

NKRA 9: Infrastructure, Communication and Public Service Delivery

Lead Agency: Ministry of Works and Human Settlement

Collaborating Agencies : Construction Development Board, Bhutan Standard Bureau and Thromdes

AKRAs	Key Performance Indicators	Description	Unit	Baseline (Year)	Baseline	Target	Data Collection Methodology	Data Source	Data Collection Frequency	Responsible Agency
1. Climate proof road accessible throughout the year in all types of weather	Clearance of road blocks on the National Highways	This indicator measures the average time taken to clear the road blocks on the national highways (Primary National Highways and Secondary National Highways)	Hours	2017	5	3	Review of administrative data	DoR, MoWHS	Annual	DoR, MoWHS
	Length of existing NH shortened	The indicator will measure the reduction in the length of national highways due to construction of bypass roads and tunnels	Kilometer	2017	2560.03	2328.73	Review of progress reports	DoR, MoWHS	Annual	DoR, MoWHS
2. Reduction in travel time	Pothole free highway	The indicator will measure the percentage reduction in the potholes on all the highways throughout the year	Percentage	2017	50-60	90-100	Review of progress reports and Road Monitoring and Management System (RMMS)	RMMS	Annual	DoR, MoWHS
	Missing links of National Highway constructed	The indicator will measure the length of missing road links constructed for the lholam	Kilometer	2017	181.7	375	Review of progress reports	DoR, MoWHS	Annual	DoR, MoWHS
3. Traffic circulation within Thromdes eased and improved	Pothole free Thromde roads	The indicator will measure the percentage reduction in the potholes in all the urban roads throughout the year	Percentage	2017	NA	100	Thromde Administrative data	Thromdes	Annual	Thromdes
4. Construction sector professionalised	Labor Material Coefficient (LMC) and specification of major BSR items reviewed and updated	The indicator will measure the timeline by which the existing Labor and material coefficients adopted directly from CPWD and else where are reviewed in relevance and context to Bhutan.	Timeline	2018	LMC in BSR 2017 Document	2022	Field Works Survey, measurements and desktop reviews	Report	Biannual	DES, MoWHS
	Construction products certified	The indicator measures the number of products and personnel certified by the BSB and the construction materials tested by BSB	Number	2017	128	300	Review of administrative data	BSB	Annual	BSB
	Professionalise the construction industry	The indicator will measures the number of construction firms specialised.	Number	2017	30	100	Review of administrative data	Review of administrative data	Annual	CDB
5. Quality infrastructure constructed and maintained	Enhanced load carrying capacity on National Highways	This indicator measures the load carrying capacity for the national highways	Metric Tons	2017	18 tons	30 tons	Review of administrative data	DoR, MoWHS	Annually	DoR, MoWHS
	Enhanced load carrying capacity on bridges	This indicator measures the load carrying capacity of the bridges on national highways	Metric Tons	2017	40R	70R	Review of design data from the Bridge Division, DoR	DoR, MoWHS	Annually	DoR, MoWHS
	Road Safety Audit	This indicator measures the road safety measures installed, road riding quality through roughness index, improvement of geometrics on the national highway	Kilometer	2018	0	510	Review of data from RMMS	DoR, MoWHS	Annually	DoR, MoWHS

	Nationally important infrastructure constructed	This indicator measures the number of new important national infrastructures designed and constructed	Number	2017	5	9	Review of annual progress report	ESD/DES	Annually	DES, MoWHS
	Road side amenities constructed along the highways	The indicator measures the number of road side amenities constructed along the highways. The road side amenities includes public toilets, cafeteria and farm shops	Number	2017	8	20	Review of progress report	DoR, MoWHS	Annually	DoR, MoWHS

NKRA 9: Infrastructure, Communication and Public Services delivery Improved (Communications)

Lead Agency: Ministry of Information and Communications

Collaborating Agencies: Ministry of Economic Affairs, Bhutan Information Communication and Media Authority, Ministry of Works and Human Settlement, Ministry of Finance, Royal Bhutan Police, National Statistical Bureau, ISPs, Airlines, Bhutan Broadcasting Service Corporation, Local Governments

AKRAs	Key Performance Indicators	Description	Units	Baseline (year)	Baseline	Target	Data Collection Methodology	Data Source	Data Collection Frequency	Responsible agency
1. Standards of civil aviation safety and security enhanced	Lack of Effective Implementation for safety improved to ICAO minimum standard	This indicator measures the status of eight Critical Elements in aggregate. By ICAO standard, 40% is the minimum % LEI that all civil aviation should adhere. The audit to validate % LEI achievement will be carried by ICAO.	Percentage	2016	55	40	ICAO Validation Mission	ICAO	Annually	BCAA, Service providers and operators
	Lack of Effective Implementation for security improved	This indicator measures the % LEI for security of the aviation. Similar to Safety, the aggregate of achievements under the eight Critical Elements will validate the % LEI status for security by ICAO standard in the aviation sector.	Percentage	2009	63.78	45	ICAO Validation Mission	ICAO	Annually	BCAA, DoAT and RBP and RBA
2. Efficiency and effectiveness of regulatory oversight enhanced	Enforcement and compliance by service providers and airlines	Review and assess reliability, inspections & auditing, monitor compliance to BCAA approvals by service providers for domestic, Paro International Airport and air operators. This indicator will be measured in % of timely and satisfactory compliance.	Percentage	NA	NA	90	Number of audit findings resolved, monitor compliance to approval accorded by BCAA - for both service providers and airlines.	BCAA	Bi-annually	BCAA, Service providers and operators
3. Connectivity to Domestic and International air routes enhanced	Passengers carried annually by airlines (Domestic sector)	This indicator measures the total volume of passengers carried in the domestic routes. The indicator is intended to indicate improvement of connectivity and the choice of transport mode by the people.	Number	2016	7641	15000 in the last year of 12th plan	Review of Administrative data	DoAT Administrative data (Druk Air)	Annually	DoAT & Airlines
	Passengers carried annually by airlines (International sector)	This indicator measures the total volume of passengers carried in the international routes.	Number	2016	284074	400000 in the last year of 12th plan	Review of Administrative data	DoAT Administrative data (Druk Air, Tashi Air and Bhutan Air Services)	Annually	DoAT, airlines and TCB
	Frequency of domestic flights	This indicator measures the frequency of flights to Domestic airports in a week	No. of flights per week	2016	3 services to Bumthang and 1 to Gelephu	2 Yonphula 4 Bumthang 2 Gelephu	As per data submitted by airlines	Druk Air	Monthly	DoAT, Airlines
4. Air Navigation services enhanced.	Efficiency and effectiveness in delivery of Air navigation services.	This indicator measures the efficiency and effectiveness of Air Navigation services. Number of flights per hour will be measured as progress and achievement.	No. of flights per hour	2016	5	8	Flight Strips	Flight Movement Recording and Charges System (FMRCs)	Daily	Air Navigation Service Division, DoAT
5. Airport Safety and Security Enhanced	Security incidents detected during dummy runs	This indicator measure number of security incidents detected during planned and adhoc security exercises	Percentage	2016	80	100	Test record maintained by AVSEC	AVSEC section	Bi-annually	DoAT
	TAT to respond to security and safety incidents	This indicator measures the time taken to respond to any security and safety incidents in the airport.	Time		10	90	Record maintained by ARFFS	ARFFS	Bi-annually	DoAT
	Status of Safety Management System (SMS) implementation	This indicator measures the Safety Management System (SMS). It contains policies, procedures, organizational structures and activities to assure and promote safety and to manage safety risks within the aviation organization.	Percentage		65	100	Record maintained by Safety Manager	Safety management unit	Annually	DoAT, Safety Management Unit
	Compliance status to BCAA safety and security requirements	This indicator measures safety and security compliance as required by BCAA national regulations	Percentage	NA	NA	100	Administrative record	BCAA/DoAT	Annually	DoAT
	Mobile penetration rate	This indicator will measure percentage increase of people having access to mobile communication services	Percentage	2016	89.7	100	Input from service providers	Telecom Operators	Quarterly	BICMA, Telecom Operators

6. Accessibility of ICT Services achieved

Proportion of population using the internet	This indicator will measure the total population accessing internet services via portable devices. Internet services refers to both mobile internet (2.5G, 2.75G, 3 G and 4 G) and fixed internet (ADSL and leased-line)	Percentage	2016	70	90	Input from service providers	Telecom Operators	Quarterly	BICMA
Reduction in the cost of International Bandwidth	This indicator measures the reduction in cost of Internet services per Mbps from Nu. 9,477 (to Nu. 1000 in five years), which is one of the highest in the region and an impediment to broadband uptake in Bhutan.	Nu. Per Mbps	2016	9477	1000	From ISPs and Telco's	DITT	Annually	DITT, BICMA
Government Offices Connected to Government Network	This indicator measures the status of Government offices throughout the country connected to Government Network both through wired and wireless technologies. Government offices refers to BHU, schools, shedra, GC, CCs. Government network refers to connection through fiber optic.	Number	2017	484	725	Collect from all relevant agencies connected to network	DITT	Bi-annually	DITT, Thromdes, RBP, LGs, Respective Ministries and Agencies
Achievement in Connectivity Reliability	This indicator measure the improvement in reliability and quality of services at core (both domestic and international), distribution, and access networks- infra- DITT. Reliability refers to the down time in terms of hours and days in a year.	Percentage		98.00	99.00	BPC & Telco's	DITT	Twice a year	DITT
Utilization of SAARC satellite transponder.	This indicator measures as to how Bhutan optimally utilize the South Asia Satellite transponder in various areas. It is aimed that 100% utilization of the transponder capacity will be achieved in the 12th FYP.	Percentage	NA	NA	100	Annual Report	DITT	Twice in a year	DITT, DDM, Telcos, BICMA
Proportion of Rural HHs covered by a mobile network	This indicator will measure the % of rural households having access to mobile network. As of June 2017, from the total rural household of 58697 about 49452 (84%) rural households have been connected. About 9245 rural households (16%) are still unconnected.	Percentage		84	100	Field verification	Dzongkhag Administration	Annual	BICMA MoIC lead for policy directives
Reduction in domestic communication tariff	This indicator measures the % decrease of tariff for communication service such as voice and data including leased line, ADSL, 3G & 4G)	Percentage		Existing price at the end of 11th FYP	10% on the existing price of 11FY	Verification of telecom providers data	Telecom Operators	Annual	BICMA
Improve quality of communications service	This indicator measures the percentage of population above the age of six with both cognitive (digital awareness) and technical (technical competency) skills to ascertain digital literacy levels. The digital skill will be built on four basic fundamentals that will "acquire basic skill" in ICT: 1. Basic computer skills, PC fundamentals 2. Train on office operations (basic intermediate and advance) 3. Internet usage, (email, online surfing, googling, browsing, updating etc) 4. IT Management ; ITIL"	Percentage		5	<2	Drive Test	Telecom Operators & Drive Test	Quarterly	BICMA

7. Adoption of ICT for improved Service Delivery

Digital literacy improved	The percentage of population above the age of six with both cognitive (digital awareness) and technical (technical competency) skills to ascertain digital literacy levels. The digital skill building will be on: 1. Basic computer skills, PC fundamentals and office operations (basic intermediate and advance) 2. Internet usage, (online surfing, googling, browsing, updating etc) 3. IT Management ; ITIL"	Percentage	NA	NA	40	NA	NA	NA	DITT, MOE, G2C
ICT Security System enhanced	This indicator measures the level of security systems in place such as: Sectoral CIRT, harden mobile/network/system/application security; build cyber capacity; international collaboration; SoPs, baselines, standards,policies; Advocacy programs. This will also assess and develop national PKI (Public Key Infrastructure) infrastructure towards ensuring identity, authentication and authorization for common data and application systems to enhance security and enable Digital Signature environment.	Percentage	NA	NA	90	Can be collected from DITT and verified at the respective agency level	DITT	Bi-annually	DITT, all Ministries,

	eGov Governance Standards improved	The percentage of population above the age of six with both cognitive(digital awareness) and technical(technical competency) skills to ascertain digital literacy levels. The digital skill building on three basics fundamentals will make them how to use ICT. 1. Basic computer skills, PC fundamentals and office operations (basic intermediate and advance) 2. Internet usage, (online surfing, googling, browsing, updating etc) 3. IT Management ; ITIL."	Percentage	NA		100	Can be collected from DITT and verified at the respective agency level	DITT	Annual	DITT, all Ministries
8. Application of ICT for promoting efficiency in Governance and Economy Strengthened	Enterprise Architecture enhanced	This indicator identifies agencies(ministry) and measures the percentage of compliance to the National Enterprise Architectural framework checklist. Enterprise Architecture (EA) is an overarching enterprise blueprint that defines the structure and operation of an organisation towards translating business vision and strategy into effective enterprise change by creating, communicating, and improving the key principles and processes.	Number	NA	NA	3	can be collected from DITT and verified from the respective ministries	DITT/Agency concerned	Annual	DITT, GPMD, GNHC, RCSC, MoF, Relevant agencies
	Professionalism in ICT sector enhanced	This indicator measure number of ICT professionals who are certified through capacity development programs. Capacity Building of ICT Professionals is an important aspect of the whole parenting framework supporting the vision of "Professionalizing ICT Human Resource". ICT professionals will be skilled through certification trainings.	Number	NA	NA	800	No. of ICT professionals trained	DITT	Bi-Annual	DITT
	Percentage of population with access to online payments	This indicator measures percentage of population having access to online payment services through both bank-led as well as non-bank led models to facilitate public service delivery and enable ecommerce ecosystem.	Percentage	NA	NA	50	RMA to collect annually from banks	RMA	Annually	DITT, MoEA, MoF, RMA
9. Access to information and media enhanced	Population with access to information and media	This indicator measures access to information and media such as reach of TV, Radio and Print media	Percentage		75 (11 FYP target)	90	Bhutan Information and Media Impact Study 2017.	Media Impact Study 2013 (DoIM)	Study carried after every 5 years	DoIM
10. Citizens empowered through access and use of media to make informed decisions.	Media Literate population increased	This indicator measures number of programs (such as awareness, sensitization, workshops, trainings, etc.) organized /conducted to provide access to information so that citizens are able to make informed decision.	Number	NA	66	68	No. of programs developed	Average programs implemented by DoIM in the past three years	Annual	DoIM
		Second measurement will be in the number of population covered by Media and Information Literacy (MIL) Programs which are targeted to teachers, students, local government and general public.	Percentage		50	80	No. of students, teachers, non-formal instructors and teachers trainees trained.	Media Impact Study	Annual	DoIM
	Digital Migration	Seek Government directives on standard (Euro/Japan)	Number	N.A				Transition from Analogue to Digital Terrestrial Television Broadcasting Report and Bhutan Roadmap for the Transition from Analogue to Digital Terrestrial Television Broadcasting		PPD, DoIM, BICMA, BBSC & Digital Migration Core Team
	Frequency of urban public transport (bus) services during rush hours	This indicator measure time interval between two buses leaving the same bus stop during rush hours. Rush hour is defined as 8:00am to 9:30am and 3:00 pm to 6:00pm. Bus stops in core Thimphu Thromdey	Hrs (Mins)		15	10	Adhoc inspection of schedules	RSTA (Administrative data)	Monthly	LG and Transport Operators

11. Smart and eco-friendly Transport system enhanced (re-defined)	Increase in urban public transport (bus) ridership	This indicator measures the ridership in urban public transport services per year. It includes all services provided by all operators in the four Thromdeys.	Number	2015	941,150	2,920,000	Record of tickets sold or other passenger data maintained by the operators	RSTA Annual report	Annual	LG and Transport Operators
	Low or zero carbon emission vehicle penetration/uptake	This indicator measures the number of electric, hybrid and other environmental/eco-friendly vehicles registered as a proportion of all vehicles (small, medium and heavy) in the country	Percentage	2016		0.01%	Administrative record	0.5% (baseline 84297)	Annual	RSTA/MoIC, GNHC, NEC
	Cities with Intelligent Transport System	This indicator measures the availability of public transport infrastructures including ITS (ITS aims to provide innovate services relating to public transport and traffic management to enable various users to be better informed and make safer, more coordinated and smarter use of transport network	Number	2016	NA	5 cities	Administrative record	RSTA /Thromdes/LGs	Annual	RSTA, Thromdes and LGs
12. Road Safety and connectivity enhanced	Annual road crash fatalities	This indicator measures the number of deaths due to road crash, per 10,000 vehicles	Number	2016	12	<10	Administrative record	Statistical Year Book, RBP	Annual	RSTA/RBP/DoPH/MoIC
	Annual road crash injuries	This indicator measures the number of injuries due to road crash, per 10,000 vehicles	Number	2016	42	<42	Administrative record	Statistical Year Book, RBP	Annual	RSTA/RBP/DoPH/MoIC, DoR
	Proportion of the population that has reliable and affordable public transport access	This indicator measures the percentage of population that has access to convenient and affordable public transport as defined by BLSS	Percentage	2012	41.85	50	Bhutan Living Standard Survey	Bhutan Living Standard Survey 2011, NSB	Annual	RSTA/NSB
13. Scarce natural resources efficiently managed and utilized	Interference free communication system ensured	This indicator measures the % of communication system maintained free of interference.	Percentage	NA	1	100	Administration data	Administration data	Annual	BICMA
14. Safe communication infrastructure ensured	Communication network (towers and stations) complied as per the safety standards prescribed in National Radio Rules	This indicator measures the % of communication towers and stations complied with safety EMR (Electro Magnetic Radiation) standards	Percentage	NA	NA	100	Administration data	Administration data	Annual	BICMA
Public Service Delivery										
15 Airport customer services enhanced	TAT per departing passenger	This indicator measures the time that the passengers spend checking in at PIA. This measure is an important parameter that ensures Standard and level of Service at the airport.	Mins	2017	20	10	As per the survey carried out by DoAT	DoAT survey report	Twice a year	DoAT, Airlines, Immigration, Custom
	TAT for clearing one arriving aircraft	This indicator measures the waiting and processing times. It directly affects the passenger satisfaction, especially in a negative way when they have to wait in queue for long. Therefore, it is important to monitor these and make sure that they are acceptable.	Hrs/mins.		45	30	As per the survey carried out by DoAT	Airport Management DoAT	Annually	DoAT, Immigration, BAFRA, Custom, Health and airlines
16. Application of ICT for promoting efficiency in Governance and Economy Strengthened	ICT for improved public service delivery adopted	This indicator measures the number of Agencies that adopt innovative initiatives	Percentage	NA	NA	70	can be verified in the respective agencies	Agency concerned	Annual	Need clarity on the services and collection methodology.
17 Public Service Delivery	Reduction in TAT (riving license, vehicle registration, renewal)	This indicator will assess time taken to process commonly availed services from RSTA.	Days	2016	3	3	Average time taken between the written driving test date to driving license printing date.	RSTA	Quarterly	RSTA

NKRA 9: Public Service Delivery Improved (Infrastructure, Communication and Public Service Delivery Improved)

Lead Agency: Cabinet Secretariat

Collaborating Agencies: Royal Civil Service Commission, Department of Local Governance, Royal Audit Authority, RSTA (MOIC), DITT (MOIC), National Land Commission, MoEA, MoF, GNH Commission

AKRAs	Key Performance Indicators	Description	Units	Baseline (Year)	Baseline	Target	Data Collection Methodology	Data Source	Data Collection Frequency	Responsible Agency	
1. Public service delivery enhanced	% of transaction of services delivered as per SDS (all services)			TBD	TBD	TBD	TBD	TBD	TBD	Cabinet Secretariat	
	Service delivery satisfaction (all services)			TBD	TBD	TBD	TBD	TBD	TBD		
	Number of agencies with ISO certification			TBD	TBD	TBD	TBD	TBD	TBD		
	% of transaction of services delivered as per SDS			TBD	TBD	TBD	TBD	TBD	TBD	All PSD Agencies	
	Service delivery satisfaction			TBD	TBD	TBD	TBD	TBD	TBD		
	Timeline by which SDS are institutionalised in all agencies	The indicator measures timeline by which SDS for public services are institutionalised (outside the scope of G2C online services)	Date		NA	NA	2020	Maintain administrative data	Administrative Data	NA	RCSC
	The indicator measures timeline by which the civil service data is deployed on data hub managed by DITT		Date		NA	NA	2020	CSIS Data	CSIS	Annually	
	% of transaction of services as per SDS	TBD		TBD	TBD	TBD	TBD	TBD	TBD	TBD	DITT
	Service delivery satisfaction	TBD		TBD	TBD	TBD	TBD	TBD	TBD		
	Timeline by which data hub is operationalised	TBD		TBD	TBD	TBD	TBD	TBD	TBD		
	% of transaction of services as per SDS	TBD		TBD	TBD	TBD	TBD	TBD	TBD	TBD	NLC
	Service delivery satisfaction	TBD		TBD	TBD	TBD	TBD	TBD	TBD		
	Timeline by which data hub is operationalised	TBD		TBD	TBD	TBD	TBD	TBD	TBD		
	% of transaction of services as per SDS	TBD		TBD	TBD	TBD	TBD	TBD	TBD	TBD	MOHCA
	Service delivery satisfaction	TBD		TBD	TBD	TBD	TBD	TBD	TBD		
Timeline by which data hub is operationalised	TBD		TBD	TBD	TBD	TBD	TBD	TBD			

5. Civil Service Right-Sized	Ratio of civil servant to population	The indicator measures the overall ratio of civil servants to population.	Ratio	Dec-16	1:29	1:30	CSIS Data	Civil Service Statistics	Annually	RCSC
	Ratio of civil servant (excluding civil servants in education and health) to population	The indicator measures the ratio of civil servants to population excluding civil servants under health and education services. However, it includes civil servants doing administrative job at the Ministries/ Dzongkhag Headquarters.	Ratio	Dec-16	1:51	1:52	CSIS Data	Civil Service Statistics	Annually	
	Agencification Framework and its SOPs Implemented	The indicator measures the policies, bills, and rules and regulation are screened through Agencification Framework which recommends institutional arrangements	NA	NA	Framework approved	All agencies to follow the Framework	NA	Administrative Data	NA	
	12FYP Staffing Plan of all Civil Service Agencies Finalised	The indicator measure the timeline by which 12FYP Staffing is finalised to support implementation of 12FYP and its programmes	Date	Dec-16	NA	2020-2021	12FYP Staffing Plan	Administrative Data	NA	
6. Efficiency & Effectiveness of Civil Service Enhanced	Average Executive Performance Rating	The indicator measures the performance of the executives using Managing for Excellence (MaX) System.	%	FY 2016-17	Agency Score of APA 2017-18	>90%	GMPS Data	GPMS System	Annually	
	% of Strategic HRD for 12FYP Implemented	The indicator measures the percentage of HRD areas implemented from the Strategic HRD for 12FYP	%	NA	NA	Institutionalised	NA	Administrative Data	NA	
	LG Common Framework Institutionalised	The indicator measures the functional status of the LG Common Framework for 20 Dzongkhags and four Thromdes	NA	NA	4 services	Existing services enhanced	NA	Administrative Data	NA	
7. Meritocracy in the Civil Service Strengthened	Bhutan Civil Service Examination System Strengthened	The indicator measures number of lapses from the conduct of BCSE to evaluation and declaration of results	NA	BCSE 2016	No. major lapses from conduct of BCSE	No. major lapses from conduct of BCSE	NA	Administrative Data	Annually	