白皮书

数字世界：全球服务基础设施框架

基于国家顶级域名体系构建的开放、平等、可信数字空间

摘要

本文提出以国家顶级域名体系为基础，构建名为"数字世界"的全球服务基础设施。该框架旨在通过非营利性治理模式，建立覆盖全球数字空间的公共服务网络，解决当前互联网碎片化、信任机制缺失等问题，最终实现"为全世界人民服务"的愿景。

第一章 数字时代的全球公共服务需求

当前数字空间面临三重挑战：

1. 技术互联与制度隔离的悖论
2. 全球数字公共产品的结构性缺失
3. 跨国数字服务的基础设施瓶颈

"数字世界"定位为中立可信的数字基础设施提供者，通过.中国域名的国际标准化特性，构建覆盖 193 个主权国家的数字服务网络。

第二章 基础设施架构

核心资产：

- 567 个 ISO 标准二级域名
- 分布式区块链存证系统
- 多语言智能路由平台

技术特性：

1. 支持 IPv4/IPv6 双栈解析
2. 符合 GDPR 等国际数据规范

3. 量子加密的数据传输通道

第三章 四层服务体系

1. **商品流通层**
   - 数字海关系统
   - 智能清关平台
   - 跨境支付接口
2. **文化传播层**
   - 数字文化遗产库
   - 跨语言实时传译
   - VR/AR 沉浸体验
3. **旅游服务层**
   - 电子签证互通
   - 行程智能规划
   - 在地服务对接
4. **教育合作层**
   - 学历资格互认
   - 课程资源共享
   - 产学研协同平台

第四章 治理框架

监督机制：

- 国际顾问委员会（7 席）
- 技术标准委员会（5 席）
- 社区治理委员会（9 席）

决策原则：

1. 重大事项需获 2/3 以上席位同意
2. 创始方在核心使命变更事项保留特别提案权
3. 所有决议及执行记录全程可审计

第五章 实施路径

第一阶段（2025-2027）

- 完成 50 个国家门户部署
- 建立基础治理架构
- 实现日均 10 万用户服务能力

第二阶段（2028-2030）

- 覆盖全部主权国家
- 建成完整生态系统
- 成为联合国数字经济合作伙伴

Digital World: Global Service Infrastructure Framework

A Trusted Digital Space Built on National Top-Level Domain Systems

Executive Summary

This proposal introduces "Digital World", a global service infrastructure based on national top-level domain systems. Adopting a non-profit governance model, the framework establishes a public service network covering global digital space to address internet fragmentation and trust deficits, ultimately realizing the vision of "Serving All People of the World".

Chapter 1: The Need for Global Public Services in the Digital Age

Three core challenges:

1. The paradox between technical connectivity and institutional isolation
2. Structural deficiency in global digital public goods
3. Infrastructure bottlenecks in cross-border digital services

Positioned as a neutral digital infrastructure provider, "Digital World" leverages the international standardization of .中国 domains to build a digital service network covering 193 sovereign states.

Chapter 2: Infrastructure Architecture

Core Assets:

- 567 ISO-standard second-level domains
- Distributed blockchain notarization system
- Multilingual intelligent routing platform

Technical Features:

1. Dual-stack IPv4/IPv6 resolution support
2. Compliance with GDPR and other international data regulations
3. Quantum-encrypted data transmission channels

Chapter 3: Four-Tier Service System

1. **Goods Circulation Layer**
   - Digital customs system
   - Intelligent clearance platform
   - Cross-border payment interfaces
2. **Cultural Exchange Layer**
   - Digital cultural heritage repository
   - Cross-language real-time translation
   - VR/AR immersive experiences
3. **Tourism Services Layer**

- Electronic visa interoperability
- Intelligent itinerary planning
- Local service integration

4. **Education Cooperation Layer**

- Academic credential mutual recognition
- Course resource sharing
- Industry-academia-research collaboration platform

Chapter 4: Governance Framework

Oversight Mechanisms:

- International Advisory Board (7 seats)
- Technical Standards Committee (5 seats)
- Community Governance Council (9 seats)

Decision Principles:

1. Major resolutions require 2/3 majority approval
2. Founding entity retains special proposal rights regarding core mission changes
3. Full audit trail for all resolutions and executions

Chapter 5: Implementation Roadmap

Phase 1 (2025-2027)

- Deploy 50 national portals
- Establish basic governance structure

- Achieve 100,000 daily user service capacity

Phase 2 (2028-2030)

- Extend coverage to all sovereign states
- Complete ecosystem development
- Become UN Digital Economy Partner