## Progress in Taiwan

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## Outline

- National Cyber Security Program of Taiwan
- Smart Government Plan
- Cybersecurity Management Act
- Progress for eID Planning
- Progress Taiwan FidO Deployment and Promotion

National Cyber Security Program of Taiwan

## Cybersecurity enhancement process

- Defining grading standards
- Promote the implementation of ISMS
- Information security .
   awareness
   enhancement
- Redefining grading standards, extending the scope of implementation to the education system

  Establish a
  - Establish a national security protection management platform to provide monitoring and early warning services
  - CISO assignation

#### Phase II

Phase I protection capability and establish a national security operating center sification

- Strengthen the implementation of various security operations and plan a total of 30 action plans
- Improve the completeness of capital security regulations eg. Personal Data Protection Act

#### Phase III

Strengthen the overall resilience of the security, and improve the response mechanism

- Complete the SOC platform for second-line security monitoring services
- Amendment to the "Regulations on the Classification of Government Responsibility Levels of Government Agencies"

#### Phase IV

Strengthen the second-line monitoring mechanism of security protection management and share information

- Increase the self-development energy of cyber security
- Nurture excellent talents in the filed of cyber security

#### Phase V

Constructing a national united defense system in cyber security

security
protection
system and
complete the
classification
mechanism of
government
agencies

2001-2004

2005-2008

2009-2012

2013-2016

2017-2020

# National Cyber Security Program of Taiwan (2017-2020)

#### Vision

### Build Taiwan as a safe and reliable digital country

#### Goals

Constructing a national united defense system in cyber security Upgrading the overall protection mechanism in cyber security Enhancing the development of self-managed industries in cyber security

#### <u>Promotional</u> strategies

Complete the cyber security infrastructure

Construct national united defense system in cyber security

Increase the selfdevelopment energy of cyber security

Nurture excellent talents in the field of cyber security

## Tactical approaches

- Establish regulations and standards related to national cyber security
- 2. Enhance the resilience and safety of basic communication networks
- 3. Establish a government' s cyber security governance model

- 4. Reinforce the cyber security protection of critical infrastructure
- Establish a crossregional united cyber security defense system.
- 6. Recharge the energy for the prevention and control of cybercrimes
- 7. Promote the emerging cyber security industries
- 8. Divert cyber security industries to upgrade
- 9. Apply the research energy of industries and schools to develop innovative cyber security technology
- 10. Increase the manpower supply of cyber security talents
- 11. Improve the professional capabilities of government cyber security personnel

## Smart Government Plan

## Process of E-Government promotion in Taiwan

Set up a basic environment for aovernment information

1998-2000

- 1. Adopt Government Service Network thoroughly
- 2. Establish an Electronic Certificate Center

Popularize online government network services

2001-2007

- E-Taxation
- Online tuition and fee payments
- E-document
- Horizontal document system
- 5. E-gazette
- On-line declaration

Accessible. digitalized governance services

2008-2011

- Widely install iTaiwan mobile internet
- 2. Promote einvoice

Proactive, segmented, continuous, rooted service

2012-2016

- **Open Data**
- My Health Record Bank
- 3. Cloud medical records, cloud invoices

NOW

DIGI+Serviceoriented Smart government by program

2017-2020

#### Goal:

- Provide convenient service
- •Implement transparent governance

#### Strategy:

- 1. Develop cross domain one-stop integrated services Professional decision making
  - **Integrated services**
  - Data activation
- Create a diversecollaborative environment

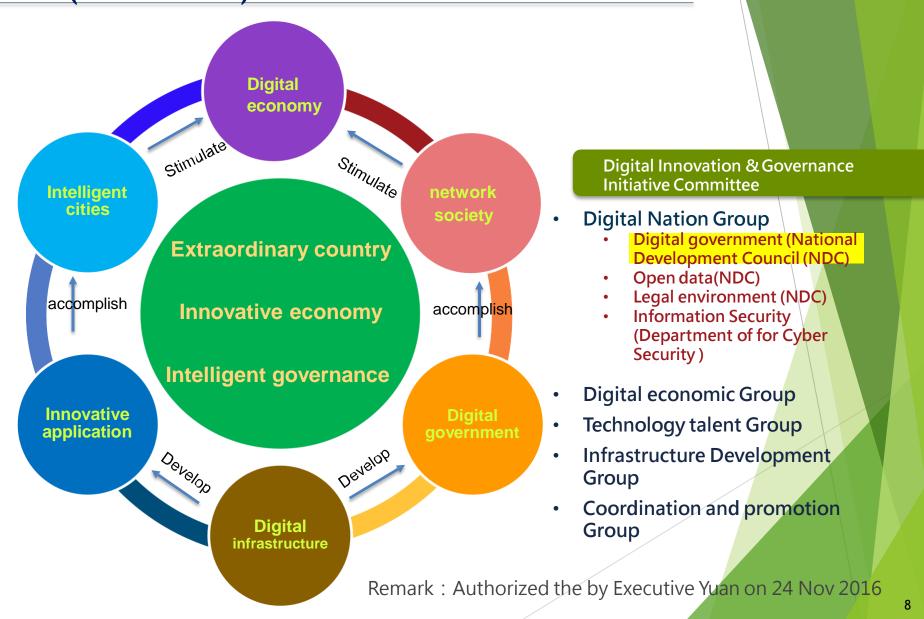
Data governance

Open collaboration

Citizen participation

(Authorized by the Executive Yuan in May 2017)

# DIGI+ Digital country, innovative economic development plan (2017-2025)



## A trusted Smart government

—the next stage public-private co-governance model



**Government digitalization** 

# **Electronic government**

Provide government services with digitalized business and onlinized procedure based on internet technologies.



# Smart Government

Using information as the backbone, apply IoT and blockchain to matching government services with people's needs, combine AI and cloud computing, to optimize decision-making quality and construct the next stage of public-private co-governance model for Smart Government.

2019

2025

## Goals: Convenient, efficient, 24/7 services

#### **Basic framework**



- New eID as a key to access entire government services
- Build secured- trust T-Road

## Three major goals





- Open and transparent data, maximize added value
- Chained governance network, optimize the quality of decision making
- Integrated services functions, create innovative smart services



#### Three supporting measures



- Build regulatory adjustment platform
- Implement supervision on privacy protection
- Strengthen cyber security protection

## New eID as a key to access entire government services

Fundamental framework

The main function of eID is to identify individuals (identity verification); it works as the key for people to access digital government services, not a device for personal data saving.

2019 2020 2021

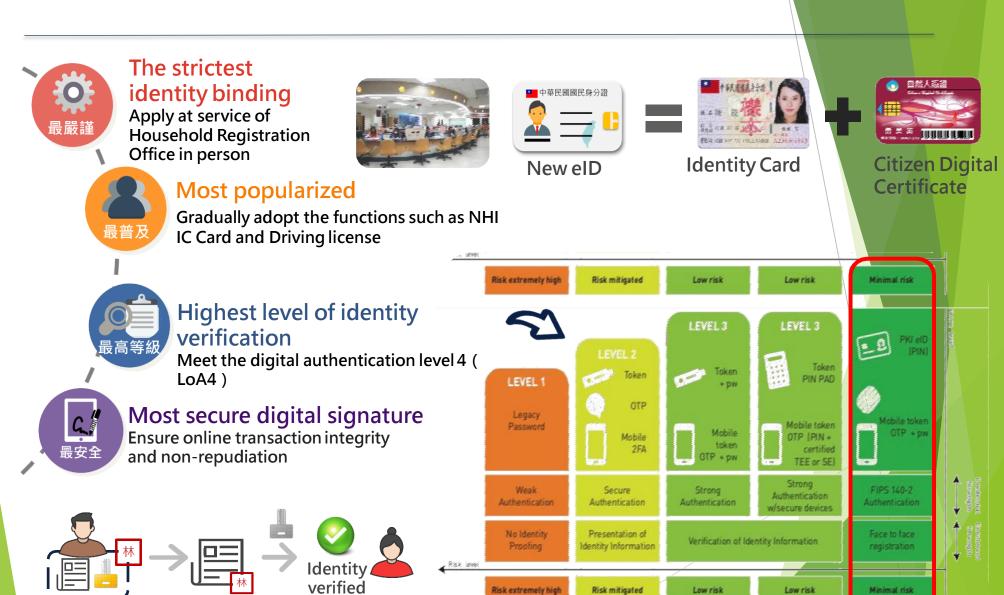
Planning and implementation

Full replacement

- √ Identity verification
- √ Signature effectiveness and non-repudiation

Ministry of the Interior

#### Convenient, private, highly secured, and information-autonomous



## Keep up with international trends

■ **128 countries** had launched eID by 2017.





Year of Issue:2010 Material: PC

#### Estonia





Year of Issue:2011 Material: PC

#### Sweden





Year of Issue:2012 Material: PC

Belgium





Year of Issue:2013 Material: PC

Thailand

Uganda





Year of Issue:2015 Material: PC

#### Indonesia





Year of Issue:2012 Material: PETG

Japan Hong Kong





Year of Issue:2016 Material: PC

E # SAMPLE

TO A PERSON OF THE GUIDALE STATE OF THE GUIDALE STA

Year of Issue:2004 Material: PC

Macao





Year of Issue:2002 Material: PC

China





Year of Issue:2004 Material: PETG

Malaysia





Year of Issue:2016 Material: PC

Year of Issue:2005 Material: PETG

## **Build secured-trust T-Road**





Ministry of Economic Affairs

Trade and industry





Ministry of Foreign Affairs

Passport and visa









#### Government Service Network (GSN) (Central + local)

(blockchain + coding technology) connect to government agency databases at all levels



Ministry of the Interior+ Ministry of Science and Technology



Health insurance and social welfare

Ministry of Health and Welfare \_\_\_

Household registration, land administration and national geographic information

Employment and vocational training

Ministry of the Interior





Ministry of Education

## **Milestones**

## Goals by 2020

- Full issue of New eID
- All-dimensional smart services, shorten administrative procedures, and paperless reimbursement
- 80% of applications for government services can be completed online
- Launch referendum electronic voting (not online voting)

## Cyber Security Management Act

## Framework of Cyber Security Management Act

 Executive Yuan, Outsourced or Outsourced unit, Government agencies

 National Competent Authorities for **Business Objectives** 

Authorized outsourced

Classification of security responsibility

 Formulation and implementation of Security Legislative maintenance plan purpose and Terms/defin

 Yearly implementation situation of Security maintenance plan

Security Audit

 Security incident reporting and handling

- Correction report
- Announcement
- Periodically publish national information communication and security plan/ National Cyber Security Program

**Establishment of security** information sharing

mechanism

**Provisions** Government personnel reward

Penal

ition

- and punishment sandards
- Notification obligation
- implementation of Security maintenance plan
- Correction report

Response mechanism

Authority(Ex ecutive Yuan) To Do

**National** security/ Social públic interest

Security management

Of Government agencies

- Classification of security responsibility
- Formulation and implementation of Security maintenance plan
- CISO designation
- Yearly implementation situation of Security maintenance plan
- Security A
- Correction report
- Security incident repo handlind
- Government and punishme

Classification of security responsibility

- Formulation and implementation of Security maintenance plan
- Yearly implementation situation of Security maintenance plan
- Security Audit
- Security incide and handling
- Correction report
- Announcement

Penal Provisions

management

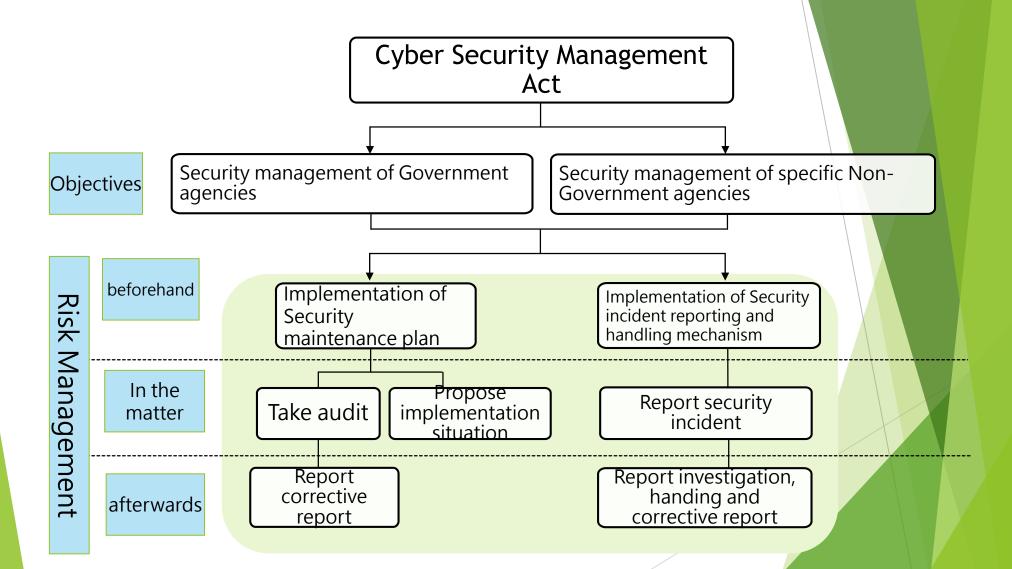
Of Specific Non-

Government agencies

Security

Department of Cyber Security, Executive Yuan

## Architecture of Cyber Security Management Act



18

Issue in 2018

# Framework of Cyber Security Management Act Sub-Act



19

## Progress for eID Planning

## eID will be postponed

- Due to the influence from COVID-19, the related schedule will be impact for:
  - > Imported equipment
  - Setting up machines
  - Getting the sample card
  - > Printing cards
- This will cause the delay of eID issued.



## Against the digital identity card

#### More than 100 experts signed against the eID card in April 2020.

- " There is no absolutely safe security system in the world", but what are the specific security enhancement measures?
- Multi-card integration is a "single point of vulnerability" for eID cards
- The chips produce and printing equipment cannot be selfsufficient, and the risk of data hacking is high
- There is no specified agency to respond

## Government response

#### Multiple choose for Citizen

- The citizen will be free to choose whether to attach "Citizen Digital Certificate". If they are not attached, there is no relevant electronic signature function, which can avoid some doubts.
- If you choose to attach a "Citizen Digital Certificate", you can also decide to stop (reuse) or cancel the certificate function at any time in the future.
- People can pay if they need it, and then apply for an additional "Citizen Digital Certificate"

#### Ensure for information security

- take duel-backup mechanism, the chip will be certified by international standards, include chip foundry TSMC company
- There are 6 major functions in the chip and 5 of them had passed for CC certification (Common Criteria), the security assessment level reaches EAL5+ or above, and reaches military secret level

# Progress Taiwan FidO Deployment and Promotion

# Citizen Tax Filling with TAIWAN FidO



# Have a Good Day! Out of COVID-19