Safer supply chain by *diagonal supervision*

May 2019, WCO IT/TI, Baku

Jan ten Have

Dutch Customs

- Short introduction
- Why this presentation?
- Innovative idea
- Future

Short introduction

- Jan ten Have

- IT manager: > 20 years
- Graduated:
  - computer science (1989)
  - Customs & Supply Chain Compliance (2015)

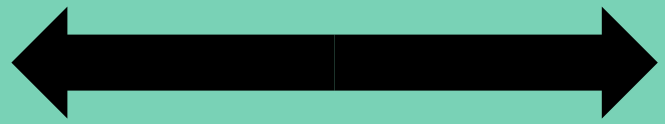
Why this presentation?

- I have won the essay contest on innovation
- held within Dutch customs administration
- for graduates from customs of the Master Customs & Supply Chain compliance.

Essay contest question:

- About innovation, renewal or optimization of a customs process
- “SMART-Borders for seamless Trade, Travel and Transport” (WCO/2019)
- No restrictions with regard to laws and regulations

Innovative idea:

Customs  Trade

- Cooperate more intensely
- Via a blockchain application

Aim

- Exchange information about criminal activities
- Safer supply chain

Examples of criminal activities:

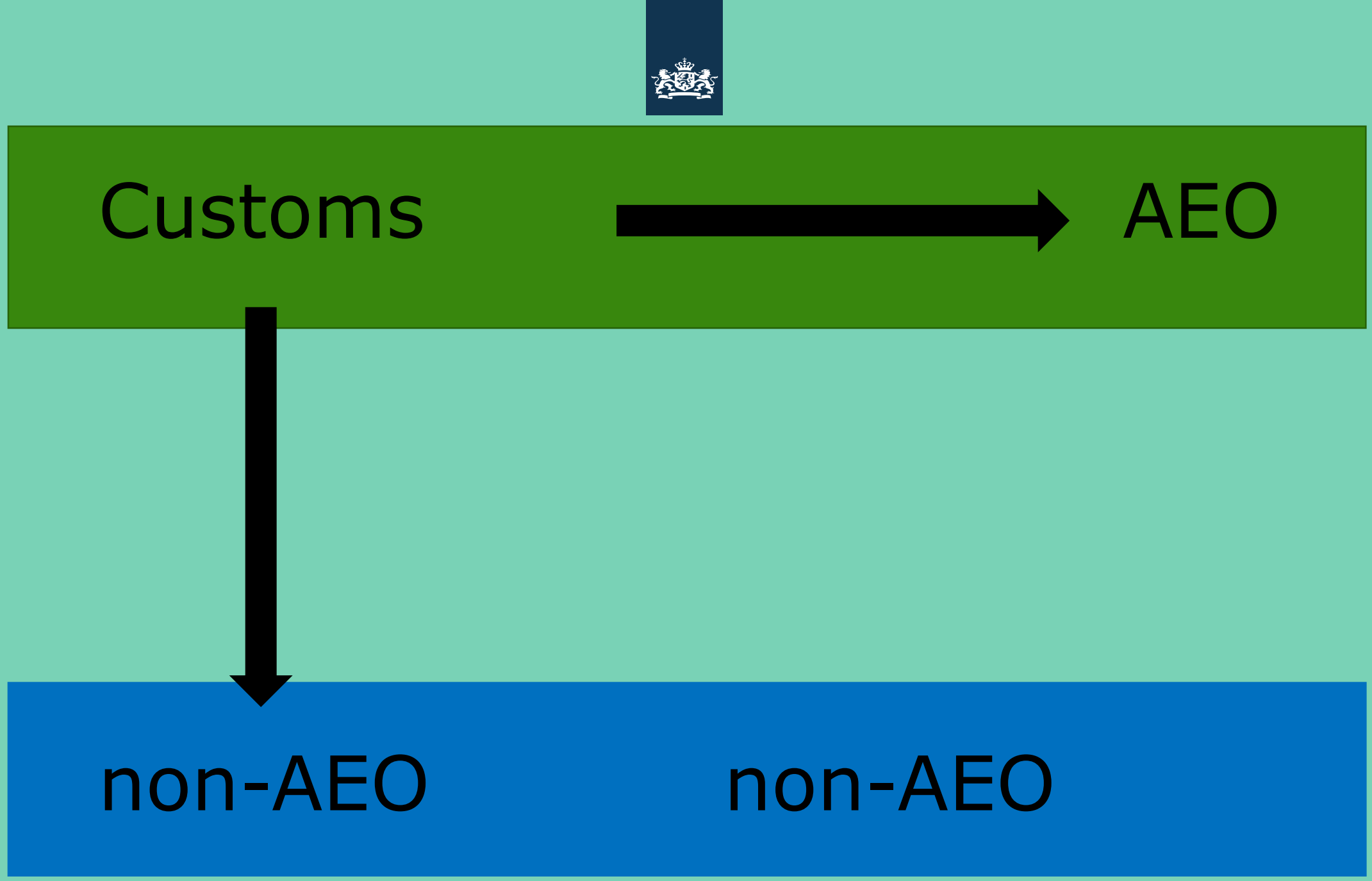
- All kinds of smuggling
- Tampering with the declaration
- Non-compliant behaviour
- Hole in fence
- Suspicious behaviour of a colleague

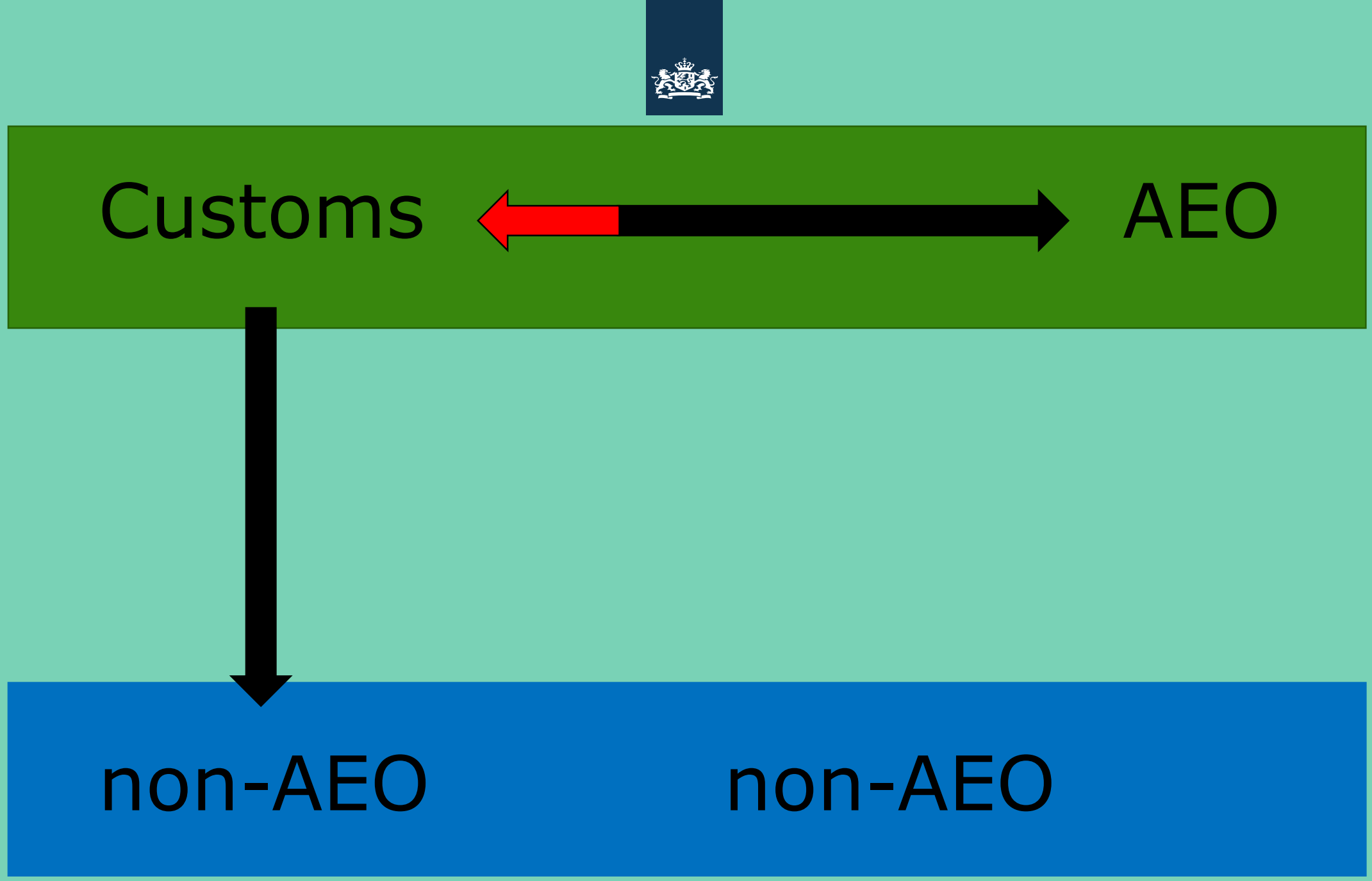
Reported by employees of AEO

Dutch enforcement vision

(Frank Heijmann)

- Risk driven
- Layered approach
- Cooperation with Authorized Economic Operators
- Green lane: trusted parties (AEOs)
- Blue lane: unknown supply chain parties


Customs
AEO
non-AEO
non-AEO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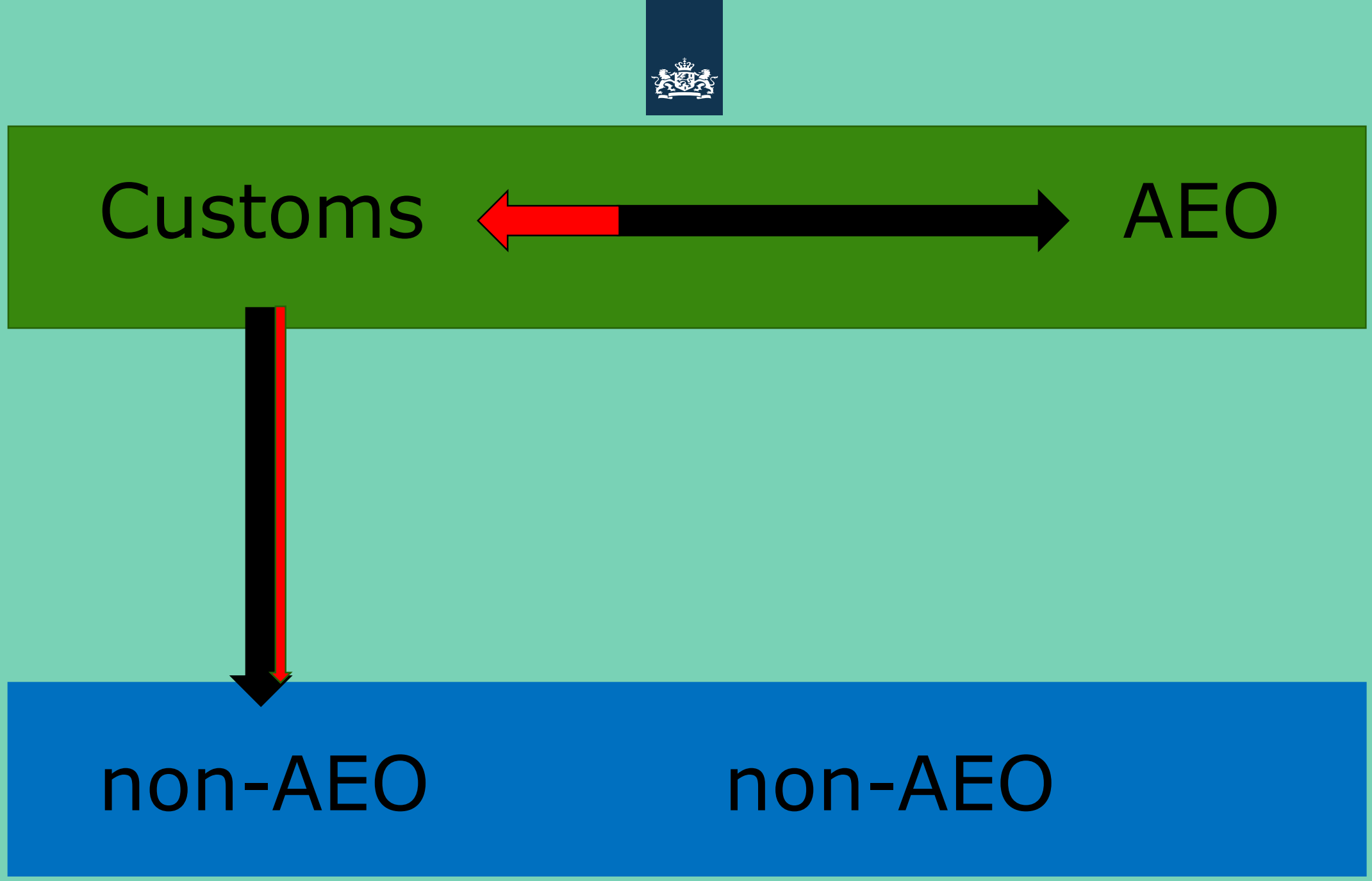
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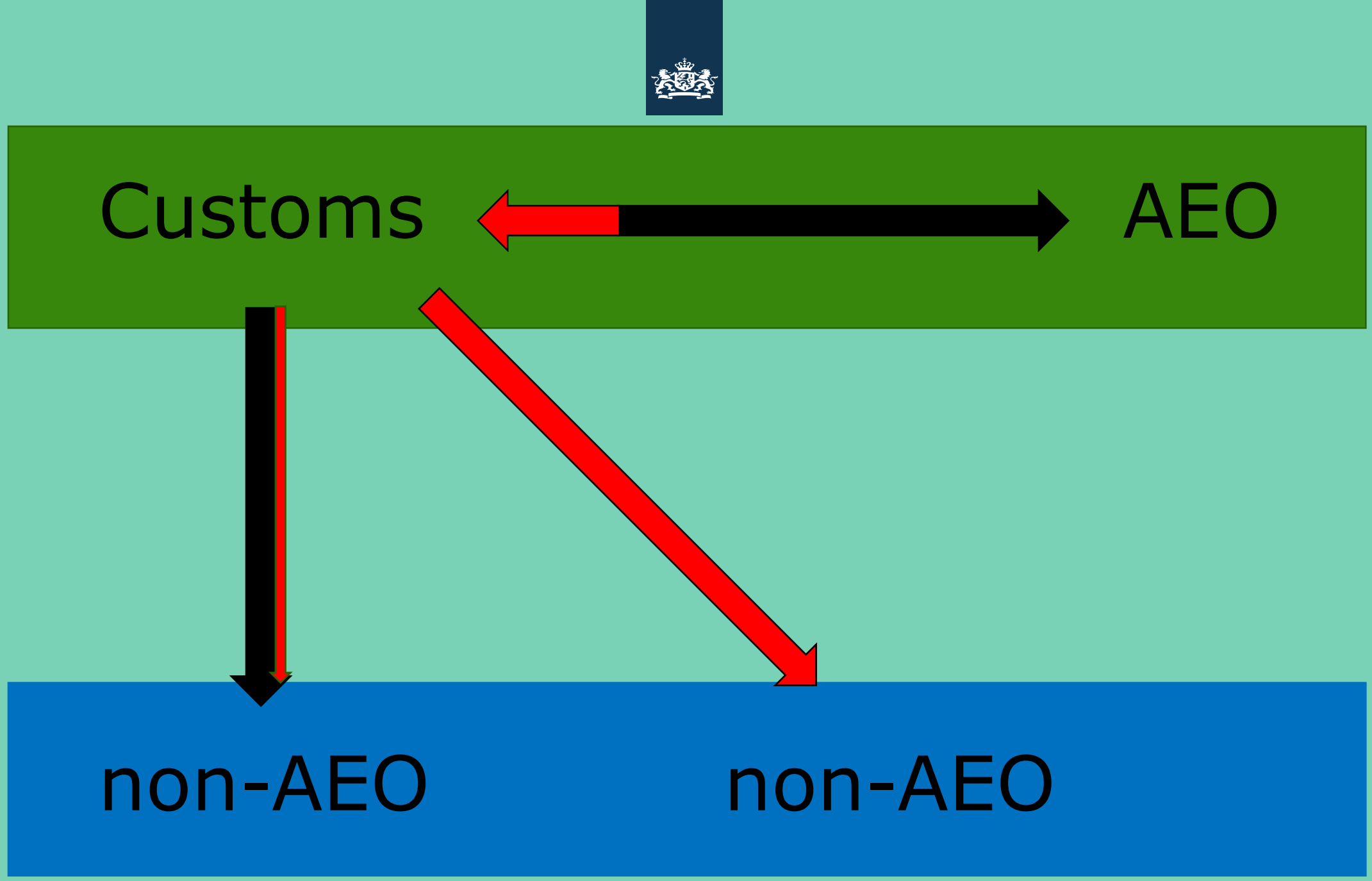
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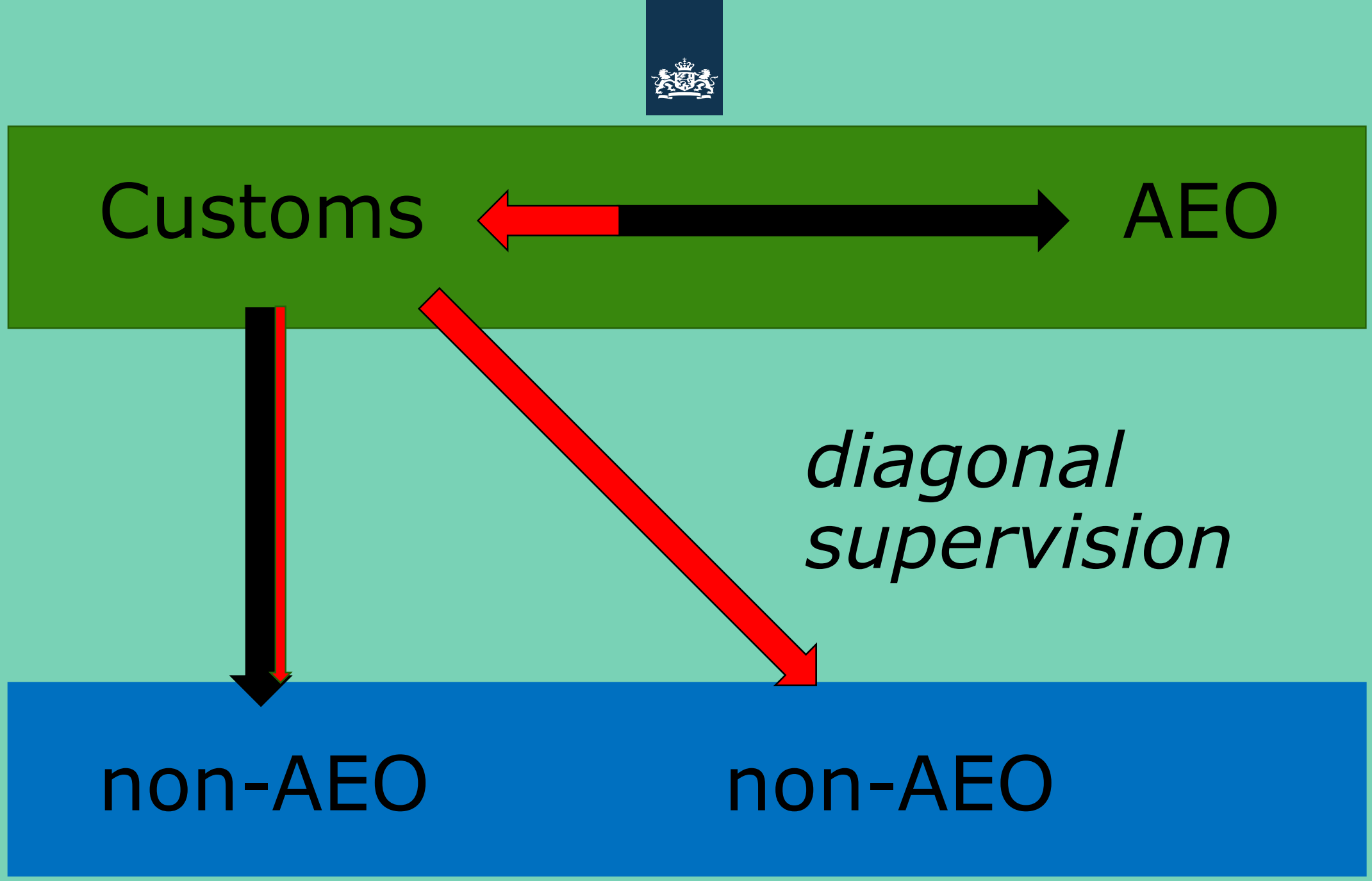

Customs
AEO
diagonal
supervision
non-AEO
non-AEO

Diagonal supervision involves

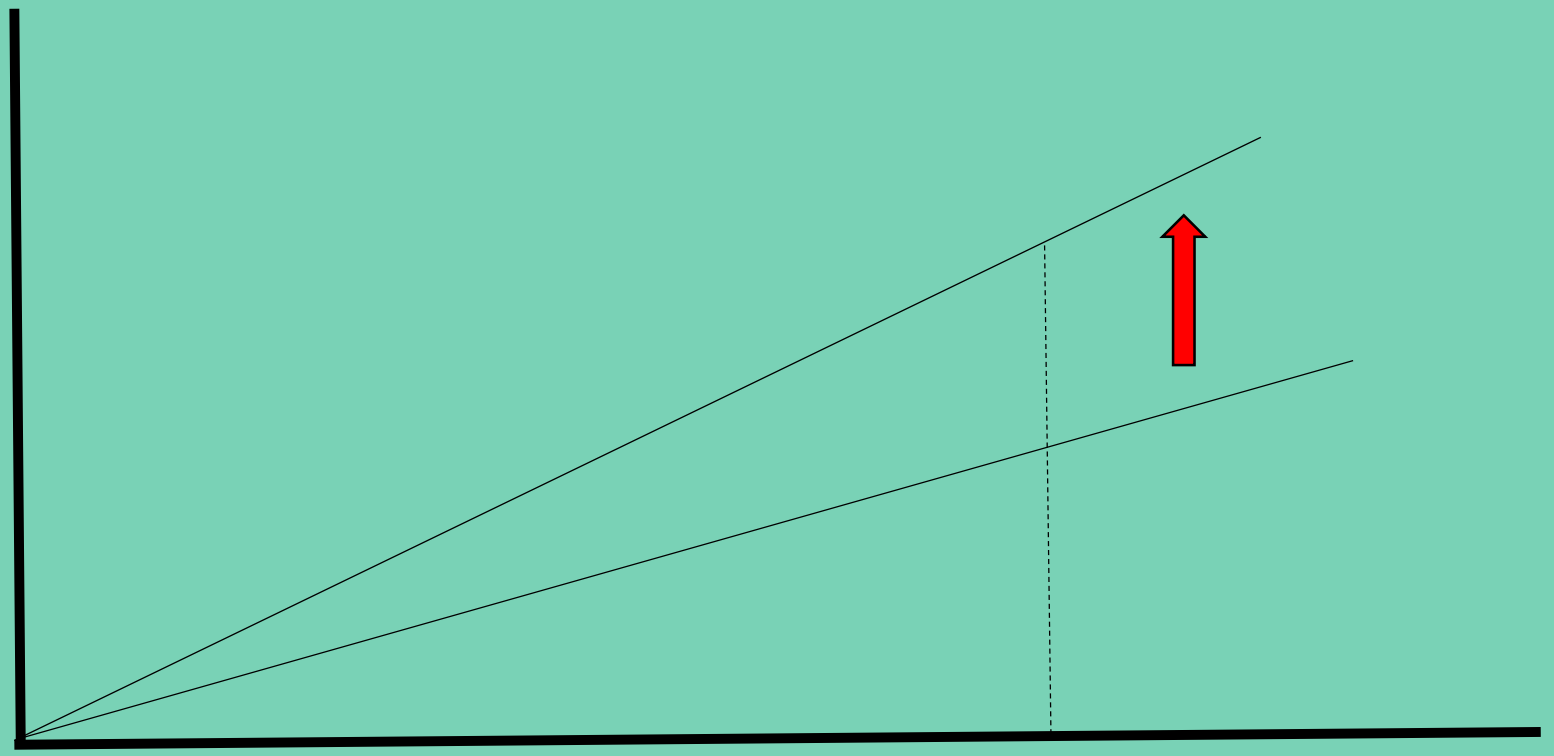
using confidential information obtained from **horizontal supervision**

to strengthen **vertical supervision**.

When will the cooperation be successful?

- Hit rate increases
- Treatment of confidential information guaranteed

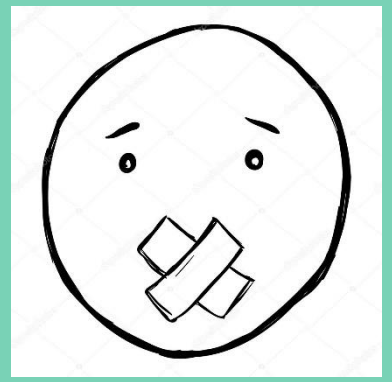
h(x)=hit rate



x=number of inspections

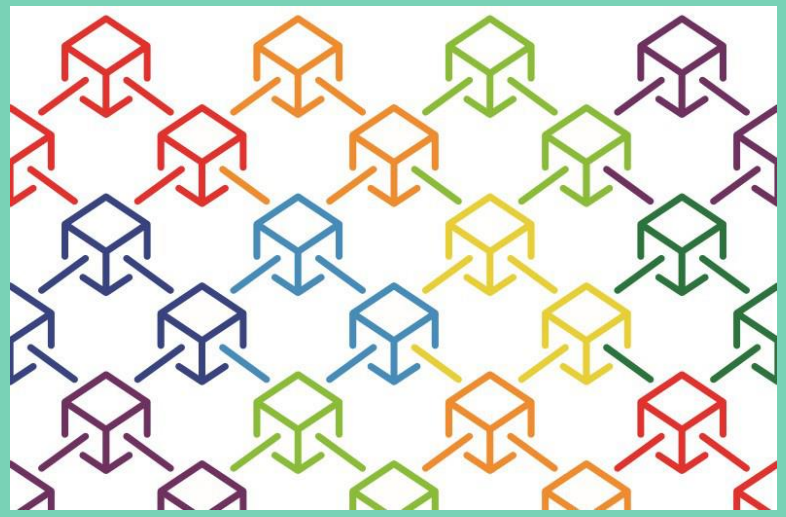
PORT OF ARPASA
CONTSHIP ECO
VALLETTA
K LINE
HANJIN

Confidential information



Report anonymously

Blockchain application



Characteristics of communication via blockchain

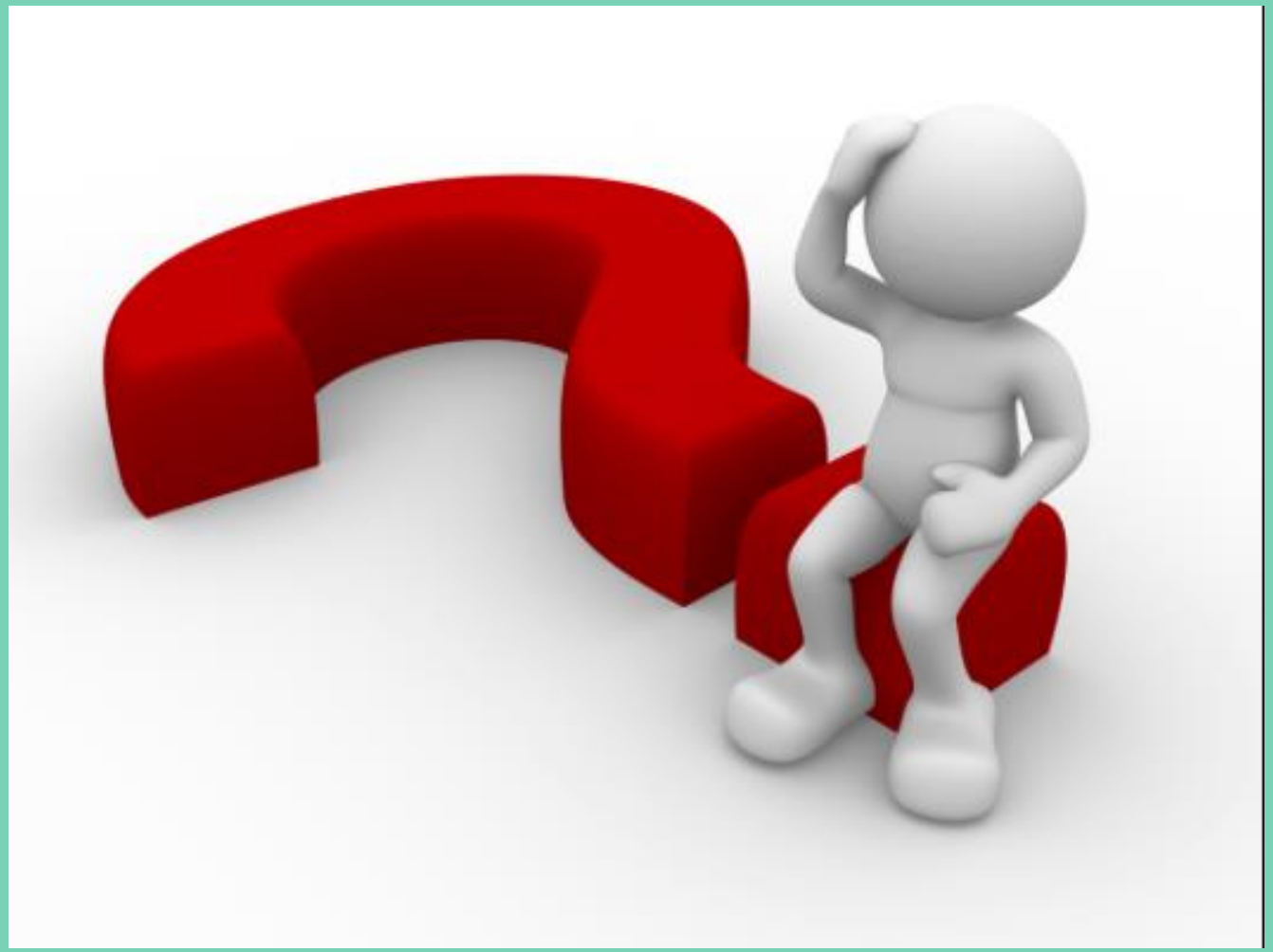
- mutual trust when exchanging information
  - Between Customs and AEO
  - AEOs: not with each other
- to report anonymously without the need for an intermediary
- information and not about physical goods
- no extreme performance requested regarding the response time
- Not about storing large amounts of data

Douane
Belastingdienst

Result of *diagonal supervision*:

- Greater efficiency of inspections
- Less supply chain disruptions

Future

Douane
Belastingdienst

- Idea, essay, presentation
- Next step: feasibility study:
  - Search for AEOs to develop the idea
  - Further investigation about the use of blockchain technology