

e-Freight.  
Let's make it happen.



A European roadmap.



# What exactly is e-Freight? And why do we need it?



The European freight business needs to improve its efficiency.

Transportation and logistics account for 10-17% of GDP in the OECD countries, and costs are increasing. Also, transportation consumes almost one third of all energy used in the European Union and is responsible for nearly one third of the Union's total CO2 emissions. Concerns about the environmental impact are growing.

Improving the administrative efficiency of freight transportation will have positive effects on these statistics – in terms of better use of cargo capacity, increased consolidation of freights and staff, shorter lead times, improved delivery precision, reduced traffic congestion, fewer accidents, etc.

A key to achieving such efficiencies is e-Freight. This is a term used to designate an automatic, electronic (i.e. paperless) flow and exchange of freight-related information – business-to-business, business-to-authority and authority-to-authority.

E-freight is based on simple and harmonised procedures supporting the physical flow of goods. This includes the tracking and tracing of cargo door-to-door – irrespective of the combination of transportation modes used.

## **E-freight benefits everyone.**

For each cargo to be shipped, transport users will be able to select, contract and monitor the optimal transportation alternative with greater simplicity and efficiency.

Transport and logistics service providers will increase their market exposure. They will also be able to consolidate freight assignments and report them to authorities more easily.

E-freight facilitates the use of all transportation modes more efficiently, whether isolated or in combination. This will doubtless support European cohesion and enhance the competitiveness of Europe.

# A Swedish EU initiative. A European road map.

E-freight in Europe is the result of an initiative launched by the Swedish government during its EU presidency in 2009. The aim of the project is to support the development of Intelligent Transport Systems (ITS) as a means to improve the efficiency and sustainability of the European transportation system.

The vision is simple:

By eliminating paperwork and simplifying information exchange, e-Freight will enable a greener, safer, more energy-efficient and more cost-effective transportation industry across Europe.

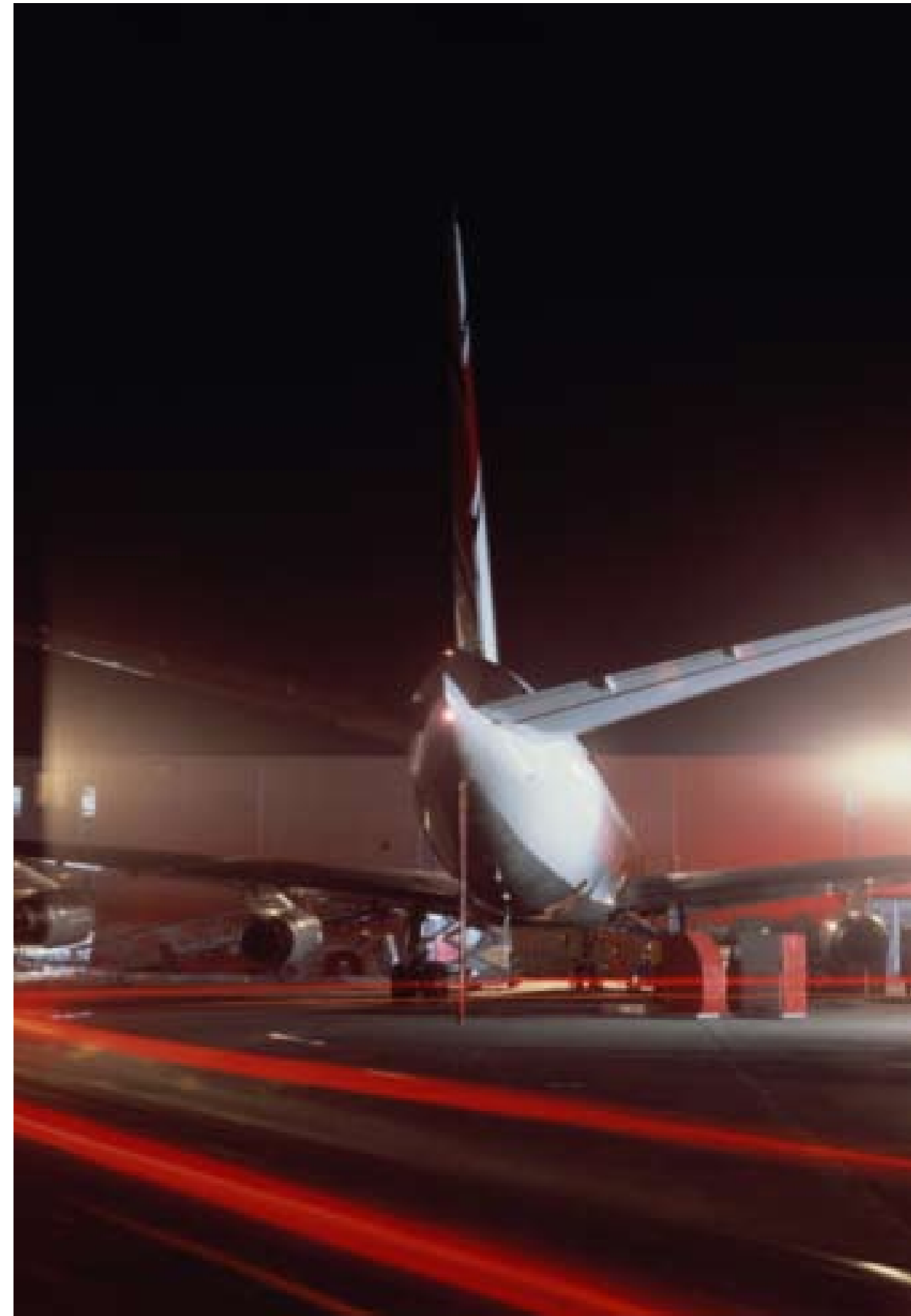
## **Orchestrating multiple initiatives.**

The current E-freight Roadmap proposes a number of actions in conjunction with initiatives by the European Commission and various stakeholders in the transport sector. These include:

- The Freight Transport Logistics Action Plan for e-Freight and ITS (Intelligent Transport Systems);
- The Action Plan for the Deployment of ITS for road transportation in Europe;
- The TAF TSI (Telematic Applications for Freight – Technical Specification for Interoperability) for rail transportation;
- Harmonised River Information Services (RIS) on inland waterways;
- The EU e-Maritime initiative.

The time is now ripe for a more concerted European effort, and the E-freight Roadmap outlines an approach for the coming years.

With the exception of the Freight Transport Logistics Action Plan, the various initiatives all focus on a single transportation mode (though with interfaces to other modes). This risks neglecting the requirements of multi-mode transportation. The E-freight Roadmap takes a more holistic view of freight transport, in an attempt to build on the efforts of all stakeholders (including IATA representing air freight).



# It's a big task. So we've split it into five.

Creating an all-encompassing European e-Freight system is a major undertaking and will not happen overnight. In many cases, laws will have to be changed in EU Member States, which takes time. The goal suggested in the E-freight Roadmap is to fully implement the system by 2020.

In order to make the work more manageable, the roadmap divides it into five sub-tasks:

## 1. A standard framework for information exchange

Although institutions like UN/CEFACT, CEN and OASIS have adopted standards for information exchange, others (like GS1, involving shippers and logistics service providers) have voiced the need for new exchange mechanisms to improve interoperability.

Hence, one key task laid out in the E-freight Roadmap is to define a standard framework for the exchange of freight information in door-to-door logistic chains, covering all transportation modes and stakeholders.

## 2. A single transport document

The EU Commission has stated the need for a single electronic transport document that can be used in every transportation mode (and every combination of modes).

The E-freight Roadmap supports the Commission's initiative to develop such a singular European transport document (waybill) for all carriage of goods, irrespective of transportation mode – along with all the necessary legislative prerequisites.

## 3. "Single-window" interaction between authorities and commercial stakeholders

The Freight Transport Logistics Action Plan has documented the need for simpler administrative compliance in the transport sector. A single point of contact with all authorities (e.g. maritime administrations, customs, security, etc) simplifies reporting and coordination.

An important task of the E-freight Roadmap is to establish a common window and access point for administrative procedures in all transportation modes.

## 4. Harmonised border-crossing procedures in Europe for all transportation modes.

There are significant differences in border-crossing procedures between countries in Eastern and Western Europe. The TIR Carnet simplifies border crossings, but no similar document exists for intra-European maritime transport. The EU Commission wants to remove unnecessary administrative barriers and duplicated cross-border controls.

Hence, the E-freight Roadmap needs to establish simple, harmonised border-crossing procedures for all modes of transportation, in all EU Member States.

## 5. Secure and efficient intercontinental transport corridors

Large freight volumes are being transported between Europe, Asia and the USA. The E-freight Roadmap wishes to strengthen the EU's competitive position, while lowering the cost of intercontinental freight and maintaining a high level of security.

This will require simple procedures and the necessary infrastructure for establishing secure and efficient transport corridors between Europe, Asia and the USA.



# The first task is well underway. Now we need to move faster.



Already, practical steps and measures are being taken in the definition of a standard e-Freight framework and in providing bridges to existing national or industrial solutions. Other tasks have now been sufficiently defined in the E-freight Roadmap to allow them to start.

## **The common framework**

Although probably the least recognized activity, the establishment of a standard e-Freight framework is probably the task that has made most progress to date.

The EU Commission is now making special efforts to support the necessary standardisation. A number of initiatives in this area are converging in a positive way, further supporting the development of a common framework within the Commission.

For example, the important GS1 Logistics Forum has developed the first version of a Logistics Interoperability Model, and is now joining forces with the EU-sponsored initiatives. A number of test cases will soon demonstrate the level of interoperability in practice.

## **The single document**

A study by the EU Commission recommends that electronic records be allowed to replace paper documents. The main challenge will be to do this in relation to existing documents used for different transportation modes. A single transport document will also need to be compatible with other international developments e.g. the eTIR Carnet.

The Commission should establish a task force to define the new liability and legislative scenarios, including the legality of an electronic transport document.

## **The single window**

Many initiatives are proposing single-window solutions – e.g. DG TAXUD that uses the concept as an integral part of its e-Customs vision. Others propose single windows on a national level. Future work will build on existing EU developments and will focus on integrating

national single windows and various EU platforms (including e-Customs, SSN, RIS and RTMS-TAF/TSI). There is also a need to harmonise the deployment of a single window with the introduction of new border-crossing procedures.

## **The border procedures**

DG TAXUD has already launched a master plan for the development of e-Customs. The vision is, among other things, to use electronic declarations and make national IT systems interoperable.

The legal framework and specific legal acts are in place. Also, the e-Customs master plan outlines the development of ICT systems automating export and import procedures with centralised clearance.

There are still significant differences in customs procedures for land transport vs. sea transport, which need to be resolved.

Needless to say, common customs procedures require a well-defined transport document. Hence, the development of these procedures must be closely coordinated with the creation of the standard framework and the single transport document.

## **The transport corridors**

Results from the EU-sponsored projects and similar commercial projects, for example in Japan, show that developing technology and infrastructure for monitoring the movement of goods from Asia and the USA to Europe is feasible and economic.

The challenge now is to create overseas border-crossing procedures, align them with appropriate technologies and apply them to all types of transport operations. The goal is a number of properly monitored corridors, where the cargo is inspected and properly sealed upon entering. This effort needs to be undertaken in cooperation with US and Asian representatives.



# The politicians want e-Freight. But can't do it on their own.

The importance of a concerted effort by all stakeholders in and around the logistics and transportation business cannot be overstated. The EU Commission and other politicians involved, directly or indirectly, need the active support and participation of national authorities, industry associations and commercial players to make the e-Freight project successful. The E-freight Roadmap is a vital instrument for streamlining and coordinating the efforts of all stakeholders.

## Governance

EU initiatives such as ITS (road), RIS (inland waterway transport), and TAF/TSI have established their own governance mechanisms. There is a European Committee with representatives from the Member States, and also a European Advisory Group with senior representatives from relevant service providers, user associations, transport operators, manufacturing industry, social partners, professional associations, local authorities, etc.

It is imperative that a similar governance mechanism is established in the area of e-Freight.

## The key drivers

The E-freight Roadmap initiative originated in Sweden and continues to be championed by three Swedish organisations:

### *Näringsdepartementet*

The Swedish Ministry of Enterprise, Energy and Communications is responsible for handling government business in the areas of business development, competition, communications, energy, ICT, regional growth, research and development, state-owned companies, tourism and transportation.

### *Vinnova*

Vinnova (The Swedish Governmental Agency for Innovation Systems) is a State authority that aims to promote growth and prosperity throughout Sweden. The Swedish Government has assigned Vinnova to stimulate Swedish participation in European and international R&D collaborations and in the exchange of experience in the field of innovation.

### *NetPort*

NetPort is a project organisation facilitating the co-operation between local industry, university and public sector in Karlshamn, Sweden. The aim is strong, long-term growth for the Karlshamn community. NetPort helps develop competence and business opportunities in three focus areas: new media, digital entertainment and intelligent logistics. Within these areas, NetPort initiates and participates in research projects funded by national and European interests.

<http://www.regeringen.se/>

