eFTI Technical Insight
and
Possibilities to Platform Providers

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www.efti4eu.eu

Why I need to be interested about eFTI?

What I need to know on a technical level?

What kind of business I can do with eFTI?

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Fintraffic

- **Project Manager of the national implementation of eFTI**

- **Facilitating the co-operation of traffic industry in Finland**

- **Experience from ICT and logistics**

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Fintraffic in brief

Traffic control and management:
on the land, in the air
and at sea

Facilitating the work of Traffic Data
Ecosystem

Digital services and open data
for organizations, developers
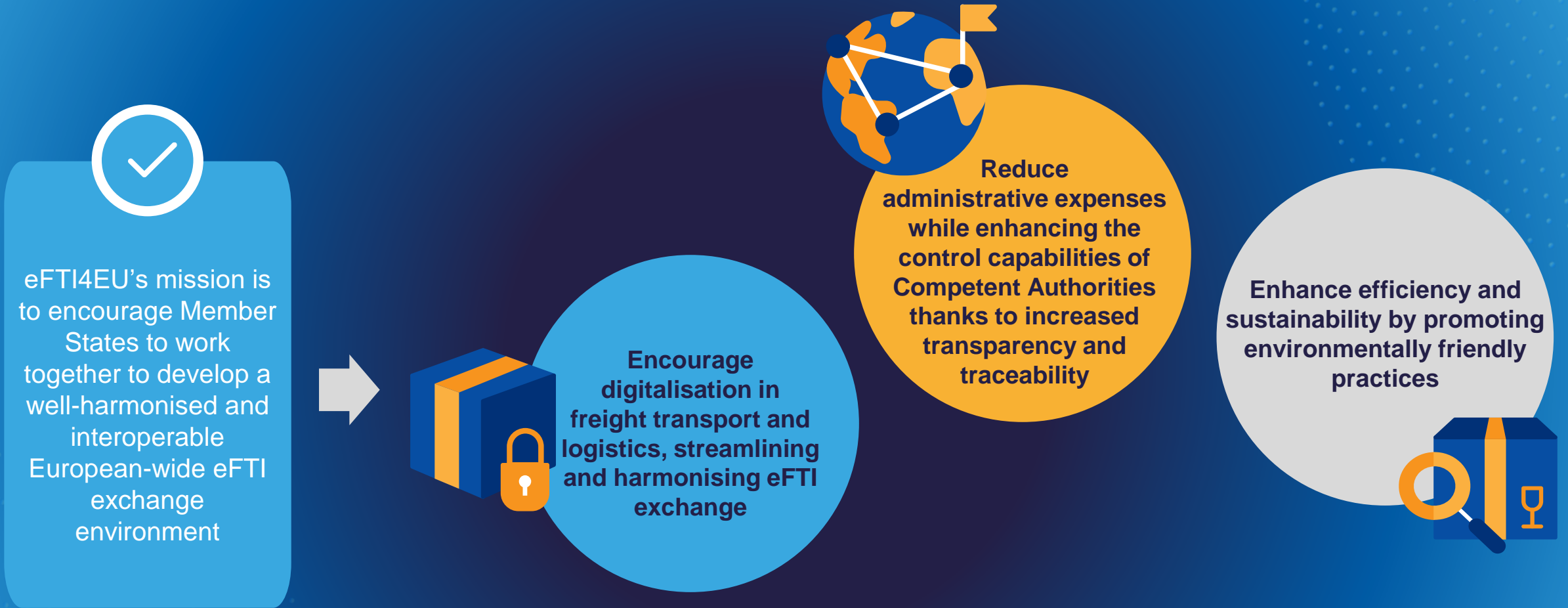and consumers

We employ
1100 professionals.

eFTI4EU

PARTNERS and observers

PARTNER

OBSERVER

Mission & Goals

eFTI4EU's mission is to encourage Member States to work together to develop a well-harmonised and interoperable European-wide eFTI exchange environment

Encourage digitalisation in freight transport and logistics, streamlining and harmonising eFTI exchange

Reduce administrative expenses while enhancing the control capabilities of Competent Authorities thanks to increased transparency and traceability

Enhance efficiency and sustainability by promoting environmentally friendly practices

About Electronic Freight Transport Information (eFTI)

eFTI is an **EU-wide** project aiming to establish a legal and standardized framework **for the digital exchange of freight transport information** between companies and authorities. The project will be completed in Q/2 2027, by which time European authorities are expected to have the capacity to receive and process freighting documents in electronic form.

The aim is to boost the efficiency of freight traffic and logistics as well as reduce the administrative burden for operators. This work has been preceded by the European Commission's 'Sustainable and Smart Mobility Strategy – putting European transport on track for the future.

eFTI concerns freight transport information transmitted with freight carried by rail, road and inland water. Other future regulations (ex. The Combined Transport) will encourage the use of eFTI.

eFTI benefits to companies

EU wide standard

Reduce administrative cost

Make border crossing smoother

Authorities can access data easier which
can reduce the need to stop transportation
for inspection

Increase data reliability and reduce errors

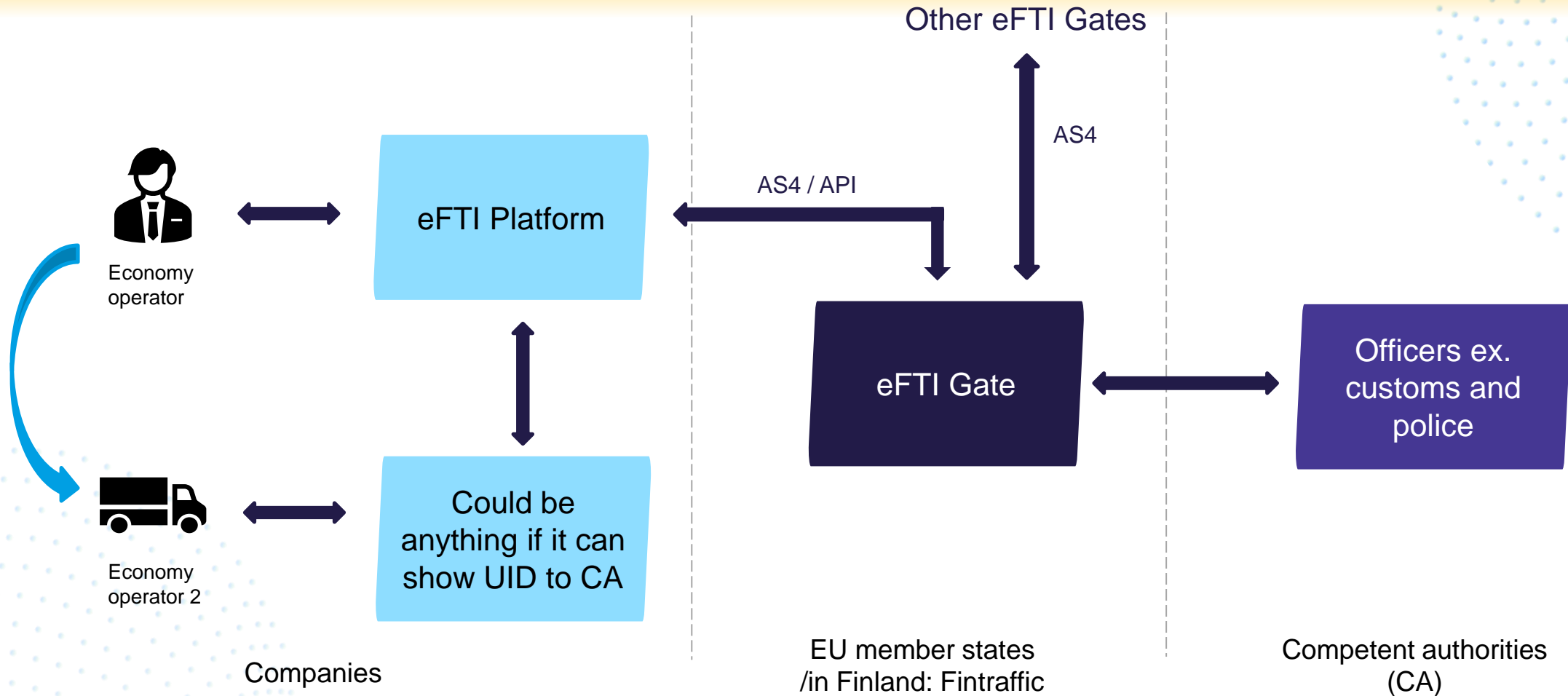New business for platform providers

Digitalization measured cost savings

According to expert calculations, a paper CMR costs **22.83** euros, while an eCMR costs just **9.72** euros
https://openlogisticsfoundation.org/the-next-big-thing-the-efti-regulation/

Processing a paper or pdf document of a catalog, order, order confirmation, invoice generates a cost of **15-20** euros. The cost of a structured electronic document is **5-7** euros. When the information of an electronic document is transferred from one document to another automatically, the cost drops to **1-2** euros
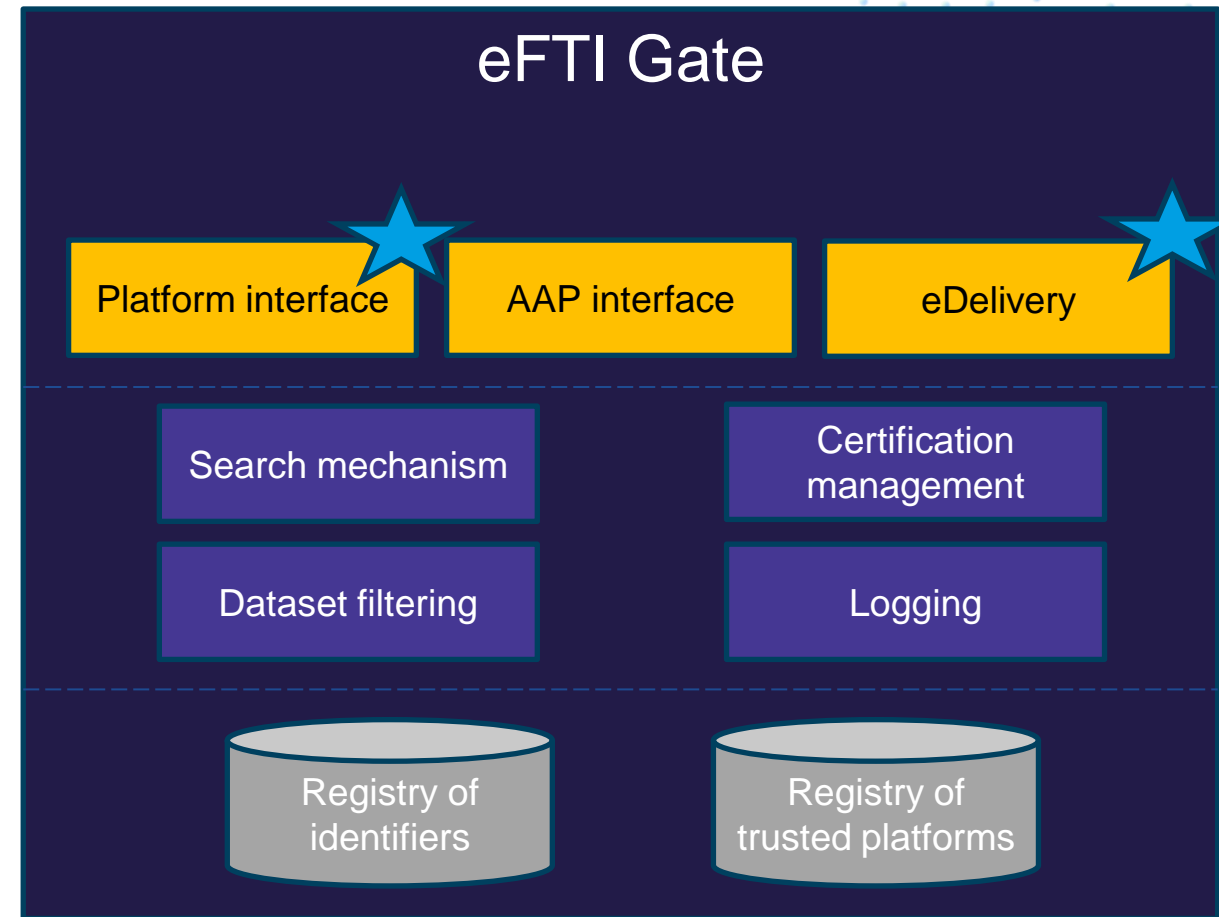https://www.youtube.com/watch?v=VCwgWMwewYU

eFTI in practice

Other eFTI Gates

AS4

AS4 / API

eFTI Platform

Economy operator

Could be anything if it can show UID to CA

Economy operator 2

eFTI Gate

Officers ex. customs and police

Companies

EU member states /in Finland: Fintraffic

Competent authorities (CA)

eFTI is making data available for authorities. It is not defining B2B data sharing.

eFTI Gate

- National centralized access point eFTI Gate connects eFTI information between Economy Operators and authorities

- eFTI Gate connects to all other eFTI Gates in Europe

- Creates single access point on a national level

- Holds only minimal set of data – identifiers

eFTI Gate

| Platform interface | AAP interface | eDelivery |

Search mechanism

Certification management

Dataset filtering

Logging

Registry of identifiers

Registry of trusted platforms

Most important component is Gate to Gate interface

eFTI can not work if Gate to Gate interface is not harmonized and eDelivery profile is not harmonized.

Data model needs to be harmonized.

Gate to Platform interface can differ at a national level
Gate to APP interface can differ at a national level
Implementation and technical paltform can differ at a national level

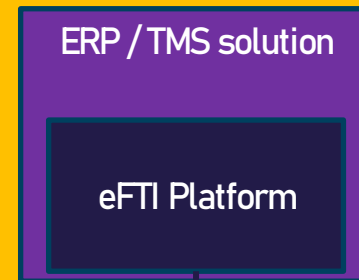www.efti4eu.eu

eFTI platform alternatives

Option 1: Stand alone system

eFTI Platform → eFTI Gate

Option 2: Third party service ex. SaaS service

eFTI Platform → eFTI Gate

Option 3: Part of TMS / ERP solution

ERP / TMS solution
eFTI Platform → eFTI Gate

Option 4: Use of tributary
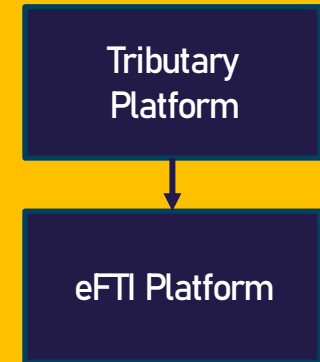
Tributary Platform → eFTI Platform → eFTI Gate

Interfaces for Platforms

National interface

Each country can have their own API or web service interface, but it is not mandatory.

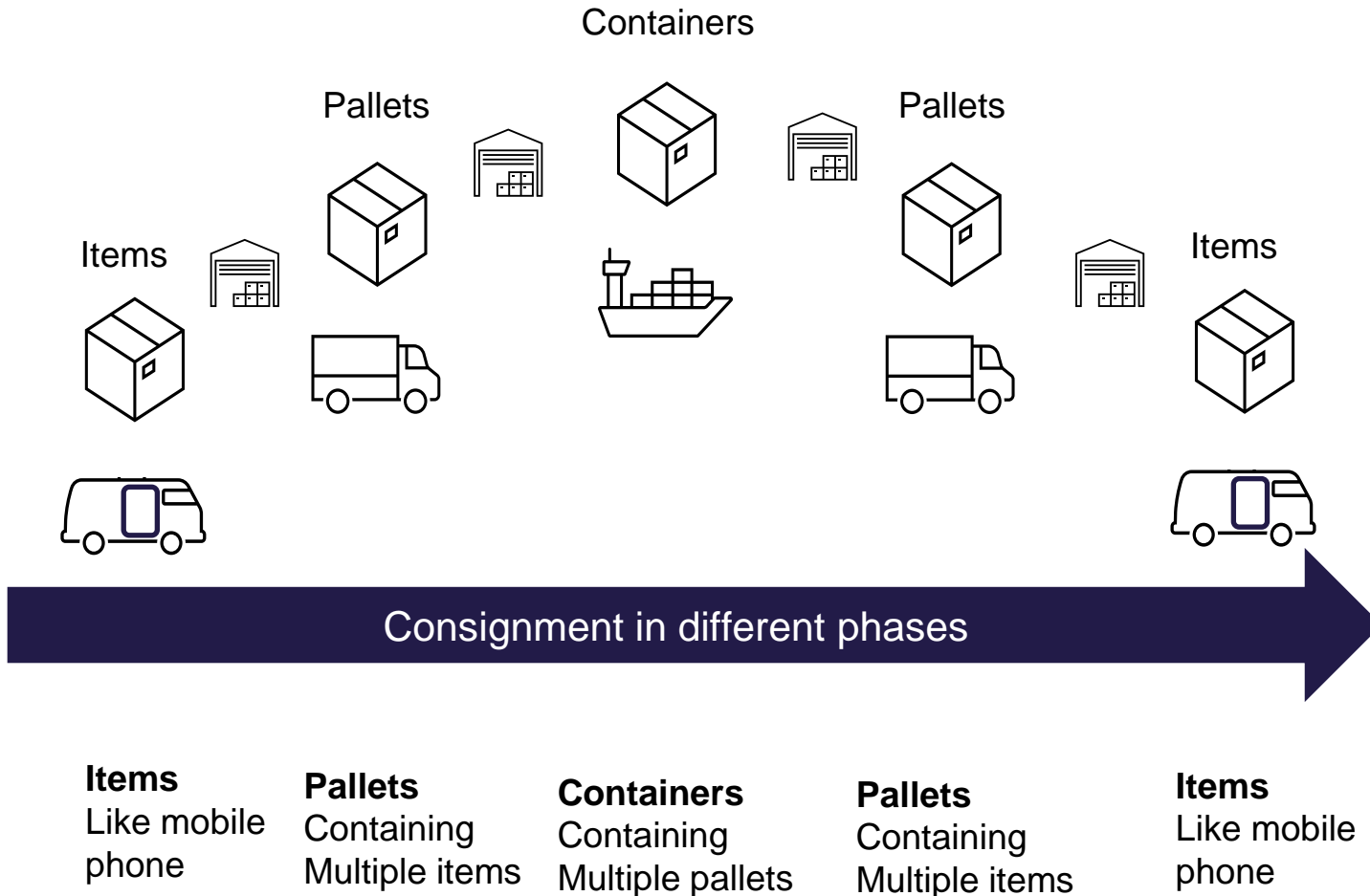Can be REST, XML or something else.

Standard eDelivery

Standard in every country

eDelivery is not that familiar to economic operators

eDelivery uses AS4 XML format

Let's be precice with terminology: What are our data elements?

Containers

Pallets   Pallets

Items   Items

Consignment in different phases

Items
Like mobile phone

Pallets
Containing Multiple items

Containers
Containing Multiple pallets

Pallets
Containing Multiple items

Items
Like mobile phone

```xml
1    <?xml version="1.0" encoding="utf-8"?>
2    <consignment
3        xmlns="http://efti.eu/v1/consignment/identifier"
4        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
5        xsi:schemaLocation="http://efti.eu/v1/consignment/identifier ../
6
7        <!-- eFTI39 -->
8        <carrierAcceptanceDateTime formatId="203">202401010000</carrierAcce
9
10       <deliveryEvent>
11           <!-- eFTI188 -->
12           <actualOccurrenceDateTime formatId="203">202401020000</actualOccu
13       </deliveryEvent>
14
15       <mainCarriageTransportMovement>
16           <!-- eFTI1451 -->
17           <dangerousGoodsIndicator>false</dangerousGoodsIndicator>
18
19           <!-- eFTI581 -->
20           <modeCode>3</modeCode>
21
22           <usedTransportMeans>
23               <!-- eFTI618 -->
24               <id>313</id>
25               <!-- eFTI620 -->
26               <registrationCountry>
27                   <code>FI</code>
28               </registrationCountry>
29           </usedTransportMeans>
30       </mainCarriageTransportMovement>
31
32       <usedTransportEquipment>
33           <carriedTransportEquipment>
34               <!-- eFTI448 -->
35               <id>313</id>
36               <!-- eFTI1000 -->
37               <sequenceNumber>1</sequenceNumber>
38           </carriedTransportEquipment>
39
40           <!-- eFTI378 -->
41           <categoryCode>AE</categoryCode>
```

Requirements for platform

Need to fulfill security standards

Need to certificate platform

Authentication is mandatory

Need to comply with response times

Technical specifications, data model and interfaces

Data storage times are defined

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eFTI is limited data sharing from EO to Authorities, it is nothing more.

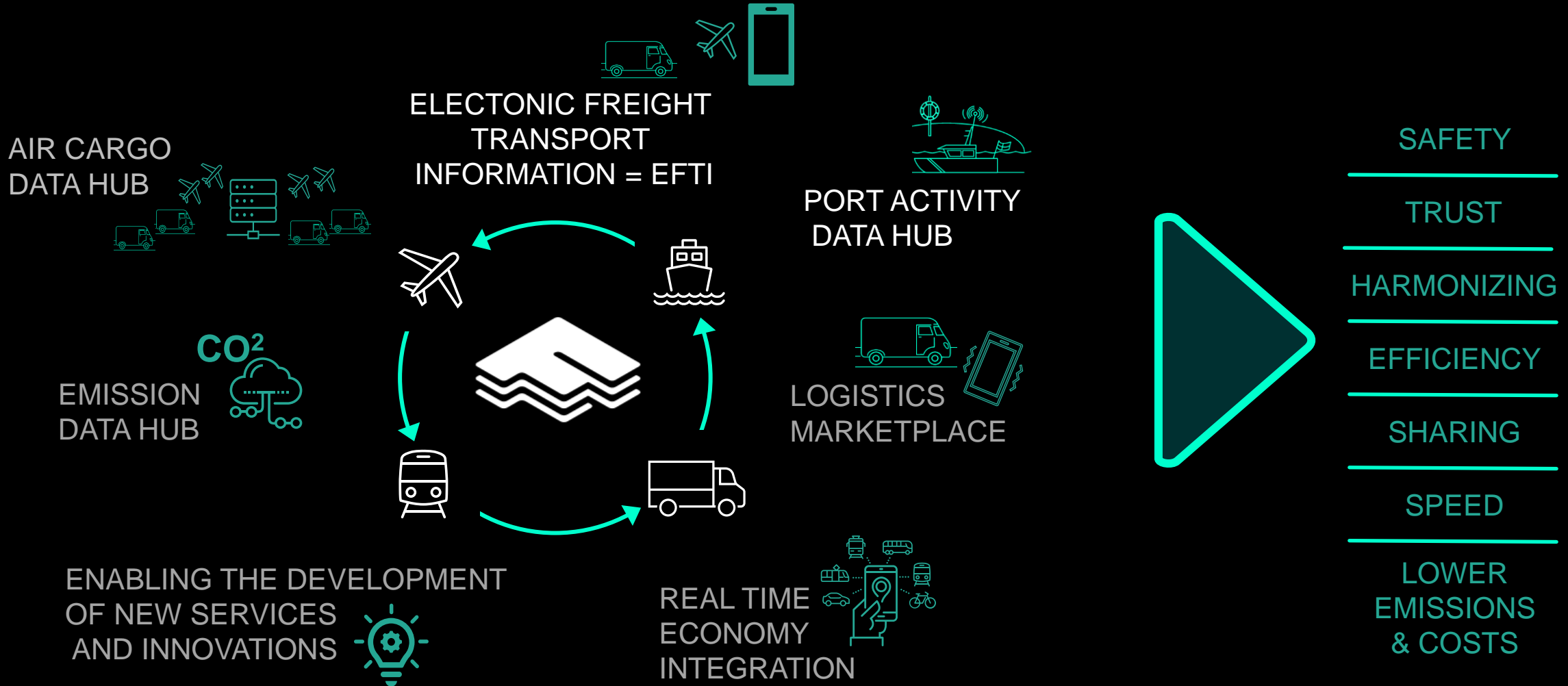However, EOs can agree that they use other services to share same information, but it is more what regulation says.

Think solutions that will utilize the same information and share that in a secure manner and provide value for logistics chains.

Selected pilot areas

- **Interoperability pilots**
  - How it will work together with other solutions

- **Cross border pilots**
  - How eFTI will work from country to country

- **Data pilots**
  - How eFTI data is linked with other logistics data models

- **National pilots**
  - How eFTi can bring value in a National level

Show the benefits of eFTI

Linked data generates more value than separate solutions, where eFTI is one piece of the digital logistic puzzle

ELECTONIC FREIGHT TRANSPORT INFORMATION = EFTI

AIR CARGO DATA HUB

PORT ACTIVITY DATA HUB

CO^2

EMISSION DATA HUB

LOGISTICS MARKETPLACE

ENABLING THE DEVELOPMENT OF NEW SERVICES AND INNOVATIONS

REAL TIME ECONOMY INTEGRATION

SAFETY

TRUST

HARMONIZING

EFFICIENCY

SHARING

SPEED

LOWER EMISSIONS & COSTS

eFTI is only one part of the logistics process - combined with other data it can bring greater value

Order — Transport — Invoice — Digital product passport
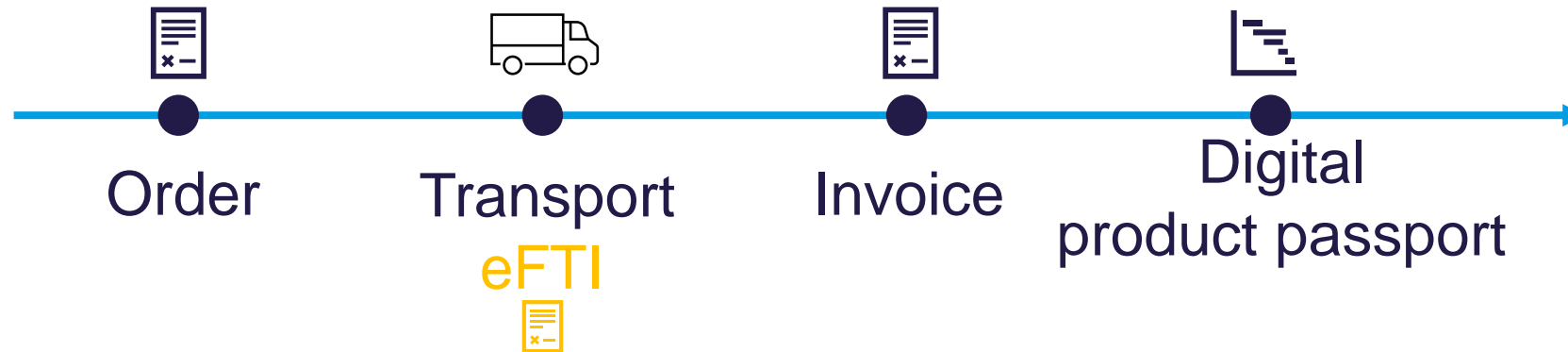
eFTI

Most of eFTI information is from order and invoicing needs waybills to accept invoice.

In Finland, we are piloting this and discovering its value, especially if eFTI is integrated into the Real Time Economy, which includes other areas as well.

Piloting eFTI interoperability with other standards

IATA
One Record
eAWB

eCMR
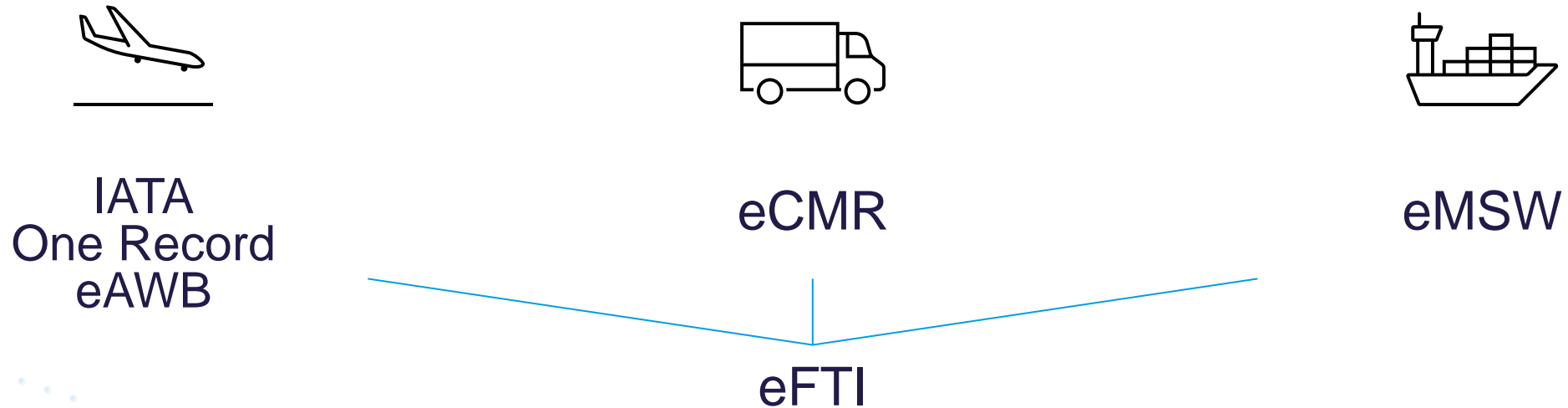
eMSW

eFTI

How eFTI works together with following data models?
How we can help the industry to provide information to authorities by using eFTI?

**In Finland pilots related to IATA One Rocord and eMSW are planned.
Other eFTI4Eu members have planned multible pilots with eCMR.**

Piloting with authorities using data from platforms

To provide practical information to authorities, it is important to do piloting with them. During pilots' authorities get understanding of available data and use cases and see how to utilize eFTI in future. It is also valuable to pilot with platform operators and authorities.

Estonia has made an early pilot with six platforms, eFTI Gate and authorities where main point was to show data flow in practice from platform to authority.

Why I need to be interested about eFTI?

- There will be a new market for eFTI platform providers.
- eFTI will bring benefits for companies.

What I need to know on a technical level?

- Interface of that eFTI Gate on which you like to communicate
- Data model
- Requirements from EU Comission which will be published later

What kind of business I can do with eFTI?

- What kind of platform you will use / develop
- There are also other parties than authorities who need the same information. Can you create additonal serices for that between B2B market?

Thanks!

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