

Government of Pakistan
Ministry of Information Technology and Telecommunication

TERMS OF REFERENCE

Ministry of Information Technology and Telecommunication is entrusted to formulate policies aimed at improving the National Information and Communication Technology (ICT) infrastructure and services to transform Pakistan into a knowledge-based economy by ensuring provision of reliable and affordable ICT enabled services. In this regard, this Ministry invites applications from dynamic professionals for following SPPS posts as per details given below:

S. No.	Positions	SPPS	Posts
1	Adviser Emerging Technologies Research	SPPS-I	1
2	Director E-Governance	SPPS-II	1
3	Director Digital Economy	SPPS-II	1
4	Director Internet Governance	SPPS-II	1
5	Director Cyber Security & Privacy	SPPS-II	1
6	DG Emerging Skills	SPPS-II	1
7	Expert Emerging Tech (AI & ML)	SPPS-III	1

1. Advisor (Emerging Technologies Research), SPPS-I

Qualification:

Masters or equivalent in a relevant field (e.g., Computer Science, Information Technology, Engineering, or a related ICTs and Emerging Technologies discipline).

Experience:

Minimum of 10 years of relevant professional experience in technology research & development, policy formulation and strategic leadership, in public and/or private sector.

The candidate's professional experience should include the following:

- Leading national-level emerging technology initiatives and strategies.
- Conducting advanced research and trend analysis related to emerging technologies.
- Designing and implementing digital innovation and emerging technology policies.
- Coordinating with government stakeholders, industry, and academia.

- Managing strategic IT and digital transformation projects.

Job Description:

- To provide strategic leadership and vision for the Ministry in leveraging emerging technologies, including AI, Cloud, Blockchain, Cybersecurity, and Semiconductors, to drive digital transformation, foster innovation, and build a robust and secure digital ecosystem for Pakistan.
- Drafting policies, strategies, advisories and analysis related to emerging technologies; driving research and innovation; fostering tech ecosystem development; providing expert analysis of technology trends; overseeing strategic IT/digital projects, and initiatives.
- Foster robust collaboration with provincial governments and other stakeholders to facilitate the exchange of best practices, ensure consistent implementation and focus on emerging technologies, and actively work to avoid duplication of efforts and resources across federal and provincial domains.
- Conduct in-depth research and continuous analysis of global trends in emerging technologies, and successful case studies from leading nations. Based on this research, strategize and recommend the national focus and priorities for emerging technologies ensuring Pakistan remains at the forefront of global digital innovation.
- Tasks assigned by the Member Digital & Emerging Tech / Secretary / Minister.

2. Director E Gov, SPPS-II

Qualification:

Masters or equivalent in a relevant field (e.g., Computer Science, Information Technology, Engineering or related ICT related disciplines, Management Sciences, Business Administration or related discipline.

Experience:

Minimum of 10 years of professional experience in e-governance, public service delivery, or digital transformation projects, in public and/or private sector.

The candidate's professional experience should include the following:

- Developing and implementing e-governance strategies and initiatives.
- Formulating standards, policies, and digital service frameworks.
- Coordinating cross-government digital transformation efforts.
- Conducting research on international e-governance practices.
- Engaging stakeholders and supporting capacity building.

Job Description:

- Lead the conceptualization, development, and implementation of strategic e-gov initiatives across Pakistan, aligning with national digital transformation goals and improving public service delivery. This includes identifying key areas for digitalization within government processes and services.
- Develop, review, and enforce national e-governance policies, standards, guidelines, and frameworks to ensure interoperability, security, efficiency, and citizen-centricity of all e-government services and platforms.
- Act as the central coordinating point for all e-governance initiatives at both federal and provincial levels. This involves fostering collaboration, sharing best practices, resolving inter-agency challenges, and ensuring a cohesive national approach to e-government development.
- Conduct continuous research on international best practices and emerging trends in e-governance, smart government, and digital public services. Analyze global case studies and leverage insights to strategically align Pakistan's e-governance roadmap and initiatives with international benchmarks.
- Engage proactively with various stakeholders, including government ministries, departments, civil society, academia, and the private sector, to foster a collaborative environment for e-governance implementation. Also, identify capacity building needs within government agencies to support the adoption and utilization of e-governance solutions.
- Tasks assigned by the Member Digital & Emerging Tech.

3. Director Digital Economy, SPPS-II

Qualification:

Masters or equivalent in a relevant field (e.g., Computer Science, Information Technology, Economics, Business Administration, Finance, Management Sciences, Social Sciences, or related fields etc).

Experience:

Minimum of 10 years of professional experience in economic policy, digital business models, fintech, or related areas, preferably in public and/or private sector.

The candidate's professional experience should include the following:

- Developing and implementing national digital economy strategies.
- Formulating policy and regulatory frameworks for digital markets.
- Conducting economic and digital innovation trend analysis.

- Industry and stakeholder ecosystem development.
- Advocating for digital infrastructure and inclusive growth.

Job Description:

- Lead the formulation, development, and strategic implementation of Pakistan's national Digital Economy strategy. This includes identifying key sectors for digital transformation, fostering innovation, and designing initiatives to maximize the contribution of the digital economy to national GDP, job creation, and overall socio-economic development.
- Drive the development and recommendation of progressive policies, legal frameworks, and regulatory reforms essential for fostering a thriving digital economy. This encompasses areas such as e-commerce, digital payments, digital FDI, fintech, platform economy, data governance for economic growth, and policies that encourage digital entrepreneurship and investment.
- Conduct continuous research and analysis of global trends, emerging business models, and best practices in the digital economy. Benchmark Pakistan's digital economy performance against leading nations and strategize the national focus and priorities to ensure competitiveness and alignment with international digital economic developments.
- Foster a vibrant digital economy ecosystem by actively engaging and building partnerships with key stakeholders including the private sector (startups, established tech companies), academia, financial institutions, and international organizations. Facilitate public-private dialogues and initiatives to stimulate investment and growth in digital sectors.
- Advocate for the development of robust digital infrastructure (broadband, connectivity, data centers, etc) as a foundational pillar of the digital economy. Champion initiatives for digital inclusivity to ensure that all segments of society, including rural communities and underserved populations, can participate in and benefit from the digital economy.
- Establish key performance indicators (KPIs) and a robust framework for measuring the growth and impact of the digital economy. Regularly monitor progress against national targets and prepare comprehensive reports for the Ministry's leadership and other relevant government bodies on the state and trajectory of Pakistan's digital economy.
- Tasks assigned by the Member Digital & Emerging Tech

4. Director Internet Governance, SPPS-II

Qualification:

Masters or equivalent in a relevant field (e.g., ICT related disciplines Computer Science, Information Technology, International Relations, Business Administration, Management Science, Law or Telecommunications) qa

Experience:

Minimum of 10 years of professional experience in internet policy, internet governance, telecommunications, or relevant international / regional forums, in public and/or private sector.

The candidate's professional experience should include the following:

- Developing national Internet governance policy frameworks.
- Representing national interests in global IG forums (ICANN, IGF, APNIC etc.)
- Leading internet governance capacity-building efforts.
- Coordinating multi-stakeholder engagement in IG.
- Researching emerging IG trends and policy issues.

Job Description:

- Lead the formulation and implementation of Pakistan's national strategy and policies related to Internet Governance, ensuring alignment with national development goals, and the multi-stakeholder model of Internet governance. This includes addressing issues such as internet governance capacity building, DNS market development, universal acceptance and internationalized domain names (UA/IDNs), within the IG framework.
- Serve as the primary focal point and lead representative for Pakistan in engaging with key international and regional Internet Governance forums and organizations, including but not limited to the Internet Governance Forum (IGF), the Internet Corporation for Assigned Names and Numbers (ICANN), Asia Pacific Network Information Centre (APNIC), and the Asia Pacific Regional Internet Governance Forum (APRIGF), etc. This involves active participation, presenting national positions, and advocating for Pakistan's interests.
- Develop, oversee, and implement comprehensive capacity building programs and initiatives aimed at enhancing understanding and expertise in Internet Governance within government agencies, academia, civil society, and the private sector across Pakistan. This includes organizing workshops, seminars, and promoting participation in relevant training programs.
- Foster and maintain strong coordination and collaboration among all national stakeholders involved in Internet Governance, including government bodies,

telecommunication operators, internet service providers, civil society organizations, technical communities, academia, and the private sector, to ensure a cohesive and inclusive approach to IG issues.

- Conduct continuous research and analysis of global and regional developments, emerging issues, policy debates, and technical trends within the Internet Governance landscape. Provide expert advice and recommendations to the Ministry on adapting national strategies and policies in response to these evolving dynamics.
- Represent Pakistan's positions and interests on critical Internet Governance issues at various international and regional platforms. Lead advocacy efforts to promote a secure, stable, accessible, and inclusive internet for all, reflecting Pakistan's national priorities and values.
- Tasks assigned by the Member Digital & Emerging Tech

5. Director Cyber Sec. & Privacy, SPPS-II

Qualification:

Masters or equivalent in a relevant field (e.g., Computer Science, Information Technology, Engineering in related disciplines, Cybersecurity or Information Security and ICT related disciplines)

Experience:

Minimum of 10 years of professional experience in cybersecurity, information security, network security, data privacy, risk management, or related fields, in public and/or private sector.

The candidate's professional experience should include the following:

- Developing cybersecurity and privacy policies and frameworks.
- Researching cybersecurity threats and international best practices.
- Coordinating national cybersecurity initiatives.
- Collaborating with global cybersecurity stakeholders and institutions.
- Leading cybersecurity capacity building and awareness programs

Job Description:

- Conduct in-depth research and analysis of global cybersecurity threats, emerging attack vectors, data privacy regulations (e.g., GDPR), and best practices in national cybersecurity and data protection frameworks. Utilize this intelligence to proactively strategize and align Pakistan's cybersecurity and privacy posture, policies, and initiatives with international standards and evolving challenges.

- Possess a comprehensive understanding of national and international cybersecurity and data privacy laws, policies, and regulatory frameworks (e.g., Pakistan's Prevention of Electronic Crimes Act (PECA), Personal Data Protection Bill, National Cybersecurity Policy). Lead the development, review, and enforcement of national policies, standards, guidelines, and frameworks to strengthen cybersecurity defenses and ensure the protection of personal data across all government and critical national infrastructure entities.
- Lead and manage high-level engagements and collaborations with international bilateral partners, multilateral forums (e.g., ITU, UN, DCO, SCO, etc.), and global cybersecurity and privacy organizations. This includes representing Pakistan's interests, sharing intelligence, participating in joint exercises, and fostering cooperation on cybercrime prevention, data breach response, and privacy-enhancing technologies.
- Serve as the central coordinating authority for all cybersecurity and data privacy initiatives across federal and provincial government entities. This involves fostering seamless communication, ensuring consistent implementation of policies, facilitating information sharing, and developing a comprehensive national action plan for cybersecurity and privacy readiness and response, and well as cybercrime related matters.
- Oversee initiatives for capacity building in cybersecurity and data privacy across the public sector, including training programs, certifications, and awareness campaigns for government employees and citizens. This also involves promoting a culture of cybersecurity hygiene and data protection awareness nationwide.
- Tasks assigned by the DG Emerging Tech

6. DG Emerging Skills, SPPS-II

Qualification:

Masters or equivalent in a relevant field (e.g., Computer Science, Information Technology, Engineering, Business Administration, Management Sciences, Human Resources, Social Sciences or equivalent in a related field).

Experience:

Minimum of 10 years of professional experience in skills development, human resource development, training & development, strategic planning, and ecosystem building, preferably in the technology sector, preferably in both, public and private sector.

The candidate's professional experience should include the following:

- Leading national-level skills initiatives and frameworks.
- Conducting research and planning for emerging tech workforce development.
- Engaging with international organizations and global technology companies.
- Designing and overseeing training, certification, and accreditation programs.
- Coordinating federal and provincial skill development programs

Job Description:

- Lead the strategic development and implementation of initiatives aimed at fostering a robust emerging technology skills ecosystem across Pakistan, aligning with national digital policy and economic growth objectives. This includes identifying key emerging technologies (e.g., AI, Machine Learning, Cybersecurity, Cloud Computing, Blockchain) and devising comprehensive strategies for their integration into the national workforce.
- Conduct in-depth research and continuous analysis of global emerging tech skill trends, identifying future demands, skill gaps, and best practices. Based on this research, strategize and recommend the Ministry's focus areas for skill development to ensure Pakistan remains competitive in the international digital economy.
- Drive and manage high-level coordination with international bilateral partners, multilateral forums (e.g., UN, DCO), and leading global technology giants (e.g., Google, Microsoft, Amazon) to attract investment, facilitate knowledge transfer, secure collaborations, and benchmark national efforts against global standards in emerging tech skills.
- Develop and oversee the national emerging tech skills strategy, with a strong emphasis on designing and implementing high-quality training programs, promoting industry-recognized certifications, and establishing accreditation frameworks to ensure the relevance and quality of skilled professionals.
- Act as the central coordinating expert for all emerging tech skill-related initiatives at both federal and provincial levels, fostering synergy and avoiding duplication of efforts. This includes developing a consolidated action plan with clear targets, timelines, and measurable outcomes for nationwide skill development.
- Advocate for enabling policies and regulatory frameworks that support the growth of the emerging tech skills sector, including incentivizing private sector participation,

fostering innovation, and promoting a conducive environment for startups and tech entrepreneurship within the context of skills development.

- Tasks assigned by the Member Digital & Emerging Tech / Secretary / Minister.

7. Expert Emerging Tech (AI & ML), SPPS-III

Qualification:

Masters or equivalent in a relevant field (e.g., Computer Science, Artificial Intelligence, Data Science, Machine Learning, Engineering, or a related discipline).

Experience:

Minimum of 7 years of professional experience in AI/ML technology research & development, policy formulation, or strategic leadership, preferably in public and/or private sector.

The candidate's professional experience should include the following:

- Leading AI and Machine Learning research/deployment initiatives
- Designing and implementing AI-driven frameworks and policies
- Assessing and managing ethical, privacy, and data governance implications of AI
- Engaging with academia, industry, and global partners on AI initiatives
- Supporting national AI ecosystem development and innovation programs

Job Description:

- Conduct in-depth research and analysis of Artificial Intelligence and Machine Learning technologies to support national strategic priorities.
- Assist in policy development, governance frameworks, AI safety guidelines, and ethical AI mechanisms aligned with global best practices.
- Engage with industry, academia, and international partners to promote AI research, innovation, and national capacity building.
- Monitor global trends in AI/ML and provide strategic recommendations for Pakistan's AI adoption roadmap.
- Support national programs and projects related to AI capability development and digital innovation.
- Support the Advisor Emerging Tech in implementing national AI initiatives.
- Tasks assigned by the Advisor (Emerging Technologies Research)