Governance Framework Matrix Companion Guide

Version 1.0
19 October 2021

This publicly available guide was approved by the ToIP Steering Committee on 19 October 2021.

The mission of the Trust over IP (ToIP) Foundation is to define a complete architecture for Internet-scale digital trust that combines cryptographic assurance at the machine layer with human accountability at the business, legal, and social layers. Founded in May 2020 as a non-profit hosted by the Linux Foundation, the ToIP Foundation has over 300 organizational and 100 individual members from around the world.

Please see the end page for licensing information and how to get involved with the Trust Over IP Foundation.
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Acknowledgements
The ToIP Foundation and IEEE P2145 team members provided valuable feedback on the document.

Revision History

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RFC 2119

The Internet Engineering Task Force (IETF) is a large open international community of network designers, operators, vendors, and researchers concerned with the evolution of the Internet architecture and to ensure maximal efficiency in operation. IETF has been operating since the advent of the Internet using a Request for Comments (RFC) to convey “current best practice” to those organizations seeking its guidance for conformance purposes.

The IETF uses RFC 2119 to define keywords for use in RFC documents; these keywords are used to signify requirements of the specification. ToIP has adapted the IETF RFC 2119 for use in this guide, and therefore its applicable use in ToIP-compliant governance frameworks.

The RFC 21191 keyword definitions and interpretation have been adopted by users of this guide. Those who follow these guidelines SHOULD incorporate the following phrase near the beginning of their document:

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119.

RFC 2119 defines these keywords as follows:

- **MUST**: This word, or the terms "REQUIRED" or "SHALL", mean that the definition is an absolute requirement of the specification.
- **MUST NOT**: This phrase, or the phrase "SHALL NOT", means that the definition is an absolute prohibition of the specification.
- **SHOULD**: This word, or the adjective "RECOMMENDED", means that there MAY exist valid reasons in particular circumstances to ignore a particular item, but the full implications MUST be understood and carefully weighed before choosing a different course.
- **SHOULD NOT**: This phrase, or the phrase "NOT RECOMMENDED" means that there MAY exist valid reasons in particular circumstances when the particular behavior is acceptable or even useful, but the full implications SHOULD be understood, and the case carefully weighed before implementing any behavior described with this label.
- **MAY**: This word, or the adjective "OPTIONAL", means that an item is truly optional. One vendor MAY choose to include the item because a particular marketplace requires it or because the vendor feels that it enhances the product while another vendor MAY omit the same item.

Requirements include any combination of Machine-Testable Requirements and Human-Auditable Requirements. Unless otherwise stated, all Requirements MUST be expressed as defined in RFC 2119.

- **Mandates** are Requirements that use a MUST, MUST NOT, SHALL, SHALL NOT or REQUIRED keyword.
- **Recommendations** are Requirements that use a SHOULD, SHOULD NOT, or RECOMMENDED keyword.

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• **Options** are Requirements that use a MAY or OPTIONAL keyword.

An implementation which does not include a particular option MUST be prepared to interoperate with other implementations which include the option, recognizing the potential for reduced functionality. As well, implementations which include a particular option MUST be prepared to interoperate with implementations which do not include the option and the subsequent lack of function the feature provides.
Background

The Trust over IP Foundation (ToIP), by defining a complete architecture for Internet-scale digital trust, seeks to enable trusted ecosystems comprised of individuals and organizations - to leverage collective intelligence and expertise, enable innovative business opportunities, and innovative solutions to societal challenges related to our environment, health, productivity, and resource allocation. To succeed, emerging ecosystems require governance authorities and a robust governance framework to identify and mitigate risks with the potential to harm individuals, the organizations, and the overall well-being of the network.

Digital trust ecosystems, defined by common goals and principles are emerging across multiple domains (e.g., government, human health, research institutions and social impact initiatives) and will continue to emerge -- encompassing a plethora of business sectors and knowledge disciplines. Due to the dynamic nature of digital transactions and inter-related objectives of organizations and individuals -- one can envision an ecosystem of ecosystems. The complexity of governing the growing landscape of digital trust ecosystems, will require a strong yet adaptable approach to governance models -- a metamodel; specifically, the ToIP Governance Metamodel.

The ToIP Governance Metamodel is an integral component of the ToIP Governance Architecture; specifically, the ToIP Standard Specification (TSS) which specifies the standard requirements applicable to all ToIP-compatible governance frameworks (GF). The TSS applies to all four layers of the ToIP Governance Stack, complementing all four layers of the ToIP Technology Stack which together comprise the ToIP Stack (Figure 1). The ToIP Governance Stack consists of multi-layered coordinated groups of parties working together to fulfill the requirements, purpose and objectives of a governance framework, designed to define and achieve interoperable trust.

![Figure 1 The Trust Over IP Stack](image-url)
The ToIP Governance Metamodel specification provides an overall template for ToIP-compatible governance frameworks from which the Governance Stack Working Group (GSWG) will develop layer-specific templates. The **ToIP Governance Metamodel Companion Guide (GMCG)**, provides guidance for ToIP-Compliant Governance Framework development and provides the ToIP Governance Stack Working Group (GSWG) the foundational body of work required to develop layer-specific templates. For example, each layer-specific template will be an instance of the metamodel that describes:

- Standard ToIP roles at that layer;
- Standard ToIP processes in which actors in those roles are engaged;
- Recommended requirements for those processes;
- Standard risks against which a risk assessment SHOULD be performed; and
- Standard elements of a trust assurance framework to address those risks.

## Introduction

The Governance Meta Model specification describes “what” should be included in the Governance Framework. However, it does not provide practical guidance on “how” to create and operate a ToIP system Governance.

The **ToIP Governance Framework Matrix (GFM)** is a practical tool to address this gap, and help with creation and operationalization of ToIP system Governance. Creating a ToIP system Governance needs to consider different aspects/areas of the system that need to be governed.

- **Structural / Product Governance**
  The Trust over IP stack in Fig. 1 above shows the structural view of a ToIP system, identifying the technology stack along with corresponding Governance stack. The Governance at each layer is critical to ensure that the layer will function as expected, however, it is not sufficient for overall ToIP system Governance.
  The ToIP system governance needs to work across the ToIP stack layers to meet identified business objectives and deliver business value for the ToIP system. It also needs to address cross-cutting concerns such as security and privacy across all layers.

- **Process / Lifecycle Governance**
  Additionally, the ToIP Governance stack describes the Governance for a final, operational ToIP system. It does not describe the Governance for the process to build such a system. We need Governance for the lifecycle of a ToIP system, starting from the vision, strategy/design, development, implementation and enhancements of the ToIP system.

By isolating the aspects/areas of the system that need to be governed from the governance process and mechanics, the GFM provides clarity and flexibility to Governance definition. It can be adopted to define governance for each layer, or to define ToIP system governance across the layers, or to define the lifecycle governance for the system.
Purpose

The purpose of this document, the ToIP Governance Framework Matrix Companion Guide (GFMCG), is to provide guidance for using the GFM to develop and operationalize ToIP-Compliant Governance Framework.

The Governance Framework Matrix (GFM) is a spreadsheet with a tabular structure. The first column of the table includes the Governance Considerations, while the columns on the right identify the Objects of Governance.

The GFM includes detailed questions for each of the Governance Considerations. The user of the GFM answers these questions for each column on the right, to develop the complete Governance Framework Definition for the Objects of Governance.

This document is to be used in conjunction with the ToIP Governance Metamodel Specification, ToIP Governance Metamodel Companion Guide, and the Governance Framework Matrix.
1. Governance Considerations

Developing effective Governance involves addressing three main areas:

1. Objects of Governance – relates to what is being governed?
2. Tactics / Mechanics of Governance – relates to the structure and processes of governance
3. Incentives for Governance – relates to incentives and influence on decision makers, community members, decision-making process and adoption of the decisions by the community members in various roles.

These three areas are interconnected and work together to achieve effective governance. In any governance model, there needs to be incentives for participants to initiate action or comply with the governance requirements. These incentives need to be baked into the design of the governance model. For example, the design for the participating stakeholders will depend on the structure of governance (centralized vs. decentralized), or, on the other hand, the design may lead to a certain form of governance.

The Governance Framework Matrix includes sections for each of these areas, along with related questions.

Each of these areas is further elaborated below.

1. Objects of Governance – What is the Governance for?
   Merriam-Webster dictionary defines Governance as “the act or process of governing or overseeing the control and direction of something”. The purpose of Governance, thus depends on what that “something” is, and what governing that “something” means.
The Object of Governance (OOG) is that “something”, that system (the word system being used in a broader sense here), which needs to be governed. It may be an organization, a technical system, or a business ecosystem.

Clearly identifying the Object(s) of Governance, separately from the Governance itself, enables us to ensure that the Governance design is aligned with and supports the purpose and objectives of the system being governed.

For the Object of Governance, we propose that following areas be addressed:

a. Scope of Object of Governance
b. Purpose / Objectives of Object of Governance
c. Requirements for Object of Governance

d. The Governance framework, to govern the identified Object of Governance, will have to define the following, as discussed in the Governance Metamodel:

d. Scope of Governance
e. Purpose / Objectives of Governance
f. Requirements for Governance
g. Principles of Governance

2. **Tactics / mechanics of Governance** - What is the structure and processes for Governance? This includes addressing questions under following categories:

a. **People** (Governance Structure) - who is involved in the process of governance, who are affected by governance, what are the roles and responsibilities of those involved?
b. **Process** (Governance Processes) - what are the processes for managing the community membership, governance decision making, and/or managing the communication and coordination among parties? What other processes need to be defined?
c. **Policy** (Governance Decisions / Deliverables) – what are the governance deliverables? How are they published and communicated?
d. **Practice** (Governance execution) – How are the governance decisions/policies practiced? How is execution/compliance achieved?
3. **Incentives for Governance** - What are the incentives / dis-incentives for parties involved? How are the decisions influenced?

In order to create an effective Governance, it is important to design the incentives scheme that will deliver the expected outcomes, by promoting desired behaviours. The incentives could be legal, financial or social. For example, in some cases, the incentive could be simply to abide by the law, or in other cases, the compliance is achieved because it leads to financial benefits to organizations involved. This may include considerations for one or more of the following:

a. Incentives for decision makers to make fair decisions (aligned with the overall objectives)
b. Incentives for the community members (in various roles) to participate in the decision-making process
c. Influence on decision makers and decision-making process
d. Ensuring legitimacy of the decisions by ensuring legitimacy of parties involved and legitimacy of the process followed
e. Incentives for community to adopt and follow the decisions

2. **Using the Governance Framework Matrix**

Using the GFM is a simple two set process:

1. Identify the Objects of Governance (and add those as columns in the spreadsheet)
2. Define Governance for each OOG (answer governance questions and add those in the OOG column)
1.1 Identify the Objects of Governance

As the first step to creating a Governance Framework, we need to identify what needs to be governed, the Objects of Governance. This identification of OOG will depend on the context of use. For example, Governance may be needed for an organization, a technology solution or ecosystem. In some cases though, Governance may also be needed at lower, more granular levels such as for organizational divisions, phases of development for technology systems, or hierarchical ecosystem of ecosystem governance model.

The granularity of objects of governance and corresponding governance frameworks depends on the level at which direction and control is needed for the OOG to meet its objectives including the level at which policies need to be defined or decisions need to be made. Some of the considerations to determine the granularity of OOG include:

- **Scope** – Review the scope of the system to determine if Governance at the highest level is sufficient to achieve the business objectives for objects of governance. If not, consider dividing the objects of governance to more manageable scope and define Governance for that scope.

- **Parties involved** – Review the parties (communities, stakeholders) involved in the Governance of identified objects of governance. If different parties are responsible for different subsystems or different aspects, consider defining Governance for those subsystems or areas separately to ensure effective alignment of parties towards a common objective. For example, Governance for a system may be divided into business governance and technology governance to address key concerns of the parties involved, providing direction and control for each group.

- **Business Objectives and Motivations** – Consider the business objectives and motivations for parties involved, which may lead to different governance structure, incentives and processes.

- **Rules / Regulations involved** – Review if the Governance of the OOG falls across multiple jurisdictions or rules. If so, location specific, hierarchical governance may be needed.

Once the Objects of Governance are identified at the level of granularity that works, one or more columns could be added in the GFM for each OOG. Thus, the right side could have one or more columns depending on the granularity of Objects of Governance.

1.2 Define Governance for the Objects of Governance

Once the Objects of Governance are identified and corresponding columns are added to the GFM, the next steps are straightforward.

The GFM includes detailed questions for each of the Governance Considerations. Simply answer these questions for each column on the right, to develop the complete Governance Framework Definition for the Objects of Governance.

The key areas in the GFM with associated questions are shown below.
1.2.1 Objects of Governance

<table>
<thead>
<tr>
<th>Governance Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance considerations and questions that need to be answered while creating governance for the system to be governed / object(s) of governance.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Objects of Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Object of Governance (system being governed)</strong></td>
</tr>
<tr>
<td>What is governed? What is the Governance for?</td>
</tr>
</tbody>
</table>

| Scope |
| Scope of the system to be governed |

| Purpose / Objectives |
| The purpose / objectives for the system being governed |

| Requirements |
| Requirements for the system to meet identified objectives? |

<table>
<thead>
<tr>
<th>Governance Requirements to govern the object of governance (Requirements)</th>
</tr>
</thead>
</table>

| Scope |
| Scope of Governance (will depend on the scope of the object of governance) |

| Purpose of Governance |
| Overall purpose (mission) of the Governance for the object of governance |

| Objectives of Governance |
| High-level outcomes desired by Community through its adoption of the Governance |

| Requirements for Governance |
| Any specific Governance requirements to ensure that the object of governance can meet its desired objectives |

| Principles of Governance |
| Guiding values and principles for Governance aligned with overall objectives of the object of governance |

| Governance Deliverables |
| What will be the outcome of Governance definition? What documents / policies will be created? |
1.2.2 Tactics / Mechanics of Governance

<table>
<thead>
<tr>
<th>Tactics of Governance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Governance Structure (People)</strong></td>
<td></td>
</tr>
<tr>
<td>Members</td>
<td></td>
</tr>
<tr>
<td>Identity</td>
<td></td>
</tr>
<tr>
<td>How is member identity managed?</td>
<td></td>
</tr>
<tr>
<td>Roles / Responsibilities</td>
<td></td>
</tr>
<tr>
<td>What are member roles and responsibilities (RACI), including the members of Governing Authority or Administering Authority?</td>
<td></td>
</tr>
<tr>
<td>Organization</td>
<td></td>
</tr>
<tr>
<td>How are the members organized? Are there any formal / informal communities (e.g., Working groups, committees)?</td>
<td></td>
</tr>
<tr>
<td>Governing Authority (Decision / rule making body)</td>
<td></td>
</tr>
<tr>
<td><strong>Governance Process (Process)</strong></td>
<td></td>
</tr>
<tr>
<td>Membership management processes</td>
<td></td>
</tr>
<tr>
<td>Public / Private / Permissioned membership</td>
<td></td>
</tr>
<tr>
<td>The membership may be open and public, or private, permissioned. What is the supported membership type for this GF?</td>
<td></td>
</tr>
<tr>
<td>Governance Decision making processes</td>
<td></td>
</tr>
<tr>
<td>Voting rights</td>
<td></td>
</tr>
<tr>
<td>What is the process of decision making (including decisions for memberships, scope, objectives, deliverables, and any other unanticipated decisions)?</td>
<td></td>
</tr>
<tr>
<td>Voting / consensus mechanism</td>
<td></td>
</tr>
<tr>
<td>How is consensus achieved? What are the voting rules? What is the voting process? Are the members signaled of a voting event?</td>
<td></td>
</tr>
<tr>
<td>Voting method (Direct / Indirect / Delegated)</td>
<td></td>
</tr>
<tr>
<td>Direct voting (each member casting one vote) or indirect voting (representative) used?</td>
<td></td>
</tr>
<tr>
<td>Change Management processes</td>
<td></td>
</tr>
<tr>
<td>Processes related to how the decisions made may be updated. For example, once the technology strategy is decided, how will it be updated, if needed</td>
<td></td>
</tr>
<tr>
<td>Risks and Issue Management processes</td>
<td></td>
</tr>
<tr>
<td>How will risks and issues be managed? What are anticipated risks and issues? What happens when an unexpected situation arises?</td>
<td></td>
</tr>
<tr>
<td>Communication / Coordination processes</td>
<td></td>
</tr>
<tr>
<td>How members communicate / coordinate? What tools/processes they use? How is community engagement managed, so that the Governing decisions are aware of the member community concerns?</td>
<td></td>
</tr>
</tbody>
</table>
2. Using GFM for a ToIP system Governance

The Governance for a ToIP system needs to be addressed both structural and process perspectives. The structural perspective defines the structure of the ToIP system (the end product) and governance needed for structural layers. The process perspective defines the system development lifecycle to create the ToIP system (process to create the end product). As such, the two perspectives provide different Objects of Governance.

- **Structural (Product) Governance** (refers to the structure / architecture of ToIP system, the end product)
  The Trust over IP stack shows the structural view of a ToIP system. The ToIP Governance stack addresses Governance for each of the four layers of Technology stack, and thus defines the structural Governance for a ToIP system.
  
  This view does not cover the Governance of cross-cutting concerns such as security and privacy that run across all layers. Other cross-cutting considerations include business objectives and business value for a ToIP system.

  Governance of a ToIP system needs to address not only governance for each layer, but also Governance of the entire ToIP system across layers. This is critical to ensure that the entire stack can work together to meet business objectives, and are aligned in Governance principles.

- **Process (Lifecycle) Governance** (refers to the process of creating and operating a ToIP system, process to create the end product)
  
  While the structural governance in the ToIP stack describes the Governance for a ToIP system in operation, it does not address the Governance needed to get to that point.

  Process Governance focuses on the lifecycle of a ToIP system, starting from the vision, strategy/design, development, implementation and enhancements of the system. Each of
these phases may involve working across the ToIP stack layers to meet the envisioned business objectives.

The entire system development life cycle may be governed by a single framework, or each phase of the lifecycle may be governed by different Governance Frameworks, depending on factors such as parties involved, business objectives, incentives etc.

Thus, Governance framework for a ToIP system may include:

- Governance for the entire ToIP system across all layers (single Governance Authority)
- Governance for each layer of the ToIP Stack
  - Technology Governance:
    - For overall ToIP system across all layers
    - For each of the layers in ToIP technology stack *
  - Business Governance
    - For overall ToIP system across all layers
    - For each of the layers in ToIP technology stack *
- Governance for ToIP System Development Life Cycle
  - Governance for creation of a ToIP system through different phases of development lifecycle such as envision (strategize and plan), execute (build and operate), and enhance (maintain and optimize)
  - When using this view, the system needs to consider other aspects including business, technology, user experience etc.

* Note that each layer of the ToIP stack may have its own independent presence with its specific business objectives. For example, Sovrin has its own objectives, business model, a community, technology stack and governance model. Same is true for Hyperledger Aries and other projects. The focus of the ToIP Governance is in the context of the entire ToIP solution across all stacks, rather than Governance of each layer. However, the ToIP Governance design must be aware of the Governance considerations at each layer, to ensure that it aligns with the overall objectives and principle of the ToIP solution.

Based on the above, the GFM could use one or more columns on the right side for a ToIP system Governance corresponding to the identified Objects of Governance:

- Governance for the entire ToIP system across all layers
  - OOG: ToIP system Governance across layers
  - # of columns: 1 column
- Governance for each layer of the ToIP Stack
  - OOG: Four layers of the ToIP stack
  - # of columns: 4 columns for each layer
- Governance for system development life cycle of a ToIP system
  - OOG: System Development Life Cycle for a ToIP system (under single Governing Framework)
- # of columns: 1 column
- Governance for each phase of system development lifecycle
- OOG: Different phases of System Development Life Cycle (governed by different Governance Frameworks) such as Envision, Execute and Enhance
- # of columns: 3 columns, one each for Envision, Execute and Enhance phases

See below an example for use of GFM for ToIP stack and for ToIP system development life cycle.

2.1 GFM for ToIP stack layers

The picture below shows the use of the Governance Framework Matrix for the layers of the ToIP stack as each column, which means that Governance Framework needs to be defined for each of these layers. The Governance metamodel companion guide identifies the roles and processes for each of the layers, along with other elements. The structure below serves as a guide to ensure all aspects of the Governance Framework are covered for each layer.

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<tr>
<th>Governance Framework (GF)</th>
<th>Governance for the ToIP Stack Layers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Layer 4 - Ecosystem</td>
</tr>
<tr>
<td></td>
<td>Layer 3 - Credential</td>
</tr>
<tr>
<td></td>
<td>Layer 2 - Provider</td>
</tr>
<tr>
<td></td>
<td>Layer 1 - Utility</td>
</tr>
</tbody>
</table>

### Objects of Governance

**Object of Governance (system being governed)**

What is governed? What is the Governance for?

- **Scope**
  - Purpose / Objectives
    - The purpose / objectives for the system being governed
  - Requirements
    - Requirements for the system to meet identified objectives

**Governance Requirements to govern the object of**

- **Purpose**
  - Scope of Governance (will depend on the scope of the object of governance)
  - Purpose of Governance
    - Overall purpose (mission) of the Governance for the object of governance
  - Objectives of Governance
    - High-level outcomes desired by Community through its adoption of the Governance
  - Requirements for Governance
    - Any specific Governance requirements to ensure that the object of governance can meet its desired objectives
- **Principles of Governance**
- **Governance Deliverables**
  - Will be the outcome of Governance definition? What documents /

### Tactis of Governance

**Governance Structure (People)**

- **Members**
  - Who is the Governance for? Who are the members of a community/system
  - Identity
    - How is member identity managed?
  - Roles / Responsibilities
    - What are member roles and responsibilities (R&O), including the members of Governing Authority or Administering Authority?
  - Organization
    - How are the members organized? Are there any formal / informal communities (e.g., Working groups, committees)?
  - Governing Authority (Decision / rule making body)

**Governance Process (Process)**

- Membership management processes
  - What is the process for membership management in various groups
  - Including different member communities, Governing Authorities, etc. (These decisions may not be made by each group.)
  - Public / Private / Permitted membership
    - The membership may be open and public, or private, permitted.

2.2 GFM for system development life cycle

Alternatively, the picture below shows the use of Governance Framework Matrix for a ToIP system development lifecycle, starting from the vision, execution and enhancement of such a system, with the governance considerations on the left side (down) and the phases of development lifecycle on the right side (across). These phases as Objects of Governance may need to consider the following:
### Governance Framework Matrix (GFM) Companion Guide

<table>
<thead>
<tr>
<th>Governance Dimensions</th>
<th>Governance Framework (GF)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition:</strong> Governance is about decision making for direction and control</td>
<td>Governance for the ToIP System Development Lifecycle.</td>
</tr>
<tr>
<td><strong>Governance Considerations</strong></td>
<td>Envision ToIP system</td>
</tr>
<tr>
<td>Execute (develop and operate) ToIP System</td>
<td>Enhance ToIP System</td>
</tr>
</tbody>
</table>

### Objects of Governance

**Object of Governance (system being governed)**

What is governed? What is the Governance for?

- **Scope**
  - The purpose / objectives for the system being governed

- **Requirements**
  - Requirements for the system to meet identified objectives

**Governance Requirements to govern the object of**

- **Scope**
  - Scope of Governance (will depend on the scope of the object of governance)

- **Purpose of Governance**
  - Overall purpose (mission) of the Governance for the object of governance

- **Objectives of Governance**
  - High-level outcomes desired by Community through its adoption of the Governance

- **Requirements for Governance**
  - Any specific Governance requirements to ensure that the object of governance can meet its desired objectives

- **Principles of Governance**
  - Governance Deliverables

- **What will be the outcome of Governance definition? What documents?**

### Tactics of Governance

**Governance Structure (People)**

- **Members**
  - Who is the Governance for? Who are the members of a community/system?
  - Identity
  - How is member identity managed?

- **Roles / Responsibilities**
  -What are member roles and responsibilities (RACI), including the members of Governing Authority or Administering Authority?

- **Organization**
  - How are the members organized? Are there any formal / informal communities (e.g., Working groups, committees)?

- **Governing Authority (Decision / rule making bodies)**

**Governance Process (Process)**

- **Membership management processes**
  - What is the process for membership management in various groups including different member communities, Governing Authority, Administering Authority etc.? These decisions may be made by each group.
  - Public / Private / Permissionsed membership
  - The membership may be open and public, or private, permissioned. What is the supported membership type for this GF?

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**Concluding Summary**

The ToIP Governance Framework Matrix (GFM) provides a practical tool to create and operationalize Governance for a ToIP system. Creating Governance for such a system requires taking a holistic view, looking at Governance from structural and process perspectives. GFM enables addressing these different perspectives by identifying the objects of governance, and defining governance for these objects of governance.

The GFM Companion Guide elaborates on the content of the GFM and provides information on how to use the GFM. It also provides examples of GFM use in various scenarios.

Together, these tools will assist the user in defining Governance for their own systems under consideration.
Appendix

GFM use for ToIP Governance Framework Meta Model Specifications

The GFM closely maps to the ToIP Governance Framework Meta Model specifications as shown in the diagram below in the column “Mapping to the ToIP Governance Meta Model Specifications”.

The GFM is also a versatile tool that can be used in different scenarios, including using the GFM for the ToIP Governance Meta Model Specifications. The picture below and the spreadsheet demonstrate this as an example.

<table>
<thead>
<tr>
<th>Governance Dimensions</th>
<th>Governance Framework (GF)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objects of Governance</strong></td>
<td>Governance for the ToIP Governance Metamodel Specifications</td>
</tr>
<tr>
<td>Object of Governance (system being governed)</td>
<td>Examples: Governance for ToIP Governance Metamodel Specifications</td>
</tr>
<tr>
<td>Scope</td>
<td>ToIP Governance Framework</td>
</tr>
<tr>
<td>Purpose / Objectives</td>
<td>Governance Meta Model Specifications</td>
</tr>
<tr>
<td>Requirements</td>
<td>Provide a template to be used by trust communities for creating a comprehensive</td>
</tr>
<tr>
<td><strong>Governance Requirements to govern the object of</strong></td>
<td>The template needs to enable interoperability, promote ease of use and be extensible</td>
</tr>
<tr>
<td>Scope</td>
<td>Governance Meta Model Specifications, other elements of the Governance Framework will not be included here</td>
</tr>
<tr>
<td>Purpose of Governance</td>
<td>ToIP Meta Model purpose</td>
</tr>
<tr>
<td>Overall purpose (mission) of the Governance for the object of governance</td>
<td>Ensure that the Governance Meta model has buy-in from the community, to provide core of</td>
</tr>
<tr>
<td>Objectives of Governance</td>
<td>ToIP Meta Model objectives</td>
</tr>
<tr>
<td>High-level outcomes desired by Community through its adoption of the Governance</td>
<td>The Governance meta model is adopted by the community to build trust, in alignment with the charter of the ToIP foundation</td>
</tr>
<tr>
<td>Requirements for Governance</td>
<td>ToIP Meta Model - various requirements categories (covered under controlled documents)</td>
</tr>
<tr>
<td>Any specific Governance requirements to ensure that the object of governance can meet its desired objectives</td>
<td>ToIP Meta Model principles</td>
</tr>
<tr>
<td>Principles of Governance</td>
<td>Open, collaborative, flexible, extensible</td>
</tr>
<tr>
<td>Guiding values and principles for Governance aligned with overall objectives of the object of governance</td>
<td>ToIP Meta Model controlled documents as deliverables</td>
</tr>
<tr>
<td>Governance Deliverables</td>
<td>Governance Meta Model Specifications document, Companion guide</td>
</tr>
<tr>
<td>What will be the outcome of Governance definition? What documents / policies will be created?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tactics of Governance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance Structure (People)</td>
<td>ToIP GFWG</td>
</tr>
<tr>
<td>Members</td>
<td></td>
</tr>
<tr>
<td>Who is the Governance for? Who are the members (of a identity)</td>
<td>ToIP Meta Model scope, Companion Guide - Appendix A1</td>
</tr>
<tr>
<td></td>
<td>Governance for members - contributors, observers, decision makers, implementers? Identity management for Linux / ToIP</td>
</tr>
</tbody>
</table>
The Trust Over IP Foundation (ToIP) is hosted by the Linux Foundation under its Joint Development Foundation legal structure. We produce a wide range of tools and deliverables organized into five categories:

- Specifications to be implemented in code
- Recommendations to be followed in practice
- Guides to be executed in operation
- White Papers to assist in decision making
- Glossaries to be incorporated in other documents

ToIP is a membership organization with three classes—Contributor, General, and Steering.

The work of the Foundation all takes place in Working Groups, within which there are Task Forces self-organized around specific interests. All ToIP members regardless of membership class may participate in all ToIP Working Groups and Task Forces.

When you join ToIP, you are joining a community of individuals and organizations committed to solving the toughest technical and human centric problems of digital trust. Your involvement will shape the future of how trust is managed across the Internet, in commerce, and throughout our digital lives. The benefits of joining our collaborative community are that together we can tackle issues that no single organization, governmental jurisdiction, or project ecosystem can solve by themselves. The results are lower costs for security, privacy, and compliance; dramatically improved customer experience, accelerated digital transformation, and simplified cross-system integration.

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