Thailand NRCA activities in 2018 -2019

- To maintain the Root CA system and compliance with WebTrust Principles and Criteria for Certification Authorities and SSL Baseline with Network Security.

- Preparation for support information to a company that interesting in the CA business. such as Law (Electronic Transaction Act) and Other Regulation (CAB Forum, Microsoft, Adobe etc.)

- Thailand NRCA collaboration with Subordinate CA to improve services.

- Thailand NRCA certified the New Subordinate CA under Thailand NRCA in Mar 2019.

- Thailand NRCA Root certificate Stored in Adobe Approved Trust List

- 4 Companies interested to be a Subordinate CA under Thailand NRCA for support e-Tax invoice project and other digital service based on PKI..

Digital Service based on PKI in Thailand

NRCA Thailand

TDID

INET Always by your side

- Thai Digital ID Company Limited (TDID) used the PKI to support Business in Thailand.
  - To Support user for Digital Signing to e-Tax invoice:.
  - To Support user for authentication to Bank of Thailand : BOT.
  - To Support EMV chip card/Smart Card for The Thai Banker's Association.
  - To Support Secure-Email for Company in Thailand.
  - To Support XML signed in National Single Windows project.
  - To Service SSL/TLS Certificates.

- Internet Thailand Public Company Limited used the PKI for support e-Tax invoice, Digital Signing service and Implement Mobile PKI.

- Other CA in Thailand Support Digital Signing and National Single window project.

e–TAX Invoice &Receipt

E–TAX INVOICE & RECEIPT

- Applicable to ANY VAT companies.

- PKI digital signature has been applied

- Seller must own certificate that issued under NRCA for digital signature

- UN/CEFACT XML invoice format

- Invoices are delivered to RD via either
  1) Host-to-Host over ebXML
 2) Web file upload
  3) Service provider

- In 2019 has service more than 248 companies.
- VAT Filing Report to Revenue Department.
- Tax Invoice bill to Buyer.
- Trusted & Legally binding.

CA

STORE

xml

PDF

2019
248
Companies

2018
196
Companies

2017
175 Company

e-TAX Invoice by e-mail
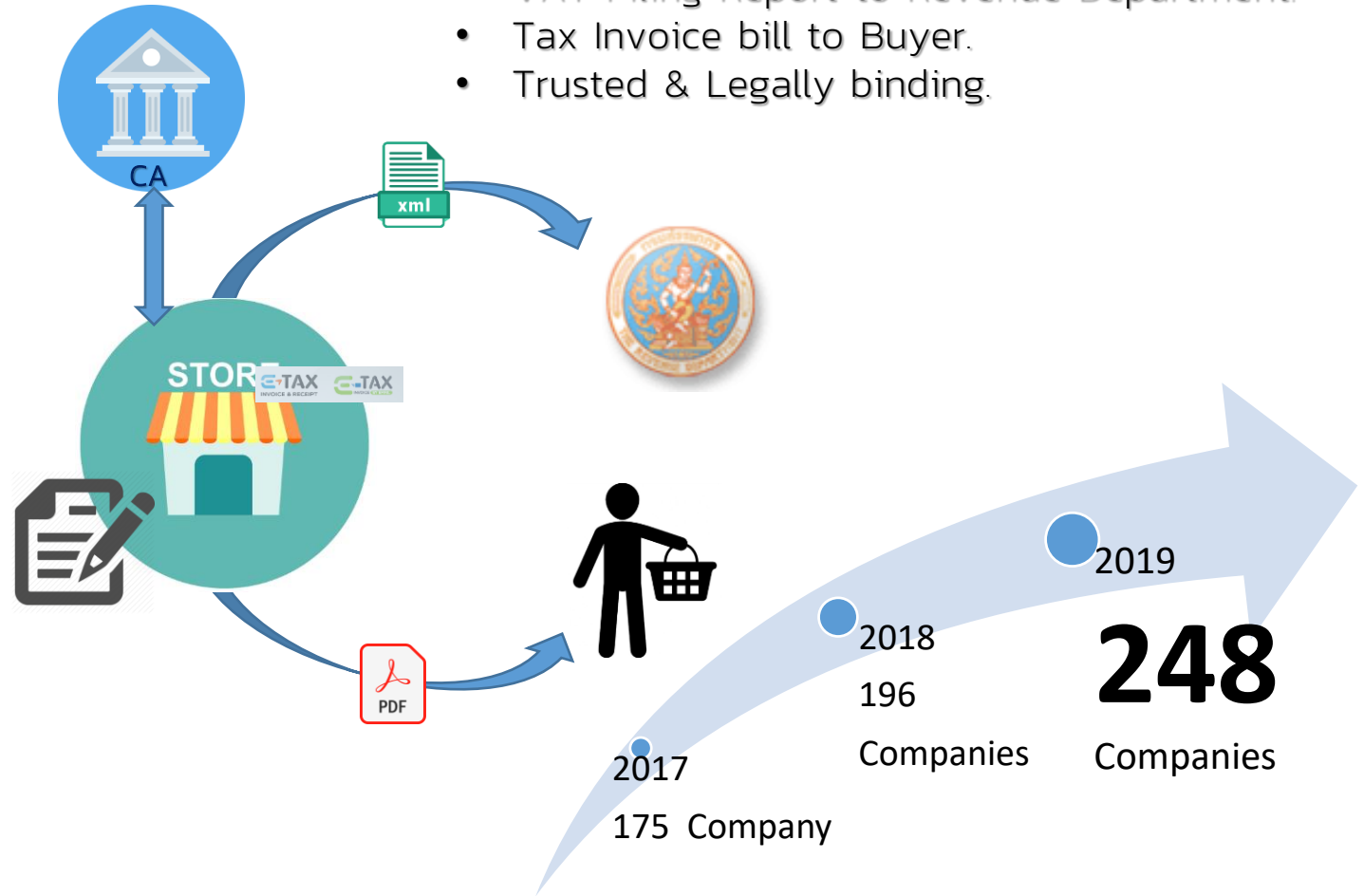
- **Applicable to VAT companies with annual revenue not greater than 30 million THB**

- **PKI Time-stamping has been applied**

- **Seller does NOT need to own any certificate for digital signature**

- **PDF/A-3 and UN/CEFACT XML invoice format**

- **Invoices are delivered from seller to RD and buyer via email**
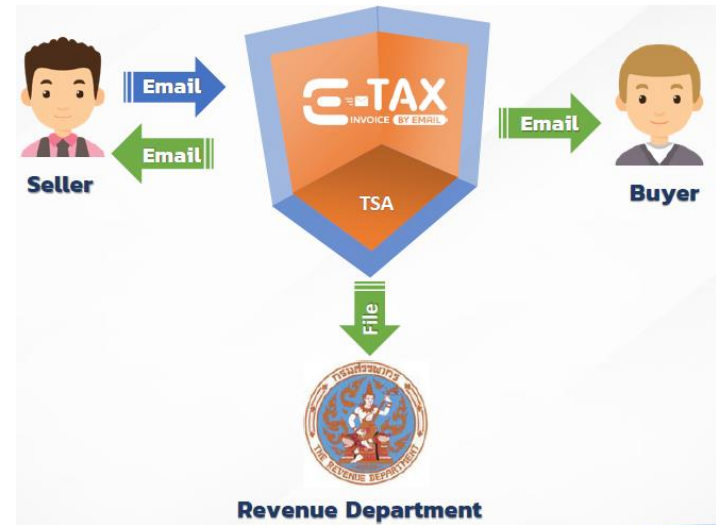
- The usage for e-Tax invoice has over 600,000 transactions in last 7 months.

- Over 3,000 Companies submitted an application to use this service. .

Thailand's Critical Infrastructure to be achieved …
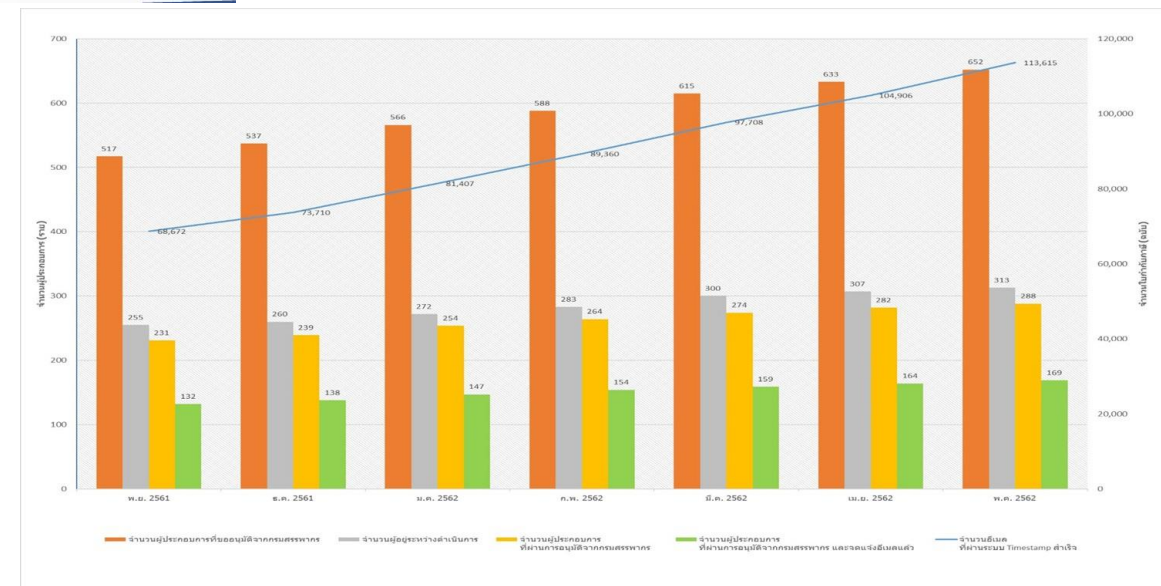
Digital ID or Digital identity is the unique representation of a subject engaged in an online transaction.
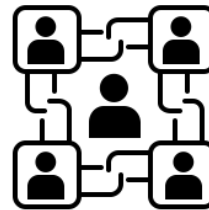
1 Digital ID

- Upgrade citizen ID smart cards to PKI tokens, as the primary ID for online transactions
- Set a Level of Assurance standard, so that ID issued by public and private organizations can be applied to identity services with the same credibility.

2 Digital Authentication Services

Develop a central authentication system for government services, so that citizens and businesses can conveniently access to the services.

3 Identity Service Providers

Provide an ecosystem that facilitates the business of ID service providers, apart from a few number of certificate authorities (CA).
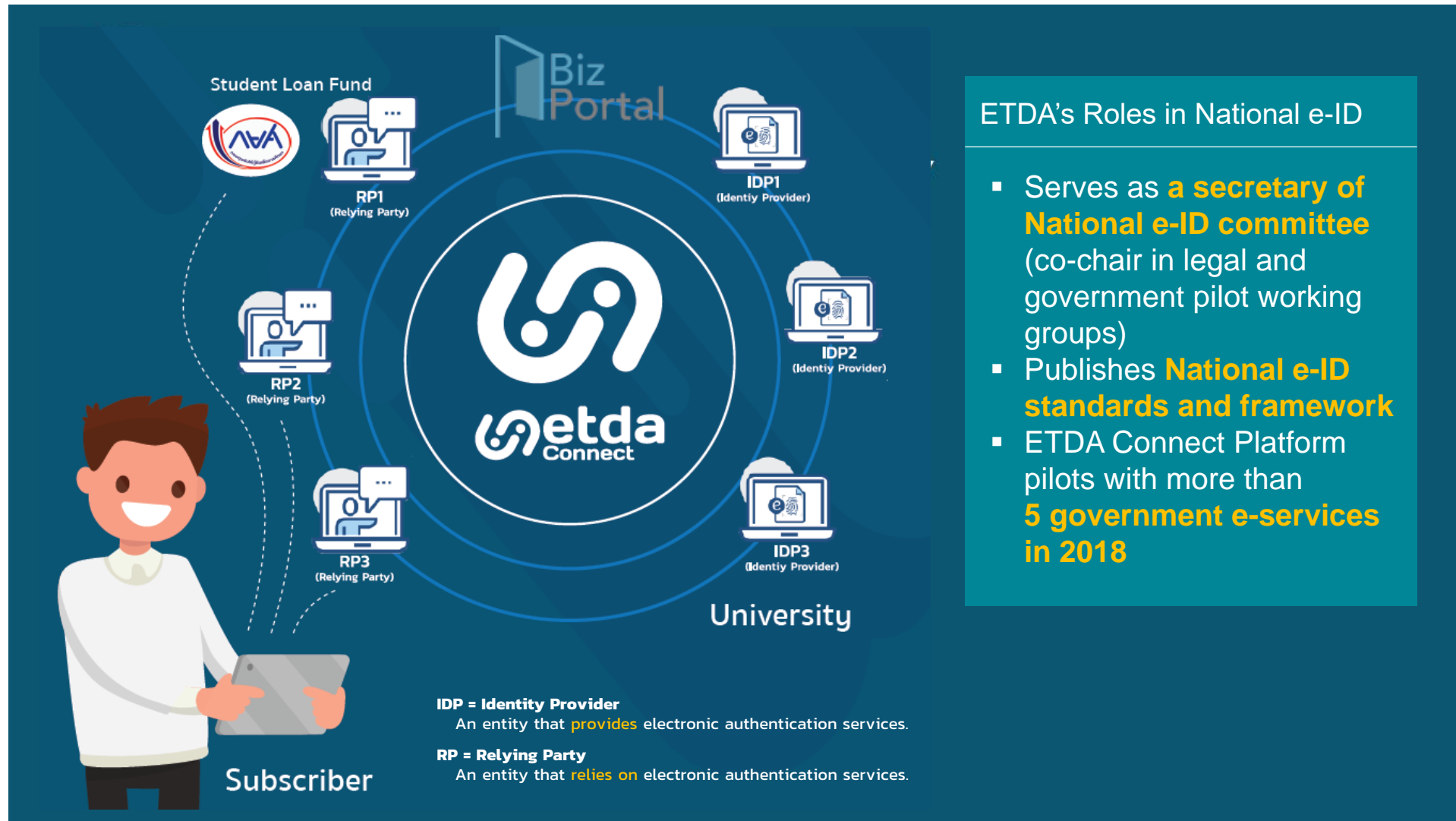
4 Digital Identity Proofing Services

- Upgrade the government's public information services/systems, so that citizens are allowed to use their personal information stored in the public domain for identity proofing purposes.
- The private sector has a central platform for exchanging information for the identity proofing process.

ETDA's Roles in National Digital ID Project

ETDA's Roles in National e-ID

- Serves as **a secretary of National e-ID committee** (co-chair in legal and government pilot working groups)
- Publishes **National e-ID standards and framework**
- ETDA Connect Platform pilots with more than **5 government e-services in 2018**

IDP = Identity Provider
An entity that provides electronic authentication services.

RP = Relying Party
An entity that relies on electronic authentication services.

THANK YOU

Q&A