



Sultanate of Oman
Information Technology Authority
National Digital Certification Center

Oman National PKI





 Competent Authority

 PKI Components

 Trust Services

 PKI Hierarchy

 PKI Hierarchy

 Standards

 Projects

 Statistics



AGENDA



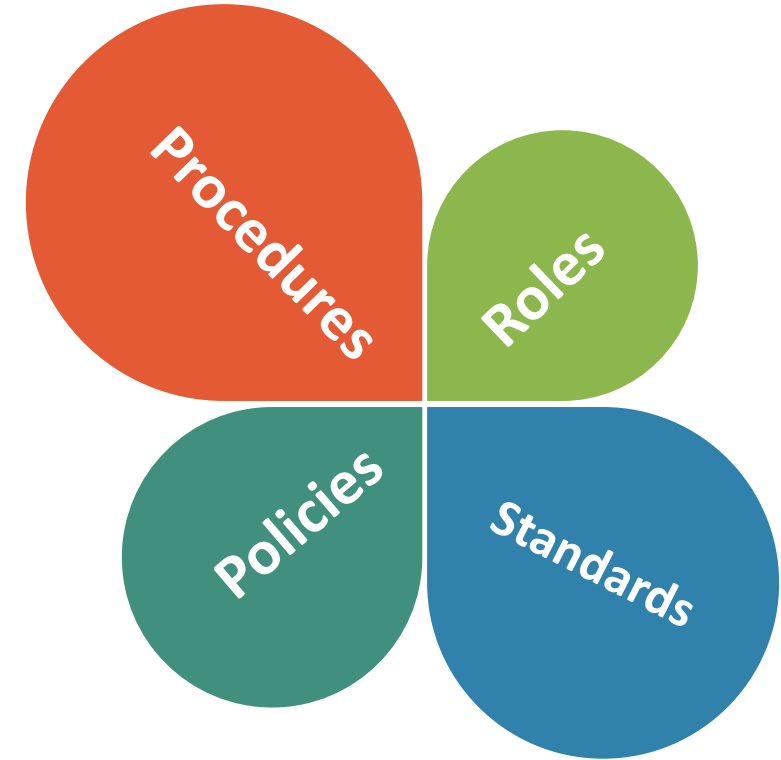


Competent Authority

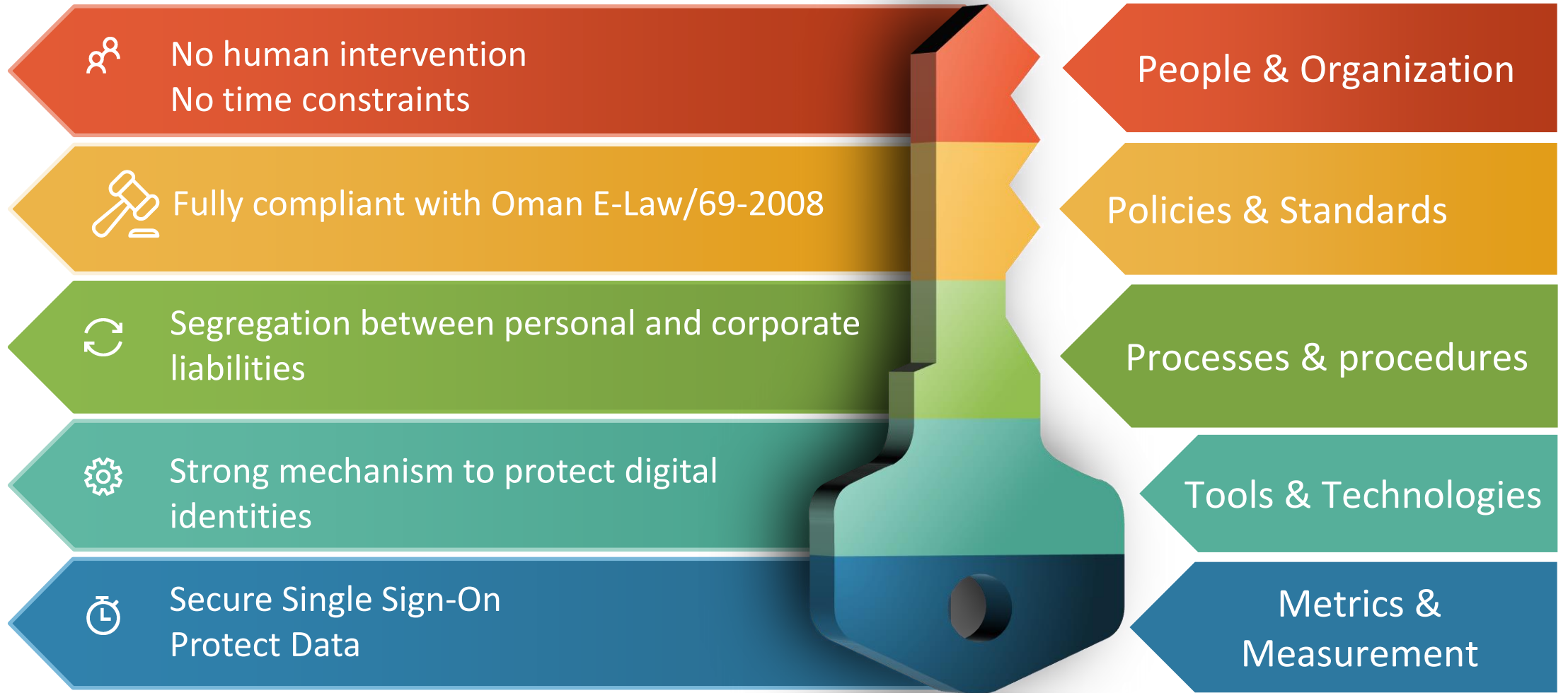
Oman National PKI



- **Oman National PKI** is owned and operated by Information Technology Authority (ITA) as the legal competent Authority
- National Digital Certification Center (NDCC)
- Legal Binding: **Oman eTransaction Law 69/2008**

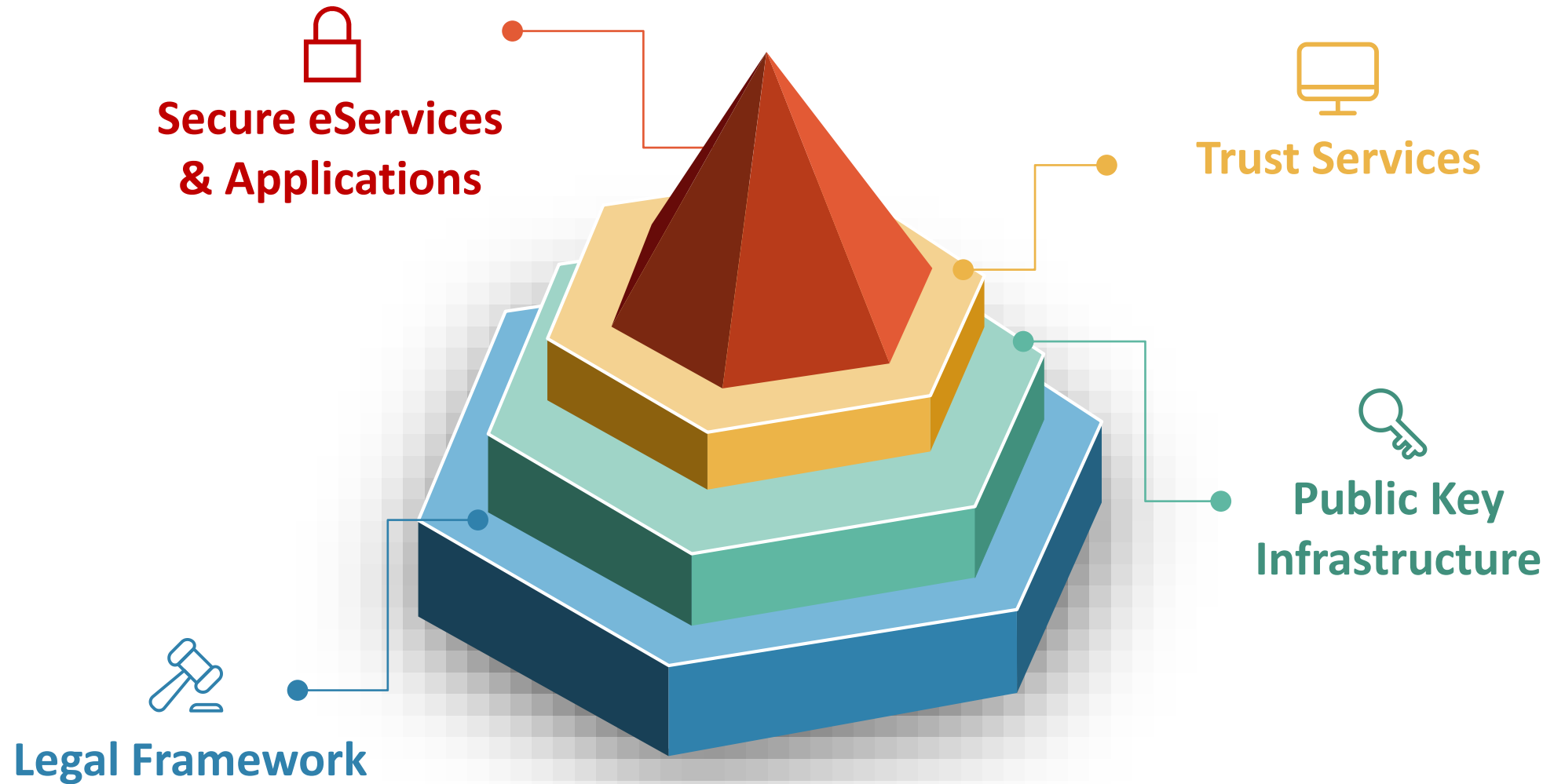


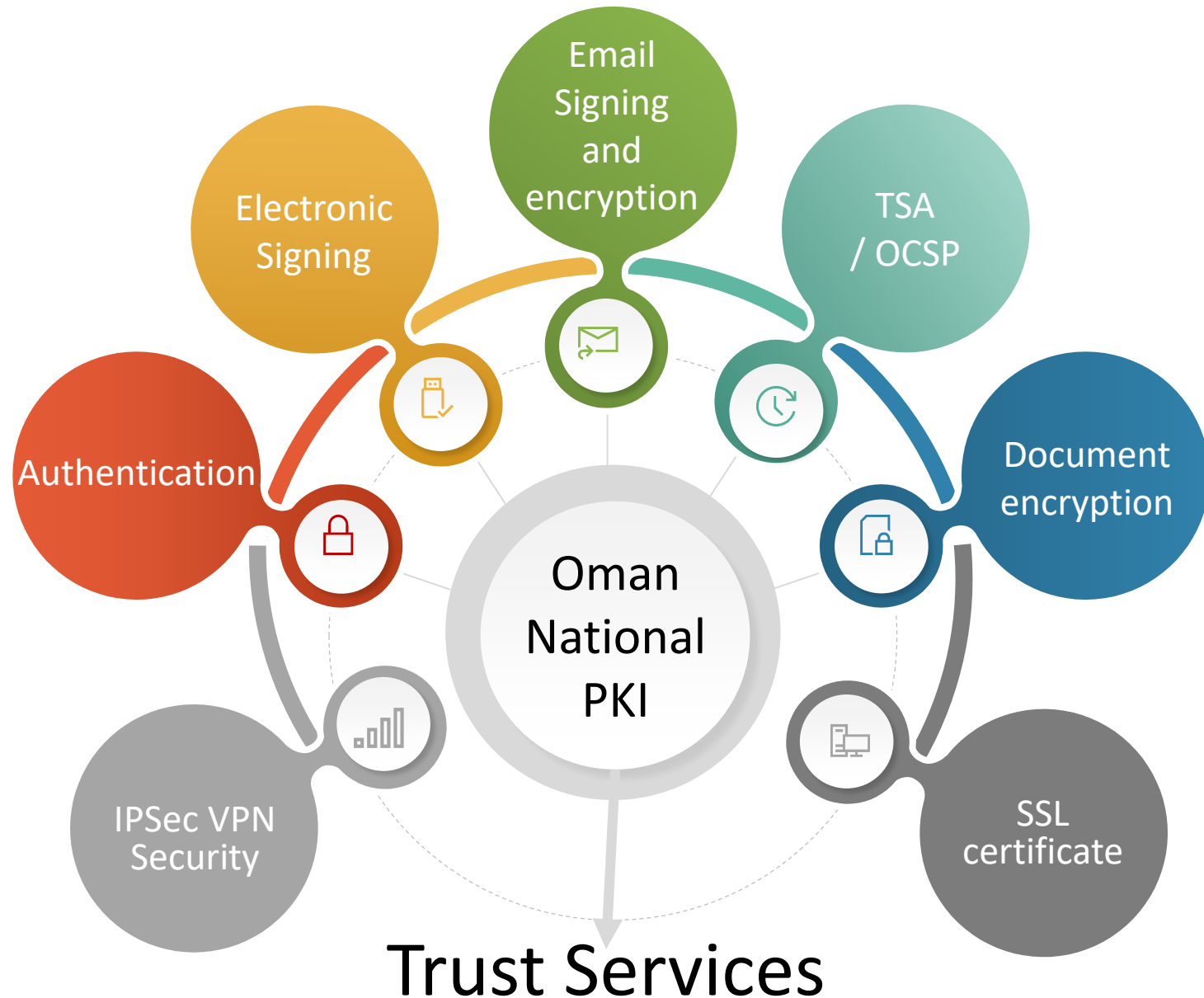
Provided eServices with PKI



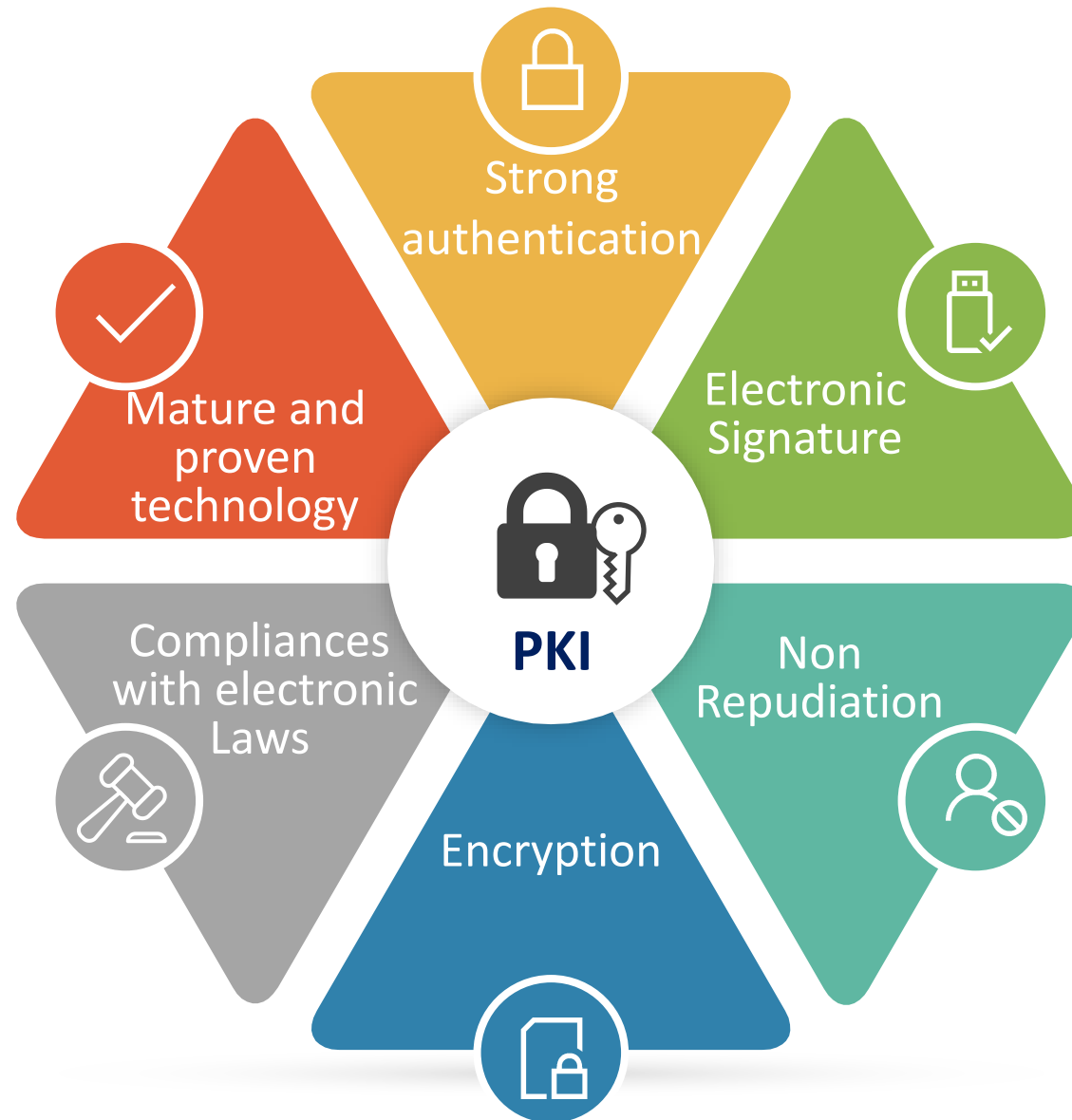
PKI Components

eTrust Pyramid Components





Trust Services





Added Value

1
Protection against
Identity Fraud

1



2



Data Integrity
Data Confidentiality
Strong Authentication
Non Repudiation

3
Trust and
Confidence

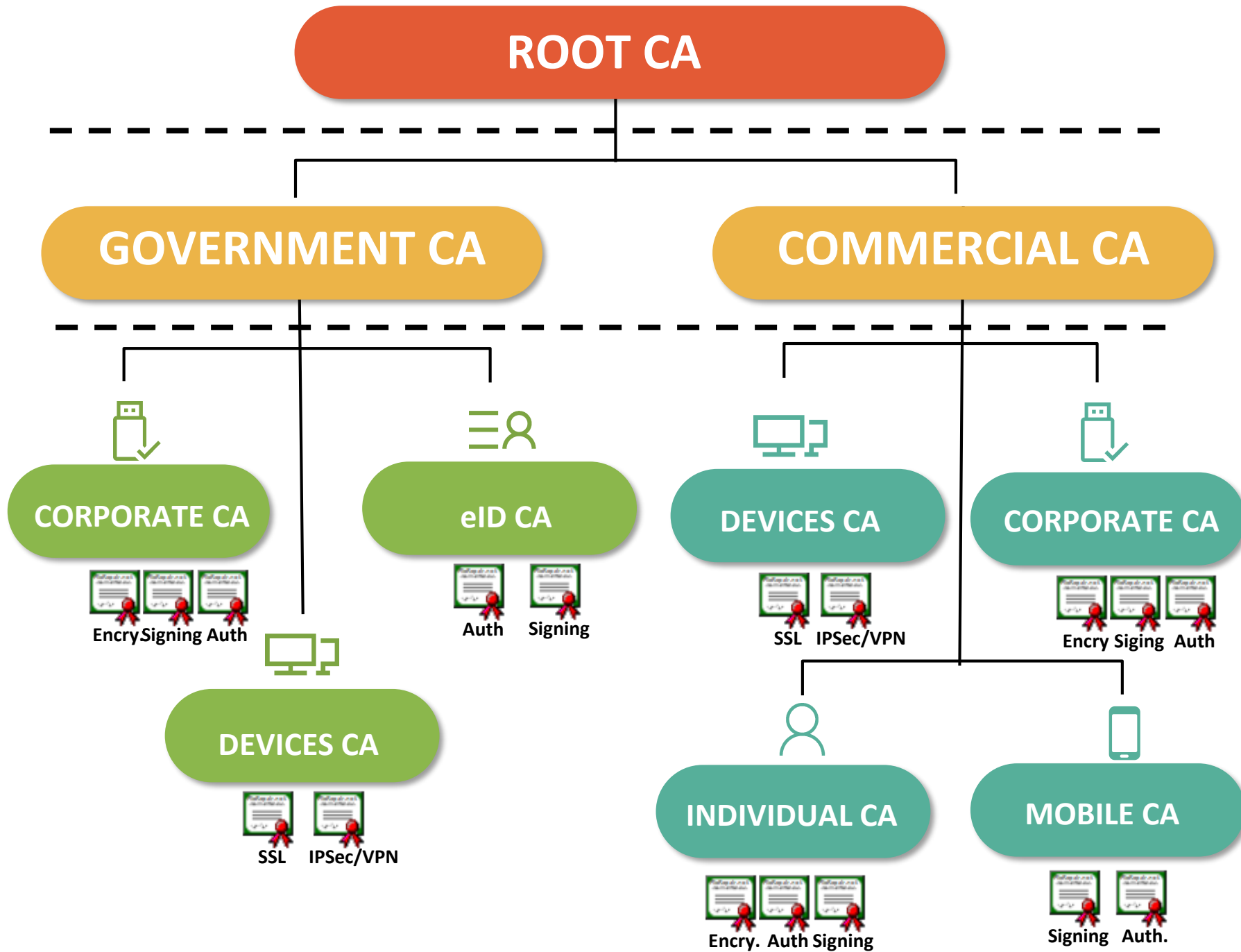
3



4



Easing e-services





Standards

Oman National PKI



Oman National PKI

- ETSI 102 042 Policy requirements for certification authorities issuing public key certificates
- ETSI 101 456 Policy requirements for certification authorities issuing qualified certificates



Standards

Oman National PKI



Digital Signature Format

- ETSI EN 319 142-1 PAdES digital signatures
- ETSI TS 103 172 PAdES Baseline Profile
- ETSI TS 102 778-1 PDF Advanced Electronic Signature Profiles; Part 1: PAdES Overview - a framework document for PAdES
- ETSI TS 102 778-4 PDF Advanced Electronic Signature Profiles; Part 4: PAdES Long Term - PAdES-LTV Profile



Standards

Oman National PKI



Time Stamp service

- Time Stamp Authority follows policy requirements on the operations and management practices
- **ETSI TS 102 023 V1.2.2** Policy requirements for time-stamping authorities



Standards

Oman National PKI



Signature Validation Service

- ITA operates its signature validation service (SVS) both as a Trusted Third Party (TTP) for its customers
- **ETSI TS 119 441** Policy requirements for TSP providing signature validation services



Project

Web Trust Accreditation



- 2014: Tender was floated
- 2015: Financial crisis
- 2017: Awarded to EY and kicked-off
- 2018: Remediation Phase – New National PKI



Project

New National PKI



- Will be hosted in a Cloud Environment
- Evaluation Phase
- Award: July 2019
- Digital Signing Solution and Remote Signing:
 - ETSI Long-Term Archive Profiles for PADES, XADES, and CADES





Accreditations

20 February 2019

Royal Oman Police

Omantel

Ooredoo

Central Bank



Integrations (1)

20 February 2019

ROP NRS

Omantel

Ooredoo

Invest Easy

ROP Customs

Ministry of Health

Ministry of
Manpower

Rafd Fund

ITA

Muscat Municipality

OPP

MARA

Mazad

Bank Dhofar

NCSI

MRMWR



Integrations (2)

20 February 2019

Civil Pension

Alduqum

MOI

Oman Post

TRA

PEIE

PASI

ROP Traffic

PACI

Central Bank

SGT

MECA

PAMR

MAF

Oman Info

MOJ



Certificates

July 2013 - February 2019

Oman Population

4.5 M

National ID Card

AUTH

SIGN

15.7 M

Mobile

AUTH

SIGN

110,882



Transactions

July 2013 - February 2019

National ID Card

14.2 M

Mobile

1.7 M

External Registration Authority (RA)

- ☆ An Entity can be accredited as an External RA to manage its own subscribers
- ☆ More convenient for conducting subscribers identifications
- ☆ Registration and Validation Teams will be trained by ITA
- ☆ Entity must be aligned with National PKI policies and accreditation agreement
- ☆ ITA will conduct auditing activities periodically and according to the auditing report,
PMC might renew or suspend the accreditation



Sub-CA accreditation

- ☆ An Entity can be accredited as a Sub-CA and build its own technical solution
- ☆ Entity must request license according to the licensing processes
- ☆ Entity should meet all the policies and the accreditation agreements approved by ITA
- ☆ ITA will conduct auditing activities periodically and according to the auditing report,
PMC might renew or suspend the accreditation



THANK YOU



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SOCIAL MEDIA

