



# CRMS®

Automated Risk Management System

# Always stay ahead of illicit trade patterns

While trade continuously grows and gains in complexity, Authorities often struggle to cope with limited resources to verify compliance. In addition, the strong demand for trade facilitation turns revenue collection, national security, and public safety into a challenge.

By combining Artificial Intelligence with Customs expertise, CRMS® offers a state-of-the-art collective intelligence which relies on advanced machine learning features with rules-based risk profiling to automatically and efficiently assess risk and recommend the appropriate level of control.

Cotecna provides a strong and transparent risk management solution that allows Customs to:

- > Provide the right response to mitigate the risk
- > Enhance border operations management to speed up trade
- > Quickly identify fraudulent practices for more targeted action
- > Strengthen ability to achieve the contrasted objectives of revenue, security, and facilitation.

## The power of Artificial Intelligence for a smarter targeting of high-risk consignments

CRMS® gets smarter over time which makes it the most advanced system for customs risk management available in the market. It also brings many advantages over the traditional approach, including:

- > Increased objectivity by reducing arbitrary controls
- > More accurate results by taking account of the daily controls results

### Key benefits of CRMS®

-  Enhanced revenue collection scheme through a better targeting of high-risk cargoes
-  Optimized use of Customs' resources which increases the effectiveness of controls
-  High level of security by efficiently fighting smuggling and contraband
-  Reduced clearance time and trade costs, enabling a smooth movement of goods across borders
-  Secured trade environment thanks to an increased visibility over operations
-  Fast and seamless integration within the Customs environment

### CRMS® process

#### Step 1: Input data

The risk engine is designed to securely absorb multi-source data such as declarations, or any other intelligence sources



#### Step 2: Learning

CRMS® identifies which criteria influence the fraud, weights their importance, and generates a model applicable to new declarations



#### Step 3: Testing and validation

The model is tested to verify its efficiency. The most accurate configuration is used to assess new declarations



#### Step 4: Assessment

CRMS® then assesses new declarations using both the risk engine and the rules-based profiling



#### Step 5: Results

The system issues a risk scorecard indicating the risk level at header and item level and proposes corrective actions



# What makes CRMS® Unique

Along with a combined risk assessment approach which provides a comprehensive method of managing threats, Cotecna focused on all essential aspects of risk management to respond to our clients' needs and challenges and provide an all-encompassing expert software.



## Adaptability and scalability

Developed to be seamlessly interconnected with any Customs Management System, CRMS® empowers Customs authorities by enabling a rapid integration and adoption. It includes modules and features which are fully configurable even by non-technical users. Our goal is to encourage Customs to fully manage CRMS by their own.

Additionally, because international trade is growing rapidly, we carefully designed a software capable to scale up with any increase of data volume associated with that growth.



## Strategic and decision-making support

CRMS® includes a customized analytics module known as Business Intelligence (BI) which is specifically aimed at decision makers. The BI delivers activity and performance measures through dynamic visualizations and alerts and is designed to:

- > Consolidate data and translate them into actionable insight
- > Provide a better visibility and transparency over Customs operations
- > Model KPIs and build customized simulation scenarios to support senior management in their decisions



## Experience

The new generation of CRMS® benefits from more than 20 years of practical trade compliance experience making the whole solution robust and effective to drive operational actions. Through our work with worldwide Customs, we've gained strong knowledge and holistic view on the customs ecosystem to develop a sophisticated tool in line with today's challenges and international standards.



# Top 10 Features of CRMS®

## Combined risk assessment methods

CRMS® combines complementary methods such as selectivity and random selection to make the risk assessment robust and effective.

## Automatic and dynamic scoring

CRMS® automatically generates risk results without the need of human intervention. Translated in the customs environment, it increases objectivity and reduces arbitrary controls.

## Automated inspectors' workload simulation

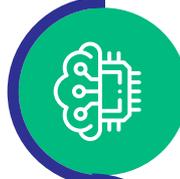
CRMS® can simulate the operational workload and take the appropriate decision to guarantee the best level of productivity without weakening security.

## Transparent and consistent

We apply machine learning models that make sense for all users to ensure they can interpret the results and know how and why specific declarations are oriented as they are.

## Customs revenue enhancement

Through a better targeting of customs declarations our main objective is to help Customs enhance their revenue and find the right balance between control and trade facilitation.



1

### Artificial intelligence driven

By using machine learning to process large sets of data, detect trade risks patterns, and better predict risks.

2



### Scientifically validated accuracy

A high level of predictive accuracy is guaranteed with a minimum hit rate at 80% if data requirements are fulfilled.

4



5



### Automatic risk factor weight computation

CRMS® computes the relative importance of each risk factor when making the prediction, thus highlighting the most relevant risk factors.

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### Risk results at item level and fraud type

Risk information is provided at item level and per risk area, allowing Customs Authorities to precisely tackle the fraud.

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### Intuitive & User-friendly

We designed an easy to use and intuitive tool to allow Customs to take full ownership of it. Our system can smoothly interface with any Customs management system and/or dataset.

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# What set us apart

Founded in 1974 in Switzerland, Cotecna started off as a family business and has now grown to become a world-class international player with more than 100 offices in across approximately 50 countries.

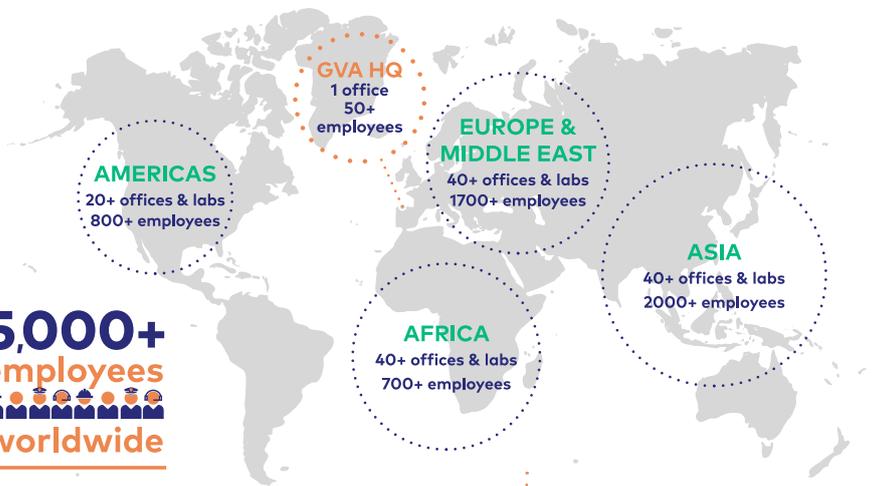
We are a world leader in providing solutions that allow governments and institutions to facilitate legitimate trade, fight fraud, enhance security and increase revenues.

For over 45 years, we have nurtured a spirit of innovation. It has led us to forge strong partnerships throughout the world and establish a leading influence in the industry. Our aim is not only to meet our clients' requirements but also to bring added value to end-users in an ethical, cost-effective and reliable way, and contribute to the competitiveness and security of the country or trade location we deliver for.

To this end, we have designed a range of unique and sustainable solutions with international quality standards where we assess conformity towards regulatory requirements, boost government revenue, secure and facilitate trade, support efficiency and promote autonomy and good governance.

- WE ACT WITH **PASSION**
- WE **CARE** ABOUT PEOPLE
- WE ARE **ACCOUNTABLE**
- WE **COMMUNICATE** OPENLY
- WE MAKE IT **HAPPEN**

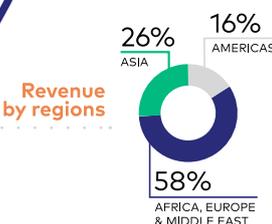
**5,000+**  
employees  
  
worldwide



founded in **1974**  
Switzerland

**40,000+**  
clients

### ACQUISITIONS



TRUST  
FOR A  
MOVING  
WORLD

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**COTECNA**  
Trust for a moving world