Trade Facilitation Innovation Days 2023

19-20 September 2023

Pitch for Trade Facilitation Innovation

Title of TFID 2023 Session	
Title of Innovation	Technology Driven Transit Facilitation using Electronic Cargo Tracking System
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Description of the Innovation (max 1,000 words)	The use of technology to facilitate trade and manage compliance is not new. However, the application of technologies to boost trade efficiency has gained traction in the recent decade, illustratively the use of blockchain in flow of trade documentation and use of artificial intelligence and machine learning in risk management. While most of the innovations have centred around application of software technologies, an application involving advanced hardware use with significant potential to impact trade is the electronic cargo tracking system (ECTS). As per United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), ECTS (used as part of their secure cross border transport model) uses technologies such as global positioning systems, cellular communication systems, geographical information systems, radio frequency identification, advanced web based software(s), electronic seals and computer network to provide a conceptual basis for design of the system that can be used to facilitate cross-border transport while addressing the pressing concerns of the control authorities[1]. ECTS allows customs authorities and other entities in the logistics chain to continuously monitor the movement of vehicles and cargo during transport from origin to destination.

[1] https://www.unescap.org/resources/secure-cross-border-transport-model

	In south Asia, The Asian Development Bank (ADB) has been supporting the application of ECTS as part of its support for the South Asia Subregional Economic Cooperation (SASEC) program. Within SASEC, an early application of ECTS was for facilitating the transit cargo of Nepal, a land-locked country, whose trade is handled predominantly through Indian ports. The movement of Nepal's transit cargo is governed by a Treaty of Transit with India, which requires excessive documentation (8 documents, including six copies of the Customs Transit Declaration with another five supporting documents plus a legal undertaking and insurance) and affixing of a One-Time Seal (OTL), before release of cargo from the port. At the border Station of exit, the intactness of the OTL is verified, before allowing further movement of cargo into Nepal. The transit system is based on manual and burdensome processes and documentation, plagued by delays, and had no shipment visibility. Moreover, the OTLs did not provide assurance of dependability to the regulators, which led them to impose the terms and conditions for the cargo and revenue security. This forced the Nepal traders to rely unduly on intermediaries in India, which further increased their costs. Nepal and India collaborated to reform the entire transit processes using ECTS. Supported by the ADB, the project involved trials of the system to arrive at suitable technical design procurement and business model and a customized regulatory regime. The most impactful change brought about using ECTS was to omit the formalities that Nepalese traders had to undertake in India. Under the ECTS-based regime, the shipping line, in collaboration with the overland transporter in India, would conduct the transit formalities in India and deliver the goods to Nepal at its border in Birgunj. Leveraging the features of the ECTS, the transit procedures were simplified, documentary requirements eased, and business processes re-engineered and automated. The beneficial measures that are part of the regime are- • Reduction in the number of supporting documents from eight to one (only invoice required)

	• Digital upload of documents • Seamless process in the territory of India, without the need for the Nepal trader to appoint intermediaries in India for undertaking processes. • Requirement of insurance or security for customs waived. Only a bond required. This system piloted from August 2018 for transit cargo from Visakhapatnam port in India has been providing greater convenience and visibility and better monitoring ability for the authorities. The initial results have indicated the following significant savings: • Overall transit time cut by about half, • Documents – from 8 to one The pilot has successfully demonstrated that using technology to eliminate manual processes and physical documents has a significant impact in boosting efficiency of transit. A key learning has been the need to put in place revised business processes leveraging the ECTS and not to merely add the ECTS to the existing formalities. The enhanced monitoring ability and cargo security is the vital feature that has encouraged customs to provide greater facilitation and simplification. The private sector entities involved have also been given limited access to the tracking information. Based on the demonstrated benefit of the ECTS deployment, its use has been extended to the following 'use cases' – • Transit of Indian cargo through and transit of Bangladesh cargo through Indian gateways. • Movement of cargo between border points and inland locations (such as dry ports). • Movement of cargo from port to bonded warehouses and between bonded warehouses. A further innovation was done by adding blockchain technology to secure immutability of information. The combination of ECTS and blockchain on the same platform has not only enhanced the Customs control, but leveraged to

	digitize, and ease procedural/documentation requirements. The documentation is uploaded, processed, and accessed on the same portal, along with the cargo tracking and seal monitoring. Reconciliation of cargo receipt and discharge of bonds and guarantees is done immediately on receipt of cargo at the destination location with seal intact. Based on the experience gained with the implementation of the ECTS, decisions on the following points are considered vital to the successful implementation of the ECTS: a. Deciding on the 'use cases' for application of ECTS, b. Designing the technical specifications of ECTS, c. Delineate revised business processes to accompany ECTS usage, d. Identifying service providers to supply, maintain, and manage the seal logistics and provide data to customs and other stakeholders, e. Agreeing on a transparent and competitive pricing mechanism, and f. Establishing a core group that will oversee the implementation. The innovative use of ECTS has resulted in enhanced trade and transit efficiency and a win-win situation for regulators and private sector.
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