

Introduction to IATA

IATA is a Standard Setting Organization

IATA uses different means to disseminate standards in the industry

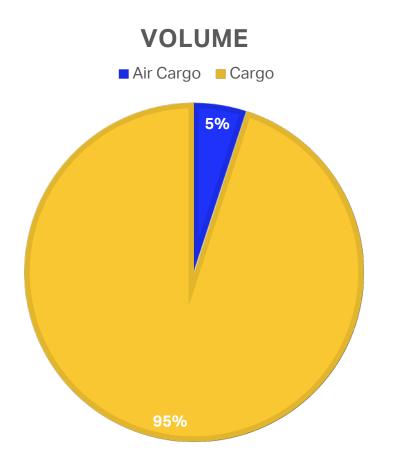


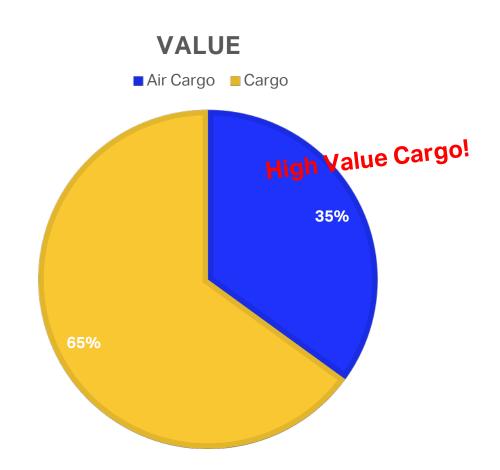


Special Cargo



Air Cargo in Cargo industry





Source: IATA

In terms of weight, air cargo constitutes 5% of the total cargo industry, yet it represents 35% of the industry's total value



IATA Special Cargo Manuals
Special Cargo Manuals contain standard operating procedure, country regulations and best-practice for safe and secure transportation

Pharmaceutical



Temperature Control Regulations (TCR)

Live Animal



Live Animals Regulations (LAR)

Perishable



Perishable Cargo Regulations (PCR)

Lithium Battery



Lithium Battery Shipping Regulations (LBSR)

IATA CEIV Certification



CEIV Certification

CEIV certification is designed to enhance the knowledge from standards and integrate to the operations to retain and improve the quality of air cargo handling

Pharmaceutical



Temperature Control Regulations (TCR)



Live Animal



Live Animals Regulations (LAR)



Perishable



Perishable Cargo Regulations (PCR)



Lithium Battery



Lithium Battery Shipping Regulations (LBSR)



About CEIV | Center of Excellence for Independent Validators

Global certification program on certifying organizations for excellence with handling and transportation of special cargo shipments in the area of pharma, live animals, perishables and lithium batteries. It brings stakeholders together to solve the challenges of special cargo air freight.

Benefits

For all stakeholders involved in the handling and transportation of special cargo shipments.

- Ensures compliance with the latest standards
- Globally recognized as a sign of professionalism and expertise
- ✓ Delivers quality handling and transport
- ✓ Builds trust throughout the supply chain



524
CEIV Pharma
certified stations from 2014



32
CEIV Live Animals
certified stations from 2018



43
CEIV Fresh
certified stations from 2019



109

CEIV Lithium Batteries certified stations from 2021

Pharmaceutical

- Pharma industry is going towards Diversification and Stringency
- Stricter regulations
- Cold Chain in Global warming with uncertain outlook
- Development of Biopharmaceuticals





Perishable Cargo

- Cold Chain in Global warming with uncertain outlook
- HACCP philosophy and its high penetration
- Food Loss Prevention as the industry's mission
- Market needs for premium perishable

HACCP: Hazard Analysis and Critical Control Point



Live Animals

- Live animal handling is a competitive yet booming and profitable business
- Transporting live animals by air is a complex
- It matters to Animals' Welfare
- Emotional loss can lead to reputational issues





Lithium Battery

- Awareness of the risk of Lithium Batteries
- Incidents from Lithium Batteries in real
- Invisible/hidden item in cargo
- Growing E-commerce







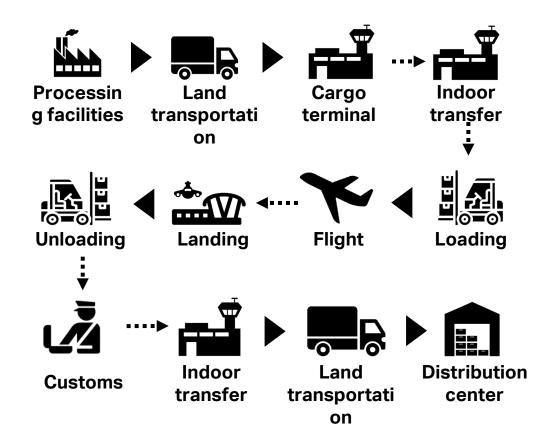




About CEIV | Air Cargo Industry Concerns and Challenges

Modal shift is a reality because shippers need products to maintain integrity and efficacy during transportation. Traceability and efficient communication between different stakeholders during transport lifecycle is a key.

- ✓ Air Cargo consists of one of the most dynamic environments
- Changes in regulations by leading bodies have increased the significance of regulatory compliance management for special cargo handling
- ✓ Supply chains across the globe are compelled to alter their compliance practices to conform to changes in regulations and stringent anti-corruption laws
- Historically pharmaceutical industry has been dealing with malpractices across the value chain ranging from improper branding to masking safety information and disregarding quality manufacturing standards. This has led to regulators keeping a strict watch on the pharma companies.
- ✓ Enforcement agencies the world over have become more active. Any violation of regulatory methods or non-compliance of standards could tarnish a company's reputation, risking its future.





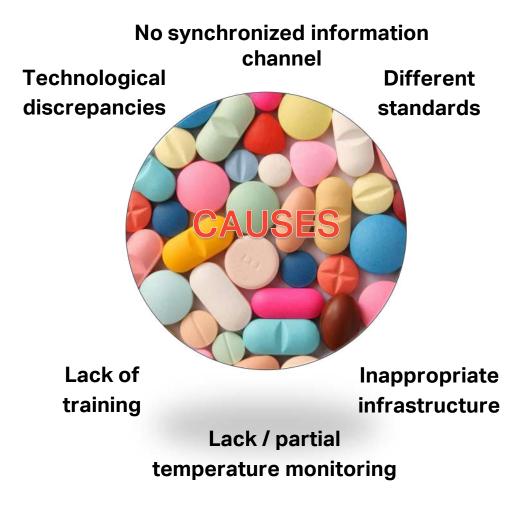


IATA CEIV Pharma



CEIV Pharma | Transportation challenges

Causes for temperature excursions



- ✓ Due to a lack of compliance, standardization, accountability and transparency across the air transport supply chain a majority of all temperature excursions occur while the package is in the hands of airlines/airports.
- ✓ Temperature deviation denature the product, render it worthless and be harmful to the health of the patient.
- ✓ Products can be lost, scrapped, returned leading to significant costs.



CEIV Pharma | An Established Program

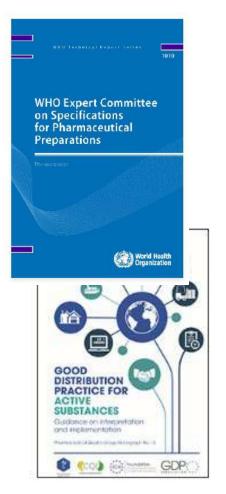
The TCR contains all the information and requirements you need to ship compliant temperaturesensitive products. CEIV also encompasses global regulatory frameworks.



Source: IATA, WHO, European GDP Association

IATA Temperature Control Regulations

- ✓ Compliance, standardization, accountability and transparency across the supply chain
- ✓ Properly trained stakeholders on regulations and standards
- ✓ Adequately equipped facilities throughout the supply chain
- ✓ Global certification for handling of pharmaceutical cargo
- ✓ Common audit format to minimize the disruptions and increase effectiveness



The CEIV Pharma Certification is consistent with the international Good Distribution Practices (GDP)

and guidelines for pharmaceutical products storage and distribution

- ✓ World Health Organization (WHO)
 Technical Report Series, No. 957, Annex
 5, 2010
- ✓ World Health Organization (WHO)
 Technical Report Series, No. 1025,
 Annex 7, 2020.
- ✓ European Commission Guidelines (2013/C 343/01)



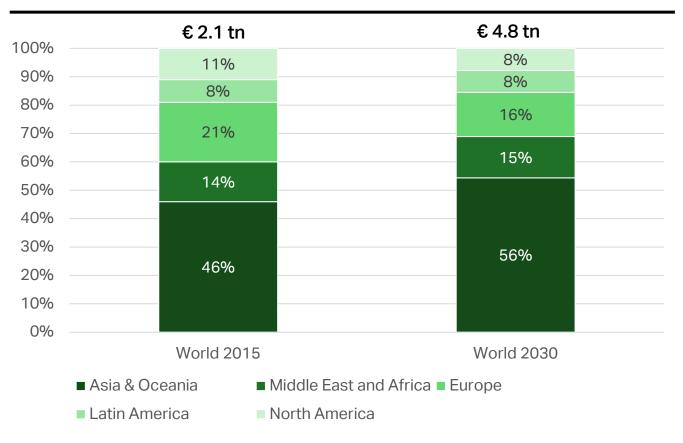


IATA CEIV Fresh

About CEIV Fresh | Demand for fresh products is growing worldwide

Especially from the Americas, EMEA and Asia Pacific

Consumer spending on fruit and vegetables by geographic location (% share)



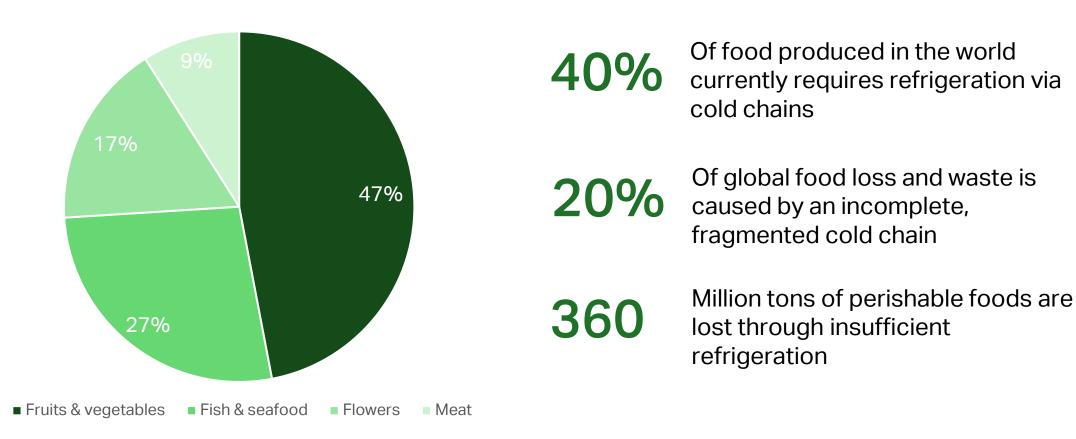
Source: Oliver Wyman

- Perishable cargo is a general category of air freight that refer to time-sensitive agrofood products and horticultural products such as seafood, meat, fruits, dairy, vegetables and cut flowers
- ✓ Over the past years, a global surge in demand for premium perishables especially from the Americas, EMEA and Asia Pacific
- ✓ Global consumption for fruits and vegetables segment alone is expected to reach 4.8 trillion euro in 2030. Asia and Oceania will be the main driver behind this growth
- ✓ Forwarders and carriers now see 'high value' perishables as a prime business, as demand for such premium products increases around the world



About CEIV Fresh | Perishables transportation challenges

Split of perishable products by type (% share)



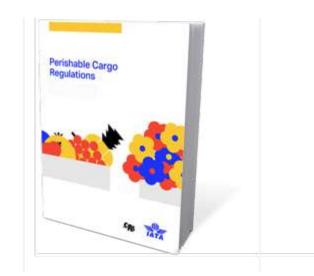
Source: WorldACD, Air Cargo News (2021)



About CEIV Fresh | An Established Program

The Perishable Cargo Regulations (PCR) is the leader in temperature control and cold chain management for goods from the food sectors

- ✓ Up-to-date airline and government requirements pertaining to the transport of perishable cargo
- ✓ Requirements on handling, marking & labeling.
- ✓ Necessary packaging requirements
- ✓ Information on the necessary documentation required when transporting perishable cargo
- ✓ A comprehensive classification of 100's of perishable commodities



Source: IATA



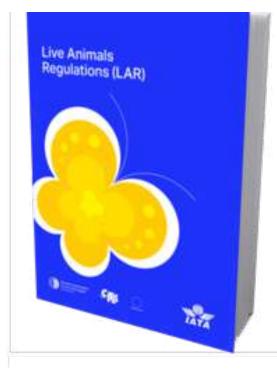


IATA CEIV Live Animal



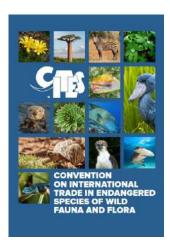
About CEIV Live Animals | An Established Program

IATA ensures that both safety and animal welfare are addressed in all regulatory issues pertaining to transportation of live animals by air



Source: IATA, CITES

- ✓ Live Animals and Perishables Board develops regulations for the acceptance, handling and loading of live animals in air transport, compiled in the Live Animals Regulations (LAR) manual.
- ✓ IATA coordinates the Live Animals and Perishables Board (LAPB) and provides key input to the airline industry on issues such as animal welfare, identification, and animal behavior based on modern science.
- ✓ The LAPB has two meetings a year where all proposals are discussed in consultation with the industry.
- The IATA LAR have been adopted by a number of countries as their national regulations for transporting live animals.
- ✓ Live Animals standards in the LAR are not set in isolation. The standards are a combination of operational experience and based on modern science



- CITES is is an international agreement between governments
- ✓ Aims to ensure that international trade in specimens of wild animals and plants does not threaten the survival of the species.





IATA CEIV Lithium Battery



CEIV Lithium Battery | Safety Incidents

Aviation Cargo and Passenger Baggage Events Involving Smoke, Fire, Extreme Heat or Explosion Involving Lithium Batteries or Unknown Battery Types





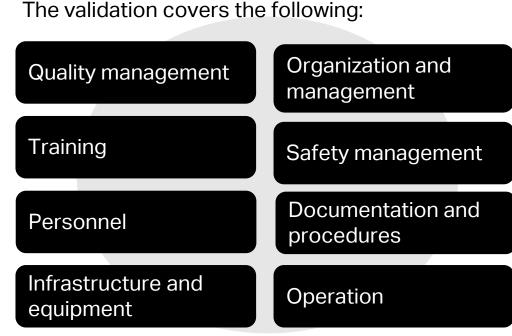




CEIV Lithium Battery | Assessment Scope & Criteria

CEIV Li-batt strives to achieve standardization and uniformity in the scope, depth and quality of the assessments conducted, focusing on critical operational areas of an organization.





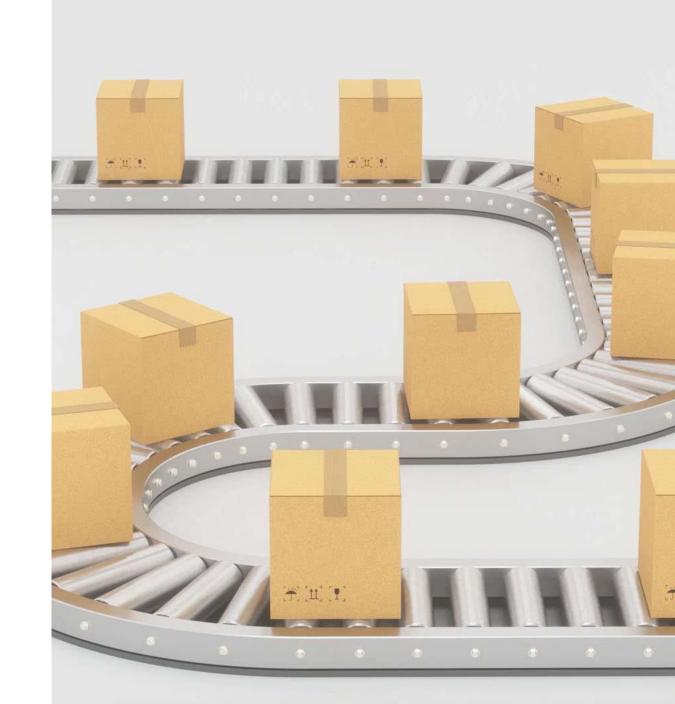
CEIV Li-batt ensures all organizations are assessed in a consistent and objective manner using standardized assessment checklist and criteria that have been developed to guide the assessor and the organization through the assessment process.

CEIV Certification Process



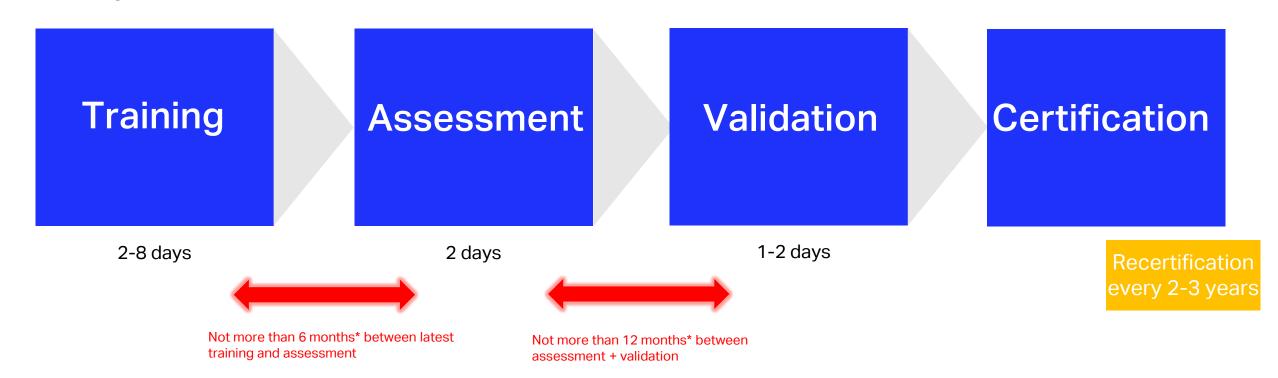
Certification Prerequisites

- ✓ Participants should have prior knowledge of air cargo procedures
- Recommended English level is Entry-level and Intermediate.
- At least 2 key personnel per station must complete the designated training (s)
- ✓ Preferable personnel:
- Cargo quality operations managers
- Airline, handler or freight forwarder operations managers
- Warehouse and ramp operations managers
- In-house auditors/managers



CEIV Certification Process

For organizations across the aviation and logistics industry involve in transport and handling of airfreight shipments



Total certification not to last longer than 18 months from last training to certification



CEIV Certification Process | Certification

Training



Assessment

Validation

Certification

Award of Certification:

The ultimate goal is to provide participating organizations with a better understanding of shippers demands, as well as providing a framework to ensure global and consistent approach towards handling and transporting perishables



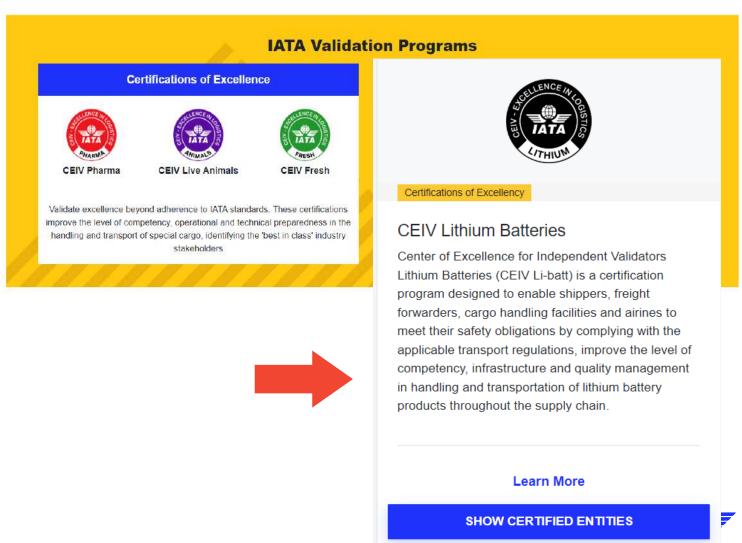




CEIV One Source

The IATA ONE Source platform functions as an online industry platform for validated aviation infrastructure capability information





Source: IATA



Implementation approach

Segment and target companies

- √ Shippers
- ✓ Trucking companies
- ✓ Freight forwarders
- ✓ Cargo terminal operators
- ✓ Ground handling agents
- ✓ Airport (if shelf handled)
- ✓ Airlines

Organization across the aviation and logistics industry involve in transport and handling of airfreight shipments.

Individual Organization

Airport Community

One company decides to get certified at one or multiple locations.

A group of stakeholders (shippers, freight forwarders, ground handlers, airlines, etc.) decide to get certified at a particular location

- ✓ Form a "CEIV gateway"
- ✓ Supply chain approach
- ✓ Coordinated and/or sponsored by airport or local association



Airport Community Approach by Incheon Airport (Korea)



INCHEON INTERNATIONAL AIRPORT

A Premier & Trustworthy Global Logistics Hub

BROCHURE

Source: IATA. Incheon Airport







incheon Airport Community scores world first with IATA certification











he incheon international Airport Community has become the worlds first of its kind to receive lenter of Escellence for Independent Validators (CSIV) Lithium Satteries (Li-Batt) certification from he International Air Tramport Association (IATA)

his acids to to the airport's IATA CETs' certification in pharmaceuticals (Pharma) and perishable gods Freshi.

is acquire the CEN Ei-Batt certification, the Incheon International Airport Corporation (EAC) stablished the Incheon Airport Community in December 2002, combiting of a total of 11 companies, schading three airlines, one ground handling company, and six logistics companies.

over a five-morth period, the community underwent certification procedures, including comprehensive education and evaluations, resulting in every member successfully obtaining the

toxted by the EAC, the Incheon Airport Community Includes Korean Air, Axiana Airlines, Jeju Air, and nound handler Swissport Korea

Labo includes a rumber of logistics companies. These are: D6 Scherker, LX Pantos, Lotte Blobal ogistics, Secul Air Cargo, Sejin Logistics and Myundai Olovis

While individual sirlines, forwarders, and operators worldwide have previously achieved IATA's Lilatt certification since its inception in October 2021, this collective certification of an airport and it intitle community is understood to be a first

icting BAC president Mee-Jeong Lee said! "As the world's first airport to obtain this certification, we vill lead the way in the lithium battery air transport market."

Stylen by the exceluting demand for lithlum batteries due to e-commerce and electric vehicle turkets. IATA introduced additional Li-Batt certification to ensure the safe transportation of these

he Incheon Airport Community successfully obtained IATA's CRN Promise ownification in June 2019. he community was recentified in September 2022

Incheon International Airport Community Achieves World First with IATA Certification

- •Certification Achievement: Incheon International Airport Community has become the world's first to receive the Center of Excellence for Independent Validators (CEIV) Lithium Batteries (Li-Batt) certification from the International Air Transport Association (IATA).
- •Previous Certifications: The airport already holds IATA CEIV certifications in pharmaceuticals (Pharma) and perishable goods (Fresh).
- •Community Formation: The Incheon Airport Community was established in December 2022, consisting of 11 companies, including three airlines, one ground handling company, and six logistics companies.
- •Certification Process: Over five months, the community underwent comprehensive education and evaluations, resulting in successful certification for all members.
- •Members: Key members include Korean Air, Asiana Airlines, Jeju Air, Swissport Korea, DB Schenker, LX Pantos, Lotte Global Logistics, Seoul Air Cargo, Sejin Logistics, and Hyundai Glovis.
- •Future Plans: The IIAC plans to collaborate with airports worldwide to ensure the safe transportation of lithium batteries

















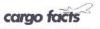






Airport Community Approach by Changi Airport (Singapore)





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Freighter Transactions Capacity & Demand Conversions Carriers AAM E-Commerce The Future

Singapore Changi Airport: Taking your pharma business further



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As a vibrant biopharma hub in the heart of Asia, Singapore is one of the top pharmaceutical importers and exporters in the region with more than US\$20 billion worth of imported and exported pharmaceutical products annually. Singapore is also the preferred gateway for the regional distribution of pharmaceutical products. Eight out of the top 10 global pharmaceutical manufacturers have facilities in Singapore, manufacturing four of the top 10 drugs by global revenue.¹

In supporting the continued development of Singapore's biopharma hub, Changi Airport Group, together with our air cargo partners, formed Pharma@Changi, the first and largest CEIV Pharma Community in Asia Pacific. Comprising stakeholders from each



Changi Airport Group to support air cargo community to co-create value

Changi Airport Group will collaborate with multiple companies to support the oir cargo community and pursue CEIV Fresh certification.





Changi Airport cargo community to pursue CEIV Fresh certification



by Charles Kauffman - November 8, 2019 in Airports, Archive, News, Technology

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Singapore's Changi Airport (SIN) today announced that a working group had been formed among the airport's cargo community to pursue the International Air Transport Association's (IATA) Center of Excellence for Independent Validators for Perishable Logistics (CEIV Fresh) certification.

The airport, together with the Civil Aviation Authority of Singapore, dnata Singapore and Singapore Airlines will shoulder certification-related costs with the aim to improve handling capabilities for perishable products at the airport. SATS, the largest handler at SIN, is pursuing CEIV Fresh certification independently of the group and expects to finish the process by April 2020.

At present, perishable cargo comprises about 13% of the airport's cargo throughput, and is a segment that continues to grow, even as other segments are down. "Although the air cargo industry has slowed down globally, it is now even more important for the Changi air cargo community to be connected and build a stronger partnership through collaboration," said Lim Ching Kiat, managing director of air hub development at Changi Airport Group. "As a community, we can leverage on synergies and co-create new solutions. This will enable the Singapore air cargo hub to strengthen our competitive edge and better serve our customers globally."

Standards for the IATA CEIV Fresh program are based on IATA's Perishable Cargo Regulations (PCR), and are designed to ensure the safety of perishable food products through standardization of handling and transport operations. The new certification was launched earlier this year at the World Cargo Symposium in Singapore.

Although SIN was the first airport in Asia to obtain IATA's CEIV Pharma certification, Hong Kong International Airport (HKG) was the first airport in Asia (and the world) to be CFN Frech-restified as IATA's launch nartner of the program

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Airport Community Approach by Narita Airport (Japan)



NEWS RELEASE



「CEIV Pharma」成田空港で第2弾の認証取得

航空輸送から陸上輸送まで一貫した輸送品質認証を受けた日本唯一のコミュニティが14社に拡大

成田園際空港株式会社は、当空港で国際航空輸送に携わる事業者とせた「成田空港コミュニティ技術成 し、医薬品航空輸送品質認証制度「CEIV Pharma」の第2弾となる認証取得を目指しておりましたが、この 度、全6社の認証取得が完了いたしました。

成田空港は、IATA(International Air Transport Association;国際航空運送協会)から、医業 品の国際航空輸送にないて世界最高水準の品質を提供できる空港として、ICEIV Pharma パートナーエア ボート Jの認定を受けており、日本で唯一、航空輸送から陸上輸送までのサプライテェーン全体(航空会社・グ ランドハン門ング会社・フォワーダー・提送事業者)で一日した輸送品質認証を受けたCEIV Pharma認証コ ランドハン門ング会社・フォワーダー・提送事業者)で一日した輸送品質認証を受けたCEIV Pharma認証コ した。

全国の医薬品輸入の約6額を成田空港が担っており (2021年実績)、その重要性はますまず高まっていま す。当社は、引き続き関係事業者と協力し、更なる医薬品の輸送品質向上を目指すととして、当空港の航空 物流場点化を促進していきます。



NEWS RELEASE



2025年3月7日

成田空港コミュニティが 「CEIV Lithium Batteries」認証を取得

日本初の空港コミュニティとして「CEIV Pharma」に続く2つ目のCEIV認証取得

成田国際空港株式会社は、成田空港で国際航空輸送に携わる関係事業者とともにコニュニティを結成し、 IATA (国際航空運送協会) の提唱するリチウム電池の航空輸送品質認証「CEIV Lithium Batteries"」 の取得を目指しておりましたが、この度、コニュニティ参加企業全5社の認証取得が完了しました。あわせて、当空 港がIATAから日本初となる「CEIV Lithium Batteries バートナーエアボート」として認定されました。

これにより、コミュニティ参加企業はジチウム電池を安全に輸送できる事業者 として認められ、当空港は安全の保証された高品質なサプライチェーンを提供 できる空港として認められたこととなります。

当空港では、IATAが策定した4つのCEIV認証のうち、Pharma(医薬 品)に続く空港コミュニティによる認証取得及びパートナーエアボート認定とな りました。

当社は、引き続き関係事業者と協力し、特殊貨物の取り扱い品質の更な る向上を目指すとともに、当空港の航空物流拠点化を促進してまいります。







参加企業(全5社) [航空会社]

- 日本航空株式会社

[フォワーダー]

- 西日本鉄道株式会社
- 株式会社日新
- 三井倉庫エクスプレス株式会社
- 三井倉庫サブライチェーンソリューション 株式会社

NAA 成田国際空港株式会社

T262-8001 平量果原因市底设置等于参ANAALI A-URL INDEX YAWA TERES SIDDED (1984)



Source: IATA. Narita Airport

Community Approach - Journey

Pre-Certification

Training & Assessment

Post-Certification

Airport's aspiration to:

- Become a "gateway"
- Differentiate from others
- Strength specific area
- Incentivize the community to make a solid supply chain

Community expectation to:

- Learn the industry standards and best practice and get the cert
- Make their quality visible = Certification

Learning together:

- Airport and community companies have better understanding the elaboration of the industry standards through IATA CEIV Certification Checklist
- Build horizontal connection to inspire new ideas, approach etc

Airport:

- Evaluate and incorporate the community's voices to their master plan, renovation plan, up-grade plan (continuous improvement)
- Participate in the industry event as the community



CEIV Certification History & Customer Feedback



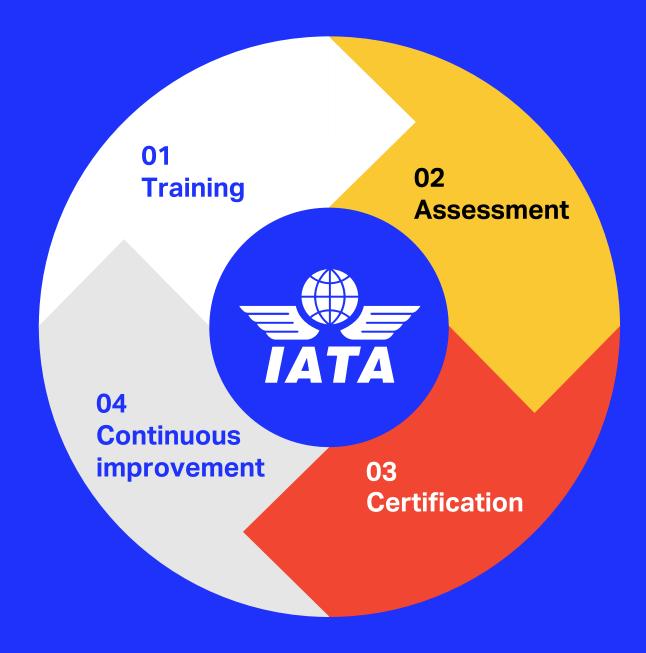


CEIV Marks 10 Years of Improving **Across Air Cargo Supply Chain** Performance





CEIV process enables and drive continuous improvement.





Certified companies
representing a significant portion
of the global air cargo volume





250/

Secured trade lanes ensuring that specialized cargo is handled with the utmost care across a vast network





Trained workforce are equipped with the knowledge and skills to manage cargo operations





2.5

Assessment delivered ensured that companies meet the requirements, leading to higher standards of quality and safety.





98%

Customer satisfaction with very positive feedback about the audit process and the auditor expertise

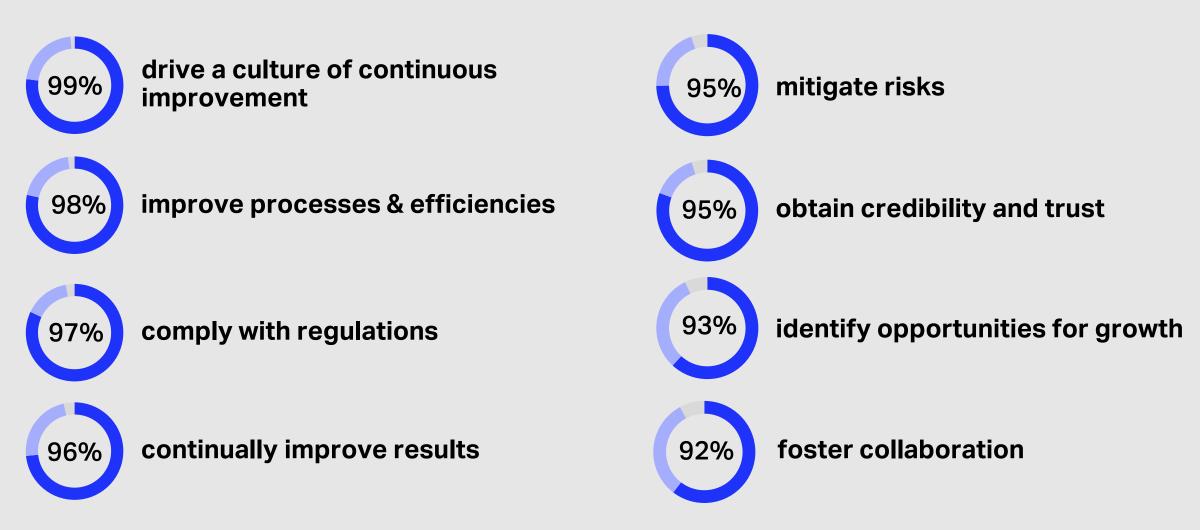
"the auditor was very professional during the whole audit process, he also helped us with corrective actions even after the audit ended. We are very grateful for his insights."

"Highly experienced auditor, fair and reasonable" "We received a professional, reasonable, knowledgeable audit."

"Deep knowledge of the topic allowing us to clearly identify in the process the benefits of the audit"

"The Auditor was great. It was a very thorough and professional audit but managed so that it never felt too onerous. All findings raised were valid and will allow us to improve our QMS"

IATA Certification has helped my organization to:





99%

Certification renewals rate reflects the value and trust it brings to air cargo

