Logistics Business Forum
Luxembourg, 13th May 2013

Robert van de Weg
Sr. VP, Sales & Marketing
I. Cargolux update

II. Air Cargo Market trends and outlook

III. Luxembourg as an international air freight gateway
Cargolux provides airfreight connections to 55 countries in five continents

Latest additions to CV network: PHC, OUA, TIP and DFW

* served by Cargolux and Cargolux Italia
** served by Cargolux Italia only
*** regular charter flight
European trucking network
Regular trucking from and to Luxembourg

Austria
Linz
Vienna

Belgium
Antwerp
Brussels

Czech Republic
Prague

Denmark
Billund
Copenhagen

Finland
Helsinki

United Kingdom
Belfast
London
Manchester
Prestwick

France
Lille
Lyon
Marseille
Mulhouse
Paris
Strasbourg

Germany
Berlin
Bremen
Cologne
Dortmund
Dresden
Dusseldorf
Frankfurt
Hamburg
Hanover
Leipzig

Nuremberg
Munich
Munster-Osnabrück
Stuttgart

Switzerland
Basle
Geneva
Zurich

Hungary
Budapest

Switzerland
Basle
Geneva
Zurich

Spain
Alicante
Barcelona
Bilbao
Madrid
Valencia
Zaragoza

Italy
Bologna
Florence
Milan
Rome
Turin
Venice
Civitanova Marche

Ireland
Cork
Dublin
Shannon

Norway
Bergen
Oslo
Stavanger

Portugal
Lisbon
Porto

Sweden
Gothenburg
Malmo
Stockholm
Cargolux operates an all-Boeing 747 fleet with high daily productivity

Cargolux fleet composition*:
- 7 747-8 freighters
- 9 747-400 freighters
- 2 B747-400BCF

Daily aircraft utilization (block hours)

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Hours</td>
<td>14:14</td>
<td>15:28</td>
<td>15:46</td>
<td>14:34</td>
<td>15:30</td>
</tr>
</tbody>
</table>

*incl. CV Italia
## Key performance indicators

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2012 vs. 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tonnes sold</strong></td>
<td>645,759</td>
<td>↓ 2%</td>
</tr>
<tr>
<td><strong>Average A/C utilization</strong></td>
<td>14:14</td>
<td>↓ 8.2%</td>
</tr>
<tr>
<td><strong>Freight tonne-kilometers</strong></td>
<td>4,799</td>
<td>↓ 6.4%</td>
</tr>
<tr>
<td><strong>Average load factor</strong></td>
<td>68.6%</td>
<td>↓ 0.9ppt</td>
</tr>
</tbody>
</table>

1 Cargolux and Cargolux Italia aircraft only
Fleet Plan

Boost in profitability with the 747-8F deliveries

The world’s most efficient freighter aircraft
- 17% more fuel efficient
- 17% reduction in carbon emissions
- 30% smaller noise footprint
- Four additional main deck pallets
- 787 technology Engines (GE)
Cargolux strengths in a competitive market environment

- Modern fuel efficient fleet
- Strong network
- Flexibility to adapt to market changes
- Lean customer driven organization
- Relatively in “Niche” market position
- Loyal and highly qualified workforce
- Quick decisions, team-spirit, flexibility
- In-house Maintenance, Flight Operations
Cargolux Business Model is based on 3 main pillars
...as a consequence of our strengths and to mitigate external factors.

External Factors

A. Supply/Demand Gap
B. Jet Fuel Prices
C. Margin Pressure

Cargolux’ Strategic Pillars

1. Load Factor
   Load factors above industry average
   - Dynamic network management aiming to operate to ‘best’ markets
   - Offset trade-imbalance in network design
   - Nose door capabilities
   - Network cargo access i.e. China/Brazil

2. Yield
   Yield above industry average
   - Dynamic network management aiming at operating to ‘best’ markets
   - Presence in all key markets
   - Niche products and network cargo (avoid commoditization) is key to Cargolux’ yield premium
   - Nose-door capability

3. Utilization
   Very high daily utilization
   - Young and reliable fleet
   - Homogenous fleet of 747s
   - In-house maintenance and flight operations
I. Cargolux update

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III. Luxembourg as an international air freight gateway
Following a dip in 2012, economic forecasts for 2013 and following years are improving again:

IMF (April 2013): “Activity has stabilized in the developed economies and is expected to gradually accelerate, following a weak start to 2013, with the US in the lead. In emerging markets and developing economies, activity has already picked up steam”.

Though slightly below expectations, the economy in China expanded by 7.7% in the first quarter 2013.

Source: IMF World Economic Outlook (April 2013)
Air Cargo markets show more volatility - in upswings and in downturns - than world trade.

Source: Boeing World Air Cargo Forecast 2013-2017 / IMF World Economic Outlook
Air cargo market trends and outlook

Market forecasts

- 2013 projected market growth rates are below expected long term average market growth rates

Growth Drivers:

- Asia linked markets (EU-Asia, US-Asia) are projected to further cement position of largest traffic flows over the next decade
- Several smaller markets (Latin America, Africa and Middle East) are also expected to show high relative growth
- Intra-Asia and domestic China are expected to show the highest growth rates
Following a long period of stronger supply growth vs demand, supply growth has stalled but demand growth remains also flat YTD 2013.

Asian and European showed declines in March 2013 compared to a year ago, whereas Middle East carrier posted another month of growth, up by 10.5%!

Capacity and demand evolve in balanced way.
## Air Cargo Market

### IATA Top 25 air cargo carriers – YTD March 2013

<table>
<thead>
<tr>
<th>Rank</th>
<th>Airline</th>
<th>FTK ('000) 2013/3</th>
<th>FTK ('000) 2012/3</th>
<th>Market share 2013/3</th>
<th>Market share 2012/3</th>
<th>Growth 2012/3-2013/3</th>
<th>CAGR 2010-2012</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EK Emirates</td>
<td>2,435,311</td>
<td>2,108,603</td>
<td>6.6%</td>
<td>5.7%</td>
<td>15.5%</td>
<td>8.5%</td>
<td>incl. KL, MP</td>
</tr>
<tr>
<td>2</td>
<td>AF Air France</td>
<td>2,345,745</td>
<td>2,526,010</td>
<td>6.4%</td>
<td>6.8%</td>
<td>-7.1%</td>
<td>-4.4%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>CX Cathay Pacific</td>
<td>2,058,766</td>
<td>2,199,083</td>
<td>5.6%</td>
<td>5.9%</td>
<td>-6.4%</td>
<td>-6.3%</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>FX Fedex</td>
<td>1,907,554</td>
<td>1,820,189</td>
<td>5.2%</td>
<td>4.9%</td>
<td>4.8%</td>
<td>2.8%</td>
<td>Estimations for 2,3/2013</td>
</tr>
<tr>
<td>5</td>
<td>LH Lufthansa</td>
<td>1,718,551</td>
<td>1,811,062</td>
<td>4.7%</td>
<td>4.9%</td>
<td>-5.1%</td>
<td>-2.1%</td>
<td>incl. OS</td>
</tr>
<tr>
<td>6</td>
<td>KE Korean Air</td>
<td>1,695,232</td>
<td>2,010,040</td>
<td>4.6%</td>
<td>5.4%</td>
<td>-15.7%</td>
<td>-8.1%</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>SQ Singapore Airlines</td>
<td>1,550,626</td>
<td>1,624,937</td>
<td>4.2%</td>
<td>4.4%</td>
<td>-4.6%</td>
<td>-2.2%</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>SX UPS</td>
<td>1,383,312</td>
<td>1,298,262</td>
<td>3.8%</td>
<td>3.5%</td>
<td>6.6%</td>
<td>2.3%</td>
<td>Estimations for 2,3/2013</td>
</tr>
<tr>
<td>9</td>
<td>BA British Airways</td>
<td>1,309,841</td>
<td>1,441,328</td>
<td>3.6%</td>
<td>3.9%</td>
<td>-9.1%</td>
<td>0.9%</td>
<td>incl. IB, BD</td>
</tr>
<tr>
<td>10</td>
<td>CV Cargolux</td>
<td>1,219,136</td>
<td>1,138,910</td>
<td>3.3%</td>
<td>3.1%</td>
<td>7.0%</td>
<td>-4.6%</td>
<td>incl. C8</td>
</tr>
<tr>
<td>11</td>
<td>OZ Asiana</td>
<td>1,123,676</td>
<td>1,021,510</td>
<td>3.1%</td>
<td>2.7%</td>
<td>10.0%</td>
<td>7.2%</td>
<td>Estimations for 3/2013</td>
</tr>
<tr>
<td>12</td>
<td>QR Qatar Airways</td>
<td>1,118,083</td>
<td>1,000,741</td>
<td>3.0%</td>
<td>2.7%</td>
<td>11.7%</td>
<td>18.6%</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>BR Eva Airways</td>
<td>1,036,391</td>
<td>1,087,703</td>
<td>2.8%</td>
<td>2.9%</td>
<td>-4.7%</td>
<td>-6.9%</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>CI China Airlines</td>
<td>1,022,723</td>
<td>1,205,865</td>
<td>2.8%</td>
<td>3.2%</td>
<td>-15.2%</td>
<td>-14.9%</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>EY Etihad</td>
<td>761,400</td>
<td>620,800</td>
<td>2.1%</td>
<td>1.7%</td>
<td>22.6%</td>
<td>20.4%</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>LA LAN Chile</td>
<td>747,014</td>
<td>755,691</td>
<td>2.0%</td>
<td>2.0%</td>
<td>-1.1%</td>
<td>2.7%</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>CA Air China</td>
<td>667,290</td>
<td>683,886</td>
<td>1.8%</td>
<td>1.8%</td>
<td>-2.4%</td>
<td>-0.6%</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>DL Delta Airlines</td>
<td>666,616</td>
<td>695,758</td>
<td>1.8%</td>
<td>1.9%</td>
<td>-4.2%</td>
<td>2.2%</td>
<td>incl. NW</td>
</tr>
<tr>
<td>19</td>
<td>CZ China Southern Airlines</td>
<td>647,140</td>
<td>608,170</td>
<td>1.8%</td>
<td>1.6%</td>
<td>6.4%</td>
<td>21.7%</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>NH All Nippon Airways</td>
<td>612,418</td>
<td>565,497</td>
<td>1.7%</td>
<td>1.5%</td>
<td>8.3%</td>
<td>11.3%</td>
<td>incl. CO</td>
</tr>
<tr>
<td>21</td>
<td>UA United</td>
<td>607,117</td>
<td>673,502</td>
<td>1.7%</td>
<td>1.8%</td>
<td>-9.9%</td>
<td>-9.7%</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>TG Thai Airways</td>
<td>589,632</td>
<td>616,629</td>
<td>1.6%</td>
<td>1.7%</td>
<td>-4.4%</td>
<td>-7.1%</td>
<td>incl. CO</td>
</tr>
<tr>
<td>23</td>
<td>AA American Airlines</td>
<td>579,986</td>
<td>632,273</td>
<td>1.6%</td>
<td>1.7%</td>
<td>-8.3%</td>
<td>-3.6%</td>
<td>incl. US</td>
</tr>
<tr>
<td>24</td>
<td>KZ Nippon Cargo</td>
<td>544,663</td>
<td>554,687</td>
<td>1.5%</td>
<td>1.5%</td>
<td>-1.8%</td>
<td>-0.9%</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>TK Turkish Airlines</td>
<td>468,235</td>
<td>410,155</td>
<td>1.3%</td>
<td>1.1%</td>
<td>14.2%</td>
<td>34.1%</td>
<td></td>
</tr>
</tbody>
</table>

**Other (IATA estimate)**

<table>
<thead>
<tr>
<th>FTK ('000) 2013/3</th>
<th>FTK ('000) 2012/3</th>
<th>Market share 2013/3</th>
<th>Market share 2012/3</th>
<th>Growth 2012/3-2013/3</th>
<th>CAGR 2010-2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>7,880,895</td>
<td>8,135,616</td>
<td>21.5%</td>
<td>21.8%</td>
<td>-3.1%</td>
<td>-3.3%</td>
</tr>
</tbody>
</table>

**Total Industry**

<table>
<thead>
<tr>
<th>FTK ('000) 2013/3</th>
<th>FTK ('000) 2012/3</th>
<th>Market share 2013/3</th>
<th>Market share 2012/3</th>
<th>Growth 2012/3-2013/3</th>
<th>CAGR 2010-2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>36,697,354</td>
<td>37,246,907</td>
<td>-1.5%</td>
<td>-1.2%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** IATA MIS data based on airline reports **Note:** International scheduled flights only!

Growth rates in red font are below industry average

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I. Cargolux update

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III. LUX as an international air freight gateway
Historical CV volumes 2007-2012
Tonnage via LUX expected to grow by 10% in 2013

Actual tons

<table>
<thead>
<tr>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013 (forecast)</th>
</tr>
</thead>
<tbody>
<tr>
<td>650,000</td>
<td>620,000</td>
<td>590,000</td>
<td>560,000</td>
<td>530,000</td>
<td>500,000</td>
<td>570,000</td>
</tr>
<tr>
<td>93%</td>
<td>92%</td>
<td>91%</td>
<td>90%</td>
<td>89%</td>
<td>88%</td>
<td>87%</td>
</tr>
</tbody>
</table>

- CV TTL tonnage (Actual tons)
- Throughput LUX (Actual tons)
- LUX Share
Key prerequisites for the success of air freight hubs in competition with cargo strongholds in AMS, FRA and CDG

- Presence of ‘anchor’ air cargo airlines with sustainable growth
  - Strong RFS network

- Reliable and competitive handling agent
  - State-of-the-art facilities to attract growing special cargo business

- Attractiveness of hub for multinational forwarders for distribution from/to origin/destination
The Luxair Cargo Center: Key infrastructure at Cargolux’s hub

- Europe's 8th largest cargo airport
- Total building area 100,300 m²
- Direct customer and cargo access to Europe's highway system
- 112 loading docks, 108 meters from truck to aircraft
- 85,500 m² of warehouse space / 1626 10-ft ULD position stacker system
- **New Healthcare Center opened on 08 April 2013**
- Vacuum cooler for flowers
- Annual capacity: 1,000,000 tonnes
- DGR and Pharma expertise
- Incentives offered by Luxembourg to attract importers → Example: VAT billed on monthly basis rather than payable upfront)
Role of Forwarder….Underestimated!

- List of forwarders with a presence in LUX
  - Panalpina (: first forwarder to choose Luxembourg – was key for development)
  - Schenker (: growing volumes via LUX)
  - K&N, JAS, Hasenkamp, Agility, DSV, Ceva
  - Expeditors (: recently stronger focus on LUX)
  - LUX based forwarders: ELP and LCA

- Since **forwarders** perform most actual activities around distribution and consolidation to/from the shipper community, their **presence and role is key**!

- Most airports still focus on attracting airlines to boost their business, not a clever approach as they come and go subject to short term economics

- Attracting forwarders will great more long-term traction
  - Without an “anchor” airline present, forwarders obviously will not come

- Because of the above, FRA and AMS are unbeatable and HHN, LGG have problems to have a long term sustainable operation