

FOREST HARVESTING AND TRANSPORT

OVERVIEW

WOODTRANS

Programme leader: Dr Ger Devlin

One of the main drivers of this programme was the potential to use GPS technology to improve transport logistics and reduce operating costs in the forest sector. The GPSTRACK project is a significant step in the overall integration of information technology into the Irish forest industry. The work was carried out in collaboration with industry and the Forest Industry Transport Group (FITG) and assessed the potential of vehicle tracking devices and engine diagnostic sensors and made recommendations regarding their use in timber haulage.

There are approximately 320 Coillte-contracted timber haulage trucks in operation in the country. The overloading that occurred in the past has been significantly reduced, making the sector one of the most compliant across the entire haulage industry. As a result, payloads are smaller, but haulage costs have increased, mainly due to the unpredictable cost of road diesel. Furthermore, as the maximum gross vehicle weight (g.v.w) for 5 axle trucks is due to revert from the current 42 tonnes to 40 tonnes, possibly in 2009, this will also impact on revenue per kilometre. Taking these factors into account it is imperative that maximum legal payloads are hauled 100% of the travelling time in order to maintain and build competitiveness in a sector that impacts significantly on the delivered-in price of roundwood. The basis for the **LOADSENSOR** project was therefore to develop and test the most appropriate, affordable and accurate on-board weight systems for optimising payload weights for in-forest loading and remote load monitoring.

GPSTRACK and **LOADSENSOR** are projects that have arisen as a result of recommendations in the FITG *Code of Practice for Timber Haulage*:

Potential benefits and outcomes of this programme include:

- Increased profits and reduced running costs;
- Ability to identify the best drivers through driver performance information;
- Remote monitoring of fuel usage and avert incidents of siphoning diesel;
- Option for cross-checking time sheets with GPS recorded vehicle activity, reducing false claims of overtime;
- Distances and routes travelled can be checked against GPS recorded vehicle data;
- Elimination of overweight fines;
- Reduction of loading / adjusting time;
- Reduction of maintenance costs and increased vehicle life;
- Increased safety;
- Reduced liability exposure for overweight vehicles.