

- There are many small freight transport operators with little coordination so external leadership and funds are needed to establish a municipal freight distribution centre facilitating night deliveries.
- An independent/ state container depot is required that can operate 24 hours a day; currently many of the operators have long leases in Dublin port and close at 17.30, which makes night deliveries very difficult.
- A subsidy could be given to night-time deliveries and retro-fitting low-noise technologies (as they do in Holland with the “PEAK” Project).
- Put in an oil pipeline from Dublin port to north of Dublin to replace the oil depot in Dublin port.
- Put in school bus services in urban areas.
- A north-south corridor is needed from Dublin airport to Sandyford, investigation is needed to assess whether the metro/Luas be able to take freight.

- A motorway strategy for Ireland should have been produced a long time ago, the planning has been very piecemeal and now we have situations where motorways run alongside national roads.
- Bicycles and HGVs should not mix. Proper cycle lanes are needed to ensure that bicycles are separate to traffic. Cycle lanes should be taken off main roads and put on small roads. They should be enforced properly.
- Bus lanes could be dedicated commercial traffic corridors in off-peak hours.
- The social cost of bigger (super-) trucks needs to be examined to test whether they are a good idea.
- Reducing CO<sub>2</sub> emissions from freight transport:
  - Without an alternative to road freight there is little chance of achieving reductions in freight transport CO<sub>2</sub> emissions – rail freight needs to be developed. After construction goods, consumer goods are the biggest volumes of freight moved in Ireland. Because of the population densities and distributions in Ireland road freight distribution will remain the most practical method for many locations in Ireland. Almost all rail trips begin and end with a road trip.
  - Improvements in efficiencies due to better supply chain management could contribute to carbon emission reduction rather than to cost as is now the norm.
  - We need to change consumption patterns, in particular to reduce packaging.
  - There is little incentive for haulage operators to pay a higher price for more environmentally-friendly vehicles.
  - A regulator needs to be appointed to catch the illegal operators. Enforcement of the present regulations is currently the main problem.
- Rail freight
  - Rail freight has not been successful partly because it is not harmonised across EU. Signalling and track gauges differ across countries and this makes it difficult to transport by rail across multiple countries.
  - It could be possible to transport freight by rail on old passenger lines in goods vans. Irish Rail already does this to distribute car parts. Perhaps a freight carriage could be put on passenger trains.
  - Turn times on passenger trains may not be suitable for freight transport. If this is so then the Luas lines should be considered, as they are not utilised at night. In Amsterdam urban passenger rail is used for freight also.
  - There should be a rail head at Spencer Dock to facilitate rail transport freight.
- Suggestions for government intervention:

materials/stationary to 22 minutes (for clothing). The success of the Irish economy has driven the upward demand for commercial vehicles.

The EU Noise Directive (2002/49/EC) and rising traffic in Dublin has required Dublin City Council to produce a Noise Action Plan for Dublin. Due to congestion in the city and the ban on HGV 5-axle trucks since February 2007, deliveries are increasingly being made by night. A quarter of deliveries in the city centre are now made before 7AM. The challenge is to ensure low noise during deliveries to minimise the disturbance of residents of city neighbourhoods. DIT has partnered with a consortium of businesses, Enterprise Ireland and Dublin City Council to work on a project “Low Noise Solutions for Night Deliveries”. A hypothetical case study involving a scenario comprising a 5 vehicle fleet making 636 deliveries during a 6 day week from a single depot demonstrated that savings of €80,000 per year could be achieved by moving deliveries to the night. Estimates by the EC of the economic and social costs of traffic noise disturbance vary from 0.2% to 2.0% of European GDP. An estimate of 0.2% would be equivalent to €12 billion per year.

The Dublin City Council Management Plan requires premises receiving deliveries using vehicles with 5+ axles to register with Dublin City Council. They are obliged to submit mitigation plans to show how they intend to reduce the number of deliveries using five axle vehicles using the Dublin Port Tunnel.

Research on the Dublin Port Tunnel (DPT)

- In 1994, total tonnage of Dublin Port was 9.5 million tonnes. In 2006, this had risen to 29 million tonnes.
- DPT opened 20th December 2006.
- Access to the M50 from Dublin Port takes approximately six minutes.
- 65% of HGVs accessing DPT are 5 axle.
- Number of over height trucks applying for permits to transit the cordon is 30-40 per day compared with the 10,000+ HGVs using the tunnel daily.
- There have been significant reductions in 5-axle HGVs using routes such as the quays, the East Wall road, Sean Moore road.
- *Heavy Vehicle Strategy* introduced to encourage maximum use of Dublin Port Tunnel and enhance the city centre environment.

Further research will need be carried out and funded to examine the impact of the DPT on Dublin traffic, in particular on HGV traffic. A guidebook aimed at developers and architects has been produced for best practice in low noise freight deliveries and this will be promoted.

#### **Main points of discussion ensuing:**

- Design of roads:
  - Damage associated with HGVs is higher than for passenger cars.
  - County roads are not strengthened to take HGVs, and the proposed larger trucks will cause even more severe damage. HGVs are restricted from some roads/areas and can be restricted from more, this occurs in many European Countries.

life cycle impact of products should be analysed and it can show that in many cases that most of the “embedded carbon” of the product is in the plastic body of the container or in the packaging or intensive agricultural methods for products that could grown more sustainably in the third world.

### **Gerry Duggan – The Neglected Issue**

Cement production and road transport have accounted for 70% of the increase in Irish CO<sub>2</sub> emissions between 1990-2005. There has been a rise of 205% in the fuel consumed by road freight over the same period. Construction materials (aggregate = sand, gravel, crushed stone, rock) make up most of the road freight in Ireland and the distances for freight transport in Ireland are short. As a result the increase in tonnes transported is significantly higher than the increase in tonne-km. Both rates of growth are substantially higher than the increase in GDP over the period. There is more paved road per capita in the Republic of Ireland than any other EU country and we are predicted to have a higher number of motorway kilometres per capita by 2010 as a result of the Transport21 building programme. Motorway construction has a higher requirement for aggregate than other roads. Civil engineering practices should be revised to reduce the use of aggregate by no longer removing large quantities of soil and filling with aggregate.

There are several ideas that could help more efficient freight movement around Dublin and Ireland. North Dublin is becoming a distribution hub for many firms and this could be facilitated by moving Dublin port to a north Dublin site. Currently there is a large oil storage depot in Dublin port but this could be moved and oil could be pumped from the port. An idea to reduce congestion and improve logistics in Ireland would be to have large ships dock in Waterford and send the freight by rail directly to Galway where there would be a new distribution centre. It is expected that milk output in Ireland will increase by 50% by 2015. A central milk processing centre would be desirable from a logistical point of view. It could be located at Limerick Junction for good access to rail transport.

Scope to Reduce Road Transport CO<sub>2</sub> Emissions:

- Terminate Motorway Programme Post 2010
- Revise Civil Engineering Design Standards (to require less aggregate use in construction)
- Change Construction Practices
- Radically Review Proposals for New Towns
- Develop Alternative Transport Modes
- Incorporate Transport Planning in Dairy
- Restructuring Planning

### **Roisin Byrne - HGVs and Dublin**

The Irish HGV segment is forecasted to grow to 3,200 per year by 2010. The largest share of goods delivered in Dublin (in 2004) was food and beverage deliveries (38%) and the majority of deliveries were made by van (55%) and truck (39%). The dwell times for retail deliveries are the longest and can range from 7 minutes (for office

**Notes on Road Freight Transport Policy seminar**  
**15<sup>th</sup> January 2008**

Seminar presentations:

**1. Walter Carpenter – Sustainability, Economic Growth and Freight Transport in Ireland**

Up to the seventies Transport regulations were still strongly influenced by the 1933 Road Transport Act, which was implemented to protect the rail industry and address the disorganized road freight industry. During World war II This led to a boom in rail, canals and coastal transport. After the war road transport began to dominate again despite the very restricted licence requirements under the 1933 Act. In 1973 there was a change in food policy and Ireland became an exporter of meat to the EEC. There were a number of licence liberalisations measures implemented to facilitate this. In 1988 the market was completely opened for freight transport and the number of licenses issued became unlimited.

Of the 286,547 commercial vehicles registered in Ireland the vast majority are not of license size, which means that they do not require a Certificate of Professional Competency (CPC) and therefore may be unfamiliar with the rules and regulations of freight haulage. There has been huge growth in the numbers of vehicles in the range 2.5-4.5GVWR, however many of these are used as vans in the construction industry and cannot be called haulage vehicles, although they are classed as such.

Enforcement of the complex range of road transport regulations and legislation remains a problem in Ireland. In particular it is very difficult to enforce weights and many vehicles are operating above their legal weight. There are several agencies with responsibility for enforcement of freight regulations such as the Gardai, RSA, HSA, and C&E and this can lead to confusion.

The environmental impact of road freight has improved on a per vehicle basis since emissions standards have lowered the permitted emissions of particulate matter (PM), nitrogen oxides (NOx), carbon monoxide (CO), and hydrocarbons (HC) significantly since the first “Euro truck” emission standards were introduced in 1988. The emissions of PM and CO are an indication of the engine combustion efficiency and therefore as these have reduced the fuel consumption of the vehicles has improved also.

There are several issues that can be addressed to improve the environmental impact of road transport. Logistics can achieve much; for example vehicles should not travel the return part of a journey empty but should try to attain a “backload”. However, it can be difficult for small operators to find backloads and some vehicles may not be suitable to transport different goods from those on the outgoing journey. Haulage operators have difficulties cooperating and thus achieving extra operating efficiencies. Pallet networks have recently been formed by some medium sized hauliers as one way to tackle this. Supply chain management tools can be very useful in achieving efficiencies. As supply chains have improved, (as well as other efficiencies, e.g. vehicle efficiencies) there have been significant reductions in transport prices. The cost savings have been passed through to consumers so that haulage firms profit margins have reduced. Packaging has become a big part of haulage volumes and therefore consumers need to refuse packaging in order to reduce the amount of packaging used. There can be fuel savings by moving to larger trucks such as the Eurocombi in Germany, which has 50% extra capacity and 15% less fuel per t/km. However, some people have safety concerns with such big freight vehicles. The total