EXCLUSIVE INTERVIEW

Hon'ble Ms. Shaza Fatima Khawaja
Federal Minister for Information Technology & Telecommunication

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ICMA: How will the Digital Pakistan Bill reshape the country's journey toward digital transformation?

IT Minister: The Ministry of IT and Telecom (MoITT) is committed to positioning Pakistan as a powerhouse in the global digital economy by fostering innovation and ensuring universal access to telecom services to realize a sustainable digital ecosystem. To this end, the "Digital National Pakistan (DNP) Act, 2025" is a landmark piece of legislation aimed at transforming Pakistan into a digitally empowered nation. With a focus on fostering a dynamic digital society, a robust digital economy, and efficient governance, the DNP Act sets the foundation for the country's digital future. It leverages the potential of digital technologies to drive innovation, economic growth, and improve societal well-being. This lays the foundation for a vibrant digital society, an expanding digital economy, and transparent digital governance — all underpinned by a robust digital infrastructure.

ICMA: What roles will the National Digital Commission and Pakistan Digital Authority play in shaping a tech-driven future?

IT Minister: The National Digital Commission (NDC), Pakistan Digital Authority (PDA), and the Strategic Oversight Committee (SOC), as envisaged in the DNP Act, will be established as key governing bodies to effectively drive our government's vision of 'Digital National Pakistan,' primarily through the digitization of the economy and the continued promotion of e-governance.

Chaired by the Prime Minister, the Commission will provide strategic vision, high-level governance, and policy direction and will comprise federal and provincial members. The objectives of the Commission include:

- Approving the National Digital Masterplan (DMP), which will serve as the core strategic blueprint to transform Pakistan into a digital nation.

- Ensuring alignment and coordination across federal and provincial entities to maintain a unified national approach.

- Issuing directives to entities to align their policies, operations, and digital initiatives with the DMP, addressing inter-jurisdictional challenges and supporting effective implementation.

- Providing policy and strategic guidance to drive the digital transformation agenda forward.

Similarly, the Authority will work to achieve the objectives of 'Digital National Pakistan' and coordinate digital initiatives across federal, provincial, and local levels. Moreover, the PDA has also been tasked with overseeing the secure adoption of emerging technologies like Artificial Intelligence (AI), virtual assets, and the Internet of Things (IoT) and addressing associated challenges. The functions of the Authority include:

- Executing the strategies and initiatives outlined in the DMP. Ensuring the development and operationalization of DPI, including components like Digital ID, Data Exchange Layer, and Digital Payments.

- Ensuring adherence to standards and regulations, fostering an environment of trust and security.

- Collaborating with stakeholders across the public and private sectors to drive innovation and scalability.

- Monitoring implementation, assessing compliance, and reporting to the NDC, highlighting progress and recommending corrective measures as needed.

ICMA: How is the Ministry addressing the challenges of slow internet speeds and improving nationwide connectivity?

IT Minister: The Ministry has been taking initiatives to continue improving nationwide connectivity coverage as well as internet speed. Some of our recent key measures in this regard include, but are not limited to, a frequency spectrum auction to improve coverage and the quality of mobile broadband internet services, the introduction of 5G services in the country, Right of Way (ROW) fee harmonization, tax reforms, the National Fiberization Policy, Telecom Infrastructure Sharing, and strengthening our international connectivity by adding more submarine cables with increased capacity. These efforts collectively aim to strengthen the country's digital infrastructure, aspiring to achieve 100 Mbps internet speeds and optical fiber coverage for 10–12 million households.

a) **Upcoming Spectrum Auction:** Availability of 560 MHz of IMT spectrum in prime bands (700/2600/3500...). 500 MHz spectrum assignment in the 6 GHz band for Wi-Fi users. The upcoming

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spectrum auction will make more spectrum available to enhance broadband infrastructure and support 4G and 5G rollout, ensuring improved service quality and connectivity.

b) **ROW Fee Harmonization:** We are actively working on harmonizing Right of Way (ROW) fees nationwide, addressing inconsistencies and reducing high charges to facilitate telecom infrastructure expansion.

c) **Tax Reforms:** We are working closely with relevant stakeholders on tax reforms to reduce high taxes on telecom services, broadband, and equipment, aiming to attract investment, improve connectivity, and foster digital transformation.

d) **National Fiberization Policy:** The National Fiberization Policy focuses on expanding the fiber-optic network to underserved areas to enhance high-speed internet access, support the 5G rollout, and drive digital growth.

e) **Submarine Cable Improvements:** We are adding four new submarine cables to boost bandwidth, reduce dependency on single cables, and ensure faster, more reliable internet.

ICMA: What impact do you foresee from the introduction of 5G technology on Pakistan's digital landscape?

IT Minister: The deployment of 5G technology in Pakistan presents a transformative opportunity to revolutionize the country's digital ecosystem by providing ultra-fast internet, reducing latency, and bridging the digital divide. It will attract foreign investment, create new job opportunities, and contribute to economic prosperity. Furthermore, it is expected to boost GDP through 5G-enabled solutions in sectors such as healthcare, education, agriculture, and manufacturing. The technology will accelerate digital transformation by enabling the Internet of Things (IoT), Artificial Intelligence (AI), and smart cities while driving investments in telecom infrastructure.

Additionally, it will empower the startup ecosystem and enhance services such as telemedicine, online education, and precision agriculture, fostering innovation and economic growth.

It will also enable Mobile Network Operators (MNOs) to significantly reduce radio network congestion in existing 2G/3G/4G networks caused by limited spectrum availability by introducing new International Mobile Telecommunications (IMT) radio bands. Consequently, this will result in enhanced broadband availability and speed, ensuring improved connectivity across the country.

ICMA: How is the government enhancing cybersecurity to protect against digital threats?

IT Minister: The Government of Pakistan has been taking several steps to enhance cybersecurity and protect against digital threats. Cybersecurity is embedded as a fundamental element in the overall digital transformation of the Government of Pakistan, ensuring that all digital transformation initiatives are aligned with robust security frameworks.

The Ministry has undertaken multiple initiatives to enhance cybersecurity, including legislation, policies, rules, capacity building, and international collaborations. Furthermore, different sectoral regulators have also introduced initiatives to strengthen cybersecurity ecosystems, such as PTA's Critical Telecom Data and Infrastructure Security Regulations and the IT Security Guidebook by the Pakistan Standards and Quality Control Authority (PSQCA).

Some of the key initiatives of the Ministry include the National Cybersecurity Policy 2021, Computer Emergency Response Team (CERT) Rules 2023, the constitution of the CERT Council, and the establishment of the National CERT, among others.

We are actively pursuing international collaboration and domestic stakeholder engagement to continue strengthening the country's cybersecurity posture.

The bill encourages the establishment of secure and interoperable digital systems, such as digital identity platforms and data exchange layers, to ensure that sensitive information is protected while enabling seamless integration of digital services.

Pakistan's Cloud First policy is another milestone aimed at promoting cloud infrastructure within the public sector to enhance security and resilience against potential cybersecurity incidents.

Similarly, we have been conducting nationwide cybersecurity training programs and hackathons through Ignite – the National Technology Fund. Last year alone, 22 cybersecurity awareness sessions for the general public were conducted in 16 cities across Pakistan. Similarly, hackathons have been successfully held annually for the past four years.

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As a result of these initiatives, the overall cybersecurity ecosystem in Pakistan has improved, leading to Pakistan's placement in the top tier (Tier-1 'Role Modeling') of the Global Cybersecurity Index (GCI) 2024.

ICMA: What programs are being introduced to equip youth with advanced digital skills?

IT Minister: The Ministry of IT & Telecom (MoITT) has been actively involved in various initiatives and collaborations to promote digital literacy through Ignite and the Pakistan Software Export Board (PSEB). Several initiatives have been launched with the aim of bridging the skills gap and ensuring that everyone has access to quality learning opportunities.

Our flagship DigiSkills initiative provides digital skills training and has delivered over 4 million training sessions since its inception, contributing to poverty alleviation and financial inclusion.

Similarly, PSEB is working to ensure the sustainable growth of Pakistan's ICT industry and freelance sector, with consistent year-over-year increases in remittance inflows. To this effect, we have undertaken several initiatives to enhance both the quality and quantity of the talent pool, offering IT professionals and young graduates opportunities to continuously improve their skills. These efforts include:

- 6,100 IT graduates trained in high-demand technologies to meet market needs.

- 6,000 ICT professionals trained and certified in the latest technologies, enhancing their value and employability. A plan is in place to train an additional 3,300 candidates.

- 20,000 IT students (in their 6th semester or beyond) and recent graduates to be trained in emerging technologies, with 19,000 of them to be placed in the IT industry.

Freelancer remittances have become an increasingly important part of Pakistan's economy, reaching USD 504 million in FY 2023-24 – an impressive 38.36% increase from USD 364.3 milion in the previous fiscal year.

To further support this growing sector, we are actively working on the Freelancers Facilitation Policy, which will provide additional benefits and ease of doing business for freelancers across Pakistan.

ICMA: How is the Ministry encouraging private-sector innovation in the digital ecosystem?

IT Minister: We strongly support private-sector innovation in the digital ecosystem. Pakistan's telecom industry, which provides the foundation for digital innovation, is primarily driven by the private sector. The Ministry of IT & Telecom (MoITT) is actively fostering private-sector innovation through the National Incubation Center (NIC) Program, managed by Ignite – National Technology Fund. The NICs are government-funded but operated by private-sector entities, ensuring a dynamic, industry-driven approach to technology entrepreneurship.

These incubation centers provide startups with access to mentorship, state-of-the-art facilities, business development support, and investor linkages—all facilitated by experts from the private sector. The NIC Program serves as a launchpad for tech-driven businesses, enabling startups to scale, commercialize innovative solutions, and integrate into the broader digital economy. By bridging the gap between startups, investors, and industry leaders, NICs play a pivotal role in strengthening Pakistan's innovation landscape and enhancing public-private collaboration in digital transformation.

The e-Rozgaar Centers Program is also being implemented in collaboration with private-sector players to empower freelancers. Additionally, PayPal payments have been facilitated through a third-party intermediary, simplifying transaction processes for freelancers.

The Cloud First Policy will enable private-sector cloud service providers to offer their services to public sector entities in Pakistan.

Above all, the Digital Economy Enhancement Project (DEEP) will further encourage private-sector participation in the digital ecosystem. The project aims to develop Pakistan's Digital Government Enterprise Architecture, creating a government ecosystem that transcends existing processes and siloed departments. This includes mapping roles and responsibilities and establishing key principles across technology, business, information, and service design.

ICMA: What strategies drove record IT export growth, and how will it be sustained?

IT Minister: Pakistan's IT & IT-enabled Services (ITeS) sector is playing a pivotal role in exports and foreign exchange earnings. During FY24, ICT export remittances surged to USD 3.223 billion, accounting for 41.3% of total services exports—the highest among all service sectors.

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The ICT industry delivered a trade surplus of USD 2.827 billion (87.71% of total ICT export remittances) in FY 2023-24, a 22.31% increase from USD 2.297 billion in the previous fiscal year (FY 2022-23). This surplus helped mitigate the country's foreign currency crunch at a critical time. In contrast, the overall Services sector recorded a trade deficit of USD 2.313 billion in FY 2023-24.

To further strengthen the IT sector, MoITT conducted nationwide industry consultation sessions to identify key challenges and develop export enhancement strategies. In addition to introducing business-friendly policies, the government has launched several industry facilitation initiatives, including Technology parks; E-Rozgaar centers; Subsidies; Certifications' and close collaboration with industry stakeholders. These efforts aim to continuously uplift the IT sector and ensure sustainable export growth. I would also like to commend the industry players for their consistent contributions in driving Pakistan's IT exports forward over the years.

ICMA: How will the Digital FDI Initiative attract global investors?

IT Minister: Pakistan has taken a pioneering step in enhancing its digital economy by being the first country to implement the Digital Foreign Direct Investment (FDI) Initiative, launched by the World Economic Forum (WEF) and the Digital Cooperation Organization (DCO) at Davos in 2022. This initiative aims to facilitate cross-border investment in the digital economy, particularly in emerging markets, and marks the beginning of Pakistan's Digital FDI-Enabling Project (DEP).

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lead strategically

The initiative is structured around four key pillars of World Economic Forum's Digital FDI framework:

- Digital Infrastructure
- Digital Adoption
- New Digital Activities
- Digital Services Exports

The implementation of the Digital FDI Initiative marks a transformative moment for Pakistan's digital landscape. By fostering a robust digital infrastructure, encouraging the adoption of new technologies, and supporting innovation, it aims to create a more investor-friendly environment.

The Digital FDI Initiative is strategically designed to attract global investors by fostering a supportive and innovation-friendly environment for technology - driven investments. It aims to position Pakistan as a leading digital economy by addressing core investor concerns, such as infrastructure, policy clarity, and talent availability.

ICMA: How is the Ministry fostering local and global collaboration to strengthen the digital economy?

IT Minister: Pakistan is actively pursuing local and global collaborations to strengthen its digital economy by engaging in bilateral and multilateral forums, nations, and organizations to foster knowledge sharing, technology transfer, and investment in the digital sector. These include, for example, our close collaboration with China, Saudi Arabia, UAE, Turkey, Azerbaijan, Qatar, and others. We are also actively participating in regional and international organizations such as ITU, DCO, SCO, ICANN, MEDCI, IGF, and CTO, among others.

These collaborations focus on developing digital infrastructure, promoting digital literacy, and creating an enabling environment for tech startups and businesses. By fostering these partnerships, Pakistan aims to accelerate its digital transformation and integrate into the global digital economy.

We are also working closely with the World Bank Group on the Digital Economy Enhancement Projects, which will provide the core engine for digital transformation and result in truly uplifting the digital economy in Pakistan. The Digital Economy Enhancement Project (DEEP) was approved to lay the rails for a national digital transformation, significantly improving the quality of life for citizens, providing digital access to government services, and improving the ease of doing business standings of the country. DEEP will develop digital government architecture and use a whole-of-government approach for an inclusive digital transformation. These efforts have resulted in an improved rank for Pakistan in various international rankings, including:

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- Pakistan was ranked in Tier 1 (Role-Modelling) in the 2024 Global Cybersecurity Index (GCI).
- Pakistan achieved a significant milestone last year with Ignite's NICs selected as ITU-backed Regional Digital Transformation Acceleration Centers.
- Pakistan has climbed/improved 14 ranks in the United Nations (UN) E-Government Development Index (EGDI) for 2024.
- Pakistan's IDI score improved significantly, rising to 55.6 from 48.7 in 2023, advancing its global ranking by 5 positions in 2024.

ICMA: What are the strategies employed by Ministry for countering fake news?

IT Minister: Fake news is a growing challenge not only in Pakistan but across the world in different countries. Though, the Ministry and other stakeholders have been taking steps, including legislation, awareness, and capacity-building sessions, to help address this challenge. The Prevention of Electronic Crimes Act (PECA) 2016 is the primary legislation that addresses the growing menace of cybercrimes, including spreading false information online that could cause harm or incite violence. The recent amendments in PECA have broadened its scope.

I must say that addressing the challenge of fake news requires a multi-faceted approach that involves governments, tech companies, media organizations, civil society groups, and individuals. It's an ongoing struggle that demands constant vigilance, adaptation, and collaboration.