



**Identity Ecosystem Steering Group, Inc.**

# **IDESG Standards Adoption Policy**

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gskits.com

*<Marked to show SCC Comments and dispositions>*

## VERSION HISTORY

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## 52 Introduction

### 53 1.1 Role of standards within the IDESG

54

55 The Rules of Association<sup>1</sup> of the Identity Ecosystem Steering Group (IDESG) state that “The  
56 purpose of the IDESG shall be to develop and administer the process for policy and technical  
57 standards development for the Identity Ecosystem Framework.” It further states that:

58

- 59 • “The IDESG shall not itself be a standards development body, but rather an organization  
60 that promotes the development of standards by other existing standards development  
61 organizations and develops policies that serve to accelerate the development and  
62 adoption of the Identity Ecosystem.”

63

64 The first activity within the scope of the IDESG is identified as:

65

- 66 • “Promote and Adopt Standards. The IDESG shall establish forums and procedures to  
67 review applicable standards and adopt those that support achievement of the NSTIC  
68 vision, conform to the Guiding Principles, and meet other established requirements.  
69 Additionally, the IDESG shall
  - 70 ○ recommend standards be established when gaps are identified; and,
  - 71 ○ advocate for standards to be established and adopted in a timely manner and be  
72 sufficient to keep pace with emerging technology and market trends.”

73

74 Adopted standards form part of the Identity Ecosystem Framework, inform the work of the  
75 IDESG committees, and will be relied upon as part of the Trustmark program. “The IDESG shall  
76 encourage harmonization of standards and policies and shall always strive to recognize the  
77 impacts of policy and standards on all stakeholders in the Identity Ecosystem.”<sup>2</sup>

78

79 It is the responsibility of the IDESG Plenary to “Facilitate the timely review, recommendation and  
80 adoption of standards related to the development and governance of the Identity Ecosystem.”  
81 The IDESG Management Council shall “Review proposals for the standards, policies, and other  
82 components of the Identity Ecosystem Framework prior to consideration by the Plenary.”

83

84 It is the purpose of this Standards Adoption Policy to define the policies and processes by which  
85 standards are adopted into the Identity Ecosystem Framework.

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<sup>1</sup> Rules of Association of the Identity Ecosystem Steering Group (IDESG), Revised April 10, 2013,  
<https://www.idecosystem.org/ROA>.

<sup>2</sup> Ibid.

## 1.2 Open standards

The purpose of an "open standards" criterion within the IDESG system is to implement the call of the White House NSTIC (the "National Strategy") for the use of open standards as the preferred methodology for interactions in data regarding identity between independent parties within identity ecosystems. As noted in the National Strategy, and multiple prior governmental directives and best practices, widespread adoption and success for identity ecosystems depends on ~~the~~ voluntary participation and widely available, cost-effective methodologies. ~~<IBC>. [Such open standards will include open standards for open source developed systems.]~~

While some identity ecologies may have their own satisfactory proprietary or closed methods, the NSTIC open and scalable ecosystem concept depends on the ability of large groups of enterprises, institutions and individuals to federate and conduct interactions regarding identity data, voluntarily, with confidence that they will be able to use their own systems and methods, within their own environment, while confidently relying on identity data interactions with each other across organizational boundaries by means of stable, vendor-neutral methods with well-declared meanings.

That requirement of open accessibility to newcomers, in "openly federating" systems, generally can be addressed by the criteria for open standards use that are pervasive in US public policy. "Voluntary consensus standards" use is preferred, as a policy matter, because those methods are:

- Neutral as to vendors, and more accessible by DIY implementers. The transparency and quality generated in an open standards process generally results in higher quality, and methods less tied to the peculiarities of any one offering. These requirements also help address competition law issues, so that a government policy is not seen to favor a specific supplier.
- Open accessibility of a system to any implementer, regardless of system or software, also enhances positive network scale effects, by making it easier for newcomers to federate and transact without high switching costs. When a higher volume of transactions is enabled, this also can result in cost savings from the creation and marketing of common interfaces, tools and service providers. [Note comment about 'affordable standards' in Section 4.]
- <Note ARR comment on a possible additional explicit criterion of "affordability.">

## 1.3 IDESG Standards Registry

The ~~corpus-set~~ of open standards ~~approved~~adopted ~~<IBC>~~ by the IDESG as part of the Identity Ecosystem Framework is contained within the IDESG Standards Registry. This registry shall list all standards that have been approved for adoption by the IDESG plenary, along with metadata about each such standard. Section 3 describes the process through which adoption occurs.

IDESG also maintains an informal web resource, uncritically listing all known standards, specifications and similar guidance, related to identity management and NSTIC's domain, of which the IDESG is made aware. That wiki-based resource is intended to serve as a finding tool; inclusion of an artifact there is not as an evaluative statement.

130

#### 131 **1.4 Standards vs specifications**

132 In the course of its work, the IDESG will create and adopt many documents to serve its many  
 133 purposes and activities. Some of these documents may be incorporated into, or be sanctioned  
 134 as authoritative guidance, within IDESG's ~~will become part of the~~ Identity Ecosystem  
 135 Framework. In this document, the word "specification" generally refers to a specific data  
 136 structure which is defined by a document. That may include markup languages, code,  
 137 methodologies, APIs, policy guidance or other recommended behaviors; and may come from a  
 138 single source or a group, and from industry, academic or governmental sectors or combinations  
 139 of them.

140

141 Whatever their merit, not all specifications are standards. The word "standard" implies a higher  
 142 degree of specificity and testability. However, although beneficial, not all of these documents  
 143 are "standards" per se. ~~<JBC>~~ According to the International Organization for Standardization  
 144 (ISO):

145

- 146 • A standard is a document that provides requirements, specifications, guidelines or
- 147 characteristics that can be used consistently to ensure that materials, products, processes
- 148 and services are fit for their purpose.

149

150 Section 4 describes the criteria for determining if a document is a standard, if it is an “open  
 151 standard”, and if it is suitable for IDESG adoption. ~~[Also, note comments about ‘affordable~~  
 152 ~~Standards’ and ‘conformant to the Guiding Principles’ in Section 4.]~~ ~~<JBC>~~

153

## 154 2 Policy Statements

155

156 The following general principles and assumptions apply to the Standards Adoption Process  
157 described in this document.

### 158 2.1 IDESG/SCC is not an SDO.

159 Neither IDESG nor its Standards Committee is intended to serve as a primary source for the  
160 creation of new data specifications or standards. In this context, the role of the IDESG is to  
161 encourage and assist the creation of identity management and identity federation activity  
162 within groups of stakeholders (thereby creating or facilitating persistent "ecologies"), by  
163 describing needs for information & communication technology ("ICT") methodologies, and  
164 identifying and encouraging the development of standards to fulfill those needs. The  
165 Adoption Process is intended to structure and define IDESG's requirements, discovery,  
166 definition, cataloging, assessment and recommendation processes for ICT standards, which  
167 largely are expected to be developed by other, independent host standards development  
168 organizations ("SDOs").

### 169 2.2 IDESG/SCC will work with SDOs for standards availability.

170 The National Strategy calls for the identity ecosystems encouraged by the IDESG to be based  
171 on open, cost-effective <from ARR comment> and widely available standards to ensure wide  
172 adoption, vendor-neutrality and ready availability. <Note ARR comment: add "affordable">  
173 IDESG expects that SDOs will participate in the development and discussion by the IDESG  
174 community of needs for ICT functionality and standardization within its identity management  
175 and identity federation scope. IDESG will communicate the discovered requirements and  
176 needs of its stakeholders, for new data standards, to SDOs for the purpose of encouraging  
177 requirements-driven development of standards projects. When an SDO's output of  
178 standards and specifications is nominated by stakeholders as a method deserving broader  
179 adoption or consideration within IDESG's domain and identity ecologies, the Adoption  
180 Process will be used to evaluate its appropriateness as an "open standard" (see next  
181 paragraph). <Note ARR comment: add "cost-effective, affordable and guiding-principles-  
182 conformant"> IDESG also will encourage candidate specifications which have useful  
183 functionality in its domain to work with SDOs to become approved as open standards <Note  
184 ARR comment: add "cost-effective, affordable and guiding-principles-conformant">  
185 appropriate for inclusion in IDESG's ecology.

### 186 2.3 IDESG will establish suitability criteria for standards adoption.

187 "Open standards," as that term and concept is used within the National Strategy, and by  
188 governmental policies requiring or encouraging the use of open standards, means data  
189 standards which have a set of "open" qualities referring to their availability, transparency,  
190 development process, licensing and neutrality. That "openness" will be defined, for IDESG  
191 purposes, by the Standards Criteria (in section 4) as applied by the Adoption Process (in  
192 section 3). That quality is distinct from, and that assessment does NOT include, an

evaluation of the fitness of a proposed standard for its particular purpose, or a functional assessment of its merit or interoperability with other specific technologies. That second inquiry belongs, within IDESG's activities, to the substantive committees or work panels having expertise in the functions in question. Thus, for example, a proposed cybersecurity standard, suggested for broad use within IDESG-endorsed frameworks, might have:

- its security functionality, and suitability for use, assessed by the Security Committee; and
- the degree to which it is an "open standard", and thus sufficiently available for use, assessed by the Adoption Process.

## 2.4 SCC will oversee standards adoption.

The Adoption Process as defined in this document will be managed by IDESG's Standards Coordination Committee (SCC), as specified in Section 3 below, subject to the governance of the IDESG through its plenary and other governing mechanisms. The primary role of the SCC will be to arrange for evaluation of candidate standards, when nominated for evaluation, using the Adoption Process, which will result in recommendations and reports to the IDESG Plenary.

## 2.5 SCC will be the primary point of SDO liaison.

The SCC will be responsible for liaising with SDOs. Liaison relationships will be initiated as needed, as provided by the Management Council's and shall go through the MC <JBC> liaison approval process. <Note ARR comment> Day-to-day interaction with SDOs will occur either (a) through the SCC, particularly with respect to IDESG initiated standards projects within those SDOs, or (b) in cases where a particular IDESG expert committee initiates a relationship, that IDESG committee may elect to serve as the primary point of contact, but keep will be advised to the SCC advised. <from CT comment> <Note CT comment on a possible new Section 2.6 about normative references.>

# 3 Standards Adoption Process

The process by which a standard is identified, evaluated, and adopted into the Identity Ecosystem Framework is described herein.

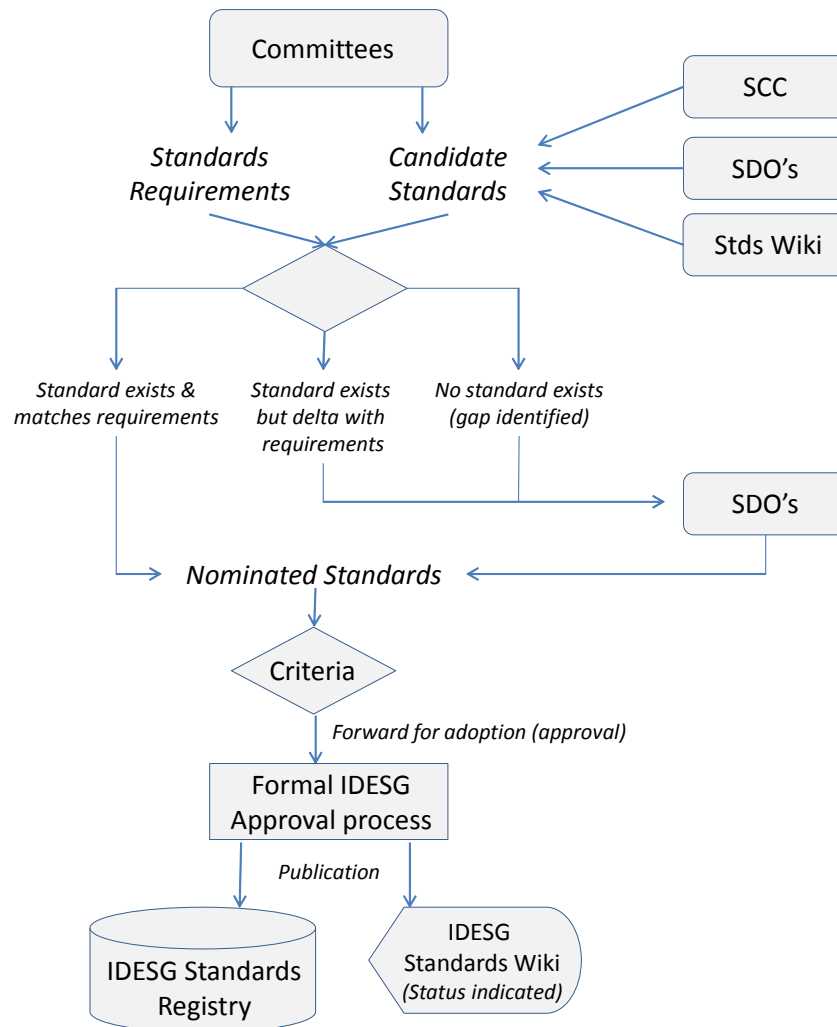
## 3.1 Process flow

Nominations for candidate standards to be used in IDESG's endorsed frameworks and identity ecologies may come from (a) IDESG's inventory efforts (described below), (b) substantive IDESG committees (such as the Security Committee) who identify standards requirements or <from CT comment> propose one or more specific candidates for review, or (c) from the results of IDESG's own use case development work. The SCC shall identify applicable standards and ascertain gaps in existing standards based on the established use cases and those incoming nominations. The SCC shall use designated IDESG liaisons for communicating any identified gaps to the owning SDO and for monitoring progress of the standards project within the SDO.



As candidate standards for examination are identified as relevant *<Note ARR comment: define as "open, affordable, NSTIC-conformant">*, they will be queued (by the Standards Committee) for review, as described in the next section.

Figure 1 depicts a high level functional view of the standards adoption process flow.



**Figure 1. Standards Adoption Process Flow**

*<JBC note - 3.1.1 - 3.1.2 is new material>*

**3.1.1 Gap identification.** Gaps in available standards to meet the needs of the IDESG and the Identity Ecosystem framework may be identified in several ways:

- *Requirements analysis.* As part of their ongoing activities, IDESG committees may develop sets of requirements, including standards requirements. For example, in the development of a functional model of the Identity Ecosystem, requirements may be identified. Likewise, as the IDESG use cases are developed and analyzed from various

perspectives, standards requirements may be derived. When these requirements are analyzed to determine how they can be satisfied by existing standards, it may be determined that either

- A standard exists, but needs to be revised (updated or expanded) to completely satisfy the requirement, or
- No standard exists to address the specific requirement(s)
- “Known gaps”. As a community, we are aware of some identity-related standards gaps that for one reason or another have not yet been addressed by an SDO. These may be collected through a solicitation process.
- *Stakeholder inputs*. IDESG stakeholders may identify gaps to the SCC. For example, an IDESG committee, stakeholder group, or an NSTIC pilot may identify a gap and/or propose a standards project.

Once a gap is identified, it must be described and a proposal created for a standards project to fill the gap. Once the scope of work is understood, an SDO must be identified to execute the project.

**3.1.2 SDO selection.** Once a standards project proposal has been drafted, IDESG may wish to identify a suitable SDO ~~must be selected~~ to take on and host that project, or issue an open call for standards projects to fulfill the identified needs. When a selective request is made, </BC> SDO’s shall be selected based on:

- Qualifications related to the subject matter
- Criteria for openness as describe in Section 4 <Note ARR comment: add “affordability, guiding-principles-conformant”>
- Adequate personnel to progress the work

SDO selection shall proceed as follows:

- SDO nominations will be made to the SCC
- The SCC will evaluate the nominations, including interviewing of SDOs as appropriate, applying the above selection criteria
- If more than one SDO has been nominated, the SCC will vote on the SDO to be offered the project

Once selected, if an SDO is neither a member of IDESG nor has ~~if~~ a formal liaison relationship with ~~has not already been established between~~ the IDESG and the SDO, such a liaison shall be established and an SCC member assigned as the liaison representative. The liaison representative shall monitor the progress of the standards project and report back to the SCC. Other IDESG/SCC members may join the SDO to participate in the project at their discretion.

## **2.6 3.2 Standards adoption life cycle**

The standards adoption process is implemented through a staged process represented as a life cycle, as depicted in Figure 2 below.

Standards Inventory	Standard Revision/ Development	Standard Nomination	Standard Review	Recommended (Submitted)	Approval & Adoption
<ul style="list-style-type: none"> <li>Collection of existing identity-related standards.</li> <li>Standards Wiki – <ul style="list-style-type: none"> <li>Collection</li> <li>Access</li> <li>Feedback</li> </ul> </li> <li>Source of candidate standards</li> </ul>	<ul style="list-style-type: none"> <li>When gaps exist, work with SDO to either: <ul style="list-style-type: none"> <li>Initiate a new standards project to develop a new standard</li> <li>Initiate a revision of an existing standard to better meet IDESG requirements</li> </ul> </li> <li>Requirements come from SCC &amp; other committees</li> <li>Liaise throughout project</li> </ul>	<ul style="list-style-type: none"> <li>IDESG committee or SCC nominates a standard for adoption</li> <li>Nomination form (online)</li> <li>Nominator defines purpose/relevance and GPs addressed.</li> </ul>	<ul style="list-style-type: none"> <li>SCC reviews nominated standard.</li> <li>Standard criteria applied (answer the question – “Is this a &lt;an open&gt; standard?”)</li> <li>SCC may meet with nominator for Q&amp;A.</li> <li>SCC may liaise with Privacy Committee for preliminary review.</li> </ul>	<ul style="list-style-type: none"> <li>Standard to be balloted by the plenary for IDESG adoption.</li> <li>Adoption means inclusion in the IDESG Standards Registry.</li> <li>Undergoes all MC and plenary approval processes as defined in the RoA.</li> </ul>	<ul style="list-style-type: none"> <li>Approved IDESG work product.</li> <li>Included within “IDESG Standards Registry” – list of standards which form part of the Identity Ecosystem Framework.</li> <li>Ready for use to inform (and be normatively referenced within) other IDESG work.</li> </ul>
<b>Progression gate:</b> <ul style="list-style-type: none"> <li>Standard is nominated for consideration.</li> </ul>	<b>Progression gate:</b> <ul style="list-style-type: none"> <li>New/revise standard published</li> <li>Standard entered into Inventory</li> </ul>	<b>Progression gate:</b> <ul style="list-style-type: none"> <li>Nomination form submitted</li> </ul>	<b>Progression gate:</b> <ul style="list-style-type: none"> <li>Meets ‘standards’ criteria.</li> <li>SCC approves forwarding standard for adoption (recommends it for adoption).</li> </ul>	<b>Progression gate:</b> <ul style="list-style-type: none"> <li>Plenary ballot passes.</li> </ul>	<b>Progression gate:</b> <ul style="list-style-type: none"> <li>N/A.</li> <li>Standard may be removed from the approved list or may be replaced by newer version by ballot.</li> </ul>
Individual/ AHG	SDO	Committees	SCC	MC/Plenary	IDESG

Figure 2. Standards adoption life cycle

The Standard Adoption Lifecycle phases are designed to provide a framework for effectively achieving the goals of the SCC to review applicable standards and adopt those that support achievement of the NSTIC vision, conform to the Guiding Principles, for standards to be established and adopted in a timely manner and be sufficient to keep pace with emerging technology and market trends.

The Standards Adoption Lifecycles consist of six dynamic phases:

**3.2.1 Standards Inventory:** SCC will lead the collection of existing identity related specifications and standards, on an uncritical basis, welcoming all data, and establish a standards Wiki for access and feedback and identifying their sources.

**3.2.2 Standards Revision and Development:** SCC will work with SDO’s to close gaps. If needed, SCC may initiate or seek the initiation of new standards development projects, and/or revisions to existing standards, for alignment with IDESG requirements. (See Section 3.1.1.) SCC will assist IDESG committees in integrating their substantive requirements into those communications.

**3.2.3 Standards Nomination:** When a candidate standard is proposed for use in an IDESG-endorsed process, by an IDESG committee or SCC standards nomination (from its gap analysis review), then it is flagged for official review as described below. The Plenary's approval

process should include a step in which the Adoption Process is invoked and applied. SCC should develop a nomination form for the Standards Wiki for all such submissions and nominations, which establishes a forum for a nominator to articulate the purpose, relevance, and source information for candidate standards.

**3.2.4 Standards Review:** SCC will review each nominated candidate standard, against the Standards Adoption Criteria, and post a notice to the IDESG community inviting feedback on the candidate standard's open attributes (including its availability and any IPR issues) and its satisfaction of the Adoption Criteria. ~~<JBC>~~ <Note ARR comment: add "its relevance"> The results of that review and open feedback process will be compiled into a report provided by the SCC to the IDESG Plenary, ~~as described in Section (4c) "Implementation."~~ <from CT comment>

**3.2.5 SCC Recommended/Submitted Standards for Plenary Ballot:** IDESG Plenary action which includes the endorsement of a candidate standard should include (in addition to the functional suitability recommendations from the appropriate IDESG Committee(s)) an explicit decision to endorse, or reject, the SCC's report on the candidate standard's openness and availability. The outcomes of those ballots, and that report, should be incorporated into the information made available in the IDESG standards registry.

**3.2.6 Approval and Adoption:** Once approved, the standard is listed within the IDESG Standards Registry. Standards in the registry may be removed or replaced by plenary ballot.

## **2.73.1 Roles and responsibilities**

**3.3.1 Standards Committee** - The SCC will build on and use existing standards and specifications as much as possible. The SCC will maintain the Standards Wiki and Standards Inventory - identifying and publishing lists of new and/or existing open standards relevant to the NSTIC Identity Ecosystem. When there is a need to modify existing Standards, then the SCC will work with the IDESG committee having expertise in that domain to document the recommended modifications and work with the relevant SDO to initiate the work. In cases where it is not feasible for the owning SDO to modify the standard and there are no alternative standards, the SCC may provide recommendations on how to proceed. The SCC shall be the primary entity within the IDESG for the establishment and maintenance of SDO liaisons.

**3.3.2 IDESG Committees** - The substantive committees may nominate candidate standards for adoption, as being relevant to the ecosystem or an included element in a set of procedures recommended for IDESG endorsement. IDESG committees may offer requirements for identified standards and seek new projects, or modifications to existing projects, from relevant SDOs (via the SCC). Committees are encouraged to contribute to the Standards Inventory.

**3.3.3 SDOs** - SDOs should identify existing standards applicable to the NSTIC effort, and suggest new standards projects or revisions of existing standards to meet NSTIC identity

363 ecosystem needs. The SCC will focus on direct collaboration with relevant SDOs such as de jure,  
 364 consortia, professional society and industry associations (e.g., IETF, OASIS, W3C, ISO, ITU, and  
 365 relevant other consortia), in the area of Security and Identity Management. SDO's will establish  
 366 or maintain liaison relationships with the IDESG/SCC\_ when standards projects are initiated.

367

## 368 4 Standards Criteria

### 369 4.1 Common Principles

370 There is a common constellation of principles generally used to determine the suitability of  
 371 proposed specifications for broader implementation in the service of public policy goals. Each of  
 372 the following requirements appears in some manner in each of the principal systems described  
 373 in Section 1.2 above.

#### 374 Primary deliverables

- 375 • *Participatory openness*, in the sense that anyone can participate within reasonable  
 376 restrictions.
  - 377 ○ Facilitates balanced input, retards the exclusion of stakeholders or use cases.  
 378 Some standards bodies have explicit "balance" composition rules. Others believe  
 379 that better results come from proactive recruiting, and level-playing-field rules  
 380 that make participation attractive for minority stakeholders, than from quota  
 381 approaches.
  - 382 ○ Some degree of participation fees have generally been found appropriate,  
 383 although it's possible that a "rich players club" with too high an entry barrier  
 384 might be found inappropriately exclusionary.
- 385 • *Fairness and due process* rules to enforce balanced decisions and consensus  
 386 methodology.
  - 387 ○ At a minimum, published rules and an absence of a track record of ignoring them  
 388 seem essential.
  - 389 ○ Usually includes enforcement mechanisms reasonably assuring that the rules are  
 390 followed. This can be difficult to measure or assess in the case of small or  
 391 volunteer-run groups.
  - 392 ○ In practice, it appears that some agencies run spotchecks on this issue by seeking  
 393 and evaluating assertions that significant points of view were excluded.
- 394 • *Transparency*, or openness in the sense of public access to inputs and results.
  - 395 ○ Some charges for published standards, to pass along the reasonable costs of  
 396 development generally have been found appropriate, particularly in industries  
 397 with relatively large commercial players. There is some pushback on this principle  
 398 from the "open data" movement, on the grounds that public policies which are  
 399 amount to regulatory requirements should be freely available, to enable review  
 400 and compliance.
  - 401 ○ The degree of availability of draft material (as opposed to final products)  
 402 varies widely among consortia at present. Their justifications for securing  
 403 draft information range from preserving it as a member-only benefit, to  
 404 keeping it distinct from final work ready for implementation, to assertions  
 405 that technical debates may be more robust if not conducted transparently.

- There is a related but difficult-to-measure problem with groups who have transparency rules in theory (such as posting and archiving practices, and meeting notice rules), but tend not to honor them in practice.
- *Function-oriented description*, as opposed to specifying design or product-specific characteristics.
  - This requirement obviously retards lock-in or tying to a single product or methodology other than the specification itself.
  - Description of the proposed functions also allows a review process to assess the market demand, and the ecosystem niche or role which the reviewed method may fill – thus supplying guidance on the appropriateness of its inclusion.
  - Descriptions by performance feature (as opposed to "do it like this exemplar product") tend to give better guidance to developers of new conforming products, and are more readily adaptable into useful conformance clauses for testing purposes. Examples of function-oriented descriptions usually can be found in the scope statements of open standards projects, where intended outcomes and boundaries are described in detail, but proprietary processes generally are not referenced.

## Requirements derived from the primary deliverables

- *Minimum public review procedures* creating genuine opportunities for, and consideration of, feedback from non-participants.
  - Parties who do not wish to invest the time or licensure necessary to actively contribute to a standard still may represent stakeholders whose views should be considered.
  - Several of the above bodies explicitly require minimum durations for public review, or replies or acknowledgments of public comments received, or both.
- *Stable hosting arrangements* likely to support the intended access and permanence of the outputs and relevant archival material.
  - The access and openness deliverables noted above are of little value if artifacts cannot be found and relied upon, over time, after their issuance. Even in the relatively fast – moving ICT sector, it appears that the lifecycle of use for data standards may be measured in decades, while the hype cycle that supports their dot.org activity may be limited to years, or even months.
  - This archival imperative may apply to draft inputs and metadata as well as final approved outputs.
  - To some degree, provisions for monitoring and enforcing the maintenance phase of published standards – managing errata, maintaining their integrity via copyright management, and maintaining conformance or interoperability criteria – also may be relevant. The need for these functions may vary widely depending on the nature of the standard.



- *Intellectual property rules* with sufficient certainty, access and enforcement.
  - The same principles of clearly-stated rules, and reliable enforcement, noted for process rules, above, also should apply here, so that stakeholders who adopt or contribute to a project can do so with reasonable knowledge of the known rights consequences.
  - Outputs that are only available on extraordinarily-limited license terms may not serve the goals of a broadly implementable standard. Some governments take this issue further, and express a preference for royalty-free, freely-available or open source standards in order to support wide implementation and access.
  - Standards whose development allows contributors to attach complex conditions, of the outset (hostage-taking at the design stage), may not develop freely in response to feedback from other stakeholders.
  - Overly-restrictive licenses required to implement a final standard, especially those which require negotiation or surveillance by competitors (hostage-taking at the implementation stage), may impede use of the standard or related technology, as is implied in the SEP cases.
- <Note ARR comment on a possible additional explicit criterion of "affordability.">
- <Note ARR comment on a possible additional explicit criterion of "conformant with the NSTIC Guiding Principles.">

## 4.2 *Special Requirements for Early Stage Technologies*

One weakness of the foregoing traditional analysis is that it treats all standards as if they don't really exist until they are finally issued. In practice, modifications and new technologies are coming along constantly. At any given time, there always are worthy projects in development that have not yet fully brought themselves into an accredited standards process. At the same time, of course, there also are private projects that either have no intent of becoming open, or publicly available; or that present themselves as "standards" without ever satisfying the openness needs suitable to public policy use. Accordingly, any identity ecosystem, and its implementers, must make choices about the adoption of methods that might later lead to open standards, or might turn out to be a unsupported dead end, or a proprietary path under the control of a single vendor or stakeholder group.

A balanced approach that allows for flexibility and innovation may need to establish some general principles for working appropriately with new, incomplete proposed methodologies for handling and structuring information. Here are some draft principles for further consideration:

While long-term, large-scale deployments and dependencies require the assurances and qualities sought by the NTTAA and the National Strategy, any developing ecosystem also will have a number of pilot projects, small implementations, and experiments. These may not yet be the basis for a mandate or wide roll-out, so the use of not-yet-standardized methods may be perfectly appropriate. Among the foregoing (draft) common criteria, the requirements of:



probably are premature and reasonably might not be applied to experimental pre-standardization projects. The other four criteria, plus one additional special one, should still be applied even to the assessment of early-stage efforts:

- *Participatory openness,*
  - *Fairness and due process, and*
  - *Stable hosting arrangements*
- 
- *Transparency to the public:* Transparency often still is needed, even if to a lesser degree, so that the outputs of a proposed methodology can be evaluated by a ecosystem participants. As an example, note that the NSTIC funded pilot projects have been required by NIST to make public interim reports to the IDESG. The projects are not obligated to produce all results publicly. However, some degree of public information and reporting puts the IDESG and stakeholders in a position to assess whether to consider incorporating a candidate technology into broader systems; and whether open standardization or sourcing of that technology would be an appropriate next goal.
  - *Function-oriented method descriptions:* The ability to understand a project's methods, free of specific proprietary product or method use, significantly assists implementers in replicating the experiment's success with different tools. That view into a project more readily lends itself to future standardization and broad use , than would a statement like "we used the Foo Inc. product."
  - *Minimum public review procedures:* Similarly, external projects that seek preliminary endorsement or use in the ecosystem should be subject to exposure for meaningful feedback, as the cost of that interim recognition. Without that mechanism, there would be little opportunity or motivation for those emerging methods to socialize into, and collaborate with, other technologies so as to become sufficiently interoperable.
  - *Intellectual property rules:* To some degree, the eventual license availability of a developing technology should be clear from a project's launch. Often the license terms applicable to a final standard are dictated by the practices used, and contributions, permitted during its formation. For that reason, any experimental method that seeks to be embraced as part of a large and widely available ecosystem should be able, *at its initiation*, to demonstrate adequate open licensing and availability will be possible, on terms are reasonable in light of its intended use. In that way the ecosystem can be reasonably assured that its resources are doing more than providing public support to private for-profit product development. For that reason, [a] / [some kind of] statement of intent or declaration about future IPR availability [should be required] / [may be appropriate] at a very early stage. (For example, if a particular functional domain was expected to be directly accessible to consumers without cost, it might be an appropriate constraint, imposed by the IDESG endorsement process, that projects to develop standards needed to implement that function be scoped not to bear royalties.)

- 537 • *Prospective commitment to open standardization:* If an identity ecology is asked

538 to give early recognition or support to an emerging method which is not yet

539 standardized -- as contemplated by the applicable public policy – an IDESG

540 endorsement process should [assess whether to] require a commitment to

541 completing its standardization, as a condition of the initial support or

542 endorsement. A variety of approaches are possible, including (a) seeking

543 aspirational but unenforceable statements of intent; (b) making some kind of

544 support contingent on progress; or (c) taking binding contributions on a delayed

545 basis for later use, subject to updating.

546

## 5 Appendix A: References

[Insert the name, version number, description, and physical location of any documents referenced in this document. Add rows to the table as necessary.]

The following table summarizes the documents referenced in this document.

5.1.1.1 Document Name	5.1.1.2 Version	5.1.1.3 Location
Rules of Association of the Identity Ecosystem Steering Group (IDESG)	rev 1, 10 April 2013	<a href="https://www.idecosystem.org/ROA">https://www.idecosystem.org/ROA</a>
National Strategy for Trusted Identities in Cyberspace	15 April 2011	<a href="http://www.whitehouse.gov/sites/default/files/rss_viewer/NSTICstrategy_041511.pdf">http://www.whitehouse.gov/sites/default/files/rss_viewer/NSTICstrategy_041511.pdf</a>

## 6 Appendix B: Key Terms

[Insert terms and definitions used in this document. Add rows to the table as necessary. Follow the link below to for definitions of project management terms and acronyms used in this and other documents.]

The following table provides definitions for terms relevant to this document.

6.1.1.1 Term	6.1.1.2 Definition
[Insert Term]	[Provide definition of the term used in this document.]
[Insert Term]	[Provide definition of the term used in this document.]
[Insert Term]	[Provide definition of the term used in this document.]

560

561 **7 Appendix C: Standards Wiki**

562

563 &lt;insert description of Wiki and its use related to this policy&gt;