



# **Utilization of Advanced Technologies in Scanning Operations at Japan Customs**

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# Overview: Advance Technology use in Japan Customs

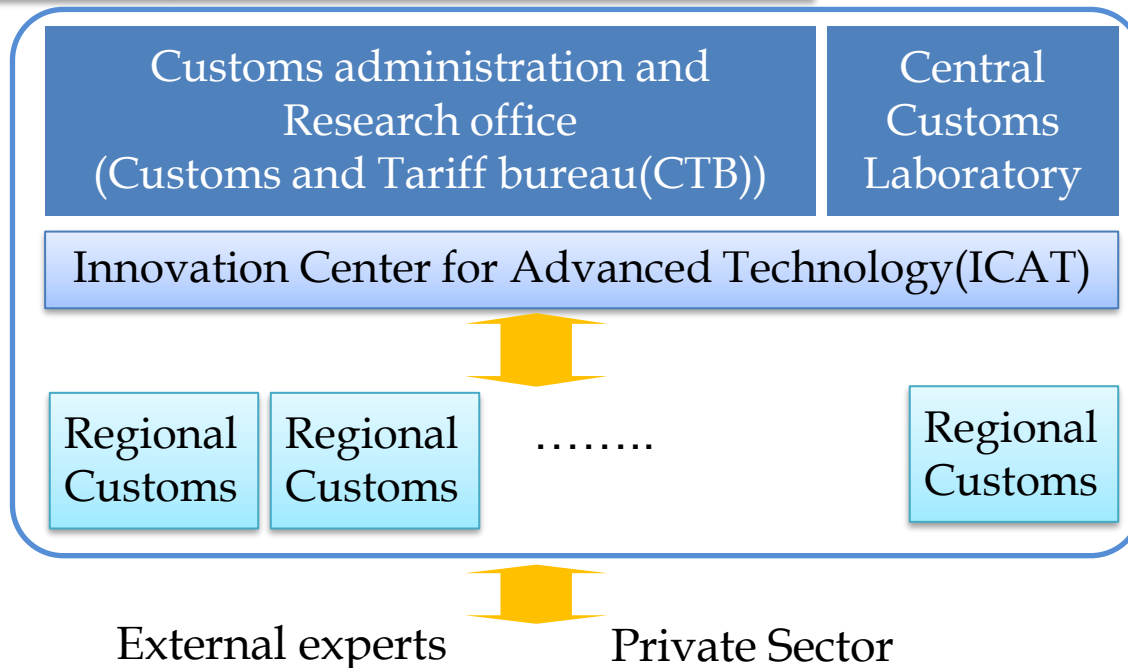
## 1. Japan Customs' Policy for Utilizing Advanced Technologies

Based on 2020 Smart Customs Initiative (Japan Customs' mid- to long- term strategy), Japan Customs actively incorporate advance technologies such as AI, Machine Learning, LLM, X-ray CT, drone, Passengers' E-gate with face recognition etc. into customs operations with the aims of:

- 1) facilitation customs procedures,
- 2) achieving effective and efficient border control, and
- 3) enhancing the work environment.



## 2. Organizational Structure



- ❑ In 2024.7 ICAT was established to accelerate DX and the use of AI in Customs operation.
- ❑ ICAT collaborates with CTB in the deployment AI models, and also supports regional Customs by Identifying issue to be solved by advance technologies.



# Summary: Advance Technology use in Japan Customs

❑ Utilizing advance technologies can be one of useful and powerful tools to effectively conduct customs operation in response to rapidly increasing number of cargoes

❑ The Expected Outcomes of AI Utilization:

1) Advance Customs capabilities

- AI identifies patterns and trends that are difficult for humans to detect.

2) Enhance Efficiency

- AI supports human tasks to improve operational efficiency
- Automate routine work to reduce paperwork and overtime.

❑ Issues of utilizing advance technologies include:

- 1) The necessity of storing large amount of “white” and “black” image data in a same format for accurate machine learning
- 2) The workload of conducting annotation tasks of X ray images
- 3) Human resource development of data science experts internally and effective cooperation with private sector
- 4) Use of cloud service or on premises server to store and analyze huge amount of data