1. Introduction and background

This reference document provides a summary of the regulatory requirements and TNT Policy and Procedures for all shipments containing UN3373, Biological Substance, Category B that are shipped by air.

UN3373 Biological Substance, Category B can be human or animal material including (but not limited to) blood and its components, tissue, tissue fluids or body parts being transported for purposes such as research, diagnosis, investigational activities, disease treatment or prevention.

Shipments containing UN3373 that are compliant to the relevant IATA DGR requirements are also acceptable for road and sea transport.

2. Summary of the regulatory requirements

Complete details of the regulatory requirements can be found in the IATA Dangerous Goods Regulations.

2.1 Packaging

The packaging must be fully compliant with IATA DGR – Packing Instruction 650, i.e. it must consist of three components:

- a primary receptacle
- a secondary package
- a RIGID outer package

The outer package must have at least one surface of a minimum dimension of 100x100mm.

2.2 Person Responsible

The name and telephone number of a “person responsible” must be provided on the Consignment Note (AWB) or on the package (this can be the shipper or the consignee!).

2.3 Markings

The package must bear a diamond shaped mark containing the text “UN3373”. (Each side of the mark must have a minimum length of at least 50mm)

The text “Biological Substance, Category B” must be displayed adjacent to the diamond shape mark.

(New) UN3373 labels can be obtained from the Global Purchasing Centre (GPC.orders.DHO@tnt.com)

Article number:11-540 (100 pieces, cost €2,18)

2.4 Documentation

2.4.1. (TNT) Consignment Note & Air Waybill

- The “Nature and Quantity of Goods” box must contain:
  - the text: “Biological Substance, Category B” and “UN3373”
  - the number of packages
- The Dangerous Goods ‘YES’ box must be ticked.

2.4.2. Itemized list of contents

An itemized list of contents must be enclosed between the secondary and the outer packaging.

2.4.3. A Shippers Declaration (DGD) is not required
2.5 Incident Reporting

- All incidents (i.e. leaking, spillage etc) with shipments containing UN3373 MUST be reported to the BU/Country DG Manager / DGSA.
- The BU/Country DG Manager / DGSA must assess whether reporting to the authorities is required and take appropriate corrective action.

2.6 State variations

A number of countries have filed State variations with IATA. (Details can be found is section 2.8.2 of the IATA Dangerous Goods Regulations)

2.7 Operator variations

If AMBIENT UN3373 shipments that are moved through the Global Air Network (i.e. on commercial flights) the relevant Operator & State variations must be complied with.

The most important Operator variations related to UN3373 are listed below. (Further details can be found in section 2.8.3 of the IATA Dangerous Goods Regulations.)

<table>
<thead>
<tr>
<th>AIRLINE (VARIATION)</th>
<th>SUMMARY</th>
<th>MAIN AFFECTED HUBS (*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adria Airways (JP-01)</td>
<td>No DG (including UN3373) all Adria flights.</td>
<td>affected flights are from Ljubljana to: Tirana, Albania (TIA), Pristina, Kosovo (PRN) and Podgorica, Montenegro (TGD)</td>
</tr>
<tr>
<td>Air France (AF-02):</td>
<td>UN3373 will only be accepted for carriage under specific requirements and after a prior Air France written approval has been granted.</td>
<td>CDG (Paris) to French African Ass. DEL (Delhi) DXB (Dubai) MIA (Miami) NRT (Tokyo) SEL (Seoul) YYZ (Toronto)</td>
</tr>
<tr>
<td>LAN (4C/4M/L7/LA LP/LUUC/XL)</td>
<td>Shipper to provide specific document (see IATA DGR for details).</td>
<td>FRA (Frankfurt) SCL (Santiago Chile)</td>
</tr>
<tr>
<td>Lufthansa (LH-05)</td>
<td>Biological Substance Category B UN3373 will not be accepted as cargo.</td>
<td>ALA (Almaty) BAK (Baku) MNL (Manila) SVX (Ekaterinburg)</td>
</tr>
<tr>
<td>Singapore Airlines (SQ-10) Scoot Airlines (TZ-05)</td>
<td>Carriage of UN3373 - Biological Substance Category B is subject to specific requirements. Shippers wishing to consign UN3373 are requested to contact the Singapore Airlines Cargo / Scoot office for these requirements. Additional requirements:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Ambient UN3373 packed as per PI650 is not accepted because inner and outer packaging must comply with PI620.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Not allowed in a consolidation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Master Airway Bill handling information box to indicate: &quot;UN3373 - Packed in compliance with Packing Instruction 620&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- All other requirements must be compliant with PI650.</td>
<td></td>
</tr>
<tr>
<td>Air Austral (UU-05):</td>
<td>All blood products and biological samples, human or animal, must be classified as UN2814 or UN2900.</td>
<td>CDG (Paris) to French Overseas Dep.</td>
</tr>
</tbody>
</table>

(*) This list is not complete and only includes the most common hubs & routes used by the TNT Global Network. Variations can occur.

The relevant operator can be identified through World Wide Sector Maintenance (see Reference Document on DG Intranet).
The following other Operators have also filed variations related to UN3373 with IATA but these do not impact the type of movements carried out by TNT Express or are rarely used by the Global Air Network:

<table>
<thead>
<tr>
<th>ABSA Cargo (M3-04)</th>
<th>Croatia Airlines (OU-12)</th>
<th>LAN Ecuador (XL-04)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerolineas Argentinas (AR-02)</td>
<td>EgyptAir (MS-06)</td>
<td>LAN Express (LU-04)</td>
</tr>
<tr>
<td>Aeromexico (AM-06/10)</td>
<td>EVA Airways (BR-14)</td>
<td>LAN Peru (LP-04)</td>
</tr>
<tr>
<td>Air Astana (KC-08)</td>
<td>Federal Express (FX-09)</td>
<td>MASAIR - Aerotransportes Mas de carga SA, De CV (MT-04)</td>
</tr>
<tr>
<td>Air Nuigini (PX-08)</td>
<td>Great Wall Airlines (UJ-06/10)</td>
<td>Saudi Arabian Airlines (SV-12)</td>
</tr>
<tr>
<td>Air Tahiti Nui (TN-05)</td>
<td>Iberworld Airlines (IP-03)</td>
<td>SkyWest Airlines (OO-01)</td>
</tr>
<tr>
<td>Alaska Airlines (AS-08)</td>
<td>LAN Argentina (4M-04)</td>
<td>TAM Linhas Aereas (JJ-06)</td>
</tr>
<tr>
<td>Blue Dart Aviation Ltd. (BZ-07)</td>
<td>LAN Cargo (M3-04)</td>
<td></td>
</tr>
<tr>
<td>Comair Pty (MN-03)</td>
<td>LAN Colombia (4C-04)</td>
<td></td>
</tr>
</tbody>
</table>

3. TNT Requirements

3.1 TNT Policy

- UN3373 customers are not subject to the DG by Air Customer Approval Process and do not require approval from the TNT Express Operations Dangerous Goods Department (DHO).
- AMBIENT UN3373 (without DI) can be shipped through the Global Air Network as well as the European Air & Road Networks.
- AMBIENT UN3373 (without DI) can be shipped to and from counties that are not DG Approved.

**Exception:** UN3373 is prohibited to/from the following countries:

- Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan & Uzbekistan (i.e. UN3373 is prohibited to/from all European associate countries except Ukraine)
- China (due to customs restrictions)
- Albania, Kosovo and Montenegro (due to Adria Airways restrictions)
- Bahrain (due to local CAA restrictions)

3.2 Option Codes (BB / DI)

- Shipments containing UN3373 only must be entered into the system with option code BB (option code HZ may not be used for UN3373)
- Shipments containing UN3373 and UN1845 (Dry Ice) must be entered into the system with option code DI and BB.

3.3 Acceptance check

- Shipments containing UN3373 only, do not require completion of an ACS.
- Shipments containing UN3373 & UN1845 (Dry Ice) require completion of the "ACS Dry Ice".

For further information on regulations in relation to UN3373, please consult the IATA Dangerous Goods Regulations or consult your local Dangerous Goods Manager / Dangerous Goods Safety Advisor (DGSA).
4. UN3373 Requirement Summary

This summary can be used as a tool to check whether shippers/shipments meet the relevant requirements.

4.1 Packaging (PI650)

4.1.1. Quality
4.1.1.1. Adequate strength & closure
4.1.1.2. Resistance to vibration, changes in temperature, humidity or pressure

4.1.2. Components
4.1.2.1. Primary receptacle (max 1L)
4.1.2.2. Absorbent material (for liquids)
4.1.2.3. Cushioning material
4.1.2.4. Leak proof secondary packaging
4.1.2.5. Rigid outer packaging

4.1.3. Size
4.1.3.1. At least one surface of the outer packaging must have min. dimensions of 100mm x 100mm (4in x 4in)

4.2 Responsible Person

4.2.1. Name and telephone number of a “person responsible”
4.2.1.1. On the Consignment Note (AWB)
4.2.1.2. On the package

4.3 Marking

4.3.1. Diamond shaped UN3373 marking
4.3.2. PSN “Biological Substance, Category B”
4.3.3. Overpack if applicable

4.4 Documentation compliance

4.4.1. Mandatory statement on airway bill (connote)
4.4.2. Number of packages (connote)
4.4.3. Itemized list of contents (in-between secondary packaging & outer packaging)

4.5 For refrigerated or frozen UN3373 shipments

(In addition to the list above follow the instructions detailed below.)

4.5.1. Wet Ice: Interior support is provided to secure the packaging after ice has melted.
4.5.2. Dry Ice (UN1845): TNT DG Policy & Regulatory requirements must be met.
4.5.3. Liquid Nitrogen (UN1977): TNT DG Policy & Regulatory requirements must be met.

4.6 Instructions on how to use the packaging. (an adequate guideline for shippers/packers on;

4.6.1. How to pack the UN3373
4.6.2. Use of absorbent
4.6.3. Use of cushioning material
4.6.4. Closure of the package
4.6.5. No covering up of markings

4.7 Example of all types of packaging & relevant instructions obtained from the customer