

# ISO 19626-2:2021 (E)

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

---

### Contents

|          |   |
|----------|---|
|          | Foreword  |
|          | Introduction  |
| 1        | Scope   |
| 2        | Normative references  |
| 3        | Terms and definitions   |
| 4        | Relational architecture of TCP  |
| 4.1      | Overview  |
| 4.2      | TCP relational architecture   |
| 4.3      | Functionalities of TCP components   |
| 4.3.1    | TTP identity directory  |
| 4.3.1.1  | General   |
| 4.3.1.2  | To register and manage trusted list of TCP communication server   |
| 4.3.1.3  | To identify entity  |
| 4.3.1.4  | To register and manage information of entity  |
| 4.3.1.5  | To search e-identity information  |
| 4.3.1.6  | To handle spam messages, blacklist and whitelist  |
| 4.3.2    | TCP communication server  |
| 4.3.2.1  | General   |
| 4.3.2.2  | To register and manage TCP communication client   |
| 4.3.2.3  | To authenticate TCP communication client for requesting the services  |
| 4.3.2.4  | To create trusted chain for TCP communications  |
| 4.3.2.5  | To transmit messages  |
| 4.3.2.6  | To receive messages   |
| 4.3.2.7  | To store and manage transmitted and received messages   |
| 4.3.2.8  | To handle spam message reports  |
| 4.3.2.9  | To create and deliver the NRR (non-repudiation of receipt)/NRD (non-repudiation of delivery) for receipt confirmation |
| 4.3.2.10 | To receive NRR/NRD and create TCE   |
| 4.3.2.11 | To request storage and verification of TCE  |
| 4.3.3    | TCP communication client  |
| 4.3.3.1  | General   |
| 4.3.3.2  | To request authentication for using TCP communication services  |
| 4.3.3.3  | To request transmission   |
| 4.3.3.4  | To get the received e-documents   |
| 4.3.3.5  | To request communication verification based on TCE  |
| 4.3.3.6  | To report spam messages   |
| 4.3.4    | TCE repository  |
| 4.3.4.1  | General   |
| 4.3.4.2  | Storage and management of TCE   |
| 4.3.4.3  | Verification on communication record  |
| 5        | TCP processes   |
| 5.1      | Overview of main processes  |
| 5.2      | Description of each process   |
| 5.2.1    | PR1 (communication server registration process)   |
| 5.2.2    | PR2 (e-identity registration process)   |
| 5.2.3    | PR3 (communication authentication process)  |

- 5.2.4 PR4 (e-document transmitting process)
- 5.2.4.1 General
- 5.2.4.2 PR4-1 (e-document transmitting process - basic type)
- 5.2.4.3 PR4-2 (e- document transmitting process - server delegation type)
- 5.2.5 PR5 (perusal confirmation process)
- 5.2.6 PR6 (TCE preservation process)
- 5.2.7 PR7 (communication verification process)
- 5.2.8 PR8 (spam message handling process)

## 6 TCP APIs

- 6.1 General
- 6.2 Network requirements for APIs
- 6.2.1 General
- 6.2.2 Security requirements
- 6.2.2.1 General
- 6.2.2.2 Confidentiality
- 6.2.2.3 Authentication on the relying party of communication
- 6.2.2.4 Guarantee of integrity on exchanged information
- 6.2.2.5 Non-repudiation of communication
- 6.2.3 Common requirements for protocol
- 6.3 Requirements for service interface
- 6.3.1 APIs of TTP identity directory
- 6.3.2 APIs of communication server
- 6.3.3 APIs of TCE repository

### Annex A (informative) Structure of TCE

- A.1 General
- A.2 Structure of TCE
- A.3 Basic information of TCE
- A.4 Signal for receipt notification or perusal notification

### Annex B (informative) Structure of message header

### Annex C (informative) Detailed description for APIs

- C.1 APIs of TTP identity directory
- C.1.1 A01 'register communication server' API
- C.1.2 A02 'inquire information of communication server' API
- C.1.3 A03 'manage information of communication server' API
- C.1.4 A04 'identify entity' API
- C.1.5 A05 'register e-identity' API
- C.1.6 A06 'inquire e-identity information of receiving client' API
- C.1.7 A07 'manage information of e-identity' API
- C.1.8 A08 'submit report of spam message' API
- C.1.9 A09 'retrieve whitelist' API
- C.1.10 A10 'retrieve blacklist' API
- C.2 APIs of Communication server
- C.2.1 B01 'request using of services' API
- C.2.2 B02 'authenticate communication client' API
- C.2.3 B03 'request retrieval of receiving client information' API
- C.2.4 B04 'request e-document transmission' API
- C.2.5 B05 'inquire list of transmission/reception messages' API
- C.2.6 B06 'inquire information of message and e-documents' API
- C.2.7 B07 'request message deletion' API
- C.2.8 B08 'request report of spam message' API
- C.2.9 B09 'inquire encrypt information of receiving client' API
- C.2.10 B10 'transmit e-document' API
- C.2.11 B11 'deliver confirmation of perusal' API
- C.2.12 B12 'notify result of review of spam message' API
- C.2.13 B13 'notify whitelist' API
- C.2.14 B14 'notify blacklist' API
- C.3 APIs of TCE repository
- C.3.1 C01 'store TCE' API
- C.3.2 C02 'communication verification' API