



# **Pakistan Customs Risk Management System**

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PAKISTAN**



# Scheme of Presentation



- TFA Article 7.4 - Risk Management
- Pakistan's International Trade
- Risk Management in Pakistan Customs
- Selectivity Criteria Results
- Recent Initiatives & Challenges
- Future Roadmap



# Agreement on Trade Facilitation



## ARTICLE 7: Release And Clearance Of Goods

### **4 Risk Management**

- 4.1 Each Member shall, to the extent possible, adopt or maintain a risk management system for customs control.
- 4.2 Each Member shall design and apply risk management in a manner as to avoid arbitrary or unjustifiable discrimination, or a disguised restriction on international trade.
- 4.3 Each Member shall concentrate customs control and, to the extent possible other relevant border controls, on high-risk consignments and expedite the release of low-risk consignments. A Member also may select, on a random basis, consignments for such controls as part of its risk management.
- 4.4 Each Member shall base risk management on an assessment of risk through appropriate selectivity criteria. Such selectivity criteria may include, inter alia, the Harmonized System code, nature and description of the goods, country of origin, country from which the goods were shipped, value of the goods, compliance record of traders, and type of means of transport.



# Pakistan's International Trade



# Pakistan's International Trade



*(figures in thousands)*

FY 2023-24			FY 2024-25	
	No. of Declarations	No. of Containers	No. of Declarations	No. of Containers
<b>Imports</b>	820.7	850.9	898.8	907.2
<b>Exports</b>	878.2	770.4	932.4	694.3
<b>Total</b>	1,699.0	1,621.3	1,831.2	1,601.5



# International Trade Revenue Contribution



## Import / Domestic Stage Tax Collection (% Share)

<b>Tax Head</b>	<b>Import (%)</b>	<b>Domestic (%)</b>
<b>Customs Duty</b>	10.9	0.0
<b>Sales Tax</b>	19.4	13.8
<b>Federal Excise Duty (FED)</b>	1.2	5.3
<b>Direct Taxes</b>	3.6	45.7
<b>Total</b>	<b>35.2</b>	<b>64.8</b>



# **Risk Management in Pakistan Customs**



# **Important Legal Provisions**



## **Customs Act, 1969**

### **Definitions (sec. 2)**

- Risk Management System
- Risk Management Committee
- Selectivity Criteria

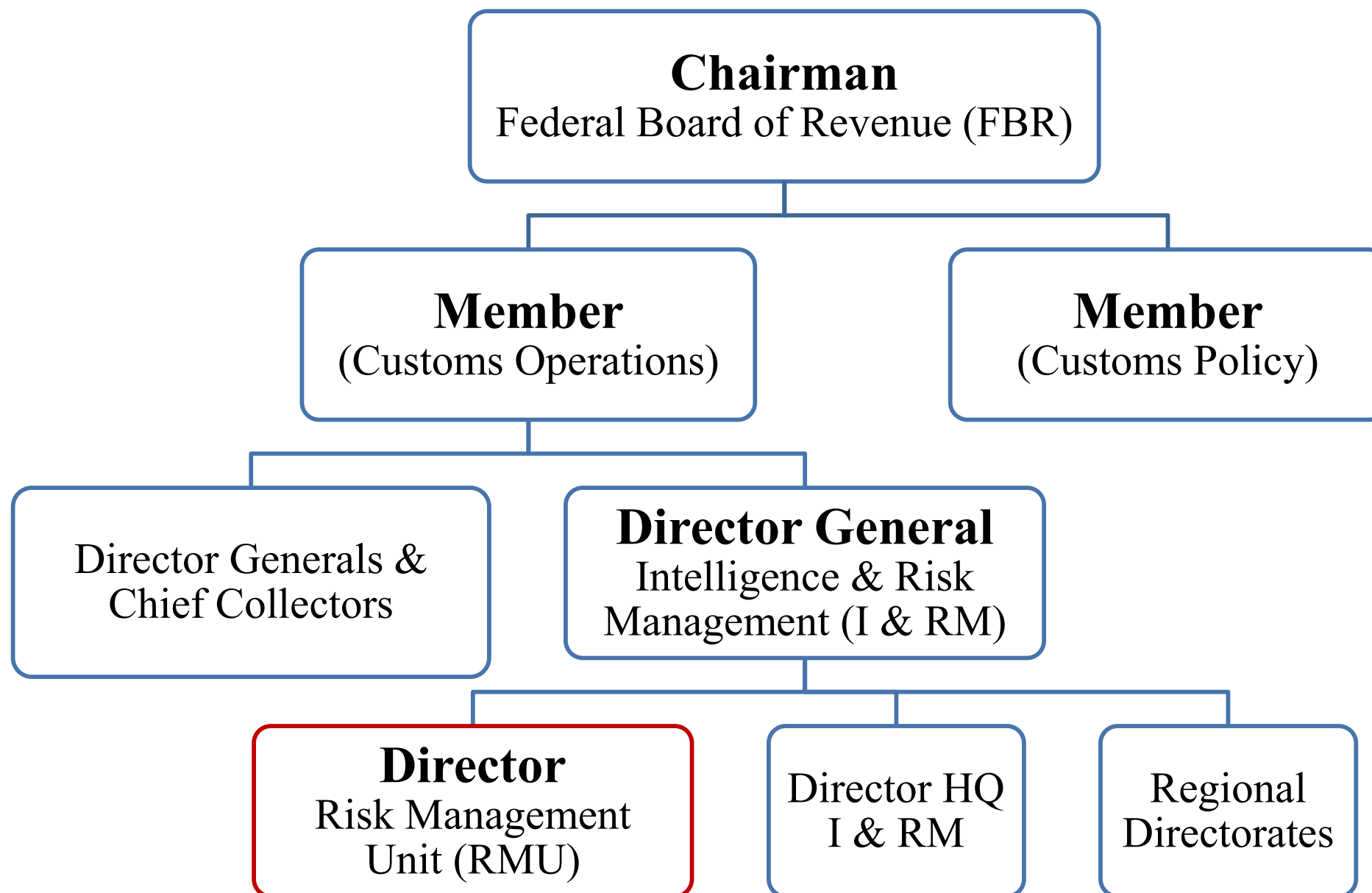
### **Implementation of RMS**

- Examination / assessment on the basis of selectivity criteria (sec. 80)
- Transshipments subject to risk selectivity criteria (sec. 121)





# Organizational Structure





## Organizational Structure...cont.



### ❑ **Customs Team:**

- **Directorate General of Risk Management:** Custodian of RMS\*
- **Risk Management Committee (RMC):** Highest decision making body headed by Director General and comprises of senior Customs officers
- **Local Risk Management Committees (LRMC):** to review risks at Collectorate level; make suggestions to DG I&RM / RMC

### ❑ **Technical Team:**

- IT based arm of the DG RM – part of Pakistan Single Window (PSW)

\* Role and responsibilities provided under [Chapter XXXI, Customs Rules 2001](#)

- 2003: Profile-based examination & assessment (manual clearance)
- 2004: PaCCS Automated Web-based clearance with:
  - risk based clearances (Red/Yellow/Green)
  - Two tier RMS - Manifest filing and Goods Declaration
- Indigenous Web Based One Customs (WeBOC) system, with:
  - Trader profile and declaration based scoring system; Risk categorization (commodity, port of loading, exemption, etc.)
- 2017 - FBR & UK Customs - Machine Learning (ML) model
- Sep 2025 – RMS 2.0 – enhanced AI / ML model



# RMS Coverage

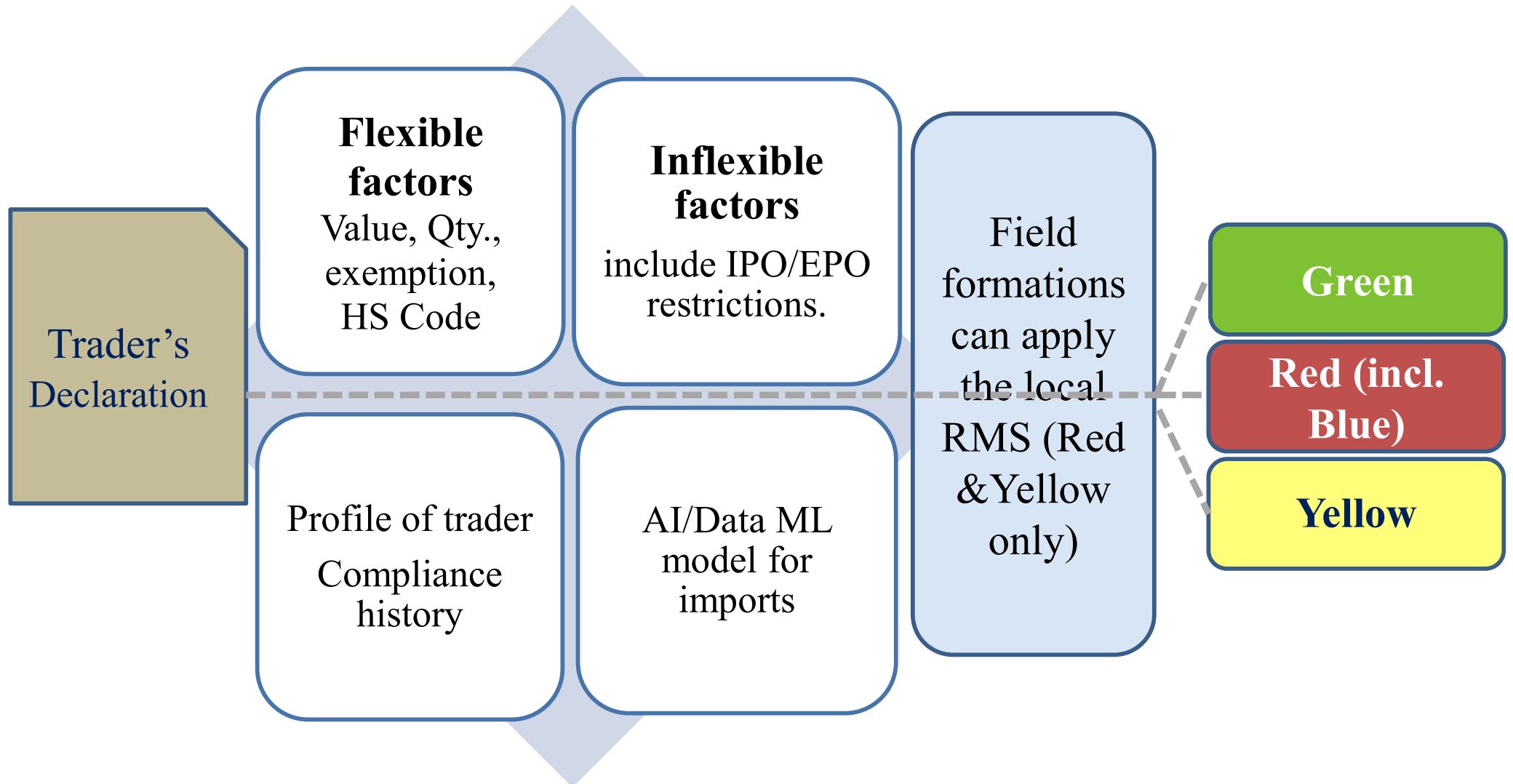


- ❖ Import and Export consignments at all seaports, airports and dry ports of Pakistan.
  - **Sea Ports** (Karachi, Port Qasim, Gwadar)
    - **On-dock and Off Dock Terminals**
  - **Airports** (Karachi, Lahore, Islamabad, etc.)
  - **Dry Ports** (Lahore, Faisalabad, Peshawar, Quetta, etc.)
  - **Land Border Stations** (Taftan, Wahgah, Torkham, etc.)

- **Inflexible factors:**
  - Import / Export Policy restrictions
- **Flexible Factors:**
  - Risk Categorization – Value, HS Code, quantity, exemption etc.
  - Multiple risk factors – GD parameters, trader's profiles
- **ML Data model (IREE)**

Channel	Physical Inspection / Scanning	Document Review / Assessment
Green	No	No
Yellow	No	Yes
Red (Incl. Blue)	Yes	Yes

# Application of Selectivity Criteria





# RMS Flagship Program ML IREE-V3 (Third Iteration)



## ❑ Risk Assessment and Fraud Detection

- Using advanced Machine Learning (ML) algorithms to develop predictive models for identifying potential risks and detecting fraudulent activities
- Successfully implemented Import Risk Evaluation Engine (IREE) for Red Channel Marking, which has significantly contributed to detections / revenue collection



# RMS Selectivity Criteria Results



## Goods Declaration-wise

Clearance Channel	2020-21	2024-25
Green	40.74%	46.0%
Red	40.53%	36.3%
Yellow	18.72%	17.7%

## Container-wise

Clearance Channel	2020-21	2024-25
Green	47.60%	53.7%
Red	31.94%	29.7%
Yellow	20.46%	16.6%

## Goods Declaration-wise

Clearance Channel	2020-21	2024-25
Green	50.7%	73.4%
Red	32.5%	17.8%
Yellow	16.8%	8.8%

## Container-wise

Clearance Channel	2020-21	2024-25
Green	73.3%	81.5%
Red	19.0%	9.5%
Yellow	7.7%	9.0%



# Detections / Revenue Increase (FY 24-25)



Clearance Channel	GDs	Additional value %	Additional Tax %
Green	409,562	0.0%	0.0%
Red	322,921	10.9%	19.4%
Yellow	157,486	2.6%	2.0%
Total	889,969	3.2%	5.8%



# AI / ML Data Model (IREE) Detections

## (Sep '25)



<b>GDs Marked Red</b>	<b>IREE Red % share</b>	<b>IREE GDs HIT rate</b>	<b>IREE Red recoveries / total red recoveries % share</b>
29,168	36%	79%	86%



# Recent Initiatives



## **RMS 2.0**

- ❖ AI / ML based system RMS 2.0 developed and under Simulation environment in WeBOC w.e.f. Sep 01, 2025
- ❖ Agreement with Technology for People Initiative (TPI), Lahore University of Management Sciences (LUMS)
- ❖ To be deployed on Live clearances after test run (Jan '25)

Automatic Entry Exit System (AEES) – Non Intrusive Inspection (NII)

- ❖ HD Scanners installed at Karachi / Port Qasim Container Terminals
- ❖ Transit, Transshipment, Import & Export cargo to undergo NII
- ❖ To be fully implemented in Dec '25



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## **Automatic Entry/Exit System – Non-Intrusive Inspection (NII)**

- ❖ HD Scanners installed at Karachi / Port Qasim Terminals
- ❖ Transit, Transshipment, Import & Export cargo to undergo NII
- ❖ Initiation - first week Dec '25 - Full implementation end Dec '25



# Challenges / Limitations



- ❖ Qualified and Skilled Human Resource
  - Business knowledge & experience
  - Technical skill & experience
- ❖ Hardware for information extraction & NLP

## ❑ **Language Translation and Interpretation**

- Using Natural Language Processing (NLP) & Text Mining
  - Test Case - HS Code recommender system to assist traders and officers

## ❑ **Intelligent Document Processing**

- Using NLP techniques for automated extraction from documents
  - Test case – extracting information from invoice/packing list and other documents for system-based verification, risk analysis and assessment filing





THANK YOU



# Key Functions of Risk Management Committee

- ❖ To review performance of RMS
- ❖ To review risk parameters and behavior of important risk indicators
- ❖ To set benchmarks for interventions targeting the risky consignments or entities
- ❖ To review major detections by the Collectorates or Directorates (I&I)- Customs with respect to RMS.