



Rialtas na hÉireann
Government of Ireland

Focus on Transport & Logistics

August 2020



Transport & Logistics

Description

The global freight transport, distribution and logistics (FTDL) services sector includes transportation by road, rail, air and sea. The industry is both capital and employment intensive and is driven by trends in global trade. Freight transport and services comprise a significant component of the total supply-chain cost for companies in bringing a product to market. The intensity of competition varies depending on the segment of the sector. Road transport is characterised by relative ease of market access and a consequential high level of competition. Railways and ports, as natural monopolies, have less exposure to direct competition. The sector is an important enabler of economic growth.

Snapshot

Global			Market Size	Growth Forecast		
	Transportation Services ⁱ		\$2,039.3 billion (2017)	\$2,490.5 billion by 2022		
Europe	Marine Freight ⁱⁱ		\$28.9 billion (2017)	\$35.1 billion by 2022		
	Air Freight ⁱⁱⁱ		\$33.3 billion (2018)	\$47.1 billion by 2023		
	Hybrid & Electric Cars ^{iv}		\$24,013.8 million (2017)	\$56,570.2 million by 2022		
Ireland (All Economy)	Exports ^v (2018)	% of National Exports	5-year CAGR (2013- 2018)	Employment ^{vi}	% of National ^{vii}	5-year CAGR
	€7.75bn	1.95%	9.92%	108,000	4.57%	4.44%

i. Global Transportation Services, Marketline, July 2018

ii. Marine Freight in Europe, Marketline, April 2018

iii. Air Freight in Europe, Marketline, April 2019

iv. Hybrid & Electric Cars in Europe, Marketline, May 2018

v. CSO Exports of Services (Transport) BPA03 (includes freight & passengers)

vi. CSO Labour Force Survey (LFS) Q4 2019 (Transportation and Storage Activities) (includes freight & passengers)

vii. The total national employment is based on CSO Q4 2019 (2,361,200)

See also Tourism & Hospitality and Aerospace & Aviation Briefs

Pre-COVID-19 Position

Advances in technologies and increased emphasis on environmental sustainability is transforming the global sector and seeing the emergence of new players in the market

- Technology is transforming the sector. The use of data analytics presents opportunities to improve performance and serve customers better through improved forecasting to scale capacity up or down and plan routes. Artificial intelligence and machine learning techniques can deliver dynamic routing.¹ Connected autonomous vehicles present further potential efficiencies.
- Remote and autonomous technologies are also being applied to the shipping industry and although it is unlikely that we will see ultra large cargo ships become autonomous in the near future there may be economic drivers to apply these technologies to smaller containerships, general cargo vessels or bulkers.
- Major players from other industries may have the potential to shake up the industry's competitive dynamics i.e. autonomous vehicles and the industry's own customers becoming significant new entrants (Amazon is an example of this, looking to expand its in-house expertise in warehousing as well as develop its own delivery capabilities).²
- In terms of sustainability, manufacturers and retailers are demanding that FTDL operators transport their goods with a low CO₂ footprint. This encourages logistics companies to invest in eco-friendly technologies, including the use of electric vehicles, electrical systems in ports to reduce emissions. This increases the demand for skills in areas such as logistics planning, carbon reporting and the 'greening' of operations.
- Increasingly, organisations are seeking to consolidate the management of their supply chain in a single location to manage more complex arrangements and increase efficiencies. Advanced supply chain management (SCM) can facilitate the movement of goods remotely, without the need for a physical presence in the countries in which any element of the transportation occurs. The use of blockchain technologies is being adapted for supply chain management.

International access and competitive freight services are crucial for Ireland as a small open economy – the sector comprises a small number of large enterprises and a large number of SMEs

- Being an island and a net exporter requires Ireland to have expertise in facilitating a multi-modal supply chain incorporating sea, road, rail and air freight. Excellence in freight transport and logistics is also vital for attracting inward investment and enterprise competitiveness.

¹ PWC Shifting Patterns, The future of the logistics Industry, 2016

² PWC Shifting patterns, The future of the logistics industry, 2016

- The Irish transportations services industry comprising air, marine, rail, and road freight sectors is forecast to generate total revenues of \$5.2bn in 2018.³ The road segment is expected to be the industry group's most lucrative in 2018, with total revenues of \$3.1bn, equivalent to 59.5% of the industry group's overall value. The marine segment contributed revenues of \$0.2bn in 2017, equating to 5.8% of the industry group's aggregate value
- Road freight is the largest employer within the goods transportation industry in Ireland. Ireland's licensed road haulage sector is dominated by small operators (some of which cater to sector specific needs) with an average fleet size of 4.3 trucks for those holding licenses to operate within Ireland, while for those holding licenses to operate internationally, the average fleet size is 5.75. The sector also includes some well-known multi-national companies (MNCs) and large domestic providers that operate internationally. The relatively high number of haulage operators results in competitive pricing in road freight.
- Low barriers to entry maintain Ireland's openness to the operation of shipping companies here.
- Ireland is heavily dependent on ports for trade as most of Ireland's merchandise imports and exports are transported by sea. The growth in the Irish food sector is likely to lead to an increase in sea freight volumes up to at least 2020 primarily driven by population increases. Irish ports handled 53.2 million tonnes of goods in 2019.
- Air freight accounts for 1% of freight tonnage by volume but about 35% of the value of all freight in Ireland – mainly seasonal food stuffs, higher value-added pharmaceutical, medical devices and IT components.⁴ Ireland's main airports handled a total of 145,950 tonnes of freight in 2019, the vast majority (94.7%) of which was international freight.⁵
- Rail freight accounts for movement of only 1% approximately of all goods⁶. Factors such as the small size of the country, the type of products produced, access to rail networks and the comparative advantage of road transportation all affect the attractiveness of rail freight in Ireland.
- Warehousing operations are a key employer in the sector. Increasingly value-added operations take place in warehouses, such as branding, pricing and merchandising of stock in readiness for final delivery to the customer.
- The overall Transport and Storage sector accounted for 2% GVA in 2018 and 5% of total employment, approximately half of which is located outside Dublin.⁷

³ Marketline, August 2019

⁴ Department of Transport, Tourism & Sport, A National Aviation Policy for Ireland, 2015.

⁵ <https://www.cso.ie/en/releasesandpublications/er/as/aviationstatisticsquarter4andyear2019/>

⁶ Addressing the Skills Needs Arising from the Potential Trade Implications of Brexit, Expert Group on Future Skills Needs, June 2018

⁷ Economic Considerations for Reinstating Economic Activity

- There is an emerging connected mobility sector in Ireland, building on established research and innovation strengths, skills and reputation as a global technology hub and enabled by a progressive and supportive ecosystem.

Impact of COVID-19

GLOBAL

- While passenger and freight transport is largely carried out in separate vehicles, about 50% of global airfreight is carried in the belly hold of passenger aircraft, and significant volumes of RoRo freight in and out of Ireland is on carried so called RoPax ferries. COVID-19 has had a bigger impact on combined passenger/freight transport because passenger numbers by both air and sea have been decimated. The current mobility and activity restrictions around the world are likely to result in a strong reduction of global freight transport volumes in 2020 of more than one third. Overall, freight transport, measured in tonne-kilometres, is projected to be 36% below the level foreseen without COVID-19 for this year.⁸
- The first half of 2020 could see a 25% reduction in shipping, with a 10% annual fall in 2020.⁹
- Freight transport within cities can expect to be hit significantly less hard than national and international goods transport. Updated projections see urban freight activity at 8% below the estimate that did not yet reflect any impact from COVID-19 due to the growth of online shopping.¹⁰
- More generally, all supply chains are being affected by the need to ensure additional health and safety measures for all participants in the supply chain (which affect costs and time).

NATIONAL

- Maritime passenger movements are down 95% and freight volumes down by approximately 40%.
- In response to a near collapse in ferry passenger numbers, Government approved the temporary designation of five strategic maritime routes as PSO routes for a period of up to three months and at a cost of up to €15m.
- Every enterprise in the aviation value chain, with the sole exception of dedicated cargo operators, have seen severe depletion of business and are facing various degrees of financial challenge.
- There are significant impacts too on the wider aviation value chain with airports, airlines and their suppliers all having to down-size and reduce their workforce. Public transport revenues have been severely impacted with consequent pressures on PSO funding.

⁸ COVID-19 Transport Brief- International Transport Forum

⁹ ILO COVID-19 and maritime shipping & fishing

¹⁰ COVID-19 Transport Brief- International Transport Forum

- Shrinkage in the overall volume of goods moving across Europe and wider has placed Ireland's commercial road haulage sector under pressure. Financial viability of haulage businesses or cash flow problems, due to overall drop in freight volumes and closure of end chain businesses may see some haulage operators closing or "parking up" their vehicles. An increase in 'empty leg' international journeys during the period of the COVID-19 pandemic has also been reported by the Irish Road Haulage Association (IRHA) and there have been similar reports across Europe. As sectors begin to re-open both here and across Europe, the demand for goods should begin to rebound toward more traditional levels.
- In Europe, air traffic movements fell to 10% of comparable traffic last year but is now recovering around Europe as travel restrictions are being removed.
- Passenger air traffic in Ireland fell to around 1% of what might be expected but the return to normal operations will take longer in the Irish market as travel restrictions remain under review. This will continue to impact on air cargo capacity as much of Ireland's air cargo is carried in the belly-hold of passenger aircraft.
- Despite this, air cargo supply lines have remained robust throughout the crisis, but escalated costs are being reported across the sector.
- All of the major providers of aviation services spanning airlines and airports have begun the process of implementing downsizing measures of at least 20-25% of the workforce.
- Aer Lingus announced on 19 June that it has formally notified the Department of Employment Affairs and Social Protection regarding proposed collective redundancies at the airline. It is understood that 500 redundancies are being sought. Ryanair has also cut its workforce at its Irish HQ by 240 employees and CityJet is currently in examinership with 400 jobs at risk.

Issues, Opportunities and Challenges for the Sector

- The prolonged disruption of Ireland's air connectivity with the rest of the world could impact on our competitiveness in the FDI sector due to uncertainty around the robustness of our supply chain and the demand for both freight and passengers cannot continue indefinitely. It is unclear for how long this reduction in demand can be sustained by the marine and maritime sector without an impact on overall service levels. The resilience of Ireland's maritime links is dependent over time on a return to passenger numbers.
- Where air services are suspended, re-activation is not automatic as restrictions are lifted. Developing services to particular markets – particularly long-haul – is a long-term investment and some of these hard-won routes may be lost for some time.
- The international transport sector makes investment decisions based on a long-term view - where financial risks associated with substantial capital costs are spread over time based on projections around the socio-economic context in which they operate. In the context of wider economic uncertainties for the sector, the current lack of clarity as to when Ireland will be in a position to facilitate a return to overseas travel presents a significant challenge for the sector.

- The prospects for the transport sector will be determined by the pace of, and extent to which, economic and social activity returns as well as by the supports necessary to sustain it.
- There has been growth in the e-commerce driven logistics and delivery industry. Companies in Ireland have increased headcount during the pandemic. Some elements of the sector are doing very well due to changed consumer buying behaviours.
- Supply chains may come under additional pressure in the event of a hard Brexit and additional supports may be required for the transport/logistics sector including customs facilitation and PSOs.