

IMRS Infrastructure (Egypt)

Good practice: Enhanced technical cooperation through ICANN-Managed Root Server (IMRS) Infrastructure

Relevant DFI commitment: Refrain from blocking or degrading access to lawful content, services, and applications on the Internet, consistent with principles of Net Neutrality subject to applicable law, including international human rights law.

Type of the initiative: Project

Stakeholder Group: Multistakeholder

Launch/adoption: 2022 - Now

Goals

Establishing an **ICANN-Managed Root Server (IMRS) Cluster in Egypt** has aimed to enhance the country's internet infrastructure's stability, security, and efficiency. This initiative seeks to improve Domain Name System (DNS) resilience, reduce latency, and provide faster DNS query responses, fostering a more reliable digital ecosystem for Egypt's growing internet user base.

A key goal is to localise critical internet infrastructure to ensure that Egyptian internet traffic is resolved domestically rather than relying on international servers. This reduces dependency on external networks, enhancing the country's digital sovereignty and resilience against cyber threats. The initiative also supports Egypt's ambitions to position itself as a regional hub for digital innovation and internet infrastructure, contributing to its economic and technological development.

Description

The deployment of an **ICANN-Managed Root Server (IMRS) Cluster in Egypt** is a strategic step in strengthening the country's internet infrastructure. By hosting an IMRS cluster locally, Egypt significantly upgrades its DNS capabilities, ensuring efficient and secure domain name resolution services within its borders.

Key aspects of the initiative include:

1. **Improved DNS Resilience and Performance:** The IMRS cluster enhances local DNS resolution speeds, reducing delays and providing Egyptian users faster access to online services. This supports smoother digital experiences for businesses, education, and public services.
2. **Cybersecurity and Stability:** Localizing the root server cluster minimises vulnerabilities related to cyberattacks and DNS outages. This ensures a more secure and stable Internet environment, which is crucial for Egypt's financial, governmental, and critical service sectors.
3. **Capacity Building and Local Expertise:** The initiative emphasises training and knowledge transfer to Egyptian IT professionals, ensuring sustainable management and operational efficiency of the IMRS cluster. This builds local capacity to maintain and expand the country's digital infrastructure.
4. **Regional Impact:** By hosting an IMRS cluster, Egypt strengthens its role as a digital leader in the region, facilitating improved internet connectivity for neighbouring countries and contributing to developing Africa's broader internet ecosystem.

The deployment of the IMRS cluster aligns with Egypt's national digital transformation strategy, which prioritises robust infrastructure to support economic growth, technological innovation, and inclusivity. This initiative reinforces Egypt's digital resilience and contributes to creating a more connected and competitive digital landscape in the Middle East and North Africa.

Disclaimer: This note was prepared by the GIFI team to illustrate certain good practices contributing to the implementation of the commitments contained in the Declaration on the Future of the Internet. The information provided in this note is based on the official documents and sources originating from donors or implementors and has not been verified for accuracy. Please see sources in the Internet Accountability Compass for additional information. The content of this note does not represent the views of the European Union or any of its bodies or agencies.