

RECOMMENDATIONS FOR THE PRIME MINISTER'S IT TASK FORCE

SYNOPSIS

Following document has been prepared for the MoIT and the Prime Minister's Task Force for IT to provide them with consolidated recommendations and guidelines obtained from a large number of stakeholders through the Digital Forum and IT Policy Making Conference held in Karachi on 23rd December 2018 by the Nation Building Initiative (NBI); which is a Society committed to unify the People of Pakistan through social harmony and economic growth.

As the Society identified IT to be the most effective tool to achieve the goal of nation building; it decided to support the Government in this regard and accordingly mobilized its resources to help the Government to produce a policy that is effective and has the ownership of the stakeholders and people as well. In this regard a digital forum was built on NBI platform, where large number of people / stakeholders contributed suggestions; for which NBI profoundly thanks them. Subsequently, NBI with the support of sponsors conducted a conference where on floor discussions resulted into specific IT policy recommendations; which will, In Shaa Allah, bolster the country's current ICT infrastructure and optimize its utilization by all stakeholders to make Pakistan peaceful, safe, secure and prosperous.

RECOMMENDATIONS OF THE CONFERENCE & DIGITAL FORUM	SUGGESTED WAY FORWARD BY NATION BUILDING INITIATIVE
1. Promulgate ICT Standards; clearly defining the compliance requirements for IT Industry including Cyber Security	<ul style="list-style-type: none">• This is the foremost task which is to be taken up by a dedicated team of subject matter experts to define the compliance requirement for various sectors such as Finance, Security, Governance, Healthcare, Industry etc.• This task should be led by Member IT and Member Telecommunication respectively• The project team should include all stakeholders from concerned ministries, departments and security agencies• The Project can be funded by IGNITE fund or as applicable

<p>2. Establish Common Digital and Cyber Security Framework for e-Governance</p>	<ul style="list-style-type: none"> • A dedicated team of Subject Matter Experts need to define and develop the framework for this mega programme • The task should be led by Member IT, Member Telecommunication and DG (Tech) respectively • The programme team should include all stakeholders from concerned ministries, departments and security agencies • To implement e-Governance in accordance with the framework an Authority / Programme Management Office needs to be created to: <ul style="list-style-type: none"> • Define metrics for development of projects • Supervise, monitor and control e-governance projects • Perform the risk analysis and formulate risk mitigation strategies • Subsequently carry out testing and acceptance • The programme can be funded from USF (initially for defining framework and programme management) and subsequently by funds allocated by the Government
<p>3. A National Cyber and Information Security Agency (NCISA) must be established, working under the security & intelligence apparatus</p>	<ul style="list-style-type: none"> • Cyber and information security must be looked at from three distinct perspectives; i.e. National Security, Cyber-crime and Privacy / Confidentiality • Legal frameworks must be formulated for each of the above which should cater for the following: <ul style="list-style-type: none"> • The Cyber and Information Security Act should propose the level of security to be deployed for each class of data by its nature of classification, confidentiality and sensitivity • The Act should have regulations for public and private entity that handles public or consumer data for direct or indirect commercial use. This will ensure privacy of citizen against data breaches as well • The Act should have a holistic view of data, security and privacy and should supersede or encompass all previous cyber security or crime initiatives or laws

<p>4. Consolidate citizens' data into the NADRA database</p>	<ul style="list-style-type: none"> • All citizens' data from various departments must be consolidated into a single database; this may include Criminal Records, Land Records, Tax Information, & • Health and Educational Information • This data should be utilized to streamline public services as well as enhance security and verification processes • Taking into account the confidentiality aspects; this data can be anonymised and shared with businesses in order to enable them to make well-informed business decisions
<p>5. Build green (eco-friendly), fast and secure digital infrastructure across the Country</p>	<ul style="list-style-type: none"> • Carry out an audit of current ICT infrastructure and analyse its capabilities • Identify options to repurpose and decommission equipment that is no more cost effective • Upgrade ICT infrastructure taking into account the Recommendations # 2 & 3 • Build National Data Centres (NDCs); North, Central and South regions • National Data Centres can be built on Public Private Partnership (PPP) basis with investment coming from local sources only • Internet governance should be robust enough to provide services in a timely manner without • disruptions, a capability known as "Survivability" • In order to maintain survivability we need continuous monitoring to ensure availability, user ease and quality of services • This recommendation would enable IT / ITeS to grow and create a stable ICT ecosystem

<p>6. Pakistan is already a water scarce Country and it is being rapidly effected by climate change.</p> <p>Whereas its population and economy primarily depend on agriculture which mandates utilization of smart water management systems for irrigation and use of data enabled agriculture</p>	<ul style="list-style-type: none"> • Leveraging ICT and Data Science, Agriculture Sector needs to be modernized • Therefore, IT Policy should facilitate a holistic countrywide irrigation / water management system integrate it into the ICT infrastructure • Concurrently, agricultural database needs to be created for better planning and optimal use of resources • Enable farmers through smartphones and Apps to learn modern ways of agriculture, share data, access precise forecasting and e-commerce tools • Accordingly, duties on smartphone and the cost of using Internet needs to reduced phenomenally • This will bring empowerment and prosperity at the grass root level
<p>7. Identify and resolve issues faced by SMEs in terms of import and export of IT equipment and services, and transfer of funds for the same</p>	<ul style="list-style-type: none"> • Establish fast, transparent and convenient payment gateways for international funds transfer • Reduce service charges and provide incentivised conversion rates for inward transactions in order to discourage use of unofficial channels • Reduce import duties on IT related equipment • Incentivise Venture Capitalists by providing tax rebates to VCs
<p>8. For government procurements, local producers must be given preference over foreign vendors</p>	<ul style="list-style-type: none"> • PPRA rules must be amended in order to not block local producers from bidding
<p>9. Build Pakistan's image as an IT and business friendly country</p>	<ul style="list-style-type: none"> • Leverage measures taken vide para. 5 to change perception • Prevent use of pirated software and promote licensed software • Enforce Intellectual Property Right laws and create organization to file patent • Media should be mandated to promote positive image of economic growth and technological development in Pakistan

10. Encourage large MNCs to open local offices and invest in Pakistan	<ul style="list-style-type: none"> Ministries of IT and Commerce should jointly pursue such organizations with a well-thought-out strategy based on incentives and concessions
11. Identify in-demand digital skills in global IT landscape and update the curriculum based on commodity skills	<ul style="list-style-type: none"> Create an IT consortium to include the software houses and all ICT universities of Pakistan Digital skills should be identified by the IT consortium in the light of local and global requirements Virtual university needs to be brought to International standards with MOOCS (Massive Open Online Courses) Build community colleges to teach short courses recommended by IT consortium Every university must have an Industry Advisory Group Develop IT instructional material in Urdu and other local languages in order to broaden access to IT Mathematics needs to be taught conceptually; computing to be taught as a foundational subject (This is the aspect that MoIT has to take and pursue with HEC and the Provincial Education ministries)
12. In view of the recommendation at para 11; creation of a post of Member Education in MoIT is recommended	<ul style="list-style-type: none"> Member Education must collaborate with the HEC, provincial education ministries and other stake holders to formulate a holistic IT Education Policy Member Education must also oversee implementation of the said policy
13. Security of financial data	<ul style="list-style-type: none"> All financial data must be protected in-line with International best practices and the proposed National Cyber and Information Security Act SBP must ensure compliance by all financial institutions

<p>14. Friendly “One Shop Solution” for all IT queries; and a dashboard is required to support growth of IT Industry</p>	<ul style="list-style-type: none"> • MoIT should consider development of a portal to facilitate growth of IT industry by providing authentic statistics, guidelines and forecast • The portal to be managed by MoIT with a collaboration of IT Industry / Consortium
<p>15. Establishment of Centres of IT Excellence (CITE) to promote R&D and innovation</p>	<ul style="list-style-type: none"> • Identify cutting edge technologies and define charter on how to contribute in IT commodity with out of box solutions • Market home grown IT products in annual IT EXPO