Code of Practice for the Transport of Potentially Dangerous Goods

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1 INTRODUCTION

This Code of Practice contains instructions, advice and information for any employee or student of the University that may, in connection with their work, be required to send or receive items or substances by road, rail or air.
Certain items may be considered Dangerous Goods and adherence to the information contained in this Code will ensure that the legal requirements of the relative modes of transport are met.

This Code deals with the categories of Dangerous Goods most commonly consigned by University personnel. Items such as plants, plant materials and live animals are covered by specific import and export licensing controls operated by Department of Environment, Food and Rural Affairs [DEFRA]. Sections 6 & 7 of this code deal with these items.

1.1 General requirements

Where a person wishes to send or receive substances they must first inform their School or Departmental Safety Officer who will ensure the necessary arrangements are made in accordance with this Code.

Where the **University is the recipient** of dangerous goods arrangements should have made to ensure that the consignment is received at a suitable location and time so as to ensure adequate control and security of the material.

All persons undertaking any role in the transport chain should be properly trained to carry out their responsibilities to the required standards. They must appreciate the risks involved and have a detailed understanding of the relevant regulations. The level of training required varies but should be commensurate with the role and the associated responsibilities and must be recurrent to take account of changes in the regulations.

1.2 Legislation

Transport by road and rail is subject to the requirements of the *Carriage of Dangerous Goods (Classification, Packaging and Labelling) and Use of Transportable Pressure Equipment Regulations 2004 [as amended by the amendment regulations of 2005].* These regulations implement various European Council Directives and agreements on the international carriage of dangerous goods by road and rail [referred to as ADR and RID respectively].

Transport by air. The Technical Instructions for the Safe Transport of Dangerous Goods by Air and the International Air Transport association Dangerous Goods Regulations are recognised as the legal requirements for transport by air.

Transport by sea is regulated under the International Maritime Dangerous Goods Code. This mode is seldom used and is not considered further in this code.

2 DANGEROUS GOODS

2.1 Definition and general duty.

Dangerous Goods are defined as *'any goods, including articles and substances which may pose a danger to the health and safety of people, or damage to property or the environment during carriage, except where they have been diluted to such an extent that they no longer have the hazardous properties of those goods'*.

The main requirements placed on the person sending goods [consignor] are to:

- identify the hazards of the goods they intend to transport - this is called classification;
- package the goods suitably and safely
- provide information about the hazards of the goods they are carrying – i.e. to mark and label them correctly and
- provide information to the vehicle operator/carrier.

Similarly, anyone supplying dangerous goods has to provide information to the users of the goods to enable them to take any precautions necessary during usage. These requirements are known as the 'supply requirements', and are covered by regulations called the *Chemicals (Hazard Information and Packaging for Supply) Regulations 1994, amended 1996 (CHIP1996).*

The Table shown in **Appendix 1** summarises the main hazards and shows the UN classification code and symbol.

Before transporting goods from the University consult this table. If any of the definitions apply to the goods to be transported, the substance could be considered dangerous for carriage.

2.2 Exemptions allowed under the regulations

There are a number of exemptions that can be allowed under the regulations. These are as follows:

i) Related to nature of transport – having reviewed the list of criteria these would not be applicable to transport of items from the University

ii) Goods packed in limited quantity

Part 3 of ADR contains the Dangerous Goods List [DGL]. An entry in column 7 indicates if an article or substance is exempt from some of the requirements of the ADR. These are known as 'limited quantity' codes LQ1 to LQ29.

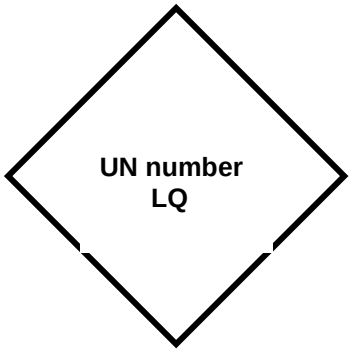
See http://www.unece.org/trans/danger/publi/adr/adr2007/English/03-2%20E_tabA.pdf

To access the LQ values in the ADR go to section 3.4.6 [page 35] in the following document.
http://www.unece.org/trans/danger/publi/adr/adr2007/English/03-4%20E_Chap3-3to3-4.pdf

If the amount being sent in a package is less than the LQ value the substance is exempt from the most of the requirements of ADR. However the following requirements must be met:

- Packaging and labelling requirements – packaging does not have to be 'UN approved' but must be suitable and of good quality. The package must be labelled with the following symbol:

The diamond must be at least 100X100mm and the line forming the diamond must be 2mm and the UN number at least 6mm high



- The maximum quantities per inner packaging and per package shown in LQ value table must not be exceeded

When the code **LQ 0** appears in column 7 of the DG list the substance or article **is not** exempted from any of the requirements.

iii) Quantities carried per transport unit [i.e. vehicle]
Column 15 of the DG list shows the transport category of the substance. The following table gives details of the maximum quantity per transport unit for each category.

Transport category	Max total quantity per transport unit*
0	0
1	20
1A	50
2	333
2A	500
3	1000
4	unlimited

*For articles, gross mass in kg (for articles of Class 1, net mass in kg of the explosive substance); for solids, liquefied gases, refrigerated liquefied gases and dissolved gases, net mass in kg; for liquids and compressed gases, nominal capacity of receptacles (see definition in ADR 1.2.1) in litres.

Where the quantity carried per transport unit does not exceed the value in the previous table the dangerous goods may be carried in packages in a single vehicle and the following requirements of ADR will not apply:

5.3 There is no requirement for placarding or marking of containers or the vehicle.
5.4.3 No requirement for documentation or instructions in writing.
7.2 There are no special requirements for carriage packages except that packages may not be in small containers and substances needing temperature to be stabilised must be packaged in such a manner as the specified temperature is not exceeded in transport.
7.5.11 [CV1] Restriction on loading/unloading in public places
8 Requirement regarding the vehicle its equipment and driver do not apply with the following exceptions.

- The vehicle must be equipped with a 2kg fire extinguisher
- All persons involved with the shipment [packer, driver etc] must have received training appropriate to their responsibilities and duties.
- There shall be no naked flames or smoking in the vehicle
- The vehicle must be suitable supervised or securely parked whilst the load is on board. [See ADR 8.4 for detail].

The following sections of this Code give more specific information and instructions for the transport of hazardous/toxic materials, biological and genetically modified materials and radioactive substances.

3 HAZARDOUS/TOXIC SUBSTANCES.

It is unlikely that large quantities of such substances will be sent from University premises and therefore, in most cases, this will result in exemption. [See above] For multiple receptacles of limited quantities the sender should ensure that

- **Packaging** is of adequate strength and durability.
- **Labelling** for a single compound should show the UN class or division number and the designated danger sign.
  Where different compounds are being sent in separate receptacles in the same package label as 'dangerous goods in limited quantities in classes X, Y [where X&Y is the classification code]

  NOTE – if the quantities are below the limits referred to in section 2 above and consist of a single receptacle within a package, no labelling will be required.

- **Enough information** accompanies the package to enable the receiver to use it safely

In the case of a novel or uncharacterised compound the scientist concerned should consider the possible hazardous properties and any control measures that should be applied in handling.

Where the package falls outside the 'exempted category' referred to above, more stringent labelling and packaging requirements will need to be met.

The courier company that will be used should be able to advise on labelling and packaging or advice can be obtained from the Safety Office

4 BIOLOGICAL MATERIALS

4.1 INTRODUCTION

The international regulations for the transport of **infectious substances** by any mode of transport are based upon recommendations of the United Nations Committee of Experts on the Transport of Dangerous Goods. These recommendations have been incorporated by IATA [International Air Transport Association] and ADR & RID.

The information in this section of the Code has been compiled with reference to the following two guidance documents entitled **'Transport of Infectious Substances'** published by:

Department for Transport, Civil Aviation Authority and the maritime Coastguard Agency.
http://www.dft.gov.uk/pgr/freight/dgt1/guidance/guidancenonclass7/guidanceontransportofinfecti3186

World Health Organisation
http://www.who.int/csr/resources/publications/biosafety/WHO_CDS_EPR_2007_2cc.pdf

The purpose of this guidance is to ensure that all staff involved in the transport of biological materials, from the sender to the receiver are aware of their responsibilities and know the procedures which must be adopted in order to ensure their safe and efficient transport.

Whilst the main focus of this section concentrates on overseas shipment by air, transport by road or rail has very similar requirements. Additionally there is increasing likelihood that packages sent by courier or post within the UK may be put on an internal flight so the more stringent requirement for air transport will apply...

4.2 DEFINITIONS

Infectious substances are defined as '*substances which are known or reasonably expected to contain pathogens which are defined as micro-organisms (including bacteria, viruses, rickettsiae, parasites, fungi), plasmids and other agents such as prions, which can cause disease in humans or animals*.

A culture is defined as the result of a process by which pathogens are amplified or propagated in order to generate high concentrations, thereby increasing the risk of infection when exposure to them occurs. Cultures prepared for the intentional generation of pathogens may not be transported as diagnostic specimens.

Patient specimens are human or animal materials, collected directly from humans or animals, including, but not limited to, excreta, secreta, blood and its components, tissue and tissue fluid swabs and body parts being transported for purposes such as research, diagnosis, investigational activities, disease treatment and prevention.

4.3 CLASSIFICATION

Under the regulations infectious substances are further classified as either Category A or Category B

Category A includes the higher risk infectious micro-organisms, defined as 'an infectious substance, which is transported in a form that, when exposure to it occurs, is capable of causing permanent disability, life threatening or fatal disease in otherwise healthy humans or animals'. An internationally agreed 'indicative' list has been published and is given in the Appendix A of the following guidance.
http://www.dft.gov.uk/pgr/freight/dgt1/guidance/guidancenonclass7/guidanceontransportofinfecti3186

Substances assigned to Category A must be consigned/shipped as either:
UN2814 Infectious substance affecting humans or
UN2900 Infectious substance affecting animals only

New or emerging pathogens which do not appear on the indicative list but which meet the criteria must be transported as Category A. Avian Influenza is one such pathogen.

Category B infectious substances are any that do not meet the criteria of category A and included any human or animal material including but not limited to excreta, blood and its components, tissue and tissue fluids transported for

purposes such as research, diagnosis, investigational activities, disease treatment or prevention.
These are assigned to UN 3373 Biological Substance Category B [formerly referred to as Diagnostic Specimens]

4.4 BIOLOGICAL MATERIALS EXEMPTED FROM THE REGULATIONS

- Non pathogenic micro-organisms
- Human or animal specimens for which there is minimal likelihood that pathogens are present providing the specimen is transported in a packaging that will prevent leakage and is marked with the words 'Exempt human specimen' or 'Exempt animal specimen' *****
- Waste or biological material that has been inactivated so they no longer pose an infectious risk.
- Environmental samples (including food and water samples) which are
- not considered to pose a significant risk of infection
- Dried blood on absorbent material or faecal occult blood
- Blood/blood components for transfusion, tissues organs for transplant.

**** Note:*** It is the opinion of the UK authorities that this exemption can only apply to substances that are known not to contain pathogens [e.g. following testing or action to neutralise/inactivate any pathogen present] Expert medical advice in the UK is that it is not always possible to categorically state that no pathogens are present or those that are present do not pose a risk. Therefore it is strongly recommended that these are assigned to UN 3373 to avoid any inadvertent breach of the regulations.

4.5 GENETICALLY MODIFIED MICROORGANISMS AND ORGANISMS

Genetically modified micro-organisms and organisms are micro-organisms and organisms in which genetic material has been purposely altered through genetic engineering in a way that does not occur naturally.

GMMOs and GMOs that meet the definition of an infectious substance and the criteria for inclusion in Division 6.2 shall be classified in Division 6.2 and assigned to UN2814, UN2900 or UN3373, as appropriate.

GMMs that do not meet the definition of an infectious substance, but are capable of altering animals, plants or microbiological substances in a way not normally the result of natural reproduction are classified in Class 9 - Miscellaneous Dangerous Goods assigned to UN 3245 GENETICALLY MODIFIED MICRO-ORGANISMS and shipped following Packing Instruction P904 (ICAO/IATA PI913). This is very similar to P 620 except there is no requirement to use UN approved packaging.

These are GMMs that can be handled at containment level 1 but which are vectors and can transfer genetic material to other organisms. Note this is in relation only to micro-organisms and does not cover, for example, naked nucleic acid, plasmids or liposome gene delivery systems, none of which are controlled under the transport regulations. Vectors which require containment level 2 or above for safe handling in the laboratory must be classified as infectious substances as described in the previous paragraph.

GMMs which do not meet the definition of an infectious substance and which are not vectors as described above are not subject to the provisions of the transport regulations. These would be GMMs which can be handled at containment level 1

and present no significant risks to human or animal health and safety or the environment.

GMOs that are not micro-organisms (i.e. plants or animals) and which are known or suspected to be dangerous to humans, animals or the environment are classified in Class 9 - Miscellaneous Dangerous Goods under UN 3245 GENETICALLY MODIFIED ORGANISMS and must be transported in accordance with conditions specified by the competent authority. Schools wishing to transport such GMOs should contact the University Biological Safety Adviser for further advice.

Some GMMs and GMOs are authorised for use in certain countries by the competent authority for that country. Where they have been so authorised, e.g. have received a consent for deliberate release into the environment, they are not subject to controls under the transport regulations providing that for any journey, authorisations apply in the country of origin, transit and destination. Schools wishing to transport such GMMs or GMOs should contact the University Biological Safety Adviser for further advice.

Appendix II is a spreadsheet which contains two worksheets that provided additional information:

> **Sheet 1** summarises the key entries from the ADR Dangerous goods list relating to biological materials.
>
> **Sheet 2** gives some examples of biological materials and the transport requirements

4.6 SCHEDULE 5 PATHOGENS AND TOXINS [Anti Terrorism, Crime & Security Act 2002]

Certain biological agents and toxins are listed within the above Act. An up to date list can be found in ACDP & Sched 5 lists

If one of the listed items is to be transported to or from the University, the Safety Office **must be informed** in advance of the shipment being arranged.

4.7 RESPONSIBLITIES & ORGANISATION

The efficient transport and transfer of infectious materials requires good co-ordination between the sender, the carrier and the receiver (receiving laboratory), to ensure that the material is transported safely and arrives on time and in good condition. Such co-ordination depends upon well established communication and a partner relationship between the three parties.
All have specific responsibilities to carry out in the transport effort.

The sender must

1. Ensure the correct designation, packaging, labelling and documentation of all infectious substances.
2. Make advance arrangements with the receiver of the specimens including investigating the need for an import permit.
3 Make advance arrangements with the carrier to ensure:
   - that the shipment will be accepted for appropriate transport
   - that the shipment (direct transport if possible) is undertaken by the most direct routing, avoiding arrival at weekends;

4. Prepare necessary documentation including permits, dispatch and shipping documents;
5. Notify the receiver of transportation arrangements once these have been made, well in advance of expected arrival time.
6. Ensure the School or Departmental Safety Officer is informed and involved in the transport arrangements.

The carrier must

1. Provide the sender with the necessary shipping documents and instructions for their completion;
2. Provide advice to the sender about correct packaging;
3. Assist the sender in arranging the most direct routing and then confirm the routing;
4. Maintain and archive the documentation for shipment and transport;
5. Monitor required holding conditions of the shipment while in transit;
6. Notify the sender of any anticipated (or actual) delays in transit.

The receiver must

1. Obtain the necessary authorisation(s) from national authorities for the importation of the material;
2. Provide the sender with the required import permit(s), letter(s) of authorisation, or other document(s) required by the national authorities;
3. Arrange for the most timely and efficient collection on arrival;
4. Immediately acknowledge receipt to the sender.
5. Where the University is the recipient, arrangements should have made to ensure that the consignment is received at a suitable location and time so as to ensure adequate control and security of the material.

Shipments should not be dispatched until:

- advance arrangements have been made between the sender, carrier and receiver
- the sender has confirmed with the national authorities that the material may be legally exported
- the receiver has confirmed with the national authorities that the material may be legally imported
- The receiver has confirmed that there will be no delay incurred in the delivery of the package to its destination.

Use of one the University approved courier companies will help ensure that the above requirements are met with a minimum of effort on behalf of the sender.

4.8 PACKAGING, LABELLING AND DOCUMENTATION FOR TRANSPORT

Because of the distinction of risks between Cat A and Cat B infectious substances there are variations to the packaging, labelling and documentation requirements.

4.8.1 Packaging requirements are determined by the UN and are detailed in the applicable Packaging Instructions (PI) which are referenced in the Dangerous Goods List against each UN number. See summary in **Appendix II.**

- **Infectious Substances Category A** [UN 2814/2900] may only be transported in packaging that meets UN Class 6.2 specifications and complies with Packing Instruction P620 or PI 602 [air]. This type of

packaging can only be obtained from specific suppliers, but courier companies authorised to transport these items can usually supply UN packaging, as can most reputable laboratory supply companies.

- **Category B [UN 3373]** should be packaged in accordance with Packing Instruction P650 see Section 4 of
  http://www.dft.gov.uk/pgr/freight/dgt1/guidance/guidancenonclass7/guidanceontransportofinfecti3186
  Or Annex 4 of
  http://www.who.int/csr/resources/publications/biosafety/WHO_CDS_EPR_2007_2cc.pdf

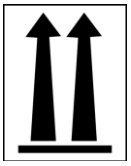
  There is no requirement to purchase UN approved packaging, however the packaging must be able to withstand the drop test criteria referred to in the aforementioned publications. This may be carried out by the consignor or the shipper and a record kept.

  Genetically Modified Micro-organisms [UN 3245] should be packed in accordance with P904 /PI913. See **Appendix IV** for details

4.8.2 Labelling

Two types of labels are required:

- Hazard label specific to the nature of the substance in the form of a diamond shape. Dimensions 100 x100mm, Black and white. See **Appendix I** for detail.
- Handling labels, either alone or in addition to hazard labels: E.g. orientation labels to indicate position of closures on primary receptacles.



4.8.3 Documentation

The following shipping documents are required.

- To be prepared and signed by the shipper:
  • for air: the shipper's Declaration for Dangerous Goods (Figure 8 shows one example)
  • a packing list/proforma invoice that includes the receiver's address, the number of packages, detail of contents, weight, value (Note: for international transport, a minimal value shall be indicated, for customs purposes, if the items are supplied free of charge)
  • an import and/or export permit and/or declaration if required.

- To be prepared by the shipper or the shipper's agent:
  • an air waybill for air transport or equivalent documents for road, rail and sea journeys.
  For UN 2814 and UN 2900, an itemized list of contents shall be enclosed between the secondary packaging and the outer packaging. When the infectious substance to be transported is unknown, but suspected of meeting the criteria for inclusion in category A and assignment to UN 2814 or UN 2900,the words "suspected Category A infectious substance" shall be shown, in parentheses, following the proper shipping name on the document inside the outer packaging.

4.9 USE OF REFRIGERANTS IN TRANSPORT

Dry Ice is the normal and preferred means of refrigeration. Where dry ice is used as a refrigerant the following ICAO/IATA Packing instruction 904 must be met.

- Dry ice should be placed **outside** the secondary receptacle. It must not be placed inside the primary or secondary receptacle because of the risk of explosion.
- The secondary receptacle must be secured within the outer packaging to prevent damage after the ice has dissipated.
- Packaging must permit release of gas to prevent pressure build up.
- The carrier [courier or taxi] must be aware that the package contains dry ice and that procedures are arranged to ensure adequate ventilation.

Additional labelling for dry ice

The package must bear the following labelling [in addition to the labelling for the biological material]

- Nett weight of dry ice.
- Miscellaneous hazard label UN class 9
- If dry ice is used for infectious substances, the details must appear on the shipper's Declaration for Dangerous Goods.

4.10 MODES OF CARRIAGE

4.10.1 Couriers

Use of a reputable company experienced in the transport of dangerous goods is the preferred means of transport as this will assist in ensuring that all regulatory requirements are met. It is also the most reliable way of ensuring that the goods reach their destination safely and within a reasonable time frame.

The University Procurement Department has an approved list of Courier companies that provide this service in accordance with the necessary regulatory requirements. Details can be found on the Procurement Department web site.

It should be noted however that some courier services will not accept this material for transport as they do not have the necessary authorisations.

4.10.2 Use of Postal Service

The following table summarises what is permitted in the postal service.

Category	**International mail**	**Domestic mail**
A - UN2814/2900	No	No
B – UN3373	No	Yes*
Exempt human/animal specimens	Yes	Yes
GMMs UN3245	No	Yes
Dry Ice	No	No

*Maximum volume 50ml or 50g

All biological materials sent in the domestic postal service must be classified, packaged and labelled in accordance with the requirements set out in the relevant

sections of this code. Royal mail will supply a purpose designed packaging system for Cat B substances in the domestic system. This is known as Safebox ™

Details and prices can be found at
http://www.royalmail.com/portal/rm/jump2?catId=400028&mediaId=600005

4.10.3 Air Passenger Transport

Infectious substances in Category A or B **are not** permitted for transport in carry-on or checked baggage and **must not** be carried on the person. They may only be transported as cargo in accordance with Dangerous Goods Regulations, in which case a Courier will be used.

4.10.4 Local Surface Transport

Examples include transport from a hospital to a research laboratory in the university or between laboratories on different campus.

This may involve the use of University or NHS transport vehicles, private cars, local courier services or even taxis. Whatever method is used the principle of safe transport by this means is the same as for air or international road transport:

The material should not have any possibility of escaping from the package under normal conditions of transport.

The following practices should be observed:

- Specimen containers should be watertight and leak-proof;
- If the specimen container is a tube, it must be tightly capped and placed in a rack to maintain it in an upright position;
- Specimen containers and racks should be placed in robust, leak-proof plastic or metal transport boxes with secure, tight fitting covers;
- The transport box should be secured in the transport vehicle;
- Each transport box should be labelled appropriately consistent with its contents;
- Specimen data forms and identification data should accompany each transport box;
- A spill kit containing absorbent material, an appropriate disinfectant, leak-proof waste disposal container and heavy duty reusable gloves should be kept in the transport vehicle.

If dry ice is to be transported the same principles outlined in section 6 must be observed. The driver must be made aware of the presence of dry ice and ensure that the vehicle is well ventilated.

Suitable and reusable containers for transporting Cat B biological materials can be obtained at very reasonable cost from the following company.
http://www.versapak.co.uk/index.php?cPath=77_156_140

When transporting liquids by road the packaging must conform to PI 650 requirement.

The Nottingham University Hospitals Trust provides a regular bus service every 10 minutes between City Hospital and Queens Medical Centre. Where it is not practicable to use a courier it is possible to transport small volumes of Cat B

Biological Specimens providing it is safely packaged and accompanied by a suitably trained person.

Use of private vehicles

This should only be considered in exceptional circumstances where it is not practicable to use a courier or NUHT/ University transport systems and the amount involved does not exceed 333Kg. Where an individual chooses to use their own vehicle they must ensure their own insurance is extended to include Business use if driving on University business. The University does not reimburse this cost.

The driver and person packing the goods must have received appropriate training so that s/he is aware of the nature of the hazard and how to deal with any emergency. The vehicle must have a 2kg fire extinguisher. The vehicle must be suitable supervised or securely parked when the load is on board. The goods will not require approved UN packaging but the packaging must be of suitable quality and labelled UN 3373. Suitable packaging can be obtained from http://www.versapak.co.uk/index.php?cPath=77_156_140

Suitable information and contact details should be affixed to the package in event of an emergency.

5 RADIOACTIVE SUBSTANCES

Transport and movement of radioactive materials is also regulated by the Radioactive Materials Road Transport Regulations 2002
The designation of radioactive substances is complex and is done on a case by case basis. The School/Department Radiation Protection Supervisor must be informed. He/she must in turn inform the Safety Office before any arrangements are made to send or receive radioactive materials.

6 ANIMAL PATHOGENS OR CARRIERS

6.1 IMPORT & TRANSFER

The import and transfer of animal pathogens or carriers are subject to licensing controls under the Importation of Animal Pathogens Order 1980.

Under the Importation of Animal Pathogens Order 1980 (IAPO):

- an "animal pathogen" means any collection or culture of organisms or any derivative either on its own or in recombinant form of such collection or culture of organisms which may cause disease in animals or poultry.
- a "carrier" means "any living creature except man which may carry or transmit an animal pathogen or the tissue, cell culture, body fluid, excreta, carcass or part of a carcass of such creature by or by means of which an animal pathogen may be transmitted.

For the purposes of the Order, "animals" means cattle, sheep, goats and all other ruminating animals, horses and swine, and "poultry" means domestic fowls, turkeys, geese, ducks, guinea-fowls, pigeons, pheasants, partridges and quail.

The Department of Environment Food and Rural Affairs web site contains a list of animal pathogens which require an import license.
http://www.defra.gov.uk/animalh/diseases/pathogens/classification.htm

6.2 IMPORT FROM ANOTHER MEMBER STATE OF THE EC

An IAPO licence is not required to import an animal pathogen or carrier from another Member State of the European Communities. However, if the material to be imported is a specified animal pathogen or a carrier of a specified animal pathogen a licence will need to be obtained prior to importation to authorise the movement of the material from the port of entry to the laboratory for which it is destined in England. Such licences will only be issued where the laboratory of destination is already licensed under the Specified Animal Pathogens Order 1998 to hold or work with the specified animal pathogens concerned.

6.3 IMPORT FROM A COUNTRY OUTSIDE THE EUROPEAN COMMUNITIES

IAPO prohibits the import into England from a country that is not a Member State of the European Communities of any animal pathogen or carrier except under the authority of a licence in writing issued by the Secretary of State for Environment, Food and Rural Affairs and in accordance with the conditions of that licence.

6.4 LICENCES UNDER IAPO

Licences usually stipulate the manner in which the animal pathogen or carrier must be prepared, treated and packed prior to importation, the containment conditions under which it must be handled while it is in England and the method by which it and its derivatives must be disposed of, if it is not re-exported. Licences are normally valid for two years, to provide for the importation of the material and the completion of work on the material in the laboratory, following importation.

6.5 APPLYING FOR AN IMPORT LICENCE UNDER IAPO

If you need to apply for a licence to import an animal pathogen or carrier from a country outside the EC an application form for a licence under the Importation of Animal Pathogens Order 1980 (IAPO) can be downloaded the DEFRA web site.
http://www.defra.gov.uk/corporate/regulat/forms/ahealth/path1.htm

This form can be printed but cannot be completed electronically. Forms completed in manuscript and signed should be sent to the Pathogens Licensing Team at DEFRA. An application form may be faxed but the signed original must also be provided. Forms that may be completed electronically are available on request. An electronically completed form may be emailed but the signed original must also be provided.

DEFRA aim to issue an IAPO licence within 15 working days of receipt of the application, provided that it has been signed and completed correctly and they do not need to seek additional information from the applicant.

Contact point for applicants who wish to import animal pathogens or carriers into England:

The Pathogens Licensing Team
Department for Environment, Food and Rural Affairs
Area 104,1A Page Street
London
SW1P 4PQ

Telephone: 020 7904 6144/6151
Fax: 020 7904 6128
Email: pathogens@defra.gsi.gov.uk

It is Important that those wishing to import or transfer animal pathogens or carriers obtain the license in advance of arranging shipment to UK. Failure to do this will result in the material being withheld at the point of entry.

6.6 TRANSPORT WITHIN UK AND TO OVERSEAS DESTINATIONS.

It is important to remember that many animal pathogens can also infect humans. Therefore packaging and labelling requirements detailed in Section 4 of this document should be applied.

When exporting animal products overseas it is important to bear in mind that the receiving country may have import licensing controls. It is normally the responsibility of the receiving organisation to arrange this. Use of one of the University approved couriers is strongly advised as they can provide the relevant information and help ensure the import requirements of the country of destination are met.

7 IMPORT OF PLANTS, PLANT MATERIAL, PLANT PESTS, SOIL AND GROWING MEDIUM.

There are many plant pests and diseases, which if they were to become established in Great Britain could, cause serious damage to crops and plant. To guard against such an eventuality official controls, arising out of EU and UK legal provisions, apply to the import, movement and keeping of plants, plant pests and other material.

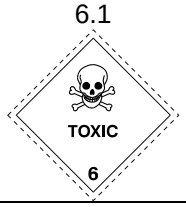
Information on the licensing procedures, forms and lists of prohibited plants and materials etc. can be found on the DEFRA web site.

The Plant Health & Seeds Inspectorate for Nottingham can be contacted for advice on 0115 929 1191.

There is also detailed information on the DEFRA web site.
http://www.defra.gov.uk/planth/ph.htm

Appendix I

UN CLASSIFICATION CODES FOR DANGEROUS GOODS

Substance	UN class	HAZARDOUS PROPERTIES
Explosive substances	1 	A substance which is capable by chemical reaction in itself of producing gas at such a temperature, pressure and such a speed as could cause damage to surroundings or which is designed to produce an effect by heat, light, sound, gas or smoke or a combination of these as a result of non-detonative self-sustaining exothermic chemical reactions.
Gas **e.g Oxygen, propane, nitrogen**	2 	At 50^0C has a vapour pressure greater than 300 kilopascals absolute,or is completely gaseous at 20°C and at a standard pressure of 101.3 kilopascals.
Flammable Liquid **E.g. alcohol, acetone, petrol, xylene.**	3 	A liquid with a flash point (a) above 61°C and which is carried at a temperature above its flash point: or (b) of 61°C or below except- • a liquid with a flash point equal to or more than 35°C which does not support combustion; • a viscous substance; or • a flammable gas.
Flammable Solids **E.g. sulphur**	4.1	• A solid which is steadily combustible, or may cause/contribute towards fire through friction; • a self-reactive or related substance which is liable to undergo a strongly exothermic reaction; • a desensitised explosive where the explosive properties have been suppressed.
Spontaneously combustible substances **E.g. cotton, carbon, phophorous**	4.2	A substance which is liable to spontaneous combustion under conditions met in carriage or liable to self-heating when in contact with air, and liable to catch fire.
Substance which in contact with water emits flammable gas **e.g lithium, sodium, potassium**	4.3	A substance which in contact with water is liable to become spontaneously combustible or to give off a flammable gas
Oxidising Substance **e.g. Hydrogen peroxide, ammonium nitrate, potassium permanaganate**	5.1 	A substance other than on organic peroxide, which although not necessarily combustible, may by yielding oxygen or by a similar process cause/contribute to the combustion of other material.
Organic peroxide **e.g. polyester resins/fillers**	5.2	A substance which is - (a) an organic peroxide; and (b) an unstable substance which may undergo exothermic self accelerating decomposition.
Toxic Substance **e.g lead, arsenic,**	6.1 	A substance which is liable either to cause death or serious injury or to harm human health if swallowed or inhaled or by skin contact.

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Infectious substance **e.g. certain bacteria/viruses see section**	6.2 	A substance which either contains viable micro-organisms that are known or believed to cause disease in animals or humans, or genetically-modified micro-organisms and organisms which may be infectious.
Radioactive Material	7 	A substance which meets the criteria in section I(I) of the Radioactive Material (Road Transport) Act 1991.
Corrosive Substance **e.g. acids, ammonia**	8 	A substance which by chemical action will - • cause severe damage when in contact with living tissue; • cause damage to other freight or equipment on the vehicle if leakage occurs.
Other dangerous Goods **e.g.** **Carbon dioxide ice, lithium batteries.**	9 	A substance which is listed in the ACL, and which may cause a risk to health or safety during carriage, whether or not it has-any of the characteristic properties listed above, or a substance which is hazardous to the environment, but excluding any substance which - • is an explosive or radioactive material; • possesses any of the hazardous properties of any other classification; or • constitutes dangerous goods for any other reason.