L.A.G.s
(Liquids, Aerosols & Gels)

Can we stop “Lagging”?
ARE THESE THREATS?

“YES”
# HOW THE WORLD DEALS WITH LAGs?

| Does Not Apply LAG Restrictions | Applies LAG Restrictions Using Secured Temper Evident Bag (STEB) and LAG Rules as Recommended | Applies LAG Restrictions Using Secured Temper Evident Bag (STEB) and LAG Rules as Recommended + LAGs Screening (Transfers) |

*74/191 ICAO states have some form of restrictions on LAGs*
Divergence in LAG handling making it more confusing to passengers and more complicated for Airports

Is Liquids Screening the Panacea to LAG?
Soon We’ll Be Able to Fly With All Our Beauty Products

By Allison P Davis  
Follow @allisonpdavis

Good news, frequent fliers and all other human travelers: Air travel is about to become a little less annoying. In an article about TSA Pre-Check,
How is LAG screening carried out?

- **EU-led LAGs Screening**
  - Phase 1: Transfer LAGs in STEB allowed through EU (subjected to LAGs screening) – in progress
  - Phase 2: Possible water and/or clear liquids in clear bottles to be screened
  - Phase 3: All LAGs to be screened and LAGs restriction lifted

- **Recap on Phase 1 of new EU LAGs rule**
  - Departing and transfer passengers able to carry duty-free LAGs packed in ICAO recognised Security Tamper Evident Bag (STEB) through EU.
  - LAGs in STEBs are subjected to liquids screening
  - Medicine and dietary LAGs are subjected to liquids screening.
How is LAG screening carried out?

- **LAGs Screening Implementation**
  - **Quad Partners:**
    - **EU** - full implementation of Phase 1
    - **Canada** – full implementation of Phase 1
    - **USA** – partial implementation - limitations on types of containers
    - **Australia** – partial implementation:
      - LAGs in STEBs delivered to gate at last point of departure for inbound LAGs in STEBs (except from US)
      - No domestic LAGs restrictions

- **Results after 4 months**
  - Very low LAGs carriage levels:
  - Low-key communications
  - Little change for many passengers
  - Low season
  - Takes time for new rules to bed-in
  - Limited impact on operations so far
  - Secondary/tertiary screening adds time to process!
  - False alarm rate Type C – some low, mostly high
  - False alarm rate Type B – low for a few to high for many
## LAGs Carriage Levels & Its Impact

### Impact on Throughput and Queuing Time

<table>
<thead>
<tr>
<th>Group</th>
<th>Airports</th>
<th>10%</th>
<th>30%</th>
<th>50%</th>
<th>Estimated increase in queueing time. Figures from survey results.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>&gt;25 million</td>
<td>30%</td>
<td></td>
<td>75%</td>
<td>Up to 3 hours</td>
</tr>
<tr>
<td>Group 2</td>
<td>10 – 25 million</td>
<td>7 – 10%</td>
<td>18 – 30%</td>
<td>28 – 71%</td>
<td>15 - 20 minutes</td>
</tr>
<tr>
<td>Group 3</td>
<td>5 – 10 million</td>
<td>8.5 – 20%</td>
<td>22 – 50%</td>
<td>31 – 70%</td>
<td>5 – 46 minutes</td>
</tr>
<tr>
<td>Group 4</td>
<td>&lt; 5 million</td>
<td>3.2 – 10%</td>
<td>12.5 – 30%</td>
<td>15.6 – 50%</td>
<td>Up to 20 minutes</td>
</tr>
</tbody>
</table>

Decrease in pax throughput as a % of pax carrying LAGs (for example water). Figures from survey results.

Estimated increase in queueing time. Figures from survey results.
Security Measures – Impact on Throughput

- **2004**: 100%
- **1 Aug 2005**: Separation of laptops
- **2005**: 85%
- **6 Nov 2006**: Liquids restrictions
- **2006**: 79%
- **Impact of liquid ban**: 59 - 65%
- **2007 - 2013**: ?
- **Impact of a LAGs Phase 2**: 45%
- **Introduction of ACBS ? (Type D +)**: ?

- **Aug 2005**: Separation of laptops
- **Nov 2006**: Liquids restrictions

**Legend**:
- Green for Introduction of ACBS
- Blue for Impact of a LAGs Phase 2
- Red for Impact of liquid ban
### Impact on Aviation Industry

#### Passengers
- Too much hype on lifting of LAGs ban - confusion
- Desire to be able to bring what they want on board

#### Airport
- High impact on checkpoints (space, throughput, queue, process)
- Cost (airport/pax?)

#### Regulators
- LAG threats exist
- LAG is not written as Annex 17 Standards or Recommended Practice
- No harmonisation

#### Manufacturer
- No single solution can address all screening needs – Combination Solutions needed
- Slow adoption = cost
Challenges of LAGs Screening Implementation

- Not a SARP
- Reduced efficiency
- Impact on duty free sales
- Immature LEDS Technology
- Increased security cost
- Unclear Direction
What’s Next?

Phase 2 LAG Screening?
Are we ready?

Could there be another way?
## New Approach in dealing with LAGs

### Offsite screening for Duty-Free LAGs
- Duty-free LAGs can be pre-screened (outside of airport premises) and delivered via secured supply chain
- Possibility to leverage on existing SARP such that use of LAG screening technologies can provide considerations for LAG carriage exemptions when carried in STEB
- Ability for states to recognise such screened duty free LAGs without re-screening when carried in STEB
- Improved security

### Dedicated LAGs screening area for passenger
- Passengers have [CHOICE](#) to carry non-duty free LAG
- Levy a fee for screening (Original Departing Pax only)
- Passengers who self present LAGs for screening are considered low risk?
- LAGs that pass screening will be bagged in STEB
- Less discard needed for LAGs that do not pass screening
- If airports do not provide such screening, check in of LAG items is still possible

### Collective LEDS resources for optimal security
- Removes need for all-in-one complete LEDS solution
- Allows screeners to adopt suitable LEDS for different LAG type and containers

---

**ICAO Annex 17**

4.6.6 Each Contracting State shall ensure that merchandise and supplies introduced into security restricted areas are subject to appropriate security controls, which may include screening.

**Security control.** A means by which the introduction of weapons, explosives or other dangerous devices, articles or substances which may be used to commit an act of unlawful interference can be prevented.

**Screening.** The application of technical or other means which are intended to identify and/or detect weapons, explosives or other dangerous devices, articles or substances which may be used to commit an act of unlawful interference.
Off Site Goods Screening – Already In Practice!

Detroit’s Wayne County International Airport

Heathrow’s Consolidation Centre
## Benefits of Proposals for Stakeholders

<table>
<thead>
<tr>
<th>Airport Operator</th>
<th>DF Retailer</th>
<th>Passenger</th>
<th>LEDS Vendor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduces strain on resources at screening checkpoints</td>
<td>Screened &amp; secured Duty Free LAGs internationally</td>
<td>Smooth transfer passenger facilitation</td>
<td>Incentive to continue development of LEDS technology</td>
</tr>
<tr>
<td>Passenger LAGs screening = possible revenue stream to offset operating costs</td>
<td>Able to sell duty free LAGs freely in all airports, including transfers</td>
<td>Reduces confusion on differing LAGs regulations between countries</td>
<td>Improve sales of product</td>
</tr>
<tr>
<td>Payable passenger LAGs screening reduces passenger LAGs carriage</td>
<td>Ability to screen duty-free LAGs prior to product packaging (don’t destroy packaging)</td>
<td></td>
<td>Return on investment for R&amp;D</td>
</tr>
<tr>
<td>Reduced equipment cost and area capacity as LEDS is consolidated offsite</td>
<td>Duty-Free sales increase</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Challenges of Proposals for Stakeholders

<table>
<thead>
<tr>
<th>Airport Operator</th>
<th>DF Retailer / Supplier</th>
<th>Passenger</th>
<th>Regulators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need to allocate space for standalone LAG screening location for ease of flow</td>
<td>Security Directives imposed on retailers / suppliers – increase business costs?</td>
<td>2 different queues for security if pax carries LAGs</td>
<td>More entities to audit to ensure secured supply chain</td>
</tr>
<tr>
<td>Revenue = cost recovery issues (regulatory framework)</td>
<td>Investment and space allocation for screening LAGs</td>
<td>Expectations management</td>
<td></td>
</tr>
<tr>
<td>Shifting of screening cost to retailers / suppliers – cost share?</td>
<td>Secured supply chain</td>
<td>Will other airports recognise the screening?</td>
<td></td>
</tr>
<tr>
<td>May still need space for screening for some transfer duty free LAGs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What’s in it for ME with this New Approach?

• **Passengers**
  - Free carriage of LAGs
  - Less confusing rules
  - Simplified security
  - Fast clearance
  - Check-in LAG or pass back to family & friends (less disposal)

• **Regulators**
  - Desired security outcome
  - LAG rules can continued with screened duty free LAG
  - Harmonisation?

• **Airport**
  - Less impact on checkpoints (throughput, space)
  - Cost
  - Passenger Facilitation

• **Manufacturer**
  - Adoption of Screening
  - Sales & Profits
Food for Thought???

Thank you for being open minded!