NIEMOpen Business Architecture Committee (NBAC) Technical Steering Committee (TSC) Governance

The NBAC TSC Governance is a living document, reviewed periodically, and based on inputs from the NIEMOpen Community-of-Interest.

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<th>Date</th>
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<tr>
<td>11 Apr 2023</td>
<td>REV 1</td>
<td>• Replaces “Domain” with Sub-Committee when referring to the organization managing the model content of a particular domain space</td>
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<td>• Addresses organization, membership, scope, definition, processes, and resources of the Harmonization Sub-Committee</td>
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<td>• Introduces the process leading to conservatorship of inactive Sub-Committees and associated model content</td>
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This document amplifies the NIEMOpen Charter document and Open Project Lightweight Rules. It incorporates all provisions of those documents. In case of conflict, that parent document controls. This document changes infrequently by the process defined below.

**NBAC Technical Steering Committee (TSC) Scope**

The scope of the NBAC Technical Steering Committee (TSC) is to coordinate, harmonize and unify NIEM Domain Space content as it relates to the NIEM data model and the code-list, safeguard NIEM data model core content, identify, validate and on-board new NIEMOpen Domain Space Sub-Committees as well as, advise and support the Project Governing Board (PGB) on matters relating to business architecture and requirements of NIEMOpen Project. The NBAC TSC shall:

- Facilitate the construction, maintenance, and use of a business architecture framework, model, code, and other NIEMOpen related documentations
- Manage the harmonization process, issue resolution mitigation, and development and packaging of version candidates
- Provide management and oversight of the NIEM core, the central part of the NIEM data model that is commonly understood across all NIEM Domain
Spaces

- Serve as the forum for NIEMOpen NBAC TSC Domain Space Sub-Committees and interactions between NBAC Sub-Committees and communities-of-interest to coordinate content, data model, and code lists
- Establish (or dissolve) tiger teams and/or Sub-Committees to help solve complicated data sharing issues or close gaps on mission critical data sharing issues or opportunities
- On-board new NIEMOpen NBAC TSC Sub-Committees and ensure new NIEM data model content candidates are properly vetted and verified
- Provide NIEMOpen management and technical training
- Document standard operating procedures
- In coordination with the NIEMOpen Technical Architecture Committee (NTAC) TSC, shepherd the model content candidate versions through the PGB evaluation and acceptance process
- Assess NIEMOpen Domain Space Sub-Committees maturity, vitality, and health and provide remediation support if needed
- Serve as conservator for inactive Sub-Committees and manage associated Domain Space content

Composition

NBAC TSC membership include the NBAC TSC chair/Co-Chairs, NBAC TSC Sub-Committee members, at-large members, NTAC TSC Co-chairs and members, NIEMOpen Maintainers, and NBAC TSC tiger teams (Figure 1). NBAC TSC official members must execute an Individual Contributor License Agreements (i-CLA) and an Entity Contributor License Agreement (e-CLA) if representing a company or agency. The NBAC Chair/Co-Chairs may invite non-member observers and guests to participate in activities on a temporary basis.

**NBAC Chair/Co-Chair** - The NBAC TSC nominally has two Co-Chairs. The NBAC Co-Chairs are appointed by the PGB via a call for nominations. Nominees for the NBAC Co-Chairs can be submitted to the PGB by any individual. The NBAC Co-Chairs serve nominal 2-year terms or until they voluntarily resign or are recalled by the PGB. If feasible, Co-Chair terms should be staggered to provide continuity.
Nominees for membership to the NBAC TSC are approved by the Co-Chairs without dissent and participate until they voluntarily resign.

**NIEMOpen Domain Space Sub-Committees** – NIEMOpen Domain Space Sub-Committees are formally established communities-of-Interest (CoI) with chair/Co-Chairs to represent the stakeholders, governance, and data model content and context oriented around their respective business (functional) needs. Sub-Committees manage reusable, community-specific content and participate in NBAC TSC governance. Each Sub-Committee represents individuals and organizations that span all levels of government, non-governmental and commercial enterprises, and the international community.

**NIEMOpen Domain Space Sub-Committee Chair/Co-Chairs** - The Chair/Co-Chairs are responsible for the governance, management, operations, and model content including maintenance of their unique code-list(s) of their respective model Domain Space. The role may be shared between Co-Chairs.

Sub-Committee Chair/Co-Chairs are initially appointed by the sponsoring organization(s) leadership and subsequently as otherwise specified in a Sub-Committee governance document. Chair/Co-Chairs require the endorsement of the NBAC.
The Sub-Committee may appoint an executive (s) to act as resource manager and senior representative of sponsoring organizations.

**Harmonization Sub-Committee** - Harmonization Sub-Committee manages model harmonization and is the conduit for accepting new model content for consideration. Harmonization is an ongoing process to improve the quality of the NIEN model - reduces semantic overlap, improves consistency of modeling, naming and definitions, and incorporates new and changing requirements (new Domain Spaces, updated content). The harmonization process integrates these new requirements while still ensuring data elements exist only once in the model. There are two types of harmonization, cross-domain harmonization (addresses overlap across multiple model Domain Spaces) and core harmonization (addresses overlap and quality issues across Core and model Domain Spaces) (Figure 2).

Harmonization Sub-Committee Chair/Co-Chairs are appointed by the NBAC TSC Chair/Co-Chairs.

The harmonization process involves the following major steps (Figure 3):
- Identify and submit potential issues
  - Anyone can submit potential issues to the issue tracker in the niemopen/niem-model repo on GitHub
  - Harmonization Technical Lead performs reviews to identify new issues
based on commonly used terms, quality assurance checks

- **Initial pass**
  - Harmonization Technical Lead provides additional background information and potential options for a solution
- **Discussion and recommendation**
  - Harmonization Sub-Committee meets to review issues and decide on recommendations
- **Recommended changes are staged and reviewed**
  - Harmonization Technical Lead stages changes to the model / schemas and submits a niem-model pull request
  - Harmonization Sub-Committee confirms changes staged in the pull request
- **Recommendations are approved (via lazy consensus) or sent back for further work**
  - Harmonization Technical Lead summarizes upcoming issues and recommendations on the monthly NBAC TSC meetings
  - Harmonization Technical Lead emails the NBAC mailing list with details and deadline to solicit feedback or objections
  - Harmonization Technical Lead moves issues with feedback / objections back to the Harmonization Sub-Committee
- **Model updates are finalized**
  - Harmonization Technical Lead accepts the approved issue’s pull request and finalizes the changes

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**Figure 3: Harmonization Process**

- **Identify Issues**
  - Issues submitted to issue tracker
  - Harmonization Technical Lead review

- **Initial Pass**
  - Harmonization Technical Lead provides background info & potential options for a solution

- **Discussion & Decide on Recommendations**
  - Harmonization Sub-Committee reviews issues and formulates recommendations
  - Harmonization Technical Lead stages changes to the model / schemas & submits a niem-model pull request
  - Harmonization Sub-Committee confirms changes staged in the pull request

- **Stage & review**
  - Recommendations are approved (via lazy consensus) or sent back for further work

- **Approval**
  - Harmonization Technical Lead summarizes upcoming issues and recommendations on the monthly NBAC TSC meetings
  - Harmonization Technical Lead emails the NBAC mailing list with details and deadline to solicit feedback or objections
  - Harmonization Technical Lead moves issues with feedback / objections back to the Harmonization Sub-Committee

- **Changes Finalized**
  - Harmonization Technical Lead accepts the approved issue’s pull request and finalizes the changes
Harmonization resources include:
- **niemopen/niem-model GitHub repo**
  - Contains NIEM model schemas and documentation
  - NIEM 1.0 – NIEM 5.2 already added as contributions
- **Issue list** on niem-model repo
- **Project board** on niem-model repo
- **Mailing list**

**NBAC TSC Voting Members** – The NBAC TSC voting members include:
- NBAC Chair/Co-Chairs
- Maximum 2 voting members per Sub-Committee as appointed or elected by the Sub-Committee

**At-Large NBAC TSC Members (Non-Voting)** – NIEMOpen stakeholders/CoIs unaffiliated with a specific Sub-Committee may participate as At-Large members. CoIs are groups of people who share a common concern, set of problems, or interest in a topic and eventually come together based on the need to exchange information. Members need not be aligned to a formal Sub-Committee to create NIEM exchanges or participate in the NBAC TSC.

**PGB Expert Voting Member**- The NBAC TSC PGB Expert Voting Member is appointed by the NBAC TSC Chair/Co-Chairs with consent of the PGB. Nominees can be submitted by any individual. The NABAC TSC PGB Expert Voting Member serves a nominal 2-year renewable term.

The TSC appointed PGB Expert Voting Member may rotate between Co-Chairs on a periodic basis.

**PGB Expert Non-Voting Member (s)** – TSC Chair/Co-Chairs not assigned as PGB Expert Voting Members may attend the PGB as Non-Voting Member (s).

**NBAC TSC Maintainer (s)** – NBAC TSC Maintainers and alternates are recommended by the NBAC TSC Chair/Co-Chairs and appointed by the PGB.

**Responsibilities**

**NBAC TSC Chair/Co-Chairs** - The NBAC Chair/Co-Chairs are delegated the following responsibilities
- Appoint NBAC TSC PGB Expert Voting Member
• Appoint NBAC TSC PGB Expert Non-Voting Member(s)
• Nominate NBAC TSC Maintainer(s) For NBAC repositories
• Propose changes to the TSC governance document to the PGB
• Establish (or dissolve) Tiger Teams and Sub-Committees
• Approve NBAC TSC membership
• Conduct regular NBAC meetings, creating or approving the agenda and directing the business of the meeting, the Chair/Co-Chairs shall exercise their executive discretion in bringing items before the committee for a vote
• Ensure that meeting minutes, including lists of attendees, and any assignments, decisions, or votes taken are compiled, recorded, and sent to the NBAC TSC OASIS mailing list
• Post NBAC TSC, Sub-Committee, and Tiger Team Public Meetings to the NBAC TSC OASIS Subgroup Calendar
• Draft NIEMOpen Project Annual Report if required
• Develop an NBAC TSC annual Work Plan
• Track accomplishment of Work Plan and committee tasks
• Document TSC membership, maintaining a current mailing list
• Maintain a roster and mailing list of TSC voting members
• Onboard new Sub-Committees
• Enforce committee voting rules and ensure that voting members can cast a vote
• Supervise Sub-Committee participation in the model harmonization process
• Supervise Sub-Committee participation supporting new model version candidates.

Domain Space Sub-Committee- The Sub-Committee Chair/Co-Chairs shall

• Appoint Sub-Committee voting members (2 maximum). Voting members should be
  o Experienced with NIEMOpen
  o Familiar with harmonization and model cycle processes
  o Understand OASIS Open Project Lightweight Rules and NIEMOpen governance
• Maintain a data dictionary of common elements and their related code-lists
• Maintain a roster and mailing list
• Draft, publish, and maintain procedures for Sub-Committee governance and the processes related to Domain Space data model and code list management
• Participate in Domain Space content harmonization and reconciliation activities supporting the NIEM version publication cycle
• Provide support to the NBAC TSC including annual reporting of progress, plans, requirements, and achievements
• Provide support to the NIEMOpen Technical Architecture Committee (NTAC) TSC production of technical specifications, requirements, tools, and associated artifacts.
• Provide ongoing identification of data requirements based on data exchange modeling and development efforts
• Attend TSC meetings or provide a temporary proxy

Harmonization Sub-Committee- The Harmonization Sub-Committee Chair/Co-Chairs shall

• Appoint Sub-Committee voting members (2 maximum). Voting members should be
  o Experienced with NIEMOpen
  o Familiar with harmonization and model cycle processes
  o Understand OASIS Open Project Lightweight Rules and NIEMOpen governance
• Maintain a roster and mailing list
• Attend TSC meetings or provide a temporary proxy
• Participate in voting in a timely fashion
• Manage the harmonization process
• Approve membership and schedule meetings
• Provide updates to the NBAC TSC

Voting Members - Voting Members shall

• Attend TSC meetings or provide a temporary proxy
• Participate in voting in a timely fashion.

PGB Expert Voting Member– PGB Expert Voting Member shall

• Attend TSC and PGB meetings
• Participate in PGB voting in a timely fashion.

At Large Members – At large members shall

• Attend TSC meetings
• Serve on Tiger Teams and Sub-Committees
• Participate in harmonization and model cycle activities.
Decisions

For most decisions, the NBAC operates by lazy consensus. The NBAC may, at its own discretion, delegate authority on minor decisions to Maintainers in the community, NBAC Tiger Teams, Sub-Committees, or members

- NBAC TSC acceptance of Harmonization Process recommendations
- Endorsing NIEM award nominations for PGB approval
- Approving the NBAC Annual report
- Approving new Sub-Committees
- Approving minor version candidates for submission to PGB
- Approving major version candidates for submission to PGB
- Recommending work to the PGB for promotion to the standards track.

Decisions on the following items must be made based on a Simple Majority Vote

- Approving NBAC TSC Chair/Co-Chair nominations for submission to PGB
- Approving amendments to this document for PGB consideration and vote.

Instantiating a Sub-Committee

The NBAC TSC shall establish Standard Operating Procedures for instantiating new Sub-Committees.

As part of NIEMOpen operations, the need for new and unique content may become transparent. The NBAC TSC will explore potential candidate organizations for establishing Domain Space Sub-Committees.

As part of the NBAC TSC’s normal outreach to potential “new adopters of NIEM” an organization may identify a business need that lends itself to establishing a new Domain Space. The NBAC TSC will assist candidates in qualifying and establishing a Sub-Committee.

An organization may approach NIEMOpen and the NBAC TSC and self-identify an organizational business need and interest in becoming a new NIEM Domain Space Sub-Committee. The NBAC TSC will assist candidates in qualifying and establishing a Sub-Committee.

Conservatorship
As Sub-Committees mature, some may reach stasis where there is no requirement to create new model content or exchanges. Additionally, there may be circumstances where a Sub-Committee is suspended, terminated, or otherwise becomes dormant. If a Sub-Committee is inactive, or without a Chair, or dormant for an extended period (6-12 months or as determined by the NBAC TSC), the NBAC TSC may retire the Sub-Committee and act as conservator for the Sub-Committee’s Domain Space model content (Figure 4).

![Retiring a Domain Space Sub-Committee Diagram](image)

**Amendments**

This NBAC TSC governance document may be amended by a simple majority vote of the NBAC TSC and consent of the PGB. NBAC TSC meetings at which a proposed amendment to governance is considered must be scheduled at least one week in advance of the vote, and the Co-Chairs must make a good faith effort to inform the NBAC TSC membership of the meeting. Proposed amendments may be submitted to the Co-Chairs for consideration and vote. A simple majority of voting members is needed to forward amendments to the PGB.