

## **Comparison of regulatory requirements for competence, fitness and fatigue in non-rail transport modes**

In order to determine the validity of the rail industry concerns about the HSC proposals for specific regulations on safety critical work, HSE has looked again at the position in other industries as regards the issues of staff competence, fitness and the prevention of fatigue.

### **Aviation**

In the aviation industry, the Air Navigation Order 2000 (ANO) requires that operators are not permitted to fly for the purpose of public transport unless the Civil Aviation Authority (CAA) has granted them an operator's certificate, certifying that the operator is competent to secure the aircraft operated by them, and that such flights are operated safely. Those in charge of the provision of Air Traffic Control also require approval from the CAA. Operator's certificates and approval for Air Traffic Control Service are only granted once the CAA is satisfied that the applicants are competent, taking into account their previous conduct and experience, their equipment, organisation, staffing, maintenance and other arrangements, to secure the safe operation of aircraft.

In many instances the organisation, staffing and maintenance arrangements require the use of licensed personnel, e.g. maintenance engineers, flight crew, pilots and air traffic controllers. The CAA grant licences to such individuals upon being satisfied that the applicant is a fit person to hold the licence and is qualified, by reason of his knowledge, experience, competence, skill and physical and mental fitness to act in the capacity to which the licence relates. Licence applicants must demonstrate such competence and undergo such examinations and tests (including in particular medical examinations), and undertake training courses, as the CAA requires. Assessment of competence is carried out at CAA approved testing centres and CAA approved medical practitioners carry out medical fitness assessments. Validity of competence and fitness assessments requires ongoing monitoring, re-validation and periodic re-assessment.

Several Articles within the ANO are concerned with the operator and crew's responsibilities with regard to the fatigue of crew. 'Civil Aviation Publications' (CAP371 - The Avoidance of Fatigue in Aircrews; and CAP 670 ATS Safety Requirements) support these Articles. Operators are required to establish schemes for the regulation of flight times and not permit any person to fly as a member of crew if they have reason to believe that the person is suffering from, or is likely to suffer from fatigue as may endanger the safety of the aircraft or passengers. Air traffic controllers are prohibited from undertaking their duties if they know or suspect that they are suffering from or, are likely to suffer from, fatigue as may endanger the safety of any aircraft. CAA have informed HSE that they view the CAP as secondary legislation (similar to an HSC ACoP) and that CAA will not grant approval or a certificate unless operators' schemes are compliant with the CAP.

## **Marine**

For the maritime industry, specific regulations require personnel such as boatmasters, chief mates, chief engineers, officers in charge of navigation and radio operators etc to be licensed and achieve certificates of competency. Such licences and certificates have to be maintained, are time limited, require periodic re-validation and require evidence of sea service and ongoing training and assessment.

The Merchant Shipping (Medical Examination) Regulations 2002 make it a legal requirement that any seafarers employed or engaged in any capacity aboard a seagoing ship must hold a valid certificate attesting to their medical fitness for the work for which they are employed. The certificate is issued by Maritime and Coastguard Agency (MCA) approved medical practitioners and is valid for two years.

The Merchant Shipping (Hours of Work) Regulations 2002 implement a Social Partners Agreement to the Maritime Working Time Directive. The regulations cover those persons whose usual place of work is onboard a seagoing ship and any person onboard undertaking safety critical activities. The employing company has a duty to ensure that seafarers are provided with the minimum period of rest specified. The seafarer has a duty to ensure that they are properly rested when they begin duty on a ship and that they obtain adequate rest when not on duty. A 'Merchant Shipping Notice' (MSN), which has a similar legal status to HSC's ACoPs, supports these regulations. The MSN states that, when operators devise schedules of duties they should take account of, amongst other things, the maximum period of work, workload, manning levels, minimum rest periods and 'the seriousness of irregular working hours and their contribution to fatigue'. The MSN also outlines the responsibilities of owners and operators, which includes ensuring 'that the working arrangements allow for sufficient rest periods to avoid fatigue and to comply with the Hours of Work Regulations 2002'.

## **Road Transport**

In road transport, the main regulatory control of competence and fitness is through licensing. The legal basis for fitness to drive lies in the EC Directives on Driver Licensing and the Road Traffic Act 1988 and subsequent regulations including, in particular, the Motor Vehicles (Driving Licences) Regulations 1999. DVLA have informed us that on first application or renewal of a licence to drive a Passenger Service Vehicle (PSV) or a Large or Heavy Goods Vehicle (LGV / HGV) the applicant is required to undergo a medical assessment by their doctor, who then sends a medical report to the Driver and Vehicle Licensing Agency (DVLA). The medical is valid until the age of 45, although the driver is required to notify the DVLA of any change in their medical status. At the age of 45, the driver has to be re-assessed medically every five years until the age of 65, unless there are additional restrictions on the licence for medical reasons.

Fatigue is controlled by many different sets of EC and Domestic rules / regulations, eg. EC Regulation 3820/85 on driver's hours, EC regulation 3821/85 on tachographs, The Drivers' Hours (Harmonisation with Community Rules) Regulations 1986, The Passenger and Goods Vehicles (Recording Equipment) Regulations 1996, etc. It is both the responsibility of the employers and the drivers to ensure that they comply with the drivers' hours and tachograph rules. The rules cover limits to continuous driving, weekly driving limits, breaks, daily and weekly rest and the compulsory use of tachographs (sealed and calibrated equipment that records hours of driving, other work, breaks and rest periods etc). The onus is on the undertaking to ensure that a driver's schedule is such that they can easily accommodate the drivers' hours rules.

In addition the Highway Code is an example of an Approved Code of Practice with quasi-legal status. It is not part of the law, but there must be very good reason for not following its direction if prosecution is to be avoided. The Highway Code has several rules concerned with fatigue and fitness to drive. The code states that 'driving when you are tired greatly increases your accident risk' and then advises on several ways that risk can be minimised, such as making sure you are fit to drive; taking sufficient breaks; avoiding driving very late at night, etc. The code also suggests adequate ventilation in hot weather to avoid drowsiness, and warns of sleepiness induced by monotonous motorway driving.

In February 2001, the European Commission published a draft Directive with proposals for the compulsory initial training and periodic retraining of professional drivers of buses and lorries. The proposal prescribed, amongst other things, a training syllabus; a minimum number of hours of initial training; a minimum number of hours of retraining to be taken periodically; and regulation of those delivering training. Successful completion of the training would result in the award of a 'Certificate of Professional Competence.' The draft Directive was the subject of much negotiation at official level throughout 2001 and 2002. The British position was informed by public consultation and close working with the road freight and passenger transport industries. The Driving Standards Agency advises us that the Directive has to be transposed into domestic legislation by September 2006. There will be staged implementation of the new training regime, with application to newly qualified PSV drivers by September 2008; newly qualified LGV/HGV drivers by September 2009; all PSV drivers by September 2013; and all LGV/HGV drivers by September 2014.