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THE LEADING PRACTICE

GOVERNANCE & COMPLIANCE REFERENCE CONTENT

#LEAD-ES20012BC

A Governance & Compliance Description, Views, Stakeholders and Concerns

Version Status: LEAD 3.0

Contents

Overview of the Governance & Compliance Reference Content

Introduction

The LEADing Practice Governance & Compliance Reference Content provides Governance & Compliance ontology with its Governance & Compliance description, specific Governance & Compliance semantic relations and correlations. It is based on a collection of best and leading practice around how to work with Governance & Compliance within enterprise modelling, enterprise engineering and enterprise architecture disciplines. The Governance & Compliance Reference Content is therefore and essential part for any practitioner working with and around Governance & Compliance aspects. It provides a structural way of thinking, working, modelling, implementation and governance around Governance & Compliance definitions and how Governance & Compliance is applied within business-, application- and technology areas. The Governance & Compliance Reference Content also provides an overview of the key Governance & Compliance aspects of the organisation and how they relate to the various business aspects e.g. rule, measurement & reporting, and owner. The Governance & Compliance Reference Content therefore provides a way of analysing, appraising, approximating, assessing and capturing Governance & Compliance related objects to enable innovation and transformation.

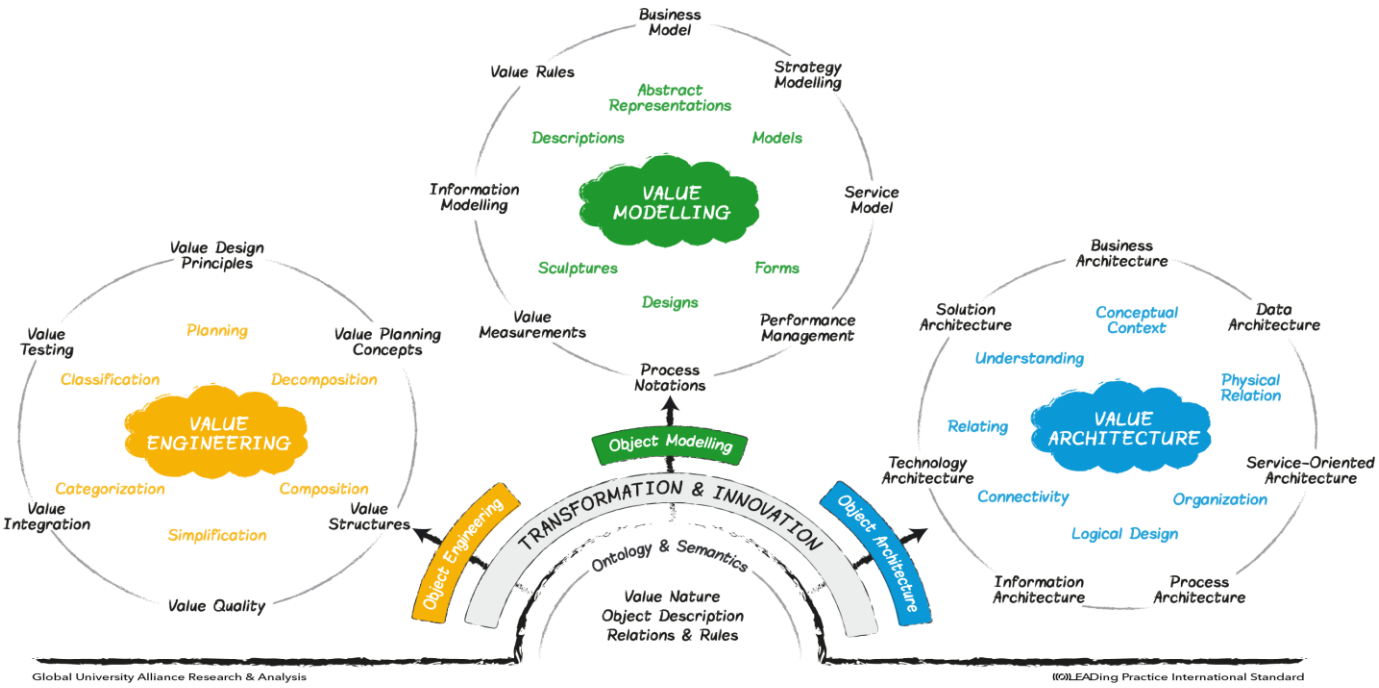

Figure 1: The Governance & Compliance Objects are part of the many semantic relations between the enterprise engineering, enterprise modelling, and enterprise architecture enabling transformation and innovation.

Why to use the Governance & Compliance Reference Content?

- It provides Governance & Compliance ontology with its specific Governance & Compliance descriptions, semantic relations and correlations.
- The purpose of the Governance & Compliance Reference Content is to define how to organize and structure the viewpoints and objects associated with Governance & Compliance development and Governance & Compliance management.
- The Governance & Compliance Reference Content serves as guiding principles to establish a common practice for creating, interpreting, analysing and using Governance & Compliance objects within a particular domain and/or layers of an enterprise or an organization.
- Using the Governance & Compliance Reference Content is done through a set of principles e.g. how and where can the Governance & Compliance objects be related (and where not).
- The Governance & Compliance Reference Content is vendor neutral and agnostic and can therefore be used with most existing frameworks, methods and or approaches that have any of the meta-objects mentioned in this document.
- It has a structured repeatable pattern for Governance & Compliance related objects, structures as well as artefacts (the basis of our standards). The definition of a pattern used here is the description of the repeatable and mostly used/generic specifications and relations of a topic, not all theoretically possible specifications or relations.
- Use a Governance & Compliance Standards that increase the level of re-usability and replication.
- It has a fully integrated and standardized Governance & Compliance maps, matrices and models that allow for advanced ways of thinking, working, modelling, implementation and governance of the strategies.

Governance & Compliance related Meta-Object Ontology and Main Characteristics

Using ontology principles to understand the very nature, the basic categories, as well as using semantic principles to identify which parts relate or should relate, exposed sixteen areas that together provide a starting point that can be used to guide the analysis, decomposition, composition and construction of a Governance & Compliance description. The Sixteen main areas are presented in figure 2.

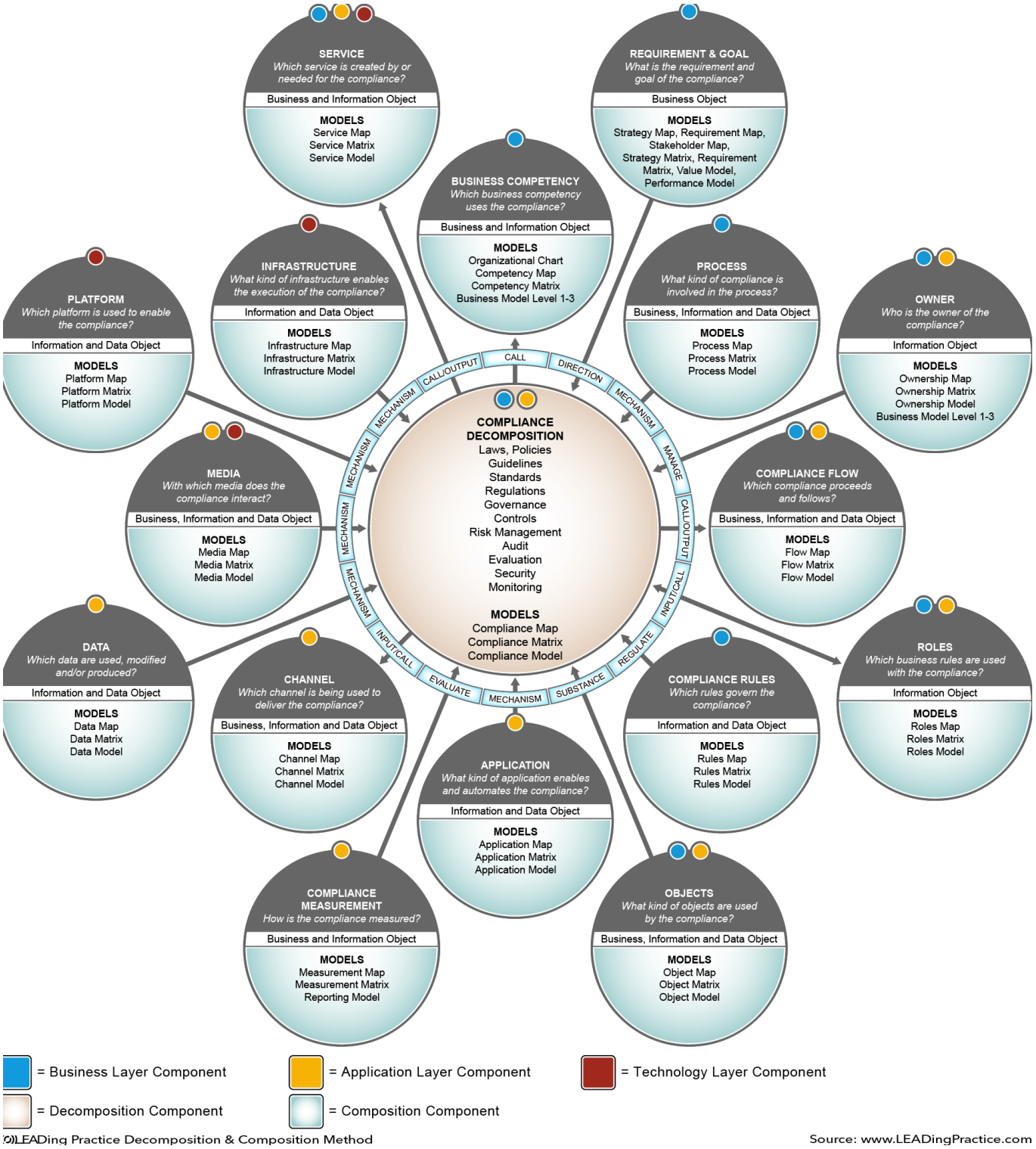

Figure 2: The 16 LEAD Governance & Compliance Decomposition and Composition objects

In order to have a structured way of thinking, working and modelling within the Governance & Compliance Reference Content, the three main properties characterizing the meta-object relevant to modelling and architecture principles are applied:

1) **Identity:** the decomposed Governance & Compliance objects that distinguishes it from other object areas.
2) **State:** describes the purpose of the composed object.
3) **Behaviour:** describes how the decomposed or composed objects can be used with other meta-object's relations across other modelling disciplines and architectural layers.

Governance & Compliance Object(s) – Governance & Compliance Definition

Governance & Compliance is the process of adhering to and verifying adherence to policies and decisions. Policies can be derived from internal directives, procedures and requirements, or from external laws, regulations, standards and agreements. The following Governance & Compliance types are used within the LEAD templates in the form of meta-objects: business Governance & Compliance, application Governance & Compliance, data Governance & Compliance, platform Governance & Compliance and infrastructure Governance & Compliance.

Other Governance & Compliance related definitions are the following.

Commercial Governance & Compliance: Commercial Governance & Compliance that a business must adhere to in the course of doing business with trading partners and customers (Source: LEAD).

Organisational Governance & Compliance: Companies creating their own internal Governance & Compliance demands. This type of Governance & Compliance is driven by needs ranging from preserving shareholder equity to embracing stakeholder identity (Source: LEAD).

Regulatory Governance & Compliance: Regulatory Governance & Compliance is concerned with laws that a business must obey, or risk legal sanctions, up to and including prison for its officers (Source: LEAD).

Governance & Compliance Object(s) – Decomposition

Governance & Compliance can be **decomposed** into the following Objects (also shown in Figure 3):

- Laws, Policies, Guidelines
- Standards
- Regulations
- Governance
- Controls
- Risk Management
- Audit
- Evaluation
- Security
- Monitoring
- Rule

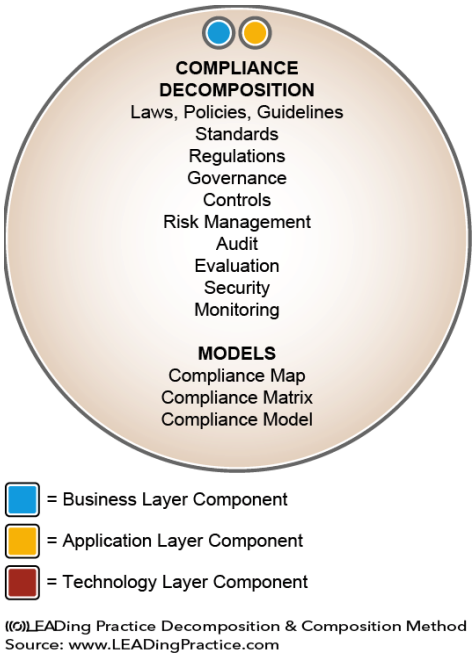

Figure 3: Components of an Initial Governance & Compliance Decomposition

Governance & Compliance Object(s) – Overview All Governance & Compliance related LEAD Objects

The following (decomposition and composition related) LEAD objects are the most relevant to Governance & Compliance aspects within the Governance & Compliance Reference Content and its templates:

Business Governance & Compliance	The process or tools for verifying adherence to rules and decisions.
Application Governance & Compliance	Behaviour or ability within an application whereby it can certify the integrity of its behaviour.
Data Governance & Compliance (incl. Security)	The means of adhering to and verifying adherence to policies and decisions about the data.
Platform Governance & Compliance (incl. Security)	The means of adhering to and verifying adherence to policies and decisions about the platform.
Infrastructure Governance & Compliance (incl. Security)	The means of adhering to and verifying adherence to policies and decisions about the infrastructure.
Business (Governance & Compliance) Rule	A statement that defines or constrains some aspect of behaviour within the business and always resolves to either true or false.

Application (Governance & Compliance) Rule	A business rule implemented within and able to be executed by an application..
Data (Governance & Compliance) Rule	Criteria used in the process of determining or verifying values of data or generalizes certain features of data.
Platform (Governance & Compliance) Rule	Criteria used in the process of determining the behaviour of the platform.
Infrastructure (Governance & Compliance) Rule	Criteria used in the process of determining the behaviour of the infrastructure.
	Decomposition related meta-objects->
Risk	The combined impact of any condition or events, including those cause by uncertainty, change, hazards, or other factors that can affect the potential for achieving these objectives).
Security	The objects or tools that secure, make safe and to protect through measures which prevent exposure to danger or risk.
Timing	A period or interval of time, as an instant in time or the elapsed time between two successive points of measurement. The system of those sequential relations that any event has to any other, as past, present, or future.
Quality	A state of excellence or worth, specifying the essential and distinguishing individual nature and the attributes based on the intended use.
Location	A facility, place, or geographic position.
Contract	An agreement between two or more parties that establishes conditions for interaction.
Product	A result and output generated by the business. It has a combination of tangible and intangible attributes (features, functions, usage).
Application Service	An externally visible unit of functionality, provided by one or more components, exposed through well-defined interfaces, and meaningful to the environment.
System Measurements	Measures that are defined and implementable within an application.
Application/System Reports	Reports that are defined and implementable or implemented within or by an application.
Application Owner	A role performed by an actor with the rights, rules, competencies and capabilities to take decisions for the application for which accountability has been assigned.

Figure 4: The 21 Governance & Compliance meta-objects.

Governance & Compliance Object(s) – Usage in the Governance & Compliance Templates

The Governance & Compliance Reference Content templates consist of both Governance & Compliance maps, Governance & Compliance matrices and Governance & Compliance models that capture the relevant Governance & Compliance meta-objects. Each of these is based on a specific view, with particular stakeholder concern to enable value identification, creation, and realization in achieving the outlined needs and wants. For this the Governance & Compliance Reference Content templates identify the relevant stakeholders, their requirements and concerns. Governance & Compliance object descriptions and their modelling and architecture rational, the corresponding rules, architecture views and viewpoints; each of these artefacts are built as templates to support a particular need and want.

Fully integrated and standardized Governance & Compliance templates enables the strategist, subject matter experts/practitioner or architect (value or business architect) to work with the relevant Governance & Compliance meta-objects throughout all the architectural layers (business, Governance & Compliance and technology). Advanced Governance & Compliance modelling and relating the relevant objects throughout the layers is one of the strengths of the Governance & Compliance Reference Content. Not only are the objects governed by its connection modelling rules, but also how and where the Governance & Compliance templates interlink and share common objects is defined and standardized. The Governance & Compliance templates are ether maps, matrices and models.

	LEAD Templates & LEAD Meta Object Relations: Compliance Specific (*)	Compliance (C)
compliance meta-objects	Timing	2
	Quality	2
	Risk	1,2,3
	Security	1,2,3
	Location	1.2
	Contract	2
	Product	2
	Business Rules	1.2
	Business Compliance	1.2
	Service Rules	1.2
	Process Rules	1.2
	Application Service	2
	System Measurements	2.3
	Application/System Reports	2.3
	Application/System Owner	2.3
	Application Rules	1.2
	Application Compliance	1.2
	Data Rules	1.2
	Data Compliance (incl. Security)	1.2
	Platform Rules	1.2
	Platform Compliance (incl. Security)	1.2
	Infrastructure Rules	1.2
	Infrastructure Compliance (incl. Security)	1.2

LEADing Practice Compliance Reference Content (#LEAD-ES20012BC)
Legenda: 1 = Map 2 = Matrix 3 = Model

(*) For a full overview of the Compliance LEAD Templates & LEAD Meta Object Relations: see Appendix 1.

Figure 5: The Governance & Compliance and their Maps, Matrices & Models

The maps are often in the form of a list and are a representation of the decomposed Governance & Compliance objects, while the matrices are the continuity of and interconnection between a map (a representation of decomposed objects) and a representation of interconnected and related objects. Models often show the graphical representation of the relations and connections. The maps, matrices and models are used in the decomposition and composition work within and throughout the layers. The specific templates do not only show which objects are within what template, thereby specifying if it is a map, matrix or model, it furthermore shows where the object of one template can be reused in another template.

Way of Thinking around Governance & Compliance aspects

The Way of Thinking around Governance & Compliance disciplines is essential, as it is the basis of the guiding principles around the Governance & Compliance Reference Content. It provides a structural concept for the value specification around Governance & Compliance definitions e.g. wants, needs, goals, issues and problems. The way of thinking around working with strategies furthermore postulates about what ought to be, including specifying the right Governance & Compliance abstraction level. The way of thinking does the following; it analyses, appraises, approximates, assesses and captures all relevant aspects of Governance & Compliance objects and artefacts; their idea, -design, -plan, -scheme and –structure. This is all done in order to understand the underlying Governance & Compliance concept, thought, view, vision as well as perspective, philosophy and belief.

The purpose of having a common way of thinking around Governance & Compliance concepts is to define how to organize and structure the viewpoints and Governance & Compliance objects associated with the various disciplines e.g. business Governance & Compliance and IT-Governance & Compliance, applying the concepts. The Governance & Compliance reference concept has proven to help companies with some of the most common and complex advanced Governance & Compliance principles, dilemmas and challenges that companies has to confront today.

This includes, but is not limited to:

- Poor alignment of Governance & Compliance with goals, rules, and requirements.
- The alignment of Governance & Compliance with system measurements, system reports and owners, resulting in low overall Governance & Compliance maturity.
- Inefficient and ineffective Governance & Compliance processes.

What many organizations do not realize is that there is something common within all the mentioned areas where Governance & Compliance aspects need to be applied. The common things are the Governance & Compliance objects. We have through research and analysis identified the semantic relations of the various Governance & Compliance objects and how they can be applied within different disciplines. The relations of the Governance & Compliance objects are built into our Governance & Compliance templates e.g. Governance & Compliance maps, Governance & Compliance matrices and or Governance & Compliance models.

Usage of Governance & Compliance Maps

A Governance & Compliance Map is an accurate list and representation of the decomposed and/or composed Governance & Compliance Objects. The purpose of this map is to provide a central and formal overview of the main Governance & Compliance items of the organisation and their types and rules.

The Governance & Compliance Reference Content Architecture & Modelling Rules

The Governance & Compliance decomposition map should capture the key Governance & Compliance rules of the organisation with their specific Governance & Compliance item number, Governance & Compliance item name, Governance & Compliance item description, Governance & Compliance type and Governance & Compliance owner.

Governance & Compliance decomposition Map

Governance & Compliance #	Governance & Compliance Name	Governance & Compliance Description (Subject)	Governance & Compliance Type	Governance & Compliance Owner
#				
#				
#				

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Figure 6: Governance & Compliance with decomposed Governance & Compliance objects.

The Governance & Compliance map's capturing should be based on enterprise modelling- and architecture rules and is related to LEAD tasks. Therefore for each individual column of the Governance & Compliance map their applicable decomposition- (D), primary- (P) and secondary (S) relationship related rules (Rule) as

The 'what/which' specification in terms of which Governance & Compliance (item) number and name.	
Rules	Not applicable (Governance & Compliance relates to Governance & Compliance).
Tasks	• Identify, label and sort business Governance & Compliance items. • Identify, label and sort application Governance & Compliance items. • Identify, label and sort data Governance & Compliance items. • Identify, label and sort platform Governance & Compliance items. • Identify, label and sort infrastructure Governance & Compliance items.
The 'what/which' specification in terms of which Governance & Compliance subject	
Rules	(D) Governance & Compliance relates to Governance & Compliance Subject.
Tasks	• Identify, label and sort the subjects of the Governance & Compliance items.

The 'what/which' specification in terms of which Governance & Compliance type.	
Rules	(D) Governance & Compliance relates to Governance & Compliance Type.
Tasks	• Label the Governance & Compliance type (Business-, Application-, Data-, Platform- and Infrastructure Governance & Compliance) to the Governance & Compliance item.
The 'who/whose' specification in terms of which Governance & Compliance owner.	
Rules	(D) Governance & Compliance relates to Owner (Governance & Compliance Owner).
Tasks	• Identify, label and sort the Governance & Compliance owners.

Figure 7: How Governance & Compliance is based on rules and relates to LEAD tasks.

Other Governance & Compliance Maps

Another Governance & Compliance map is the 'Application Governance & Compliance Map'. This map, and its specific templates, matrices and tasks are described in a separate LEADing Practice Application Reference Content document.

Way of Working around Governance & Compliance aspects

The Governance & Compliance Way of Working is critical discipline of translating both strategic planning and effective execution. It structures the arrangement of effort and work by translating the "Way of Thinking" into a structural way of working. The Way of Working organizes, classifies, aligns, arranges, quantifies, recommends and selects the Governance & Compliance objects and with it the relevant Governance & Compliance template in a systemized and categorized way they need to be de-composed (broken down) or composed (related) together.

The Way of Working is where one defines the best suitable technique, manner, routine and method that will help the practitioner to ensure integrity, accuracy and completeness of each particular task related to the rule that ensures the right Governance & Compliance relation. The Governance & Compliance way of working is therefore a series of phases with a collection of activities that the user of the Governance & Compliance methods needs to follow and undertake in order to reach a specific goal/outcome. The below specified way of working therefore structures the practitioner's techniques in applying the right semantic principles, rules, procedures and practices.

Usage of Governance & Compliance Matrices

The Governance & Compliance Matrices are a representation that accurately shows the relationship between specific decomposed and composed Governance & Compliance objects. The core idea of a the Governance & Compliance matrices is that they consists of the Governance & Compliance objects that have primary and thereby direct natural relations, these are always in a list form (row and columns) and the Governance & Compliance objects that need to be related to them. This is seen in the Governance & Compliance matrices as the cross product between the rows and columns. This allows within the Governance & Compliance matrix to relate the unfamiliar to the familiar Governance & Compliance objects in the different layers (composition), which represents the matrix diagram (rows and columns). These ontology and semantic based Governance & Compliance relations have been standardized to ensure reusability and replication of success in outlining the right connection points that is actually based on a common relationship pattern of the Governance & Compliance objects.

The Governance & Compliance Reference Content Architecture & Modelling Rules

The Governance & Compliance matrices should capture key Governance & Compliance of the organization with their related meta-objects as shown in Figure 5 above. The most important matrices are described below.

Governance & Compliance – Risk Matrix

This matrix shows the columns of the Governance & Compliance map in combination with risk, the 'what/which' in terms of which risks are related to the Governance & Compliance items.

Risk (Which risks are related to the Governance & Compliance items)	Governance & Compliance #	Governance & Compliance Name	Governance & Compliance Subject	Governance & Compliance Type	Governance & Compliance Owner
Risk 1	#				
Risk 2	#				
Risk N	#				

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Figure 8: Governance & Compliance with risk objects.

The Governance & Compliance-risk matrix's capturing should be based on enterprise modelling- and architecture rules and is related to the LEAD tasks as described under the Governance & Compliance map. In addition to those rules and tasks, the following rules and tasks are related to risk:

Risk: The combined impact of any condition or events, including those cause by uncertainty, change, hazards, or other factors that can affect the potential for achieving these objectives.	
Rules	(S) Governance & Compliance relates to Risk.
Tasks	• Link and associate risks to Governance & Compliance items: 1. Business Governance & Compliance, 2. Application Governance & Compliance, 3. Data Governance & Compliance, 4. Platform Governance & Compliance, 5. Infrastructure Governance & Compliance. • Link and associate risks to Governance & Compliance owners.

Figure 9: A table showing that Governance & Compliance objects relate to Governance & Compliance and the tasks associated with it.

Governance & Compliance – Security Matrix

This matrix shows the columns of the Governance & Compliance map in combination with security, the 'what/which' in terms of which security measures relate to Governance & Compliance items.

Security (Which security measures relate to Governance & Compliance items)	Governance & Compliance #	Governance & Compliance Name	Governance & Compliance Subject	Governance & Compliance Type	Governance & Compliance Owner
Security Measure 1	#				
Security Measure 2	#				
Security Measure N	#				

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Figure 10: Governance & Compliance with security objects.

The Governance & Compliance-security matrix's capturing should be based on enterprise modelling- and architecture rules and is related to the LEAD tasks as described under the Governance & Compliance map. In addition to those rules and tasks, the following rules and tasks are related to security:

Security: The objects or tools that secure, make safe and to protect through measures which prevent exposure to danger or risk.	
Rules	(S) Governance & Compliance relates to Security.
Tasks	• Link and associate security measures to Governance & Compliance items: 1. Business Governance & Compliance, 2. Application Governance & Compliance, 3. Data Governance & Compliance, 4. Platform Governance & Compliance, 5. Infrastructure Governance & Compliance. • Link and associate security measures to Governance & Compliance owners.

Figure 11: A table showing that Governance & Compliance objects relate to security and the tasks associated with it.

Governance & Compliance – Rule Matrix

This matrix shows the columns of the Governance & Compliance map in combination with rule, the 'what/which' in terms of which rules ('Governance & Compliance rules') are related to the Governance & Compliance item.

Governance & Compliance Rule (What is the related rule of the Governance & Compliance item)	Governance & Compliance #	Governance & Compliance Name	Governance & Compliance Subject	Governance & Compliance Type	Governance & Compliance Owner	(Governance & Compliance) Rule Type
Governance & Compliance Rule 1	#					
Governance & Compliance Rule 2	#					
Governance & Compliance Rule N	#					

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Figure 12: Governance & Compliance with rule objects.

The Governance & Compliance-goal matrix's capturing should be based on enterprise modelling- and architecture rules and is related to the LEAD tasks as described under the Governance & Compliance map. In addition to those rules and tasks, the following rules and tasks are related to rule:

Business Rule: A statement that defines or constrains some aspect of behaviour within the business and always resolves to either true or false. (Also: application rule, data rule, platform rule, and infrastructure rule).	
Rules	(S) Governance & Compliance relates to Rule (Governance & Compliance Rule).
Tasks	• Associate and relate each identified business rule, application rule, data rule, platform rule and infrastructure rule to: 1. Business Governance & Compliance, 2. Application Governance & Compliance, 3. Data Governance & Compliance, 4. Platform Governance & Compliance, and 5. Infrastructure Governance & Compliance. • Associate and relate each rule to a Governance & Compliance owner.

Figure 13: A table showing that Governance & Compliance objects relate to rule and the tasks associated with it.

Governance & Compliance – Measurement Matrix

This matrix shows the columns of the Governance & Compliance map in combination with measurement, the 'what/which' in terms of which measurements do measure the Governance & Compliance item.

Governance & Compliance Measurements (Which measurements measure the Governance & Compliance item)	Governance & Compliance #	Governance & Compliance Name	Governance & Compliance Subject	Governance & Compliance Type	Governance & Compliance Owner
Measurement 1	#				
Measurement 2	#				
Measurement N	#				

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Figure 14: Governance & Compliance with measurement objects.

The Governance & Compliance-goal matrix's capturing should be based on enterprise modelling- and architecture rules and is related to the LEAD tasks as described under the Governance & Compliance map. In addition to those rules and tasks, the following rules and tasks are related to system measurement:

System Measurement: Measures that are defined and implementable within an application.	
Rules	(S) Governance & Compliance relates to System Measurement (Governance & Compliance System Measurement).
Tasks	• Link and associate system measurements to Governance & Compliance aspects: 1. Business Governance & Compliance, 2. Application Governance & Compliance, 3. Data Governance & Compliance, 4. Platform Governance & Compliance, 5. Infrastructure Governance & Compliance. • Link and associate system measurements to a Governance & Compliance owner.

Figure 15: A table showing that Governance & Compliance objects relate to measurement and the tasks associated with it.

Governance & Compliance – System Report Matrix

This matrix shows the columns of the Governance & Compliance map in combination with reporting, the 'what/which' in terms of which reports do report on the Governance & Compliance item.

Governance & Compliance System Reports (Which reports report on the Governance & Compliance item)	Governance & Compliance #	Governance & Compliance Name	Governance & Compliance Subject	Governance & Compliance Type	Governance & Compliance Owner
Report 1	#				
Report 2	#				
Report N	#				

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Figure 16: Governance & Compliance with system reporting objects.

The Governance & Compliance-goal matrix's capturing should be based on enterprise modelling- and architecture rules and is related to the LEAD tasks as described under the Governance & Compliance map. In addition to those rules and tasks, the following rules and tasks are related to reporting:

The what/which in terms of which reports do report on the Governance & Compliance item.	
Rules	(S) Governance & Compliance relates to Application/System Reporting (Governance & Compliance Report).
Tasks	• Link and associate application/system reports to Governance & Compliance aspects: 1. Business Governance & Compliance, 2. Application Governance & Compliance, 3. Data Governance & Compliance, 4. Platform Governance & Compliance, 5. Infrastructure Governance & Compliance. • Link and associate application/system reports to Governance & Compliance owners.

Figure 17: A table showing that Governance & Compliance objects relate to reporting and the tasks associated with it.

Governance & Compliance – Application/System Owner Matrix

This matrix shows the columns of the Governance & Compliance map in combination with application/system owner, to tie application/system owners to Governance & Compliance aspects (business Governance & Compliance, application Governance & Compliance, data Governance & Compliance, platform Governance & Compliance and infrastructure Governance & Compliance).

Application/System Owner (Who is the owner of the Governance & Compliance item)	Governance & Compliance #	Governance & Compliance Name	Governance & Compliance Subject	Governance & Compliance Type	Governance & Compliance Owner
Application/System Owner 1	#				
Application/System Owner 2	#				
Application/System Owner N	#				

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Figure 18: Governance & Compliance with owner objects.

The Governance & Compliance-goal matrix's capturing should be based on enterprise modelling- and architecture rules and is related to the LEAD tasks as described under the Governance & Compliance map. In addition to those rules and tasks, the following rules and tasks are related to application/system owner:

Application Owner: A role performed by an actor with the fitting rights, competencies, and capabilities to take decisions about the application components and modules for which they are responsible.	
Rules	(S) Governance & Compliance relates to Application System Owner (Governance & Compliance (Application/System) Owner)
Tasks	• Tie application/system owners to Governance & Compliance aspects: 1. Business Governance & Compliance, 2. Application Governance & Compliance, 3. Data Governance & Compliance, 4. Platform Governance & Compliance, 5. Infrastructure Governance & Compliance.

Figure 19: A table showing that Governance & Compliance objects relate to rule and the tasks associated with it.

Other Governance & Compliance Matrices

The following other Governance & Compliance matrices are described, together with their specific templates, maps and tasks in their individual LEADing Practice Reference Content documents as listed:

Business Governance & Compliance Matrix	LEADing Practice Business Model REFERENCE CONTENT
Application Governance &	LEADing Practice Governance & Compliance Application REFERENCE

Compliance Matrix	CONTENT
Data Application Matrixs	LEADing Practice Data REFERENCE CONTENT
Platform Governance & Compliance Matrixs	LEADing Practice Platform REFERENCE CONTENT
Infrastructure Governance & Compliance Matrix	LEADing Practice Infrastructure REFERENCE CONTENT

Way of Modelling around Governance & Compliance aspects

The Governance & Compliance Way of Modelling provides the means for the various practitioners working with Governance & Compliance aspects to assist them in defining the modelling principles to make an objective assessment of the possible Governance & Compliance object relationships with other objects. It provides a uniform and formal description of the models where the Governance & Compliance objects and artefacts within one or more different types of models can be portrayed. The Governance & Compliance models are a representation that graphically represent and shows the Governance & Compliance relationship and the interconnection of specific composed objects and complies with a specific set of rules for what the graphical components mean, and how they are connected to the rest of the business. The key ideal of an Governance & Compliance model is that it is a representation, an illustration, of a composition of information intended to represent an aspect of an enterprise (e.g. business, Governance & Compliance and/or technology), using a specific set of rules, which express a logic or grammar.

Each practitioner working with Governance & Compliance aspects has to be able to translate the "Way of Working" into a "Way of Modelling", which for the most part include the following:

- **Expressiveness:** the degree to which a given modelling technique is able to denote the models of any number and kinds of layered domains (business, Governance & Compliance and technology).
- **Arbitrariness:** the degree of freedom one has when decomposing and composing different models on the same domain.
- **Suitability:** the degree to which a given modelling technique is specifically tailored for a specific kind of wanted output/result.
- **Comprehensibility:** the ease of how the way of working and way of modelling techniques are understood by participants.
- **Coherence:** the degree to which the individual sub-models of a way of modelling constitute a whole.
- **Completeness:** the degree to which all-necessary concepts of the Governance & Compliance domains are represented in the way of modelling.
- **Efficiency:** the degree to which the modelling steps (e.g. LEADing Practice steps) use resources such as time and people.

- **Effectiveness:** the degree to which the modelling principles achieve its goals.
- **Audit:** the degree to which the end results of the models achieve its goals.

Based on already acquired information from the Governance & Compliance maps and/or a Governance & Compliance matrices (or both), an Governance & Compliance model is usually crafted to enable complex information to be used in different disciplines and within this to be communicated more easily to stakeholders, management and leadership. The fully integrated and standardized Governance & Compliance templates enable the practitioner to work and model with the Governance & Compliance objects throughout all the aspects of the enterprise (business, Governance & Compliance and technology). Not only are the objects governed by its semantic relations and connection, also the specified Governance & Compliance modelling rules and tasks, which ensure how and where the Governance & Compliance templates interlink and share common Governance & Compliance objects is defined and standardized.

As we described earlier is the Governance & Compliance matrix the continuity of and interconnection between an Governance & Compliance map (a representation of decomposed and/or composed objects) and an Governance & Compliance model (a representation of interconnected and related objects). The Governance & Compliance maps, matrices and models are therefore used in the decomposition and composition work (within and throughout the layers).

By using the Governance & Compliance templates to manage the different kinds of highly connected information and relations, the Governance & Compliance creation is ensured. The Governance & Compliance map (which list the various related objects in order to capture the decomposed unrelated objects) is vital as well as the Governance & Compliance matrix (which composes in terms of relating specific objects together) and the Governance & Compliance model (which graphically represent the decomposed and composed objects) are both critical in integrating and standardizing the Governance & Compliance templates and tools of the practitioner. Furthermore, it is an essential part of supporting as well as integrating and standardizing the practitioner's Way of Thinking, Working and Modelling.

Last but not least, it ensures integration of the Enterprise Modelling and Enterprise Architecture objects and artefacts. Bringing an organization that uses the Governance & Compliance way of modelling templates to the highest maturity possible of working not only documented (level 3) or managed (level 4) but enabling optimization, governance and continuous improvement (level 5).

Governance & Compliance Decomposition & Composition Model

The Governance & Compliance Decomposition & Composition Model is already shown in Figure 2. As described there it shows the sixteen main areas that provide a starting point that can be used the analysis, decomposition, composition and construction of a software and system architecture description.

Governance & Compliance Model

The Governance & Compliance Model shows the relationship between Governance & Compliance items and:

1. System Measurements,
2. Application/System Reports, and
3. Application/System Owner.

The Governance & Compliance Model is developed applying the corresponding architectural modelling rules. These have been described above in chapter 'Way of Working around Governance & Compliance Aspects'. The corresponding tasks are included in chapter 'Way of Implementing' below.

Way of Governing

The Way of Governance - the word governance is derived from the Greek verb κυβερνάω[kubernáo], which means to steer and was documented for the first time in a metaphorical sense by Plato. It then passed on to Latin and then on to many languages. In Enterprise Architecture, governance is the act of governing what exists or is in the process of getting developed/deployed. In the Way of Governance it relates to decisions and guidance that define expectations and direction, grant power, or verify and ensure value identification and creation. It consists of either a separate project governance process in terms of Governance & Compliance analysis, design, implement and run/monitor/optimize or a part of the enterprise architecture continuum governance or even the LEAD Architect leadership processes.

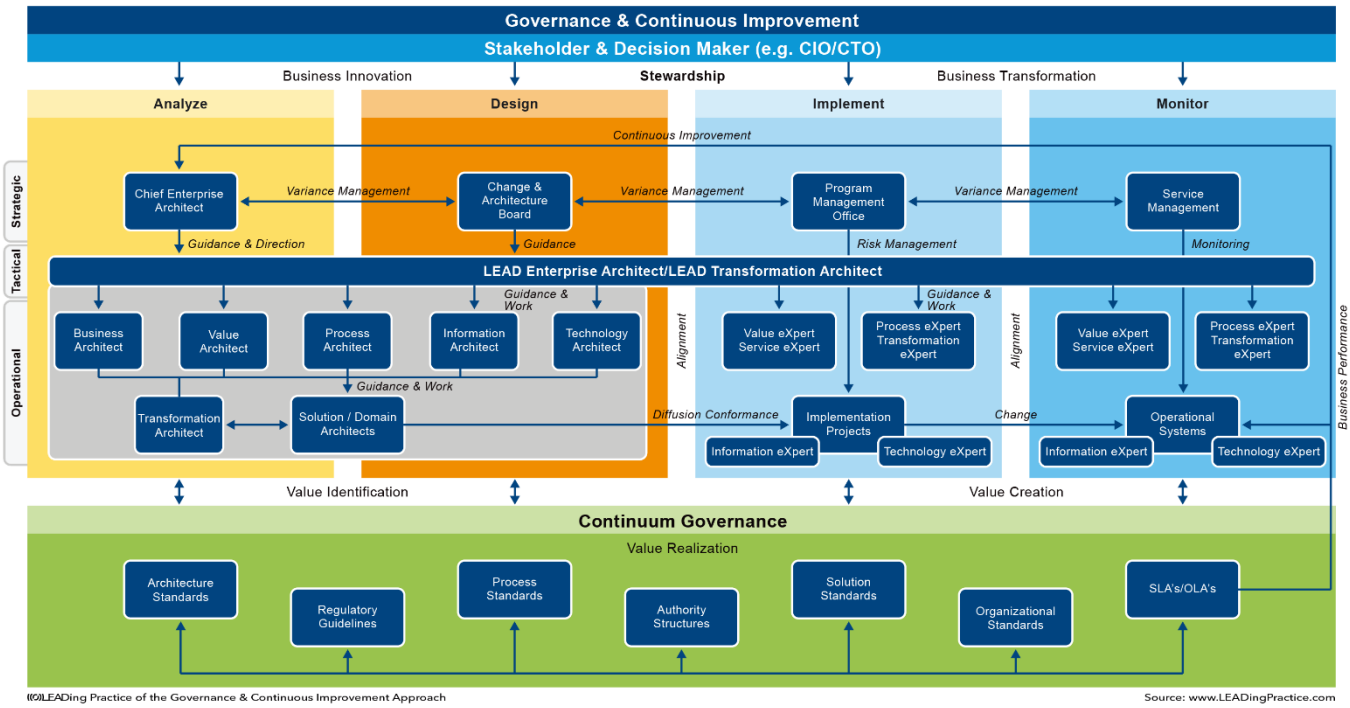

Figure 20: The LEAD Way of Governance.

A reasonable or rational purpose of governance might aim to assure, (sometimes on behalf of others in terms of stakeholders) that an organization produces a worthwhile Governance & Compliance standard or pattern of good results while avoiding an undesirable pattern of bad circumstances. Therefore, a governance body typically administers the Governance & Compliance architecture governance and continuous Governance & Compliance improvement route and systems. The daily Governance & Compliance project or Governance & Compliance architecture governance consists of assuring, on behalf of those governed, the desired business innovation, transformation and value creation while avoiding an undesirable pattern of high cost, ineffectiveness and inefficiency (low performance). The Governance & Compliance governance consists of the set of modelling rules, connections and architecture, regulatory requirements, processes, authority structure, solutions, organizational standards and guidelines as well as service level/operating level agreements, affecting the way people direct, administer or control a corporation.

Governance & Compliance governance also includes the relationships among the many players involved (the stakeholders) and the business goals. The principal players include the CIO, CTO, shareholders, Governance & Compliance users, and the solution/Governance & Compliance architecture governance board. Other stakeholders include the employees, suppliers, end-consumers and the IT community at large. The LEAD Way of Governance therefore applies to the entire lifecycle, as it represents the course of developmental changes through which the information evolves in terms of innovation and/or transformation as it passes during its lifetime. From Governance & Compliance analysis, Governance & Compliance strategy, Governance & Compliance component, Governance & Compliance tasks and Governance & Compliance service definition, Governance & Compliance operations, Governance & Compliance improvements and changes. The Governance & Compliance Lifecycle thereby consists of a set of steps/phases in which each phase of the Governance & Compliance aspects interact with other vital aspects e.g. requirements, value, process and testing. The input of one phase is the results of the previous one. It provides a sequence of phases and activities for Governance & Compliance Experts and Governance & Compliance/Solution Architects to ensure value investigation, identification, creation, realization and governance.

The LEAD Governance & Compliance Lifecycle adheres to important phases that are essential for the various roles, such as Governance & Compliance analysis, Governance & Compliance strategy/planning, Governance & Compliance design, and Governance & Compliance implementation resources as well as those involved in continuous Governance & Compliance improvements. Focusing on all Governance & Compliance aspects from requirements to architecture the LEAD Governance & Compliance Lifecycle covers:

- **Governance & Compliance Analysis & Strategy**: The phase where ones Governance & Compliance strategy is defined, based on the business and Governance & Compliance requirements e.g. business needs and wants, as well as business and Governance & Compliance demands. Then Governance & Compliance goals and detailed requirements are defined, Governance & Compliance choice clarified through blueprinting the Governance & Compliance maps, matrix and models are developed.
- **Governance & Compliance Design**: The phase where one initiates, aligns, arranges, categorizes, charts, defines, determines, quantifies, drafts, outlines and designs the Governance & Compliance concept. The Governance & Compliance design phase considers the identified business requirements and the specific design considerations for Governance & Compliance components (e.g. logical/physical), Governance & Compliance modules, Governance & Compliance features, Governance & Compliance functions, Governance & Compliance tasks and Governance & Compliance services.
- **Governance & Compliance Build & Test**: The phase where one creates, sets up, builds, integrates, standardizes, harmonizes, and consolidates as well as tests the Governance & Compliance solutions. Furthermore Governance & Compliance standardization as well as Governance & Compliance integration & interface e.g. API are considered.
- **Governance & Compliance Implementation and/or Deployment**: The phase where one launches, implements, executes, deploys, activates, completes, concludes and transitions the Governance & Compliances to execution (go live).

- **Governance & Compliance Operation**: The phase where the Governance & Compliance is managed in terms of its components, services, incidents/issues and Governance & Compliance change request fulfilments, etc.
- **Continuous Governance & Compliance Improvement**: The phase where one improves the existing Governance & Compliance operation, evaluates, adjusts, alters, amends, changes, corrects, eliminates, enhances, increases, modifies, optimizes and/or excludes specific Governance & Compliance parts.

Way of Implementing

The Governance & Compliance Reference Content's Way of Implementation combines the enterprise engineering, enterprise modelling and enterprise architecture principles in an order to apply the way of Governance & Compliance thinking, Governance & Compliance working and Governance & Compliance modelling into the physical and thereby the Governance & Compliance execution.

Most implementations fall short of transforming the business and creating real Governance & Compliance due to the fact that they automate the existing Way of Working around Governance & Compliance concepts. Thereby actually reinforcing a siloed and ineffective way of automation. It is about the possibility to totally rethink the Governance & Compliance flow within the information flow, the Governance & Compliance flow, the process flow as well as the measurement and reporting flow. It can fundamentally rethink and transform the different ways of working within an organization.

The Way of Governance & Compliance Implementation has been developed as a fully integrated part of a Blueprinting and Implementation concept. In this way, the Governance & Compliance aspects can be integrated to any other engineering, modelling or architecture discipline e.g. process, Governance & Compliance, Governance & Compliance/software, data etc. With this the Way of Implementation provides a uniform and formal implementation concept of where the Governance & Compliance meta-objects and artefacts can be used. By using decomposition and composition modelling techniques within the 40 steps of the Way of Implementation, the Governance & Compliance objects within the templates can be applied to the relevant subjects within the different layers (business, Governance & Compliance or technology).

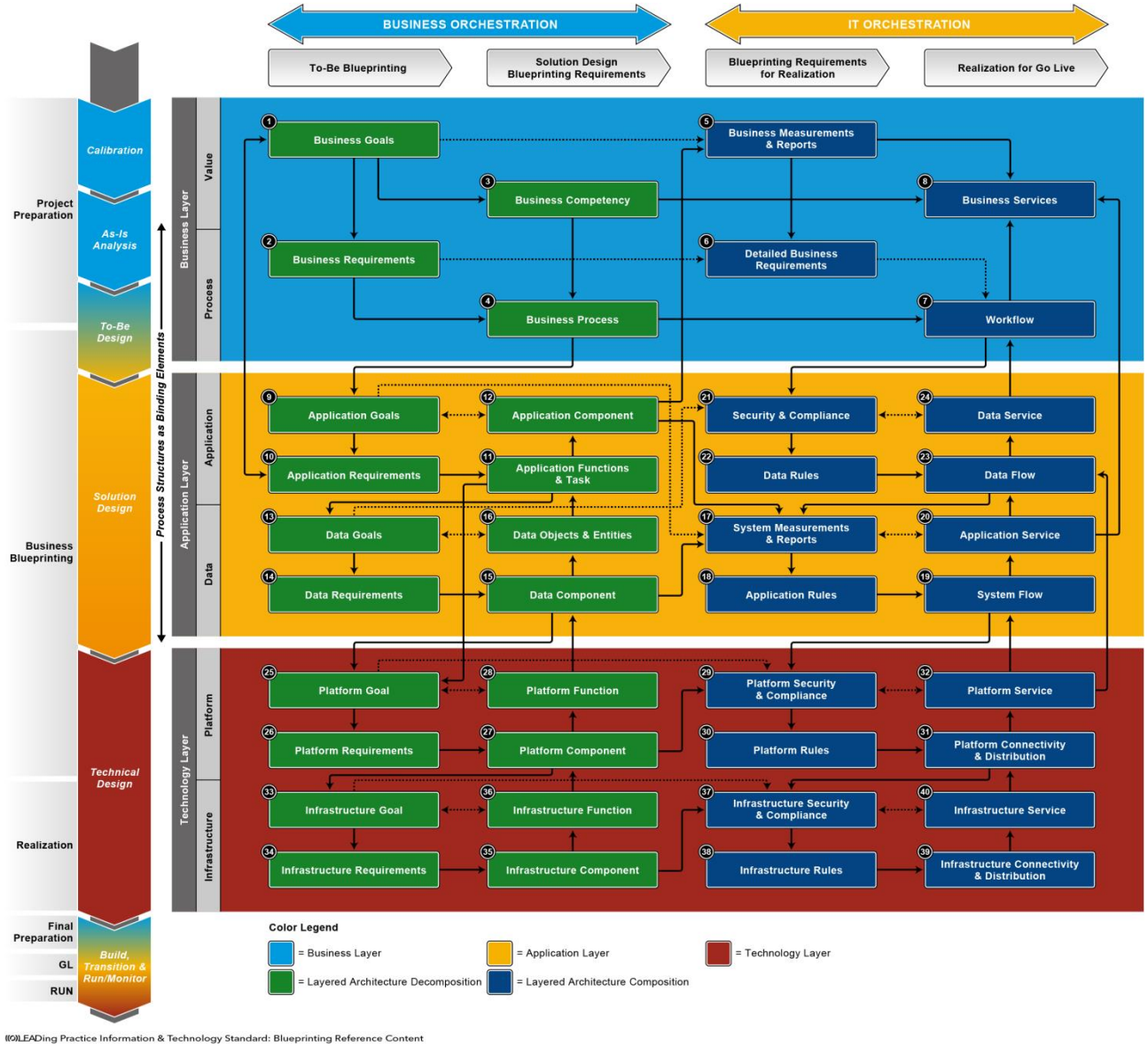

Figure 21: A model showing the 40 Blueprinting & Implementation steps across the Business, Governance & Compliance and Technology Layer.

Example of the Business Layer where the Governance & Compliance Objects are used or applied within the implementation steps:

<u>Step 2: Governance & Compliance Objects and the tasks to apply them within the Business Requirements (High-Level) step:</u>

- ✓ Map: Identify, label and sort **Governance & Compliance items** (Figure 7).
- ✓ Map: Identify, label and sort **business Governance & Compliance items** (Figure 7).
- ✓ Map: Identify, label and sort **application Governance & Compliance items** (Figure 7).
- ✓ Map: Identify, label and sort **data Governance & Compliance items** (Figure 7).
- ✓ Map: Identify, label and sort **platform Governance & Compliance items** (Figure 7).
- ✓ Map: Identify, label and sort **infrastructure Governance & Compliance items** (Figure 7).
- ✓ Map: Identify, label and sort **Governance & Compliance owners** (Figure 7).

- ✓ Map: Identify and categorize **application rules.**
- ✓ Map: Identify and categorize **data rules**.
- ✓ Map: Identify and categorize **platform rules**.
- ✓ Map: Identify and categorize **infrastructure rules**.

- ✓ Matrix: Link **application services** to Governance & Compliance aspects: 1. Business Governance & Compliance, 2. Application Governance & Compliance, 3. Data Governance & Compliance, 4. Platform Governance & Compliance, 5. Infrastructure Governance & Compliance.
- ✓ Matrix: Associate and relate each identified **application Governance & Compliance item** to: 1. Business rules, 2. Service rules, 3. Process rules, 4. Application rules, 5. Data rules, 6. Platform rules, and 7. Infrastructure rules.
- ✓ Matrix: Link and associate **risks** to Governance & Compliance items: 1. Business Governance & Compliance, 2. Application Governance & Compliance, 3. Data Governance & Compliance, 4. Platform Governance & Compliance, 5. Infrastructure Governance & Compliance (Figure 9).
- ✓ Matrix: Link and associate **risks** to Governance & Compliance owners (Figure 9).
- ✓ Matrix: Link and associate **security measures** to Governance & Compliance items: 1. Business Governance & Compliance, 2. Application Governance & Compliance, 3. Data Governance & Compliance, 4. Platform Governance & Compliance, 5. Infrastructure Governance & Compliance (Figure 11).
- ✓ Matrix: Link and associate **security measures** to Governance & Compliance owners (Figure 11).
- ✓ Matrix: Associate and relate each identified **application rule** to: 1. Business Governance & Compliance, 2. Application Governance & Compliance, 3. Data Governance & Compliance, 4. Platform Governance & Compliance, 5. Infrastructure Governance & Compliance (Figure 13).
- ✓ Matrix: Associate and relate each identified **data rule** to: 1. Business Governance & Compliance, 2. Application Governance & Compliance, 3. Data Governance & Compliance, 4. Platform Governance & Compliance, 5. Infrastructure Governance & Compliance (Figure 13).
- ✓ Matrix: Associate and relate each identified **data Governance & Compliance item** to: 1. Business rules, 2. Service rules, 3. Process rules, 4. Application rules, 5. Data rules, 6. Platform rules, and 7. Infrastructure rules (Figure 13).
- ✓ Matrix: Associate and relate each identified **platform rule** to: 1. Business Governance & Compliance, 2. Application Governance & Compliance, 3. Data Governance & Compliance, 4. Platform Governance & Compliance, 5. Infrastructure Governance & Compliance (Figure 13).
- ✓ Matrix: Associate and relate each identified **infrastructure rule** to: 1. Business Governance & Compliance, 2. Application Governance & Compliance, 3. Data Governance & Compliance, 4. Platform Governance & Compliance, 5. Infrastructure Governance & Compliance (Figure 13).
- ✓ Matrix: Associate and relate each **rule** to a Governance & Compliance owner.
- ✓
- ✓
- ✓ Matrix: Link and associate **system measurements** to Governance & Compliance aspects: 1. Business Governance & Compliance, 2. Application Governance & Compliance, 3. Data Governance & Compliance, 4. Platform Governance & Compliance, 5. Infrastructure Governance & Compliance (Figure 15).
- ✓ Matrix: Link and associate system measurements to a Governance & Compliance owner (Figure 15).

- ✓ Matrix: Link and associate **application/system reports** to Governance & Compliance aspects: 1. Business Governance & Compliance, 2. Application Governance & Compliance, 3. Data Governance & Compliance, 4. Platform Governance & Compliance, 5. Infrastructure Governance & Compliance (Figure 17).
- ✓ Matrix: Link and associate **application/system reports** to Governance & Compliance owners (Figure 17).
- ✓ Matrix: Tie **application/system owners** to Governance & Compliance aspects: 1. Business Governance & Compliance, 2. Application Governance & Compliance, 3. Data Governance & Compliance, 4. Platform Governance & Compliance, 5. Infrastructure Governance & Compliance (Figure 19).

- ✓ Model: Construct a Governance & Compliance Model that shows the associations and link between Governance & Compliance aspects and **system measurements**.
- ✓ Model: Construct a Governance & Compliance Model that shows the associations and link between Governance & Compliance aspects and **application/system reports**.
- ✓ Model: Construct a Governance & Compliance Model that shows the associations and link between Governance & Compliance aspects and **application/system owners**.

Step 6: Governance & Compliance Objects and the tasks to apply them within the Detailed Requirements step:

Tasks as above, but here with a focus on the detailed requirements.

Roles involved

The following roles are involved in the definition and maintenance of the Governance & Compliance templates:

ENTERPRISE MODELLERS	ENTERPRISE ENGINEERS	ENTERPRISE ARCHITECTS
Business Analyst (P)	Value Engineer (P)	Business Architect (P)
Process eXpert (P)	Technology Engineer (P)	Solution Architect (P)
Value eXpert (P)	Process Engineer (P)	Value Architect (P)
Information eXpert (S)	Quality Engineer (P)	Data Architect (P)
Governance & Compliance eXpert (P)	Change Engineer (P)	Governance & Compliance Architect (P)
Transformation eXpert (S)	Software Engineer (P)	Technology Architect (P)
		Process Architect (P)
		Enterprise Architect (P)
		Information Architect (P)

(P) = Primary object/role
(S) = Secondary object/role

Conclusion

While this document should be seen and used as a detailed description of how the Governance & Compliance reference content can be used, it does not have all aspects of the Governance & Compliance reference content and thereby its Governance & Compliance engineering, modelling and architecture content. It attempted to build a basis of a structured way of thinking, working, modelling and implementation of Governance & Compliance objects. It endeavoured to provide a standardized terminology, build common understanding and make available the standardized and integrated Governance & Compliance templates. Enabling practitioners to use the Governance & Compliance reference content to:

- Identify the relevant Governance & Compliance objects.
- Decompose the Governance & Compliance objects into the smallest parts that can, should and needs to be modelled, and then compose the Governance & Compliance objects entities before building them (through mapping, simulation and scenarios).
- Visualize and clarify Governance & Compliance object relationships with the Governance & Compliance artefacts by using maps, matrices and models (alternative representation of information).
- Reduce and/or enhance complexity of Governance & Compliance modelling, Governance & Compliance engineering and Governance & Compliance architecture principles applying the Governance & Compliance decomposition and composition standard (see Decomposition and Composition Reference Content)
- Model the relevant Governance & Compliance objects through the architectural layers (see Layered Architecture Reference Content).
- Adding Governance & Compliance Requirements (see Requirement Reference Content)
- Provide a structured Governance & Compliance Blueprinting and Implementation (see Blueprint & Implementation Reference Content).

For further learning around semantic object relations, decomposition and composition, layered modelling, engineering and architecture or how the Governance & Compliance reference content can be used within the other LEADing Practice Reference Contents we refer both to the LEADing Practice Body of Knowledge document as well as the other LEADing Practice Enterprise Standards and their Reference Content on www.LEADingPractice.com.

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