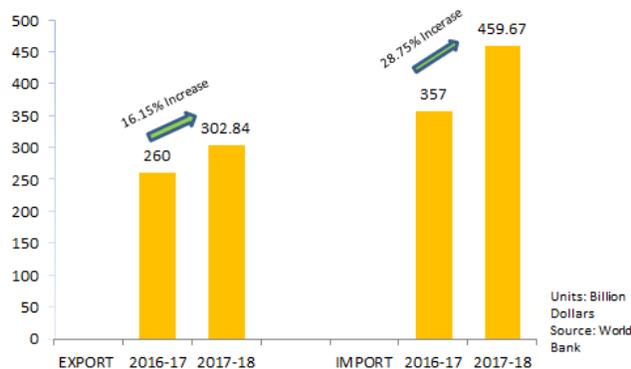**Concept Note on PCS ver 2.0**

Background:

As per the Economic Survey 2017-18, the Indian logistics sector provides livelihood to 22 million-plus people and improving the sector would facilitate a 10% decrease in indirect logistics cost, leading to a growth of 5-8% in exports. Further, the Survey estimates that the worth of Indian logistics market would be around US$ 215 billion in next two years compared to about US$ 160 billion currently. The Indian logistics sector is considered as a sunshine industry and is going through a phase of transformation. Some of the challenges that beset the Indian logistics industry pertain to procedural complexities, redundant documentations and involvement of several agencies at our ports and borders, which severely affect our performance in international trade, resulting in delays. Some of the areas identified for improvement include harnessing the potential of emerging technologies, removing bottlenecks, improving automation, single window clearance system, and simplifying procedures.

India Port Sector – Cargo handled

The country's major ports handled a combined traffic volume of 648.4 million tonnes during 2016-17. To improve the operational efficiency, Overall TRT target was fixed at 3.0 days for 2017-18. Actual Overall TRT achieved was 2.68 days during 2017-18. Avg. Output Per Ship Berth day improved from 14576 tonnes during 2016-17 to 15333 tonnes during 2017-18. Operating surplus of Major Ports has increased to 5667.41 crores during 2017-18 against 4920.06 crores during corresponding period of previous year. The major ports recorded the highest ever capacity addition of 100.37 MT in 2016-17, thereby raising the total capacity to 1065.83 MT per annum, as against a capacity of 965.36 MT per annum in 2015-16.

During the last decade, there has been major advancement in technology like Cloud computing, mobile technology, Block chain, Internet of Things, machine learning, AI etc. which provide major opportunities for the logistics industry to leverage technology.

Indian Ports Association, the apex body of Indian Major Ports under the Ministry of Shipping has, therefore, proposed to extend the scope of its Port Community System by integrating existing and additional stakeholders and their information exchange processes to meet the information exchange requirement of all stakeholders covering the entire supply chain and bring out the next version viz. PCS v2.0. The earlier version viz. PCS 1.0 was established during the year 2008 for and on behalf of all the Indian Major Ports to exchange sea trade related messages among the stakeholders of the community. Predominantly the messages exchanged were between Ports and Customs and other stakeholders sending information to Ports for their business requirements. The PCS is currently operational for seventeen port communities covering all the major ports and a few private ports. 15 lakh trade related messages covering Vessel, Container, Cargo, and Customs operations are exchanged by ports and its stakeholders through the PCS.
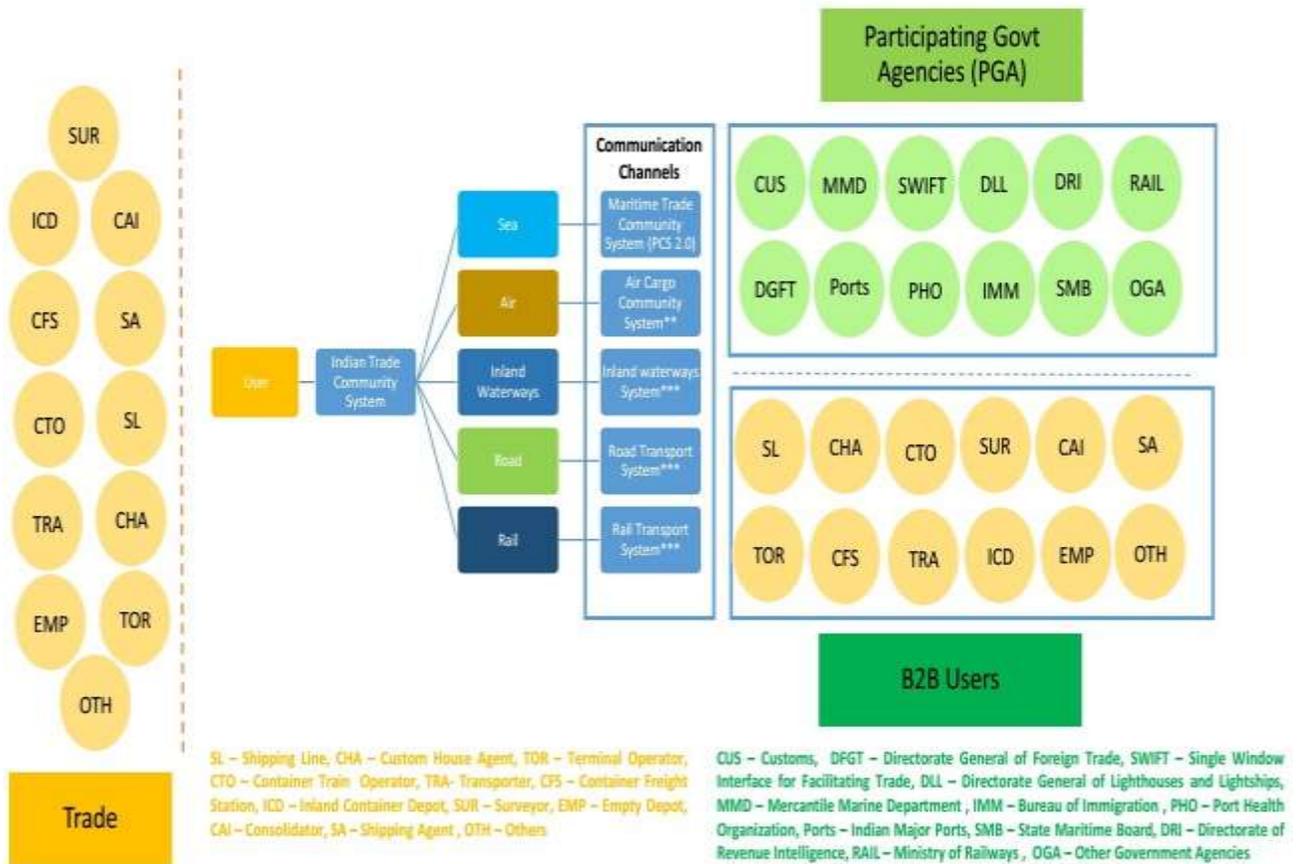
Vision & Objectives:
The vision envisaged by IPA for PCS v 2.0 project is given below and amplified in the diagram:
"To digitalize the trade transactions on a single platform with an aim to reduce transaction cost and time, to standardize information-exchange processes, eliminate paper documents and ultimately improve India's ranking in Ease of Doing Business. The system would cover maritime trade community initially and be able to scale up to include other trade communities like Road Transport, Air, IWT and eventually up to the level of a Regional cross-border Trade Community System."
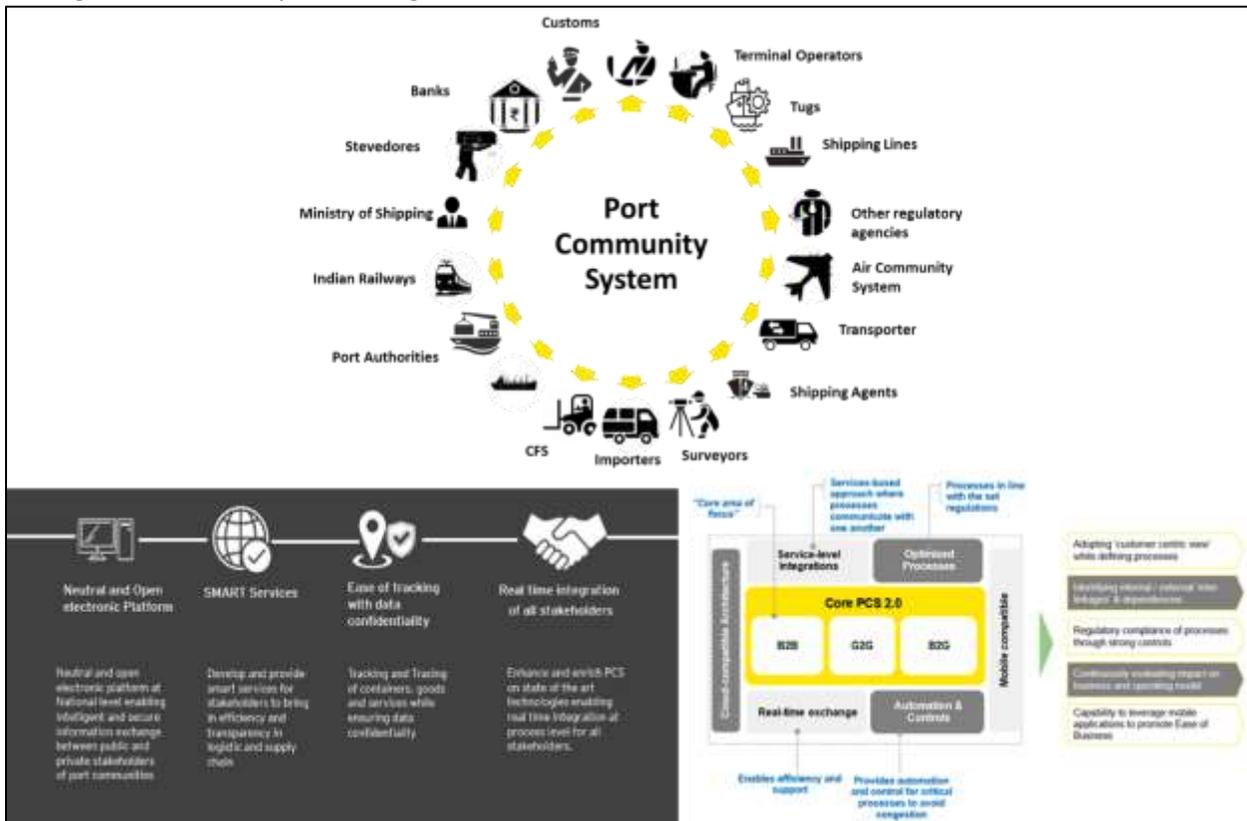
Indian Trade Community System- Vision Diagram

The major objectives of the project are:

- Design develop and implement neutral and open electronic platform at National level enabling intelligent and secure information exchange between public and private stakeholders of port communities

- Enhance and Enrich PCS on state of the art technologies enabling real time integration at process level for all stakeholders.

- Develop and provide smart services for stakeholders to bring in efficiency and transparency in logistic and supply chain

- Tracking and Tracing of containers, goods and services while ensuring data confidentiality

The proposed PCS ver 2.0 is expected to provide a secure platform for all the stkeholders of maritime trade to optimize, manage and automate logistics-efficient processes through a single submission of data, linking the entire transport and logistics chains.

Essential Features:

Some of the essential features of the proposed PCS ver 2.0 are:

- PCS 2.0 is envisaged to be a neutral and open electronic platform at national level enabling Indian sea port communities to exchange information and transact business on real time basis.

- PCS 2.0 will optimize, manage and automate logistics-efficient processes through single submission of data, connecting transport and logistics chains.

- PCS 2.0 will enable B2B interactions beyond Ports between stakeholders in Port eco-system while enhancing ease of doing business.

- PCS 2.0 will be cloud based infrastructure as to give the flexibility to scale up as and when demand increases. With mobile apps proposed in new system, stakeholders can get access to information anytime from anywhere thus facilitating ease of business.

- PCS 2.0 will include smart services for advance clearances for berth repairs, bunkers, fresh water, sludge disposal etc.

- PCS 2.0 will also include cargo and trade related information, trade processes, track and trace capabilities, additional modules like freight booking, purchase order, empty pick up, pilot allotment etc.

- PCS 2.0 will cover the Integrated logistics and transport chain (from Door to International Borders and vice a versa), across the Country ensuring a seamless Trading across Border' (EXIM) to reduce the regulatory and official information requirements through the elimination of duplication and removal of redundant data elements.

- All trade related transactions would be handled in common platform with uniform standardized process, which will be achieved in a phased manner through simplification, rationalization, and harmonization of processes, procedures and documents required through process reengineering; integration, interfaces, and interoperability with other systems to operate in real time.

- System will be highly stable & secure system, extensible for meeting trade community requirements and provide guaranteed availability, confidentiality, integrity & transaction security to address risks / threats.

- PCS 2.0 will be capable of accepting messages and data in various formats including international EDIFACT standards, XML, text files, web services, etc. from different sources and compatible with the systems of all stakeholders.

- PCS 2.0 will include better user friendly interface, increased functionality with respect to Terminal Operator (TOR) and Container Freight Station (CFS) etc., automated services for documentation in App notification, next activity information, live dash-board and data analytics (Business Intelligence) and Tracker (cargo and container) etc. WEB based, user friendly, device independent, fast, transparent & efficient for information exchange and available 24 x 7 x 365.

- This system will be developed to cover maritime trade community initially and able to scale up to integrate with other trade communities like road transport, IWT and other logistics trade platforms.

Expected Results:

The main benefits envisaged after the successful execution of the proposed project are:

- Reduced costs and timeframes for execution of trade and logistics operations

- Improved port logistic chain efficiency

- Process automation enhancing goods clearance

- Simplified and accelerated procedures for goods entry, exit or transit

- Enhanced transparency in Government to Business relations

- Ease of doing business

IPA would like to get your valuable inputs/ comments on the proposed PCS ver 2.0 to take it forward. Comments / suggestions, if any, may please be mailed to to **"pcs.ipa@gov.in"**