"Post-COVID-19 National ICT Roadmap FY2021-2025"

The ICT roadmap is an action document with a ‘whole of the government’ and ‘whole of the society’ approach. The roadmap presents 16 key action agenda, which will create domino effects within a sector and across the economy and society.

This is an initiative of the Government of the People’s Republic of Bangladesh | Coordinated by the ICT Division.

A. Background

COVID-19 has posed a challenge to all of us: should we only defend and mitigate or should we take it as an opportunity to reflect and overhaul our approach as a nation towards economy, society, governance, and prosperity. Bangladesh believes that COVID-19 is an opportunity to take Bangladesh to the next level of digitalisation and its streamlining into all aspects of our lives. It is also an opportunity to take ICT as an industry to the next level with an agenda of ‘Made in Bangladesh’. Learning from successes and failures, it is an opportunity for Bangladesh to become more inclusive, sustainable, and humane.

B. Journey towards Identifying Domino Effect Action Agenda

1. Action agenda developed for each theme
2. Priority agenda within the theme identified
3. Priority action agenda compiled from each sector

- Impact at large scale
- Bring transformational change
- Allow leapfrogging in certain areas
- Enable better preparedness for future disaster management
- Accelerate certain national aspirations
- Drive towards taking advantage of new opportunities

C. Approach towards Implementing the Action Agenda

Whole of the government approach

- Lead government agency
- Coordinating government agency
- Facilitating agency
- Relevant agencies with government

Whole of the society approach

- Private sector
- NGO/CSO
- Citizens
- Development partners
- Academia
D. Domino Effect Action Agenda

- **Impact**
  - Export diversification and 100K employment creation
  - Bangladesh a manufacturing hub of digital and IoT devices for domestic and export markets
  - ‘Made in Bangladesh’ boost in ICT and emerging technologies
  - Job creation (direct/indirect) for 15 million people by 2030, up 10X from current levels, making digital commerce a central way of life
  - Paperless government
  - Private sector transformation boosted through local and foreign direct investment

- **Domino effect action agenda**
  - Access to education, livelihood opportunities, healthcare, and social protection benefits for 165 million citizens
  - Interoperable and connected health management systems
  - Breakthrough in enabling seamless access to social protection benefits for all citizens
  - Launching of Universal Identity System (UIS) with profiling for multi-purpose use
  - Readiness of supply side for payment of social protection benefits to citizens with disability, vulnerability status, etc.
  - Financial data interoperability speeding up financial inclusion by 10X
  - Alternative credit rating system for CMSMEs and vulnerable citizens
  - Expansion of financial market, boosting economy for faster growth and overcoming challenges of COVID-19
  - Digital commodity exchange for agriculture produce connecting farmers at their doorsteps
  - Bottom-up e-commerce for livelihood of local producers and artisans
  - National Skills Registry for both the formal and informal economy
  - National Policy and Agenda for Start-ups
  - Design of targeted unemployment benefit schemes
  - Job creation for 30 million youth and citizens

**Inclusive Growth by FY2025**
E. Thematic Areas for Action Agenda

**ICT and Emerging Technologies**
- ICT Infrastructure
- Software Solutions
- ICT Hardware
- Emerging Technologies

**Roadmap for Key Sectors catalysed by ICT**
- Agriculture and Food Security
- Health and Well-being
- Education
- Employment and Skills
- Labour Migration and Remittance
- Social Protection
- Financial Inclusion
- Supply Chain
- Private Sector Transformation and Innovation
- Public Service Transformation and Innovation

F. Policy Agenda for Quick Win

<table>
<thead>
<tr>
<th>Action Agenda</th>
<th>Policy and Regulation</th>
</tr>
</thead>
</table>
| 1 Interoperable and connected health management systems | Investment in human capability and capacity, especially health care management so that the health system is transformed from ‘doctor-centric’ to ‘healthcare management centric’
- Development of an accountability framework for both public and private facilities
- Development and enforcement of a mandatory health data interoperability protocol for connecting data system of all public and private health facilities
- Launching of universal health insurance system covering both public and private facilities |

| 2 ’Made in Bangladesh’ boost in ICT and emerging technologies | Development and enactment of ’Made in Bangladesh’ Policy for promoting local manufacturing of digital devices for domestic and foreign market. The policy needs to be foreign investment friendly and at the same time promote local capacity building |

| 3-4 Universal affordable access to digital device and Internet broadband connectivity | Development of guideline for utilisation of Social Obligation Funds so that it can be invested in covering all citizens under ‘universal access to digital device and Internet’ program
- Upgrading National Broadband Policy, 2009 for:
  - Inviting districts and upazilla level investors and start-ups to offer broadband services
  - Revision of TAX, VAT, and Surcharge to decrease Internet price |

| 5 Universal affordable access to digital literacy | Development of digital literacy curriculum guideline for each segment of learners for development of course materials by public and private agencies
- Making curriculum and content for digital literacy open [creative commons licensing] |
<table>
<thead>
<tr>
<th>Action Agenda</th>
<th>Policy and Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Launching of Universal Identity System [UIS] with profiling for multi-purpose use</td>
<td>- Inter-agency working group for appropriate design and roadmap for UIS - Enactment of Data Interoperability Law - Enactment of Data protection and Privacy Law [e.g., GDPR]</td>
</tr>
<tr>
<td>7. Universal coverage of digital financial services</td>
<td>- Digital Financial Inclusion Policy to incentivise digital financial transactions across the population</td>
</tr>
<tr>
<td>8. Financial data interoperability speeding up financial inclusion by 10X</td>
<td>- Enactment of Data Interoperability Law - Enactment of Data Protection and Privacy Law [e.g., GDPR] - Revision of Digital Security Act, 2018 to connect with independent law on data protection and privacy</td>
</tr>
<tr>
<td>9. Alternative credit rating system for CMSMEs and vulnerable citizens</td>
<td>- Enactment of a law for CMSME credit rating system with emphasis on credit bureau database under Bangladesh Bank Order, 1972</td>
</tr>
<tr>
<td>10. Digital commodity exchange for agriculture produce connecting farmers at their doorsteps</td>
<td>- National policy for quality standards for different agro-commodities in Bangladesh - National Agro-Commodity Exchange Policy</td>
</tr>
<tr>
<td>11. Facilitating bottom-up e-commerce for livelihood of local producers and artisans</td>
<td>- Upgrading National Broadband Policy, 2009 for revision of TAX, VAT, and Surcharge to decrease Internet price - Upgrading National Digital Commerce Policy, 2018 for exemption of taxes imposed on digital commerce and advertising</td>
</tr>
<tr>
<td>12. Transformation of education to 4IR adjusted blended learning approach for all citizens</td>
<td>- Digital Education Policy [in alignment with 8th Five-Year Plan] - Upgradation of Intellectual Property Rights [IPR] Policy to ensure appropriate encryption and to protect the providers of online education</td>
</tr>
<tr>
<td>13. National Skills Registry for both the formal and informal economy</td>
<td>- Introduction of National Skills Registry Policy</td>
</tr>
<tr>
<td>15. Ease of Doing Business Index, 50 by 2025</td>
<td>- Introduction of Ease of Doing Business Policy catering to each of the 18 sectors identified</td>
</tr>
<tr>
<td>16. National Policy and Agenda for Start-ups</td>
<td>- Introduction of National Policy for Start-ups to promote growth of the ecosystem, while also attracting foreign investment</td>
</tr>
<tr>
<td>Action Agenda</td>
<td>Lead</td>
</tr>
<tr>
<td>---------------</td>
<td>------</td>
</tr>
<tr>
<td>Interoperable and connected health management systems</td>
<td>Ministry of Health and Family Welfare (MoHFW)</td>
</tr>
<tr>
<td>'Made in Bangladesh' boost in ICT and emerging technologies</td>
<td>Ministry of Industries (MoI)</td>
</tr>
<tr>
<td>Universal affordable access to digital device and Internet broadband connectivity</td>
<td>Posts and Tele-communications Division</td>
</tr>
<tr>
<td>Universal affordable access to digital literacy</td>
<td>ICT Division (ICTD)</td>
</tr>
<tr>
<td>Launching of Universal Identity System [UIS] with profiling for multi-purpose use</td>
<td>Cabinet Division</td>
</tr>
<tr>
<td>Universal coverage of digital financial services</td>
<td>Bank and Financial Institutions Division (BFID)</td>
</tr>
<tr>
<td>Financial data interoperability</td>
<td>Bank and Financial Institutions Division (BFID)</td>
</tr>
<tr>
<td>Alternative credit rating system for CMSGSMs and vulnerable citizens</td>
<td>Bank and Financial Institutions Division (BFID)</td>
</tr>
<tr>
<td>Digital commodity exchange for agriculture produce connecting farmers at their doorsteps</td>
<td>Ministry of Agriculture (MoA)</td>
</tr>
<tr>
<td>Facilitating bottom-up e-commerce for livelihood of local producers and artisans</td>
<td>Ministry of Commerce (MoC)</td>
</tr>
<tr>
<td>Transformation of education to 4IR adjusted blended learning approach for all citizens</td>
<td>National Education Reform Commission (proposed)</td>
</tr>
<tr>
<td>National Skills Registry for both the formal and informal economy</td>
<td>National Skill Development Authority (NSDA)</td>
</tr>
<tr>
<td>Paperless government</td>
<td>Cabinet Division</td>
</tr>
<tr>
<td>Ease of Doing Business Index, 50 by 2025</td>
<td>Bangladesh Investment Development Authority (BIDA)</td>
</tr>
<tr>
<td>National Policy and Agenda for Start-ups</td>
<td>ICT Division (ICTD)</td>
</tr>
</tbody>
</table>

Knowledge Resource: Expert team comprising national and international agencies/ experts for each agenda.
H. Implementation Timeline

FY2021
- ‘Made in Bangladesh’ boost in ICT and emerging technologies
- National Policy and Agenda for Start-ups
- Financial data interoperability speeding up financial inclusion by 10X
- Universal affordable access to digital device

Universal affordable access to broadband Internet connectivity
- Interoperable and connected health management systems
- Paperless government
- Launching of Universal Identity System [UIS] with profiling for multi-purpose use
- Alternative credit rating system for CMSMEs and vulnerable citizens
- Facilitating bottom-up e-commerce for livelihood of local producers and artisans
- Digital commodity exchange for agriculture produce connecting farmers at their doorsteps
- National Skills Registry for both the formal and informal economy

FY2022
- Universal coverage of digital financial services
- Transformation of education to 4IR adjusted blended learning approach for all citizens

FY2023
- Universal affordable access to digital literacy
- Ease of Doing Business Index, 50 by 2025

ICT Roadmap attributes
Initiated by
In Association with
Thematic Partners
Secretariat
Coordinator
Sabbir Rahman Tanim | Managing Director | Windmill Advertising Ltd.
Core Team
Lead | Dr. Ananya Raihan | Ashoka Fellow | Chief Imaginator | DataSense
Anir Chowdhury | Policy Advisor | Aspire to Innovate Programme | ICT Division
Bijon Islam | Co-founder and CEO | LightCastle Partners | Rubaiyath Sarwar | Managing Director | Innovision Consulting
Sami Ahmed | Policy Advisor | Leveraging ICT Project | ICT Division
Tina Jabeen | Managing Director | Startup Bangladesh Limited | ICT Division
Consulting Partners
Prof. Dr. Md. Akram Hossain | Chairperson | Department of MIS | University of Dhaka
Mehad ul Haque | Project Manager | LightCastle Partners | Dr. Nazneen Ahmed | Independent Director | DataSense
Sadruddin Imran | Chairman and CEO | Innovation Consulting | Silvia Rozario | Project Manager | LightCastle Partners
Dr. Wasel Bin Shadat | Research Director | DataSense | Editor | Bipasha S. Hossain | Senior Strategy Specialist | DataSense