



CRMS[®]
Computerized
Risk Management
System

COTECNA

Cotecna's approach to risk management

Innovative approach

Cotecna's risk management services are designed to assist Customs' authorities in implementing the recommendations and requirements of the revised Kyoto Convention and to comply with the WCO SAFE Framework of Standards. Our aim is to assist Customs in revenue protection, trade facilitation, resources optimization and security enhancement.

Our services are driven by CRMS[®], a proprietary and innovative software solution that analyzes trade transactions and recommends the appropriate level of Customs intervention based on the probability of fraud and the availability of Customs resources.

Originally developed in 1999 as an integrated component of Cotecna's Destination Inspection services, this innovative system has evolved into a stand-alone solution, which can be installed at the client's premises and operated by its staff.

Four-fold approach

Cotecna's CRMS[®] is:

Automated: risk levels are assigned in real-time to consignments and are systematically used to guide the operational process flow.

Focused: an appropriate level of intervention, resulting from sophisticated risk scoring computations, is assigned to each consignment taking into account its specific characteristics.

Dynamic: the CRMS[®] takes into account the intervention results (including physical inspection, valuation, examination and/or scanning) to continuously consolidate the fraud database, thus enabling the system to deal with ever fluctuating and evolving non-compliance patterns.

Efficient: by targeting the riskiest consignments for Customs examination, CRMS[®] optimizes the use of resources.



CRMS® key capabilities

Risk management

- Provides a dedicated platform that can easily be installed within the Customs IT environment
- Utilizes a specific fraud database and related tools to record and utilize Customs intervention results, including the detection of discrepancies and offences
- Computes powerful fusion of random and selectivity criteria with a proven econometric model for risk assessment
- Features an executive reporting portal, open for Government agencies such as the Ministry of Finance or Central Bank

Multidimensional capabilities

Multi-data: integrates different data from multiple sources.

Multi-port: adjustable according to port of entry / border post.

Multi-process: applicable to any Customs process including pre- and post-clearance.

Multi-agency: compatible within any Government agency addressing risk.

Multi-purpose: secures Customs' revenue, facilitates trade, increases public security and protects consumers and the environment.

Proven technical capabilities

- Benefiting from 10 years of continuous enhancement, this proven solution supports nine government contracts
- Based on an open IT architecture and features built-in EDI (Electronic Data Interchange) capabilities, which are compliant with industry standards
- Supports centralized and distributed architectures directly addressing the client's network infrastructure and requirements
- Fully scalable in order to process high volumes of declarations in real-time
- Implements advanced security features



Benefits

- Secure revenue collection
- Enhance security
- Facilitate legitimate trade
- Optimize resources usage
- Online access to KPI
- Compliance with WCO guidelines
- Capacity building

The CRMS[®] solution

CRMS[®] deliverables

Comprehensive system



The CRMS[®] contains four main software components:

- The administration system, utilized by risk managers to configure the system and run simulations that predict the impact of newly defined parameters on the risk channel distribution
- The risk assessment and feedback management engine that computes in “real-time” the risk score and ensures dynamic updates of system parameters
- Built-in EDI capabilities for data exchange with Customs management systems such as ASYCUDA++
- A Web-based executive reporting system, providing the client’s management with dashboards and reports on system performance, trade statistics and resource usage

The CRMS[®] solution is delivered with a set of technical assistance services:

- Feasibility studies ensuring an optimal integration of the solution within the Customs environment
- Operational assistance for efficient risk management organisation set-up
- Technical assistance in system management
- Support in implementing progressive and efficient feedback mechanisms
- Operational and technical training
- Capacity building in risk management

The CRMS[®] software solution combines different risk assessment techniques which provide a dynamic and effective estimation of risk on Customs declarations.

The CRMS[®] draws from a uniquely crafted and subtle combination of three different risk assessment methodologies:

Econometric modelling is a proven methodology based on statistical models and tools used by a plethora of industries addressing risk. It allows computing risk scores on trade transactions and compares them against predefined acceptability thresholds in order to define the appropriate levels of intervention.

Cotecna has been a pioneer in the successful application of this approach in the trade industry and particularly in the Customs environment.

Selectivity rules, whereby risk levels are identified through a set of predefined criteria. Based on Customs’ experience and disciplined judgement, this methodology integrates automation with human intervention. Within CRMS[®], selectivity is used to complement the econometric modelling responding to specific requirements.

The Random selection principle, although easy to implement, is highly ineffective in intercepting high risk cargo. CRMS[®] randomly identifies a percentage of declarations determined by the model as low-risk and associates them as high-risk to ensure the stability and balance of the econometric model.

Systematic approach

The combination of multiple risk assessment approaches makes the CRMS® fully compliant with the requirements of the WCO SAFE Framework of Standards, which mandates a structured and systematic process applicable in a highly disciplined manner.

Cotecna's CRMS® approach offers numerous advantages:

- Accurate evaluation of fraud probability
- Dynamic and intelligent design
- Effective targeting of high-risk trade transactions
- Identification of risk criteria
- Provision of right equilibrium between trade facilitation and revenue security
- Resources usage optimization
- Ability to forecast the impact of risk management measurements on future transactions
- Integration of Customs expertise and other intelligence sources
- Fraud history-based computation of risk

Tailor-made and transferable

Each CRMS® implementation is configured to meet Customs authorities' specific objectives, responding to their unique environment.

Implementation usually starts by a feasibility study carried out in close collaboration with Customs to define the project scope and plan including:

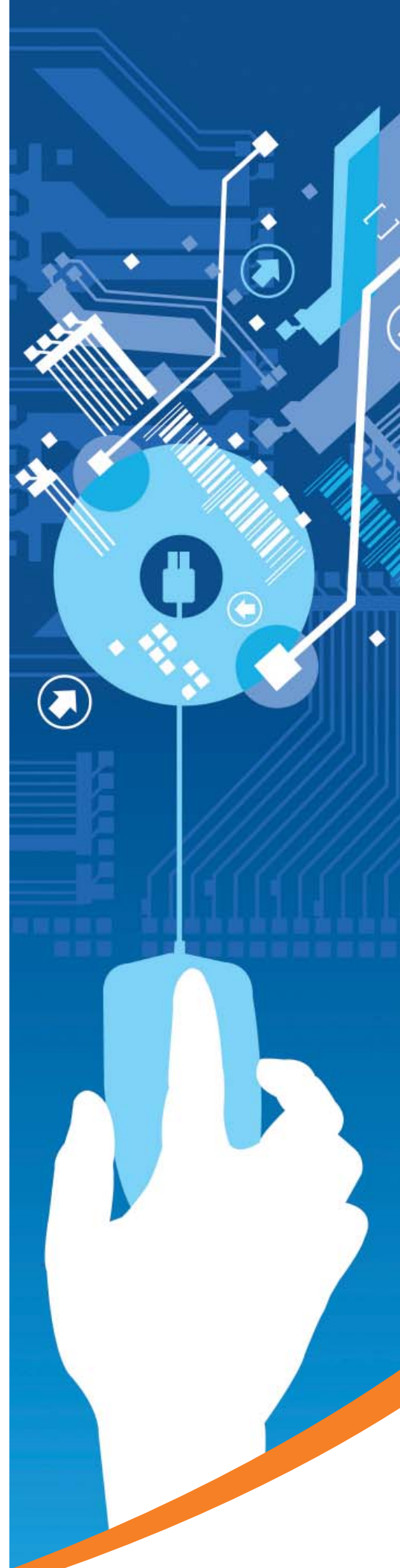
- A full understanding of Customs organization and objectives
- Review of the existing tools and systems
- Definition of CRMS® customization needs
- Definition of specific reporting needs
- Definition of implementation plan and training needs

This process leads to a unique combination of customized modules and services.

Cotecna proposes alternative project financing models, such as "fixed fee" per transaction, licensing or, concessional schemes such as Build, Operate and Transfer (BOT).

CRMS® projects are proposed with a full training and capacity building program, aiming at the transfer of CRMS® ownership to the client.

While the system is gradually rolled out, Customs teams are increasingly empowered as their level of experience and know-how grows. At the client's request, Cotecna transfers the entire management of CRMS® to fully trained Customs teams.



The Cotecna advantage

A unique combination

Cotecna's risk management solution has been created "with Customs for Customs". It inherently provides unique and advanced features:

- A combination of several risk assessment approaches, notably the econometric modelling
- An incremental and scalable solution
- A system 100% transferable to Customs
- Applicable along Customs processes
- An open architecture which can be integrated into a variety of Customs environments
- A transferable solution, with training and capacity building provided by Cotecna
- Alternative and flexible project financing models

Integrated portfolio

As part of Cotecna's integrated solution, the CRMS® can be seamlessly combined with other trade facilitation services offered by Cotecna, thus empowering our client's overall risk management strategy.

CRMS® is frequently launched alongside Non-Intrusive Inspection Scanning (NIIS) facilities, serving as a powerful means to determine which containers need to be scanned. As a means of optimizing human and technical resources, CRMS® is the ideal complement to such scanning services.

Our valuation solution, ValueQuest®, supports the implementation of the WTO Agreement on Customs Valuation (ACV) complementing any Customs risk management strategy. In conjunction with CRMS®, ValueQuest® assists Customs authorities to configure their data processing to track ever fluctuating, trade fraud patterns.

References in risk management

Cotecna implemented its first CRMS® solution in 2000 in Ghana. Since then, we have implemented CRMS® in nine other countries: Angola, Congo, Ivory Coast, Kenya, Niger, Nigeria, Senegal, Tanzania and Togo.

After 10 years of continuous improvement and innovation, we also deliver standalone CRMS® operated by Customs and fully integrated into their IT platform, as in Angola.

CRMS® assists Customs in achieving its objectives. Examples include:

- A 50% reduction in the number of physical inspections after the first year
- Optimization of cargo x-ray scanners exploitation
- A two-fold increase in Customs revenue over four years

About Us

Cotecna is the worldwide leader in government inspection services, a pioneer and recognized authority in risk management programmes using scanning technologies.

Founded in Switzerland in 1974, as a privately owned company, Cotecna was first established to meet the demand for professional inspection services in the Middle East. Our entrepreneurial spirit and excellent understanding of emerging economies have enabled us to become a leading supplier of trade security and facilitation services with international credibility in inspection and testing.

Our Group offers a wide range of Customs support services, combining state-of-the-art technology and knowledge transfer with innovative, tailor-made solutions to improve and secure trade environments around the world. In addition to risk management, destination inspection and scanner integration projects, we also offer Customs modernization and valuation assistance, verification of conformity and commercial inspections.

With strong revenue growth over the past 10 years, the Cotecna group has a combined workforce of 4 000 employees and agents in close to 100 offices around the world. Our tried and tested experience is drawn from over 35 contracts in government inspection services.



TRIED AND TRUSTED



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