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**Digital government architecture framework - Part 5: Information
exchange model**

数字政府架构框架 第5部分：信息交换模型

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for

standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is Part 5 of GB/T 45963, Framework for Digital Government Architecture. GB/T 45963 has been published in the following parts.

- Part 1: Reference model;
- Part 2: Architecture design;
- Part 3: Governance;
- Part 4: Competence assessment;
- Part 5: Information exchange model.

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Introduction

Digital government is an important part of digital transformation. The in-depth application of digital technology and the extensive construction of various systems have increased the digital government's complexity. The complexity of digital government is that it takes overall planning, overall coordination, interconnection and intensive construction as its development content and characteristic requirements. Therefore, the application of The need to recognize, understand and guide the entire process of digital government through systematic thinking is becoming increasingly prominent.

The top-level design of the government can not only promote the organic integration of technical elements, but also help promote the formation of collaborative consensus among multiple subjects and resource allocation. Improved efficiency.

GB/T 45963 "Digital Government Architecture Framework" aims to provide a conceptual approach for the top-level design of digital government and enhance the The overall, scientific and continuous nature of the planning will help digital government planners, designers, developers and builders to establish a unified understanding and form a Provides overall guidance for digital government planning. In actual application, it can be selected and tailored according to specific situations and actual needs.

GB/T 45963 is intended to consist of five parts (as shown in Figure 1).

- Part 1: Reference Model. The purpose is to provide the content and design process of the top-level design of digital government in the organizational dimension, and to provide a reference for the implementation of digital government.

It provides a unified reference and direction for the government's overall planning and overall planning.

- Part 2: Architecture Design. The purpose is to provide the architecture design of government digitalization projects in the engineering dimension under the guidance of the reference model.

Design methods and architecture design processes are used to guide how to carry out the overall planning of government digital projects.

- Part 3: Governance. The purpose is to standardize the elements of control over the various contents of the top-level design of digital government under the governance dimension.

The composition, mutual relations, specific requirements, etc. provide various supports and guarantees for the smooth implementation of the top-level design of digital government.

- Part 4: Capacity Assessment. The purpose is to conduct maturity analysis and Judge, establish the basis and level of evaluation, and provide a path for continuous improvement for the top-level design capabilities of digital government.

- Part 5: Information Exchange Model. The purpose is to provide the extended content and specific application of the data reference model, and to specify the cross-border The requirement for formal description of information resources in the context of domain information exchange is to promote cross-domain common understanding and collaboration of data. Figure 1 GB/T 45963 structure Digital Government Architecture Framework Part 5: Information exchange model

1 Scope

This document defines the cross-domain information exchange framework, specifies the requirements for building information models, meta-model component management process requirements and Information exchange implementation requirements for the information exchange model.

This document applies to the construction, management and use of information exchange models.

2 Normative references

This document has no normative references.

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1

A data model that meets information exchange requirements.

3.2 metadata registry; MDR

An information system for registering metadata.

[Source. GB/T 18391.1-2009, 3.2.19]

3.3 metamodel

A data model that describes one or more other data models.

[Source. GB/T 18391.3-2009, 3.2.24]

3.4 metamodel component metamodelconstruct

A unit of modeling notation.

[Source. GB/T 18391.3-2009, 3.2.25]

3.5 data type datatype

A collection of distinct values with a specific name, characterized by their properties and by the operations that can be performed on them.

[Source. ISO /IEC 11404 2007, 3.12, with modifications]

3.6 complex type

A data type composed of two or more elements, used to describe more complex business