the public will expect the government to protect the public interest and its privacy and security. It will be critical that the Identity Ecosystem is perceived as a collaborative effort between the private and public sector, not as a government-operated or managed system. The Identity Ecosystem Steering Group must be perceived as being led largely by the private sector with the support of the Federal government. An essential role of the Federal government will be to facilitate the decisions and solutions recommended by the private sector. The resulting solutions and networks themselves will be owned and operated by the private sector.

Nonetheless, because this is a new initiative being launched by the Federal government, the Identity Ecosystem Steering Group initially will need to be organized under the auspices of NIST and the government will need to take on an organizational role with the adaptability to gradually hand off more responsibility to the private sector. The governance structure will need to facilitate the government's ability to:

- Initiate the formation and organization of the Steering Group
- Play a catalyst role in building consensus and establishing the baseline Identity Ecosystem
- Migrate to a partnership role and regulatory role post-Identity Ecosystem launch
- Maintain its role as a stakeholder that issues identities and acts as a Relying Party
- Support the private sector's ownership and operation of the Identity Ecosystem
- Ensure that the privacy, security, and civil liberties of the public are protected
- Promote public adoption of the Identity Ecosystem

### Effective Participation with Standards Development Organizations (SDOs)

The Identity Ecosystem at maturity is expected to be a nationwide identity authentication system and infrastructure that validates identities for the purpose of conducting secure transactions across the Internet. Furthermore, the public and private sectors will strive to enable international interoperability. The foundation of a broad-based transactional system is interoperability. Interoperability, in turn, depends on the system components adopting standards and specifications that enable the exchange and validation of transaction data. Within the identity community, several organizations have developed and adopted frameworks, standards, and specifications for identity interoperability and federation; however, the end-to-end identity management and authentication envisioned for the Identity Ecosystem and its Trustmark scheme will require the development and adoption of a business and technical model based on commonly accepted standards and specifications.

A mature Identity Ecosystem with its broad reach will also need to have broad reaching standards, not only nationally, but also internationally. The Steering Group will need to establish a relationship with the major standards organizations such as NIST, ANSI and ISO to ensure that the Identity Ecosystem perspective is represented. In addition to formal interactions at the Steering Group level, this will mean regular participation by its representatives at organization meetings, which also requires allocation of funding for this purpose.

The conventional process by which standards have been proposed, developed and implemented has changed due to the rapid pace of technology over time. Because the traditional standards organizations tend to progress at a more measured pace than technology advances, many standards are outdated by the time they are published because their developers are unable to keep pace with the technological innovation. As a result, a new class of standards setting consortia has emerged, commonly known as standard-setting organizations (SSOs) that have gained widespread acceptance over a relatively short period of time. One example is the World Wide



Web Consortium (W3C), whose standards for HTML, CSS, and XML are used worldwide. Another example is community-driven associations such as the Internet Engineering Task Force (IETF) a worldwide network of volunteers who collaborate to set standards for lower-level software solutions. SSOs are able to gain acceptance, conduct testing and achieve usage in a considerably shorter period of time than the traditional standards setting organizations. There are several SDOs/SSOs that develop and influence standards development for digital identity and interoperability in today's marketplace. The predominant identity SSOs are OASIS, Kantara, Open Identity Exchange (OIX), and the Open Group.

For the Identity Ecosystem to benefit from other nations' standards and best practices, the Steering Group must actively participate in international standards organizations (as well as technical and policy forums), for example, ISO and ITU. In addition, the Steering Group may find value in participating in some of the prominent European Standards Organizations (ESOs), including the European Telecommunications Standards Institute (ETSI), the European Committee for Standardization (CEN) and the European Committee for Electrotechnical Standardization (CENELEC).

The governance body and process being established for the Identity Ecosystem will need to effectively and efficiently incorporate the input and ideas of SDOs and SSOs related to standards and specifications development. The position of SDOs and SSOs within the governing body should facilitate the creation for and consensus on common and open standards for the exchange of identity data.

To establish the Identity Ecosystem and gain timely adoption will require development of an identity authentication infrastructure. An organized process needs to be established by which early standards and specifications for identity and federated identity have the opportunity to be tested within communities of interest for the Identity Ecosystem and have successful specifications proposed and published as formal standards. Such a process is necessary for broad scale adoption so that nationwide and international interoperability is facilitated and accelerated.

Without an effective process for SDO input and participation, progress likely will be sidelined by communities of interest creating proprietary systems and standards that haven't been developed with interoperability in mind. Once created, these proprietary systems are difficult to displace or adapt. And, of course, the more invested groups become in their proprietary systems, the less likely they are to contribute to, or adopt, the Identity Ecosystem infrastructure. In addition, providing a formal position for SDOs in the governing body further substantiates that the development of the Identity Infrastructure is being led by the private sector.

The Steering Group's participation and interaction with standards bodies should be defined in its Standards Organizations Policy.

### **Potential Obstacles & Risks**

The standards development and setting practice for identity is in a state of flux. What generally is a formal and predictable process for much of the IT community is currently restructuring and accelerating due to the pace of innovation. Several organizations have emerged in the identity arena that promote and advance open interoperability, but have yet to establish a formal and acknowledged process to establish these standards outside of their voluntary communities of interest.

These divergent groups will need to be brought together and structured for participation with the Identity Ecosystem Steering Group. The challenge will be to ensure that the conventional standards setting bodies as well as the newly emergent SDO/SSOs are appropriately represented on the Steering Group and that the process is set up in a way that ensures that correct and credible standards based on sound experience are able to emerge and gain acknowledgement and adoption.

The emerging identity interoperability market is characterized by the promotion and advocacy of open standards. A few serious and well-respected SDOs have developed standards that are followed by communities of interest. To be sure, the more mature identity components – cards and credentials – are regulated by maturing and mature standards. The process of developing standards for the federation of identities and attributes across domains, however, is immature.

Similar to the early days of smart cards, it is possible that new and competitive organizations may not want to work together and will work to promote their proprietary specifications and standards and their vested interests rather than the common good. The Steering Group will need to find a way to balance the influence of these parties and at the same time appear to be inclusive. If the Identity Ecosystem Steering Group does not involve and organize the SDOs and stakeholders that are developing identity interoperability

standards, the initiative risks haphazard market development, regressive growth and slow adoption. Proprietary closed systems and communities of interest will continue without planning with interoperability and federation in mind.

## **Transparency & Open Public Involvement**

The Identity Ecosystem is intended to be user-centric by design. As part of the vision, individuals will gain increased security while enjoying ease of use to perform online activities. Thus, individual Internet users represent a large and important stakeholder group for successful implementation of the NSTIC. For the most part, Internet users are not generally represented by an organization or association. Nevertheless, for Identity Ecosystem to be successful and useful, user buy-in will be crucial.

Willingness to participate in the Identity Ecosystem (Goal #3) is crucial. Success in building the Identity Ecosystem will be meaningless if no one uses it. Resistance may persist should the Identity Ecosystem initiative be perceived as threatening Internet freedom and online anonymity. Ensuring that these basic principles are upheld and promoting complete transparency of Steering Group deliberations and decision-making will be essential to success.

Activities of the Steering Group need to be open with effective communications for individuals. The process of deliberation needs to mitigate concerns that decisions related to the Internet are being conducted “behind closed doors.” All meetings of the Steering Group should be recorded and made available publicly. Its communications approach should also take advantage of social media outlets (e.g., Twitter, blogging, Facebook page, etc.) to help personalize the effort and reach out to users through media well-known and adopted by internet users.

The Steering Group also will need to take advantage of the media to broadcast the Identity Ecosystem message and influence Internet end users through public relations activities, press events, print articles, white papers, presentations at conferences, and other similar methods. In addition to communications, individual users also will require representation within the Steering Group. Individual users cannot be represented in the same way as other stakeholder groups within the Identity Ecosystem Steering Group (i.e., designating a member of the Steering Group to represent individuals). Alternate approaches must be identified for engaging their participation and feedback, such as a web forum for collecting individual opinions, feedback, and ideas on the work of the Steering Group. Furthermore, the Steering Group needs to make this kind of contribution meaningful by incorporating information gathered through these media for official consideration as part of the Steering Group activities (e.g., as standing agenda item for all Steering Group meetings).

Public organization over the internet is powerful because it can spread information and shape public opinion rapidly, to positive or negative results. Leveraging this activity and cultivating positive public opinion and support should be an active, on-going activity.

As an example, crowd-sourcing can be used as a tool to engage the public and obtain inputs that could not be generated by a small steering group alone. As new aspects of the Identity Ecosystem are considered or rolled out, the public can be engaged to help test them out and solicit opinions, giving a broader, more accurate response than pilot efforts alone.

### **Potential Obstacles & Risks**

Failure to garner public participation and support could erode business support because individuals represent a business’ customers. If the Identity Ecosystem is viewed as negative or unpopular, businesses will not want to be associated with it. Thus, satisfying customer needs is an important factor for private sector adoption of the Identity Ecosystem.

Mechanisms must be structured in such a way that one-time participation from different individuals can be leveraged in a productive way because there likely will be little consistency in individual participation. It is unlikely that a single group of individuals will be involved in an on-going basis and subject to governance. For example, if a news item related to the Identity Ecosystem is linked on a popular website, a large group of individuals may be prompted to post feedback but may not participate going forward.

Conversely, certain groups of individuals are likely to be excluded regardless of the efforts made to entice their participation. Individual participation is a self-selecting process. This can lead to an overly-vocal minority opinion and lack of representation or under-representation of other groups/opinions. Outreach to individuals should be diverse and outlets targeted that would appeal to different groups of individuals, particularly those who might otherwise not become involved.

## Potential Governance Models

There are numerous governance models on which the Identity Ecosystem Steering Group can model its organization, for example, mutual benefit association, public-benefit corporation, public-private partnership models. There are also several options for the Federal Government's role – government-led, government oversight, government advisory or public-private collaboration. Alternatively, there are various existing organizations the government can evaluate for similarity of purpose and select one whose situation could be used as a blueprint for the Identity Ecosystem Steering Group. As a preliminary task, the government will need to conduct an analysis of the applicable models against the selected attributes. The structure and governance documents of an organization with similar purpose and organizational objectives could serve as a starting point and tailored as required to form the Steering Group. Potential existing organization models for evaluation include, but are not limited to: Smart Grid Interoperability Panel (SGIP), Council for Affordable Quality Healthcare's Committee on Operating Rules for Information Exchange (CORE), Internet Corporation for Assigned Names and Numbers' (ICANN) Board Governance Committee, National eHealth Collaborative Board of Directors (Successor to American Health Information Community), GridWise Architecture Council, and Health Information Technology Standards Panel.

Because of NIST's participation in the SGIP and its similarity in purpose and intent of the Identity Ecosystem, the SGIP has been widely discussed as a potential governance model for the Identity Ecosystem to emulate, and with good reason. The Smart Grid bears many similarities that translate well to the Identity Ecosystem, e.g., a large number and variety of stakeholders; a focus on infrastructure; its dependence on standards; and, the need for interoperability. The Smart Grid is a group of businesses that deliver a service to the public (both businesses and individual users) through an existing mature infrastructure that needs to be improved and expanded for interoperability. The SGIP governance model certainly is one that the IE Steering Group could use as a solid starting point.

Nonetheless, the purpose of the SGIP and similar organizations is to identify and implement new ways to more efficiently deliver an existing product, service, or benefit to stakeholders and individual users, generally using or building on an existing infrastructure. The uniqueness of the Identity Ecosystem initiative's mission is that it intends to develop a new infrastructure (even though some components already exist) to enable users, largely individual users, to digitize personal information that these users normally want to protect, into identity data for the purpose of securing transactions on the Internet. Furthermore, while industry insiders well understand the vulnerabilities and liabilities against which they are looking to protect their enterprises, individual users historically have been protected against the consequences of security breaches on a personal level. Thus for the Identity Ecosystem, the governance model will necessarily have to incorporate components that take these important factors into consideration.

First, the Identity Ecosystem initiative's mission will be to establish a largely **new infrastructure**, rather than building on an existing one. Second, the Identity Ecosystem will not be delivering an existing product or service, but rather leveraging **users' proprietary data** and credentials created from this data to establish strong identities to enhance Internet transaction security. Third, because these identities will be used in a nationwide and even international infrastructure that cuts across many businesses and industries rather than being limited to a community of interest, they eventually will become **ubiquitous**. This system will focus largely on **individual users** whose rights and protection will be paramount. Toward that end, the Identity Ecosystem governance structure may have to combine the utility of the SGIP model with some of the governance methodologies used by health cooperatives to protect health records or even create a modified governance model that utilizes the strengths of more than one model.