Session 5: Trade facilitation for e-commerce: Emerging innovations for seamless cross-border transactions

An Introduction of Applying NewTechnologies to Intelligent Customs

❑ 1、 Exploration of the Application of the new Technologies in China Customs

- ❑ "Single Window Application" to improve the Efficiency of Trade

- ❑ "One –off Declaration, Phased Disposal" to accelerate Customs Clearance

- ❑ Application of Automated Image Recognition to Improve Customs Control Efficiency

- ❑ Application of Blockchain to Deal with Contradictions in Customs Control

- ❑ CUSDEP Motivate Data Sharing between China Customs and its Counterparts

- ❑ Establishment of Big Data Platform to Bolster Risk Analysis

❑ 2、 Suggestions on the Application of New Technologies

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❑ 1、Exploration of the Application of the new Technologies in China Customs

    ❑ 1、"Single Window Application" to Improve the Efficiency of Trade

➢ **Single Window:** declaring at any Customs through internet. Goods can be imported or exported at any ports in China .

➢ **Both quarantine and customs declaration business**

➢ **Streamlined and Unified Nationwide Platform**

paperless

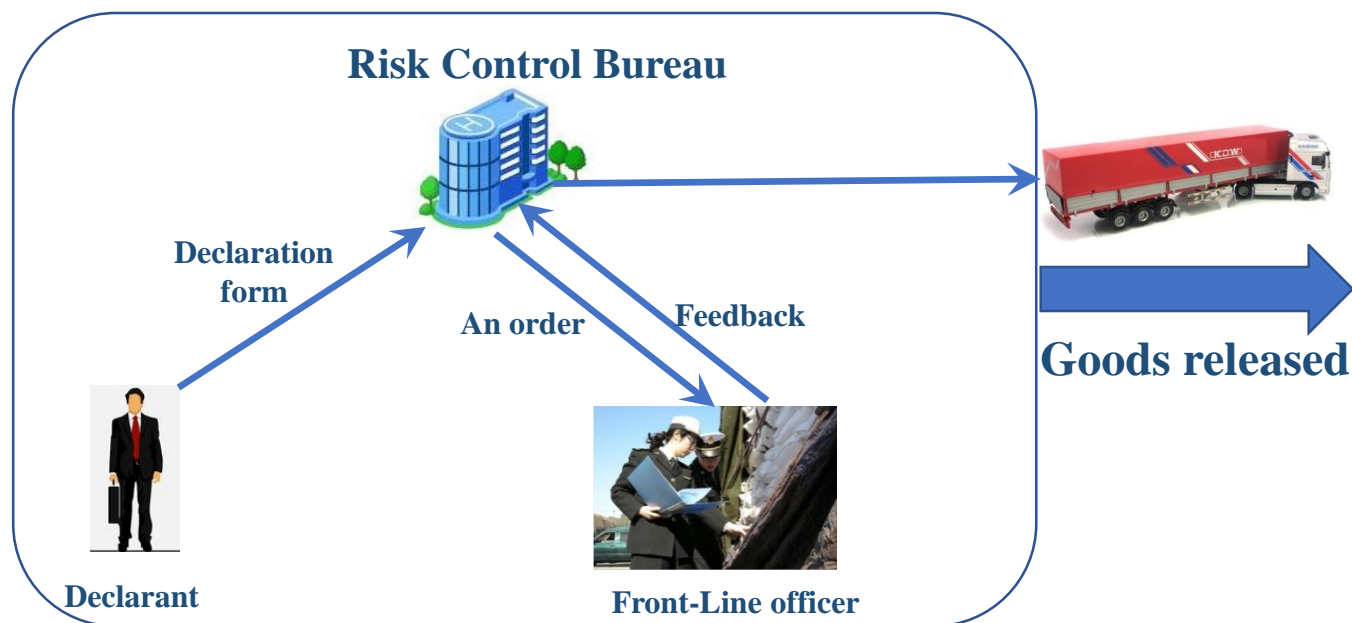**accepting declaration**

Procedure traceable

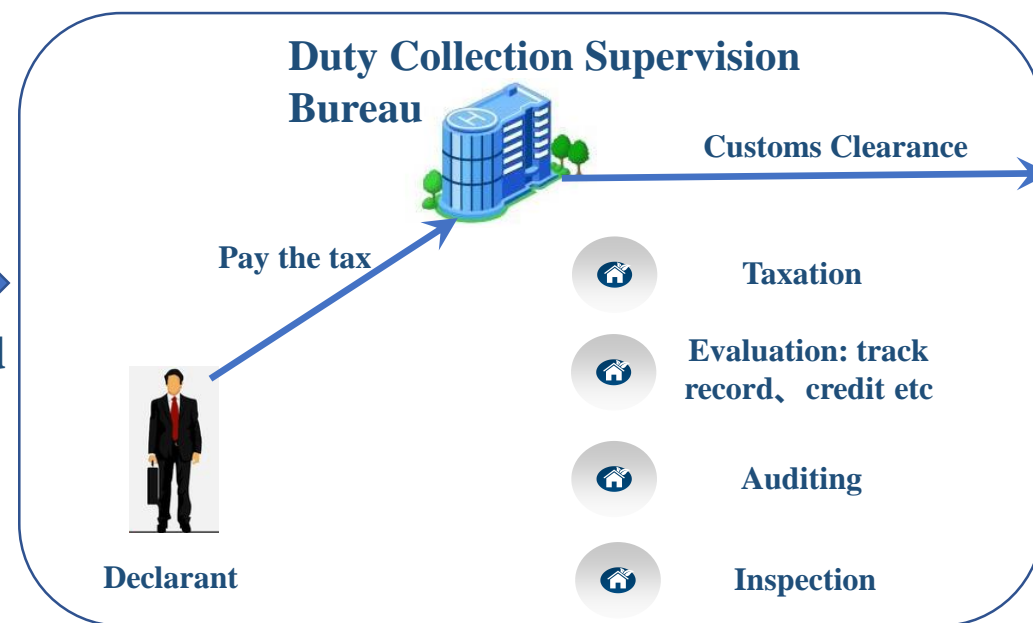Session 5: Trade facilitation for e-commerce: Emerging innovations for seamless cross-border transactions

- ❑ 1、 Exploration of the Application of the new Technologies in China Customs

  - ❑ 2、 "One-off Declaration, Phased Disposal" to accelerate Customs Clearance

    Target:solving the problem that the goods have to be blocked in the checkpoint till the tax payment formalities are finished.

First Step:Whether the goods are legal

Risk Control Bureau

Declaration form

An order

Feedback

Declarant

Front-Line officer

Goods released

Second Step:how much tax should be levied

Duty Collection Supervision Bureau

Customs Clearance

Pay the tax

Taxation

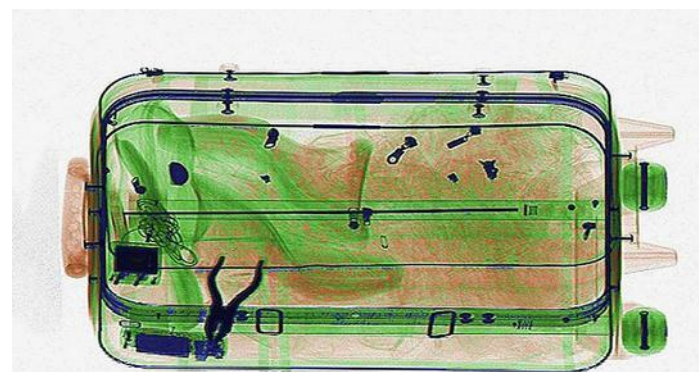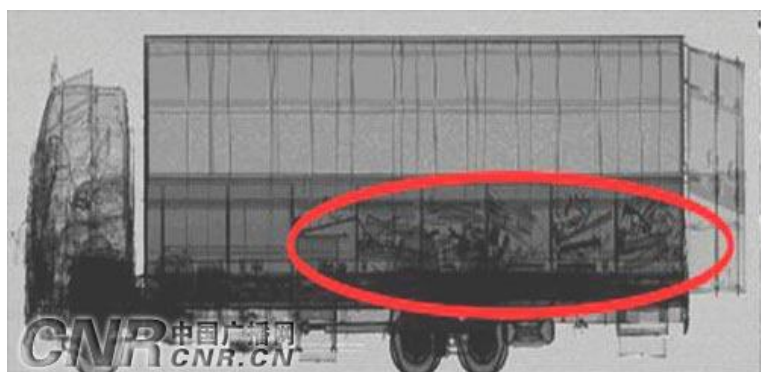Evaluation: track record、 credit etc

Auditing

Declarant

Inspection

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❑ 1、Exploration of the Application of the new Technologies in China Customs

    ❑ 3、Application of Automated Image Recognition to Improve Customs Control Efficiency
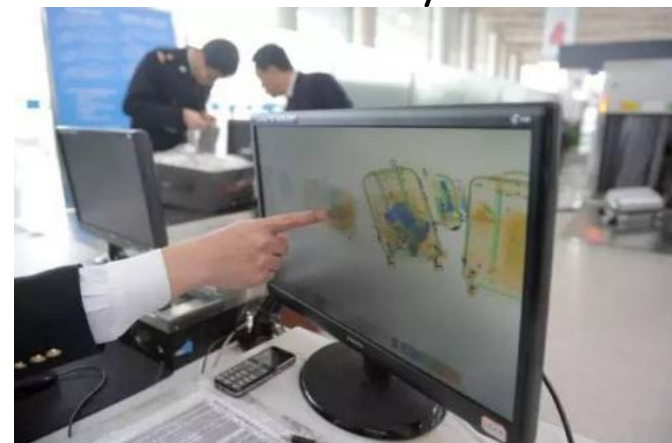
Session 5: Trade facilitation for e-commerce: Emerging innovations for seamless cross-border transactions

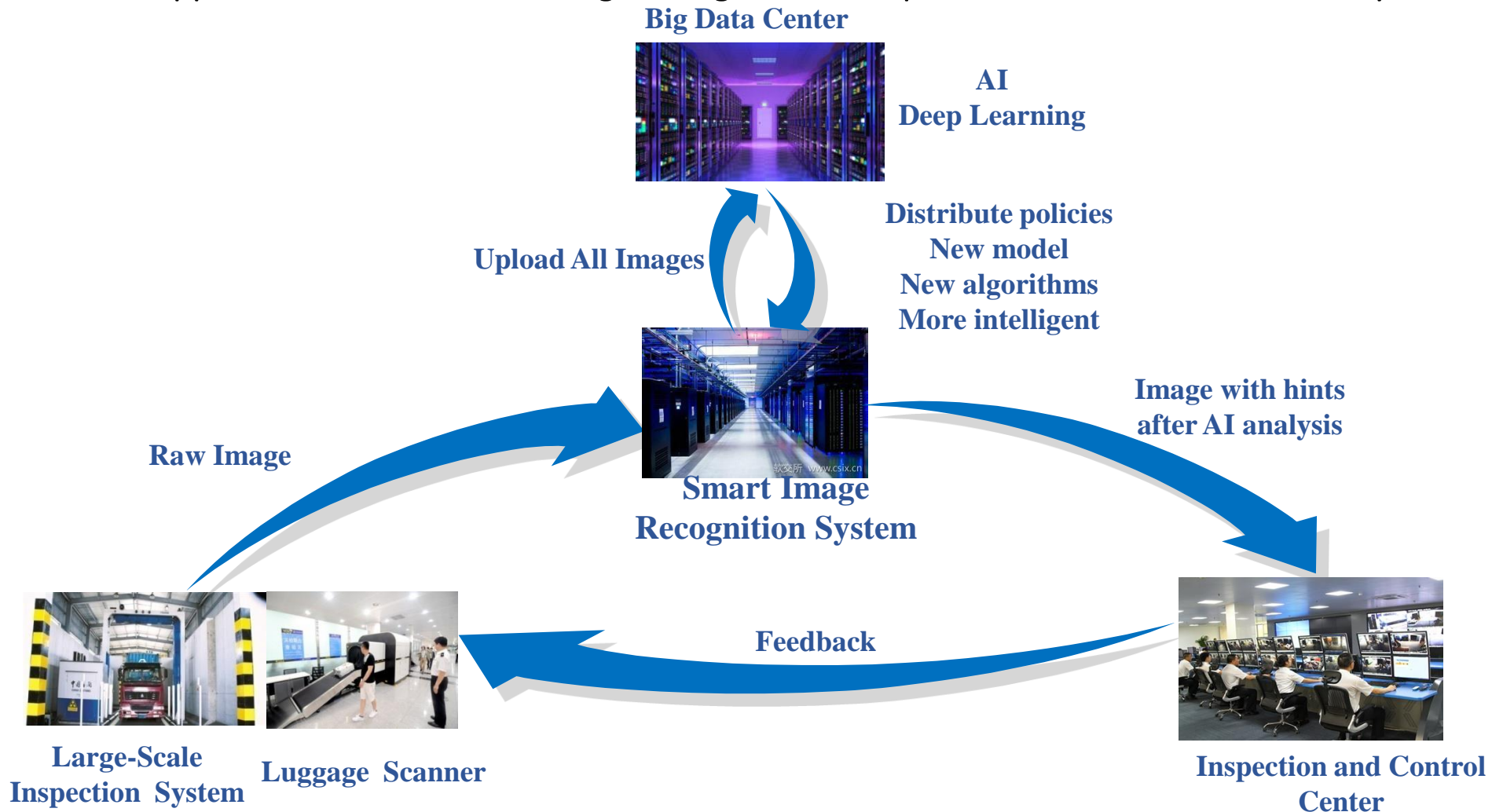❑ 1、 Exploration of the Application of the new Technologies in China Customs

    ❑ 3、 Application of Automated Image Recognition to Improve Customs Control Efficiency

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- 1、 Exploration of the Application of the new Technologies in China Customs
  - 3、 Application of Automated Image Recognition to Improve Customs Control Efficiency

Big Data Center

**AI
Deep Learning**

Upload All Images

**Distribute policies
New model
New algorithms
More intelligent**

**Smart Image
Recognition System**

**Image with hints
after AI analysis**

Raw Image

**Large-Scale
Inspection System**

Luggage Scanner
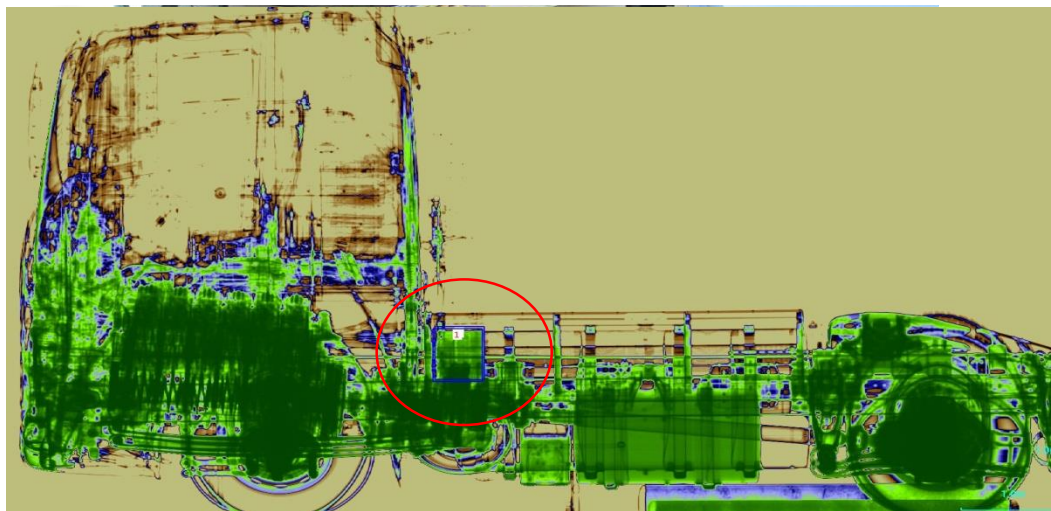
Feedback

**Inspection and Control
Center**

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❑ 1、 Exploration of the Application of the new Technologies in China Customs

　　❑ 3、 Application of Automated Image Recognition to Improve Customs Control Efficiency

There are 120 Iphones in the following part of the truck .

❑ 1、 Exploration of the Application of the new Technologies in China Customs

❑ 3、Application of Automated Image Recognition to Improve Customs Control Efficiency

Smart Image Recognition

Large-Scale Inspection Image

Average Time per Image: **13 Seconds**

Recognizable goods: **483 Kinds**
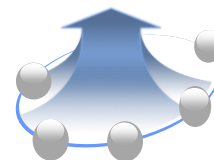
Luggage Scanner Image
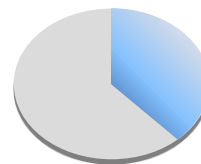
Average Time per Image: **2 Seconds**

Recognizable goods: **221 Kinds**

Take ShenZhen Customs as an Example

98% of recognition ratio

reducing clearance time by 1/3

- ❑ 1、 Exploration of the Application of the new Technologies in China Customs

  - ❑ 4、 Application of Blockchain to Solve Contradictions in Customs Control

  - ❑ 5、 CUSDEP Motivate Data Sharing between China Customs and its Counterparts

    - ❑ Conform to the Global Network of Customs (GNC) perception raised by World Customs Organization (WCO).

    - ❑ Compatible with different network transmission protocols, different security arrangements, different packet formats

    - ❑ Overcome the Downsides of the traditional software development model like waterfall development method etc.

- 1、 Exploration of the Application of the new Technologies in China Customs

  - 6、 Establishment of Big Data Platform to Bolster Risk Analysis

    - A unified big data platform which contains three Big Data centers located in BeiJing ,ShangHai , GuangZhou.

    - Data mining technology to make model building and verification.

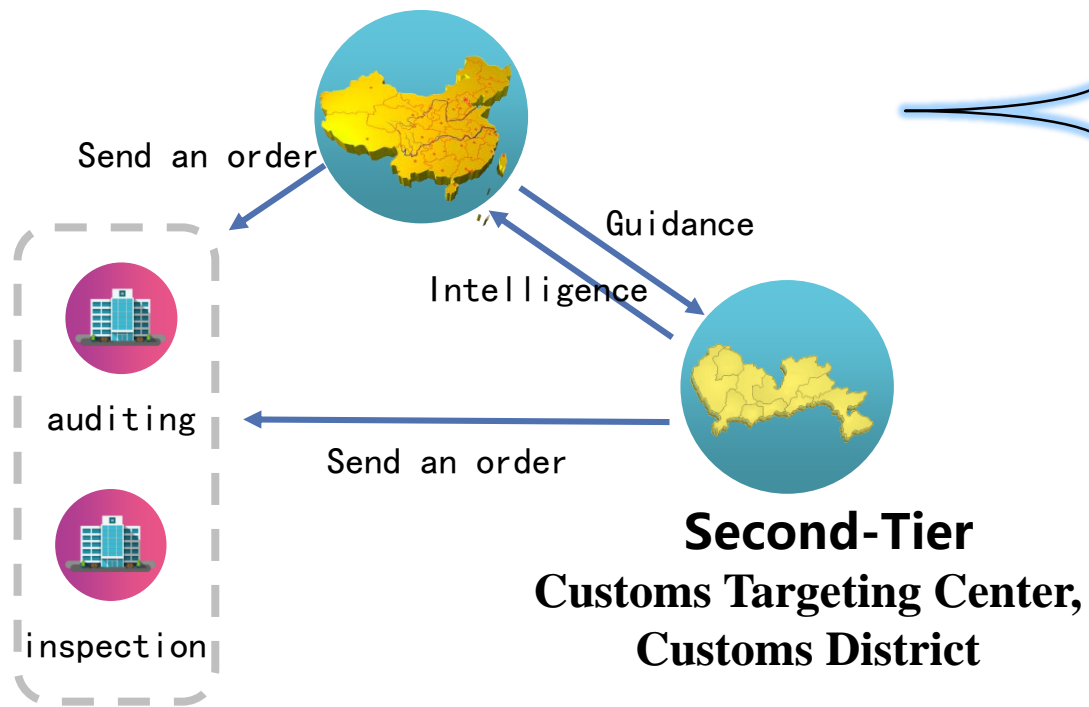   - A lot of new algorithms including the newly findings from universities..

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❑ 1、 Exploration of the Application of the new Technologies in China Customs

    ❑ 6、 Establishment of Big Data Platform to Bolster Risk Analysis

Big-Data-based Risk-targeting

Customs National Targeting Center, GACC

Send an order

Guidance

Intelligence

auditing

inspection

Send an order

Second-Tier
Customs Targeting Center, Customs District

Division of Duty Collection

Division of Control

Division of Free Trade Zone and Special Control Area

Division of Enterprise Management

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❑ 3、 Suggestions on the Applications of New Technologies

    ❑ Advanced technologies will definitely bring profound innovations on customs control mode.

    ❑ As high technology is more practical and viable, we should follow the trend, catch the rare historic opportunity and take advantage of it.

    ❑ The specific route map to achieve it is to accelerate the research of new information technology, artificial intelligence, new equipment technology, new analysis and detection technology.

 we look forward to it.