IATA & the story of the electronic Air Waybill (e-AWB)

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International trade is about moving goods.
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Each year, more than 7,800 tons of paper documents are processed. It’s the equivalent of 80 Boeing 747 freighters filled with paper.
2005: IATA kicks off the e-freight program

e-Freight is an industry-wide program that aims to build an end-to-end paperless transportation process for air cargo made possible with regulatory framework and electronic message standard.
2005: IATA kicks off the e-freight program

- 2010
- $1.2B
- -25%

Paper out of the cargo
Industry yearly savings
Shipping time to 4 days
# e-freight benefits

**Operational efficiency**

- e-Freight brings operational efficiency through the reduction of the end-to-end processing time (up to 24h)

**Cost effectiveness**

- e-Freight brings cost effectiveness through the reduction of document processing and archiving costs

**Data quality**

- e-Freight improves data quality and accuracy (e.g. auto-checks, mandatory fields, …)

**Innovation**

- Standardization and digitization are key enablers for the development of new innovative services and solutions, thus increasing the value of the air freight to shippers (e.g. real time status update)

**Sustainability**

- e-Freight will eliminate more than 7,800 tons of paper documents annually, the equivalent of 80 Boeing 747 freighters filled with paper

**Regulatory compliance**

- e-Freight implementation facilitates compliance to international and local regulations (e.g. facilitate Advance Electronic Information (AEI) requirements for security purpose)
The 3 pillars of the e-freight program

1. Customs documents
Engaging regulators and governments worldwide to create an ‘e-freight route network’ with fully electronic customs procedures and where regulations support paperless shipments

2. Transport documents
Working collaboratively within the cargo supply chain to digitize the core industry transport documents, starting with the Air Waybill (AWB)

3. Commercial & Special cargo documents
Developing a plan to digitize the commercial and special cargo documents typically accompanying airfreight today, in or outside of the ‘Cargo pouch’
The Air Waybill

The Air Waybill (AWB) is a critical air cargo document that constitutes the contract of carriage between the “shipper” and the “carrier” (airline).

It is governed by IATA Resolution 600a “The Air Waybill” and 600b “Air Waybill Conditions of Contract”. 

The Air Waybill
Air Waybill and electronic Air Waybill

The electronic Air Waybill (e-AWB) is the **electronic contract of carriage** between the “**shipper**” and the “**carrier**” (airline).

**The Electronic Air Waybill Resolution 672 (MeA) removes the requirement for a paper Air Waybill**

**The original transportation contract is electronic (shipment record)**

**There is no longer a need to print, handle or archive the paper AWB simplifying the air cargo process**
Paper AWB versus electronic AWB

The 2 components of an AWB can be found both in the paper and in the electronic worlds.

Paper AWB

+ e-AWB

Front (600a) + Reverse (600b)

Electronic message* + Signed e-AWB agreement

IATA message standards: Cargo IMP (FWB message), Cargo XML (XFWB message)
Communicating effectively requires Freight Forwarders, Airlines and GHAs to exchange standard messages

The Resolution 670 rules the Cargo electronic data interchange message standard, supported by the recommended practice 1670 (Carriage of Cargo using Electronic Data Interchange), the recommended practice 1672 (Cargo-Fact/Cargo-IMP Message Standards) and the recommended practice 1675 (Cargo-XML Message Standards)

The table below describes the different messages as per the 2 IATA message standards – Cargo-IMP and Cargo-XML:

<table>
<thead>
<tr>
<th>Message type</th>
<th>Cargo-XML</th>
<th>Cargo-IMP</th>
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<tbody>
<tr>
<td>Air Waybill message</td>
<td>XFWB</td>
<td>FWB</td>
</tr>
<tr>
<td>Status Update message (Freight on Hand - FOH, Ready for Carriage - RCS)</td>
<td>XFSU</td>
<td>FSU</td>
</tr>
<tr>
<td>Error message</td>
<td>XFNW</td>
<td>FNA</td>
</tr>
<tr>
<td>Message Acknowledgment</td>
<td>XFNW</td>
<td>FMA</td>
</tr>
</tbody>
</table>

Cargo-IMP message standard is no longer maintained since 2014. IATA recommends to use standard IATA Cargo-XML to exchange electronic information along the air freight supply chain as the alternative to IATA Standard Cargo-IMP

For more information, please visit: [www.iata.org/cargo-xml](http://www.iata.org/cargo-xml)
Montreal Convention 1999 (MC99)

- MC99 is intended to replace the patchwork of regimes that developed since the Warsaw Convention in 1929
- Entered into force in 2003
- It governs airline liability for passengers, baggage and cargo on international flights in cases of:
  1. death, injury or delay to passengers
  2. delay, loss or damage to baggage
  3. delay, loss or damage to cargo
- IATA and its member airlines continue to support ICAO in promoting MC99 as the single, global Convention on airline liability
- Ratified by 137 parties
MC99 is modern and fair

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<th></th>
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<tbody>
<tr>
<td>USD 20 per Kg</td>
<td>USD 20 per Kg</td>
<td>USD 25 per Kg</td>
<td>USD 31 per Kg</td>
<td></td>
</tr>
</tbody>
</table>

| Provision for electronic AWB? | No                     | No                   | Yes                 | Yes                      |

NB: Treaties don’t express limits in USD but in IMF Special Drawing Rights (SDR). These have been calculated using xe.com for comparison purposes.
The use of e-AWB as a means to establish the contract of carriage is **only recommended on feasible trade lanes**. In February 2021, the **feasible trade lanes** represented **67%** of the AWBs.

Feasible trade lane is defined as such when country of origin and country of destination ratified the same treaty - either the Montreal Protocol No. 4 of 1975 (MP4) or the Montreal Convention of 1999 (MC99).

The use of e-AWB as a contract of carriage between the “shipper” and the “carrier” may also **depend on government authorities** recognizing and accepting the e-AWB.
e-AWB penetration: 72.0% as of FEB 2021

- AMERICAS: 53.2%
- EUROPE: 66.6%
- MIDDLE EAST: 80.8%
- NORTH ASIA: 73.6%
- AFRICA: 60.0%
- ASIA PAC: 72.4%
The air cargo digital transformation journey

From paper to digital
Cargo IMP / Cargo XML
Digitization

Transforming the industry through data
IATA ONE Record standard
Digitalization / Digital Transformation

The industry needs to get rid of the documentary flow to speed up the cargo flow

- e-AWB: ~70%
- e-freight: nonsignificant
- Shipping time: 5.5 days
ONE Record concept

The essence of the ONE Record is to move from a peer-to-peer messaging model to a data sharing model relying on a Virtual Shipment Record.
The ONE Record concept is based on 3 pillars enabling to define:

WHAT, HOW, with WHOM data can be shared
ONE Record

is a data-centric model and NOT a document-centric model

Provide better visibility and transparency

Eliminate duplicate

Improve data quality
Industry benefits

Data quality and control
- Data shared by data owner
- Full control of data
- Data stays at the source
- Owner determines data access

Visibility and transparency
- End-to-end transportation chain
- Share data of the shipment with relevant parties
- Enhanced visibility and transparency

Plug & Play Connectivity
- Facilitate the direct connectivity between all the stakeholders
- Use of web API
- New cooperative IT solutions and innovation

Future of digital cargo
- Foundation for true digital air cargo
- Develop collaborative and automated digital services

Welcome a new generation
- Technology platform that is ready for a new generation of digital natives
Stop looking back when the future is ahead
Thank You