

e-Governance policy Implementation and Monitoring plan												
Policy Reforms/Chapters	Policy statement	Action	Indicator	Baseline	Target	Timeline		Lead Agency	Collaborating Agencies	Fund(committed/uncommitted)	Implementation status	Remarks
						Start date	End date					
<b>e-Gov policy</b>												
5.1 Digital by Default	5.1.1 RGoB shall go digital by default while reforming or introducing new government services.	5.1.1.1 Ensure reliable connectivity at all times	% of uptime	95%	98%	January 2018	December 2020	BICMA/MoIC	ISPs, BPC	O&M funds committed. Fiber Monitoring System (FMS) funds not committed	O&M ongoing	FMS implemented as of Dec 2019 to tackle fiber disruptions and timely rectification. SLA being reviewed on O&M with BPC (Long term activity) annually.
		5.1.1.2 Expand Government network coverage	No. of agencies covered	500	765	July 2017	July 2022	DITT/MoIC	All government agencies	Not committed	Ongoing	600 agencies completed including Community Center at Gewog.
		5.1.1.3 Issue executive order for going digital by default	Executive order issued	0	1	January 2018	December 2020	DITT/MoIC	All government agencies		Not started	
		5.1.1.4 Disseminate and implement executive order for going digital by Default	No. of agencies covered	0	100%	July 2018	December 2020	DITT/MoIC	All government agencies		Not started	
		5.1.1.5 Make existing and new public services online	No. of services automated	125	All services	January 2018	July 2022	All Government Agencies	MoIC, Cabinet Secretariat		Ongoing	Total of 156 G2C services automated and upgraded from existing technology to the newer version. The DITT will keep automating the G2C services as and when required.
		5.1.1.6 Create awareness of the online public services to the service beneficiaries	% of advocacy programs carried out on the public services	NA	100%	July 2019	July 2022	All Government Agencies	MoIC, Cabinet Secretariat		Ongoing	- As a part of Digital Literacy program, advocated to the sector heads of 4 dzongkhags (Perma Gatsel, Mongar, Lhuentse, Trashigang) focused on the Online Public Service. - Completed imparting Imparted TOT for G2C Service Administration to 9 government agencies MoHCA (DCHC), MoAF (NCAH, DoL, NHDC, MoFA(DoP), Thimphu Thromde, MoE (DAHE, BCSEA). - Training on development of APIs and Databub platform provided to all the IT Firm in Thimphu & IT Officials of RGoB - All GAO & CC Operators trained on Single Sign On (SSO) for G2C Services by NLCS
		5.1.1.7 Make online services accessible to all including PWDs	No. of services accessible to all including PWDs	0	80%	January 2018	July 2025	All Government Agencies	GNHC, MoIC, Cabinet Secretariat		Ongoing	- Technical Clearance for Dzongkha-Test-to-Speech software development provided to Royal Education Council and DDC. - Dzongkha Font (Jomdhar) published in Google Font Repository for use by online systems, apps and IoT devices.
		5.1.1.8 Develop and implement SDGs for all services	% of SDGs developed for all public services	57/125	100%	January 2018	July 2022	All Government Agencies	Cabinet Secretariat		Ongoing	*SDGs: Service Delivery Standards. SDS for 142 Services developed by PSGRD, Cabinet Secretariat
		5.1.1.9 Develop and implement Business Continuity framework	Timeline by when the framework is developed	0	100%	January 2020	July 2024	MoIC, Cabinet Secretariat	All agencies		Not started	
		5.1.1.10 Institutionalize a procedure for endorsement of new services	Procedure in place	NO	YES	January 2018	2022	MoIC, Cabinet Secret	All Agencies		Not started	
	5.1.2 Ministries/Agencies shall work towards complying to standards and best practices set by the National Enterprise Architecture and DITT shall explore emerging technologies for use in the government.	5.1.2.1 Institutionalize a team to recommend emerging information technologies and best practices	Timeline by when the team is formed	0	100%	January 2018	December 2021	MoIC	All agencies		Ongoing	In the process of identifying a expert team of ICT officials within government for application design, network, system administration, etc.
		5.1.2.2 Institute a high level committee to review and ensure adoption of recommended emerging information technologies and best practices	Timeline by when the highlevel committee is formed	0	100%	January 2018	December 2021	MoIC	GNHC, MOF, Cabinet and RCSC.		eGov Governance Structure is in place already.	High level ICT steering committee formed in November 2019 chaired by Honourable PM.
		5.1.2.3 Create awareness of emerging information technologies and best practices	No. of awareness created on regular basis	0	100%	January 2020	Continue	MoIC	All Government agencies		Ongoing	- Trainings on technologies such as DevOps tool chain, Containerizations, and Data Analytics are provided to ICT Officials. - Webinars and Online conferences are also made available for the ICT officials on cybersecurity, data visualizations, Google NEXT Conference. - Online training platform on <a href="http://SimpliLearn.com">SimpliLearn.com</a> by DITT and <a href="http://Coursera.com">Coursera.com</a> by MoLHR are provided to build competencies on various topics including emerging technologies.
		5.1.2.4. Implementation of National Enterprise Architecture (NEA)	% of Agencies implemented	0	100%	June 2018	December 2025	MoIC	All Government agencies		Ongoing	- Completed National Enterprise Architecture (NEA) for MoEA, ICT Master plan for MoH, MoAF and MoE completed. - Ongoing NEA: MoH
	5.2 Shared ICT Assets	5.2.1 Relevant RGoB agencies shall ensure reuse and sharing of existing common services, ICT infrastructure and data/information, for all ICT initiatives, including compliance of ICT standards.	5.2.1.1 List all services, ICT assets in respective Agencies	Timeline by when the inventory is created	NO	YES	July 2018	December 2020	MoIC/All Government agencies	MoIC, Cabinet Secretariat		Ongoing
5.2.1.2 Identify minimum set of common services, infrastructure and data across RGoB.			Timeline by when the Inventory of common assets is created	NO	YES	July 2018	December 2020	MoIC	All Government agencies		Not started	
5.2.1.3 Classify data for sharing and reuse as per the guidelines and procedures for data sharing			% of data classified	0	100%	January 2021	January 2023	Relevant Government agencies	All agencies	NA	Not started	
5.2.1.4 Develop and implement common platforms for data exchange			Integrated platform developed	0	1	January 2019	January 2020	MoIC	All Government agencies	NA	Completed	Data exchange layer is operationalised. 24 APIs out of 53 APIs are in production environment serving various applications. Remaining APIs are in staging environment. DITT/MoIC will keep adding APIs as and when new data source are identified.
5.2.1.5 Develop guidelines and procedure for sharing and reuse of ICT asset			Guideline and procedure developed	0%	100%	July 2017	December 2021	MoIC	Relevant Government agencies		Not started	
5.2.1.6 Notify all Government agencies to share or reuse common services/data			Notification issued	0%	100%	January 2018	December 2019	MoIC, Cabinet	All government agencies	NA	Not started	
5.2.1.7 Advocacy of ICT Standards and Guidelines to all government agencies to ensure compliance			No of agencies covered	30%	100%	January 2013	Continue	MoIC	All government agencies		Ongoing	Government Website standards launched, software Outsourcing guideline formulated, SOP for databub presented to ICT Officials of all agencies.
	5.2.1.7 Provision computational capacity, network and storage space to government agencies	No. of platforms (Virtual Machines Servers) provisioned	40 VMS	As required by the Government Agencies	December 2017	Continue	GDC-DITT-MoIC	RGoB and Application owners		Ongoing	- All requests for Virtual Servers from government agencies are provisioned in the GDC. - 294 Virtual Machines (VMS) provisioned to-date. - 49 Virtual Machines (VMS) provisioned this FY.	

	5.2.3 The relevant committee/s of e-Gov Governance structure or Multisectoral Committee shall endorse all ICT initiatives before allocation of funds to ensure reuse and sharing	5.2.2.1 Operationalise e-Gov Governance structure	Timeline by when e-Gov Governance will operationalise	0	100%	January 2018	December 2018	MoiC	Cabinet Secretariat		eGov Governance Structure is in place already.	High level ICT steering committee formed in November 2019 chaired by honourable PM.
		5.2.2.2 All ICT projects to be endorsed by the e-Gov governance structure	% of projects reviewed and approved annually	0	above 90%	January 2018	Continue	MoiC, GNH, Mof and RSC	All Government agencies		Ongoing	All ICT projects are reviewed and approved by eGov PMU
		5.2.2.3 Enforcement of EGIF framework for all approved ICT projects	% of ICT Projects budgeted that are approved	0	above 90%	January 2018	Continue	MoiC	All Government agencies		Completed	All ICT projects (100%) are mandated to have eGIF Approval from eGov PMU for provisioning Virtual Machine in GDC.
5.3 Single Source of Truth	5.3.1 MoIC shall identify and recommend a single agency as the owner for a specific data to the Cabinet for approval. The identified agency shall be the only agency responsible for collection, updation, and validation of that data.	5.3.1.1 Develop guideline/framework for Single Source of Truth	Timeline by when the guideline is developed	0		January 2019	June 2020	January 2023	MoiC	Relevant Government agencies		Not started
		5.3.1.2 Issue executive order for identifying data owners	Timeline by when the Executive Order is issued	0		Jun 2019	January 2020	June 2021	MoiC / Cabinet Secretariate	Respective Data Owners		Not started
		5.3.1.3 Identify agencies as data owner	No of data owners identified	0	All relevant agencies	2023	2025	MoiC	All Government agencies		Not started	
		5.3.1.4. Sensitise policy makers/development planners at the centre and LG levels on the SST policy and guidelines	% of agencies covered	0	All agencies	2020	2020	MoiC	Government agencies		Not started	
	5.3.2 The identified agency shall ensure the quality of data and share it with other agencies.	5.3.2.1 Implement data sharing platform	No of data owners sharing data	0	All data owners	2019	July 2025	MoiC	All Government agencies		Completed	National Data Exchange platform is established and 24 APIs are currently in production sharing government data security
		5.3.2.2 Perform data cleaning and updation as per the Single Source of Truth Guideline	No of complaints about incorrect data	0	To reduce the error less than 5 compliants per agencies per	January 2020	December 2022	All Data owners	MoiC		Not started	
5.4 Information Security and Privacy	5.4.1 Agencies concerned, and/or any other agencies designated by the concerned agency, shall be responsible for safeguarding the security of data, privacy of the users, and the confidentiality of information. The agencies concerned shall classify data based on its confidentiality to facilitate secure access of permissible data by other agencies.	5.4.1.1 (a) Develop National Cybersecurity Strategy (NCS)	Timeline by when the strategy is developed.	0	1	2020	2021	BCIRT-DITT-MoiC	NCS-WG Refer Annexure	Committed	Ongoing	NCS-WG- National Cybersecurity Strategy Working Group instituted and conducted 2 rounds of workshops and one round of meeting with NCS to come up with the draft strategy. The draft will be finalized by September 2020 after consultation meeting with the relevant stakeholders.
		5.4.1.1 (b) Implement NCS	Percentage of NCS target (Actionable Items) achieved	0	100%	2021	2025	The Agencies identified as the component/domain lead in NCS	BCIRT-DITT-MoiC	Partial (Some actionable items are covered by Digital Drukyl Flagship Program)	Ongoing (The implementation will be carried out by DDFP and NCS implementation)	This action is will be commenced after the adoption of NCS strategy.
		5.4.1.2 Develop and implement reporting framework for breach of information privacy and confidentiality status	Timeline by when the framework is implemented	0	100%	2019	2020	MoiC	Respective Agencies		Not Started	The framework will be implemented once the NCS is adopted
		5.4.1.3 Develop and implement data backup and recovery framework	% systems implemented	0	100%	2017	2020	GDC-DITT-MoiC	Respective agency		Ongoing	GDC backup and recovery is pul in place, Framework is not formulated.
		5.4.1.4 Classify data/info to ensure data confidentiality	% of data classified by agencies	0	100%	July 2018	July 2025	Respective Agencies	MoiC		Not started	
		5.4.2 Agencies shall be responsible for data management and data destruction, including handing taking/transfer of official correspondence, of senior officials.	5.4.2.1 Develop and implement Data management and Destruction protocol covering all aspects of Data Lifecycle	Protocols put in place	0	100%	Jul 2018	July 2021	Respective Agencies	BCIRT-DITT-MoiC		Not started
	5.4.2.3 Institutionalise a procedure for handing over official emails and documents during handing and taking of senior officials.		Institutionalise % of officials with handing and taking procedure.	0	100%	July 2018	July 2020	RSC, MoiC	All Government agencies		Not started	
	5.4.3.1 Develop Data Retention Policy/Framework										Not started	This statement is identified by the cabinet before approval of the policy. Hence, the action items will be identified along with the relevant stakeholders
	5.4.4 MoIC(BCIRT) shall coordinate incident handling related to cyber security. It shall also develop guidelines concerning protection of privacy and confidentiality of data, disseminate information on cyber security threats received from both regional and international bodies. In the event of security threats found by agencies, the concern agency shall alert and properly report it to BCIRT.	5.4.3.2										
		5.4.4.1 MoIC shall revamp IMSP for RGoB highlighting individual roles and responsibilities	guideline put in place	NO	YES	2017	2020	BCIRT-DITT-MoiC	All Government agencies		Not Started	The ongoing formulation of National Cyber Security strategy will cover this activity
		5.4.4.2 Implement the security guideline (for protection of privacy and confidentiality of data) in RGoB	% of agencies completed	0	100%	2021	2025	BCIRT-DITT-MoiC	All Government agencies		Not Started	
		5.4.4.3 Develop and implement reporting framework for Cybersecurity incidents in the country	Timeline by when the framework is implemented	0	2021			BCIRT-DITT-MoiC	All Government agencies		Ongoing	Online reporting of incidents has been made available on BTCIRT website
5.5 Need driven Initiative	5.4.1 All ICT asset procurement and updation in RGoB shall be driven by actual requirements/needs of the agencies and must be led by domain experts.	5.4.1.1. Develop SOP/Guidelines for ICT initiatives in agencies	Time by which the procedural guideline is developed	0	100%	July 2018	December 2022	MoiC	All Government agencies		Ongoing	Initial Components identified
		5.4.1.2 Implement the guideline/SOP	% of ICT initiatives reviewed that have business champions	Less than 20%	100%	July 2019	July 2024	All Government agencies	MoiC		Not Started	
	5.4.2 RGoB shall regularly develop national technical capabilities considering the needs of national development	5.4.2.1 ICT capability building for ICT professional from government, private sector and college faculties	Number of ICT professionals trained	N/A	500	2020	2023	DITT		committed	Not started	to begin from 2021 FY (This is a new policy statement identified by the cabinet prior to approval of the policy)

	plans, market demands and potential of emerging technologies	5.4.2.2 Enhance skills of IT graduates	Number of graduates skills enhanced	N/A	100	2020	2022	DITT		committed(will use from capacity building program from flagship)	Not started	to begin from 2021 FY (This is a new policy statement identified by the cabinet prior to approval of the policy)
5.6 Sustainability	5.6.1 Agencies concerned shall undertake sustainability planning at the inception of any ICT initiative.	5.6.1.1 Develop Sustainability Planning Framework including Total Cost of Ownership (TCO) and Sustainability Models such as PPP Model	Timeline by when the framework is developed	0	December 2018	June 2018	June 2019	MoIC	All agencies		Not started	
		5.6.1.2 Create awareness of the framework	% of agencies covered	0	100%	January 2019	December 2019	MoIC	All agencies		Not started	
		5.6.1.3 Implement the framework through e-Gov Project Management Unit (e-Gov PMU) and e-Gov Governance Committee	% of projects approved which adopts the framework	0	100%	January 2020	December 2020	All Government agencies	MoIC		Not started	
	5.6.2 MoIC shall be responsible for increasing national digital literacy to ensure that citizens benefit from the eGovernance initiatives.	5.6.1 Provide digital literacy training to non-ICT professional(civil servant and general public)	Number of Non ICT professionals trained on digital literacy	N/A	6000	2019	2023	DITT, MoIC	Dzongkhag/Thromde	committed	Ongoing	2019-20 FY: Provided DL Training to 600 non-ICT professionals/General Public
		5.6.2. Develop digital content (for critical services) and air in media channels	No. of digital content developed	1	4	2020	2021	DITT	respective agencies whose services are developed	committed	Ongoing	- Content for 1 service (mRSTA) developed.
		5.6.3 Inclusion of digital literacy component as part of school ICT curriculum	Component included in the ICT curriculum	N/A	75	2020	2021	DITT	REC, MoE	No budget required	Ongoing	Included in ICT curriculum framework during the last review (Dec 23, 2019). Content to be provided to MoE/REC
		5.6.4 Awareness program in dzongkhag, gewogs and Dungkhag targeting sector heads and communities.	Number of awareness programs conducted	N/A			2020	2023	DITT	Dzongkhag/Thromde	committed	Not started

Stakeholder list		
	MoEA	Ministry of Economic Affairs
	DOI	Department of Industries
	DRE	Department of Renewable Energy
	DHMS	Department of Hydro-Met Services
	DoT	Department of Trade
	IPD	Department of Intellectual Property
	DCSI	Department of Cottage and Small Industries
	DGM	Department of Geology and Mines
	APIC	Association of Indigenous Crafts
	MoFA	Ministry of Foreign Affairs
	MoLHR	Ministry of Labour and Human Resources
	MoAF	Ministry of Agriculture and Forest
	BAFRA	Bhutan Agriculture and Food Regulatory Authority
	MoWHS	Ministry of Works and Human Settlement
	MoE	Ministry of Education
	MoH	Ministry of Health
	DRA	Drug Regulatory Authority
	MoIC	Ministry of Information and Communication
	RSTA	Road Safety and Transportation Authority
	MoHCA	Ministry of Home and Cultural Affairs
	DOI	Department of Immigration
	DOLG	Department of Local Governance
	MoF	Ministry of Finance
	DMEA	Department of Macroeconomic Affairs
	DRC	Department of Revenue and Customs
	NLC	National Land Commission
	DHI	Druk Holding & Investments
	DGPC	Druk Green Power Corporation
	BPC	Bhutan Power Corporation
	TTP	Thimphu Tech Park
	BT	Bhutan Telecom Ltd.
	CDCL	Construction Development Corporation Ltd.

	SMC	State Mining Corporation
	OCP	Office of Consumer Protection
	BEA	Bhutan Electricity Authority
	GNHC	Gross National Happiness Commission
	RMA	Royal Monetary Authority
	TCB	Tourism Council of Bhutan
	ABTO	Association of Bhutanese Tour Operators
	GAB	Guide Association of Bhutan
	HRAB	Hotel and Restaurant Association of Bhutan
	CDB	Construction Development Board
	CAB	Construction Association of Bhutan
	BCCI	Bhutan Chambers of Commerce & Industry
	ABI	Association of Bhutanese Industries
	AWBI	Association of Wood Based Industries
	G2C	Government to Citizen Project
	NITM	National Institute of Traditional Medicine
	RSEBL	Royal Securities Exchange of Bhutan
	NSB	National Statistic Bureau
	NEC	National Environment Commission
	BSB	Bhutan Standard Bureau
	RUB	Royal University of Bhutan
	NHCM	Hydrology and Water Resources Services Division
	NCWC	National Commission for Women and Children
	FCB	Food Corporation of Bhutan
	GPMD	Government Performance Management Division
	NIZC	National Institute for Zorig Chusum
	RITH	Royal Institute for Tourism and Hospitality