



Data Management Maturity - NDMO

Content

1.	Introduction	03
2.	NDMO – Compliance and Enforcement	03
3.	NDMO – Domains	03
4.	Control Structure	05
	a) Format	05
	b) Example	05
5	Specifications Priorities	06
6.	Implementation Plan	06
7.	Implementation Approach	07
8.	Key Success Factors	08
9.	Mitigate Risk	09

Introduction

In accordance with a directive by the Saudi Authority for Data and Artificial Intelligence, the National Data Management Office (NDMO) has developed the National Data Management and Personal Data Protection Standards, encompassing the development and implementation of policies, governance mechanisms, standards, controls, and post-publication compliance monitoring for data and artificial intelligence.

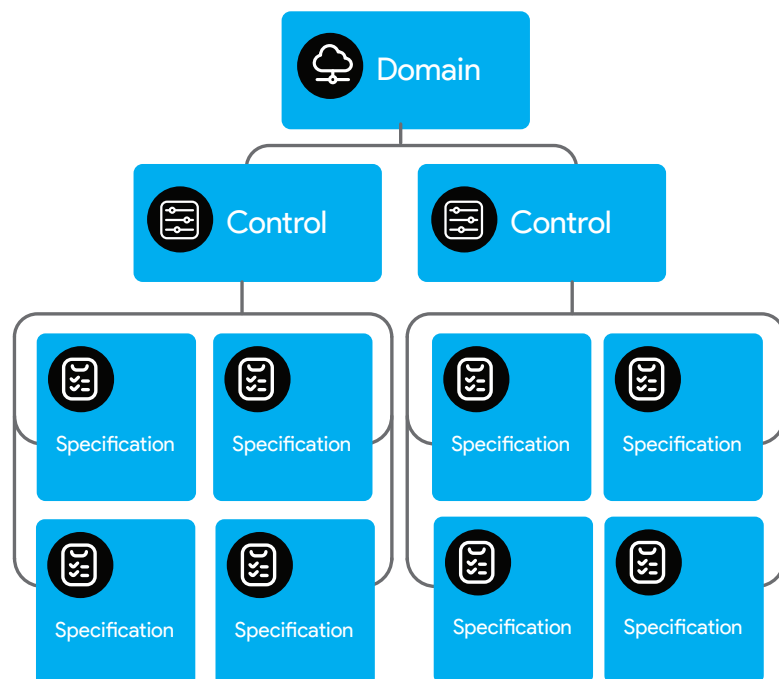
The National Data Management and Personal Data Protection Standard consists of 15 domains that cover the data lifecycle from creation, storage, movement, and usage, to retirement, and must be adopted by all public entities in the Kingdom, including business partners entrusted with government data assets. The regulations apply to all government data regardless of form or type, including paper records, emails, data stored in electronic form, voice recordings, videos, maps, photos, scripts, handwritten documents, or any other form of recorded data.

NDMO – Compliance and Enforcement

- The compliance assessment measures how well government entities implement the National Data Management and Personal Data Protection Standards, using a defined compliance assessment methodology. Entities will conduct a compliance audit annually and submit the report to NDMO by the third quarter of each year.
- NDMO will review, consolidate and release the annual compliance results to stakeholders, covering individual entities, sectors, and the entire government spectrum.
- Entities will carry out compliance assessments for each specification, assigning a binary value of 100% to fully implemented specifications and 0% to those partially or not implemented.
- Each specification’s compliance score will be cascaded up to the control, domain, and overall entity level.
- The annual compliance report will also include supporting evidence for the implementation of each specification (where applicable).

- The compliance exercise will be led by the Chief Data Officer, supported by the other Data Management and Personal Data Protection Office roles.
- Building upon the findings from the submitted Entity Compliance Reports, NDMO reserves the right to conduct selective ad-hoc Compliance Audits on chosen entities for a more comprehensive review and validation of the results.

NDMO – Compliance and Enforcement



NDMO – Domains

1-Data Governance:

Data governance provides the authority and control over planning and implementing the organization’s data management practices through people, processes, and technologies. It ensures consistent, proper handling of the organization’s data assets in line with its Data Management and Personal Data Protection Strategy.

2-Data Catalog and Metadata:

Data catalog and metadata facilitates easy access to high-quality integrated metadata, using data catalog’s automated tool. This serves as the single point of reference to the organization’s metadata.

3-Data Quality:

Data quality improves the quality of the organization's data, ensuring its alignment with consumer needs.

4-Data Operations:

Data operations focuses on the design, implementation, and support for data storage, maximizing data value throughout its lifecycle, spanning from creation/acquisition to disposal.

5-Document and Content Management:

Document and content management controls the capture, storage, access, and use of documents and content stored outside of relational databases.

6-Data Architecture and Modelling:

Data architecture and modelling establishes formal data structures and data flow channels enabling end-to-end data processing across and within entities.

7-Reference and Master Data Management:

Reference and master data management allows linking all critical data to a single master file, providing a common point of reference for all critical data.

8-Business Intelligence and Analytics:

Business intelligence and analytics analyze an organization's data records to extract insights and draw conclusions

9-Data Sharing and Interoperability:

Data sharing and interoperability involves gathering data from different sources and integrating solutions to create a smooth communication channel between various IT components. It also covers a process for organized and standardized data exchange between entities.

10-Data Value Realization:

Data value realization consistently assesses data assets to identify potential data-driven use cases that generate revenue or reduce operational costs for the organization.

11-Open Data:

Open data focuses on an organization's data that can be shared with the public to increase transparency, accelerate innovation, and foster economic growth.

12-Freedom of Information:

Freedom of information enables Saudi citizens to access government information, the process for accessing such information, and the appeal mechanism in the event of a dispute.

13-Data Classification:

Data classification involves categorizing data so that it may be used and protected efficiently. The classification levels are determined through an impact assessment that determines the potential damage caused by mishandling or unauthorized access to data.

14-Personal Data Protection:

Personal data protection protects an individual's right to secure and confidentially manage their personal information.

15-Data Security and Protection:

Data security and protection focuses on the protecting the entity's data through the processes, people, and technology. It includes, but is not limited to, authorized access to data, avoidance of spoliation, and safeguarding against unauthorized data disclosure. This domain is under the mandate of the Saudi National Cybersecurity Authority.

Control Structure

Each of the 15 data management & privacy domains break down to a set of controls that further breaks down into a list of related specifications. These specifications define the essential outcomes that must be achieved to be compliant with the data management & privacy standards.



Domain Level

The domain is a knowledge area defined by the KSA data management & privacy framework.



Control Level

The control is a collection of the specifications that address a common area within the domain.



Specification Level

The specification defines the required outcomes that need to be achieved to be compliant with the data management & privacy standards.

a) Format



b) Example

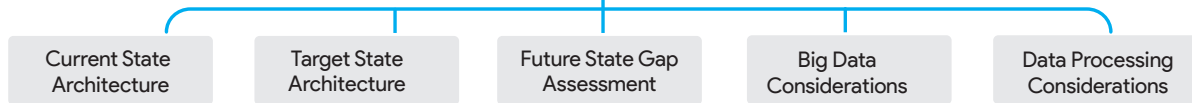
Domain

Data Architecture and Modeling

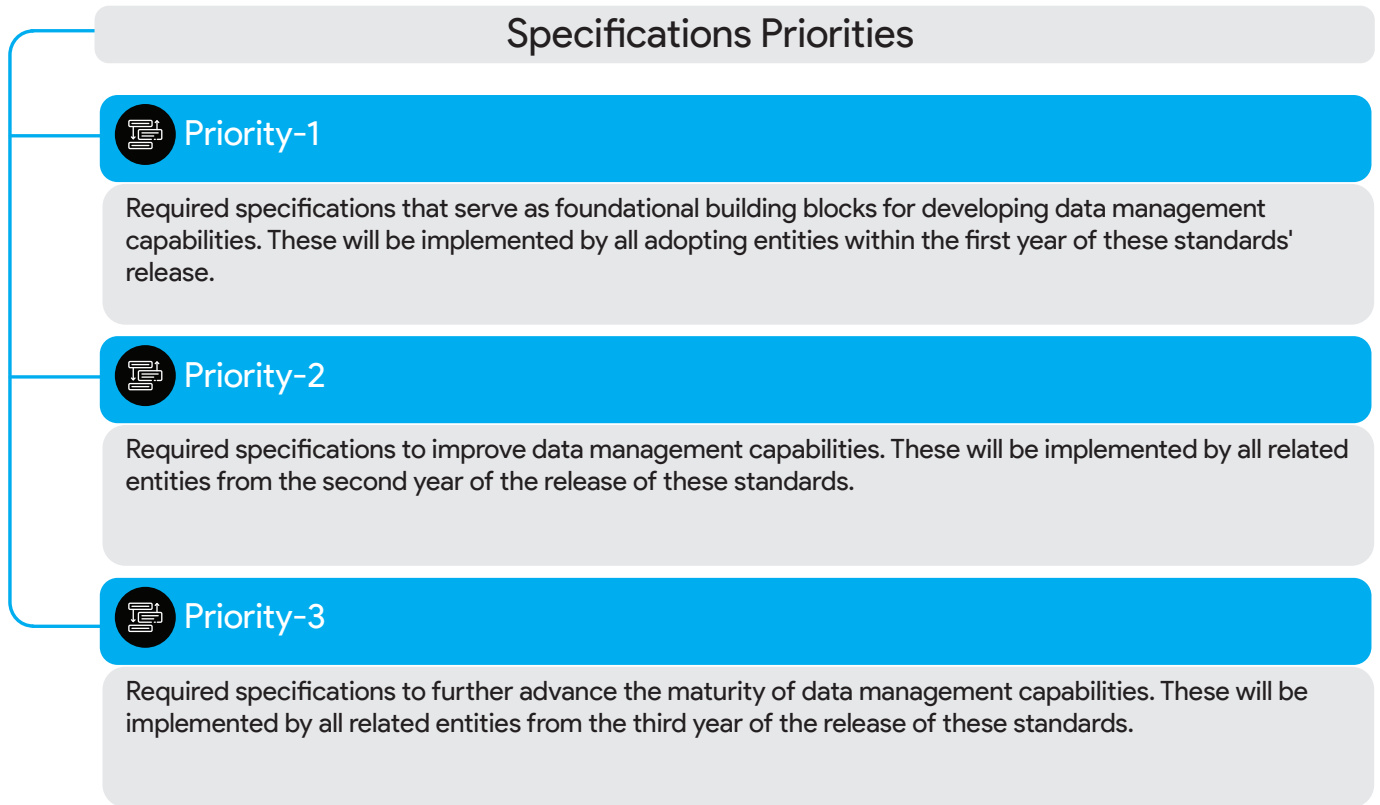
Control

Data Architecture Framework Definition

Specifications

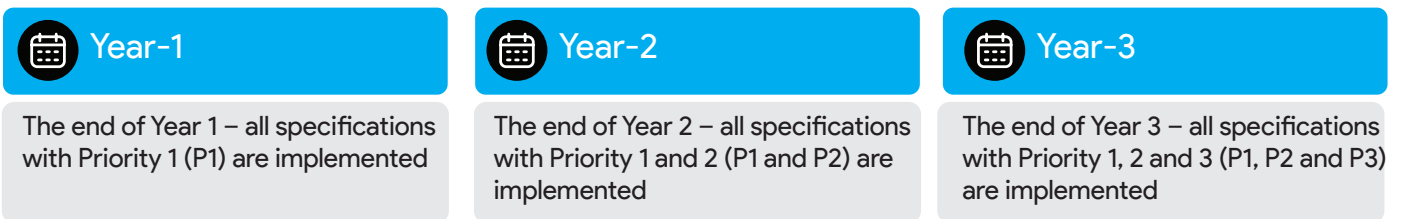


Specifications Priorities






Implementation Plan

The specifications' priorities will serve as an input for developing a phased implementation plan in compliance with KSA Data Management and Personal Data Protection Standards. The plan will be structured around a three-year roadmap encompassing all necessary specifications, including three key milestones.



Implementation Approach

Based on our teams extensive experience in similar projects and leveraging industry best practices, we have designed an approach to meet your specific requirements. Our method seamlessly integrates proven methodologies from similar contexts aligned with globally recognized best practices.

Streams	 Review and Plan	 Implement & Document	 Handover
Key Activities	<ul style="list-style-type: none"> Define key stakeholders and develop communication plan Create implementation plan for control's implementations 	<ul style="list-style-type: none"> Engage with stakeholders to review and gather the evidence of all controls Review the current processes and documentation for controls Develop and document the methodology and process for controls 	<ul style="list-style-type: none"> Share relevant deliverables and artifacts Conduct Walkthrough sessions and training to relevant stakeholders Request stakeholders to formally provide their sign-off, indicating their acceptance and satisfaction with the project's outcomes, deliverables, and overall performance
Deliverables	<ul style="list-style-type: none"> Stakeholder Matrix and Communication Plan Implementation plan for controls 	<ul style="list-style-type: none"> Implementation of controls Documentation of implementation 	<ul style="list-style-type: none"> Knowledge transfer & training documents Project closure document

Key Success Factors

We will define a set of guidelines and principles to follow throughout the project:



Scope Clarity

Gaining a clear understanding of the project's scope is crucial. It entails defining and understanding the boundaries, objectives, deliverables, and prerequisites of the project. When there is clarity surrounding the project's scope, it helps in preventing scope creep, aligning expectations, and ensuring that the project stays on track.



Stakeholder Alignment and Sponsorship

Ensuring that the key stakeholders share a common understanding of the project's importance and goals, and are consistent with their support throughout the project, is of utmost importance.



Team Availability

It is essential to have a pre-identified team from the customer's side committed to actively participating in the project's progress. This includes engaging in discussions, attending regular progress meetings, and actively participating in steering committees and other relevant activities.



Data Availability

Data plays a pivotal role in the project, and it is assumed that the customer will prioritize fulfilling any data requests to ensure adherence to the project's timeline.

Mitigate Risk

Risks	Probability	Impact	Mitigation
<p>Insufficiently explained specifications in the NDMO can lead to a lack of clarity regarding the precise requirements. This lack of clarity can result in several challenges, including unfinished tasks, modifications to deliverables, adjustments to the project schedule.</p>	<p>Medium</p>	<p>High</p>	<p>To mitigate scope challenges, it is advisable to establish clearly defined focus areas related to NDMO specifications during the initial stages of project implementation. These focused areas should be documented and shared with the customer for their formal approval and signoff. This proactive approach can help prevent potential scope-related issues from arising later in the project.</p>
<p>It is important to ensure that key stakeholders share a common understanding of the project's importance and goals, and are committed to providing adequate support throughout the life of the project.</p>	<p>Low</p>	<p>High</p>	<p>To mitigate such risks, we recommend involving all key stakeholders from the beginning of the project to ensure that their perspectives, requirements, and concerns are addressed. This fosters collaboration, promotes a better understanding, and helps align project goals and expectations among all stakeholders.</p>
<p>Involving the customer team is necessary for the project's success. The absence or unavailability of stakeholders, both from the vendor and customer side, can significantly impact the project and cause delays in multiple deliverables, especially if their participation is critical for specific tasks or the decision-making process.</p>	<p>Medium</p>	<p>High</p>	<p>It is advisable to launch an expectation setting workshop prior to the launch of the project to introduce the project team members to each other for coordination, including strategically coordinating their leaves. By knowing the team composition and their availability, it becomes easier to allocate responsibilities, manage workloads, and plan project timelines effectively.</p>
<p>Data and documents are a crucial aspect of any project, and customers must prioritize data and document requests in alignment with project plans and schedules. By recognizing the significance of timely data and document provision, customers can ensure that project activities progress smoothly and efficiently.</p>	<p>Medium</p>	<p>High</p>	<p>To avoid delays the vendor will compile a proposal with the necessary information and share it with the customer in a timely manner. This includes relevant documents, roles and responsibilities, escalation matrix, service level agreements, reports, updates, and any other vital data required for the decision-making process or project progression. The proposal will be finalized prior to the expectation setting workshop.</p>



WHITE PAPER

Data Management Maturity - NDMO

tenx.

tenx.ai
info@tenx.ai