



**World Customs  
Organization**

# BACUDA Project

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**WCO Technology Conference & Exhibition**

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# Customs face two contradictory goals

## FACILITATION

- Simplify Procedures
- Reduce Cost of Clearance
- Support Economic Growth



Technology  
helps reduce  
the tension

## SECURITY & SAFETY

- Reduce non-compliance
- Protect national Interests
- Ensure Supply Chain Security

# Data Analytics in Customs

Data Analytics can be used for all aspects of Customs:



## **Fraud detection**

Find goods that  
with high illicitness  
probability



## **HS Code Classification**

Recommends HS Codes  
based on description of  
goods



## **Time Release Study**

Identify bottlenecks and  
find ways to optimize



## **X-Ray image detection**

Automatically find illicit  
goods in bags/ cargo



## **High-Risk Passenger Selectivity**

Network Visualization,  
Risk profile generation

# BACUDA Project



## Objective:

Building practical capacities of customs data analytics capabilities

## Collaborative work on 3 main pillars:



**Data  
Experts**

Experts from:  
WCO Analysts,  
Customs  
Agencies,  
Academia,  
Private Sector,



**Algorithm  
Creation/  
Testing**

Open Source  
algorithms in  
Python tailored  
towards needs of  
Members, tested  
with real  
transactional  
data



**CB  
Activities**

National/Regiona  
l Workshops,  
Scholarships,  
Online Courses,  
Diagnostic  
Missions, etc.

# Achievements



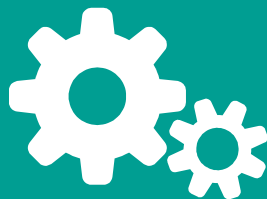
## Capacity Building Data Analytics Framework

Including Accreditation  
& Regional Events



## Practical Algorithms for Customs

DATE Algorithm (Fraud  
detection, Revenue  
Prediction), AI HS (HS  
Code Classification)



## Online Courses/Offline Workshops

Data Analytics  
Beginner/Intermediate/  
Advanced course,  
Regional/National  
Workshops, Scholarships



# Data Quality Guideline

**Two online courses** and a **guideline** to provide ready to use solutions for Customs Organizations



## Data Cleansing Course

Improving quality of existing data using open source methods



## Data Standardisation Course

Ensuring high quality of newly collected data



## Data Quality Guideline

Holistic document to ensure high quality data in an organization



# Thank you

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