ACCELERATE THE APPLICATION OF NEW TECHNOLOGIES AND PROMOTE THE PERFORMANCE OF SMART CUSTOMS

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1 Customs face new challenges

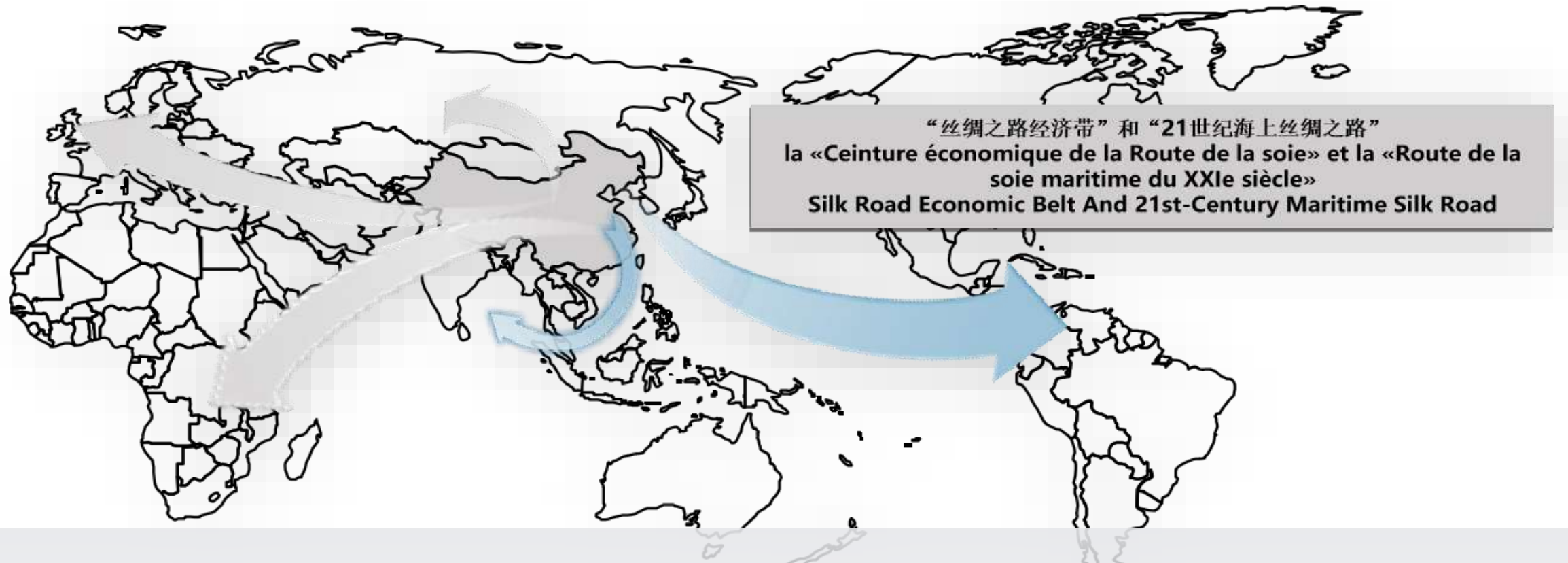## Difficult to balance between "efficient customs control" and "fast clearance"

- As security threats enter the country through the ports of entry in multiple and hidden ways, effective prevention and control become increasingly challenging.
- Enterprises have soaring demand in facilitating customs clearance, reducing trade costs, and ensuring the quality of import and export.

The shortage of human resources in customs is increasingly acute

- China Customs faces a heavier workload of import and export supervision, shortened customs clearance time, and a higher standard of law enforcement.
- However, the number of customs personnel has not increased. Due to the limited human resources, we need to fully leverage the role of technologies to increase efficiency and lead the change.

Digital transformation and smart upgrading are urgently needed in customs

- The traditional management mode occupies a large amount of human resources, and access to customs services on the Internet is limited.
- Customs business, artificial intelligence, big data have not been effectively integrated.
- The existing security technologies need to be upgraded to achieve a balance between effective prevention and control and easy operation.

中国海关
CHINA CUSTOMS

"丝绸之路经济带" 和 "21世纪海上丝绸之路"
la «Ceinture économique de la Route de la soie» et la «Route de la soie maritime du XXIe siècle»
Silk Road Economic Belt And 21st-Century Maritime Silk Road

The major initiative of "Smart customs, Smart borders, and Smart connectivity" ,which is proposed by president Xi Jinping, indicating the path for the world customs to achieve digital transformation. In 2023, president Xi Jinping announced the implementation of the "Smart Customs" cooperation partnership at the BRICS-Africa Outreach and BRICS Plus Dialogue

Safe | Facilitation | Efficiency

Reform-driven

Sci-tech driven

Business operation system

Four Mechanisms

Whole-chain smooth supervision mechanism

Multi-dimensional integrated prevention and control mechanism for the whole process

All-round convenient and efficient service mechanism

Coordinated mechanism for smooth operation covering whole field

Six Transformations

Ecology of the business system

Proceduralization of standardized operation

Parameterization of policy requirements

Sourcing of regulatory data

Digitization of knowledge and experience

Smart operation management

Philosophy innovation

System innovation

Mechanism innovation

Regulatory innovation

Service Innovation

Management innovation

AI

Big Data

Technology supporting system

Five Platform

Application supporting platform

Big data analysis platform

Business collaboration platform

Monitoring and command platform

Infrastructure platform

Three Mechanisms

Application development mechanism

Research and development mechanism for scientific research projects

Infrastructure development mechanisms

Internet of Things

Blockchain

Cloud computing

Secure encryption

| Organizational Support | Rule of law safeguard | Teamwork Support | Financial Support | Supervision Support |

3.Smart Customs Construction Ideas of China Customs

"digital governance" as the goal

"digital intelligence" as the means

digital as the foundation

Strengthen the effective supply of technology

| A business application system development mechanism | A multi-level collaborative research project development mechanism | A joint infrastructure construction mechanism |

Continuously improve regulatory efficiency

Abroad | Port | Domestic

Response ▷ **Echo** ▷ **Reaction**

Strengthen the application of customs technology

| Ecology of the business system | Proceduralization of standardized operation | Parameterization of policy requirements |
| Sourcing of regulatory data | Digitization of knowledge and experience | Smart operation management |

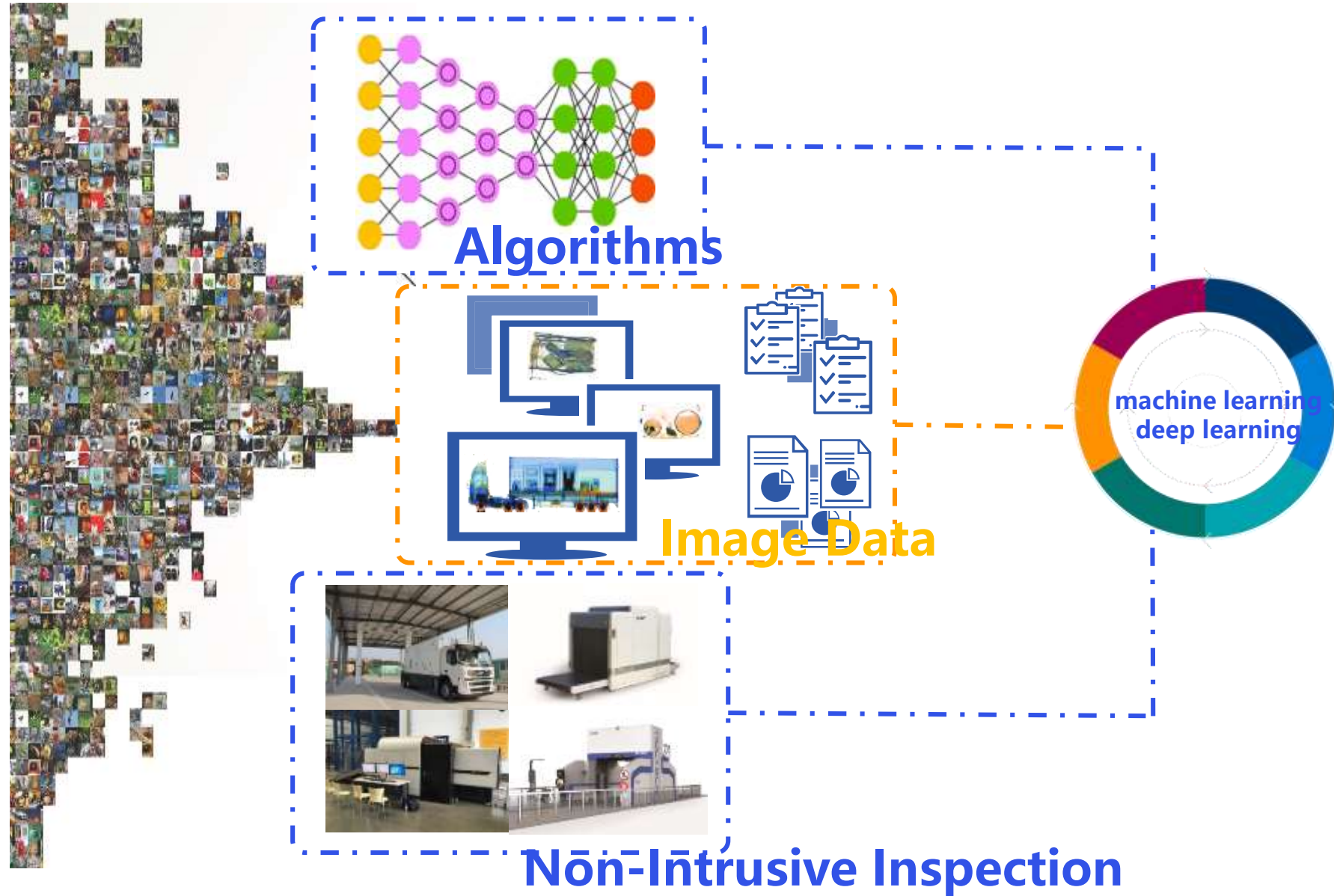### Enhance technological support capabilities

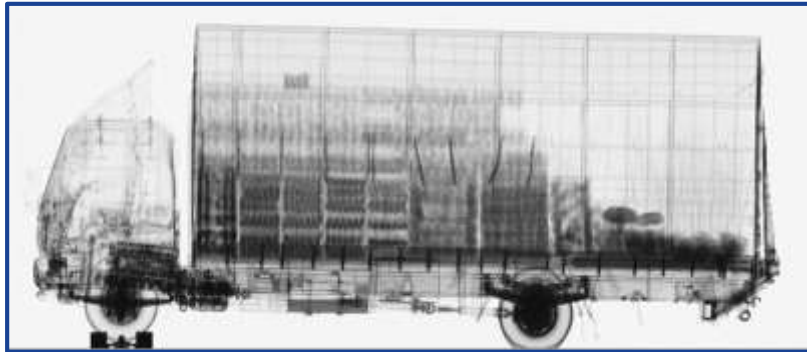| Application supporting platform | Big data analysis platform | Business collaboration platform | Monitoring and command platform | Infrastructure platform |

CHINA CUSTOMS

Algorithms

Image Data

machine learning
deep learning

Non-Intrusive Inspection

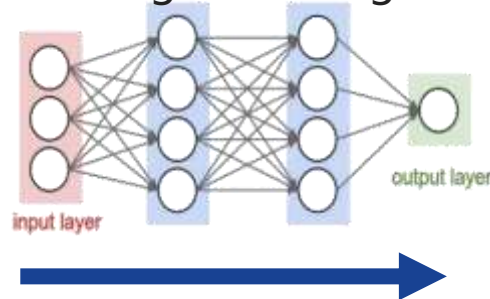# 1.Intelligent Scanning Image Recognition based on AI

3

Scanning Image

Customs Clearance Informationscanning

3 D classification network;
semantic segmentation
network ;
natural language
processing technologies

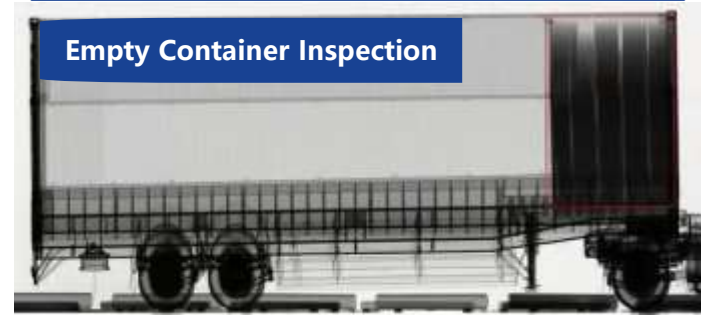
input layer   output layer

- Waybill information
- logistics information
- commodity information
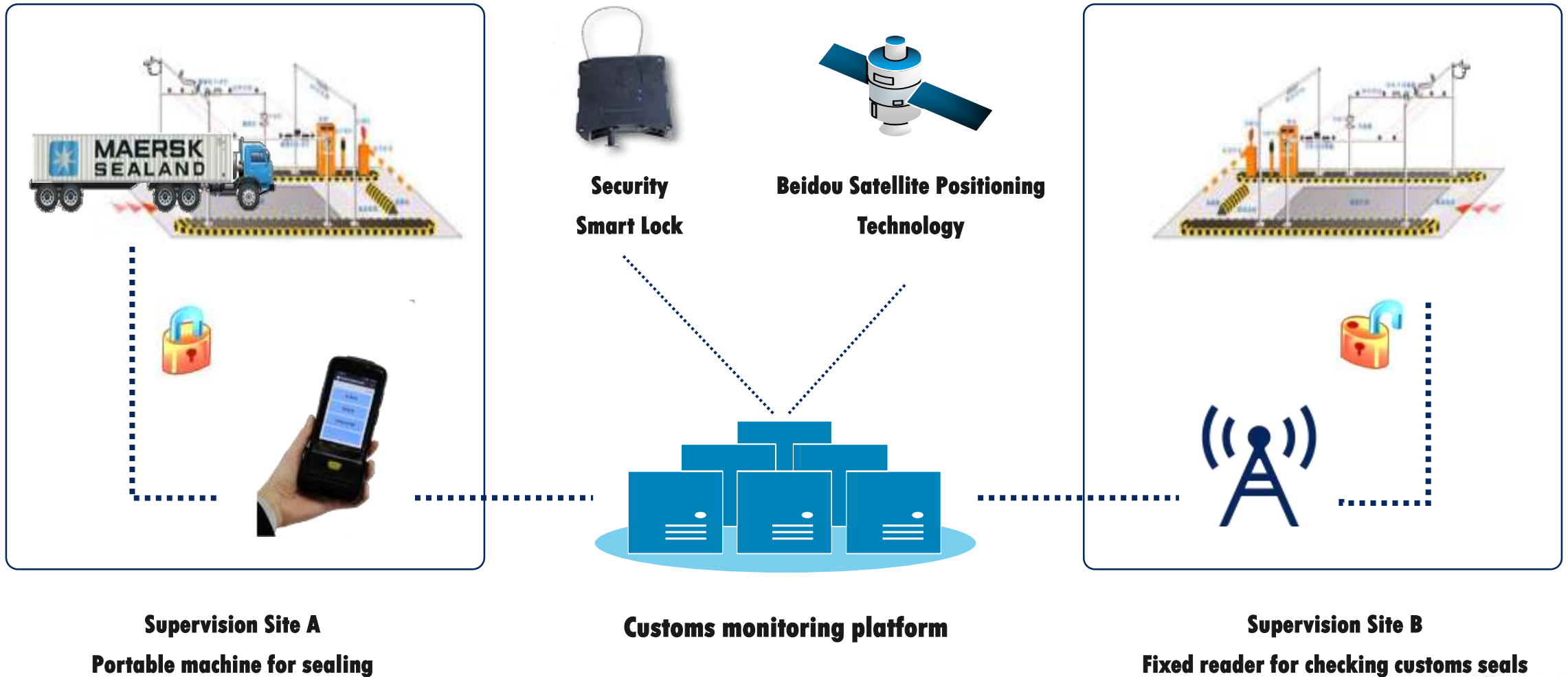- enterprise information

Inspection of Smuggled Goods

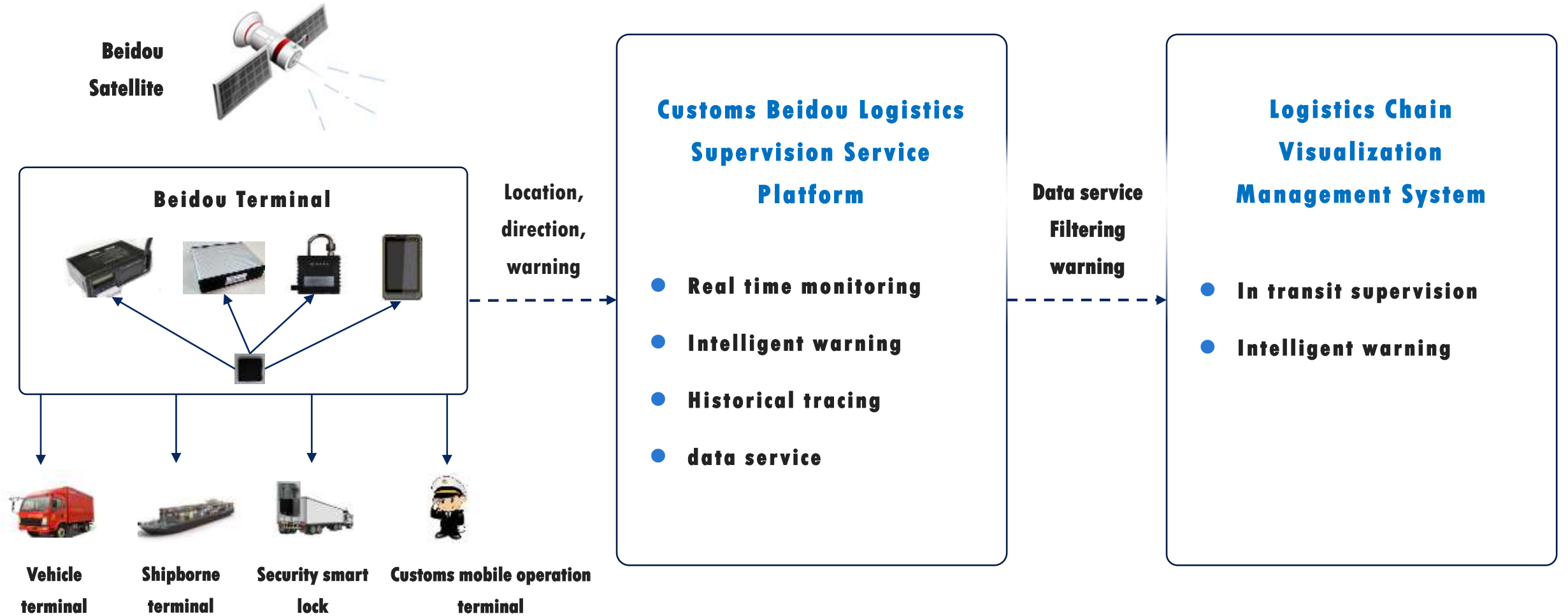**Automatic Matching of Customs Declarations and Goods**

Empty Container Inspection

Security management and real-time monitoring

Security
Smart Lock

Beidou Satellite Positioning
Technology

Supervision Site A
Portable machine for sealing

Customs monitoring platform

Supervision Site B
Fixed reader for checking customs seals

2.Realize Customs Logistics Monitoring Visualization

Beidou Satellite

Beidou Terminal

Location, direction, warning

Customs Beidou Logistics Supervision Service Platform

- Real time monitoring
- Intelligent warning
- Historical tracing
- data service

Data service Filtering warning

Logistics Chain Visualization Management System

- In transit supervision
- Intelligent warning

Vehicle terminal

Shipborne terminal

Security smart lock

Customs mobile operation terminal

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Unimpeded Clearance

Automatic Supervision

New Technology Application

+

Smart Information System

+

Smart Equipment

Make joint efforts
to promote "Smart Customs" cooperation partnership

THANK YOU FOR YOUR ATTENTION