

SMART Driving Training Programme For Heavy Goods Vehicle Drivers

Gerard Walker
Senior Economist
Future Jobs-Skills-Work Insights
January 2021



Rialtas na hÉireann
Government of Ireland



FOREWORD

Now more than ever, initiatives which can improve health and safety, reduce CO² emissions, increase productivity, and reduce costs are essential.

This study researches the benefits and outlines the content of a 3-day SMART Driving Training Programme for Professional HGV Drivers. The programme has been developed by Mayo Sligo & Leitrim Education and Training Board (MSLETB) in collaboration with Waterford and Wexford Education and Training Board (WWETB) and the Irish Road Haulage Association (IRHA). “The development of the SMART Driving training programme builds on the successful collaboration between ETB’s and the IRHA and will complement, and adds to, Professional HGV Training in Ireland”. (John Cassidy WWETB).

The new National Further Education and Training Strategy 2020-2024 - “Future FET Transforming Learning” highlights as a strategic priority that FET will build skills to anticipate and respond to rapidly evolving regional and national needs. This includes ETBs as a key resource for enterprise, working with them to help them understand their future skills requirements, develop a future pipeline of talent to meet these needs, and to provide the up-skilling support required by their existing employees. The Smart Driving Programme is an excellent example of this approach.

The new Programme for Government “Our Shared Future”¹ includes a measure to implement a 10-year strategy for the haulage sector focused on improving efficiencies, standards, and helping the sector move to a low carbon future. The objectives of the SMART Driving upskilling programme fit well within such a strategy. The programme is being funded through the SOLAS “Innovation through Collaboration Call 2019” process as part of the “Skills to Advance” policy initiative. It supports the objectives of the SOLAS “Supporting Working Lives and Enterprise” policy and is well aligned with the Governments Future Jobs Ireland Programme 2020.

“This programme is designed to meet specific upskilling needs in the HGV sector in Ireland. It will be delivered to around 300 professional HGV drivers over a 2-year period. It will then be mainstreamed across the Further Education and Training sector making it more widely available to existing professional HGV drivers, including HGV drivers returning to the sector, and to participants on HGV traineeships” (Sean Burke MSLETB).

Upskilling drivers in eco-driving behaviour, digital technology (in-cab and hand-held devices etc.), safe driving and drivers health and well-being, will be the focus of the programme. SMART Driving behaviour along with the adoption of new truck safety and efficiency technologies, has the potential to lower CO² emissions, reduce fuel usage, increase productivity, enhance driver well-being, and improve driver and road user safety. It can enhance enterprise competitiveness and ensure that HGV driver skills are future proofed.

The nature of the Irish economy, with high levels of trade, means that excellence in Road Freight Transport is vital for national and regional development. 159 million tonnes of freight are transported by road per annum, including food, goods, medicines, fuel, raw materials, and chemicals so essential during the COVID-19 pandemic. HGV driver skills needs are continually changing to move to reduce CO² emissions, advances in digitalisation, market demands, regulatory compliance, Brexit, and changing work practices. The COVID-19 pandemic requires more stringent hygiene and sanitisation practices for operators and drivers.

¹ June 2020



“The nature of work for HGV drivers, with the equipment being utilised, digitalisation, market demands, regulatory compliance and changing work practises, has evolved the Road Haulage sector almost beyond recognition in the last fifteen to twenty years. These changes, coupled with the high average age in the sector, very much suggests the need for an upskilling course for this current crop of drivers. Upskilling opportunities will help drivers deal with this new world while best availing of new technologies and practices. This will help drivers get a better understanding of their modern work environment and equipment thus helping drivers to drive and work in a safe and compliant manner, while using less fuel to do so” (Paul Jackman IRHA)

We would like to thank all those who contributed to the study. This includes the valuable expertise of members of the Steering Group for the project², stakeholders, and the inputs of the Road Haulage companies surveyed. Finally, we would like to thank Gerard Walker, Future Jobs-Skills-Work Insights, for conducting the writing and analysis of this study.

Signed: Tom Grady Kevin Lewis Paul Jackman
 Tom Grady Kevin Lewis Paul Jackman
 Chief Executive, MSLETB Chief Executive, WWETB Vice President, IRHA

² Appendix 1



Rialtas na hÉireann
 Government of Ireland



EUROPEAN UNION
 Investing in your Future
 European Social Fund



Ireland's European Structural and Investment Funds Programmes 2014-2020
 Co-funded by the Irish Government and the European Union

Executive Summary



The SMART DRIVING upskilling programme is an innovative initiative by Mayo, Sligo, and Leitrim ETB in collaboration with Waterford and Wexford ETB in partnership with the Irish Road Haulage Association. It is an exemplar of the approach being taken by ETBs within the new 5-year Further Education and Training (FET) strategy to act as a key resource for enterprise helping them address critical skills gaps and providing employees with upskilling opportunities to sustain their employment.

The Irish Road Haulage sector comprises many small operators with limited capacity to identify skills needs or to meet their employee development needs. Half of HGV Drivers have lower secondary level education as their highest level of educational attainment compared to 13% for all those at work.³ The average age of HGV drivers is relatively high⁴ with 28% aged over 55 years compared to the 19% national average.

The skills need of the professional HGV drivers are rapidly changing driven by advances in vehicle digital technology, targets to reduce CO2 emissions, demand for greater efficiency, changing work practices, and mandatory regulatory requirements. The upskilling of HGV drivers is essential to keep up with new skills and knowledge demands. ETBs have identified this critical skills gap and are addressing it through the development of this targeted SMART Driving upskilling programme. The programme is being offered free to employers and is funded through the SOLAS "Innovation through Collaboration" Fund.

The SMART DRIVING upskilling programme is well aligned with the SOLAS workforce upskilling agenda, and Government priorities for reducing CO2 emissions, embracing innovation and technological change, and supporting regional development. The programme is a valuable contribution by FET within the National Strategy on Education for Sustainable Development in Ireland.

There is potential for the programme to be mainstreamed across the entire FET sector making it more widely available to existing professional HGV drivers, including HGV drivers returning to the sector and to participants on HGV traineeships and for professional drivers in other sectors.

The Irish Road Haulage sector provides employment for around 50,000 employees including 25,000 HGV drivers. 159 million tonnes of Irish freight per annum is transported by road including the safe and efficient transportation of food, goods, medicines, fuel, and pharmaceuticals so essential during the COVID-19 pandemic. HGV drivers may work locally, nationally, or long journey. Some work with hazardous or extremely large loads and require extra training and/or licences. Others work transporting livestock, or with refrigerated container loads. The COVID-19 pandemic requires more stringent hygiene and sanitisation guidance and practices for drivers. Following the recent EU-UK Trade and Cooperation Agreement, HGV professional drivers will have an important role to play in ensuring the smooth flow of Irish trade with the UK and EU.

SMART DRIVING is a strategy that can enhance driver performance, increase fuel efficiency, lower carbon emissions, and improve road safety. It comprises a series of eco-driving behaviours which uses advances in digital technology (In-cab and hand-held devices etc), to deliver immediate benefits for the employer, driver, and the environment. Evidence from Europe, Asia, and North America suggests that eco-driving behaviour that utilises the adoption of technical vehicle improvements, can save fuel and reduce emissions up to 15%. Fuel costs are a significant expense, accounting for about 30% to 40% of the total operating costs.⁵

³ Heavy Goods Vehicles Drivers, Highest level of Education attained, CSO Census 2016, Profile 11 – Employment Occupations and Industry. <https://statbank.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=EB054&PLanguage=0>

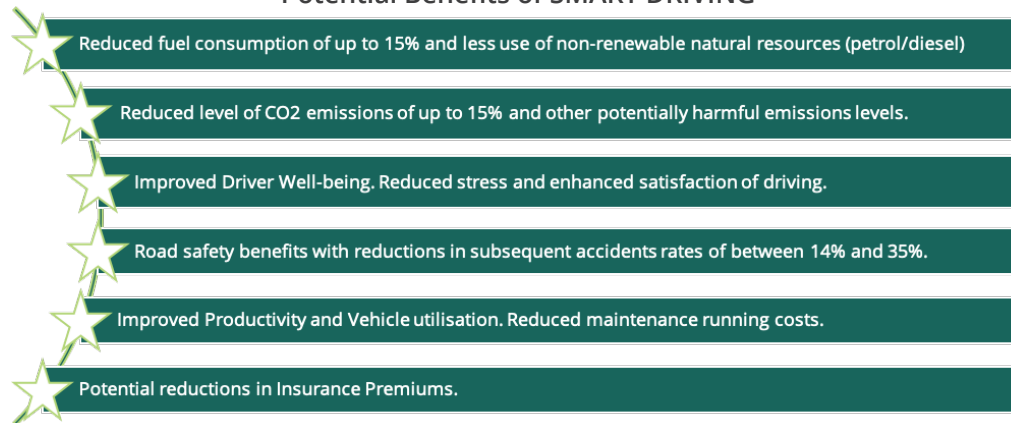
⁴ CSO 2016 Average Age by Occupational analysis. <https://statbank.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=EB068&PLanguage=0>

⁵ Reducing the Carbon Footprint of Freight Movement through Eco-Driving Programs for Heavy-Duty Trucks, National Center for Sustainable Transportation, Center for Environmental Research and Technology University of California, 2015. <https://merritt.cdlib.org/d/ark:%252F13030%252Fm54b5rqg/1/producer%252FNCST201506.pdf>





Potential Benefits of SMART DRIVING



Advances in vehicle feedback systems can reinforce eco-driving behaviours including to assess drivers' fuel efficiency performance, speed, gear changes, braking profile along with real-time advice while driving.⁶ SMART DRIVING training is a cost-effective means of reducing fuel usage and CO2 emissions in Road Freight.⁷ Improved driver performance from the programme can result in potential economic benefits as follows:

Average annual fuel cost per Fleet Vehicle Ireland = **€32,250⁸**
 Cost savings Per Fleet Vehicle from 10% fuel usage reduction = **€3,250**
 Average annual maintenance cost per Fleet Vehicle Ireland = **€7,500**
 Cost savings Per Fleet Vehicle from 10% maintenance cost reduction = **€750**
 Potential Annual Fuel and Maintenance Savings Per Fleet Vehicle = **€4,000**
Per 300 HGV Drivers undertaking SMART DRIVING Programme = €1,200,000

Potential Reductions in CO2 emissions will contribute towards the Government Climate Change objectives.⁹

Per Fleet Vehicle from 10% fuel usage reduction = **10 tons**
 Per 300 HGV Drivers SMART Driving Programme = **3,000 tons**
 (There are also commensurate improvements in local air quality from reduced micro-particles and nitrogen oxides).

SMART DRIVING can also contribute to the health and safety culture within an organisation.¹⁰ HGV Drivers can develop skills that promote their safety and other road users.¹¹ There is evidence of road safety benefits arising from SMART DRIVING with reductions in subsequent accidents rates of between 14% and 35%.¹²

A differentiated learning approach will benefit those drivers with less digital skills capability. Small-sized Fleet Operators may also lack knowledge of vehicle digitalisation trends, as indicated in the survey work undertaken for this study and therefore the benefits of applying them. The SMART DRIVING promotional campaign with industry support and dedicated website will be essential to communicate the practical benefits of the programme and securing employers and drivers participation.

⁶ Assessment of the potential for demand-side fuel savings in the Heavy Goods Vehicle sector. The Centre for Sustainable Road Freight, UK, 2015. http://www.csrf.ac.uk/wp-content/uploads/2018/08/CUED-C-SRF_TR_108-Greening.pdf

⁷ Ibid

⁸ Derived from Data within Managers Guide to Freight Distribution Costs 2019, Freight Transport Association.

⁹ Utilising Road Haulage Operator data for driver's mileage, fuel usage and CO2 emissions, February 2020.

¹⁰ https://www.cieca.eu/sites/default/files/documents/projects_and_studies/ECOWILL_FINAL_REPORT.pdf

¹¹ Eco-driving for HGVs -Final Report, UK Department Transport, December 2016. <https://www.fors-online.org.uk/cms/wp-content/uploads/2017/02/Eco-driving-for-HGVs.pdf>

¹² Efficient Driving-A rapid evidence assessment for the UK Department of Transport, 2016. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/509972/efficient-driving-rapid-evidence-assessment.pdf



Rialtas na hÉireann
Government of Ireland



EUROPEAN UNION
Investing in your Future
European Social Fund



Ireland's European Structural and Investment Funds Programmes 2014-2020
Co-funded by the Irish Government and the European Union

SMART
DRIVING



"Let it Roll"

WWW.SMARTDRIVING.IE