CEIV Workshop
Introduction

Frederic Leger
Director, IATA

Ronald Schaefer,
Senior Principal, IATA Consulting
## Presenters/Moderators

### INTRODUCTION

Frederic LEGER  
Director, APCS Products  
legerf@iata.org

### SUBJECT MATTER EXPERT

Andrea GRUBER  
Head, Special Cargo  
grubera@iata.org

### SPEAKERS

Ronald SCHAEFER  
Senior Principal, IATA Consulting  
schaeferr@iata.org

Maria JITOMIRSKI  
Project Manager, CEIV Live Animals  
jitomirskm@iata.org

Yaniv SORANY  
Senior Manager, Cargo Training & Validation Programs  
soranyy@iata.org
Aim for the workshop

- Introduce and provide an **update on the different CEIV programs**
- Provide an overview of some of the adjustments made to the programs
- Provide **insight on topics** addressed by CEIV Pharma, Live Animals and Fresh
- **Hear from the companies** that are undergoing **CEIV Pharma and Live Animals Certifications** or that have been certified
- **Hear from CEIV pilot program participants** about their experience
- Seek your input and **constructive feedback**
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>09:00 – 09:05</td>
<td>Chairman Opening Remarks / Welcome Address</td>
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<tr>
<td></td>
<td><em>Frederic Leger, IATA</em></td>
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<tr>
<td></td>
<td>Director, Airport, Passenger, Cargo and Security</td>
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<tr>
<td>09:05 – 09:15</td>
<td>CEIV Introduction, Overview &amp; Next Step</td>
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<tr>
<td></td>
<td><em>Ronald Schaefer, IATA</em></td>
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<td></td>
<td>Senior Principal, Consulting</td>
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<tr>
<td>09:15 – 09:25</td>
<td>IATA Cargo Gateway – Update on the Development of the New CEIV Platform</td>
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<td></td>
<td><em>Marc Voelkl, IATA</em></td>
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<td>Project Manager, Smart Facility</td>
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<tr>
<td>09:25 – 09:45</td>
<td>The Potential Impact of Cool Chain Standardization on Insurance Claims</td>
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<td></td>
<td><em>Marian Joraschkewitz</em></td>
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<td>Corporate Segment Leader Asia</td>
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<tr>
<td>09:45 – 10:00</td>
<td>CEIV Community Journey</td>
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<td></td>
<td><em>Trevor Caswell, Edmonton International Airport (EIA)</em></td>
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<tr>
<td></td>
<td>Cargo Account Manager</td>
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## Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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| 10:00 – 11:00 | **CEIV Pharma Experiences**  
  *Franco Nanna, Cargolux Airlines - Aircraft Cargo Hold Temperature Mapping*  
  Director, Global Logistics Services  
  *Eddy Weygaerts, Pfizer – Road Feeder Services Compliance to the CEIV Pharma Standards*  
  Transportation Manager  
  *Nathan De Valck, Brussels Airport - Experience with Spot Audits*  
  Cargo & Product Development Manager |
| 11:00 - 11:15 | Networking Break |
# Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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| 11:20 - 11:30 | CEIV LIVE ANIMALS  
- Program specification and value for the industry  
*Maria Jitomirski, IATA  
Project Manager, CEIV for Live Animals Logistics* |
| 11:30 – 11:45 | Regulatory Authorities’ Perspective  
*Filip Vande Capelle, ATA – The Importance of Safe and Humane Animal Transport  
President* |
| 11:45 – 12:00 | Value Insight from the First Airline to become CEIV Live Animals Certified  
*Tom Sohorab, Air Canada Cargo  
Manager, Cargo Products Business Development* |
| 12:00 – 12:30 | Industry Experiences  
*Charlotte Rob-Hughes, Goldenway International Pets & Live Animals – Freight Forwarder Perspective on the Value and Benefits of CEIV Live Animals  
Operations Manager*  
*Sean Harding, Biotrans LLC – Experience with the Program Certification for a  
Transport & Logistics Company  
President of Business Development* |
<p>| 12:30 - 14:00 | Networking Lunch                                                                         |</p>
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker/Role</th>
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</thead>
<tbody>
<tr>
<td>14:00</td>
<td>CEIV FRESH</td>
<td>- Program specification and value for the industry</td>
</tr>
<tr>
<td></td>
<td>Yaniv Sorany, IATA</td>
<td>Senior Manager, Cargo Training and Validation Programs</td>
</tr>
<tr>
<td>14:15</td>
<td>Industry Call for Standards</td>
<td>Gerton Hulsman, CCA</td>
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<td></td>
<td>Member at Large</td>
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<tr>
<td>14:45</td>
<td>Why Perishables are Strategic for</td>
<td>Alaina Shum, Airport Authority Hong Kong (AAHK)</td>
</tr>
<tr>
<td></td>
<td>Airports</td>
<td>General Manager Aviation Logistics</td>
</tr>
<tr>
<td>15:00</td>
<td>Experience with CEIV Fresh Pilot</td>
<td>Aldous Chung, CPSL – Head of Quality</td>
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<td></td>
<td>Program by Participants</td>
<td>Benny Siu, HACTL – Senior Manager, Quality Assurance</td>
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<td></td>
<td></td>
<td>Candy Chan, Cathay Pacific – Cargo Services Manager</td>
</tr>
<tr>
<td>15:45</td>
<td>Closing Remarks / Networking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Break</td>
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CEIV Introduction, Overview & Next Step

Ronald Schaefer, Senior Principal
What is CEIV?

IATA CEIV Center of Excellence for Independent Validators
Established following a call-to-action to standardize processes, improve operations and enhance training in relation to the transport and handling of air freight shipments.

- Addressing industry concerns & requirements
- Establishing a globally consistent, recognized and standardized certification program
- Raising the bar in the industry & giving visibility
IATA has a long-standing reputation as a standard setting organization

**Step 1: Implementation**

Industry feedback driving improvements:

- Need for standardization in safety, security, operations, e.g. the handling of pharmaceutical products in air cargo environment
- Need to enhance partnership and communication
- Need to ensure appropriate training in the supply chain

**Step 2: Dissemination**

Support Adoption

Prove Concept

Develop Standards

The industry usually asks IATA to address their needs to ensure compliance and quality services
Industry Leverage of Quality & Excellence

- **Training**
  - Mandatory for personnel involved in cargo handling;
  - For competent and responsible personnel;
  - Scheduled classes and In-house delivery.

- **Assessment**
  - On-site assessment by Independent Validator;
  - Assessment versus Audit Checklist;
  - Comparison against best practice;
  - Establish findings, recommendations;
  - Develop report.

- **Validation**
  - On-site validation by Independent Validator;
  - Validator to review progress made on recommendations established during the assessment.

- **Certification**
  - Certification issued, once all major gaps have been closed.

- Recertification every 3 years
How can it be implemented?

**Individual**
- One company decides to get CEIV certified

**Network**
- One company decides to get CEIV certified at several stations

**Community**
- A group of companies (airline, forwarders, ground handlers) decide to get CEIV certified
- Form a “CEIV gateway”
- Supply chain approach
- Coordinated and/or sponsored by airport or local association
Industry Leverage of Quality & Excellence

2013
Security

2014
Pharma

2018
Live Animals

2019
Fresh
CEIV Pharma

Value Proposition

CEIV Pharma helps the industry achieve fast, consistent and efficient delivery of high-value, time-sensitive, temperature-controlled products.

Benefits

- Obtain guarantee that products would be handled in line with regulations
- Experience lower rate of damage and loss due to a reduction in temperature excursions
- Protect and grow revenues in faster growing segment of cargo
- Obtain recognition for operations, facilities and staff after meeting standards
- Promote best practices to the shipper community
CEIV Pharma

Target Audience

From point of origin to destination

1. Trucking Companies
2. Freight Forwarders/Pet Shippers
3. Origin Ramp/Cargo Handlers
4. Airports
5. Airlines
6. Destination Ramp/Cargo Handlers

Consignee
**Background: Pharmaceutical Market Development**

The global biopharma sales trend is projected to go upwards.

By 2022, **world sales of cold-chain drugs and of biologics will likely top $416 billion**, in a global biopharma market exceeding $1.43 trillion.

**An expansive future for cold chain logistics is expected** (at a 5–6 % growth rate), driven by:

- continuing transition to biologically based products;
- tightening requirements for life sciences shipments;
- growing internationalization of pharmaceutical trade;
- continued strong growth in vaccines; and
- continued expansion of clinical trials logistics
- broader adoption in underdeveloped economies.

---

### Global Biopharma Sales Trend 2014 - 2022

($ Billions)

<table>
<thead>
<tr>
<th>Year</th>
<th>Cold Chain (+53% growth)</th>
<th>Non-Cold Chain (+26% growth)</th>
<th>Total (+29% growth)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>$272</td>
<td>$318</td>
<td>$833</td>
</tr>
<tr>
<td>2018</td>
<td>$833</td>
<td>$870</td>
<td>$1,105</td>
</tr>
<tr>
<td>2020</td>
<td>$870</td>
<td>$940</td>
<td>$1,310</td>
</tr>
<tr>
<td>2022</td>
<td>$940</td>
<td>$1,014</td>
<td>$1,430</td>
</tr>
</tbody>
</table>

Source: Pharmaceutical Commerce
Background: Pharmaceutical Market Development

The global biopharma sales trend is projected to go upwards

Global Medicine Spending and Growth in Selected Countries
From 2014 - 2023

Source: IQVIA Market Prognosis
Background: Critical Issues Raised by the Shippers

The use of air-mode transportation is re-considered unless industry partners ensure quality services

- 25% Of vaccines reach their destination degraded because of incorrect shipping
- 30% Of scrapped pharmaceuticals can be attributed to logistics issues alone
- 20% Of temperature-sensitive products are damaged during transport due to a broken cold chain

• 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.
Background: Critical Issues Raised by the Shippers

Looses associated with temperature excursions in healthcare are around a staggering ~USD 35B

**Losses associated with temperature excursions**

- **Total:** USD 34.1B
- **1.00**
- **3.65**
- **5.65**
- **8.60**
- **15.20**

**The average costs of root cause analysis for each excursion can range from $3K to up to $10K (avg. USD 6.5K per year)**

- **Opportunity Labor Costs**
- **Direct Labor Costs**
- **Trial Production Costs**
- **Wasted Logistic Costs**
- **Replacement Costs**
- **Clinical Trial Costs**
- **Lost Product Cost**

Source: World Health Organization, Parenteral Drug Association, worldpharmaceuticals.net, cargosense.com, other industrial analysis
CEIV Pharma: Path to Certification

In a nutshell

Step 1: Preparation
Step 2: Training
Step 3: Assessment
Step 4: Validation
Step 5. CERTIFICATION
Step 6: Training (remaining staff)
Certification Timeline (requirement)
Pharma shippers demanded to impose timelines

Mandatory Trainings: Not more than 6 months between latest training and assessment
Assessment: Not more than 12 months between assessment + validation
Validation

• In case companies pass deadline, key personnel need to take refresher training

Total certification not to last longer than 18 months from last training to certification
CEIV Pharma (Certified Entities)
Certified Pharmaceutical Trade Lanes Development

Locations
- 233 Certification Completed
- +75 Certification in Progress (estimate)
- +99 Certification under discussion * Estimate
CEIV Pharma (Community Approach)
Community Approach Development Worldwide

Location

20 Ongoing Communities
6 Communities in Discussion
Marc Voelkl,
IATA
IATA Cargo Gateway - ICG

The Industry Platform for validated cargo capacity and infrastructure information
Planning a trip?
Looking for restaurants?
Renting a car?
What do Modern Search Platforms have in common?

- Transparency
- Customization
- Convenience
- Trust
Looking for Cargo Terminal Operators?
IATA Cargo Gateway - ICG

- Publicly accessible platform
  - Available to anyone
  - Free at no cost or membership fee

- One-stop shop for all CTOs
  - Listing Cargo Facilities by location
  - Intuitive navigation and search functionalities

- Accurate Matchmaking
  - Tailoring search to your individual requirements

- Ensuring authenticity of the published information through:
  - IATA audit and validation programs

Transparency
Customization
Convenience
Trust
IATA Cargo Gateway - ICG

✓ Bringing proven search platform concept into the Cargo Industry
✓ One-stop shop for all IATA Cargo Certification Information
✓ Only displaying validated information
✓ Marketing platform for Cargo Service Providers
✓ Raising Cargo Facility profiles on the global market place
✓ Easier matchmaking between supply chain partners
✓ Raising industry baseline standards
## IATA CARGO GATEWAY – Project Timeline

<table>
<thead>
<tr>
<th>ICG Platform</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
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<tbody>
<tr>
<td>Concept Exploration</td>
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<tr>
<td>Analysis</td>
<td></td>
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<tr>
<td>Business Requirements Assessment</td>
<td></td>
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<tr>
<td>Request for Proposal</td>
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<tr>
<td>Vendor Selection</td>
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<tr>
<td>Implementation – ICG Platform</td>
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</table>

### Notes:
- **ICG Platform**
- **Explore**
- **Develop**
- **Implement**
For more information on the new ICG

- **Contact:**
  Marc Voelkl, Project Manager Smart Facilities
  voelklm@iata.org

- **Website:**
  www.iata.org/smart-facility
IATA Cargo Audit Landscape

Transport

Handling Operations

Safety

Smart Facility

ISAGO

IOSA

CEIV

Shipper

Freight Forwarder

CTO

Ground Handler

Airline
Marian Joraschkewitz,
Marsh Pte Ltd
INSURANCE and COOL CHAIN

Marian Joraschkewitz
Corporate Segment Leader Asia
Marsh Pte Ltd,
Singapore
About Marsh
Company Profile

Marsh is a global leader in insurance broking and risk management. Marsh helps clients succeed by defining, designing, and delivering innovative industry-specific solutions that help them effectively manage risk. Marsh’s approximately 30,000 colleagues work together to serve clients in more than 130 countries.
Risk and insurance management demands specific expertise for many sectors of industry in order to understand the peculiarities and complexities and to evaluate and devise optimal solutions.

Marsh has therefore established teams of specialists who devise individual, industry-specific solutions and continuously exchange ideas with other experts on the entire spectrum of business risks.

<table>
<thead>
<tr>
<th>Industry Sector</th>
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<tbody>
<tr>
<td>AUTOMOTIVE</td>
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<tr>
<td>CHEMICAL &amp; LIFE SCIENCES</td>
</tr>
<tr>
<td>CONSTRUCTION</td>
</tr>
<tr>
<td>SPORTS &amp; ENTERTAINMENT</td>
</tr>
<tr>
<td>FOOD &amp; BEVERAGE</td>
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<tr>
<td>INFRASTRUCTURE</td>
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<tr>
<td>LOGISTICS</td>
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<tr>
<td>MANUFACTURING</td>
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<tr>
<td>HEALTHCARE</td>
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<tr>
<td>ENERGY &amp; POWER</td>
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<tr>
<td>RECYCLING</td>
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<tr>
<td>REAL ESTATE</td>
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<tr>
<td>AVIATION &amp; AEROSPACE</td>
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</tbody>
</table>
Pharma Logistics
Supply chain of pharmaceutical transports
Insurance – Boring – Think Again!

1. Airport: Negligent behaviour?
2. Forwarding agent: Failing to instruct the airport?
3. Manufacturer: Failing to declare a chilled product

Who is paying for the damages?

- Container with pharmaceutical cargo commissioned to go from A to B
- Temporary stop in C (Middle East) with interim storage on airport apron
- Damaged cargo of €500,000
Another claims scenario …

- Container with pharmaceutical cargo commissioned to go from Airport A to Airport B (Export)
- Due to overbooking airline is trucking the cargo to Airport C to leave to B
- Customs denies approval due to unqualified presentation and incomplete documentation
- Damaged cargo of € 500,000

Liability of Logistics company, BUT to what limit and will insurance cover this claim?
Logistics vs. Insurance Industry
Different perspectives

<table>
<thead>
<tr>
<th>FROM THE LOGISTICIANS' POINT OF VIEW</th>
<th>FROM THE INSURERS' POINT OF VIEW</th>
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<tbody>
<tr>
<td>Favourable terms and conditions</td>
<td>More transport restrictions and obligations</td>
</tr>
<tr>
<td>Low premiums</td>
<td>High Value Cargo mean high potential claims</td>
</tr>
<tr>
<td>Quick and efficient claims processing</td>
<td>Incomplete documentation</td>
</tr>
<tr>
<td>High cost pressure</td>
<td>Unskilled and/or poorly trained staff</td>
</tr>
<tr>
<td>High use of technology</td>
<td>Poor maintenance of technology</td>
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POTENTIAL FOR CONFLICT
Why do transport damages occur?

- Insufficient communication between involved parties
- Errors in packaging or choice of wrong means of transport
- Incorrect storage or interim storage
- Delays
- Incorrect loading & cooling

**FOR EXAMPLE:**

- The goods are not declared as chilled goods
- The packaging is not sufficiently insulated and cannot maintain the temperature
- Goods are not stored in a cold store but in the sun on the airport apron
- Due to delays, the amount of dry ice is not sufficient
- Loading and cooling is not carried out according to the transport instructions
How do insurance companies calculate?

<table>
<thead>
<tr>
<th>Parameters</th>
<th>EUR</th>
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</thead>
<tbody>
<tr>
<td>Net insurance premium p.a.</td>
<td>100.000 EUR</td>
</tr>
<tr>
<td>Administration costs of 30% p.a.</td>
<td>-30.000 EUR</td>
</tr>
<tr>
<td>Transport claims</td>
<td>-500.000 EUR</td>
</tr>
<tr>
<td><strong>Final outcome = loss making contract</strong></td>
<td><strong>- 430.000 EUR</strong></td>
</tr>
</tbody>
</table>

How would you rate such a transaction and what would you do with the respective employee?

**Insurers walk away from unprofitable business!**
Certifications can help to improve the processes and reduce the damage potential

Openly involve your broker in the drafting of the logistics contracts

Open communal exchange among all participants

FOR EXAMPLE:

GDP + GMP + CEIV

Reduce disputable losses and avoid gaps in coverage

By involving a packaging expert, the damages for a customer could be greatly reduced.
Sitz: Frankfurt am Main; Handelsregister: HRB 12141; Amtsgericht: Frankfurt am Main

Geschäftsführung: Siegmund Fahrlig (Vors.), Dr. jur. Georg Bräuchle, Oliver Dobner, Bernd Knof

Vorsitzender des Aufsichtsrates: Dr. August Joas
Trevor Caswell, Edmonton International Airport (EIA)
2019 IATA WCS: Singapore

March 11th 2019
Mission & How We Operate

Mission:

*Driving our region’s economic prosperity through aviation and commercial development*

- Not-for-profit corporation
  - all earnings reinvested into the airport
- Self-funded
  - not supported by taxes or public funds
- We work to generate revenue that can be used to offset aviation costs
Edmonton Overview

- **CAPITAL OF ALBERTA:** Energy center of Canada; home to third largest oil reserves in the world, the Canadian Rockies and 5 National Parks
- **DIVERSE GROWING ECONOMY:** Artificial Intelligence, oil & gas, petrochemicals, technology, bio-pharma, tourism
Edmonton International Airport (YEG)

- YEG is Canada’s 5th largest airport
  - Canada’s most northerly 24-hour international airport
  - Closest major N. America airport to Asia over the pole
  - Serves Alberta & Prairies, plus the North & the Arctic
- 2018 Performance:
  - 5.8% passenger traffic growth
  - 21% growth in International capacity
2018 Economic Impact

Corporate Overview

**ECONOMIC OUTPUT**
$3.2 BILLION
INCREASE OF
$1 billion
(45%)
IN 3 YEARS

**GDP**
$2.8 BILLION
INCREASE OF
$1.6 billion
(133%)
IN 3 YEARS

**TOTAL EMPLOYMENT**
26,000
INCREASE OF
13,400
(106%)
IN 3 YEARS

MORE THAN 2,000 NEW JOBS WILL BE CREATED IN 2018
EIA: Target Industries

- Driving regional economic prosperity through development of the Airport City – 7000+ acres
- Destination
- Distribution & Logistics
- Industrial & Agriculture
- Aviation / Technology
EIA: Airport City Developments
EIA: Airport City Developments

[Map of Edmonton International Airport highlighting various developments and areas such as Cargo Village, Future Developments,讼, Retail/Service, Premium Outlet Collection EIA, and others. The map indicates completed, completion by 2019, construction commencing 2019, construction commencing 2020, and future plans.]
EIA: Cargo Network & CEIV Community Certification Journey:
YEG Air Cargo Network Scheduled/Charter

- Air Bridge Cargo
- Air Canada
- Air China Cargo
- Air Atlanta
- AF/KLM
- Alaska Airlines
- American
- Atlas Air
- CargoJet (UPS)
- Delta
- DHL
- FedEx
- Icelandair
- Korean Air Cargo
- Lufthansa Cargo
- Nippon Cargo Airlines
- United
- WestJet
Global access from YEG:
YEG - Broad Air Cargo Mix
YEG – Oil and gas demand projects / exports

Nisku – largest energy park in Canada, second in North America

Typical oil drilling site in Alberta
YEG – Very large oil and gas demand projects

820+ ton oil and gas single piece of equipment
The need to diversify our economy – single resource dependency does not work for our economy
YEG - Strong and diverse foundation for air cargo

- Oil & Gas industry
- Sustainable energy/technology & manufacturing
- E-Commerce products
- Perishables (Cherries / Meat)
- Agri-Foods (Ingredients / Protein)
- Pharmaceuticals
- Bio-Pharma (Cannabis / Hemp Hub)
- Life Sciences products
- Precious stones and metals
- General cargo
Air Cargo Network Expertise

- Worldwide air cargo service with non-stop freighter routes and connections
- Cargo capacity with over 50 non-stop passenger flights
- Experts shipping temperature controlled perishable products globally
- Full service capabilities with heavy lift and cold storage
- Opening soon, Fresh Cargo Centre, a brand new perishable handling facility
- Road connections within 24 hours to and from anywhere in Western Canada
EIA: THINK BIO-PHARMA

Our community steps towards CEIV certification journey
First CEIV Community Info session November 2017: STEP 1 of our journey

Edmonton International Airport hosts an information session on CEIV

- Over 80 attendees from Alberta
- 35 + companies, cold supply chain
  - Freight forwarders
  - Airlines
  - Logistics providers
  - Pharma & bio-pharma shippers
  - Trucking companies
  - Canada Customs

- Just there for a free breakfast & lunch?
YEG Community CEIV follow up
Summer 2018: STEP 2 of our journey

- Phase 1 2018 target: educate complete supply chain approach benefits to community
- Included: freight forwarder, warehouse agent, ground handler and airline – FFAF, BBE, Swissport and Canadian North Airlines
CEIV Program updates
Training
Benefits of community approach
Challenges / rewards of the certification
Certification networking opportunities
Project organization, roles, meetings
Project timelines and dates
YEG – CEIV Community Certification: STEP 4 of our journey

- Edmonton International Airport is the first airport in Canada to pursue the CEIV Community Certification process

(press releases below)

Reasons why: Bio-Pharma shippers

- Aurora Sky: world’s largest bio-pharma facility
  800,000 sq./ft. located on airport - fully robotic & digital supply chain capabilities
YEG – Global Bio-Pharma Distribution hub

- Aurora Polaris: global cold chain, GNP and GDP certified distribution hub 300,000+ sq./ft. on airport
- Includes a 30,000 sq./ft. pharma grade cooler
EIA – CEIV Cool Chain Infrastructure Investments

- New cooler 5,000+ sq./ft. airside access facility (called Fresh Cargo Centre)
- Export bio-pharma & value added (CBD, CBG, oils, life science, high-value added and perishable products for export)
- Cool supply chain storage
Edmonton has become recognized as a global distribution hub for some of the world's largest bio-pharma facilities:

Over 2.5 million sq./ft. of licensed space in our region and continuing to grow

- **Aurora Cannabis**: the second largest cannabis producer, the Edmonton-based company is a 800,000-square-foot facility at the Edmonton International Airport. Developing a 1.5 million sq./ft. facility in Southern Alberta & 1 million sq./ft. facility in Denmark

- **Canopy Growth**: currently the world’s largest cannabis producer, the Ontario-based company is expanding its national footprint with a 160,000-square-foot facility, called **Tweed 53**,

- **Atlas Growers**: the Edmonton-based company received its production license for its initial 38,000-square-foot facility

- **Pebble Grass**: an Edmonton-based craft grow operation, currently establishing it’s facility and developing it process, that will focus on the extraction of cannabinoids
Edmonton Bio-Pharma attraction:

- Global market access and distribution networks
- Hemp and cannabis cluster
- Young, strong and highly educated labour force
- World renown academic strength and R&D potential – University of Alberta partnerships
- International consumer demand: medical and value added products
- HEMP demand & development: northern Alberta is home to some of the best agricultural land in the world to grow industrial hemp. Rich soil and some of the longest sunlight growing days in the world, for hemp harvesting.
CEIV Community Lessons Learned:

- Continuous time and effort to proceed with our CEIV Community Certification
- Cost of the program, out weighting the benefits
- Potential business disruption
- Customer communication efforts
- Certification is just the beginning for our community improvements (the work is never over)
- Continuously educating program offerings
- Potential costs to infrastructure
- Number of monthly community meetings and follow ups with priorities

Community Certification = more transparency & collaboration within our airport community
CEIV Community Certification: program benefits

- CEIV Community Certification: equals increased transparency & collaboration opportunity for our airport community’s through a complete supply chain approach
- Increase Pharma and Bio-Pharma demand to our community
- Drive temperature control air export potential internationally
- Development of Pharma and Bio-Pharm networks and corridors through lane validation
- Increase accountability with our CEIV partners in the program
- Raise the level of services for our airport community to meet global standards
- Investment opportunity for our airport cargo community, treated like infrastructure or equipment investments
- Educated partners, not necessarily looking for immediate ROI, but high standard and level of service for their temperature control customers and networking opportunities
Thank You

Email contact:
tcaswell@flyeia.com

flyeia.com/cargo
Franco Nanna, Cargolux Airlines
Boeing 747 Freighter
Why temp mapping

GDP scope
Demonstrate uniformity of the temperatures across the aircraft
Identify problem areas that may experience fluctuations
Show the time required for temperature settings to be achieved
Temp mapping

Verify that the equipment has the ability to meet specified performance characteristics
# Principles of Temp Mapping

**Plan**

<table>
<thead>
<tr>
<th>Map more than once</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot air rises</td>
</tr>
<tr>
<td>Select calibrated data loggers</td>
</tr>
<tr>
<td>Put loggers where cargo is loaded and critical area</td>
</tr>
<tr>
<td>Distance between loggers matters</td>
</tr>
<tr>
<td>Label your loggers</td>
</tr>
<tr>
<td>Pick the proper sample rate</td>
</tr>
<tr>
<td>Record all the data (incl. all temp influencing factors)</td>
</tr>
<tr>
<td>Repeat if so required by results of RA, whenever significant modifications are made to the ECS</td>
</tr>
</tbody>
</table>
Qualification Protocol and Planning

Comprehend technical constraints

Loaded vs. empty aircraft

Acceptance criteria

Report should be as complete as possible (e.g. data of each sensor, max-min and acceptable range limits)

Determine critical mapping points

Determine sample rate

Establish data logger criteria

Place loggers at determined locations

Capture and evaluate logged data

Document and repeat
Environmental Control System

4 different temperature zones: FWD MD, AFT MD, FWD BLY, AFT BLY
Possibility to set target temperatures independently from each other
Operating range +4°C to +29°C
Environmental Control System

3 Air-conditioning packs provide conditioned air.

Airflow is not only used for temperature control, but also for pressurization.

Engine bleed air (with a high pressure) must be used.

Air-conditioning Packs required to cool down bleed air temperature 180ºC --> 4-29ºC.

Target Temperature Range 40F (4°C) - 85F (29°C)
Factors influencing onboard temperature

<table>
<thead>
<tr>
<th>Outside air temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flight level</td>
</tr>
<tr>
<td>Mach-number</td>
</tr>
<tr>
<td>Cargo compartment temp settings</td>
</tr>
<tr>
<td>Air conditioning settings (e.g. high flow switch position)</td>
</tr>
<tr>
<td>Heat/moisture generation of payload</td>
</tr>
<tr>
<td>Upper deck temp</td>
</tr>
<tr>
<td>Interactions between the cargo compartments</td>
</tr>
<tr>
<td>Heat generated by the bleed air exhausts</td>
</tr>
<tr>
<td>Air flow pattern (depending on air conditioning settings)</td>
</tr>
<tr>
<td>ECS temp sensor locations</td>
</tr>
</tbody>
</table>
Factors influencing onboard temperature

Difference between air & payload temp

Air Temperature +2°C

Flower Temperature +12°C
Factors influencing onboard temperature
Factors influencing onboard temperature
Resulting Guidelines

Recommendations for:
- Loading location
- ECS settings
- Enhanced NOTOC design
- B747-8F:
  - ECS improvement
Air-conditioning and pressurizing of the aircraft go hand-in-hand

Numerous external and internal factors can influence the temperature onboard

Even though different settings on the MD are possible, there is no physical separation and the FWD MD will always have an effect on the AFT MD

Depending on the outside air temperature, inflight cool down times will greatly vary
Nathan de Valck, Brussels Airport
Experience with Spot Audits

Nathan De Valck
Cargo & Product Development manager – Brussels Airport
Chairman – Pharma.Aero
How it started
Community Certification

Instead of only focusing on this...
FOCUS ON:
- THE ENTIRE COOL CHAIN AT THE AIRPORT
- THE COMMUNITY

Community Certification
Focus on: The entire lane

Community Certification

- Closed Cool Chain
- Continuous Improvements (~CAPA)
- Lower Risk Profile
- Community Dynamic
- Follow Up Improvement Projects
- Growth of Pharma Volumes
BUT WHAT HAPPENS IF PART OF THE COOL CHAIN FAILS?
Community Certification

BUT WHAT HAPPENS IF PART OF THE COOL CHAIN FAILS?
BUT WHAT HAPPENS IF PART OF THE COOL CHAIN FAILS?

RESULTING FROM:
- QUALITY CONSISTENTLY BELOW STANDARD
- MAJOR INFRASTRUCTURE CHANGE
- CHANGE IN PRIORITIES
Ensuring the CEIV pharma standard
Ensuring the CEIV pharma standard

Complacency is not an option

PHARMA PRODUCT INTEGRITY & PATIENT SAFETY

CEIV REPUTATION
- CONSISTENT SERVICE
- RELIABILITY
- TRANSPARENCY

COMMUNITY REPUTATION
- COMMON STANDARD
- PHARMA GARANTEE
Ensuring the CEIV pharma standard

Who should take action/ownership?
Ensuring the CEIV pharma standard

Who should take action/ownership?

1. IATA
   - CLEAR EXPECTATIONS
   - CONTRACTUAL AGREEMENT IN PLACE
Ensuring the CEIV pharma standard

Who should take action/ownership?

1. IATA
   - CLEAR EXPECTATIONS
   - CONTRACTUAL AGREEMENT IN PLACE

2. AIRPORT COMMUNITY
   - COMMON RESPONSIBILITY
   - KPI MEASUREMENT
   - WORKING GROUP
Ensuring the CEIV pharma standard

Who should take action/ownership?

1. IATA
   - CLEAR EXPECTATIONS
   - CONTRACTUAL AGREEMENT IN PLACE

2. AIRPORT COMMUNITY
   - COMMON RESPONSIBILITY
   - KPI MEASUREMENT
   - WORKING GROUP

3. SHIPPER
   - PARTNERSHIP
   - COMMON INTEREST
   - EARLY WARNING
Lessons Learned
CEIV shippers validation

COLLABORATION

RECOMMENDATIONS

- 49 RECOMMENDED ACTIONS
- 14 AREAS FOR ATTENTION
- CHAPTER ON SPOT AUDITS

WHITE PAPER: EXECUTIVE SUMMARY

CEIV VALIDATION PROJECT BY THE SHIPPERS
RECOMMENDATIONS

- BUILD IN ENFORCEABLE SPOT AUDIT
- DEFINE SPOT AUDIT METHODOLOGY
  - ON SITE AUDIT
  - FACT BASED: REVIEW OF CAPA HISTORY
  - CORRECTIVE ACTION PLAN
  - TIMING
- TRANSPARENCY: CLEAR COMMUNICATION PLANNING
- FOCUS ON
  - AWARENESS OF SERVICE ISSUES
  - SUPPORT
- CERTIFICATION STATUS
  - EARLY EXPIRATION
  - BUILD IN POSSIBLE SUSPENSION (ONLY AS LAST RESORT OPTION)
Conclusion
Evaluation

Outcome of a spot audit

- Hands-on and constructive approach by IATA
- Involvement of the shipper
- Clear communication
- Transparency
  - On corrective action plan
  - For the community
  - For shippers
- Airport community:
  - Takes ownership
  - Clear quality commitment
  - Positive outcome
www.brusselsairport.be
Maria Jitomirski, IATA
Program launch at WCS 2018

Pilot program completed in 2018

AIRLINES
one certified & two certifications in progress

20+ companies

CEIV LIVE ANIMALS UPDATES

FFs
Two certifications in progress
Why CEIV Live Animals?

CEIV Live Animals is a concerted effort to meet industry concerns over non-compliance, lack of appropriate infrastructure and inadequate training which impact animal safety and welfare.
IATA Live Animals Regulations (LAR)

- The IATA LAR is the worldwide standard for transporting live animals by commercial airlines.
- It has been adopted by a number of countries as their national regulations for transporting live animals and is
  - Endorsed by the LAPB
  - Underpinned by the expertise of major airlines and scientific data supplied by research institutions
CEIV Live Animals

IATA STRATEGY

- Protect the safety and welfare of animals globally
- Improve animal health and welfare through appropriate risk management
- Enhance capability of modern live animals transportation
- Promote a uniform approach for the handling of live animals
- Reinforce trust through transparency and communication
CEIV Live Animals

**OBJECTIVES**

- **Improve transportation of live animals** in compliance with existing regulations and standards.
- **Elevate staff competency level** through efficient and robust training program.
- Ensure all **animals are transported safely and humanely** by air.
- **Support and recognize organizations** in their compliance with live animals regulations.

**Ensure animal safety and welfare**
Who does CEIV Live Animals target?

From point of origin to destination

1. Trucking Companies
2. Freight Forwarders/Pet Shippers
3. Origin Ramp/Cargo Handlers
4. Airports
5. Airlines
6. Destination Ramp/Cargo Handlers

Shippers

Airlines

Trucking Companies

Ramp/Cargo Handlers

Freight Forwarders/Pet Shippers

Airports

Consignee
Value & Benefits

CEIV Live Animals **ensures compliance with stringent regulations** pertaining to live animal handling and transport demanded by the industry.

- Competitive advantage
- Certainty in compliance with the IATA LAR
- Visibility of credible partners in the supply chain
- Reliability and assurance in live animal transport operations for both customers and partners across the supply chain.
Industry Leverage of Quality & Excellence

Training

• Live Animals Cargo Logistics Management course
• Mandatory 3-day course for personnel involved in the handling of live animals;
• Scheduled classes and In-house delivery

Assessment

• On-site assessment by Independent Validator;
• Assessment versus the CEIV Live Animals Logistics Audit Checklist;
• Comparison against best practice and compliance with the IATA LAR;
• Establish findings, recommendations;
• Develop report.

Validation

• On-site validation by Independent Validator;
• Validator to review progress made on recommendations established during the assessment.

Certification

• Certification issued, once all major gaps have been closed.

Recertification every 3 years
“Customers will be looking for end-to-end excellent service which they can appreciate if everyone in the supply chain has done the CEIV program.”

Tristan Bradfield, Heathrow Animal Reception Centre (HARC)
“It’s important that our customers know we’re handling their pets in a very high, regulated and prescribed manner and they can absolutely be certain that their animal will be cared for.

Having achieved a CEIV certification let’s them know that we are at the top of our game and at the top of anyone in the world’s game.”

Tim Strauss, Air Canada Cargo

Certified Entities
First Airline to be certified
Air Canada

First Airline to Achieve CEIV Live Animals Certification
Filip Vande Cappelle, ATA
Regulatory Authorities’ Perspective

Filip Vande Cappelle
The Importance of Safe and Humane Animal Transport
Animal Transport Association
• What?
• Who?
• Why?
Every incident is one too many!

Changing the law takes time.

Filip Vande Cappelle
11 March 2019
• OIE
• IATA-LAR
• CEIV Live Animals
Thank you!
Janet Wallace, Air Canada
Charlotte Robe-Hughes, Goldenway International Pets & Live Animals
Freight Forwarders Perspective on the Value and Benefits of the IATA CEIV Live Animals Program

Charlotte Robe-Hughes
Operations Manager CDG
Goldenway International Pets and Live Animals
About us

• FREIGHT FORWARDERS SPECIALISED IN LIVE ANIMAL RELOCATION

• Based on Paris CDG Cargo 6
• Animal transit hotel
• 24/7 Emergency service
• All services and establishments are approved by the French Ministry vets
• 15 employees
• Only quarantine in mainland Europe for dogs and cats to French Polynesia
• GOLDENWAY ARE PROUD TO WORK WITH:

• Major corporations
• Government organisations
• International Relocation & Mobility companies
• Zoos
• Pet Rescue associations
• Individual owners
• Breeders
• Approved laboratoires & institutions
• Airlines *Air France*
Goldenway are members of

- IATA  International Air Transport Association
- FIATA  International Federation of Freight Forwarders Associations
- ATA  Animal Transport Association
- IPATA  International Pet and Animal Transport Association
- TLF  Transport & Logistic of France

Goldenway is now in the course of becoming

- AEO certified  Authorised Economic Operator
- WAZA member  World Association of Zoos and Aquariums
- IATA CEIV Certified  Center of Excellence for Independent Validators
Primary interest in the CEIV Program

The next step, after IATA LAR to work in the live animal transport sector

Freight forwarders have an important role when preparing cargo for airlines
Internal benefits & values

Within a freight forwarding company

• Keeping up good practices and standards
• Striving for improvements
• Staff recognition

Within the industry

• Setting a higher standard of quality
• Aspiring others to follow
External benefits/values

Customers
Recognition from potential clients & increasing our business

Airlines
Encouraging airlines to take a step towards working only with live animal specialist freight forwarders

Administrative bodies
Recognition from the Ministry, Veterinarians, Customs, EU representatives
To conclude

• Continuously raising standards in live animal transport

• Increasing business with similar minded businesses/people

• Recognition of our practices & services by others
Thank you

Charlotte Robe-Hughes

charlotte@goldenwaypets.com

www.goldenwaypets.com
Sean Harding, BioTrans LLC
Experience with the CEIV Live Animal Transportation and Logistics Program Certification

Sean Harding
President of Business Development
BioTrans LLC
Company Background

• Biotrans is a worldwide leader in live animal transportation and logistics
• 10,000 live animal containers each Week
• Logged over 5.5 million miles in 2018
• 100 trucks/20 offices/130 employees, exclusive to live animal transport
• Global network of qualified agents
• 2015-2018 1320% growth in 3 full years
# Experience with Each Phase

<table>
<thead>
<tr>
<th>Preparation</th>
<th>Training</th>
<th>Assessment</th>
<th>Validation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Detailed Project Plan that outlined the scope, methodology, and training</td>
<td>• Live role play sessions that used matrix to analyze critical checkpoints</td>
<td>• Onsite detailed review of processes and procedures</td>
<td>• Onsite multi-day review of steps take to eliminate findings</td>
</tr>
<tr>
<td>• Exchange of information increased efficiency and allowed to use time wisely</td>
<td>• Risk Assessment SOP’s, QMS to improve animal welfare</td>
<td>• Identified gaps, interviewed staff</td>
<td>• Live audit of ground and air shipments</td>
</tr>
<tr>
<td>• Flexible project logistics allowed our team to work around their busy schedules to prepare</td>
<td>• Understanding the role of the auditor, follow ups and continual improvement</td>
<td>• Produced report itemizing major and minor findings of non compliance</td>
<td>• Produced report of remaining non compliance, if any</td>
</tr>
</tbody>
</table>
Course Contents and Compliance

Non-Compliance Level

- Regulations
- Checklists
- Supplier Mgmt
- QMS
- HSE
- SOP's

Time to Correct Non-Compliance

- SOP
- HSE
- QMS
- Rest

Biotrans IATA

0 1 2 3 4 5
Improvements

• Quality Management
  1.) Improved QMS and more clearly defined the role of the responsible person
  2.) Updated formal review process for Management Meetings
  3.) Refined change and process control measures to more clearly define steps

• Health and Safety
  1.) More robust HSE Manual

• Training
  1.) Updated training matrix and LAR training procedures

• Documentation
  1.) Improved checklists around animal acceptance and critical checkpoint checklists
  2.) Increased documentation regarding Risk Assessments
  3.) Improved Master List, Control Numbers, References

• Supplier Management
  1.) Increase documentation around SLA’s
  2.) Additional KPI’s measurements and audit procedures for Suppliers
The Project intends to create baseline standards to improve the level of competency, infrastructure, and quality management in handling and transportation of live animals throughout the supply chain.
Opportunities and Expectations

Opportunities
• Increased year over year growth
• Decrease deviations
• Improved KPI’s and Success Rates
• Improved procurement efficiency
• Greater Profitability

Expectations
• Promote certification to increase customer base
• Promote vendors and partners to certify
• Develop increased trust between stakeholders
• Expand shipments between other CEIV certified company’s
• Continually improve operation
THANK YOU
CEIV Fresh
Perishable goods by air increase globally

$250 billion

1/3 of food produced is wasted

Social responsibility

Spend on perishables is escalating

$21.6 billion by 2025
CEIV FRESH (Perishables) – Challenges

- **Industry call to prevent food loss and food waste throughout the supply chain** (Cool Chain Association)
  - Consequence of lack of harmonized procedures and practices
  - Issue of industry driving its own standards
  - Need for increased collaboration

- Increased industry interest and requests to IATA over the last months to get engaged in a CEIV Fresh program

- This resulted for IATA to accelerate the process of developing a “CEIV Fresh” program to investigate the feasibility together with the Industry
CEIV FRESH (Perishables) - Objectives

**Key messages** that arise from this investigation, such as the need to:

- Keep the business in the air transportation vs. other modes of transport;
- Raise awareness on existing standards and develop new requirements;
- Enhance professionalism in the industry as well as quality services;
- Consider the aspect of sustainability and getting the message across to consumers.
- Ensure overall food safety and reductions of loss of products in the air industry.
- Streamline companies’ own processes in the different special cargo area.
Using a consistent approach in standard-setting activities.

Addressing industry needs, to ensure compliance and quality in their services.

- Developing CEIV related checklists and guidelines
- Piloting with interested companies the practicability of the program
- Seeking industry feedback
- Fine-tuning the program following the outcome of the pilot project
- Rolling-out in the industry
CEIV Fresh - Pilot Project Status

- Pilot is ongoing to determine the feasibility of CEIV Fresh
- Airline, cargo terminal operator and ground handling agents involvement
- Staff from participating companies being trained
- Assessment of organization’s documents, processes, infrastructure and operations
- Final validation ensuring that the findings have been resolved confirming compliance to the program requirements
- Pilot completion expected by April 2019
CEIV FRESH (Perishables) Benefits

- Apply excellence in perishable logistics by establishing standardized and efficient processes and operations throughout your organization
  - Comply with the Perishable Cargo Regulations (PCR) and international standards
  - Improve handling and transportation performance
  - Elevate level of staff competency and capacity of workforce
  - Reduce food loss and waste through appropriate quality and risk management
  - Ensure food safety along the supply chain
  - Gain a stake in the growing perishables market
  - Meet consumer expectations
Questions?
Alaina Shum, General Manager, Aviation Logistics

Airport Authority Hong Kong (AAHK)
Why Perishables are Strategic for Airports

Alaina Shum
General Manager, Aviation Logistics
Airport Authority Hong Kong
HKIA’s Cargo Leadership

World’s Busiest Cargo Airport for 8 Consecutive Years Since 2010

Source: ACI Preliminary 2017 World Airport Traffic Rankings (Top 20 Airports)
HKIA’s Air Cargo Strategy

- Promote Cross-border E-Commerce
- Capture High-value Cargo
- Grow Transshipment
HKIA’s Air Cargo Strategy

Promote Cross-border E-Commerce

Capture High-value Cargo

Grow Transshipment
Develop HKIA as pharmaceutical and perishable hub
Commissioning IATA for a consultancy study in 2016

Scope of Work

1. Benchmark major international airports' approach to on-ramp infrastructure and equipment in order to determine current best practices.
2. Generate commodity forecast for on-ramp temperature-controlled cargo at HKIA.
3. Conduct stakeholder interviews in order to better understand HKIA specific challenges and needs.
4. Ascertaining HKIA’s operating model based on current available functions and flows for future cargo operations.
5. Determine basic future on-ramp cargo infrastructure requirements for transfer cargo.
6. Deliver findings and recommendations.

Temperature Controlled Cargo Initiatives

Source: IATA Rampside Temperature Controlled Cargo Study, 2016

CONFIDENTIAL
HKIA community attained CEIV Pharma Certification in 2017

CEIV Pharma Partner Airport

Community Approach

- Hactl
- Asia Airfreight Terminal
- CPSL
- SHAS
- SATS
- Jardine Aviation Services
- Cathay Pacific
## Positive outlook for perishable air cargo

Global and North East Asia Markets

<table>
<thead>
<tr>
<th></th>
<th>World</th>
<th>NE Asia</th>
<th>World</th>
<th>NE Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAGR 2013 – 2018</strong></td>
<td>5.0%</td>
<td>6.1%</td>
<td>5.1%</td>
<td>6.2%</td>
</tr>
</tbody>
</table>

Source: Seabury Global Trade Database  *Note: Oct-Dec 2018 are forecast only*
Perishables Outgrow General Cargo at HKIA

2013 – 2018 CAGR

4% VS 8.4%

Approximate value: HK$38.4 Billion

HKIA handled 380,000 tonnes of perishables

YOY 12%
HKIA participating in CEIV Fresh Certification

CEIV Fresh Partner Airport

Community Approach with 3 leading the way

Hactl  CPSL

CATHAY PACIFIC
Dedicated Cold Chain Handling Facilities

- Cool Dollies
- Cool Rooms across Cargo Terminals
- Apron Shelters
Thank You
Jenny Lam, CEO

Cathay Pacific Services Limited (CPSL)
CEIV FRESH Workshop

- Experience with CEIV Fresh Pilot Program

11 MAR 2019
About Cathay Pacific Services Ltd (CPSL)

- **Annual Capacity**: 2.6M tonnes
- **2018**: >2M tonnes
- **2018**: >200,000 flight movement
- **170 truck docks**
- **2,445 container storage positions**
- **4,224 bulk storage positions**
- **>2,300 staff**
- **>2M** tonnes

RAISING
THE BAR
Standard setting organization

Facilitate cooperation of key stakeholders

Develop a robust system for all
Feb  Validation
Jan  Implement improvement plans
Dec  Assessment
   Enrich existing procedures
Nov  Training
Raising staff awareness

More comprehensive knowledge

Worldwide recognition
MAKE THINGS HAPPEN!
within 3 months

Course Design
Train the trainers
Computer based training

2300+ staff trained
Implement HACCP in Cargo Terminal

Identify possible hazards & causes

Develop Control Measures
Extreme weather
Temperature Controlled Dolly

24/7 Temperature Controlled Facility
Future Development

- Bluetooth ULDs Tracking
- Packaging
- Humidity Control
- Blockchain Technology
Freshness Respected Culture
Benny Siu, Senior Manager, Quality Assurance,
Hong Kong Cargo Terminal Limited (HACTL)
Experience with CEIV Fresh Pilot Program by Participants

Together Shaping the Future
Our Background
Hong Kong Air Cargo Terminals Limited (Hactl)

» Founded in 1976
» Over 40 years of cargo handling experiences
» 2400 permanent staff
» SuperTerminal 1
» Serving over 100 airlines

SuperTerminal 1
The world’s single largest air cargo terminal
IATA and Hactl

Strategic Partner
Since 2007 till now

IGOM
First Company in Hong Kong (2016)

ISAGO
First CTO in the World (2008)

CEIV Pharma
First company in Hong Kong (2017)

CEIV Fresh
First company in the world passing the validation audit (2019)

IATA SFOC
First Company in the world on trial audit (2018)

Cargo iQ
» Former “Cargo 2000” (since launched by IATA)
» Cargo iQ (2018)

Cargo iQ
Former “Cargo 2000” (since launched by IATA)

Hactl
Our CEIV Fresh Roadmap
Hactl’s Rainbow Journey

- **Preparation**: 2 Oct 2018
- **Training**: 19-21 Nov 2018
- **Internal Audit**: 6 Dec 2018
- **Management Review**: 10-11 Dec 2018
- **Assessment**: 30-31 Jan 2019
- **Validation**: 12 Mar 2019
- **Certification**: 3 Dec 2018
- **Management Review**: 6 Dec 2018
Preparation

» **Teamwork:**

   Not just your QA team but experts from cross-departments, coz IATA CEIV Fresh involves operation, facility, equipment, QMS, training...etc.

» **Structured Timeline:**

   Set the milestone dates coz you need to go through several stages for certification

» **High Discipline:**

   Once the action plan is set, everyone shall be dedicated to achieve
IATA Training

» Perishable Cargo Logistics Management Course
» A 3-day course trained by IATA (19-21 Nov 2018)
» Before the class, it’s better to read IATA PCR and get yourself familiar with IATA audit checklist
» During the class, a wonderful platform to clarify all requirements written in the audit checklist
» After the class, review/ revise internal training materials, documentations, SOP, infrastructure and equipment...etc.
» Candidates would be better equipped with the standard of IATA PCR, CEIV Fresh and have a better understanding the importance of Hazard Analysis and Critical Control Point (HACCP).
» Train all concerned staff internally as a critical part of change management
Internal Audit

» Identify clearly **which team** should be responsible for which audit checklist item

» Distribute the checklist and **communicate** closely with each team how to comply with the standard

» Discuss and confirm the modifications required to come up with an **action plan**

» All actions are advised to be done **before** internal audit

» **Internal audit** to check the level of compliances

» **Create findings** which need to be closed before IATA Assessment
Management Review

» **Top management** not only sign the contract and policy, but allocate adequate resources for enhancement works

» **Review** the internal audit results and monitor the compliance readiness

» Meet IATA standard is a basic, need to plan forward to seek for **breakthrough** in the long-term planning

» **Think out-of-the-box**: Please forget how many years you have handled PER, otherwise, it’s a hurdle to hinder your enhancement plan

» **Be creative** in your enhancement plan
e.g. Hactl has its “Fresh Lane”, “Coloured Zone”, “Blue Belt”...etc.

» **Keep the momentum**: always be the leader to drive continual improvement
IATA Assessment

» IATA assigned the Independent Validator (IV) to undergo the assessment

» 2 IVs to conduct a 2-day assessment in our experience

» It involved site inspection, documentation check, staff interview and record verification

» Get ready all the audit checklist items with valid supporting evidences in your hands before the assessment

» Be open-minded coz assessment is a kind of gap analysis to see if there is action to be done before validation
IATA Validation

» 30-31 Jan 2019, Hactl was the first company in the world to attempt CEIV Fresh Validation

» Validation involved follow-up actions of assessment, site inspection, documentation check, staff interview and record verification

» Detailed verification by IV shall be expected coz this is your last stage towards the final certification
Fresh Lane
Fresh Lane

» Thermal Dolly
» Fresh Release
» Fresh Storage
» Fresh Break/Build
Thermal Dolly

- Designated just for PER
- Protective bumpers
- Flexible locking system for different ULDs

Loading ULDs:
- 2 x LD3 or,
- 1 x LD6 or,
- 1 x PAG pallet or,
- 1 x PMC pallet

- Temperature logging with warning alarm
- A side door for pallet pusher
- Lights for night operation
Fresh Release

Designated blue zone (Just for PER)

» Risk Assessment
» Segregate PER from the other cargo
» Within PER, Segregation per PCR Appendix 2B
Fresh Storage

- Clear segregation
- Clear identification
- Easy to frontline staff
- Minimize mishandling

Blue Belt: PER
Golden Belt: PIL

15°C to 25°C Perishable Shipment Storage Area
15°C to 25°C 鮮活貨物儲存區

Blue belt
Fresh Break/Build

**Temperature Controlled Zone (TCZ)**
- Sliding door & plastic curtain to keep better cooling
- 7x24 monitoring by BMS
- Clear segregation zone within TCZ
- Clear identification by blue belt
- Enhanced daily cleaning
- Stringent pest control
Conclusion
Conclusion

» Hactl was honoured to be the first company to pass CEIV Fresh Validation in the world

» Certification is always a kind of third-party recognition which is useful to benchmark the quality and standard of an organization

» Hactl supports IATA initiatives to drive IATA CEIV Fresh in the industry and hope in every success

» Hactl encourages more companies to join coz this can improve your existing operation standards of handling PER
Thank You

Mr. Benny Siu
benny.siu@hactl.com
Candy Chan, Manager, Cargo Services Development

Cathay Pacific
Cathay Pacific Airways Limited

- Over 100 passenger flight destinations, 46 freighter destinations

- Aircraft inventory: 201

<table>
<thead>
<tr>
<th>Fleet</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cathay Pacific Passenger</td>
<td>133</td>
</tr>
<tr>
<td>Cathay Dragon Passenger</td>
<td>48</td>
</tr>
<tr>
<td>Cathay Pacific Freighter</td>
<td>20</td>
</tr>
</tbody>
</table>

- 2017 Ranking (tonnage): No. 1 in Hong Kong

- Wholly-owned subsidiaries:

- Cargo Products
Facts & Figures – Hong Kong

- **Population**: 7.482 million *(Source: HKCSD)*

- **Seafood consumption (per capita)**: 2nd in Asia, 8th in the world, 65.5kg per year *(Source: WWF)*

- **Cut flowers import**: 15th largest in the world *(Source: Hortibiz.com)*

- **Fruits import**: 1.692 million Tons in 2017 *(Source: USDA)*

- **Importation**: Majority of the Perishable Traffic

- **IATA CEIV Fresh Pilot Programme**
Why Does Cathay Pacific Participate?

- Lift industry standard
- Raise awareness
- Improve quality control
- Strengthen the handling
- Increase transparency
- Promote sustainability
Employee Readiness
- Competent employees who are trained to handle temperature controlled pharmaceutical products are also perishable products trained.

Quality Management System
- Similar quality management system was established for IATA CEIV Pharmaceutical Certification.
- Critical Control Points in operations were identified and managed by risk assessment.
- Risk assessment by each pharmaceutical stations were completed.

Supplier Management
- Particularly in HK, our CTO (CPSL) and ramp handling agent (HAS) are both IATA CEIV Pharmaceutical certified.

Governance
- Has always had internal audits and self-inspection in general, extended some focus on pharmaceutical products, and further extending to perishable products.

Customer Centric
- Enhanced the complaint handling and CAPA procedures for IATA CEIV Pharmaceutical Certification.
  - Adapting these to perishable products.
Thank you for participating

For questions or further information, contact us:

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