Nepal: Feasibility Study on Cross-border Electronic Exchange of Trade Data

(a depiction of as-is scenario)

Purushottam Ojha

National Consultant

29th November 2022

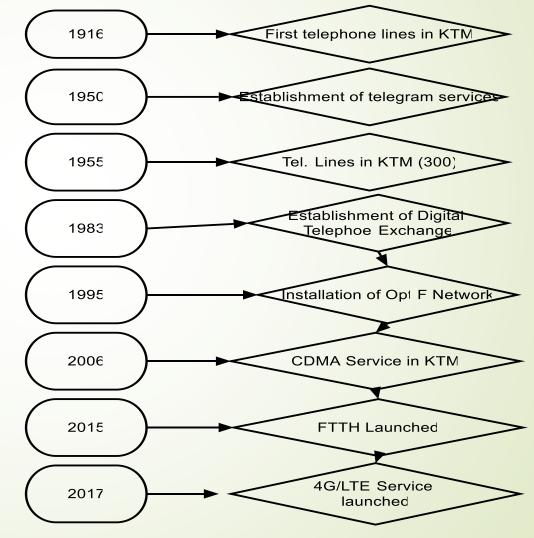
Kathmandu, Nepal

Outlines

- Historical perspectives
- Path towards digitization and paperless environment.
- ICT infrastructures in the country.
- Policy and regulatory framework.
- Trade and transit procedures
- Challenges and way forward.

Historical development of telecom services





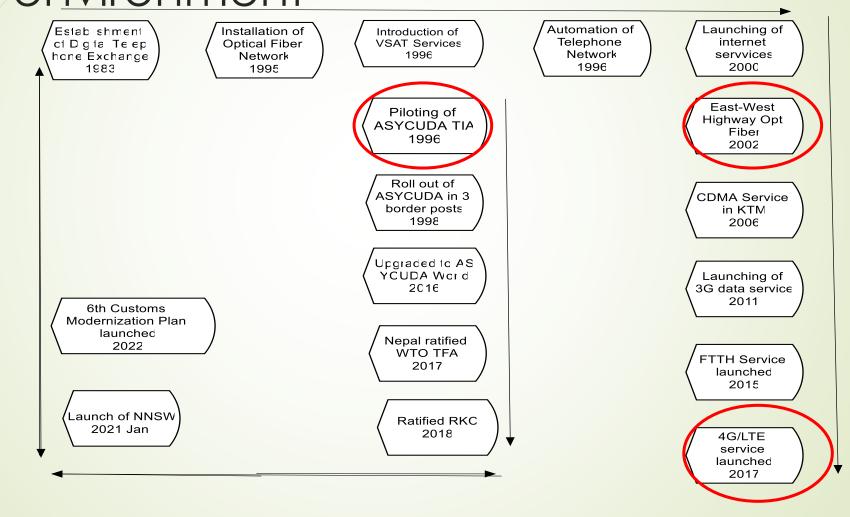
Historical development of telecom services

- Regulatory Agency: NTA was established in December 1995 for expansion of telecom services and create competitive environment by bringing private sector in the business.
- Service providers: NDCL, NCELL (incorporated in 2004 as Mero Mobile) and STPL/SMART (established in 1 July 2008) are now providing voice communication services of PSTN, GSM postpaid/prepaid and CDMA postpaid/prepaid services.
- UTL started its basic telephony service in 2003; but could not remain in business due to decline in customer's demand, weak administration and heavy financial losses.

Path to digitization and paperless environment

Source: Websites of Nepal Telecom and Nepal Customs.

Note: Piloting of 5G started in 2021.



ICT infrastructures

- Optical Fiber Networking (By March 2022, 12,139 Km installed; work in progress)
- VSAT technology (86 locations).
- Cable (FTTH): reached in 209 locations (cities and major rural settlements in 64 districts).
- 3G/4G subscribers: 9.4+18.5 million=27.9 million
- Cyber security (use of VPN) and data center (GIDC at Singhadurbar, DRC at Hetounda, Kohalpur and Khumaltar)
- ► Internet penetration 117 %; mobile penetration: 41.4 million in numbers; 139% (2022)
- Three backbone projects and 18 broadband projects have been completed under the rural telecom development fund. Broadband internet services available in locations in 74 districts.
- Broadband services extended to: 708 offices under the local municipalities, 5,933 ward offices, 5,299 community schools and 4,237 health institutions.

Source: Economic Survey-2079. Websites of Nepal Telecom, Nepal Telecom Authority.

	7	7			
1	Institutions	Existing system	Remarks		
	Department of Customs	NECAS (ASYCUDA World) – Web Startup Customs Process Software – fully automated Customs Clearance System NNSW (Nepal National Single Window) – Web based single window system - Integrating and Interfacing OGAs with Customs Other Systems includes: Performance measurement; litigation management, Beruju (Financial irregularities) control, Revenue dashboard for real time report, mobile App for customs clearance etc. Customs system are integrated with: RMIS, ITS, NRB, NCHL, Gate Entry System for Port operator, NTWCL, OCC, DOCSCP, OCR, DOI, MDMS etc.	Sixth Customs Modernization Plan (2021/22-2025/26) aims at increasing contribution of customs in maintaining integrity of supply chain and guaranteed social security through fair collection of revenue and facilitating trade through the use of modern technologies (ICT).		
	Nepal Freight Forwarders Association (NEFFA)	Individual Freight Forwarder Company uses customized Web based software "Air Cargo System", developed by Boxbyte Software. It is used to generate Airway bill, invoice, receipts, reports etc. Internal process with Local Exporter/Importer is done manually on paper documents Custom House Agents are registered in Nepal Customs ASYCUDA World system in broker module and processing of related documents are done online but simultaneously have to submit the hard copy printout as well.	Scanned Copies of Documents have to be submitted Freight forwarders also uses shipping lines portals in export/import		

	Institutions	Systems in use	Remarks	
	Ministry of Communication and Information Technology (MOCIT)	GOIMS – (Day to day office procedures - Registration, Attendance, Deputation, Leave, Holidays, Memo etc.) Foreign Currency Exchange Recommendation Nagarik App – 48 OGA using this system. Web based Progress Reporting Portal – Submission of progress report of all related offices under the Ministry. (Submit and share reports monthly, trimester, half annually and annual) Module for MOCIT in NNSW.	Web Based System Back up at GIDC and DRC	
	Federation of Nepalese Chambers of Commerce and Industry (FNCCI)	Website provides information about the Federation (FNCCI). Data base management System – Web based. Integrated module in NNSW for Issuance of COO. (Though Certificate of Origins are issued digitally through NNSW, the printout hard copy with sign and seal is also submitted). Back Up System at GIDC	Full digitalization of certificate of origin in paperless environment.	

9			
Institutions	Systems in use	Remarks	
Ministry of Industries, Commerce and Supplies (MOICS)	Website of the Ministry which publish all trade related information and its activities for public and concerned organizations. Department of Commerce, Supplies and Consumer Protection (DOCSCP) – Firm Registration, Permits for Export/Import. Department of Industry (DOI) – Industry registration/FDI registration. Office of the Company Registrar – Company registration. Nepal Bureau of Standards and Metrology-Quality certification.	All web based system These systems are interfaced with NNSW. Back up systems with GIDC.	
Trade and Export Promotion Center (TEPC)	Nepal Trade Information Portal (NTIP) for collecting, processing and dissemination of all trade related information from a National Single Point. Coordinating agency for EU Rex System. which allows Self Certification of Country of Origin for Export. Issues GSP Form A and certificate of origin.	REX is fully Web based system developed by the EU. The Self Certification of Country of Origin is done by the registered exporters. in Commercial Invoice and transferred in Hard Copy to trading partner country's Customs through Nepal Customs. Issuance of Certificate of Origin is integrated with NNSW.	

	Institutions	Systems in use	Remarks
	Plant Quarantine and Pesticide Management Center (PQPMC)	PQPMC is integrated with Nepal National Single Window (NNSW) Import of Goods: Importers registered in NNSW apply online for the issuance of entry permit of import of plant and plant products in NNSW LPCO Module 907 and submit to PQPMC or its offices through the portal. Export of Goods: Registered Firm/Company with EXIM Code and Individual Exporter can file application for Phytosanitary Certificate in NNSW LPCO model no. 908 Phytosanitary Certificates issued through NNSW are also connected through National Hub connectivity with E-Phyto Hub of International Plant Protection Convention (IPPC) and the information of issued Phyto Sanitary Certificate is digitally shared with concerned partners through this hub. Online payment of fee and charges is enabled.	Backup at GIDC, DRC
	Nepal Intermodal Transport Development Board (NITDB)	TMS – Terminal Management System developed by Gateway Infosys Company, currently in operation at Birgunj ICP, Chovar ICD; operated by NITDB. The TMS is the Web based software. The outsourced (leased out) terminals at Kakarbhitta, Biratnagar, Tatopani, and Bhairahawa use the same vendor's Software for TMS, operated by the private terminal management company. ITIS – Integrated Terminal Information System developed by Gateway Infosys (reporting system for TMS). The ITIS is the Web based software.	The Backup System is only Rack Mount Servers with RAID Hard Disks in its premises

Trade and transit procedures (direction of trade)

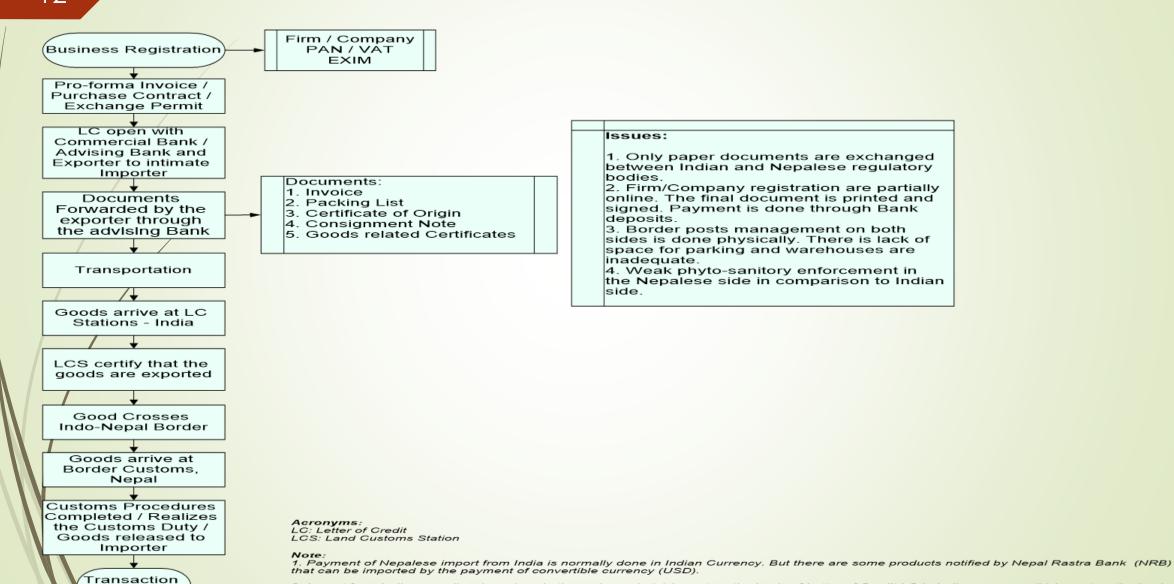
	1975-76	1985-86	1995-96	2005-06	2015-16	2019-20
Total trade	3,007	12,470	95,654	220,454	844,966	1,196,799
Trade with India	2,121	5,212	28,082	147,858	522,870	805,404
Trade with ROW	886	7,258	67,572	72,596	322,096	391,395
Share of India (%)	70	42	29	67	62	67

Source: TEPC and Department of Customs.

Complete

Trade and transit procedures

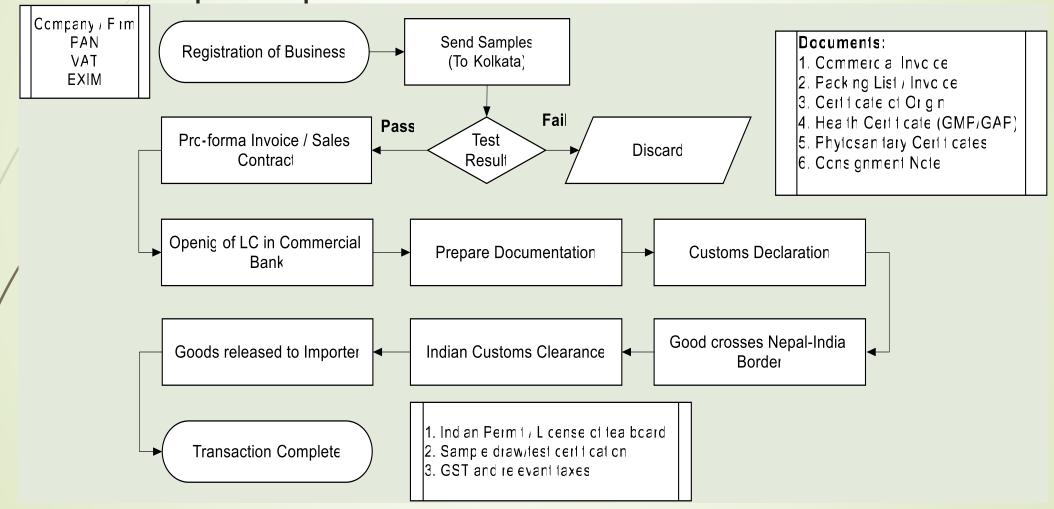
Imports of Industrial goods from India



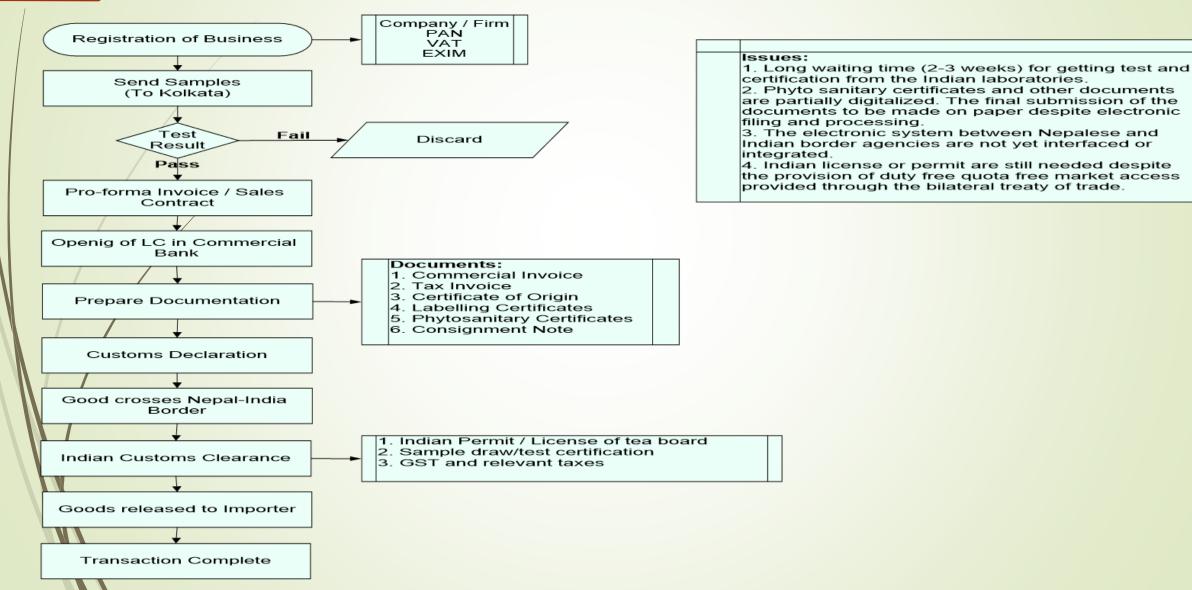
2. Import from India normally takes place in three channels (a) Import on the basis of Letter of Credit LC in Indian currency (b) Import on the basis of

payment of convertible currency (inbound) and (c) Local trade based on payment through Demand Draft or TT or Cash payment.

Trade and transit procedures Export process of tea to India



Trade and transit procedures Export process of tea to India



Banglabandh ICDs.

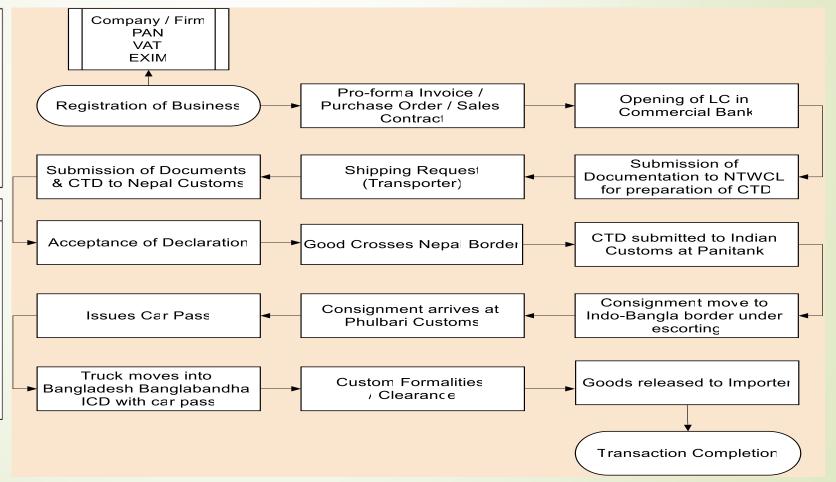
Export of medicinal herbs to Bangladesh.

Documentation: - Commercia Bank Account - Commercia nvcice - Packing st - Certificate of origin - Corsignment Note / Truck Chalan - Quarantine Certification - Photocopies of LC oriadvance payment statement received from the bank | Issues: - All documents are processed manually. - Nepalese trucks are allowed in Bangladesh up to 200 meter from the India-Bangladesh border of Banglabandh - The car pass system allows the Nepalicand Bangladesh trucks to move between Phulbari and

- Nepal Transit and Warehousing Company Limited

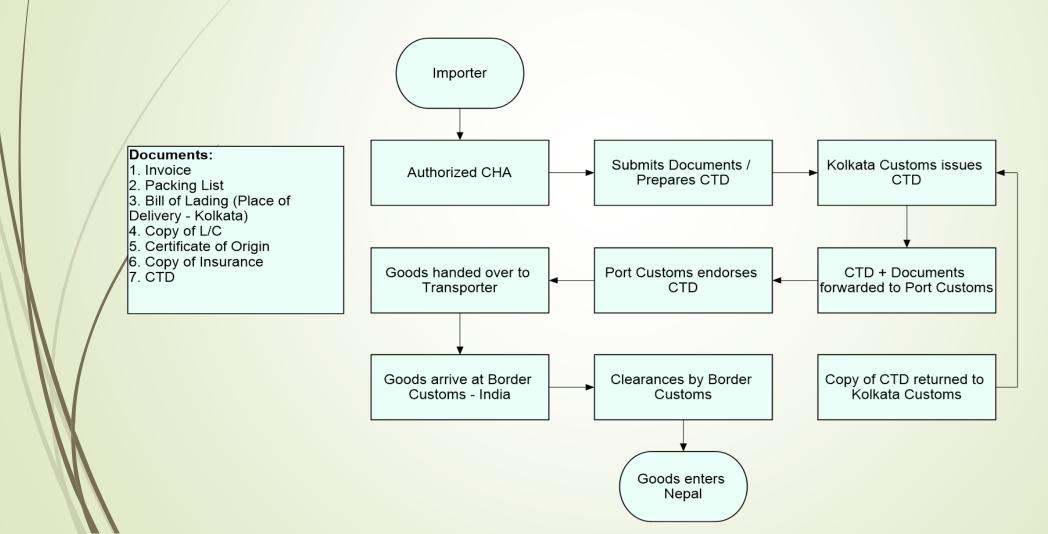
of cargo trucks between India-Bangladesh border and Nepal.

(NTWLC) provides undertaking (a guarantor) for secured safe movement



Trade and transit procedures

Transit Procedure in Import between Kolkata Port – India and Nepal border



Documents: 1. Invoice

2. Packing List

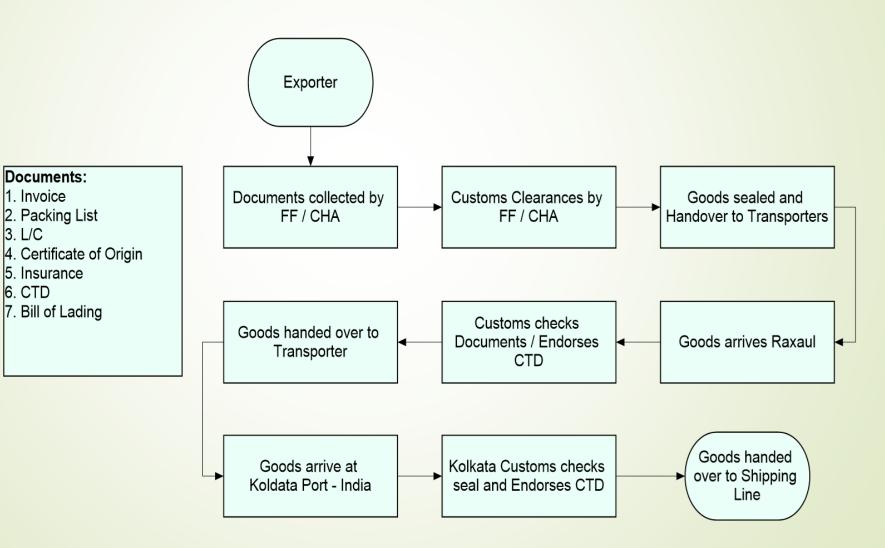
5. Insurance 6. CTD

. Bill of Lading

3. L/C

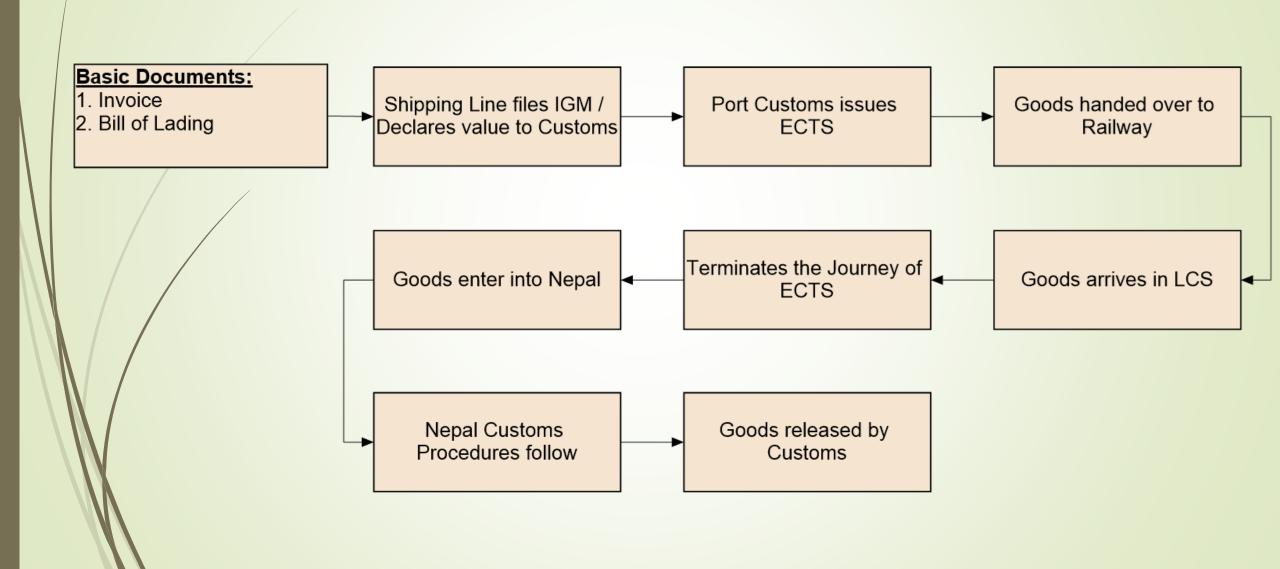
Trade and transit procedures

Transit Procedure in Export: Nepal border to Kolkata Port - India



Trade and transit procedures

Transit Procedure between Port in India and Nepal border using Electronic Cargo Tracking System.



Policy and regulatory regimes

- ICT Policy-2015.
- Broadband Policy-2015
- Digital Nepal Framework-2019.
- Electronic Transaction Act-2006 and Regulations-2007
- IT Bill-2019 (proposed)
- Customs Act-2007 (proposed for amendment)
- E-Commerce Bill (proposed)
- Various guidelines and standards (Establishment and Operation of National Knowledge Park, Government Integrated Office Management system, Management and Development of Websites of the Government Offices, etc.)

Challenges and the way forward

Challenges:

- Higher cost of internet services: Depends on vendors from India and China for internet bandwidth.
- <u>Digital Divide:</u> Just 4 Districts (Kathmandu, Lalitpur, Bhaktapur and Kaski) have the highest ICT penetration while districts in the remote areas and mountains have the low penetration.
- Low level of digital literacy; mostly among the poor communities and disadvantaged groups.
- Quality of services: Only 30% of mobile connections have high speed internet- 3G/4G. Most of the grievances of customers is about slow speed of internet (37.82%); second grievances is about stoppage of internet services (9.73%) (http://www.nta.gov.np)

Challenges and the way forward

- Inadequate regulatory framework: IT Bill is still pending. Meanwhile the need of regulating the new technologies like use of Drones, AI, Robotics, ML, Big Data is not addressed
- Poor digital infrastructures, and lack of trained human resources.
- Inadequate regulatory and institutional support for effective implementation of National Single Window/Coordination issues.
- Lack of cross-border arrangement for exchange of trade and transport data. Use of RFID in transit movement has remained as a temporary measures.
- Increased risks of cyber attack, and data security.

The way forward

- Internet as an essential services of the people/upgrade the existing IT infrastructures for high speed of internet to the reach of the people.
- Support the policy statement by proper legislations/regulations, institutional and financial set ups/ maintain coherence between various IT related policies and programs.
- Close the digital divide between urban and rural areas and settlements.
- Impart digital literacy and awareness campaign, particularly targeting the small and micro entrepreneurs.
- Inclusivity in terms of bridging gender disparity, rich and poor, indigenous people.
- Introduce proper regulatory mechanisms in place.

The way forward

- Negotiate with neighboring countries for enabling the cross-border flow of trade, transit and transport related data with a view to reducing the transaction costs.
- Introduce the elements of using modern technologies in transit movement of goods; to be enabled by the bilateral agreements.
- Take initiatives to implant the use of web based document exchange in protocols of BBIN MVA.
- Encourage ICT and BPO Companies to enter into tax net of Nepal.
- Leverage the potentials of NNSW and customs automation: Digital Nepal Framework has envisioned for paperless government for achieving better collaboration within government agencies, operational efficiency, faster decision making and better document management. Paperless trade could be a part of this initiatives and harbinger of paperless government.

