

# Changing risk in the liberalised rail freight market

Ian Lake – Railway Safety Commission



# Introduction

- How changes in market structure have changed resulted in organisational terms
- How these changes are affecting risk at ground level
- Note this is a Western European perspective

# Market structure -What happened?

- The EU identified a need to enable rail freight to cross borders more easily than the existing inter-working arrangements. Market competition was seen as assisting this process.
- A succession of EC Directives has made competition possible, creating mechanisms for the sale of train paths and rights of access and harmonising technical standards
- Parallel to this process, privatisation occurred in the UK in 1994-1996 with a freight operations being divided up into multiple companies and sold.
- Within five years new entrants emerged to directly challenge the incumbent operators.
- Now freight is moved by seven parent companies with licenses to operate / safety certificates in GB. Only one in Ireland.

# Shunting

- Freight train preparation and shunting moved mainly into the hands of Freight Railway Undertakings - making shunting a speciality rather than a general skill.
- The task is undertaken by fewer staff
- Shunters have become 'road mobile'

# What's the effect on risk?

- The risk is concentrated, potentially easier to manage
- New source of risk from being 'road mobile' with fatigue implications
- Reduced direct supervision in task – although probably equal attention to competence management

# Train driving

## What changed?

- Wider route knowledge but some routes will be driven infrequently.
- Move to drivers working from home for certain diagrams – travelling by car / van or train.
- With business fluctuations, working patterns may be more irregular for freight RU drivers

# What's the effect on risk?

- Can wider route knowledge create a greater likelihood of operational incidents - Such as SPAD's and accidental speeding over weight restricted structures.
- Fatigue implications from more irregular shift patterns.
- Fatigue considerations from travelling by road.





# Management of staff

## what changed?

- Fitness for duty - Traditional arrangements v New arrangements. Train crews working day no longer based around a fixed location where visual check undertaken on all staff.
- Now fitness for duty managed by a percentage check of staff (15% checks) and the scientific deterrent - Drugs and Alcohol testing instead of observation
- Smaller RU's managers may cover large geographical areas
- Limited 'spare' staff available to be used in periods of disruption.
- 'Poaching' of qualified drivers – mainly from passenger RU's.

# What's the effect on risk?

- Fitness for duty - Any meaningful loss of supervision as a result? Most management do not think so – only severe cases of alcohol or drug use were ever likely to be detected by depot supervisors. Testing and strong HR policies (both random and post incident) is a now stronger deterrent.
- Can route knowledge (as an example) be sufficiently assessed by management when staff cover a large area?
- Potential for safety to be compromised by not having any 'spare' train crew to cope with disruption and staff having to work excessive hours.
- How robust is the recruitment process if 'poaching' drivers. Risk increased if not thorough.

# Rolling stock and maintenance – what changed?

- The drive to become more cost efficient has led to modernisation and standardisation.
- In the UK – nearly all the operators use the class 66 or the ‘EMD JT42 CWR’ in their fleets.
- Significant replacement off the wagon fleet, with higher capacity air braked bogie wagons replacing 4 wheel wagons.
- Maintenance activity has become more mobile. Taking the fitter (engineer) to the vehicle rather than the vehicle to the fitter.
- Planned maintenance frequencies extended



# What's the effect on risk?

- Higher utilisation may lead to failure issues arriving earlier
- New diagnostic methods help identify defects earlier. OTMR, engine management systems, better HABD's
- Engineering issues are being picked up and managed. Defective wagon wheelsets have been detected and changed. Circulation of defect information is fairly robust (N.I.R Notices)

# Conclusion

Change in the industry has seen the risk change

- Some risks have been concentrated (e.g. shunting) and potentially can be managed better
- Some risk has been reduced with new working practices and improvements in equipment, materials and understanding of human factors
- Potential risk has been created with more flexible working, not all on railway infrastructure
- Industry is generally aware of emerging areas of risk
- Larger RU's are able to manage certain areas of risk more easily (excess working time, engineering issues etc)

# Questions?

