



# Time Release Study

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*Korea Customs Service*

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4. Conclusion

**I**

# **Introduction**

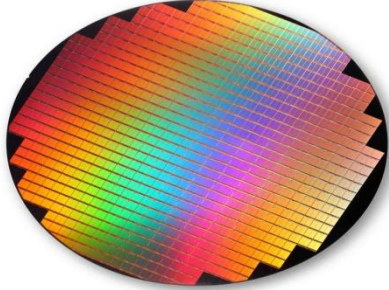
# Trade

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- ✓ Huge increase in cross border trading as a result of globalization, customs role in trade facilitation (TF) becomes more prominent
- ✓ Expediting the movement, clearance & release of goods have been a major desire for many Customs in the 21<sup>st</sup> Century

# Trade

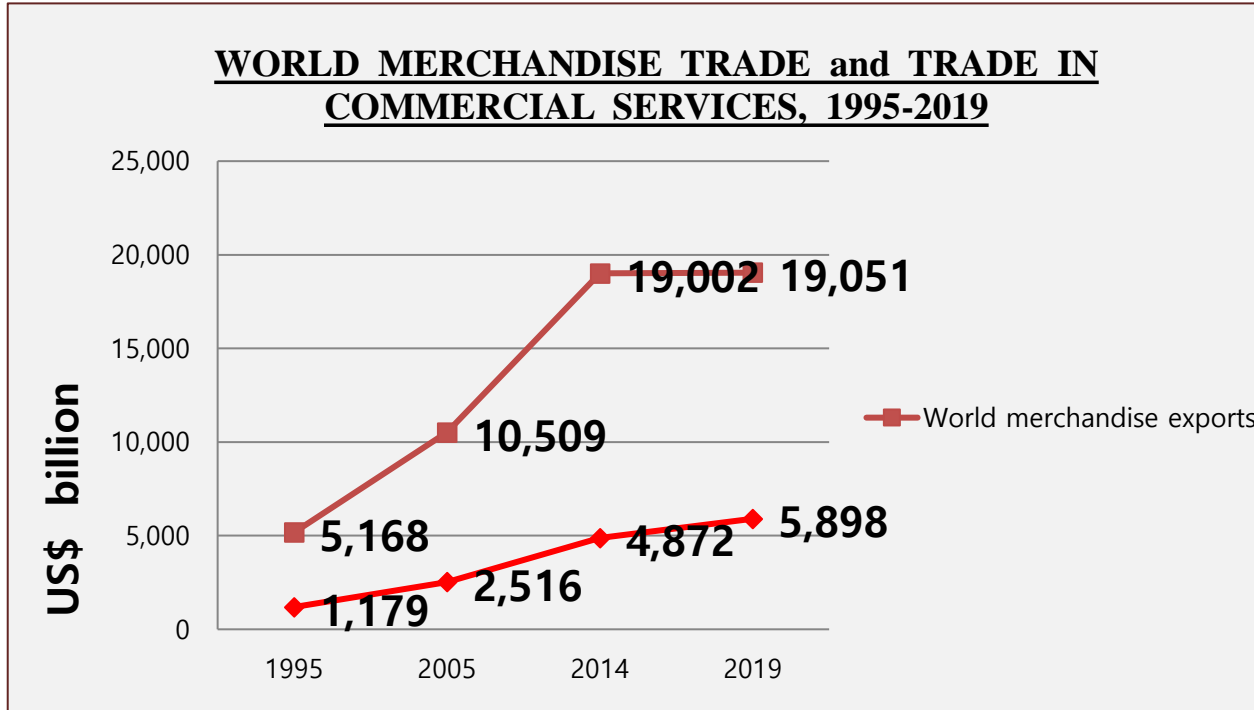
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**GLOBAL SUPPLY CHAIN**



# Trade



Source : World Trade Organization International Statistics 2015 & 2020



**Traders** have been **exploring avenues** to move their goods **expeditiously** across borders at a **reduced cost**

# Trade Facilitation

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# **Trade Facilitation**

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- **Expediting the movement, release and clearance of goods, including goods in transit (Doha Declaration)**
- **Lowering trade transaction cost and Creating standard efficiencies**



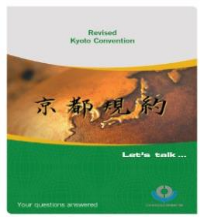
# **Customs and WCO Role for TF**

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- **Improving Economic Situation depends highly on an Effective Trading System**
- **Internationally agreed Protocols**
- **Guidelines**
- **Customs Practices**

# Customs and WCO Role for Trade Facilitation

## Examples of WCO tools



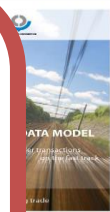
**RKC**



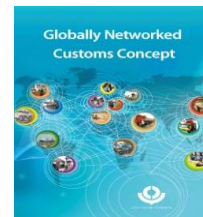
**SAFE Fo**



**Time Release  
Study Guide**



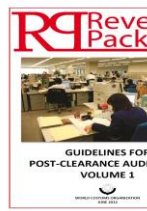
**Model**



**GNC**



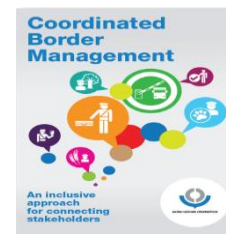
**RM  
Compendium**



**PCA  
Guidelines**



**Handbook**



**CBM**

**Partnership**

# WTO Trade Facilitation Agreement



N I N T H   M I N I S T E R I A L   C O N F E R E N C E

3 - 6   D E C E M B E R   2 0 1 3

B A L I - I N D O N E S I A



## Bali, Indonesia, 2013 & Effected 2017

# WTO TFA Article 7.6.

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## Article 7. Release and Clearance of goods

### 6. Establishment and Publication of Average Release times

6.1 Members are encouraged to measure and publish their average release time of goods periodically and in a consistent manner, using tools such as, *inter alia*, *the WCO Time Release Study*.

# WTO TFA Article 7.6.

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## Article 7. Release and Clearance of goods

### 6. Establishment and Publication of Average Release times

6.2 Members are encouraged to share with the Committee **their experiences in measuring average release times**, including methodologies used, bottlenecks identified, and any resulting effects on efficiency.

# WCO support WTO TFA



# WCO TOOL for WTO TFA

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WCO has developed a number of instruments and tools, which respond to Members' needs as regards *WTO TFA implementation*.

WCO is continuing to develop and fine-tune an inter-active guidance tool designed to help Customs implement the WTO TFA.



**II**

## **What is TRS?**



# **TRS: Overview**

# Time Release Study



**Shipping  
company  
and agent,  
Port Authority**

**Importer,  
Customs broker  
Container Yard  
OGAs**

**Customs,  
Bank,  
Customs  
broker**

**Port Authority  
Container Yard  
Warehouse,  
Forwarder**

**TIME**

**Arrival**

**Unloading &  
warehousing**

**Preparation &  
Declaration**

**Customs  
Release**

**Delivery**

# Time Release Study

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Strategic, internationally accepted tool to measure the actual time required for the release and/or clearance of goods, from the time of arrival until the physical release of cargo, with a view to finding bottlenecks in the trade flow process and taking the corresponding necessary measures to improve the effectiveness and efficiency of border procedures.

# Key objectives of TRS

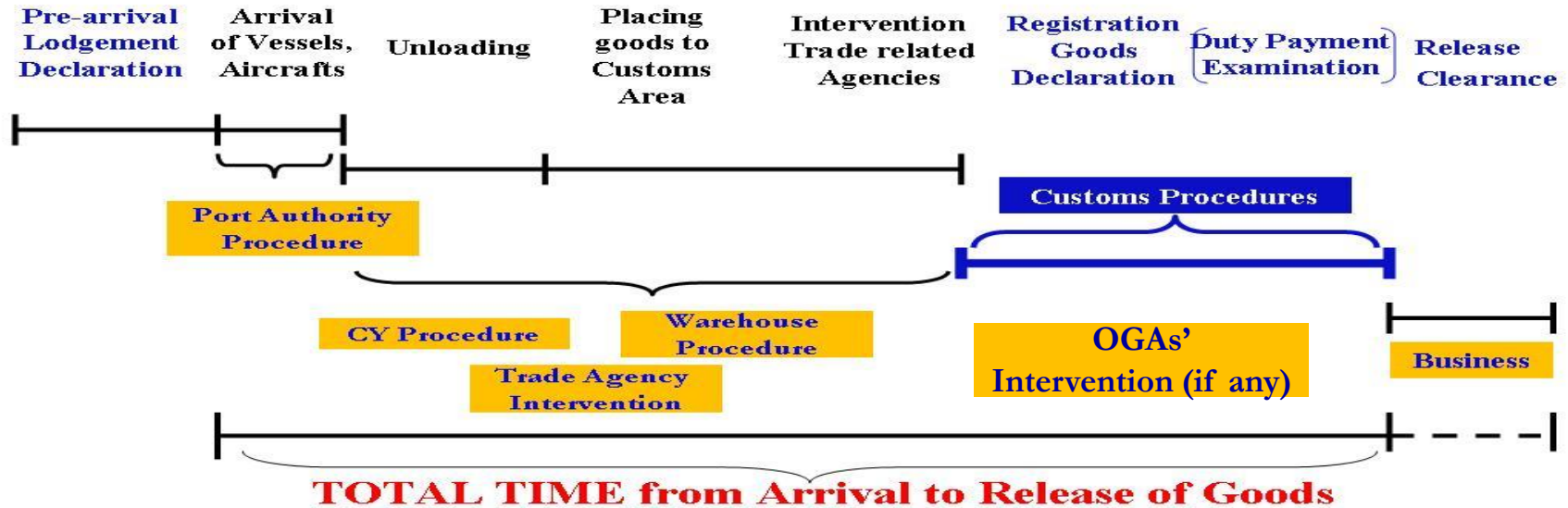
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- ✓ Measuring the overall performance of Customs and other stakeholder's business processes
- ✓ Identifying bottlenecks in the international supply chain and/or constraints affecting the release of goods, including with regard to the flow of information, documents and finance
- ✓ Assessing newly introduced and modified policies, procedures, techniques, technologies and infrastructure, or administrative changes
- ✓ Establishing a baseline for trade facilitation performance measurement
- ✓ Identifying opportunities for trade facilitation improvements

# Scope of TRS

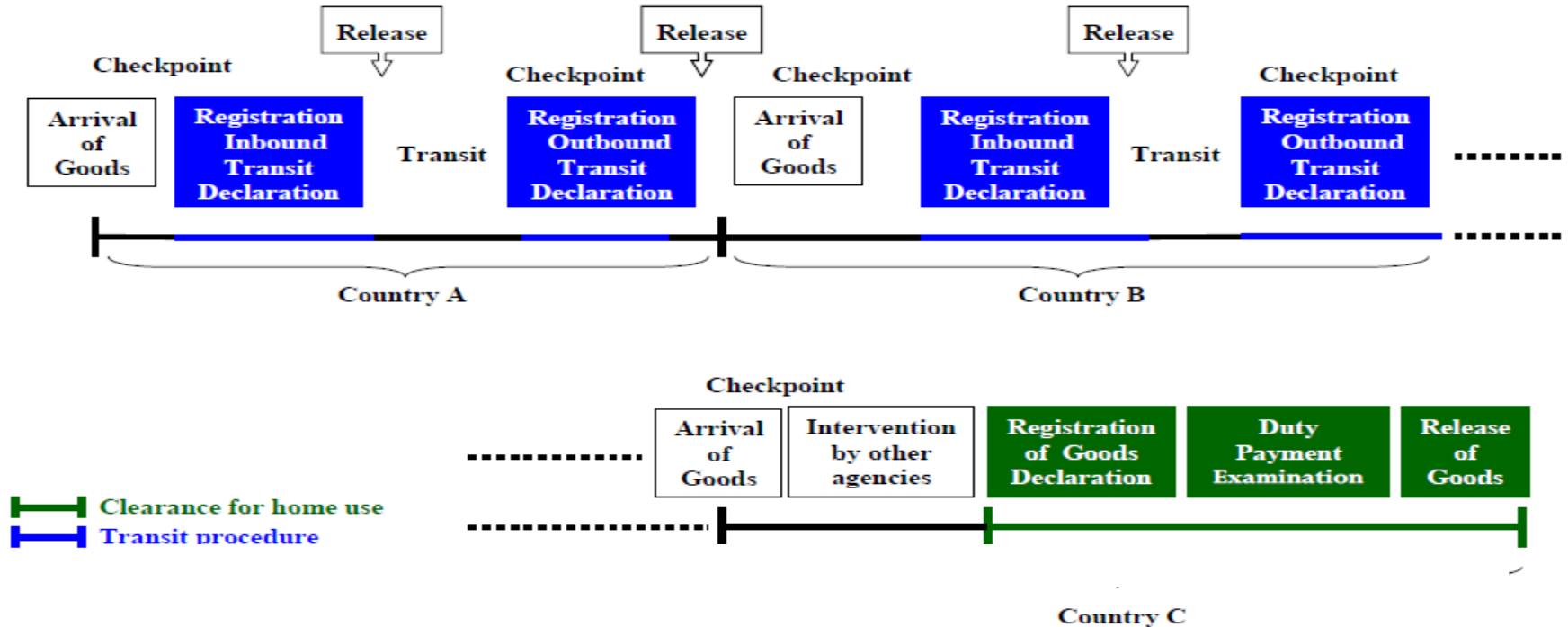
## Cargo Flow from Arrival to Release of Goods

### Sea cargo & Air cargo



# Scope of TRS

## TRS with neighboring countries



# Time Release Study

## WCO TRS Guide

1991 The first TRS conduction  
between Japan and US

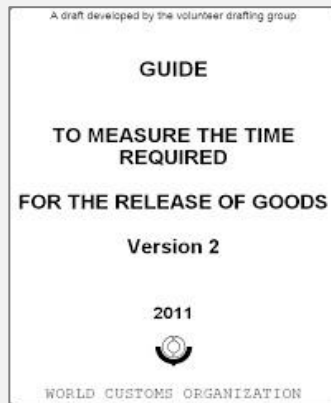
1994 WCO TRS Handbook

2001 WCO TRS Guide

2005 WCO TRS Software

2011 WCO TRS Guide Version II

**2018 WCO TRS Guide Version III**



Updated TRS Guide Version III

# Time Release Study

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## WCO TRS Guide

Updated TRS Guide Version III includes;

- Detailed information on the use of TRS in the implementation, monitoring and evaluation of the TFA
- An explanation of the possibility of conducting, as a first step, a simplified TRS
- illustrations of different approaches to conducting TRS
- Detailed information on the use of modern technologies in data collection, collation, and analysis for improving the TRS process (e.g. electronic processing systems, Single Window, smart phones, RFID seals and GPS-enabled track and trace)



# TRRS Process in General

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Preparation of the Study

Phase - I

Phase- II

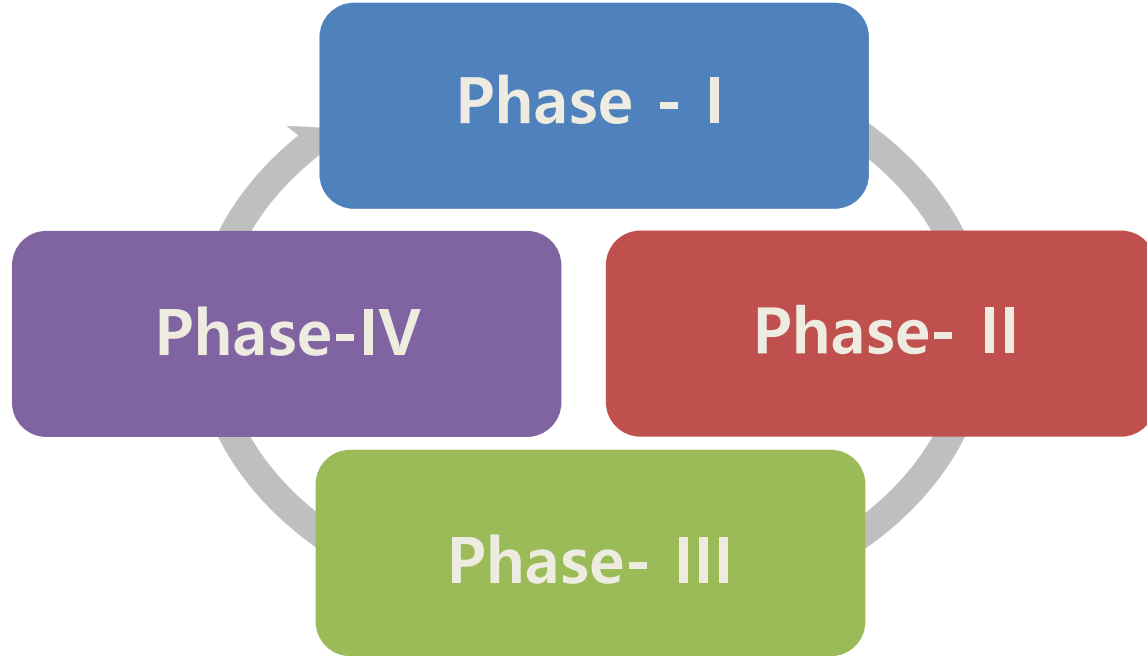
Collection and  
recording of  
Data

Phase- III

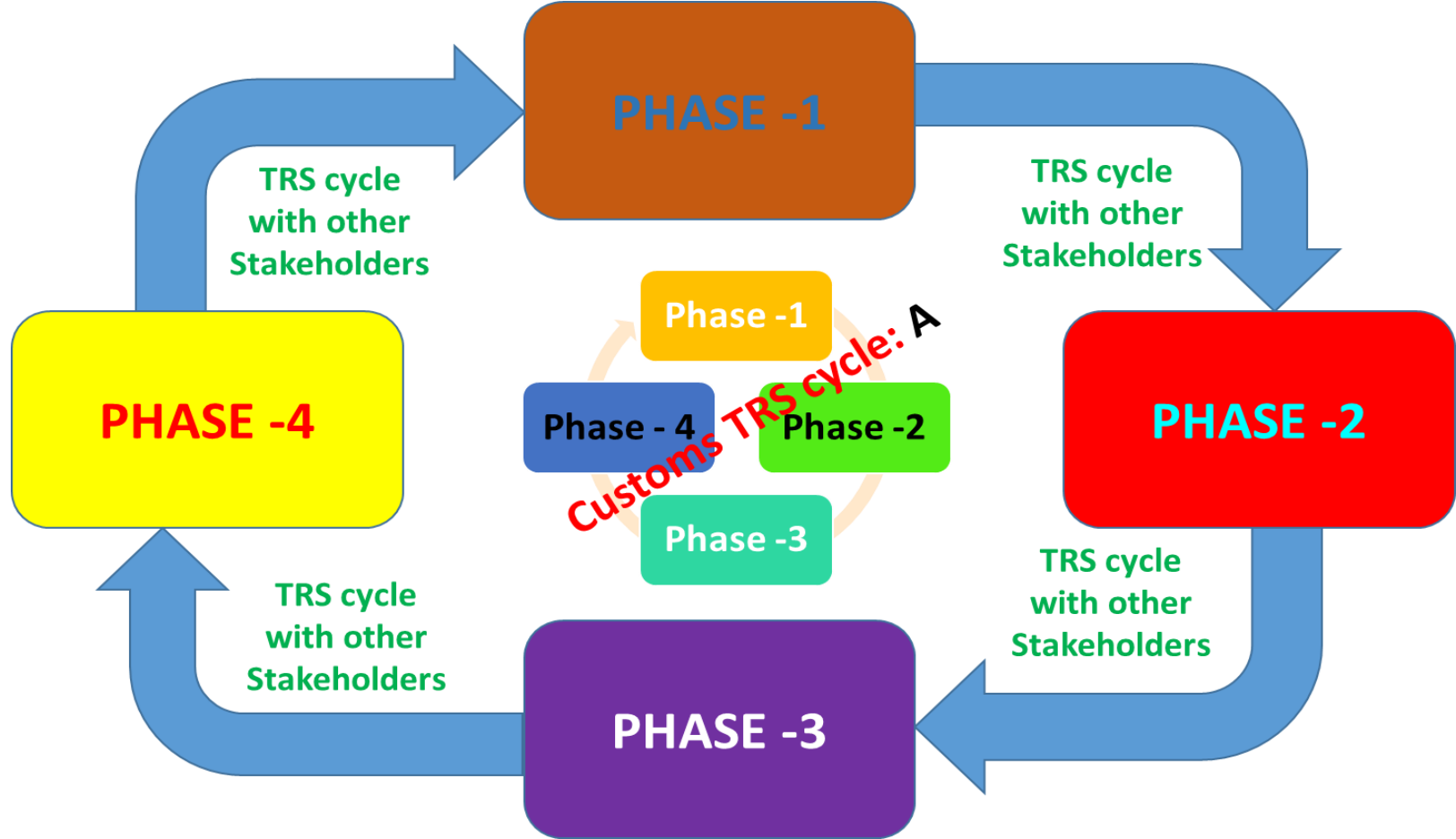
Analysis of Data and  
Conclusions

Phase-IV

Monitoring and  
Evalutation



# A Customs TRS cycle versus an entire TRS cycle



# **TRS in context of the Global Pandemic**

# **WHO announcement affects Customs**

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- ✓ **Closing of borders in different countries;**
- ✓ **Travel restriction and ban;**
- ✓ **Reduction of Customs workforce;**
- ✓ **Shift from more goods to less imported/exported goods;**
- ✓ **Significant reduction of Customs duties;**

# **WHO announcement effects Customs**

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- ✓ **Reopening borders;**
- ✓ **Limitation in terms of workforce;**
- ✓ **Leverage on technology to advance Customs work;**
- ✓ **Introduction of biosafety measures in Customs for employees and clients;**
- ✓ **Adjusting to the decline in revenue, and in some cases to the introduction of special exemption on certain goods;**
- ✓ **Further shift from a physical method to a more non-physical inspections.**

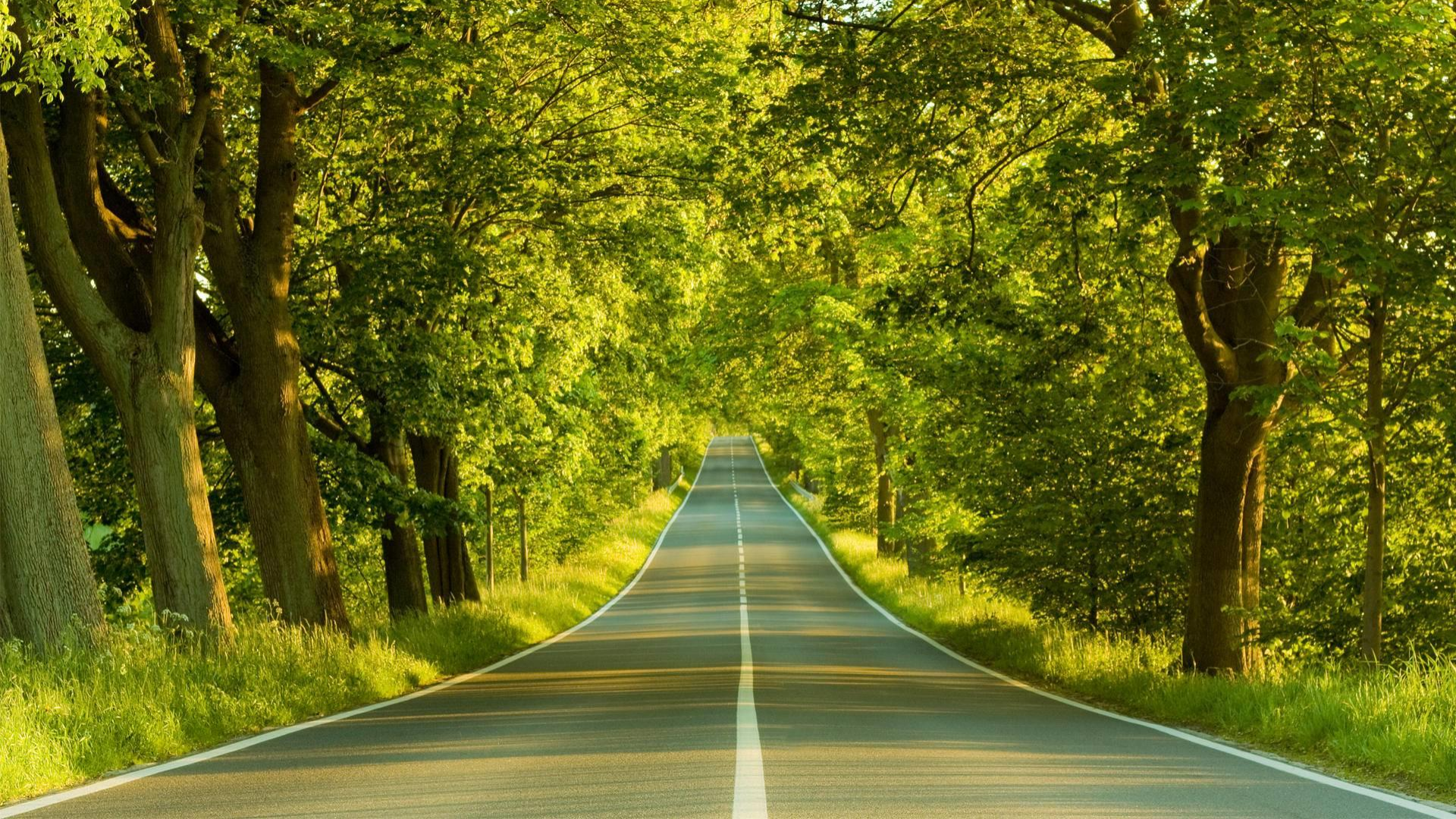
**What is the opportunity?**

**STAND STILL**

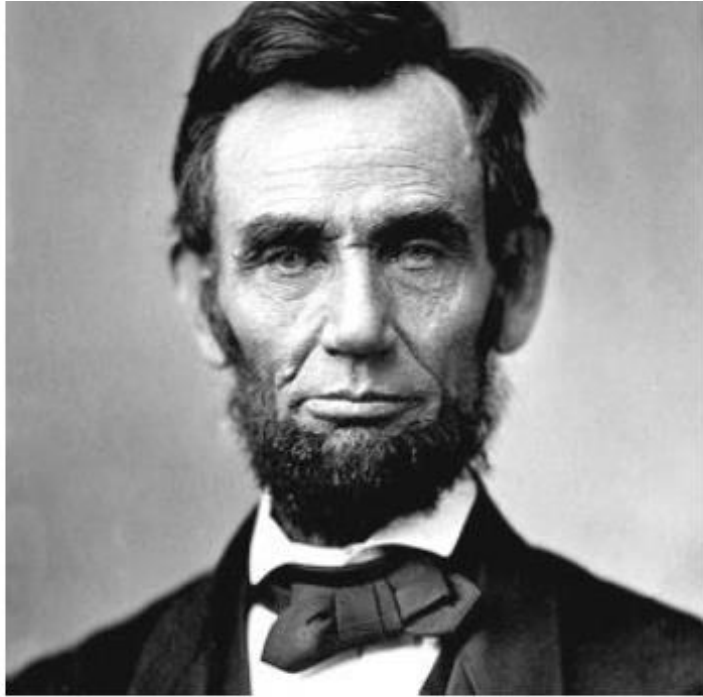


**CHANGE**









**“The best way to  
predict the future  
is to create it.”**

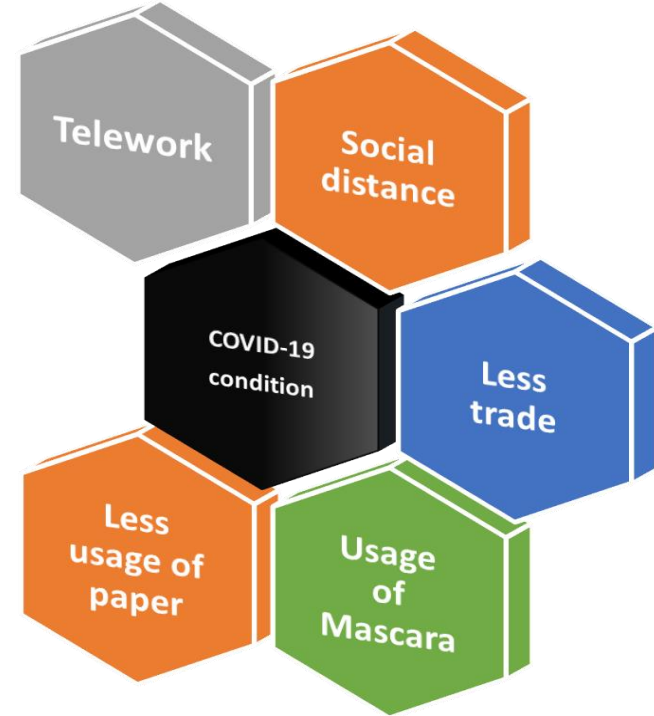
***-Abraham Lincoln-***

# **New opportunities for Customs**

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- ✓ To adjust to the new reality;**
- ✓ To set new goals and targets for Customs Administrations;**
- ✓ To review things in critical manner;**
- ✓ To introduce corrective measures.**

# New opportunities for Customs



# **New challenges for Customs**

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- ✓ To follow thoroughly the TRS methodology in more holistic manner, through involving all trade stakeholders;
- ✓ To have physical meetings;
- ✓ To use paper form or survey questionnaire;
- ✓ To conduct a full environmental scanning

# **WCO recommendations to address the challenges**

- ✓ Conduct a simplified TRS by only focusing on Customs process;
- ✓ Conduct all meetings virtually;
- ✓ Refrain from using questionnaires by officers or Customs employees;
- ✓ Avoid to fill survey questionnaires forms completely.

# **WCO recommendations to address the challenges**

- ✓ If it is impossible to carry out an environmental scanning because of pandemic;
  - Data should be collected only electronically and
  - Complete the cycle in at least 6 months

**III**

## **TRS Best Practice of KCS**

# Background of Initial TRS of KCS

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- Rapid growth of Korean economy and trade volume

US\$ 11 billion('1974) -> US\$ 135 billion('1990)

- Extreme delays in cargo processing due to shortage of SOC

SOC (Social Overhead Capital) T/F : Korean Government set up an ad hoc SOC Task Force Team in the presidential office in 1991

- First measurement of cargo processing time by ad hoc SOC T/F

Proportion of Logistics costs up to 16.7% in 1991, Release of goods takes 15~23 days



Recognition of the importance of efficient trade logistics  
by integrated border control & management

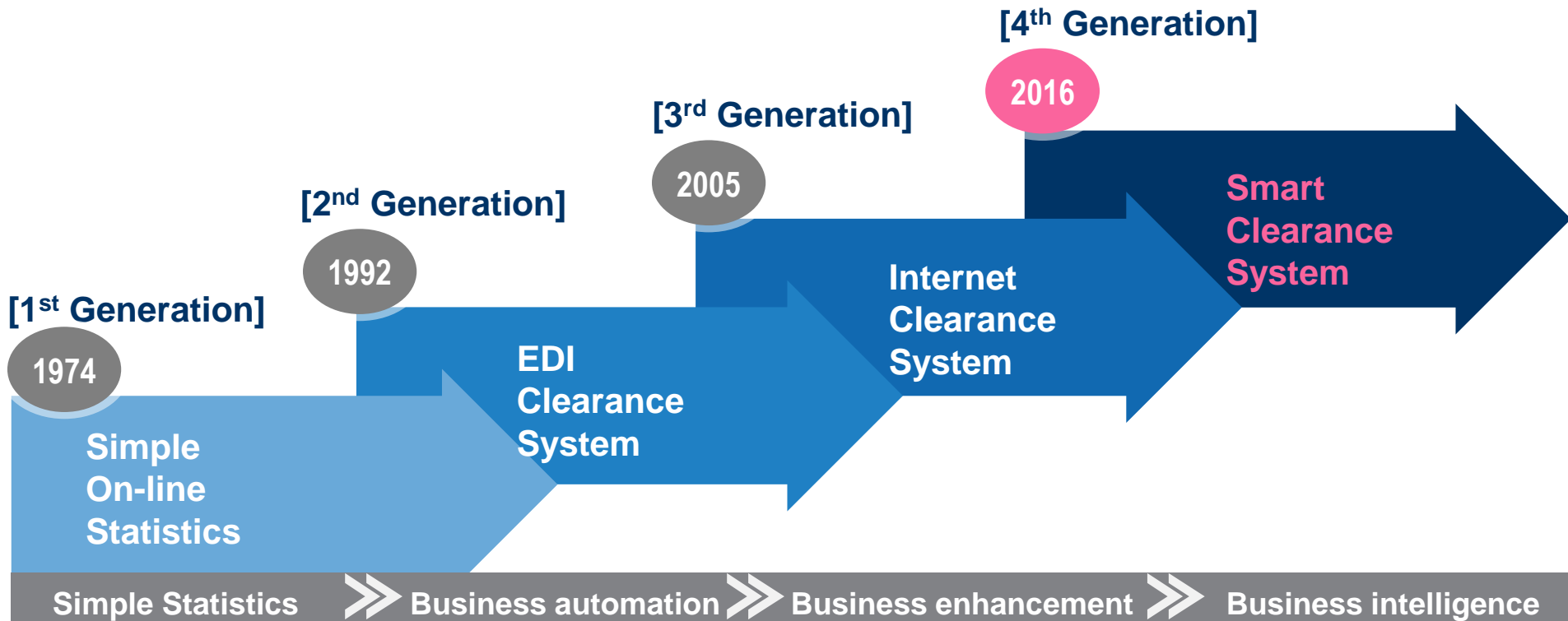


**Perform Informatization**

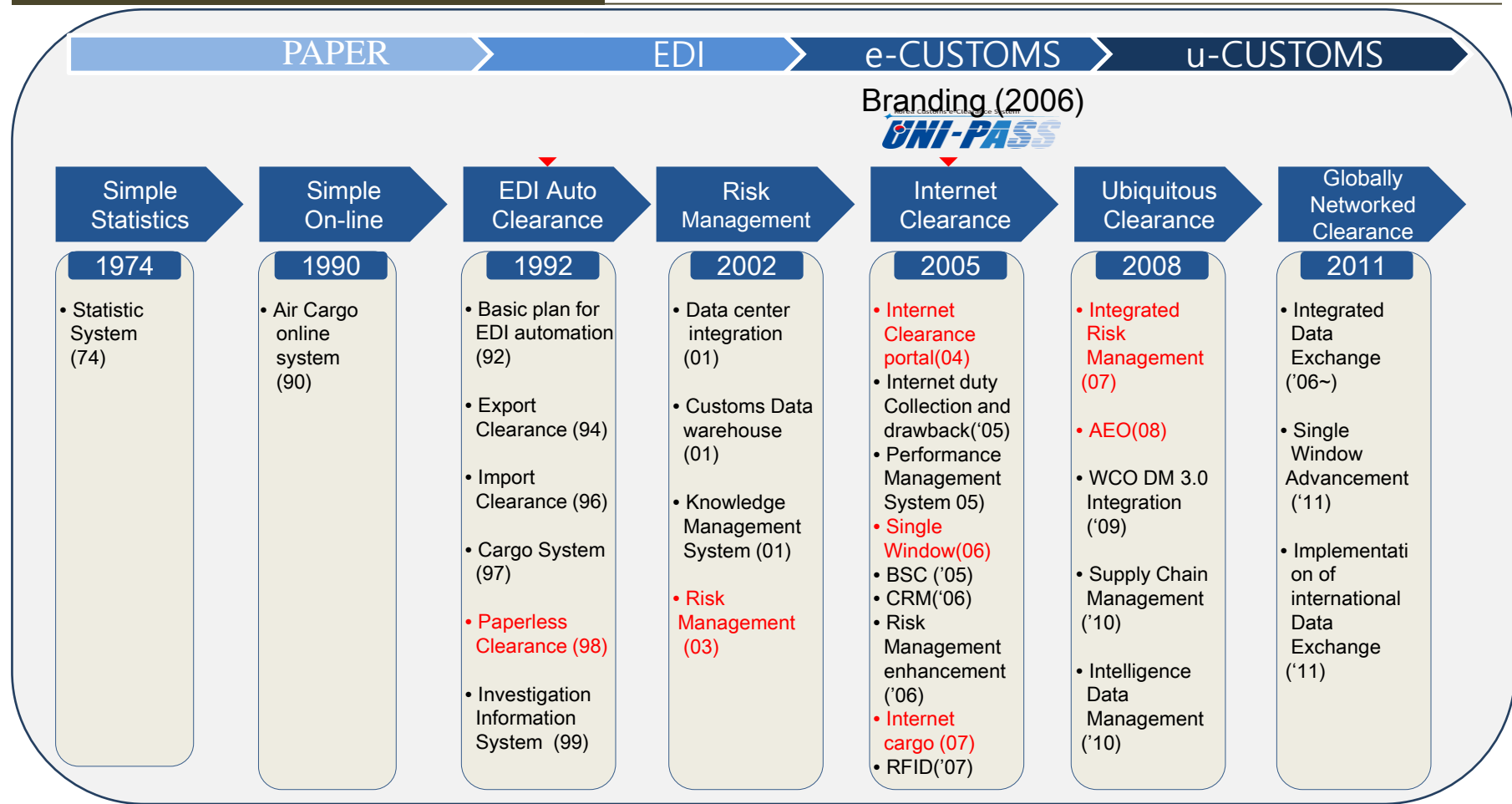


# Paperless Customs Clearance

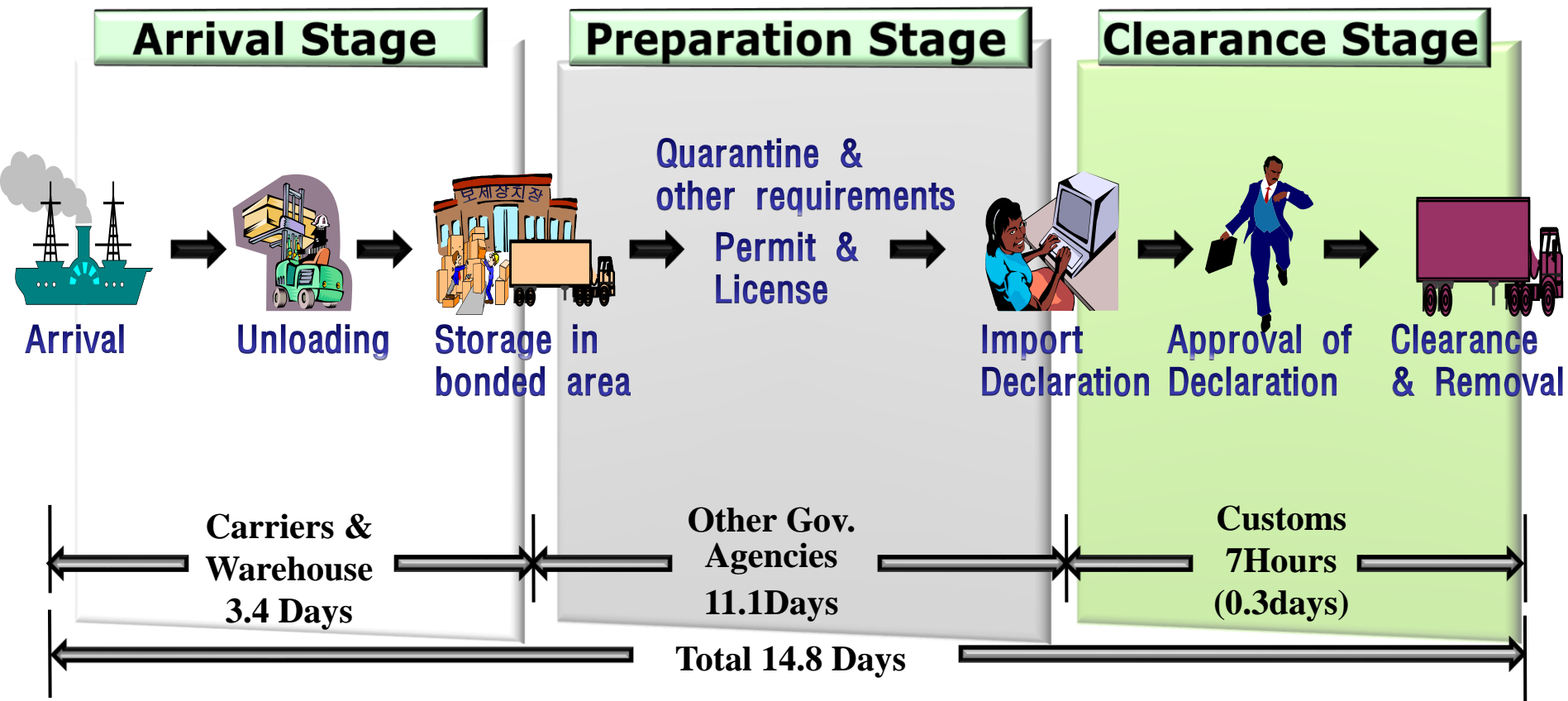
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# Overview of the KCS' Informatization



# First Time Release Survey (1997)



# Key Problems Defined

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Arrival Stage  
(3.4days)

- Declarations allowed only after the storage

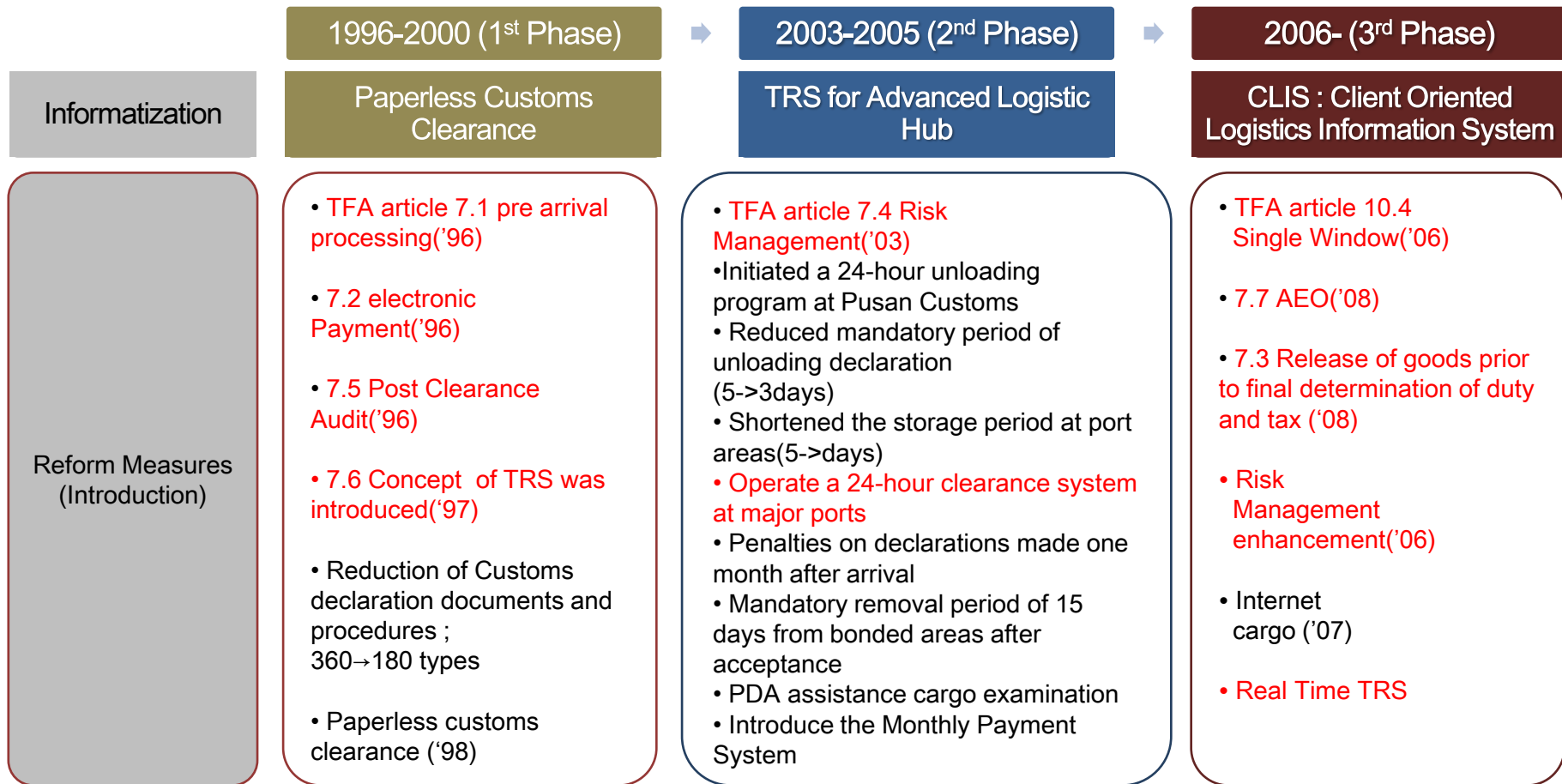
Preparation  
Stage  
(11.1 days)

- OGA's complex requirements

Clearance  
Stage  
(7 hour)

- Paper-based check and control

# Three key phases of TRS in KCS



# **Prior to arrival Clearance system**

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## **Adopting flexible declaration system**

### **⇒ Import declaration prior to arrival**

- (1) declaration prior to arrival at the bonded area**
- (2) declaration prior to arrival at the importing port**
- (3) declaration prior to departure at the exporting port**

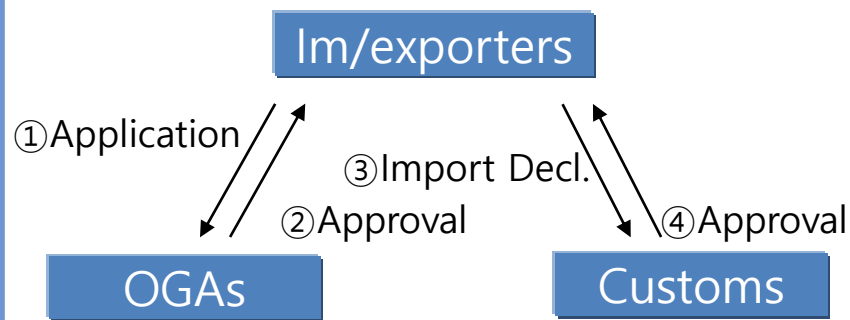
# Single Window

KCS introduced **Single Window in 2006** and participated 38 authorities or agencies related with border procedures such as quarantine, KFDAs and so on.

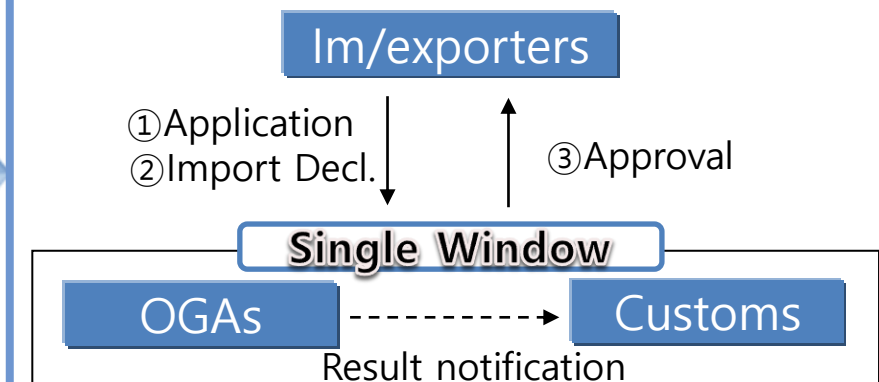
**KCS'  
SW**

One Stop service system processing Customs declaration and OGAs' regulatory requirements

Before



After



# AEO

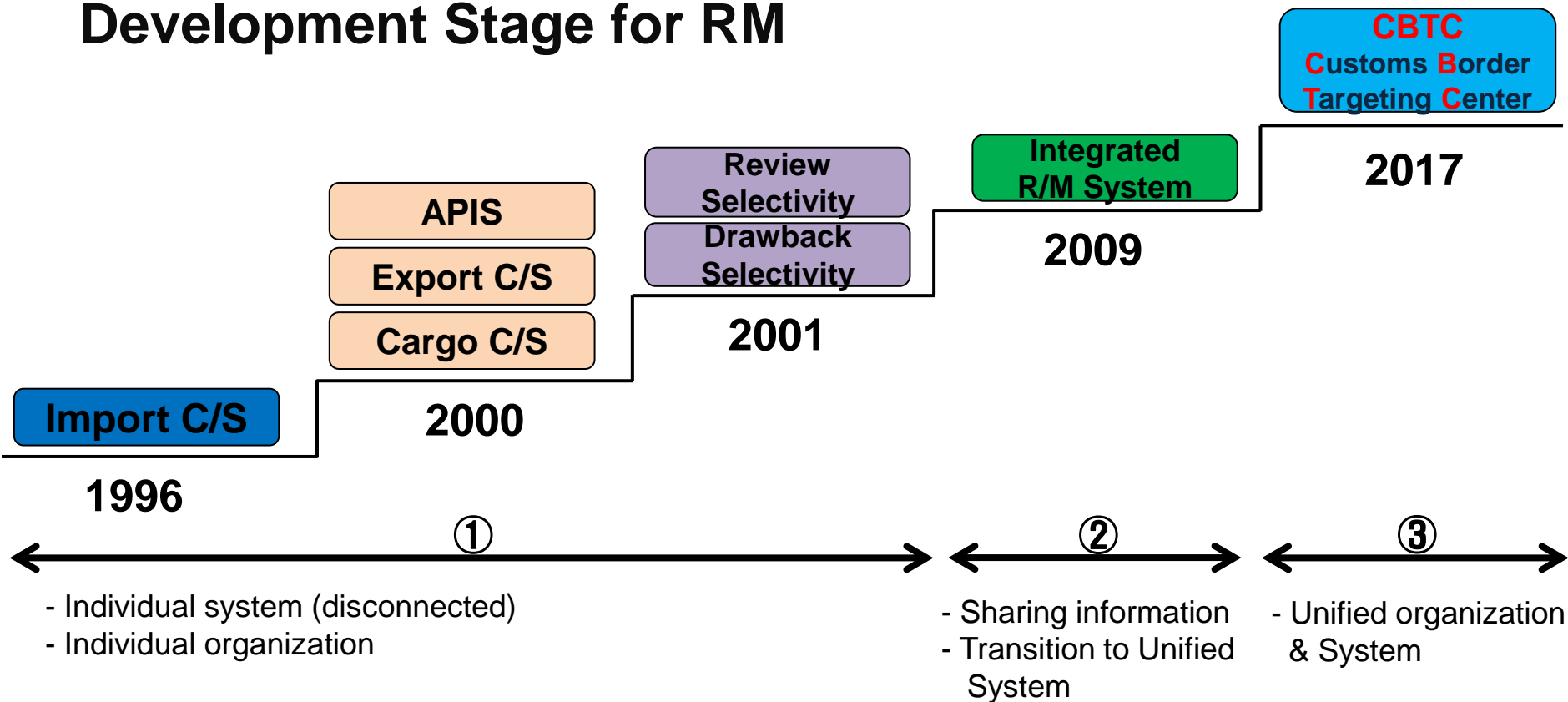
KCS introduced **AEO in 2009** and signed **MRAs(Mutual Recognition Agreement)** with **22 countries** including USA, Japan, China and India.





# Risk Management

## Development Stage for RM



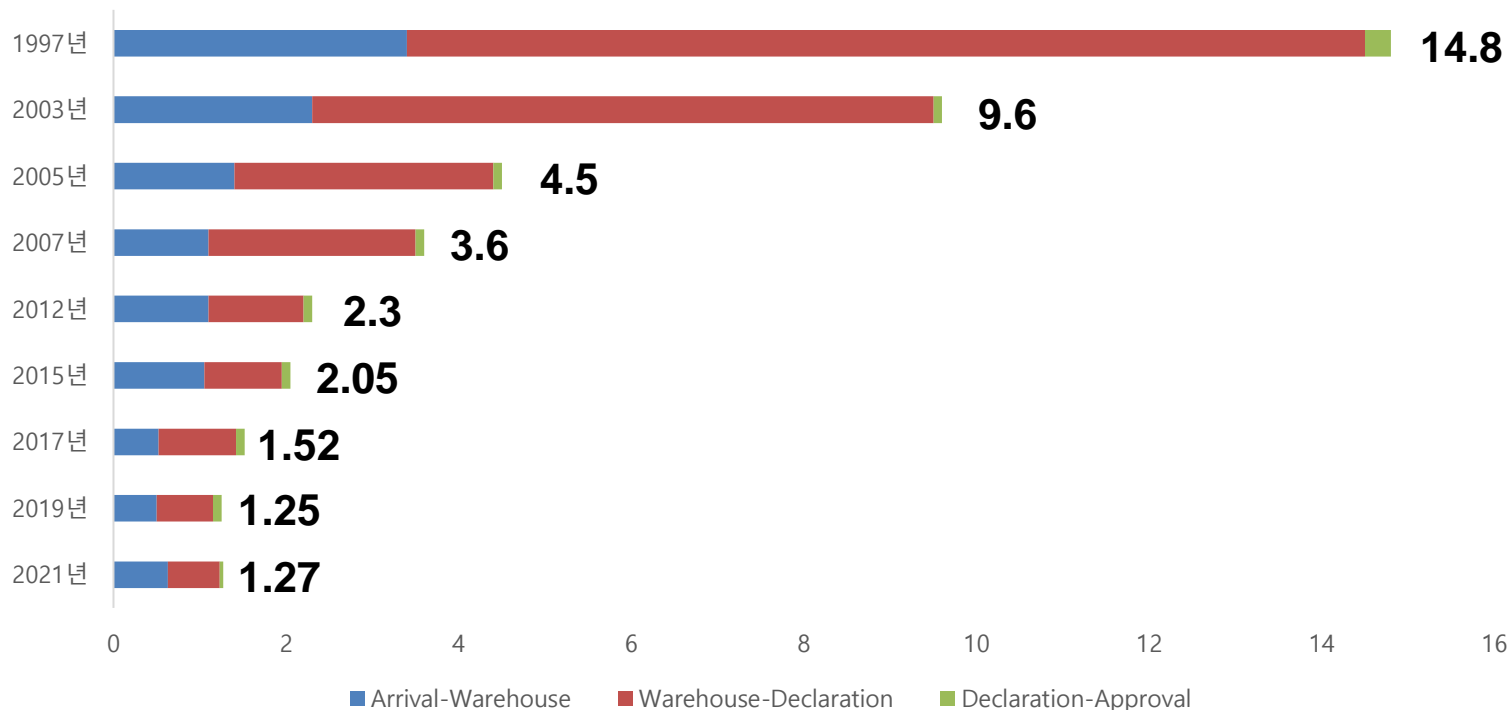
**IV**

# Conclusion

# Outcome

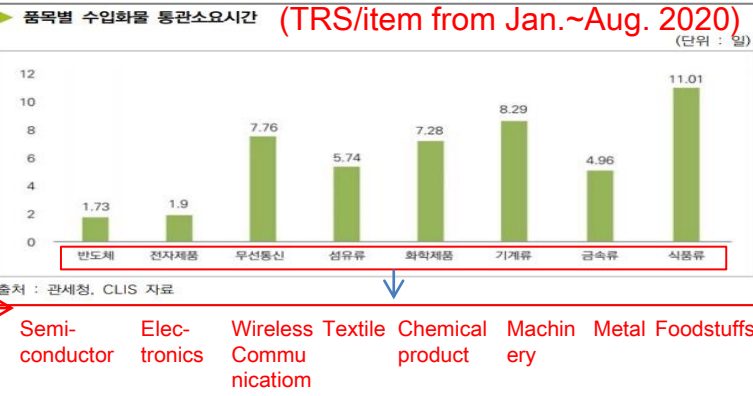
## Resolving the bottlenecks diagnosed by TRS

14.8days('97) → 4.5days('05) → 1.25days('19)



**KCS**

(Quarterly Import-export Report Magazine)



# New Technologies of the KCS



# New Technologies of the KCS

## Blockchain

📍 (B2B Trade)  
Blockchain platform for  
export clearance

📍 (Data Exchange)  
E-C/O

📍 (B2C)  
E-commerce Platform



## AI X-RAY

📍 AI X-RAY System



## Big Data

📍 Big Data Platform

📍 (Big) Passenger Model



# Block Chain based Clearing System of KCS

Benefit: Information can be exchanged without an intermediary, whilst ensuring data integrity and providing a full audit trail → Omission of document submission procedure

## - Introduction of Block Chain

2016 The block chain and 'big data' have become issues discussed at length worldwide

2017 Korea Government formed "Fourth Industrial Revolution Committee"

2018 KCS established an ICT Development Division for the task

2018 Launched the "Fourth Industrial Revolution and Smart Customs" project

## - The steps KCS has taken to adopt blockchain technology

2017: Maritime Export Logistics Consortium ;

(Domestic ICT company, SAMSUNG SDC Co., 41 entities government agencies, including KCS, Ministry of Maritime Affairs and Fisheries, transporters, and consignors )

2018: Project Design \_Three clearance processes selected

- export clearance
- e-commerce import
- Cross-border information exchange(e-C/O)

2019. 7: Trial Operation

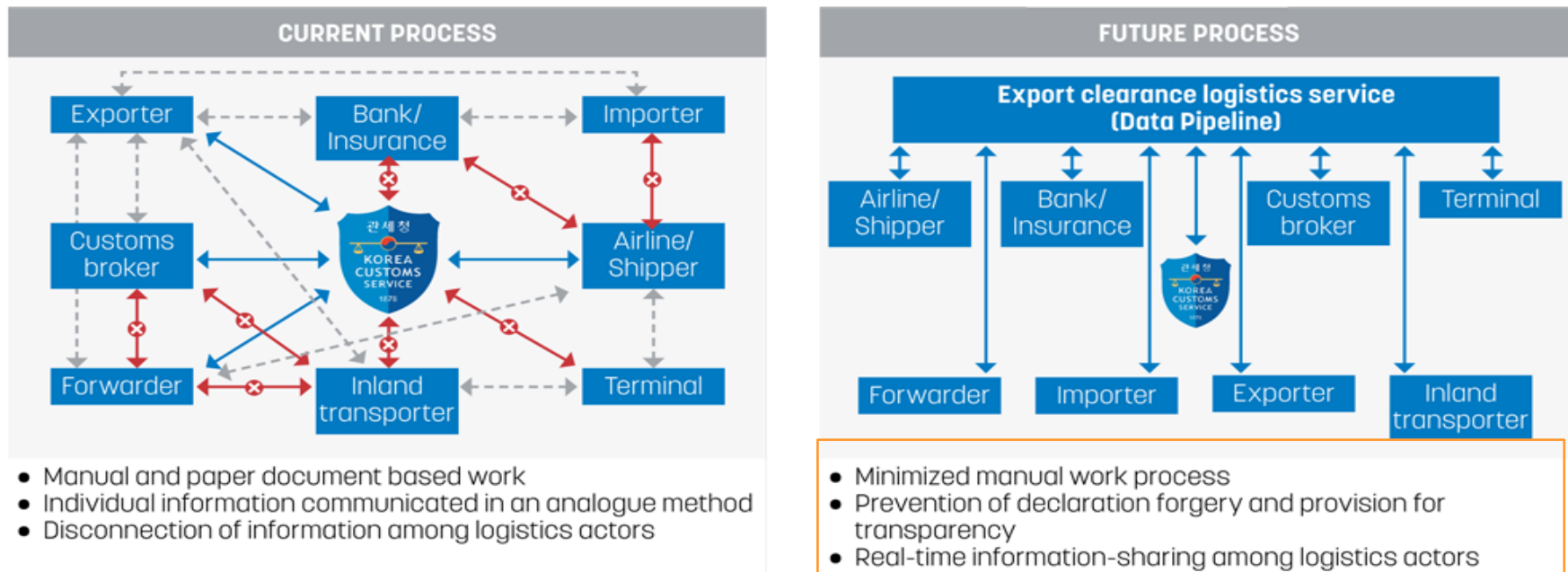
2022. 1: Plan commercial service

# Block Chain based Clearing System of KCS

The objective is to strengthen data accuracy, process reliability, promptness, and efficiency.

## 3.1. Export Clearance

Graph 1: Current and future information management process

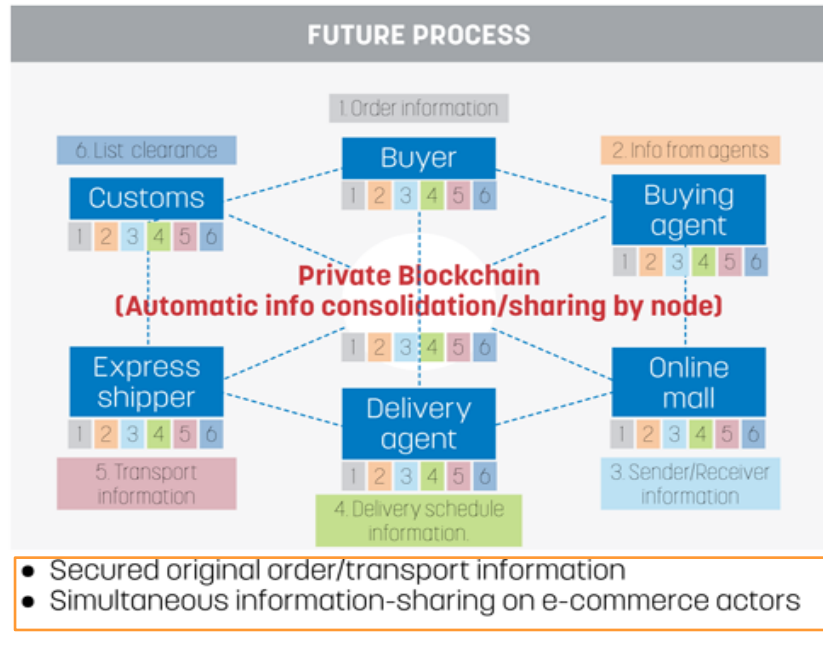
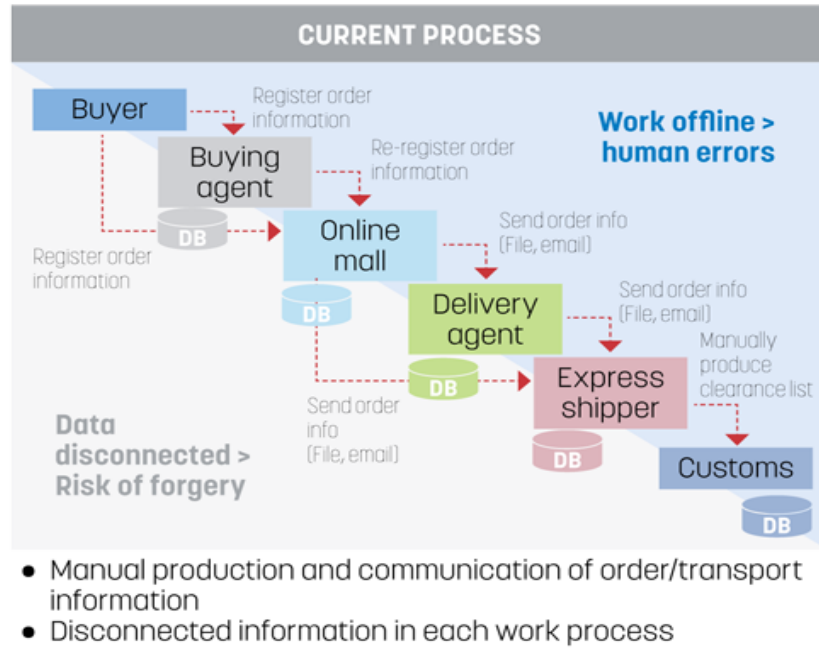




# Block Chain based Clearing System of KCS

## e-commerce import

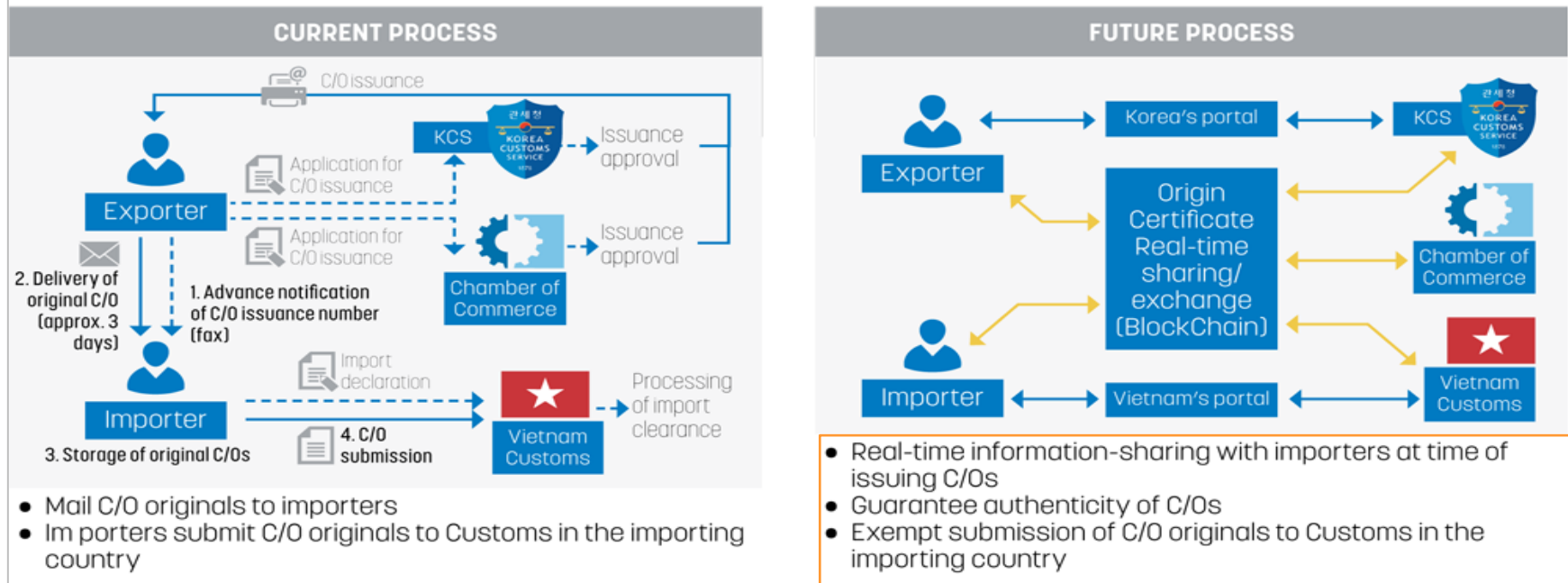
**Graph 2: Blockchain model for e-commerce**



# Block Chain based Clearing System of KCS

cross-border information exchange (e-C/O)

**Graph 3: Blockchain model for the exchange of certificates of origin (C/Os) between Korea and Vietnam**





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