

# E-commerce & Dangerous Goods

## A call for action

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Who are we and what do we do?



# ALTA

## Latin American & Caribbean Air Transport Association

ALTA is an association serving the aviation industry. It coordinates collaborative efforts throughout the value chain, from airlines to suppliers, along with the industry, authorities, associations and stakeholders.

Our mission is to contribute to the economic and social growth of the Latin American and Caribbean region through the development of a safer, more efficient and sustainable aviation.

# ALTA'S EXECUTIVE COMMITTEE



Jose Ricardo Botelho



Adrian Neuhauser



Andrés Conesa



Tracy Cooper



Pedro Heilbron



Roberto Alvo



John Rodgerson



# 150 members & 10 Working Groups



MAINTENANCE AND MRO COMMITTEE



FRAUD PREVENTION COMMITTEE



LEGAL & AEROPOLITICAL AFFAIRS COMMITTEE



TECHNICAL PURCHASING AND PROCUREMENT  
COMMITTEE



ENVIRONMENT COMMITTEE



FUEL COMMITTEE



SAFETY COMMITTEE



FINANCE COMMITTEE



TRAINING COMMITTEE



TECHNOLOGY COMMITTEE

# Air Cargo

## For convenience, employment, livelihood and wealth...

Whether it is about large online marketplaces or an individual seller, anyone can buy and receive anywhere, whatever they want...



Needle



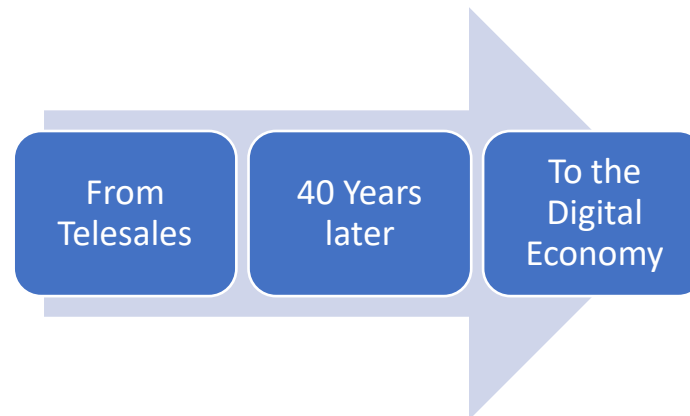
Vans Rv10 2010

# By UNCTAD

## United Nation Conference on Trade and Development

The E-Commerce and Digital Economy Program fulfilled the strengthened mandate given to UNCTAD by member states in the Bridgetown Compact (2021) to assist developing countries seeking to enhance their preparedness to join and engage in the digital economy.

<https://unctad.org/publication/e-commerce-and-digital-economy-programme-year-review-2022>



UNCTAD continues

Digital technologies mitigate economic disruption in developing and least developed countries.



# 2021 – Sales up to \$ 3.9 trillion

## From \$2.4 trillion in 2019

The largest online E-commerce platforms benefited the most during the pandemic.



<https://unctad.org/publication/e-commerce-and-digital-economy-programme-year-review-2022>

**Table B.** Share of enterprises in developing countries that receive orders online, for countries where data are available

| Country                    | Data collection Year | Reference Year | Share of enterprises that receive orders online (%) |
|----------------------------|----------------------|----------------|---|
| Azerbaijan                 | 2018                 | 2017           | 1.75  |
| Bolivia                    | 2021                 | 2016           | 15.67   |
| Chile                      | 2021                 | 2018           | 9.46  |
| Colombia                   | 2021                 | 2019           | 76.16   |
| Dominican Republic         | 2021                 | 2020           | 25.84   |
| Ecuador                    | 2021                 | 2019           | 28.37   |
| India                      | 2021                 | 2018           | 47.37   |
| Iran (Islamic Republic of) | 2018                 | 2017           | 0.31  |
| Mauritius                  | 2021                 | 2020           | 52.11   |
| Mongolia                   | 2018                 | 2016           | 12.74   |
| Peru                       | 2021                 | 2018           | 8.84  |
| Philippines                | 2018                 | 2017           | 5.47  |
| Qatar                      | 2018                 | 2018           | 33.3  |
| Saudi Arabia               | 2018                 | 2016           | 11.07   |
| Thailand                   | 2021                 | 2018           | 5.89  |
| Tunisia                    | 2021                 | 2019           | 46.43   |
| Türkiye                    | 2021                 | 2021           | 10.67   |

# Potential

<https://unctad.org/publication/e-commerce-and-digital-economy-programme-year-review-2022>



# United States

U.S. Department of Transportation's Pipeline  
and Hazardous Materials Safety Administration

# Incidences

According to PHMSA data, from March 2018 to March 2023, there were **5,319 incidents involving all aircraft**, including freighters, in the United States. About 695 of them occurred to passenger aircraft.

Based on the analysis, **the most common incidents (29.06%) involve lithium-ion** batteries. The rest involved other such as aerosols, live ammunition, paint and poisons.

<https://www.cbsnews.com/losangeles/news/hazardous-materials-airplanes-la/>

# Further information

The same article stated that data from NASA's Aviation Safety Reporting System include 879 anonymous reports of on-board hazardous materials incidents on passenger aircraft. The data shows that in 62% of the cases, neither pilots nor airlines were informed that hazardous materials were on-board their aircraft, even though reporting is required by law.

What are we seeking?



# Safe Flights

How to deal with the impact of e-commerce on the operational safety?

# Regulation

National civil aviation authorities already issue regulations for the transport of dangerous goods. However, despite fines and legal proceedings that can even lead to people going to jail, the threats remain.

There are requirements for training, quality controls, audits, etc. that are regularly compliant by airlines and freighters, ground handlers and airports.

But what about individuals or small and medium-sized e-commerce retailers who are newcomers?

# Scanning Equipment

Is it  
enough?

Technologies already exist to help the operator identify various threats and different chemicals.

# Practices and promptness

## Productivity agreement

As an example, let's take a B737-40: 9+1 main-deck positions plus 2 bulk compartments with a 19-ton reasonable payload, it transports about 18,000 orders.

E-commerce depends on people waiting 15 / 30 days or more to receive their orders.

Is it feasible to scan all 18,000 orders, considering the processes of picking-up, packaging, shipping to the freight forwarder/cargo agent, consolidation and then transfer to the airport and the airline?

Would it be achieved within that deadline?

What are the necessary resources in doing so, and will the cost still be attractive?

Capillarity



# Regional Flights

Regional flights transport cargo and there are airlines with multiple stations and diminished infrastructure far from major cities.

Many airlines consider air cargo as ancillary and, despite society's demand for medicines, spare parts, diagnostic samples, e-commerce, etc., it is only feasible because of the low operating cost.

Major e-commerce routes also depend on the capillarity of the airline to cover long distances by road, crossing natural obstacles such as mountain ranges in a short time.

The effectiveness of scanners or other high-cost solutions will impose constraints on e-commerce goals. After all, it is not a one-way trade channel; anyone can open an online store and... it's really happening.



# Digitization

The aviation industry struggles year-after-year to enhance the access to the e-AWB among countries, besides the e-AWB there are other digital documents such as the HAWB, manifest, invoice, etc.

In order to achieve this goal that benefits society with air cargo logistics it is necessary to involve National Authorities for the adjustment of Customs, the Law and of course the technological framework and including forwarders of various sizes, shippers, consignees and more.

# A paradox

It is paradoxical that e-commerce depends on technology, but its continued growth also depends on technology to mitigate the risks of unsafe flights.

The risk is there, but the hazards must first be identified.

# Let's talk about this

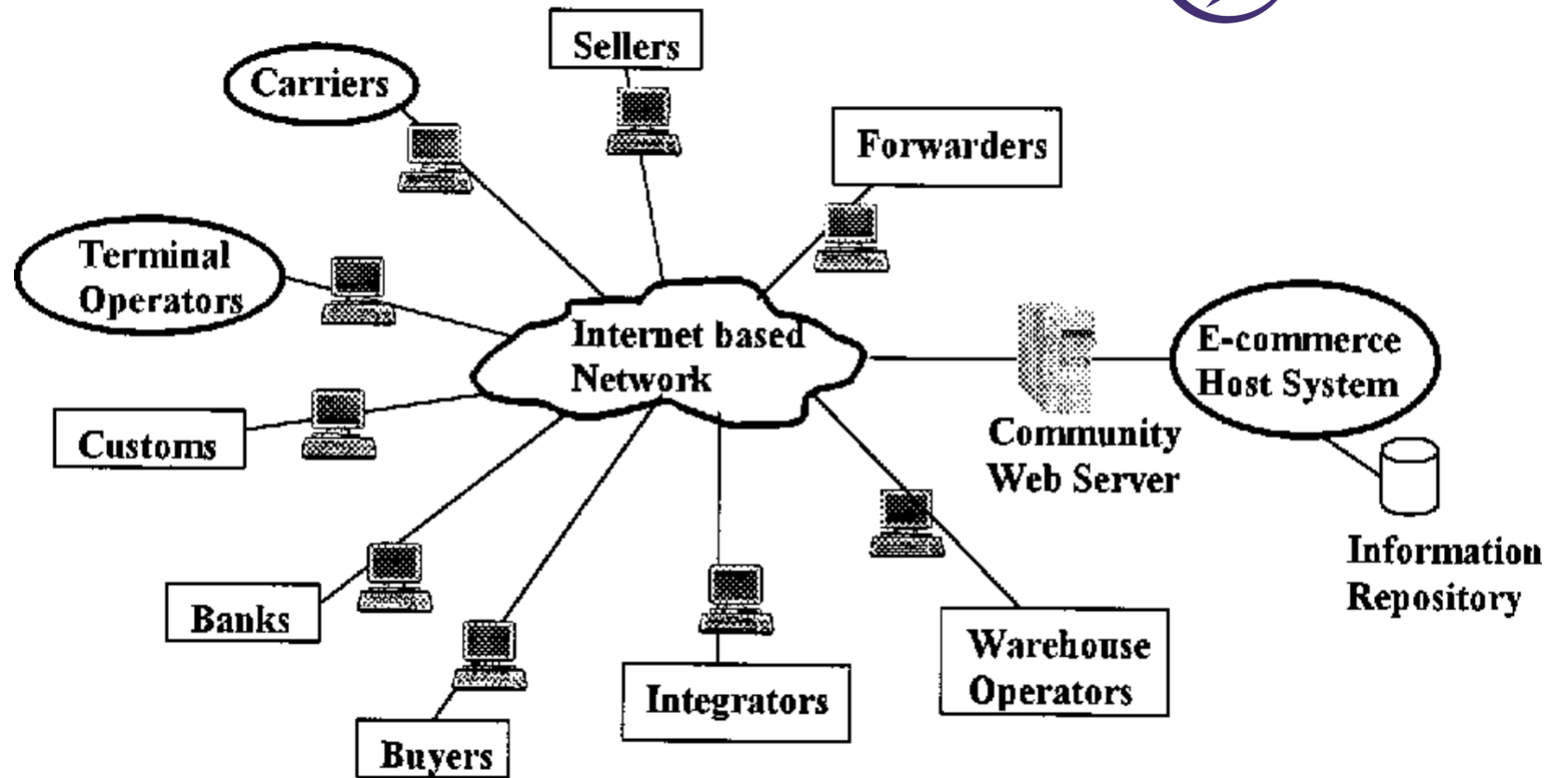
Considering the massive technology already available and put in place, high-end hardware and software, big data, growth of artificial intelligence and much more, let's talk about possible solutions to prevent, stop and red flag those e-commerce sellers (individuals or marketplaces) who may offer hidden or prohibited hazardous materials for air transport.

This call is for the benefit of airlines, but we do exist only because of society, because of our customers, and e-commerce is primarily important. It's mutual!

What is missing?



# Risk Analysis



# Thank you so much!

Claudio Terry

