

***For Comments Only***

**Draft Indian Standard**

**Processes, data elements and documents in commerce, industry and administration —  
Trusted communication platform for electronic documents —  
Part 2: Applications**

**ICS 35.240.63**

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**NATIONAL FOREWORD**

*(Formal clauses to be added later on)*

The text of the International Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.

In this adopted standard, reference appears to an International Standard for which no Indian Standard exists. The technical committee have reviewed the provisions of the following International standard referred in this standard and has decided that they are acceptable for use in conjunction with this standards:

<i>International Standard</i>	<i>Title</i>
ISO 19626-1	Processes, data elements and documents in commerce, industry and administration — Trusted communication platforms for electronic documents — Part 1: Fundamentals

Annexes A, B and C are for information only.

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**Note:** The technical content of the document is not available on website. For details, please refer the corresponding ISO 19626-2 : 2021 or kindly contact:

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## **Scope**

As a connected standard of ISO 19626-1, this document defines the communication interactions between TCP system components and specifies their detailed interfaces — the processes and the APIs of the TCP system components.

It provides the common communication interface for deployment and implementation of the system components, and their functions in a specific technology-neutral way to those who consider applying and establishing a TCP system.

## **Introduction**

This document presents the TCP (trusted communication platform) system for trusted communication in the open and distributed ICT (information communication technology) environment, as a connected standard of ISO 19626-1.

The TCP system is a kind of middleware for connecting trusted communication in IoT (internet of things) or cloud environments, that delivers the information between humans, organizations, and devices by exchanging the e-documents via the TCP system components and stores the evidence of executed communication.

This document specifies the functionalities of processes and APIs (application programming interfaces) between TCP system components.

It intends to be described in the technology-neutral way in order that a TCP system can be implemented by applying various wire-wireless applied services and communication protocols used in the real world.

The key points that are implicated to this document are as follows.

a) The communication protocol used for inter-connection between TCP components is a core function of the application service layer in the distributed environment of wire and wireless communication.

The basic function of sending or receiving messages between the TCP system components compose the common communication interface to deliver message(s) in a distributed computing system of wire and wireless environment.

b) TCE (trusted communication evidence) can prove trusted communication in a TCP.

The TCP communication server executes reliable communication transactions, and create and store TCE as the proof in a way of non-repudiation between the communication participants.

c) A TCP system can be adequately ported to various kinds of business communication systems.

A TCP system is connected as a transmit or receive module between the e-business systems connected to be distributed with various work systems of B2B, e-government, and e-trade as well as the simple electronic communication systems to transmit contents directly using the address of sender or receiver (URLs, IP, address) such as the e-mail system as a related application system.