

ALTERNATIVE FUELS INFRASTRUCTURE

Developing a National Policy Framework for Ireland

Initial Public Consultation

Context

The Department of Transport, Tourism and Sport (DTTAS) is tasked with the transposition of the Alternative Fuels Infrastructure Directive (2014/94/EU.) Given the close relationship between transport and energy in this area, the Department is working closely with the Department of Communications, Energy and Natural Resources.

The two Departments have started work in relation to developing a National Policy Framework to support the deployment of alternative fuels in Ireland arising from obligations associated with [Directive 2014/94/EU](#) and have decided to jointly issue an initial public consultation on the topic. Further public consultation is also planned for 2016.

Background

Transport in Europe is 94% dependant on oil. 84% of this is imported, which costs up to one billion euro per day. This figure does not include the additional costs to the environment. To help reduce oil dependency in transport and the correlated harmful effects, the EU Commission undertook to develop a sustainable alternative fuels strategy, which would support the development of appropriate refuelling infrastructure and associated standards.

The Commission took the view that a major obstacle to market uptake of alternative fuels was the slow establishment of supporting infrastructure, along with a lack of associated common technical standards across the EU. As a result, a Directive to address these issues was proposed. Following negotiation, Directive 2014/94/EU was published in November 2014.

The Directive outlines the main fuel options that could provide alternatives to oil in transport (both road and maritime). These are electricity, hydrogen, biofuels, and natural gas, in the forms of compressed natural gas (CNG), liquefied natural gas (LNG), or gas-to-liquid (GTL), and liquefied petroleum gas (LPG). The Directive also makes reference to synthetic fuels.

The Directive requires Member States to adopt and publish National Policy Frameworks (NPFs) that will support the provision of refuelling infrastructure for alternative fuels, common technical standards and appropriate consumer/user information. In the case of certain provisions, Member States have the opportunity to cooperate with one another for the purposes of satisfying the scope of the Directive.

Member States are required to bring the Directive into force by **18 November 2016**. Member States must make their targets public and present their NPFs within this timeframe. The Commission will then assess and report on those frameworks in order to ensure coherence across the EU.

Policy Considerations

- Minimum requirements to establish adequate coverage of alternative fuels infrastructure across the EU are expected to give increased reassurance to car manufacturers and investors in making the long term investments required to speed up the shift to such vehicles. We must give consideration to what is appropriate coverage, taking into account the profile of the transport fleet (and likely future market demand) in Ireland.
- Ireland has a very high dependence on oil in transport (98%). For energy security policy reasons, greater diversification of fuels in the transport sector is highly desirable. Ireland also needs to reduce oil dependency in transport in response to the level of greenhouse gas emissions from oil in transport and the threats posed by climate change. In responding to this Directive, there is an onus on us to bear in mind climate and energy policy considerations in seeking to frame an appropriate level of ambition.
- Ireland must, however, be mindful of the proportionality and cost-effectiveness of measures proposed. While obligations in respect of refuelling stations and charge points do not appear to be overly onerous, careful analysis will be required when establishing 'appropriate numbers' of such infrastructure.
- There are currently no LNG facilities in Ireland. In the absence of demand (and high investment costs), consideration should be given to the level of cooperation that will be needed with neighbouring Member States to satisfy the LNG requirements for maritime transport in the Directive.
- The Directive is not prescriptive on refuelling infrastructure for LPG. It is considered to be an alternative fuel but Member States are not required to establish a target number of refuelling stations for LPG in the NPF. The extent to which Ireland will provide for LPG in the future mix of transport fuels will need to be examined.
- Hydrogen is considered versatile for use in transport and there are strong arguments for further investigation of this fuel, despite no current market in Ireland. However, transition to a hydrogen-based transport system would involve massive technological change and economic investment by consumers.
- In matters such as common standards for alternative fuels infrastructure, action will be required to ensure market harmonisation and acceptance of refuelling equipment by users across the EU. It will be necessary to explore what impact this will have on key stakeholders in Ireland.
- The level of financing required to deliver the NPF will be a fundamental influence on the measures to be undertaken by the State. Regulatory issues will also be pertinent to any plans for private investment.
- Other non-infrastructure based incentives to support the market for all types of alternative fuels will be included within the scope of the NPF.

Main Provisions

Electricity: The Directive requires Member States to set targets for recharging points accessible to the public, to be built by 2020, to ensure that electric vehicles can circulate at least in urban and suburban agglomerations. Targets should ideally foresee a minimum of one recharging point per ten electric vehicles. Moreover, the Directive makes it mandatory to use a common plug all across the EU, which will allow EU-wide mobility.

Liquefied Natural Gas (LNG): Gas fuelled vehicles offer equivalent performance and costs to petrol/diesel units with lower emissions. For the development of LNG for road transport, Member States have to ensure a sufficient number of publicly accessible refuelling points, with common standards, on the TEN-T core network, ideally every 400 km, to be built by end-2025. The Directive also requires a minimum coverage to ensure accessibility of LNG in main maritime and inland ports.

Compressed Natural Gas (CNG): The Directive requires Member States to ensure a sufficient number of publicly accessible refuelling points, with common standards, to allow for the circulation of CNG vehicles, both in urban and suburban areas as well as on the TEN-T core network, ideally every 150 km, to be built by end-2025.

Hydrogen: The Directive aims at ensuring a sufficient number of publicly accessible refuelling points, with common standards, in the Member States who opt for hydrogen infrastructure, to be built by end-2025.

The required coverage and timings provided by the Directive is as follows:

	Coverage	Timings
Compliance with technical specifications	Normal and high powered electric recharging points, shore-side electricity	18 Nov 2017
Electricity in urban/suburban and other densely populated areas	Appropriate number of publically accessible points	by end 2020
CNG in urban/suburban and other densely populated areas	Appropriate number of points	by end 2020
CNG along the TEN-T core network	Appropriate number of points	by end 2025
Electricity at shore-side	Ports of the TEN-T core network and other ports	by end 2025
Hydrogen in the Member States who choose to develop it	Appropriate number of points	by end 2025
LNG at maritime ports	Ports of the TEN-T core network	by end 2025
LNG at inland ports	Ports of the TEN-T core network	by end 2030
LNG for heavy-duty vehicles	Appropriate number of points along the TEN-T core network	by end 2025

Views Sought

The purpose of this document is to invite written submissions from all interested parties and key stakeholders on the content of this consultation paper. It is hoped that submissions received on foot of this paper will better inform the preparation of the National Policy Framework.

Subsequent to receipt of submissions and feedback from this paper, DTTAS will liaise directly with key stakeholders on particular issues before undertaking more formal consultation as part of the Strategic Environmental Assessment and Natura Impact Assessment.

The Department would ask that all submissions be forwarded to alternativefuels@dtas.ie by 23 November 2015. In view of the level of interest anticipated, the Departments would ask that submissions are kept concise and, where possible, not longer than 1,500 words.

In making submissions, contributors should note that it is intended to post all submissions online (on both Departments' websites) following the conclusion of the initial public consultation.

Sustainable Transport Division
October 2015