# ISO/TS 23526:2023-09 (E)

## Security aspects for digital currencies

## Contents

Page


**Foreword** ..... **iv**

**Introduction** ..... **v**

**1 Scope** ..... **1**

**2 Normative references** ..... **1**

**3 Terms and definitions** ..... **1**

**4 Considerations on security framework for digital** ..... **2**
4.1 General ..... 2
4.2 Security considerations for processing digital currencies ..... 3
4.3 Variations of security frameworks ..... 3
4.3.1 Non-fiat digital currency (digital asset) security framework ..... 3
4.3.2 Creating a national digital currency with an anonymity security framework ..... 3
4.3.3 Secure digital cash as digital currency with consumer identity security framework ..... 4
4.4 Overview of security frameworks ..... 4
4.4.1 General ..... 4
4.4.2 Standards as a basis for security frameworks ..... 4

**5 The emergence of currency in digital formats** ..... **4**
5.1 Digital cash representing money as a basis for financial usage with security ..... 4
5.2 Cryptocurrencies as a digital entity for financial usage ..... 5
5.3 Cryptocurrencies and the digital currency market challenges ..... 6
5.4 Cryptocurrencies and financial market formats ..... 6
5.5 Cryptocurrencies and banking regulation – stablecoin example ..... 7
5.6 Security criteria representing security aspects ..... 8
5.6.1 Security objects ..... 8
5.6.2 Key management ..... 8
5.6.3 Hiding and steganography techniques ..... 8
5.6.4 Digital representation ..... 8
5.6.5 Digital model ..... 8
5.6.6 Security countermeasures ..... 9
5.6.7 Legal and regulatory requirements ..... 9
5.6.8 Trust ..... 9
5.6.9 Chaining security processes ..... 9
5.6.10 Security framework implementation ..... 9
5.6.11 Platform independence ..... 9
5.6.12 Existing good practices ..... 9
5.6.13 Digital interfaces ..... 9

**6 Critical areas for security to establish trust, acceptance and risk** ..... **10**
6.1 Digital wallets ..... 10
6.2 Specific security considerations ..... 11
6.3 Digital currency financial security framework considerations ..... 11

**7 Fraud and threat considerations** ..... **11**

**Bibliography** ..... **13**