



Ship Type: All Trade Area: All

Bulletin 380 - 09/04 - New Nuclear Security Regulations for Sea Carriers

Minimum Standards for the Physical Protection of Nuclear Materials have existed in the UK for many years. These standards were based on Infcirc 225, a publication of 'The International Atomic Energy Agency (IAEA)'. The relevant regulations in the UK were 'The Nuclear Generating Stations (Security) Regulations 1966'. After the events of 11th September 2001 in the USA the UK government enacted the 'Anti-Terrorism, Crime and Security Act 2001'. Following on from that Act the government have now enacted and published 'The Nuclear Industry Security Regulations 2003'. For sea carriers this Act came into force on 22 September 2003.

The previous regulations placed the principal responsibility for physical protection of nuclear materials in transit on the shipper/receiver. The new Act includes, in a higher category than previously, materials which have been regularly carried by sea without any regulatory security requirements on the part of the carrier. This means that carriers will have new requirements placed upon them if they wish to continue to transport these materials.

There are two principal aspects to the Regulations which effect carriers, the categories of materials which are covered by the regulations and the requirements placed on carriers.

The regulations affect 'Nuclear Materials' which are defined in the Anti-Terrorism, Crime and Security Act 2001 as:

1. any fissile material in the form of uranium metal, alloy or compound, or of plutonium metal, alloy or chemical compound; or
2. any other fissile material which may be prescribed by regulations made by the Secretary of State;

The regulations define three categories of material. Categories 1 and 2 are the most onerous and Category 3 the least. UK flag carriers wishing to transport these materials must register and be authorised as a Class A Carrier for Category 1 and 2 materials and as a Class B Carrier for Category 3. The materials which carriers have been regularly carrying are now included in Category 3

Principally these are:

1. Uranium enriched to greater than the natural level of 0.711% in quantities >10kg. This is usually in the form of Uranium Metal, Uranium Hexafluoride or Uranium Oxides.
2. Neptunium 237 and Americium 241/242/243 in quantities >15gms.
3. Irradiated reactor fuel in any quantity.
4. Other irradiated nuclear material.

Non-UK flag carriers do not have to become an authorised Class A or B carrier but do have advance notification requirements placed on them for each shipment and must certify that they comply with the security regulations of their flag State.

The requirements stated here apply to Category 3 materials only since these are the materials which many carriers are already carrying. If carriers are asked to transport Category 1 or 2 materials they will need specialist advice and close cooperation with the shipper.

Application to the Office for Civil Nuclear Security (OCNS) for approval as a Class B authorised carrier is by submission of a Transport Security Statement (TSS). (It is envisaged that the detail contained in Shipboard Marine Emergency Plans and Ship Security Policy will contain much of the information required.)

The TSS must include:

1. Company name and details.
2. Company organisation for security.
3. Personnel security – basic security check of ships crew.
4. Information security procedures.
5. Transport security plan for each shipment – on board arrangements, handover points, routing. (This may be a generic document, particularly for regular movements, and is an internal company document available for inspection by OCNS if requested.)
6. Tracking or monitoring of ship position – 24 hr operation and UK based.
7. Contingency and business continuity planning
8. Audit (annual).

A Notification must be sent to OCNS at least seven days prior to each transport. For Non-UK flag ships a notification must be sent to OCNS seven days in advance of shipment and there must be confirmation of compliance with own Flag State security requirements.

For ro-ro ships, where the driver of a consignment remains on board the ship during the voyage, the ro-ro operator does not require approved carrier status.

It must be stressed that there is no connection between the 'Nuclear Security Regulations 2003' and the 'Nuclear Installations (Excepted Matter) Regulations 1978' The Nuclear Security Regulations deal with the Physical Protection of Nuclear Material. The 'Excepted Matter' Regulations concern liability in the event of a claim arising out of the transport of Radioactive Material. Within the range of materials covered by the Nuclear Security Regulations some consignments will be and some will not be 'Excepted Matter'.

Other countries in Europe and the USA have also revised/reinforced their Nuclear Security Regulations and Members are advised to make themselves aware of the requirements of countries they trade to/from.

Source of information: Roger Cheshire
UK Club Nuclear Consultant
Email: rcheshire@netlocal.co.uk
The Nuclear Industries Security Regulations 2003 - SI No.403