maritime carriage of nuclear materials

A new international Convention Relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material was signed on 17 December last year by France, the Federal Republic of Germany, Italy, Portugal, Sweden, the United Kingdom and Yugoslavia. The Convention had been adopted earlier in the same month by an International Diplomatic Conference in Brussels attended by some 50 countries, held under the joint auspices of the Intergovernmental Maritime Consultative Organization (IMCO), the European Nuclear Energy Agency of the OECD (ENEA) and the IAEA; it comes into force upon ratification by five signatories.

Conventions which deal with third party liability of operators of nuclear installations (that is, the 1960 Paris Convention on Third Party Liability in the field of Nuclear Energy, and the 1963 Vienna Convention on Civil Liability for Nuclear Damage) apply not only to nuclear incidents which may occur at a land-based installation but also to incidents occurring in the course of transport of nuclear material from or to such an installation. Under this system, the operation of a nuclear installation is normally absolutely liable (without need to prove fault or negligence) for damage caused by a nuclear incident involving nuclear material in the course of carriage from it, until the operator of another nuclear installation has become liable for them or until the material is unloaded in the territory of a non-contracting State. The extent of this liability is limited; it must be covered by an insurance or other financial security. The liability is channelled exclusively on to the operator of the installation concerned, and no other person can be held liable for damage caused by a nuclear incident. However, both the Paris and the Vienna Conventions provide for an exception to this exclusive liability to meet the case where under any existing international convention in the field of transport some other person might be liable such as a shipowner, carrier, and so on. The effect of this exception is not to supersede the nuclear operator's liability, but merely to maintain in addition the carrier's liability under international transport conventions.

The need for a new Convention

In practice, under the legal régime established by the Paris and Vienna Conventions a number of serious difficulties have arisen in maritime transport — notably, the demand by maritime carriers for unlimited or very high indemnities from the nuclear operator before they will agree to carry most kinds of nuclear material and, in particular, nuclear fuel.

Part of a consignment of 222 tonnes of uranium hexafluoride from Springfields, in the UK, being loaded at Liverpool for shipment to the United States. Photo: UKAEA/copyright Ace Films Ltd.



Such indemnities are intended to protect the carriers against, inter alia, any possible liability under maritime conventions. The fact that under the nuclear conventions carriers are entitled to recover from a nuclear operator by subrogation any damages they may have to pay under maritime conventions up to a limit of the nuclear operator's liability was not considered sufficient to avoid asking for indemnities of this kind. Such a requirement has meant that the sea transport of nuclear material has been seriously affected and has come virtually to a standstill, despite the fact that for irradiated nuclear fuel, because of the size and weight of its special containers, there is often no economic alternative to maritime transport. In practice the indemnities demanded have been so high that operators have had to request in turn that this coverage be provided by Governments. Where such coverage has not been obtainable it has been necessary to employ more costly means or even to resort to the use of a naval vessel.

Liability under international conventions relating to air or land transport also remains unaffected by the nuclear conventions, but there has been so far no call for similar indemnities from air and land carriers — no doubt because stipulations on third party liability in those conventions are different from those in the maritime conventions, and the practical conditions relating to these other forms of transport are also different. For this reason, the difficulties which have arisen in the case of maritime transport have not occurred in the air or on the land.

Resolving the difficulties

The question has been studied since 1968 by nuclear and maritime legal experts, on the initiative of ENEA and IAEA with the collaboration of IMCO and CMI (the Comité Maritime International). Action was based on a detailed and comprehensive study made at a Symposium held in Monaco in October 1968 on Third Party Liability and Insurance in the field of Maritime Carriage of Nuclear Substances, at which all interests were represented. All aspects of the problem, both legal and practical and including those of insurance, were studied. As a result, the most satisfactory solution to the problem was agreed to be a short, new convention ensuring that liability would be borne exclusively by the nuclear operator where damage was caused by a nuclear incident occurring in the course of maritime carriage.

The Convention just adopted provides that any person who by virtue of an international convention or national law applicable in the field of maritime transport might be held liable for damage caused by a nuclear incident shall be exonerated from such liability:

(a) if the operator of a nuclear installation is liable for such damage under either the Paris or the Vienna Conventaion, or (b) if the operator of a nuclear installation is liable for

such damage by virtue of a national law governing the liability for such damage, provided that such law is in all respects as favourable to persons who may suffer damage as either the Paris or the Vienna Convention.

The effect of the new Convention is to reinforce one of the basic principles of the nuclear conventions — that of channelling all liability on to the operator of the nuclear installations concerned, to the exclusion of any other person's liability —, and to remove one of the main obstacles in the way of international nuclear trade. It must not be overlooked that for its fullest effectiveness the new Convention requires that the special legal régime established by the nuclear conventions themselves should become even more widely extended in its application by further ratifications in the near future. The adoption of the new Convention by the Brussels Conference is clearly an important step forward.

The Agency and ENEA, with the collaboration of Foratom, are organizing a further symposium on the maritime carriage of nuclear material, to be held in Stockholm from 18 to 22 June this year. This symposium will take place in two consecutive parts, the first of which will be devoted to technical and regulatory problems and the second to nuclear third party liability and insurance. Its purpose is to examine and to explain the practical and legal effects of the new Convention.