



A Report on
The Kantara Initiative *NSTIC Discussion Group*'s response to
the Department of Commerce's Notice of Inquiry concerning
Models for a Governance Structure for
the National Strategy for Trusted Identities in Cyberspace
v2.0.0 - 2011-07-21

Noting the Department of Commerce's Notice of Inquiry requesting public comment from all stakeholders on potential models for the formation and structure of the Steering Group, the Kantara Initiative's *NSTIC Discussion Group* hereby offers this considered contribution to the strategy, in accordance with the Department's request.

These comments were submitted on 2011-07-21.

Background to this contribution:

The Kantara Initiative is a non-profit 501c6 program operating under the IEEE Industry Standards and Technology Organization ("IEEE-ISTO") as one of a federation of industry programs. Kantara has in its mission the fostering of activities which bridge and harmonize identity communities through actions that will help ensure secure, identity-based, online interactions while preventing misuse of personal information so that networks will become privacy protecting and more fundamentally trustworthy environments. Kantara Initiative stakeholders represent a variety of communities including: enterprise, end-user (consumer), international research, education and government agencies as well as open source initiatives. It is this variety of representation that provides Kantara Initiative with a unique perspective for the NSTIC PO's consideration.

Driven by this mission and bolstered by the broad spectrum of representation which makes up the Kantara Initiative community, the Kantara Initiative's *NSTIC Discussion Group* (hereafter *KI NDG*) was formed 2011-06-21 in order to give Kantara members a forum in which to discuss and respond to the publication of the above-referenced NOI.

The responses offered below reflect a consensus position achieved within the *KI NDG*. It is the Discussion Group's hope that its responses are informative, constructive and valuable to the NSTIC PMO as it determines the way to establish the NSTIC Steering Group. Our responses include examples and recommendations based upon subject matter expert experience ranging from domestic to international coverage.

We have been careful to distinguish between a consensus opinion formed by the *KI NDG* and references to other bodies within the Kantara Initiative and the Kantara organization in general.

Those Participants of the KI *NDG* listed below contributed to the preparation of this NOI Response . A complete listing of all KI *NDG* Participants can be found at <http://kantarainitiative.org/confluence/x/0gDWAg>.

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1. Structure of the Steering Group

- 1.1. Given the Guiding Principles outlined in the Strategy, what should be the structure of the Steering Group? What structures can support the technical, policy, legal, and operational aspects of the Identity Ecosystem without stifling innovation?

KI NDG's response:

The Kantara Initiative community provides one such model that encourages innovation. The development of common standards, assessment criteria, and operational integration is a method of developing into an operational governance structure the combination of diverse policies, and legal requirements, based upon supporting standards and an accreditation and certification scheme. As such our recommendation is to consider the Kantara Initiative as a basis for establishing the initial structure of the Steering Group.

There will be occasions when the nature of a decision facing the Steering Group will be such that a different set of capabilities are required to advise, and in a very few cases direct, the Steering Group on matters of a geo-political/legal/commercial/governmental nature. There are existing global fora where 'issues of gravity' are discussed and a consensus generally reached. The OECD (with its Advisory Committee structures such as ITAC), and Information Systems Audit and Control Association (ISACA) are examples of forums that could be leveraged to act as a Reference Group (a 'UN of Identity', so to speak) to advise and if necessary direct to the Steering Group in rare instances. Since most jurisdictions already contribute funding and expertise, the US Government/NSTIC Program may not necessarily need to provide additional funds, but rather 'directing' existing funds.

A Steering Group support structure should comprise representatives from expertise areas (technical, legal, policy, privacy, security, operational) but also stakeholder representation from the ecosystem participants: public sector, private sector, end-user, and international.

The Steering Group itself should not make decisions in the above areas, unless there are conflicts or inconsistencies between the expert groups that would affect the viability of the Identity Ecosystem Framework. In addition to being ultimately responsible for the specification of the Identity Ecosystem Framework, the Steering Group should also facilitate the creation of sub-groups of experts and stakeholders, offer guidance to the sub-groups, and co-ordinate communication and overall direction between the sub-groups.

- 1.2. Are there broad, multi-sector examples of governance structures that match the scale of the Steering Group? If so, what makes them successful or unsuccessful? What challenges do they face?

KI NDG's response:

The Kantara Initiative Leadership Council is such a body in actual operation which is successful because it's a 'light hand on the tiller'. The Leadership Council is comprised of representatives from each of the Work and Discussion Groups, and the Leadership Council serves the needs of

the Work and Discussion Groups with the simple guidance of ensuring that activities are within the Kantara Initiative Mission and Operating Procedures. While the activity and guidance are light-touch in nature the Leadership Council operates under the guidance of the Kantara Initiative Operating Procedures. These Operating Procedures are 'managed' by both the Work and Discussion Groups and the Leadership Council and may be amended through an all member vote, which is transparent and each organization, company or government agency has only one vote.

A perfectly rational modification of this model would be to recognize that Steering Group members need not necessarily also be members of any subordinate expert or working group, since the Steering Group's role is primarily one of oversight and governance, and hence Steering Group members may bring specific skills to facilitate that objective.

Another example of a global multi-sector structure that could be used as a reference point is the OECD with its Advisory Committee structures (e.g. Internet Technical Advisory Committee (ITAC)).

One significant challenge (though not necessarily faced at the outset) is that there are occasions when the global nature and ramifications of a decision facing the Steering Group is such that a different set of capabilities are required to advise and in very few cases direct, the Steering Group. These matters are typically of a geo-political/legal/commercial/governmental nature.

As is official policy in many international fora, assignment of personnel into the Reference Group should be based on exclusively objective qualifications, rather than being based on prior service in NSTIC activities.

- 1.3. Are there functions of the Steering Group listed in this Notice that should not be part of the Steering Group's activities? Please explain why they are not essential components of Identity Ecosystem Governance.

KI NDG offers no response.

- 1.4. Are there functions that the Steering Group must have that are not listed in this notice? How do your suggested governance structures allow for inclusion of these additional functions?

KI NDG's response:

The NSTIC Program Office should provide logistical support and funding for Steering Group activities unless or until there is a reliable, stable, long term and independent funding model to support the continuing functioning of the SG. The Steering Group's ability to drive the development of an interoperable and trusted Identity Ecosystem should be under-pinned by granting it some key mandates:

- a) authority to act as a point of receipt, review, validation and (subject to applicable criteria being met) recommendation for requests for allocation of funds from within the NSTIC Project Office's budget for larger projects and for pilots.;

- b) specific budget expenditure capability enabling the Steering Group to disburse seed money to enable itself to reach a “steady state”;
- c) sponsorship of competitions for open implementation (such as the crypto required¹);
- d) maintain communications with stakeholders and public generally, through a wide variety of media and technologies;
- e) freedom to evolve into the type of private legal entity that best meets the needs, charter and goals of the NSTIC Program Office, Steering Group and the Identity Ecosystem at large.

In all cases above, expenditure limits to be initially determined at the time the Steering Group is formally inaugurated and periodically reviewed thereafter.

Pilots would include establishing standards, infrastructural elements (equivalent to Kantara's Identity Assurance Framework) and technical conformity ‘test beds’ (e.g. Kantara's Interoperability Certification Program - <http://kantarainitiative.org/wordpress/programs/iop-certification/> - and the European Telecommunications Standards Institute's ‘Plug Test’ programme - <http://www.etsi.org/Website/OurServices/Plugtests/home.aspx>). In essence, the Steering Group would oversee the development of the design principles by which NSTIC can be realistically implemented – NSTIC in itself is not, and was not meant to be, detailed enough to provide guidance. The Steering Group provides a single community enabling a centralized policy structure that provides a base for an integrated approach to governance.

1.5. To what extent does the Steering Group need to support different sectors differently?

KI NDG's response:

It is critical that all sectors be able to effectively review and provide input to Steering Group decisions, and how the Steering Group achieves that may differ by sector. For example, the Steering Group may need to foster public sector participation differently than commercial or Law Enforcement Organization or Academic sectors' participation. The Steering Group's extent of support should however be limited to monitoring balance and weight of representation and assisting the Steering Group sub-groups to achieve such balance/weight.

1.6. How can the Steering Group effectively set its own policies for all Identity Ecosystem participants without risking conflict with rules set in regulated industries? To what extent can the government mitigate risks associated with this complexity?

KI NDG's response:

One method is to ensure sector representation of regulated industries. In addition, by having a set of design principles that will work across all areas, regulated industries should all applaud

¹ our intention here is that there be an open, global competition, as was held for AES.

and embrace strong identity mechanisms that actually work. The Steering Group needs to have a mechanism that ensures decisions are checked by industry sector regulatory authority for compliance prior to implementation / adoption. Implicit in this is acknowledgement that, as the NSTIC fulfillment leads to improved practices, there may need to be made changes in specific industry sectors whereby today's practices, rules and possibly legislation will be superseded and therefore will require revision accordingly.

KI NDG believes that the Steering Group will need to be cognizant of potential requirements to support legislative change to facilitate implementation of the Identity Ecosystem, and to lobby the US Government to bring about such legislative changes. Whilst conflict with rules (i.e. commonly accepted obligations) may be over-ruled by the Steering Group it clearly cannot ignore or take action which opposes or contravenes existing legislation or regulations, although proposals to revise legislation may be made and appropriately prosecuted through its Government representation.

- 1.7. To what extent can each of the Guiding Principles of the Strategy—interoperability, security, privacy and ease of use—be supported without risking “pull through”² regulation from regulated participants in the Identity Ecosystem?

KI NDG's response:

The Steering Group needs to have in place a mechanism that ensures any decision by a sub-group is checked by industry sector regulatory authority for compliance. Additionally, the US Government needs to be prepared to support Steering Group / sub-group proposals which may require changes in legislation (e.g. to exempt from liability).

This question is generally addressed by KI NDG's response to Question 1.6.

- 1.8. What are the most important characteristics (e.g., standards and technical capabilities, rulemaking authority, representational structure, etc.) of the Steering Group?

KI NDG's response:

Above all, the Steering Group must demonstrate experience in consensus-driven governance and proactive/directed communication. Other characteristics e.g. standards and technical capabilities, rulemaking authority, representational structure, etc. of the Steering Group have been answered in previous Questions and the need for these characteristics are understood to have already been brought out.

The Steering Group must be composed of individuals with established expertise and experience in relevant fields, ideally with cross-cutting knowledge.

² NSTIC solutions will ideally be used across all industries, including both regulated and unregulated industries. “Pull through” refers to the concept that when implementing an NSTIC solution that touches some regulated industries, individuals or firms implementing those solutions would then find that they are subject to the specific regulations for those industries. This could create a confusing policy and legal landscape for a company looking to serve as an identity provider to all sectors.

The Steering Group should be at a reasonable size to enable flexibility and cross communications by global experts in an open and transparent environment that is consensus, and not lobby, driven. The work of the Steering Group should be completely open and transparent to the public. It must be balanced so that the agendas of any one sector do not dominate the legitimate interests and participation of any others.

1.9. How should the government be involved in the Steering Group at steady state? What are the advantages and disadvantages of different levels of government involvement?

KINDG's response:

The Federal and state governments certainly constitute stakeholders both for agency applications, and for security and law enforcement. That stakeholder group should have the same rights as other stakeholder groups represented on the Steering Group, with no disproportional vote or influence over any other participant. More specifically, the US Government (as a stakeholder) should not have any special privileges, e.g. veto power, over decisions of the Steering Group.

In addition, the US Government must accept the implications of the NSTIC and endeavor not to invent Federal-specific requirements – a practice which at present, e.g. through the imposition of FISMA for US Government-specific systems and services, imposes significant burdens, including operating inefficiencies, upon many private entities and organizations.

Commensurate with these mandates and entitlements, there should be appropriate exemptions from liability, which would need to be subject to periodic review and would be expected to evolve over time as the scope and objectives of the Steering Group themselves evolve.

In particular, we believe that keeping Government intervention to a minimum in the steady state should be established as a policy goal. The Steering Group should not be established as a formal “advisory committee” subject to the Federal Advisory Committee Act, nor should it be treated as a US Government contractor. To the greatest extent possible, it should operate as a private organization within which the US Government participates as a peer stakeholder and participant in open and public discussions. The US Government should determine for itself what it gains and learns from its participation in the Steering Group and how it chooses to apply that knowledge.

Our concerns regarding legal implications also apply to the initial set-up stage.

2. Steering Group Initiation

- 2.1. How does the functioning of the Steering Group relate to the method by which it was initiated? Does the scope of authority depend on the method? What examples are there from each of the broad categories above or from other methods? What are the advantages or disadvantages of different methods?

KI NDG's response:

Of the options available, KI NDG does not support the third (c). The first choice (a) may offer the advantage of a 'clean sheet', but may be too idealistic and would most likely require greater effort to initiate and to frame. In addition, with choice (a) there exists the problem, both economic- and personnel-related, of creating yet another identity-centric group in which interested organizations would be expected to participate.

Therefore, option (b) is KI NDG's preferred path, subject to the host organization being open to the responsibilities for enabling the representation which we believe the Steering Group requires. Principle amongst those responsibilities would be the commitment to ensure the openness and democracy which the Steering Group must have.

Such an existing stakeholder would be able to offer a template charter with a common baseline of rules e.g. adherence to Guiding Principles, voting, election process, term, financial support disclosure, balance of representation (in a specified range), activity/performance audit against GPs and specific charter items. Other rules would reflect protocols whereby a Working Group would elect a representative to serve on the Steering Group for a set period (e.g. a year) and similar terms.

Adoption of these principles would employ some of but not all of the Kantara Initiative's procedures indicated elsewhere in this response.

In its response to Question 1.1, the KI NDG has already indicated that the Kantara Initiative be considered a potential host for the Steering Group and its ancillary groups. Such a move would require formal discussion with and agreement from the Kantara Initiative Board of Trustees and the KI Membership.

- 2.2. While the Steering Group will ultimately be private sector-led regardless of how it is established, to what extent does government leadership of the group's initial phase increase or decrease the likelihood of the Strategy's success?

KI NDG's response:

US Government leadership can provide an initial focal point, so long as the Steering Group has appropriate representation and is open to all legitimate interested parties. This should include international representation to ensure that strategies developed do not adopt a 'bunker' mentality. Therefore, the US Government's involvement in the initial phase is essential to ensure that these principles and goals are firmly embedded in the operating rules and

subsequent activities of the organization. That said, heavy-handed involvement, after initial organization, could stifle independent thinking on the part of the Steering Group and supporting Working Groups.

The initial development of the Steering Group needs to provide the means to create and underpin the desired infrastructure, principally through investment in infrastructural elements which do not favour any particular provider or consumer entities, groups, interests.

To that extent, the US Government should see itself as a philanthropic benefactor, neither leading nor directing, and during this initial phase should steadfastly resist any group dynamics tending towards looking to the government to take such a role.

2.3. How can the government be most effective in accelerating the development and ultimate success of the Identity Ecosystem?

KI NDG's response:

The US Government can be most effective by facilitating with direct financial and other material support during the initial stages rather than by leading or directing the work of the Steering Group. We see a need to develop the scope and objectives for the Steering Group, and to initiate it as an operational entity, as soon as possible. However we also see significant challenges in refining the Steering Group's constitution and 'rules of participation which may take some time to resolve amongst all of the stakeholders (including the fact that some stakeholders may be either oblivious of their role or reluctant to participate). On that basis, the initial set-up and early-stage development might last between 12 and 36 months, depending on how long it takes to establish the Steering Group and for stakeholders to see concrete benefits from the NSTIC program). Material support could also include hosting physical and virtual environments (e.g. a web site, group lists, tele- and real meeting facilities) as well as paying for secretariat and other key posts. The US Government should also provide institutional support for the Steering Group's recommendations, which would increase the likelihood that they would achieve their objectives.

The NSTIC Project Office / US Government will need to provide seed funding until a reference architecture is agreed – and probably a one year transition funding after the initial reference architecture has been deployed.

2.4. Do certain methods of establishing the Steering Group create greater risks to the Guiding Principles? What measures can best mitigate those risks? What role can the government play to help to ensure the Guiding Principles are upheld?

KI NDG's response:

The self-created route suggested might potentially carry greater risks but these can be mitigated by requiring adoption of and adherence to general principles as part of each Working Group's Charter (see KI NDG's response to 2.1).

During the establishment of the Steering Group, efforts by individual stakeholders or groups of stakeholders to dominate or control the group will have to be resisted. The use of open, representative and democratic processes is the best way to manage the risk that establishing the Steering Group might be derailed by special interests.

The US Government's role might therefore be modeled on the role it plays in sponsoring research and development. These include promoting open solutions developed outside of government.,

- 2.5. What types of arrangements would allow for both an initial government role and, if initially led by the government, a transition to private sector leadership in the Steering Group? If possible, please give examples of such arrangements and their positive and negative attributes.

KI NDG's response:

We see a phased implementation for the strategy. As it is now, the US Government is setting itself up to act as a facilitator. In doing so, it is reasonable that it sets initial high-level objectives, but it will be necessary for Government to relinquish this role to the Steering Group at an early stage. KI NDG considers that the US Government's role therefore has four distinct perspectives:

- a) Facilitating the formation of the Steering Group and its associated Work Groups, etc., to ensure the three fundamental principles (openness, democracy, broad representation);
- b) Diminishing its role to that of peer stakeholder within the Steering Group and its Working Groups, thereby enabling the transition to an industry-led group;
- c) Managing the NSTIC budget, in response to the recommendations of the Steering Group, in order to foster the development of the desired infrastructure (e.g. to help motivate/fund federal agency "relying parties" to adopt applications and services conforming to NSTIC deliverables);
- d) Proposing and following proposed changes to legislation or international agreements and seeing them through the legislative and, potentially, international agreement-making processes.

3. Representation of Stakeholders in the Steering Group

- 3.1. What should the make-up of the Steering Group look like? What is the best way to engage organizations playing each role in the Identity Ecosystem, including individuals?

KINDG's response:

Given the diverse and extensive number of national and international organizations involved in the Identity Ecosystem one way to engage these organizations is by engaging the organizations they belong to as a group. A number of industry and other private sector organizations represent members of the Identity Ecosystem. At a high level these organizations should include entities that represent:

- a) Identity Providers;
- b) Attribute Providers;
- c) Consumer, Privacy and Civil Liberty organizations;
- d) Communication and information technology infrastructure and application providers;
- e) Certification and Education Organizations;
- f) Standards Development Organizations;
- g) US Government agencies;
- h) State, local, tribal, territorial and other sovereign governments' agencies;
- i) Representatives of industry & government who would bring forward target applications (i.e. Users and Consumers of online services reliant upon being able to trust an identity).

The Steering Group should include the leadership and/or subject matter, policy and operational expertise of these organizations, including CxOs and those with in-depth experience and knowledge, among others. It should include individuals with experience of large scale infrastructure and systems to support users in the millions. If the individuals participating in the Steering Group represent multiple organizations then it will be more representative of the Identity Ecosystem as a whole. In addition the Steering Group should leverage work groups and think tanks to address particular areas of interest and challenge in establishing an Identity Ecosystem that meets NSTIC's goals.

- 3.2. How should interested entities that do not directly participate in the Identity Ecosystem receive representation in the Steering Group?

KINDG's response:

The Steering Group processes and records should be fully transparent and open to public observation and public comment periods. It should maintain at large seats for individuals who can provide leadership and expertise. These interested entities and their representative individuals should express their interest, be involved in the NSTIC process and be invited to participate as at large members via a selection process to be determined. That being said the nature of the "indirect" participation and the process by which "at large" members become part of the Steering Group needs further consideration. For example, the principles contained in American National Standards Institute (ANSI) Essential Requirements: due process

requirements for ANSI standards were designed to ensure that the interests of all persons who are directly and materially affected by standards-setting activities are considered in standards-setting processes.

- 3.3. What does balanced representation mean and how can it be achieved? What steps can be taken to guard against disproportionate influence over policy formulation?

KI NDG's response:

Balanced participation means that representation on the Steering Group is spread across the stakeholders in the ecosystem outlined in 3.1. Representatives should apply to be part of the Steering Group. The Steering Group should have a limit to the number of individuals from a particular firm/organization. In addition the Steering Group should try to include members of organizations small and large, for profit and not-for profit, as well as a balance of providers and users. This can be achieved by allocating seats on the Steering Group to representatives of different interest groups within the Identity Ecosystem. A super-majority voting requirement could be used for matters involving policy in order to guard against disproportionate influence.

- 3.4. Should there be a fee for representatives in the Steering Group? Are there appropriate tiered systems for fees that will prevent "pricing out" organizations, including individuals?

KI NDG's response:

The Steering Group will require funding in order to operate. It should be funded at least in part from NSTIC seed funding – it is very likely that fees for membership will preclude representation of the most vulnerable stakeholder group: citizens. One of the values of using an established group as a host for the Steering Group is that start-up costs should be lower.

Fees, if they are put into place at all in later phases, should be structured so that the Steering Group does not discriminate against organizations based on size. Many organizations use tiered pricing in order to make participation open and the Steering Group should make it a policy to achieve this goal. Participation in the Steering Group should not be "sold" to those wishing to make financial contributions so as to influence the process.

- 3.5. Other than fees, are there other means to maintain a governance body in the long term? If possible, please give examples of existing structures and their positive and negative attributes.

KI NDG's response:

Other and multiple sources of funding can be used, besides or in addition to fees, to maintain the governance body (aspects of this have been previously addressed in KI NDG's response to Question 1.4). These can include:

a) Federal funding:

- i. Positive - Provides the ability to initiate the Steering Group without worrying about funding;

- ii. Positive- Provides an ability to engage best possible organizations and individuals without a concern about ability to pay (e.g. option for “scholarships”);
- iii. Negative – Current funding and budget environment;
- iv. Negative – Possibly contrary to the concept of “industry led”.

b) Sponsorships, donations, directed funding (unrelated to membership):

- i. Positive – Provides additional revenue source and improves the ability to have tiered fees;
- ii. Negative – Could be seen as potentially commercializing initiative;
- iii. Negative – Requires administration;
- iv. Negative – generally one-off and thus not a stable source of sustained funding.

A further approach would be to encourage other countries and their respective private enterprises to contribute towards the infrastructural and piloting costs, perhaps to the extent of matching the \$17.5M budget nominally proposed by the US Government.

Because the Identity Ecosystem does not stop at national borders, any membership system should have a procedure for accepting applications for membership from private individuals and organizations based outside the United States.

As noted in our response to Question 1.2, leveraging a recognized international body such as the OECD or ISACA, that already receives funding from the majority of the world's more wealthy jurisdictions, offers an alternative method for indirect funding (for the proposed Reference Group at least).

3.6. Should all members have the same voting rights on all issues, or should voting rights be adjusted to favor those most impacted by a decision?

KINDG's response:

Whatever different weights might be given would inherently bias the outcome. Instead, it is critical to create equal, adequate and effective representation of all stakeholder groups. Whether any system of weighting voting rights would be necessary or appropriate depends how participation was decided in the first place. If participation in the Steering Group has been carefully balanced, then equal voting rights would be essential; if not all stakeholder interests are fully represented in the Steering Group, then weighted voting might be necessary. The voting rights among the Steering Group should be shared equally within the group. Only one vote per participating organization can be made with a pre-determined designated representative.

The SG should prepare and apply a policy addressing conflicts of interest and the means for their resolution.

- 3.7. How can appropriately broad representation within the Steering Group be ensured? To what extent and in what ways must the Federal government, as well as State, local, tribal, territorial, and foreign governments be involved at the outset?

KI NDG's response:

This has been largely answered in KI NDG's responses to Questions 1.2, 1.9, 3.1, and 4.1. However, it should be noted that the subject NOI, though open and publicly available, was only promoted within the US. International input from foreign (i.e. non-US) government agencies and other non-US entities was made possible through organizations such as Kantara that have a significant international membership, and this has enabled them to 'be involved at the outset' (i.e. in this phase of NOI's and workshops). However, the NSTIC program should increase its efforts to promote the existence of the program and the pending commencement of real work to the broader international community, using commercial industry, academic and diplomatic channels.

In addition, there should be a review, conducted annually, to determine whether any significant stakeholder group is under or over represented. If so, the composition of the Steering Group must be adjusted using the same process that initiated the Steering Group, or its successor process.

4. International

- 4.1. How should the structure of the Steering Group address international perspectives, standards, policies, best practices, etc.?

KI NDG's response:

The remit of the Steering Group should be the development of an Identity Ecosystem that can be adopted internationally (i.e. it would be a US-initiated strategy with international participation and contribution leading to a system that can be implemented internationally).

To this end, the remit, governance and composition of the Steering Group must commit to its eventual deliverables (be they standards, operating rules, MoUs, processes, etc.) being fully open with the standards and reference model held in trust for the community by an independent body (either a new body or a suitable existing body). An example is the Open Group holding reference model for UNIX POSIX.

- 4.2. How should the Steering Group coordinate with other international entities (e.g., standards and policy development organizations, trade organizations, foreign governments)?

KI NDG's response:

Our belief is that standards and policy development organizations, trade organizations and foreign governments have vested interests in their current standards, solutions and the status-quo, none of which to-date have delivered a strong, trusted, global Identity Ecosystem. Thus the current direction of listening to and taking submissions from all interested parties is the correct approach and the resultant Identity Ecosystem will need to be new and different in approach from those being implemented today.

We stress our view that it is the approach taken in constructing the governance framework that is the key to NSTIC's successful fulfillment - we believe that all of the fundamental technology already exists. The current direction should be augmented with a directed, proactive program of outreach and engagement, reporting and interaction.

- 4.3. On what international entities should the Steering Group focus its attention and activities?

KI NDG's response:

While largely answered in KI NDG's response to Question 3.1, significant experience can be gained from those entities (government agencies, global organizations comprising commercial online businesses and Telcos with IdPs and RPs, EU groups such as ENISA) with deployments currently in play, in pilot and in Proof of Concept situations, together with the relevant SDO's from which the standards for such deployments emanate.

Other key international groups are those involved in privacy, accepting that the concept of privacy, particularity for the individual citizen, is far more mature outside of the US.

4.4. How should the Steering Group maximize the Identity Ecosystem’s interoperability internationally?

KI NDG’s response:

International interoperability should be a design goal for the Identity Ecosystem. If it can operate as a source of strong identities, trusted internationally, this will benefit governments, global businesses and global e-commerce.

We believe that the Steering Group should, as a priority, set a series of design goals that can be seen as being beneficial by the US government, other sovereign governments, global businesses, citizens, denizens and other interested parties.

We foresee some common goals that would gain international support, these being that:

- a) All stakeholders can consume and trust a strong identity not issued by them;
- b) Standards and other deliverables overseen by the Steering group and deployed within the Identity Ecosystem are able to be replicated in any country, meaning they are vendor and country neutral, and fully open;

We commend the example of the open competition for AES and a great example of openness fostering the adoption of a new strong crypto standard that rapidly achieved global acceptance and use.

The Kantara membership, which reflects a significant proportion of those with experience of deploying online services, knows that the challenge of interoperability goes deeper (conformance with standards and deployment profiles) and wider than an agreed series of design goals. The European Interoperability Framework offers an insight into this with the matrix (shown below) which should be studied by the Steering Group as it installs itself.

Delivery Processes	Interoperability Levels				
	Political	Legal	Organizational	Semantic	Technical
Business Management					
Customer Management					
Channel Management					
Technology Management					

4.5. What is the Federal government’s role in promoting international cooperation within the Identity Ecosystem?

KI NDG's response:

This question overlaps considerably with Questions 3.7 and 4.2, and we refer to Kantara's responses thereto, for a fuller response.

We foresee times when the fulfillment of the NSTIC goals may be furthered by the funding of experts with specific knowledge and perspectives pertinent to NSTIC, to enable them to participate in the deliberations of the NSTIC PO, the Steering Group or the activities of WGs and also in other forums, such as those organized by international SDOs. The Liberty Alliance, one of the co-founders of Kantara, successfully applied this approach during the development of the Identity Assurance Framework.

Management of such a budget could be assigned to the Steering Group, if not managed directly by the NSTIC PO