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**E-FREIGHT**  
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# e-freight fundamentals

March 2012

# e-freight fundamentals (1/3)

- e-freight is about building a paper free air cargo supply chain
- It includes a set of business processes and standards that allow to remove a set of documents from the process of shipping air cargo from origin to destination
- Documents are replaced with the exchange of electronic data

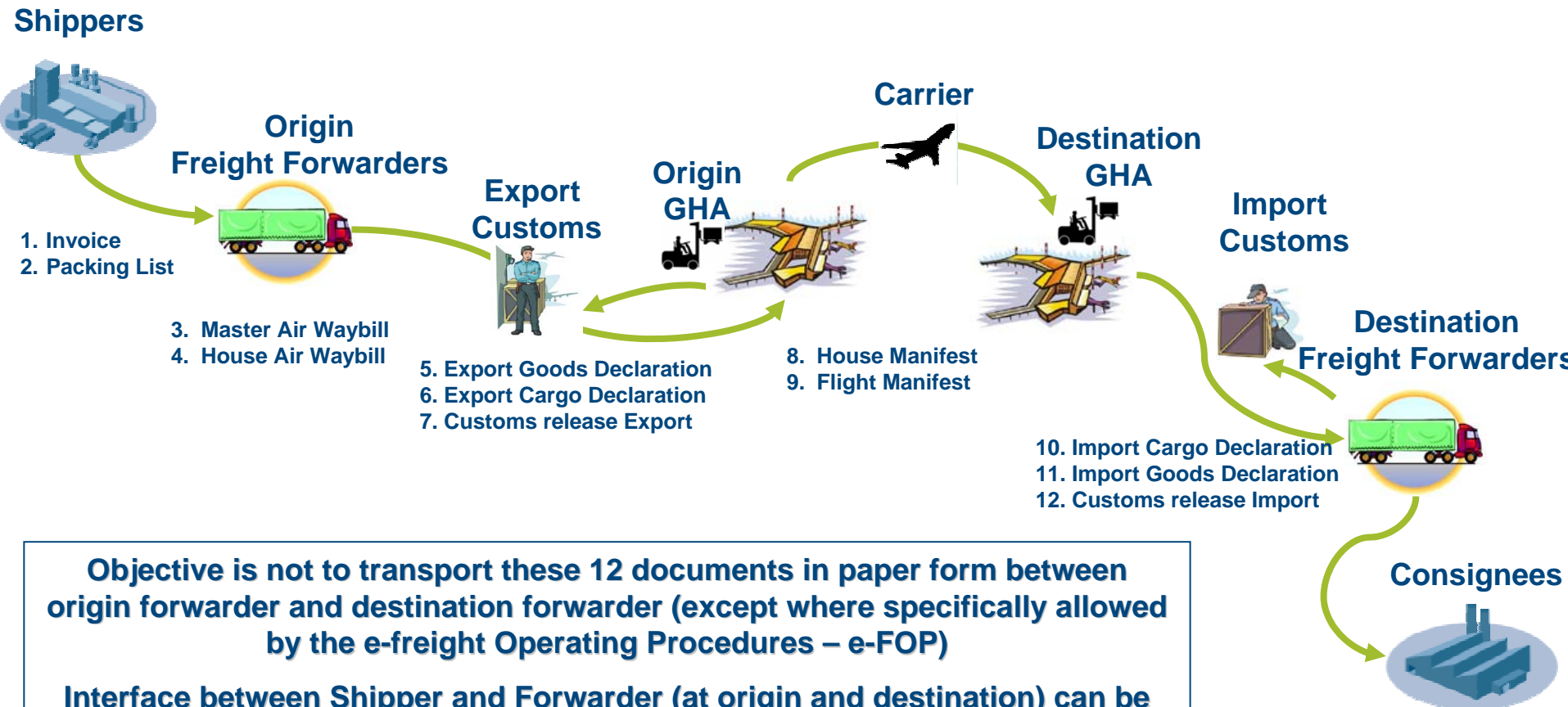
## e-freight fundamentals (2/3)

- The e-freight project sets the locations where those electronic standards can be used based on:
  - Local regulations,
  - e-customs programs in place,
  - Support from relevant authorities and from industry stakeholders
  
- The e-freight project drives adoption of those standards by industry participants via targeted change management initiatives

## e-freight fundamentals (3/3)

- e-Doc standards used as part of e-freight rely on use of EDI (Cargo-IMP or XML) or scanned images (for some documents)
- e-freight uses the existing air cargo industry messaging infrastructure. Participants must acquire technology capabilities to connect to their partners or use tools provided by their partners or 3<sup>rd</sup> party providers (such as web portals)

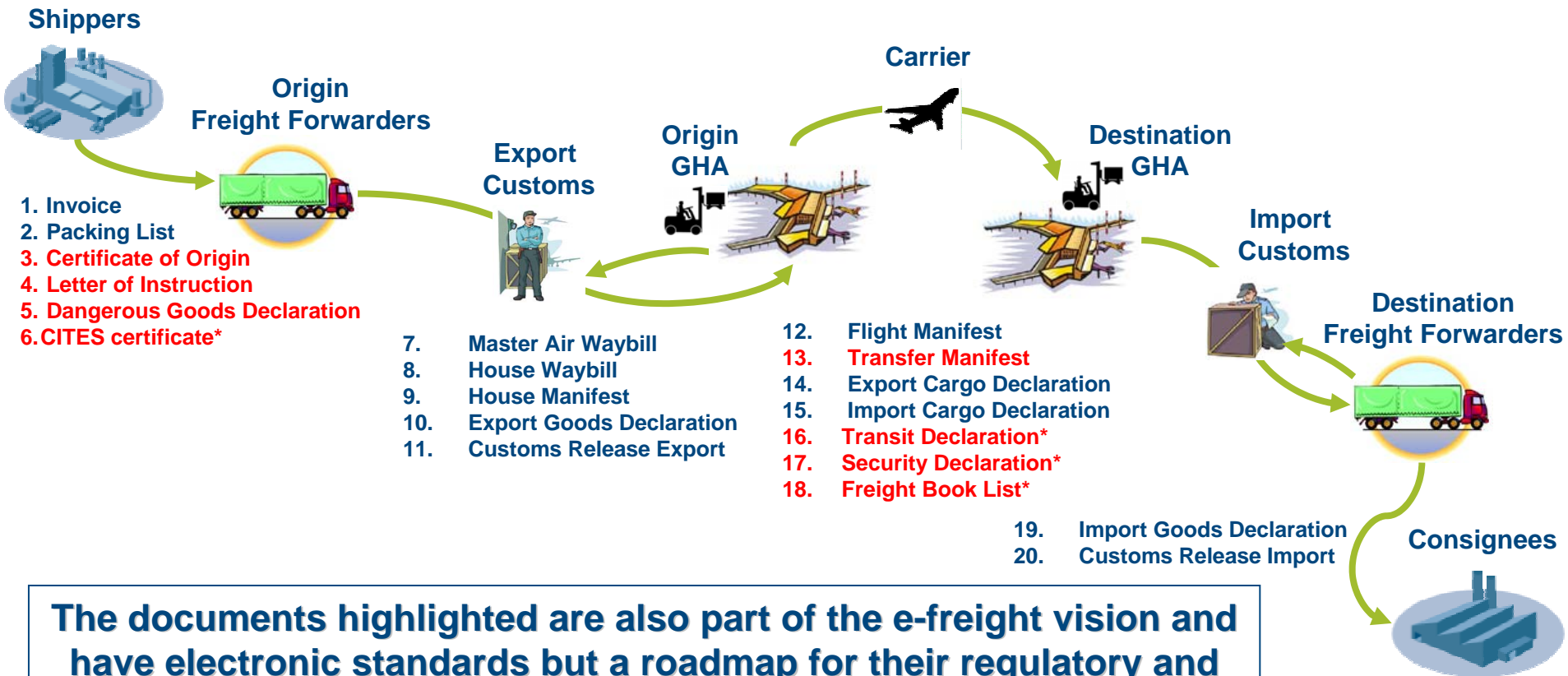
# Scope e-freight (12 core documents)



**Objective is not to transport these 12 documents in paper form between origin forwarder and destination forwarder (except where specifically allowed by the e-freight Operating Procedures – e-FOP)**

**Interface between Shipper and Forwarder (at origin and destination) can be paper or electronic**

# Scope e-freight (8 optional documents)



The documents highlighted are also part of the e-freight vision and have electronic standards but a roadmap for their regulatory and industry adoption has not yet been fully developed

# e-freight: Why do it?

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**Cost:**

Eliminate paper handling and processing cost (eliminates data re-capture)

**Time:**

Reduced freight “wait time”

**Visibility:**

Quality electronic messaging for tracking status of freight

**Quality:**

Unified Quality Management Standards

**Sustainability:**

Contribute to environment by reducing paper consumption

# e-freight - Status – end Dec 2011

42

Locations  
LIVE

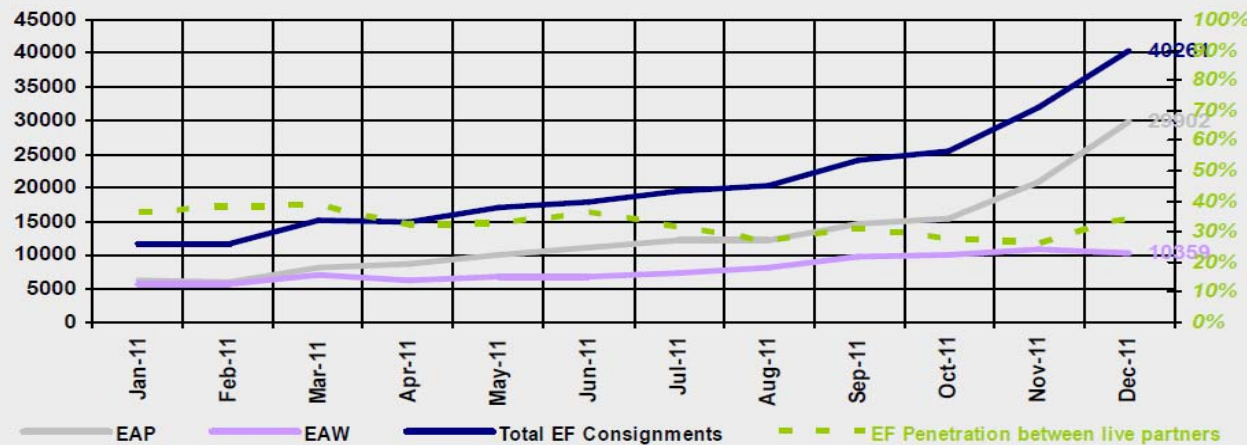
109

Major Airports  
LIVE

20

Standards  
Developed

Monthly EF Volume (last 12 months)



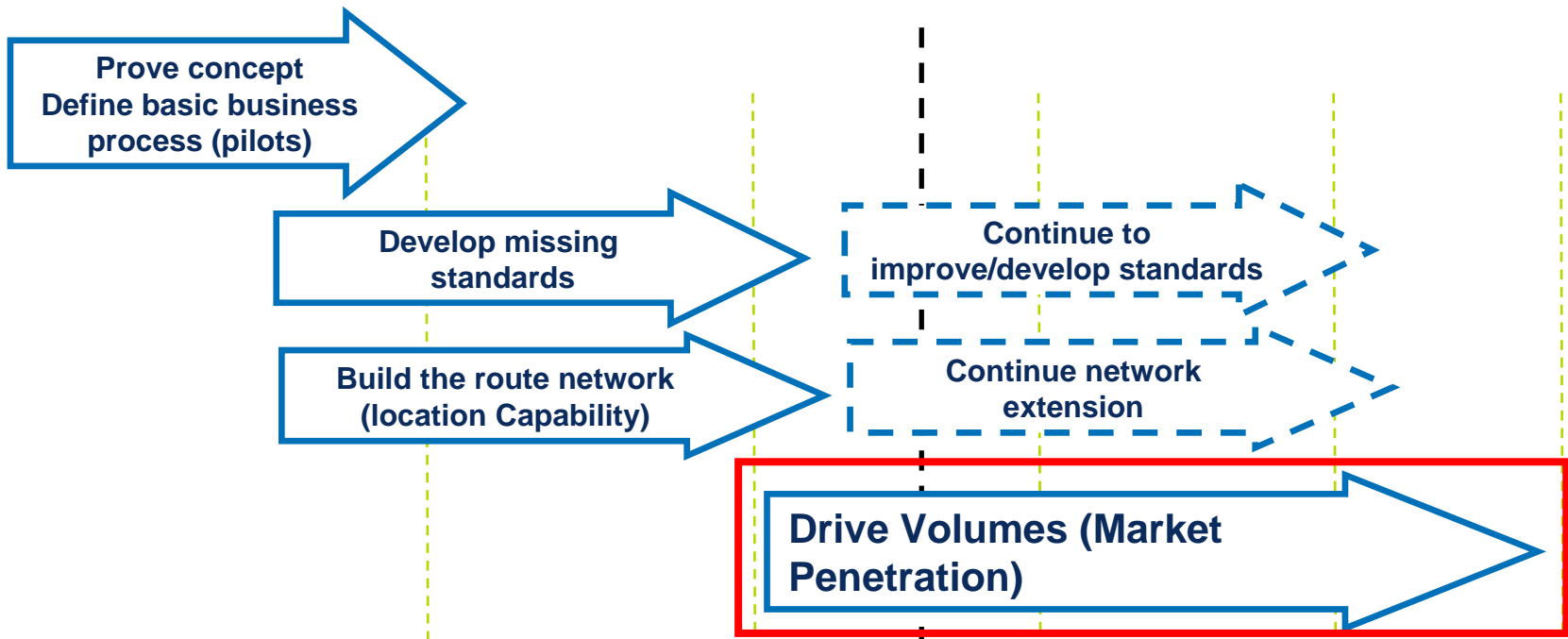
EAP: e-freight consignments with accompanying documents (other than the 12 core documents in scope)  
EAW: e-freight consignments with no accompanying documents

↑Overall e-freight penetration reached 11.14% on trade lanes that were live at the end of 2010.

↑Graphic figures are based on December 2011 data.

# e-freight development life cycle

2006 2007 2008 2009 2010 2011 2012 2013 2014 2015



e-freight  
Global market  
penetration

0%

~2%

100%\*

\*where feasible

# e-freight priorities 2012



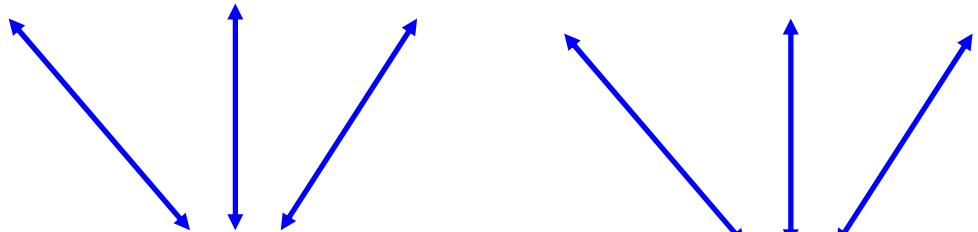
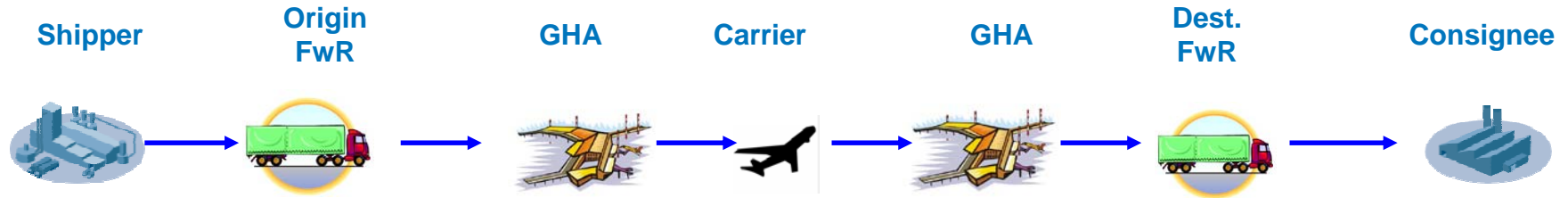
- **Elevate e-freight to industry priority** via Global Air Cargo Advisory Group (GACAG)
  - GACAG to propose a new roadmap to e-freight with a new set of targets starting in 2013
  - Each GACAG member (including IATA) will have to agree what role they play in the overall scheme and which targets will drive
  
- **Increase penetration on the core airline document (e-AWB)** – Target of 15%
  
- **Migrate all e-freight to e-AWB** (mandatory starting Jan 2013)
  
- **Continue to grow the e-freight route network** (new locations) with BRIC as overall priority)
  
- **Increase e-freight airline coverage in live locations** (focus on major airports)

# What is required for e-freight to work?

# e-freight requires three components to work in the supply chain

- 1) Electronic customs environment
- 2) Electronic communication between forwarder, airline and ground handler
- 3) Electronic communication between forwarder at origin and forwarder/consignee at destination

# 1) Electronic customs environment



  
Export  
Customs

  
Import  
Customs

## 1. Electronic Customs environment

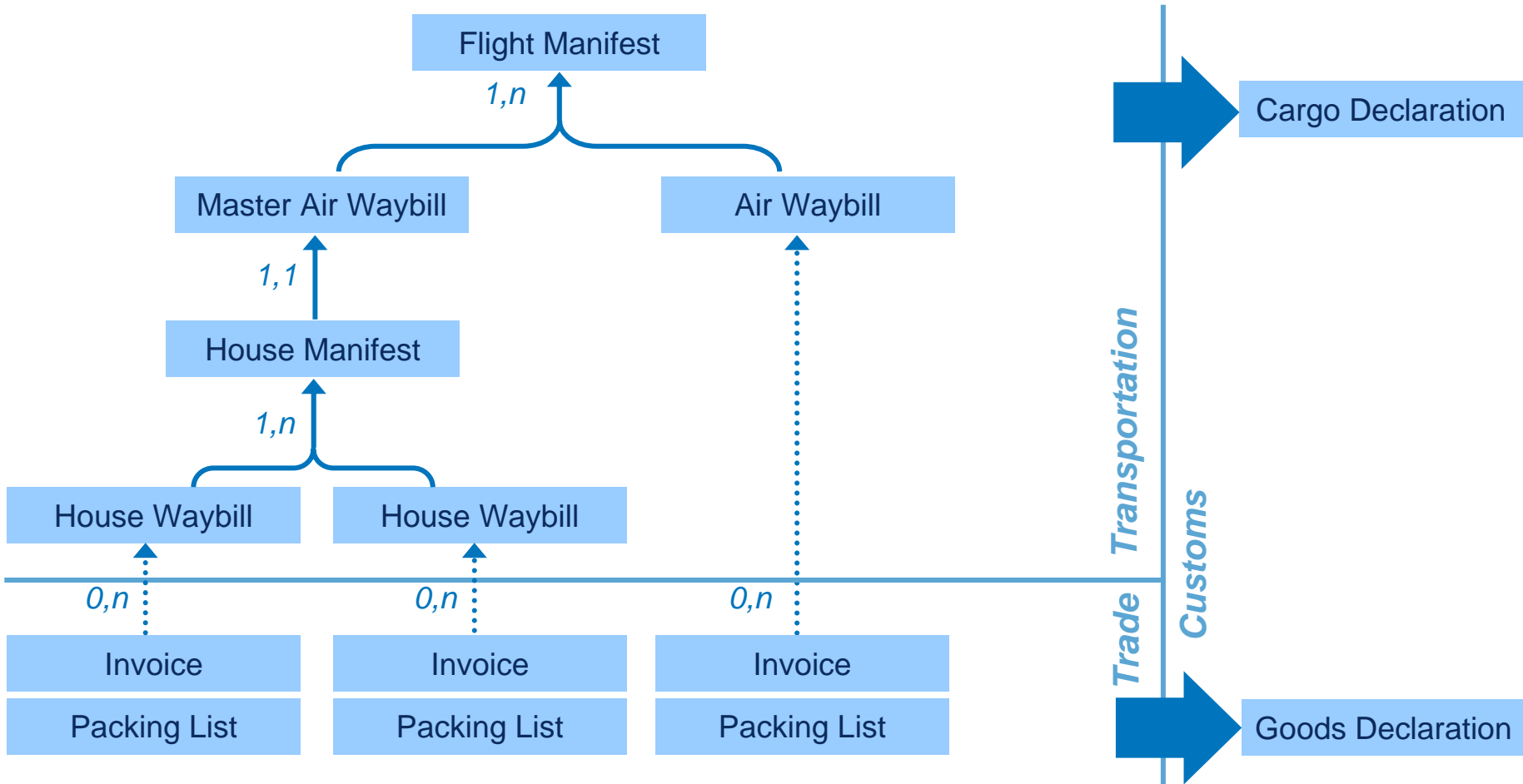
- Ability to make customs declarations electronically (export and import)
- No requirement to show original paper documents for invoice and packing lists during or post transit
- Electronic docs (invoice/packing list) must be accepted in electronic format, or printed copy

# Key electronic customs requirements for e-freight

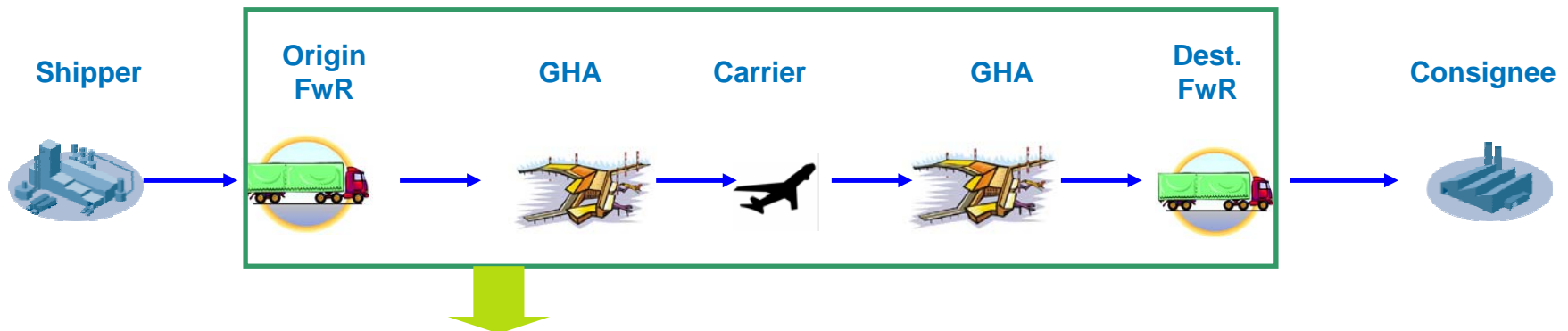
## Customs accepts:

- Electronic as an alternative to paper-based requirements
- Goods & cargo declarations exchanged electronically
- Release & control notification exchanged electronically
- Supporting documents exchanged electronically
- Messages & supporting documents archived electronically
- Paper by exceptions e.g. for examination
- Paper printout of electronic records instead of paper originals – at least for invoice and packing list, master air waybill and house air waybill (including for post-flight audits)

**e-freight trade & transport  
messages should “feed”  
Customs messages, reducing  
manual entries & increasing  
quality**



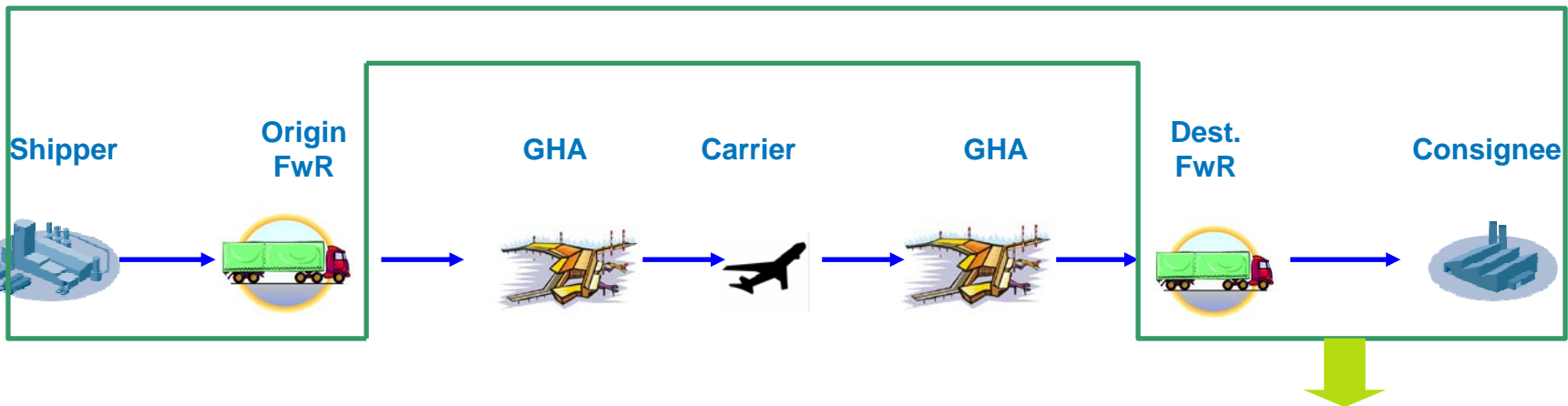
## 2) Electronic communication between forwarder, airline and handler



### 2. Electronic communication between FF-Airline-GHA

- Ability to communicate FWB and FHL information between FF-Airline-GHA systems (or capture information on airline web portal)
- e-AWB agreements signed and implemented (currently optional for e-freight but mandatory as of Jan 2013)
- Procedures defined between FF-GHA-Airline to accept freight at acceptance counter (origin) and for freight delivery (destination) without original paper docs (may require use of a shippers delivery note or warehouse receipt)

## 3) Electronic communication between origin and destination forwarder/consignee



### 3. Electronic communication between origin and destination forwarder/consignee

- Ability of origin forwarder to communicate key documents to destination forwarder, broker and shipper electronically (house air waybill, invoice, packing list)
- Ability to archive documents electronically (e-Archiving)
- Once the above are in place, the forwarder does not need to provide these documents to the airline for carriage to destination (Elimination of the document pouch for general cargo documents, reduced pouch for other cargo that needs special cargo docs in the pouch)

# How the 12 core e-freight documents are communicated electronically - Summary



## *Trade documents*

Sent electronically by origin shippers and/or freight forwarders to destination either using agreed EDI standards (XML) or imaged (scanned) documents – similar to what is done today in ‘pre-alerts’

Invoice

Packing List

## *Transport documents*

Replaced with IATA Cargo-IMP electronic messages (FWB, FHL, FFM, FSU), already in use by many airlines and forwarders or XML equivalents now also available)

Flight Manifest

Air Waybill

House Manifest

House Waybill

## *Customs documents*

e-freight is only implemented in locations where import and export declarations and release programs are in place and where customs agree they do not need original paper documents

Export Goods Declaration  
Export Cargo Declaration  
Export Release

Import Goods Declaration  
Import Cargo Declaration  
Import Release

# How are e-freight shipments tracked?

# Tracking e-freight shipments (1/2)

- e-freight shipments are identified by two codes (EAW or EAP) which must appear in the FWB sent by the freight forwarder to the airline as a Special Handling Code
- These codes are reported by airlines via the monthly Message Improvement Programme (MIP) reports they provide IATA
- EAW is for e-freight shipments with no pouch. Its definition (per CIMP manual) is: **'e-freight consignment with no accompanying documents'**
- EAP is for e-freight shipments with no in scope documents transported but where a document pouch still needs to be carried (for example, to transport a certificate of origin). Its CIMP definition is: **'e-freight consignment with accompanying documents'**
- Until end 2012, it is allowed to do e-freight without the e-AWB. A paper air waybill may still be used at origin and handed over by the origin freight forwarder to the airline. But it should not be transported with the freight. Starting in January 2013, all e-freight shipments must include the e-AWB.

## Tracking e-freight shipments (2/2)

- The ECC code is for e-AWB shipments where no paper AWB i.e. no paper contract is used. Its exact definition (per CIMP manual) is: **‘Consignment established with an electronically concluded cargo contract with no accompanying paper air waybill’**
- It is an optional code, not mandatory (i.e. airlines and forwarders doing e-AWB can opt not to use the code at all, it is their decision)

# Quick guide: When to use ECC, EAW and EAP codes

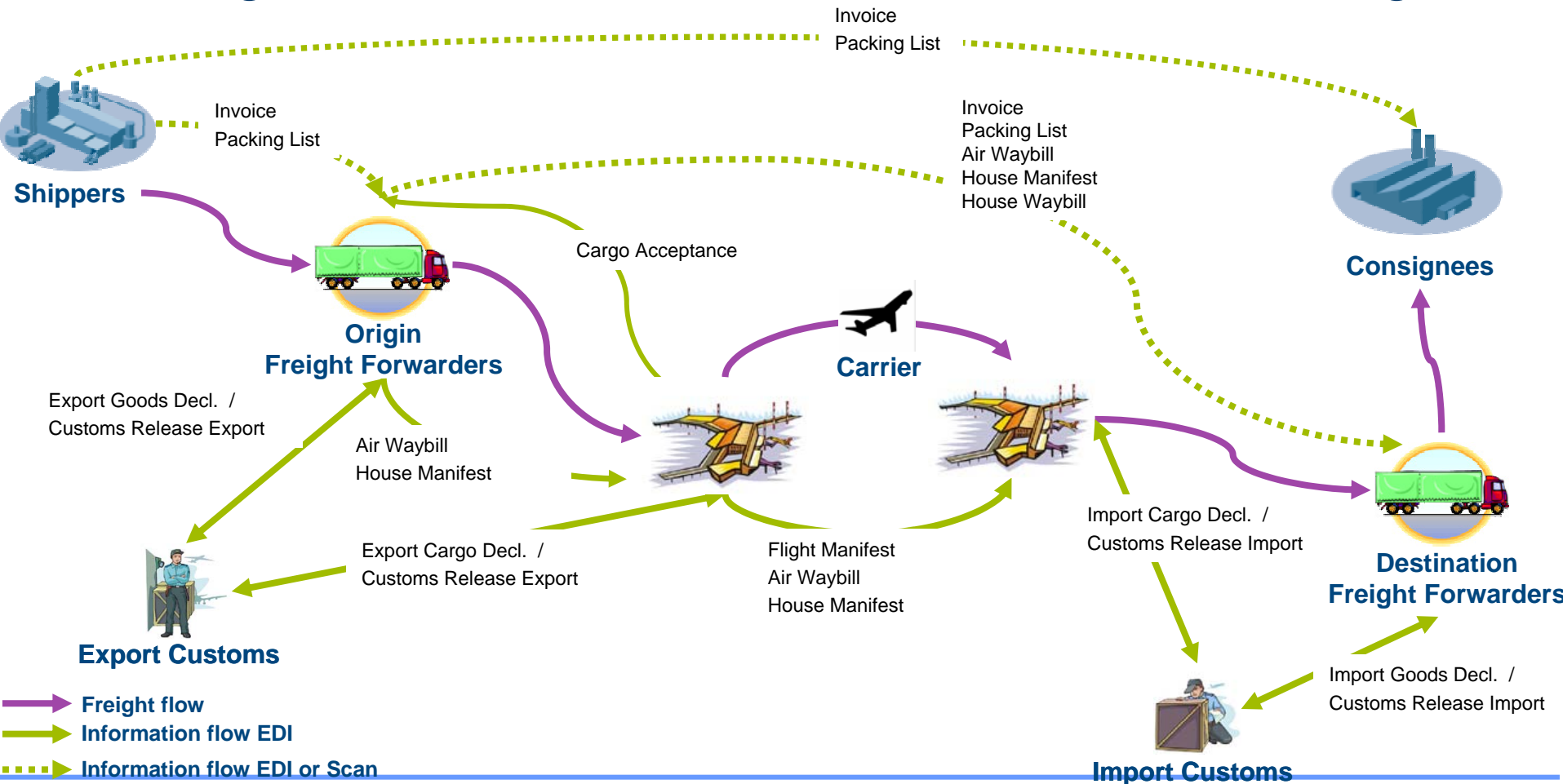
Type of shipment	1. Electronic Customs	2. Communication between airline-forwarder-handler			3. Communication between origin and destination forwarder/consignee		Special Handling Code
	Electronic Customs procedures in place at origin and destination	EDI Agreement exists between FF and Airline	FWB & FSU exchanged between FF and Airline	Paper AWB handed over from FF to Airline (or GHA)	Invoice & Packing List can be included in pouch to be transported to destination	Are other documents (not invoice or packing list) in pouch to be transported to destination?	
<b><u>e-AWB only</u></b>	Indifferent	YES	YES	NO	YES	Indifferent	<b>ECC or no code*</b>
<b><u>e-freight with e-AWB</u></b> (mandatory for all e-freight starting Jan 2013)	YES	YES	YES	NO	NO	NO → YES →	<b>EAW + ECC or only EAW*</b> <b>EAP + ECC or only EAP*</b>
<b><u>e-freight without e-AWB</u></b> (only allowed until Dec 2012)	YES	NO	YES	YES	NO	NO → YES →	<b>EAW</b> <b>EAP</b>

\* When implementing e-AWB, use of ECC code is not mandatory (bilateral decision between the parties)

# Appendix

- e-freight: **the end-to-end data flow** for General Cargo
- Where to **find out more** on e-freight

# e-freight end-to-end data flow – for General Cargo



# Find out more on e-freight...

...by visiting our **webpage**

**<http://www.iata.org/whatwedo/cargo/efreight/Pages/index.aspx>**

- e-freight Fundamentals
- e-freight Self Assessment Questionnaire
- e-freight Project Status and Scorecards
- e-freight Handbook
- e-freight Business Process and Standards
- Message Improvement Program (MIP)
- Technology Assessment for IT Vendors
- USA e-freight updates
- Presentations, Glossary of terms and more

...by writing to us at: **[e-freight@iata.org](mailto:e-freight@iata.org)**