

# ISO 37180:2021 (E)

## Smart community infrastructures — Guidance on smart transportation with QR code identification and authentication in transportation and its related or additional services

---

### Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Concept of smart transportation with QR code identification and authentication
4.1	Background
4.2	Practical usefulness of QR codes
4.3	Satisfying the Sustainable Development Goals
5	QR code identification and authentication-applicable transportation and its related or additional services
5.1	General
5.2	Services to customers in public transportation
5.3	Services to customers in private transportation
5.4	Services to customers in inter-modal, carrier or line operational transportation for public and private purposes
5.5	Business work by operators, administrators and facilities owners of public transportation and its related or additional services
5.6	Business work by operators, administrators and facilities owners of private transportation and its related or additional services
6	QR code identification, authentication and authorization in or for smart transportation
6.1	General
6.2	QR code identification
6.3	QR code authentication
6.4	QR code authorization
6.4.1	General
6.4.2	Authorization processes
6.5	Other practically useful applications of QR codes in transportation and its related or additional services
6.5.1	General
6.6	Application to data transfer validation
7	Security of smart transportation with QR code identification and authentication
7.1	General
7.2	QR code identification and authentication security
7.3	QR code authorization security
7.3.1	General
7.3.2	Personal information collection and encryptions
7.3.3	Security procedures
8	Organization and operation of smart transportation with QR code identification and authentication
8.1	General
8.2	Secure-trusted infrastructures for QR code identification and authentication
8.2.1	Credible service management modules

- 8.2.2 Big data analysis centres
- 8.2.3 Registration centres
- 8.2.4 Data transfer modules
- 8.2.5 Terminal application modules

**9 Quality maintenance of smart transportation with QR code identification and authentication**

- 9.1 General
- 9.2 Parameters to be observed

**Page count: 10**