

Future-proofing Customs' IT and business processes

A new architecture to support European Customs' business and IT transformation

The world of Customs is changing rapidly. New global legislation and national regulations, and vanishing borders now characterize Europe. Paperless working and the introduction of logistical, risk management and straight-through processing principles are having an enormous impact on Customs organizations. Now, more than ever before, Customs are part of the logistical chain between manufacturers and consumers of goods, and Customs processes are being restructured to better facilitate trade.

Within this environment, there is tight collaboration and information sharing between Traders, Customs, Harbor Authorities and Airport Authorities in Cargo Control Centers. By using business intelligence on enterprises and cargo organizations, Customs are also striving for more efficient goods inspection and stringent Public Security (Border Control and Intelligence)

with a focus on international goods trafficking. Thus, in addition to facilitating trade, Customs agencies are looking to play a key role in public security, which has gathered serious momentum after the 9/11 attacks in the US.

On a European level, these trends and developments are captured in the e-Customs vision statement and the Multi Annual Strategic Plan for realizing e-Customs (MASP). MASP aims to push forward the restructuring of Customs' business processes and supporting IT. Although being IT-driven, MASP also forces the Customs authorities of member states to evaluate and restructure their business principles and business processes.

Arrivals hall 

Customs
Douane 

First aid
Eerste hulp 



Both MASP and the development of e-Customs are EU-wide initiatives. This means that many national Custom agencies share similar challenges when it comes to equipping their business processes and IT for the future.

Change can be difficult to effect and Capgemini works with Customs agencies across the EU and further afield to help facilitate this transformation of business processes and IT.

To maximize reuse of experience, Capgemini has developed a generic European Customs Reference Architecture to support agencies in their pursuit of transformation.

Gaining insight

The European Customs Reference Architecture is developed by Capgemini to provide European Customs agencies with a baseline insight into their business requirements, the supporting IT solutions, and the principles and guidelines that underpin and steer decision making in these areas. It provides a generic picture (hence, it is a *reference* architecture) that can be adapted by each agency to cope with local states, needs and decisions.

The Architecture enables both business and IT professionals working in Customs across the globe to embrace:

- **Common Terminology:** speak the same language when it comes to Customs related topics
- **e-Customs and MASP scope:** Understand what is really important for today's Customs organizations from a business perspective, now and—more importantly—in the future (MASP and e-Customs). In addition to this, understand the scope of EU initiatives like MASP and e-Customs
- **Business/IT Alignment:** Understand how the business requirements can or should be supported by IT solutions. Taking into account the

current solution landscape of Customs agencies and the main Customs compliant Commercial Off The Shelf Packages (COTS) in the market

- **Methodology:** Guide Customs organizations to move from business requirements to the most suitable IT solutions, taking business and IT principles into account as well as COTS and bespoke development
- **Migration/Transformation Planning:** Guide Customs organizations to migrate their as-is IT solution portfolio to the to-be state.

A framework for change

The European Customs Reference Architecture is based on Capgemini's Integrated Architecture Framework (IAF). It is a business and IT architecture that covers the complete Customs scope and defines key elements for Customs organizations:

- **Business Principles:** A complete overview of the mission, vision and objectives of today's Customs organizations, mainly based on the developments in the EU with a strong focus on those that have a big impact on supporting IT. Most of the principles have been derived from MASP and Capgemini's own EU insights

- **IT Principles:** Ground-rules that steer the IT solution architecture decisions of today's Customs organizations. Keywords here are Service-Oriented Architecture (SOA), flexibility of solutions, open standards support and complexity reduction
- **Business Requirements:** Defined in terms of Business Processes and Business Services, requirements comprise the scope and definition of today's Customs business
- **IT Requirements:** Defined in terms of IT services and derived from the business requirements
- **MASP (requirements) coverage:** A mapping of the complete MASP program portfolio on the defined business processes and business services
- **IT Solutions:** A mapping of the functionality of the main off-the-shelf software packages in the market (COTS), such as Bull e-Biscus, Cybernetica, Tatis and Intrasoft, on the defined IT services.

The following diagram (Figure 1) illustrates the building blocks of the European Reference Architecture. It shows that business and IT principles, and business requirements steer the choice for IT solutions.

Figure 1: European Customs Reference Architecture - The Process

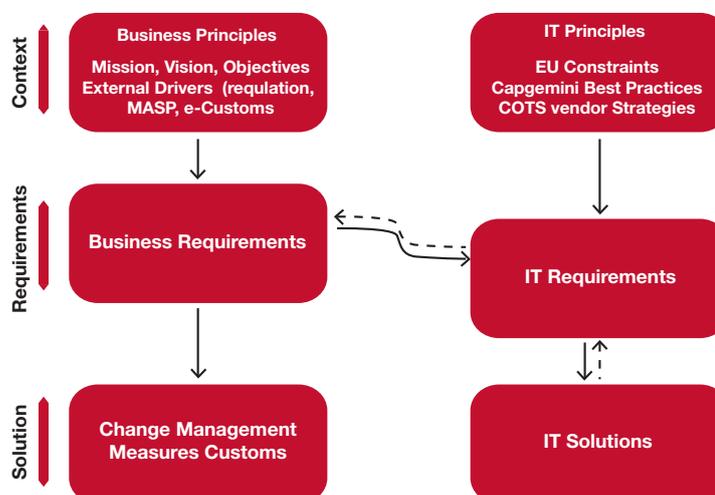
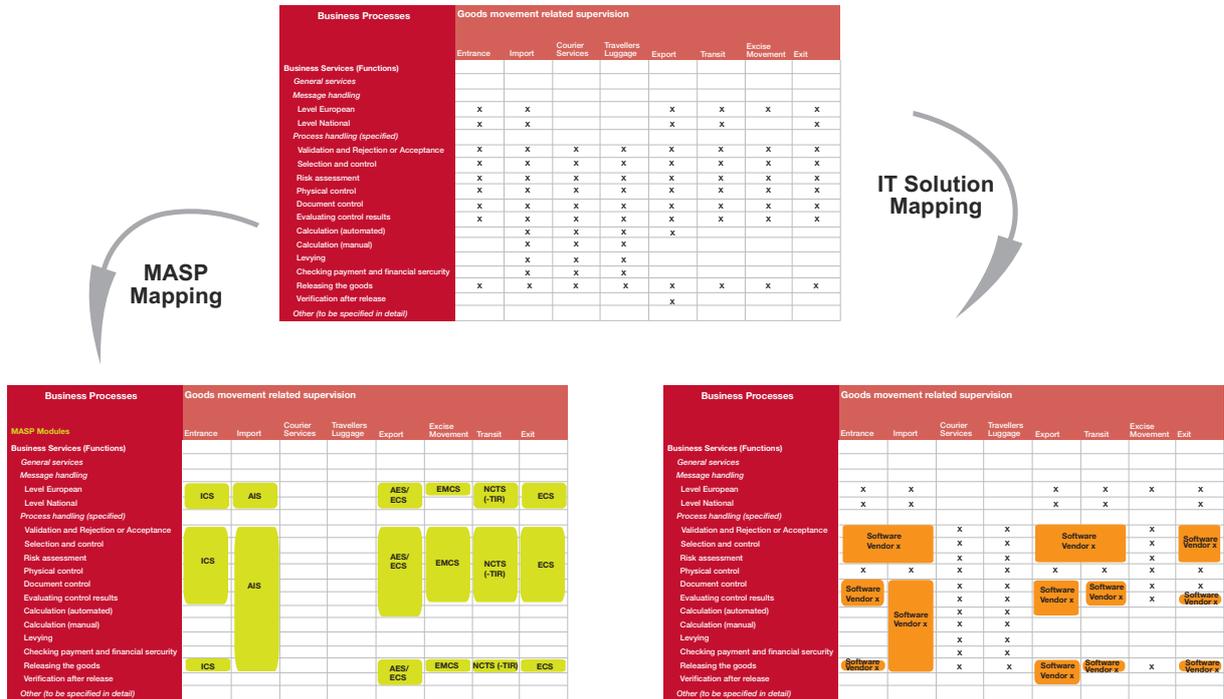


Figure 2: Some examples of the European Reference Architecture Deliverables



However, in practice, IT can steer—or at least influence—business as well. IT can ‘inspire’ the business or offer out-of-the-box solutions that have an impact on the way Customs do their business (e.g. COTS).

Using the European Customs Reference Architecture, Capgemini is already deploying the reference architecture in several Customs agencies in the EU. It offers a reference and starting point, helping these agencies define their principles and business requirements, their as-is and to-be IT solution landscape and the migration plan to come from the current to future state, in addition to the architecture baseline. In doing this, Capgemini also brings in its knowledge of Supply Chain Management, Business Intelligence, Risk Management, and Airport and Portservices in relation to Customs processes, drawing on proven experience with Customs Authorities and other Customs organizations. The

result for the agencies is a future-proof IT solution landscape that fully supports EU and national regulations, is 100% in line with running business and IT principles and maximizes reuse of efforts and knowledge gained at EU agencies that have been facing similar challenges—all within a short period, thus saving money and time.

Why Capgemini

Capgemini carries extensive experience and adopts best practices in restructuring Customs processes, architecture and IT. Selecting Capgemini as partner implies the reuse of this collective experience which saves money and reduces time and implementation risks. Capgemini also has a vast ecosystem comprising solution partners/software vendors in the field of Customs solutions that can add valuable collaborative expertise to projects.

Since Capgemini also has close ties with the WCO and the EU Customs, clients will have a partner that truly understands trends in Customs globally and their effect on Customs organizations.

The Capgemini team comprises business consultants and architects who are highly experienced in Customs processes and IT as well as in logistics, risk management and security.





About Capgemini

Capgemini, one of the world's foremost providers of Consulting, Technology and Outsourcing services, has a unique way of working with its clients, called the Collaborative Business Experience.

The Collaborative Business Experience is designed to help our clients achieve better, faster, more sustainable results through seamless access to our network of world-leading technology partners and

collaboration-focused methods and tools. Through commitment to mutual success and the achievement of tangible value, we help businesses implement growth strategies, leverage technology, and thrive through the power of collaboration. Capgemini employs over 80,000 people worldwide and reported 2007 global revenues of 8.7 billion euros.

More information about our services, offices and research is available at www.capgemini.com

For more information about how Capgemini can support your Customs business, contact our Global Public Sector Tax and Customs Team:

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