

Strategic Trends in Air Cargo

Regional Symposium in Brazil

This two-day symposium is a comprehensive event with both informational and practical components for executives in civil aviation administrations, airlines, logistics companies, aviation training centres and for industry experts and support personnel with an interest in the trends and strategies for the air cargo market. The event will be conducted in English, Spanish and Portuguese with interpretation/translation as appropriate.

E-freight and e-AWB as a part of E-commerce

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- Board Member of TIACA

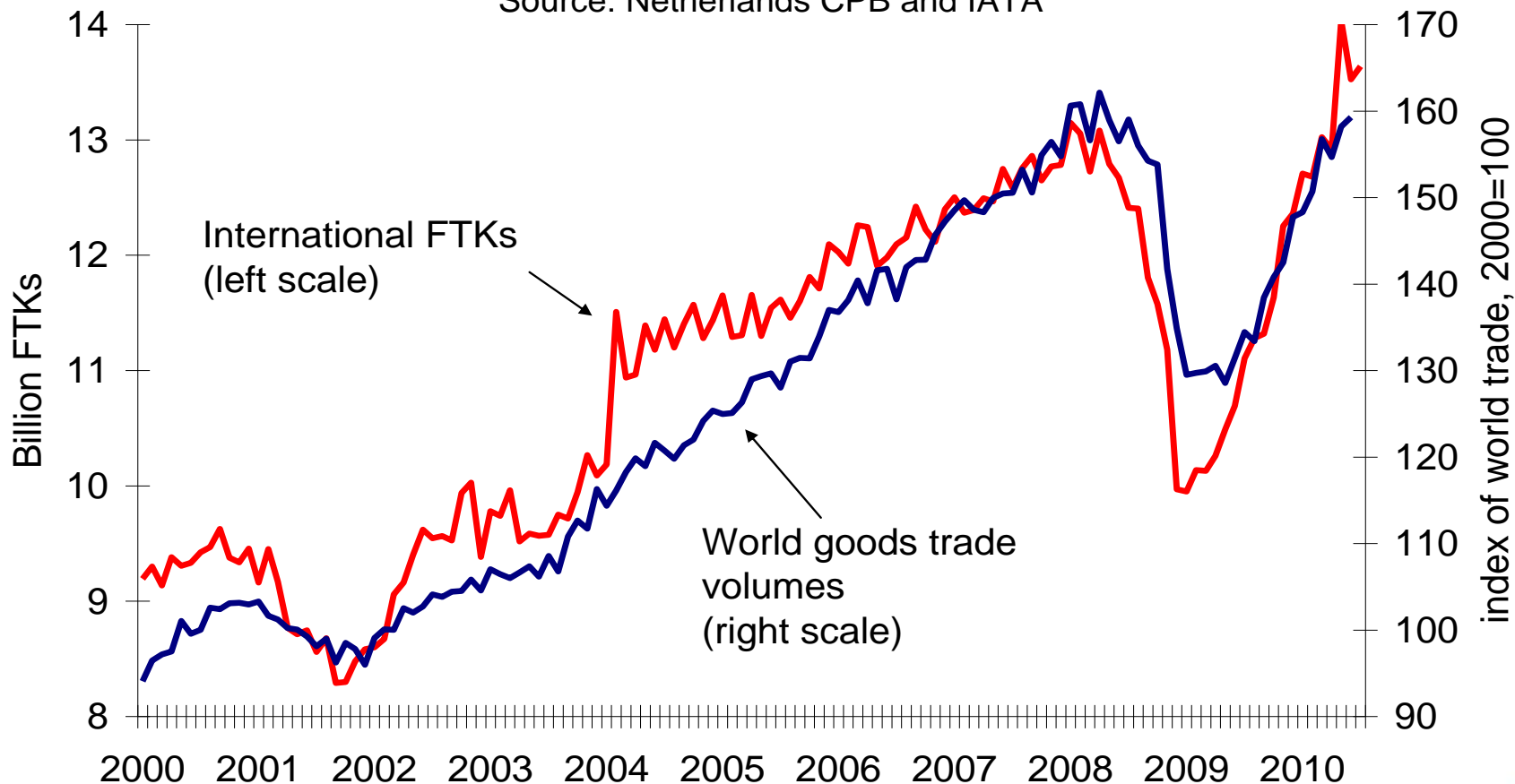
Is really E-freight a part of E-commerce ???



Freight is a barometer of state of the commerce

World trade in goods and air FTKs

Source: Netherlands CPB and IATA

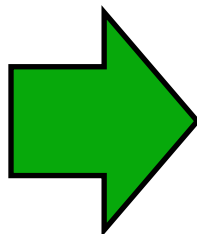
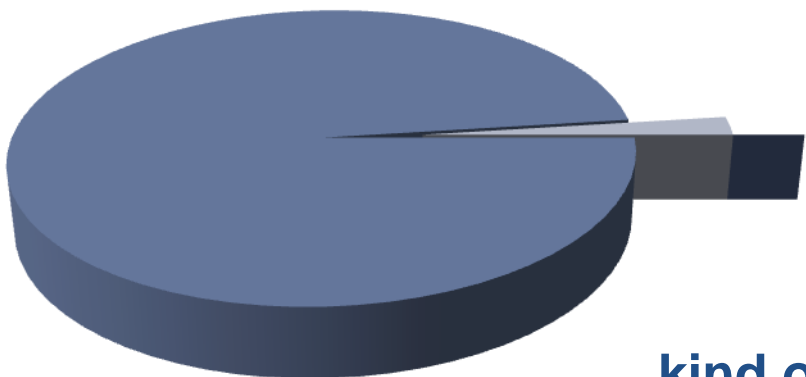


Air cargo is only 0.5% in the global volume,
but 35% in terms of its value



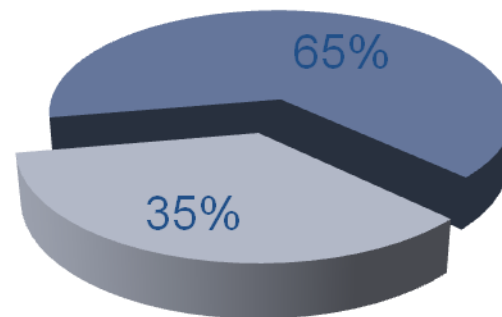
Cargo volume

■ Global Cargo ■ Air cargo



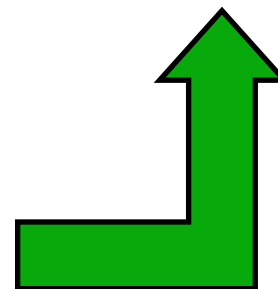
Cargo value

■ Global cargo volume
■ Air cargo volume



kind of commodities:

perishables
live stock
valuable cargo
electronics
urgent
just-in-time (for assembly lines)
project cargo
unique cargo





iPhone

Manufacturing & Distribution Process Demonstrates importance of good logistics and the Utility of Air Cargo to World Economies

iPhone Components & Source Countries

LCD Display



Flash Memory Chip

Applications Processor

DRAM Memory

Bluetooth, GPS Chips



Radio Frequency Memory

Touch Screen Control, Wi-Fi

Receiver/Transceiver

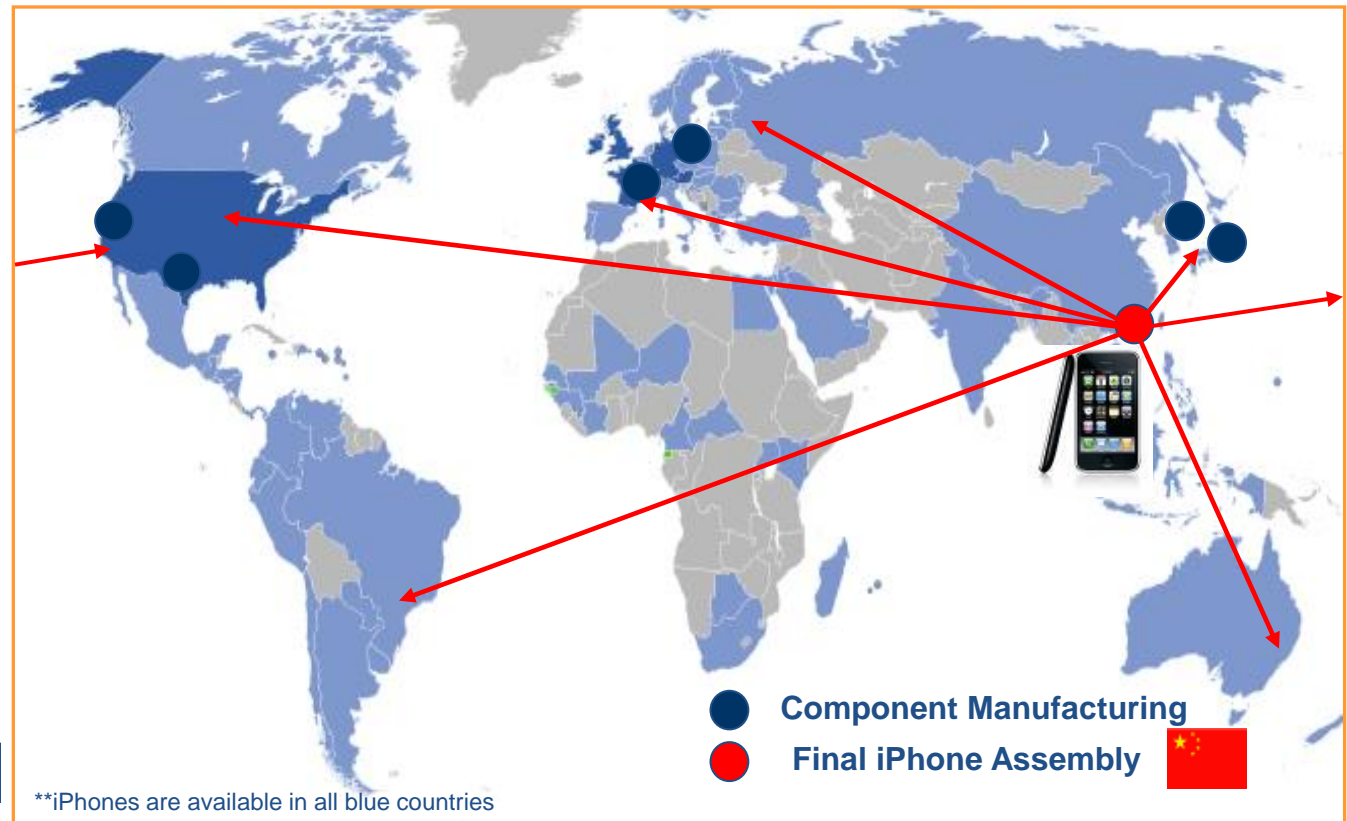


Power Management

Accelerator/Gyroscope



Compass





The industry is ready for “e”

WCO, FIATA, ICAO, TIACA, IATA, IT providers ... worked together toward the same vision to ensure a paper-free infrastructure is available.

20 multimodal standard electronic messages available

300+ airports in **31** countries and **4** domestic markets ready

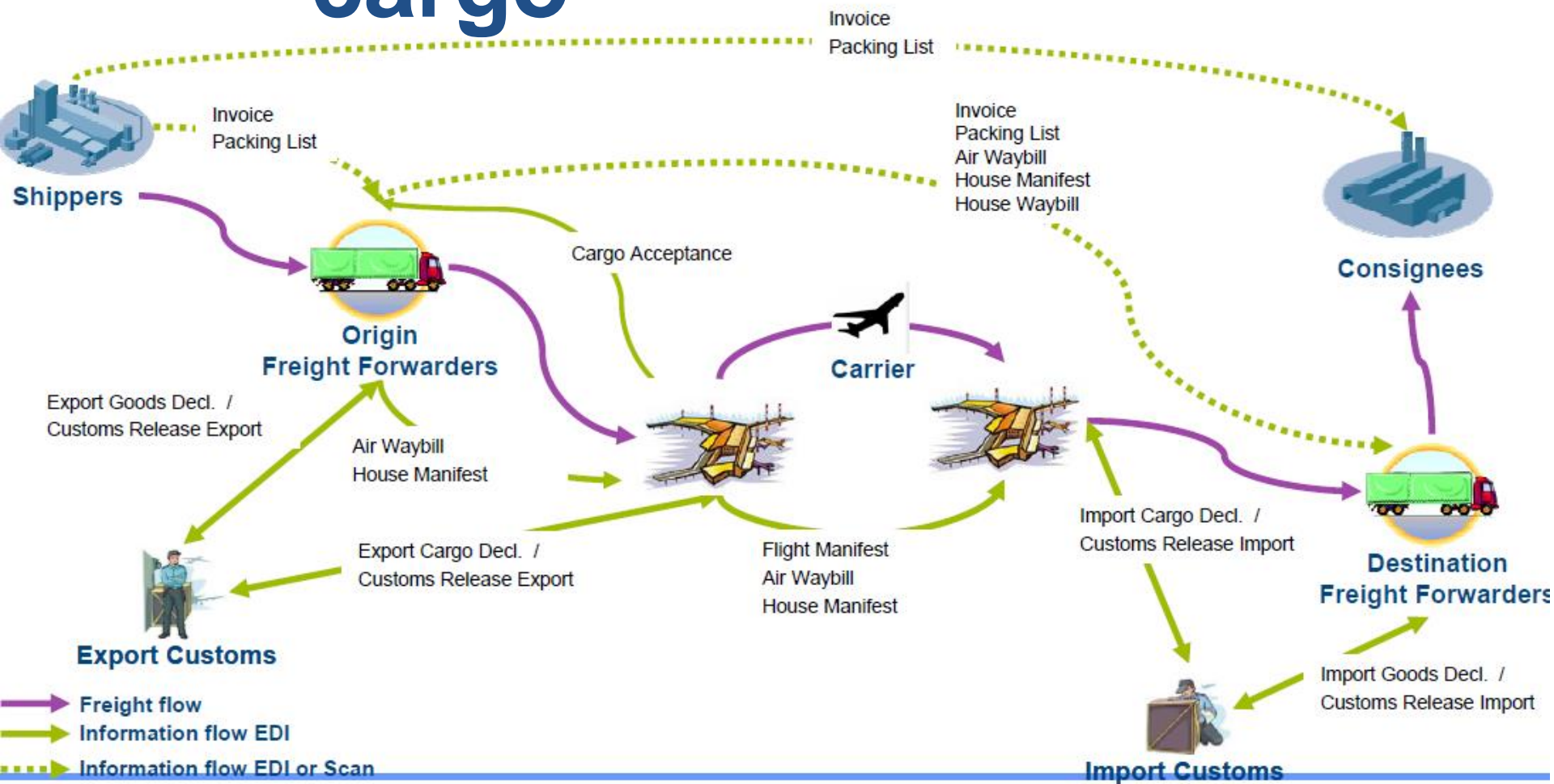




E-Freight fundamentals

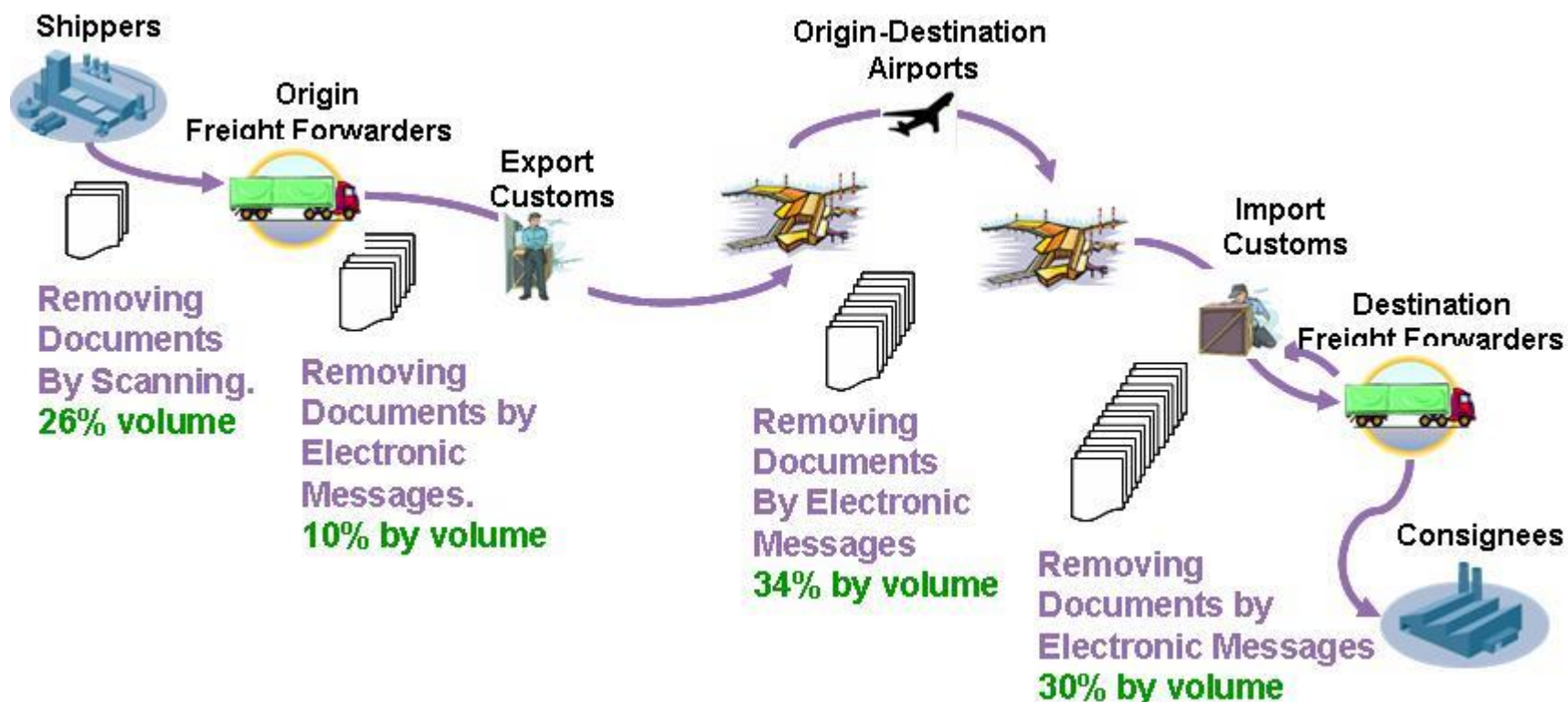
- **e-Dock standards used as part of e-freight rely on use of EDI (Cargo-IMP or XML) or scanned images (for some documents)**
- **e-freight uses the existing air cargo industry messaging infrastructure.**
- **Participants must acquire technology capabilities or use tools provided by 3rd party providers**
- **Acknowledgement of IATA's role and data !**

e-freight end-to-end data flow –for general cargo



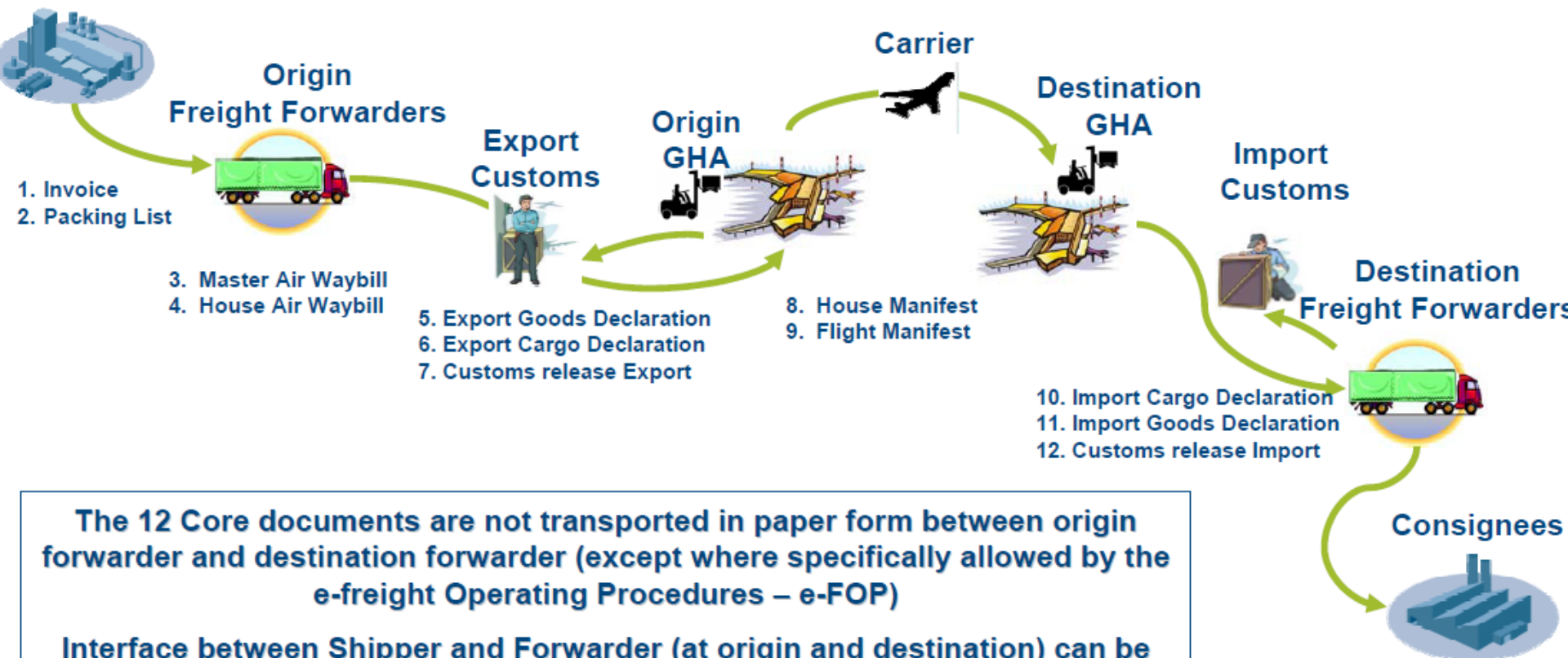


E-freight: what happens with the documents



Scope e-freight (12 core documents)

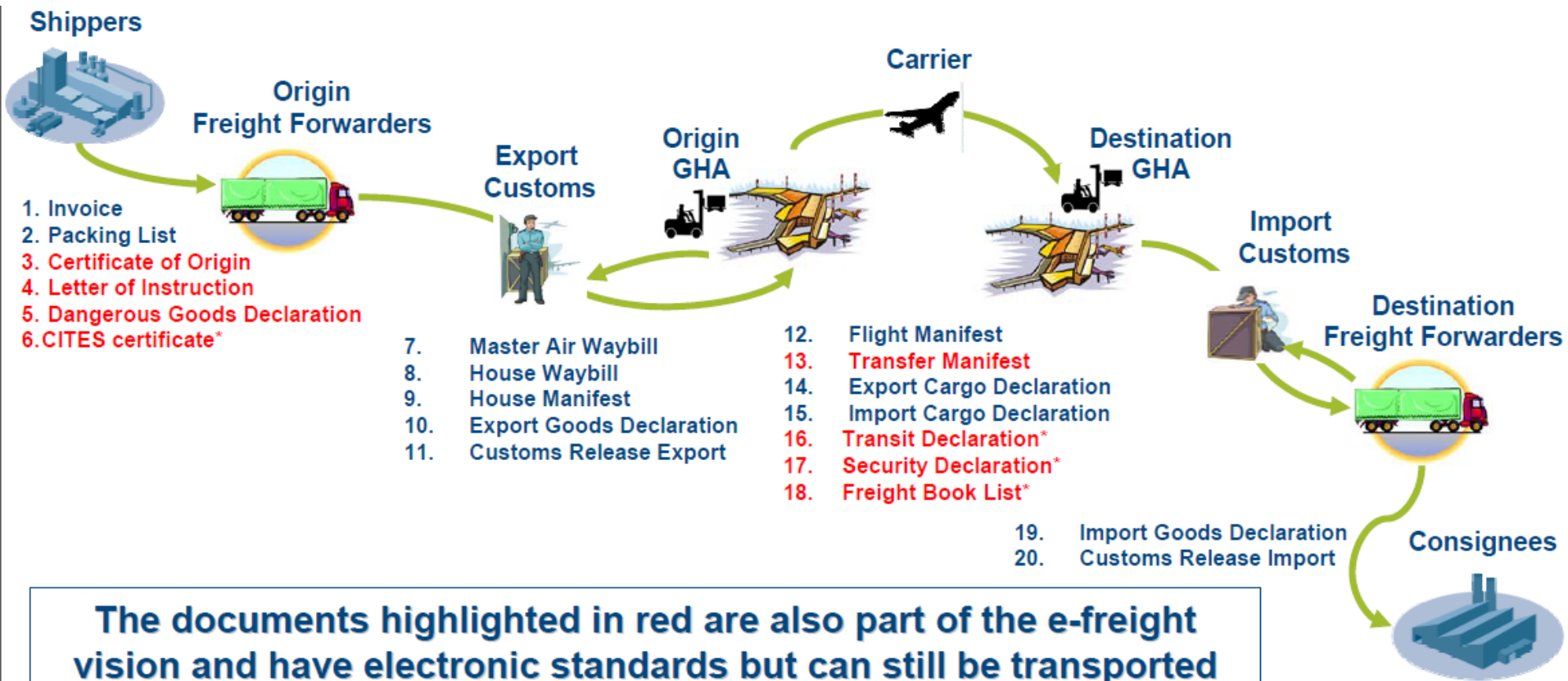
Shippers



The 12 Core documents are not transported 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 in red are also part of the e-freight vision and have electronic standards but can still be transported as paper originals in e-freight shipments today – they are optional

e-freight: Why do it?



Take
the paper
OUT >>



E-FREIGHT
SIMPLE > ELECTRONIC > PAPER FREE

- **Cost:**
Eliminate paper handling and processing cost (eliminates data re-capture)
- **Time:**
Reduced freight “wait time”
- **Quality:**
Unified Quality Management Standards
- **Visibility:**
Quality electronic messaging for tracking status of freight
- **Sustainability:**
Contribute to environment by reducing paper consumption





Improves logistics

World Bank Logistics Performance Index 2010 - 2012

State	2010 rank	2012 rank
Germany	1	4
Singapore	2	1
South Africa	23	23
China	27	26
Brazil	41	45
India	47	46
Russia	94	95

Busiest Air Cargo Airports in the World

CIS

1. Moscow Domodedova (115)	128,385
2. Moscow Sheremetyevo (119)	118,353
3. Tashkent (231)	35,791
4. Moscow Vnukovo (242)	32,427
5. Kiev Borispol (265)	27,164

Asia

1. Hong Kong (2)	3,385,313
2. Shanghai (3)	2,543,394
3. Seoul-Incheon (4)	2,313,001
4. Tokyo-Narita (10)	1,851,972
5. Singapore (11)	1,660,724
6. Beijing (14)	1,475,649
7. Taipei (15)	1,358,304
8. Bangkok (20)	1,045,194
9. Guangzhou (21)	955,270
10. Tokyo-Haneda (24)	779,118
11. Osaka (26)	608,876
12. Shenzhen (27)	605,469
13. Kuala Lumpur (28)	601,620
14. Jakarta (39)	446,245
15. Shanghai-SHA (41)	439,072

Middle East

1. Dubai (8)	1,927,520
2. Doha (34)	511,983
3. Sharjah (43)	421,395
4. Abu Dhabi (48)	382,523
5. Bahrain (55)	342,734

SW Asia

1. Mumbai (30)	566,368
2. Delhi (38)	473,218
3. Chennai (59)	306,508
4. Bangalore (96)	162,875
5. Dhaka (103)	147,239
6. Karachi (104)	146,674
7. Colombo (107)	141,107
8. Calcutta (133)	102,121
9. Lahore (163)	77,078
10. Hyderabad (183)	64,358

() – World Ranking

USA

1. Memphis (1)	3,697,054
2. Anchorage (6)	1,994,629
3. Louisville (7)	1,949,528
4. Miami (12)	1,557,401
5. Los Angeles (13)	1,509,236
6. New York –JFK (18)	1,144,894
7. Chicago-O'Hare (19)	1,047,917
8. Indianapolis (22)	944,805
9. Newark (23)	779,642
10. Dallas –DFW (29)	578,906
11. Atlanta (31)	563,139
12. Oakland (36)	491,138
13. Philadelphia (42)	433,439
14. San Francisco (45)	408,102
15. Houston – IAH (51)	372,662

Africa

1. Cairo (62)	285,839
2. Nairobi (66)	263,070
3. Johannesburg (70)	252,063
4. Lagos (94)	175,828
5. Luxor (131)	103,541

Latin America

1. Bogota (33)	512,842
2. Sao Paulo Guarulhos (47)	382,722
3. Mexico City (57)	325,452
4. Santiago (69)	255,789
5. Lima (75)	232,374
6. Sao Paulo Viracopos (92)	198,203
7. Buenos Aires (98)	162,745
8. Quito (105)	143,767
9. Manaus (106)	142,623
10. Rio De Janeiro (123)	110,853

Europe

1. Paris-CDG (5)	2,054,515
2. Frankfurt (9)	1,887,686
3. Heathrow (16)	1,349,571
4. Amsterdam (17)	1,317,120
5. Luxembourg (25)	628,667
6. Cologne (32)	552,363
7. Leipzig (35)	507,135
8. Leige (37)	482,118
9. Brussels (44)	411,690
10. Istanbul (49)	381,174

E-freight status 2012

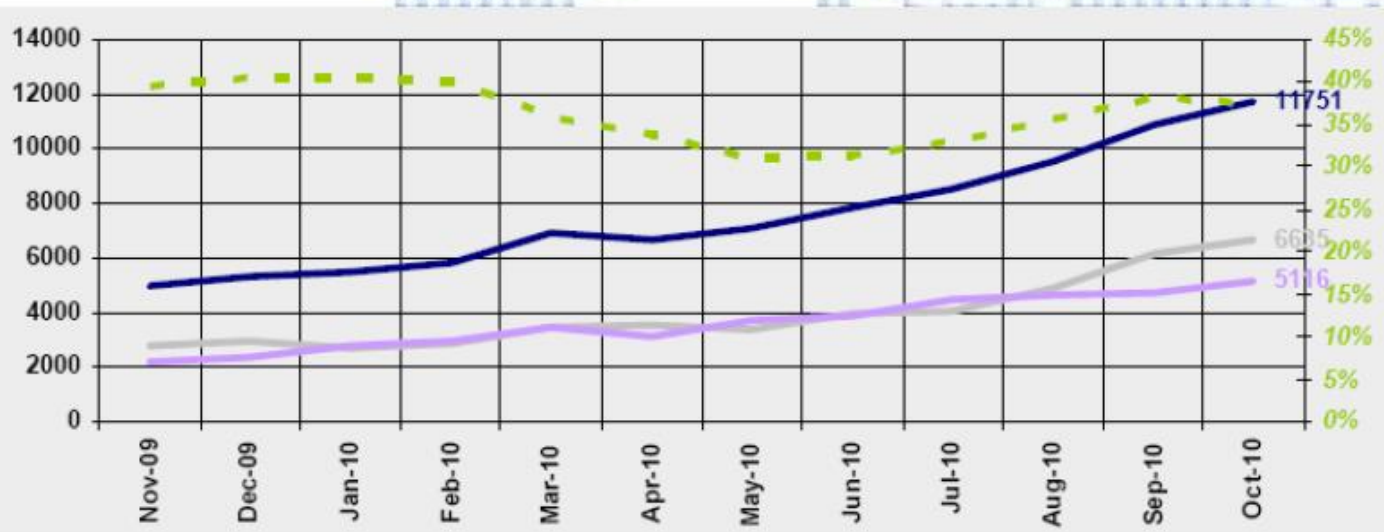
44

Locations
LIVE

104

Major Airports
LIVE

20

Standards
Developed

↑ 54% in volumes
since June 2010

↑ Still just the
beginning: less than
1% global market

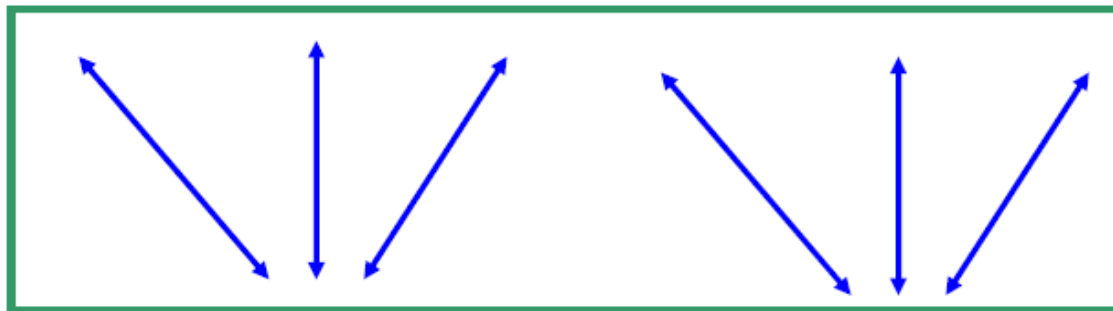
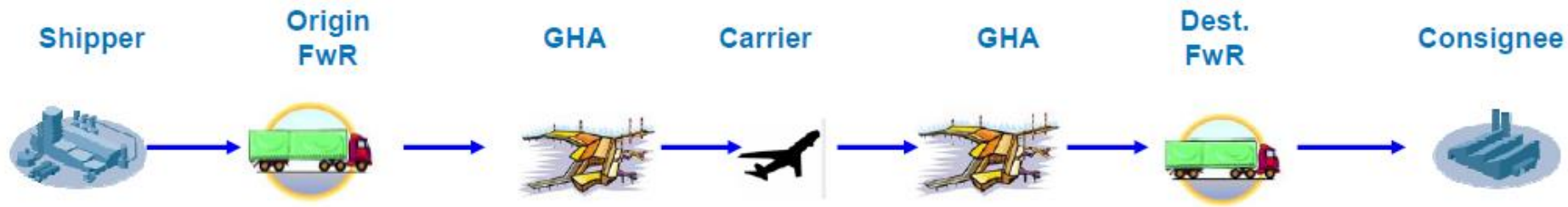


E-freight requires three components to work in the supply chain

- 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**

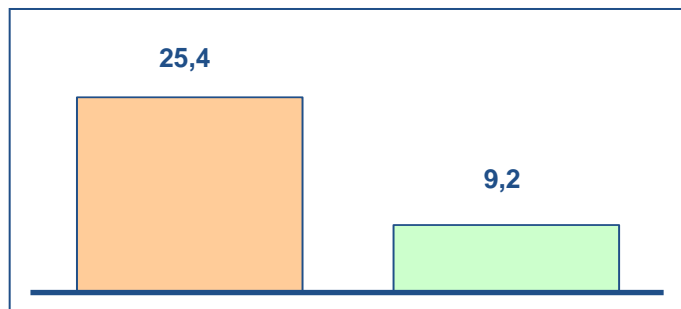
Electronic Customs Environment

- Ability to make customs decls 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



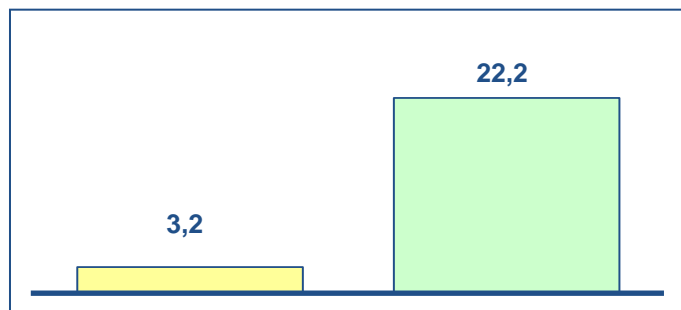
Получение разрешения таможи на выгрузку груза - эксперимент 2009

Средняя задержка начала разгрузки воздушного судна
(минут)



Без подачи Предварительной информации При подаче Предварительной информации

Опережение графика окончания разгрузки воздушного судна
(минут)

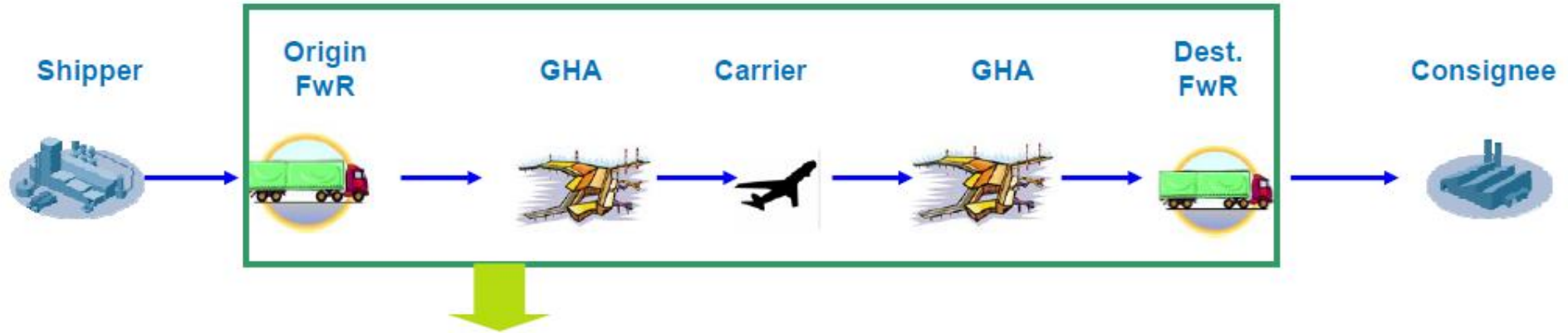


Без подачи Предварительной информации При подаче Предварительной информации

- Всего в ходе исследования были получены данные по 2057 рейсам
- Из них 1519 – с грузом (74%)
- На 700 рейсов было получено предварительное разрешение на выгрузку (46%)
- При получении предварительного разрешения на выгрузку значительно (в 3-7 раз) улучшаются временные показатели начала и окончания разгрузки воздушных судов

При получении предварительного разрешения на выгрузку значительно улучшаются временные показатели начала и окончания разгрузки ВС

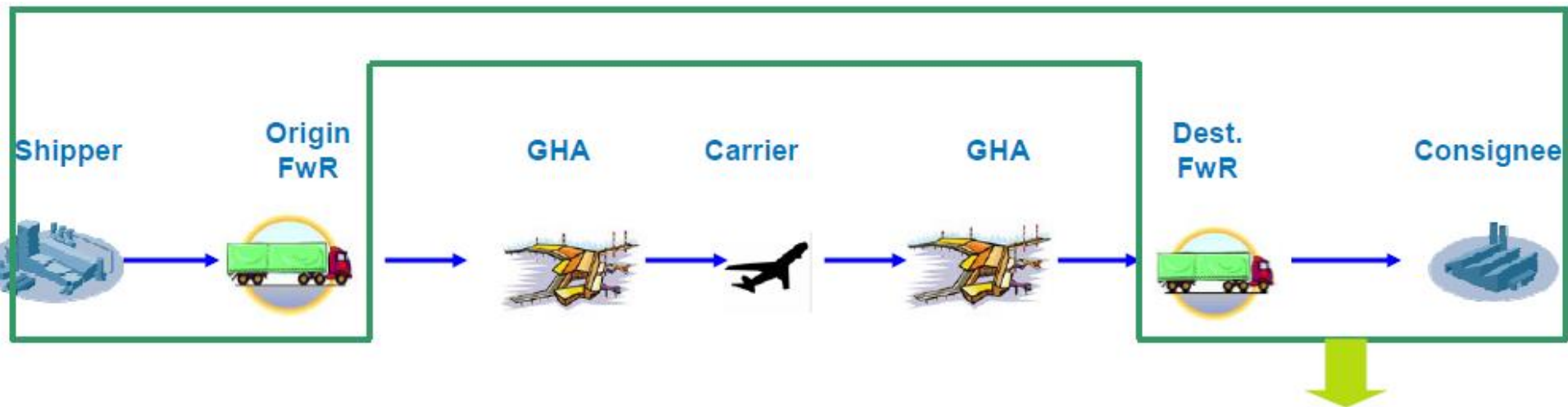
2) Electronic communication between forwarder, airline and handler



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)



What are the key e-freight challenges?



e-freight -Key challenges



Collaboration: Getting an entire supply chain to work together to change the way it operates

e-freight -Key challenges



e-freight -Key challenges



Security putting some new demands on the industry for data

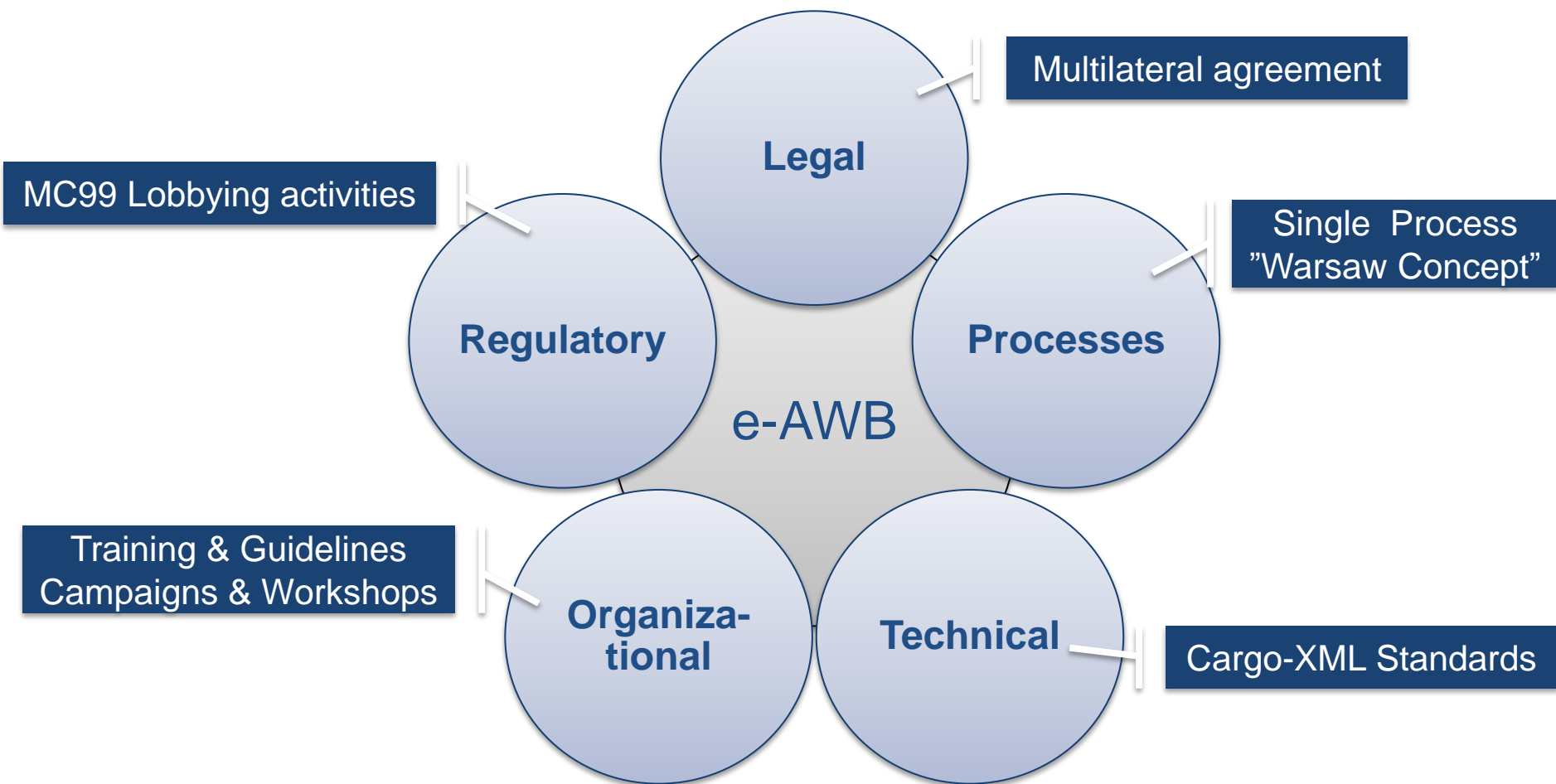


e-freight -Key challenges





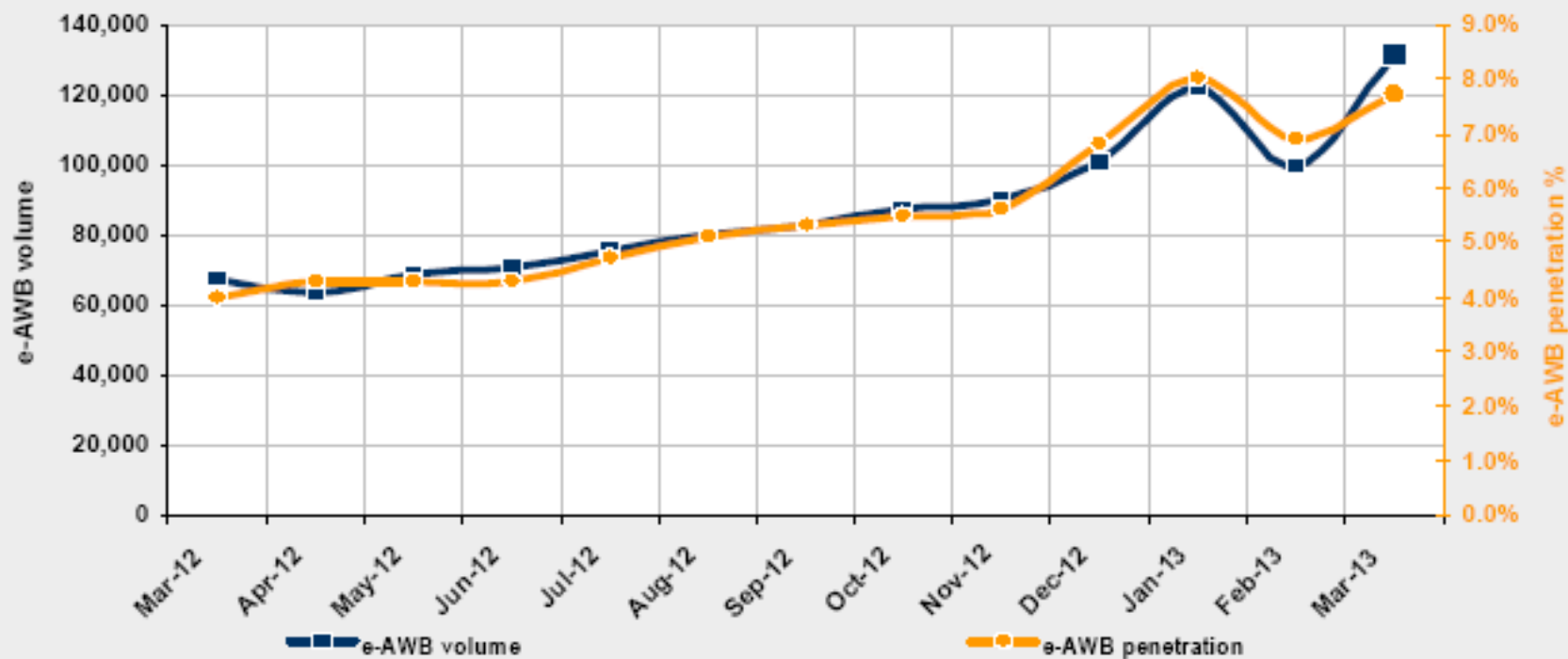
Examples of challenges already addressed



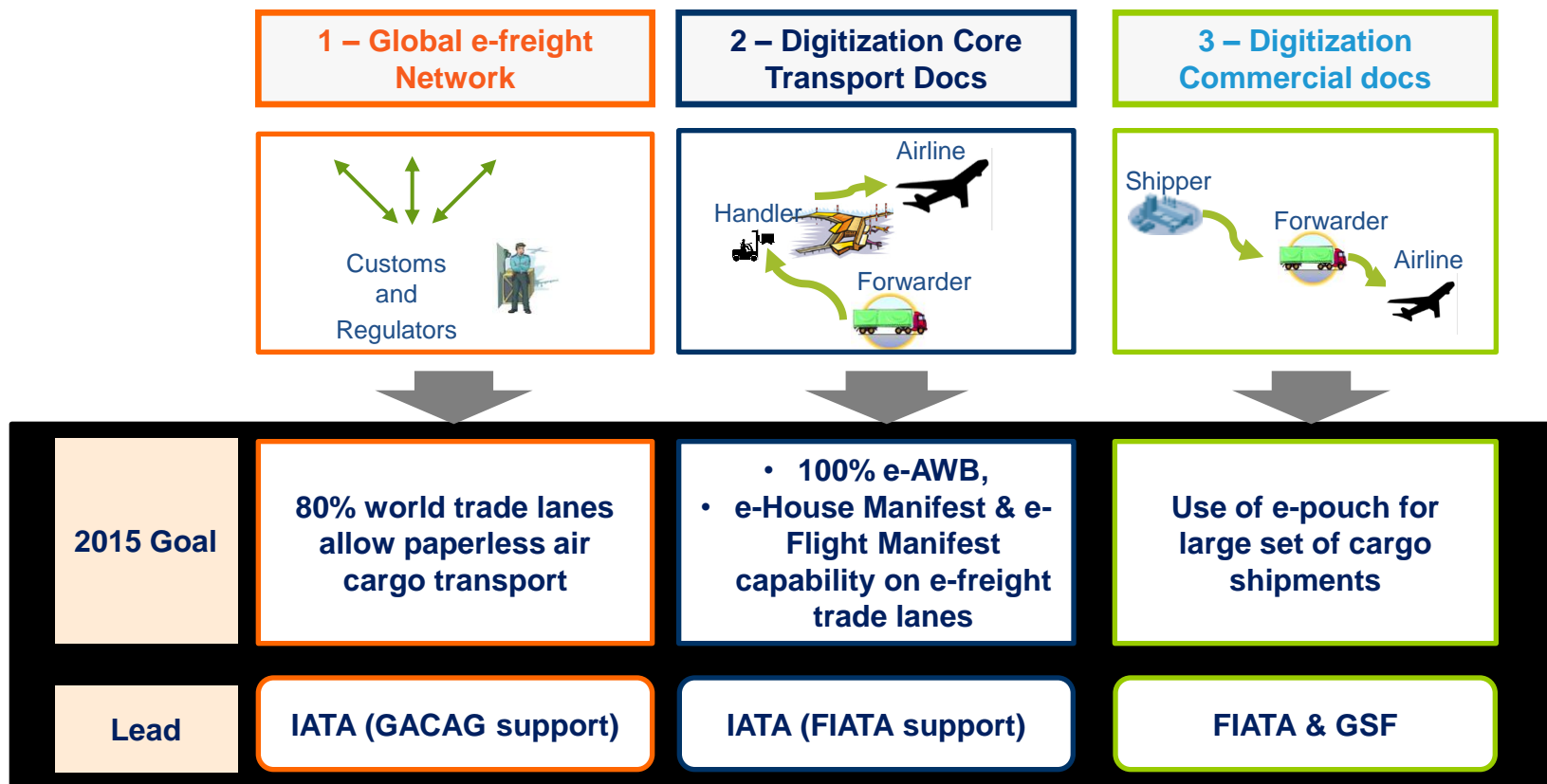


Where is the industry?

Monthly e-AWB volume



The GACAG* vision for 2015



* GACAG - the Global Air Cargo Advisory Group, which comprises four global industry associations – IATA, FIATA, TIACA, and the Global Shipper's Forum

The International Air Cargo Association

TIACA – the major partner of IATA in the implementation

Working to advance
the world of air cargo

To find out more about TIACA, go to
www.tiaca.org



Who are members of TIACA



- **Airlines**
- **Freight Forwarders**
- **Shippers**
- **Logistics Service Providers**
- **Integrators**
- **Airports**
- **Ground Handling Agents**
- **General Sales Agents**
- **Aircraft Manufacturers**
- **Trucking Organizations**
- **Technology Providers**
- **Courier & Express Operators**
- **Industry Media**





There is no alternative to E-freight in aviation

