

Various regions and countries have published information about the different dimensions of Digital Sovereignty.

This frames digital sovereignty through an infrastructure lens, showcasing IBM Z & LinuxONE strengths across four critical dimensions.

IBM Z /LinuxONE Infrastructure for Digital Sovereignty

A Sovereign-ready platform for modern mission-critical workloads

 Data Sovereignty	 Operational Sovereignty	 Technical Sovereignty	 Legal Sovereignty
<i>End-to-End Control Through Strong Data Governance</i>	<i>Invisible in normal Operations, Critical in a Crisis</i>	<i>Strategic Control and Trust Across the Technology Stack</i>	<i>Navigating Complex Regulations to Enable Digital Sovereignty</i>
Data protection at HW Security level ▪ HSM - Crypto Express Card ▪ Secure boot ▪ Support for NIST-standardized post-quantum-cryptography. ▪ AI Inference capability - keeping sensitive data on-platform Access and Control ▪ Hardware-anchored foundation ▪ IBM Secure Service Container (SSC) ▪ Protect data at rest and in-use ▪ Enforce Data-centric protection	Availability and Resiliency: ▪ Fault-tolerant architecture with redundant components including processors and RAIM ▪ Advanced virtualization ▪ High-availability data sharing Secure Operations ▪ IBM Z / LinuxONE allows organizations to ensure direct authority over software operations and system configurations Sustainable Infrastructure: ▪ Long-term infrastructure operability ▪ IT Efficiency: resources and energy optimization	Trusted Foundations and Control: ▪ Hardware-rooted, immutable security and strong isolation mechanisms Verifiability, Transparency, and Protection ▪ Hardware-rooted security, confidential computing, and exclusive key ownership (KYOK) Interoperability and Strategic Autonomy ▪ Open architecture & flexible deployment model ▪ Network of European laboratories operated by local staff ▪ Transparent supply-chain	Auditing and Compliance: ▪ Complex, evolving regulations: EU frameworks (GDPR, AI Act, Data Act, DORA) and national variations with increasing compliance complexity ▪ IBM Z / LinuxONE auditability is built into the platform, not added afterwards. It provides provable, tamper-resistant, and regulator-ready evidence of compliance across data, users, and system operations.