

Title: Nutrient Action Programme (Amendment) Regulations (Northern Ireland) 2019	Regulatory Impact Assessment (RIA)
	Date: 24 September 2019
	Type of measure: Secondary Legislation
Lead department or agency: Department of Agriculture, Environment and Rural Affairs	Stage: Final
	Source of intervention: EU
Other departments or agencies: N/A	Contact details: Martin Irvine
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Summary Intervention and Options

What is the problem under consideration? Why is government intervention necessary?

The Nitrates Directive (91/686/EEC) (the Directive) aims to improve water quality by protecting water against pollution caused by nitrates from agricultural sources. The Directive is implemented in Northern Ireland (NI) by the Nutrient Action Programme Regulations (Northern Ireland) 2019 (the 2019 NAP Regulations) which apply to all farms.

The Directive sets a 170kg nitrogen per hectare per year limit on the land application of livestock manure. However, in accordance with the Nitrates Directive, Member States can apply for a derogation from this limit.

In 2019, [Northern Ireland](#) made an application to the European Commission for renewal of a derogation which would allow farms in NI to apply a higher limit of nitrogen to land than that set by the Directive. The application was approved in March 2019.

Commission Decision 2019/1325/EU, granted [NI](#) a derogation under paragraph 2(b) of Annex III to the Directive, allowing the application of livestock manure up to a limit of 250kg nitrogen per hectare per year.

[NI](#) has operated under the terms of an EU approved Commission Decision to permit this higher nitrogen application limit since 2007. The current Derogation Decision is for the period 2019-2022.

What are the policy objectives and the intended effects?

The Amendment Regulations will implement the conditions of Commission Decision 2019/1325/EU in NI. The conditions of derogation are set by the European Commission. The EU Derogation Decision allows an increase in the amount of grazing livestock manure that may be applied to land from 170kg nitrogen per hectare per year, to a limit of 250 kg nitrogen per hectare per year on grassland farms which meet certain nutrient management and environmental criteria.

The derogation impacts on NI grassland farms with higher stocking rates. It enables farmers to better utilise the nutrients within grazing livestock manures and operate more efficiently with reduced chemical fertiliser requirements. It also requires additional standards of environmental management.

There are approximately 478 farms seeking a derogation in 2019. These farms are holdings where 80% or more of the agricultural acreage for manure application is grass. Farmers are required to apply annually to the Department. The derogation is authorised by DAERA to those farms who agree to comply with the terms of the derogation requirements set by the European Commission Decision.

The amendment regulations also make some technical changes to the 2019 NAP Regulations. These changes will assist with practical implementation on farm and will either be cost neutral or lead to cost savings for farmers.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

Option 1: Do Nothing / Business as usual scenario; do not amend the 2019 NAP Regulations to implement the conditions of the Commission Derogation Decision.

This would mean the EU Derogation Decision would not be implemented in NI for the period 2019-2022. This would impact on approximately 478 farms who operate under a derogation and need to apply annually to DAERA for an authorisation to continue to operate under derogation from 2019 to 2022.

There are also potential implications for future trading agreements post- Brexit. Non implementation of the derogation would also be contrary to the Department's policy established since 2007 and commitments given to stakeholders. Therefore, Option 1 is not feasible and is ruled out. Costs outlined at Policy Option 1.

Option 2: Implement the requirements of the EU Derogation Decision in NI by amending the 2019 NAP Regulations. Option 2 is the preferred option and is in the best interests of grassland farms in NI who rely on the derogation to operate at a higher livestock manure application limit than is permitted under the Nitrates Directive. It also ensures additional standards of environmental management on these farms. Costs outlined at Policy Option 2

Option 3: No additional options identified.

Option 2 is preferred as it delivers the most benefits and is also significantly lower cost, with a total net cost of £1.4m over 4 years. In contrast, Option 1 (Do nothing) would have a net cost of £17.26m over 4 years.

Will the policy be reviewed? Yes

If applicable, set review date: June 2022

Cost of Preferred (or more likely) Option

Total outlay cost for business £	Total net cost to business per year £	Annual cost for implementation by Regulator £
£2.0M	£71.5K	£ no additional

Does Implementation go beyond minimum EU requirements?	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
Are any of these organisations in scope?	Micro Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Small Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	Medium Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Large Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

The final RIA supporting legislation must be attached to the Explanatory Memorandum and published with it.

Approved by: Dave Foster Date: 24 September 2019

Summary: Analysis and Evidence

Policy Option 1

Description: Do nothing, or 'business as usual' scenario.

This option would mean the Commission Derogation Decision for 2019-2022 would not be implemented in Northern Ireland.

ECONOMIC ASSESSMENT (Option 1)

Costs (£m)	Total Transitional (Policy)		Average Annual (recurring)	Total Cost
	(constant price)	Years		
Low	-	-	£3.1m	£11.39m
High	-	-	£6.2m	£22.77m
Best Estimate	£-	-	£4.7m	£17.26m

Description and scale of key monetised costs by 'main affected groups'

Non-implementation of the EU Derogation Decision by revising the NAP for 2019-2022 could have a direct impact on approximately 478 farms in NI which currently operate under a nitrates derogation granted by the European Commission. If the derogation is not available, the financial losses to these 478 farms would be between some £3.1 and £6.2 million per year.

Post-Brexit, there may be scope to operate a NI derogation without EU approval, in which case these costs would not be realised. However, this scenario is uncertain and could have implications for future trading arrangements. In addition, it would carry over an associated infraction risk.

Other key non-monetised costs by 'main affected groups'

If the Derogation Decision is not implemented, costs to Government associated with its implementation would be reduced. These costs include processing applications, assessing compliance, training, guidance and monitoring.

However, these savings would largely be offset by increased costs associated with inspection and enforcement of the 170kgN/ha/yr limit. Non-implementation of the new Derogation Decision may also result in a continuation in recent trends of declining water quality, the costs of which are difficult to estimate but likely to be significant.

There could also be consequent losses in the milk processing sector due to reduced milk production of up to 90 million litres per year. This is because the vast majority of farms operating under the derogation are many of NI's most productive dairy farms.

Benefits (£m)	Total Transitional (Policy)		Average Annual (recurring)	Total Benefit
	(constant price)	Years		
Low	Optional	-	Optional	Optional
High	Optional	-	Optional	Optional
Best Estimate	--	-	--	--

Description and scale of key monetised benefits by 'main affected groups'

Under this option there would be no additional cost to most of the agricultural industry. However, loss of the Derogation would impact significantly on approximately 478 intensive grassland farms in particular. If it was not renewed farms currently operating under the derogation would have to take alternative action such as exporting manure, destocking or renting additional land to comply with the 170kg N/ha/year limit. Such actions could potentially have a negative impact on other farms and the environment potentially.

Other key non-monetised benefits by 'main affected groups'

None identified

Key Assumptions, Sensitivities, Risks

Non-implementation of the EU Derogation Decision in NI would impact on approximately 478 farm businesses which are currently operating under the derogation. It is assumed in this option that additional land can be sourced or that other farms would be willing to take excess manure if it was exported from the farms currently operating under the derogation. Risks are that neither of these would be possible for some of the farms affected.

BUSINESS ASSESSMENT (Option 1)

Direct Impact on business £m				
Costs:£17.26m	Benefits: -	Net:£17.26m		

Cross Border Issues (Option 1)**How does this option compare to other UK regions and to other EU Member States (particularly Republic of Ireland)**

The other UK Action Programmes are not currently agreed with the EU Commission and consequently there is no associated EU approved derogation. This is currently the subject of a pilot infraction case.

The Republic of Ireland has an EU Commission approved NAP and associated derogation for the period 2018-2021.

Summary: Analysis and Evidence

Policy Option 2

Description: Implement all proposed revisions to NAP Regulations. This will ensure the derogation for NI is implemented and available for farmers.

ECONOMIC ASSESSMENT (Option 2)

Costs (£m)	Total Transitional (Policy) (constant price) Years		Average Annual (recurring) (excl. transitional) (constant price)	Total Cost (Present Value)
Low	£1.5m	1	£95.6k	£1.22m
High	£2.5m		£143.4k	£1.9m
Best Estimate	£2.0m		£119.5k	£1.57m

Description and scale of key monetised costs by 'main affected groups'

There are two key costs of option 2:

The costs of operating under a derogation are estimated to be approximately £200 – £300 per year in farmer's time or consultants fees for fertilisation planning and administration.

The cost of the requirement to use Low Emission Slurry Spreading Equipment (LESSE) after 15 June each year is estimated to require a total investment cost of £1.5m to £2.5m, best estimate £2.0m. Further details are given in the Evidence Base section.

Other key non-monetised costs by 'main affected groups'

None identified

Benefits (£m)	Total Transitional (Policy) (constant price) Years		Average Annual (recurring) (excl. transitional) (constant price)	Total Benefit (Present Value)
Low	-	-	£39.5k	£145.3k
High	-		£56.5k	£207.5k
Best Estimate	-		£48k	176.4k

Description and scale of key monetised benefits by 'main affected groups'

The key benefits will be for approximately 478 grassland farms in NI who are operating under derogation. The implementation of the EU Derogation Decision will enable these farms to seek an annual authorisation to operate under derogation between the periods 2019-2022. This means that these farms will be able to operate at higher amount of nitrogen from livestock manure limit than that provided for in the Nitrates Directive. Therefore, they will not have to rent additional land or reduce dairy cow numbers.

As a result of using LESSE, they will benefit from savings in chemical fertiliser costs as indicated in the table above.

Other key non-monetised benefits by 'main affected groups'

An EU approved derogation would be available to all eligible farmers.

The additional standards of environmental management required of derogated farms help to protect water quality.

Use of LESSE also provides a range of productive and environmental benefits. These include lower grass contamination from slurry, a longer period to apply slurry after each silage harvest, reduced phosphorus and ammonia loss and reduced odour. There are also biosecurity advantages as LESSE reduces the risk of bacteria being aerosoled.

Key Assumptions, Sensitivities, Risks

It is estimated that approximately 478 grassland farms will seek a derogation to operate at the higher nitrogen per hectare per year limit of 250kg. These farmers will likely seek an annual derogation from 2019 to 2022.

The conditions set in the EU Commission Decision are to ensure that the application of the higher amount of nitrogen will not compromise the achievement of the water protection objectives of the Nitrates Directive.

BUSINESS ASSESSMENT (Option 2)

Direct Impact on business £m				
Costs:£1.57m	Benefits:£176.4k	Net:£1.4m		

Cross Border Issues (Option 2)**How does this option compare to other UK regions and to other EU Member States (particularly Republic of Ireland)**

An EU agreed NAP and approved derogation in NI would ensure a consistent and similar approach to the Republic of Ireland on implementation of the Nitrates Directive and improving water quality. This option would ensure that NI continues to demonstrate full compliance with the Nitrates Directive for 2019-2022. This has been the position since the NI NAP was first introduced in 2007. The other UK regions do not currently have an EU agreed NAP or EU approved derogation and are the subject of a pilot infraction case.

Summary: Analysis and Evidence

Policy Option 3

Description: Adjust the proposed revisions to NAP Regulations, taking account of issues raised through public consultation. This should ensure an EU agreed NAP and approved derogation for NI.

ECONOMIC ASSESSMENT (Option 3)

Costs (£m)	Total Transitional (Policy) (constant price) Years		Average Annual (recurring) (excl. transitional) (constant price)	Total Cost (Present Value)
Low				
High				
Best Estimate				
Description and scale of key monetised costs by 'main affected groups'				
N/A				
No Policy Option 3 identified				
Other key non-monetised costs by 'main affected groups' Maximum 5 lines				
N/A				
Benefits (£m)	Total Transitional (Policy) (constant price) Years		Average Annual (recurring) (excl. transitional) (constant price)	Total Benefit (Present Value)
Low				
High				
Best Estimate				
Description and scale of key monetised benefits by 'main affected groups'				
N/A				

Other key non-monetised benefits by 'main affected groups'

N/A

N/A

BUSINESS ASSESSMENT (Option 3)

Direct Impact on business £m				
Costs:	Benefits:	Net:		

Cross Border Issues (Option 3)

N/A

Evidence Base

Problem under consideration

The Nutrients Action Programme (NAP) Regulations (NI) 2019 (the 2019 Regulations), implements EU Directive 91/676/EEC (the Directive) concerning the protection of waters against pollution caused by nitrates from agricultural sources. This is the 4th NAP to be implemented in NI. The previous 3 Action Programmes also implemented previous derogations under the Nitrates Directive which allowed the application of a higher limit of nitrogen from livestock manure to that set by the Directive.

In March 2007, the UK, with regard to NI, was first granted a derogation by Commission Decision 2007/863/EC to permit an increase in the amount of grazing livestock manure that may be applied to land from 170 kg N/ha/year up to a limit of 250 kg N/ha/year on grassland farms which meet certain criteria. After application, the derogation was renewed by Commission Decisions 2011/128/EU and 2015/346/EU. Measures relating to the 2015 Decision were included in the 2014 NAP Regulations. The 2015 Decision expired on 31 December 2018. Therefore, in 2019, NI submitted an application to the EU Commission for renewal of the derogation from the statutory livestock manure limit of 170 kg Nitrogen per hectare per year as provided for under paragraph 2(b) of Annex III and Article 9 of the Nitrates Directive.

Commission Decision 2019/1325/EU granted NI a derogation allowing the application of livestock manure up to a limit of 250kg nitrogen per hectare per year. The current Derogation Decision is for the period 2019-2022.

Rationale for intervention

DAERA, has secured European Commission approval for a nitrates derogation for NI which is important to grassland farms with higher stocking rates. It enables these farms to better utilise the nutrients within grazing livestock manures and operate more efficiently with reduced chemical fertiliser requirements. It also requires additional environmental management standards on derogated farms.

Policy objective

The implementation of the EU Commission Decision through an amendment to the 2019 NAP Regulations will ensure grassland farms can continue to seek an annual authorisation from DAERA to operate under the conditions of a derogation during the period 2019-2022.

Description of options considered (including do nothing), with reference to the evidence base to support the option selection

Option 1: Do Nothing / Business as usual scenario; do not amend the 2014 NAP Regulations.

It is not feasible for the Department to do nothing. Therefore, this option is ruled out.

Option 2: Implement NAP (Amendment) Regulations.

Option 3: No additional options identified

Monetised and non-monetised costs and benefits of each option (including administrative burden)

Option 1: Do Nothing / Business as usual scenario; do not amend the 2014 NAP Regulations.

Having no derogation in place would have significant impact on the 478 farms in NI who currently operate under derogation. As assessed in the RIA of the 2019 NAP Regulations, if the derogation is not available, the financial losses to these farms would be between some £3.1 and £6.2 million per year. If derogation was to cease, the 478 dairy farmers currently operating under derogation would have to reduce stocking rates to keep within the 170 kg organic N ha⁻¹ limit for non-derogated farms. The average area of these 478 derogated farms is 86 ha and the average N loading is 206 kg org N ha⁻¹, and hence average number of dairy cows per farm (*allowing for followers*) will be approximately 155. If these 478 farms lost their derogation, on average an extra 22 ha of land per farm would have to be rented at £300 ha⁻¹ (*total cost for 478 farms = £3.1 million yr⁻¹*), or else dairy cow numbers would have to be reduced to bring organic N loading down below 170 kg N ha⁻¹ thus cutting milk yield and causing a total £6.2 million yr⁻¹ loss in gross margin for the 478 farms. The financial losses are therefore estimated to be between £3.1 and £6.2 million yr⁻¹.

There could also be consequent losses in the milk processing sector due to reduced milk production of up to 90 million litres per year. This is because the vast majority of farms operating under the derogation are many of NI's most productive dairy farms.

Post-Brexit, there may be scope to operate a NI derogation without EU approval, in which case these costs would not be realised. However, this scenario is uncertain and could have implications for future trading arrangements.

In addition, NI will need to deliver on its EU regulatory commitments within any future trading arrangements. This could be particularly important for cross border trade in agricultural products. Therefore, consistency with Ireland by having an EU approved NAP and Derogation could be very important for NI farmers and the wider agri-food industry post Brexit.

Option 2:

Implement (Amendment) Regulations.

The 2019 NAP (Amendment) Regulations will implement the conditions of Commission Decision 2019/1325/EU in NI which grants a derogation to allow farms to seek an authorisation to apply livestock manure up to a limit of 250kg nitrogen per hectare per year, subject to meeting the conditions of the Derogation Decision.

The costs of operating under a derogation are estimated to be approximately £200 – £300 per year in farmer's time or consultants fees for fertilisation planning and administration.

The main cost relates to a new condition in the Derogation Decision for 2019 – 2022. This requires derogated farms to spread at least 50% of the slurry produced on the farm by 15 June each year.

Low emission slurry spreading equipment (LESSE) must be used for all slurry spread after 15 June.

Spreading 50% of slurry by 15 June would be normal practice on most NI dairy farms, and where not it could be achieved, and therefore is assumed to have no additional cost.

The requirement to use LESSE after 15 June will result in additional cost for some farms, which are assessed as follows:

Analysis has identified that 63 out of the current 478 derogated farms have received grant funding from DAERA to invest in LESSE. Therefore, the remaining 415 derogated farms will need to take some action to use LESSE. Some may already be using LESSE by employing a contractor to spread some or all of their slurry by LESSE.

Farmers can either choose to invest in their own LESSE or employing a contractor to spread by LESSE.

Farms with 200 cattle livestock units of more will be required to use LESSE by 1 February 2022, whether derogated or not.

Analysis identifies that 52% of derogated farms are in this category and therefore will have to use LESSE because of their size rather than them being derogated. The costs associated with their farms have been included in the RIA of the 2019 NAP and therefore are not included in this assessment.

The larger farms will have to use LESSE from 2019 as a result of being derogated, rather than waiting until February 2022 as required as a result of their size. Therefore, some of these farms may invest in LESSE sooner than 2022. Alternatively, some farms could meet the LESSE requirement for 2019 by employing a contractor. It is not possible to determine the number of farmers who will choose each option. In addition, the use of a contractor to spread by LESSE is cost neutral. Therefore, the potential cost impact of some farmers investing sooner than 2022 in LESSE has not been quantified.

Therefore, the number of farms impacted by the LESSE requirement, directly as a result of them being derogated is as follows:

Total derogated farms	478
Derogated farms already funded for LESSE	<u>63</u>
	415

52% of 415 farms have 200 cattle livestock units or more 216

Farms directly impacted by LESSE requirement as a result of being derogated 199

Of these 199 farms impacted, it is estimated that 50% will choose to invest in LESSE. The other 50% will employ a contractor to spread slurry by LESSE. As assessed in the RIA of the 2019 NAP Regulations, the extra contractor cost of spreading by LESSE is largely off-set by the resulting savings in chemical fertiliser costs.

Therefore, 100 farms will invest in LESSE at a cost of £25K or £15K (with grant aid) per farm, giving a total investment cost of £1.5m to £2.5m.

Total savings in chemical fertiliser costs which result from using LESSE range from £145k to £207k over 4 years.

It is assumed that farmers who have invested in LESSE will spread all slurry by LESSE, so that they maximise the benefits and savings in chemical fertiliser costs.

Option 3: No additional options identified.

Rationale and evidence that justify the level of analysis used in the RIA (proportionality approach)

Option 1: Do Nothing / Business as usual scenario; do not amend the 2014 NAP Regulations

Option 1 is not feasible and is ruled out.

Risks and assumptions

Option 2: Implement the requirements of the EU Derogation Decision by amending the 2019 NAP Regulations.

Making the NAP Amendment Regulations to implement the EU Derogation Decision in NI, will deliver benefits to those grassland farms who rely on the derogation to operate at a higher stocking rate. It will also enable these farms to utilise the nutrients within grazing livestock manures and operate more efficiently with reduced chemical fertiliser requirements. Therefore, option 2 is preferred.

Option 3: N/A

Direct costs and benefits to business

Direct costs of operating under the derogation for 478 farms are £1.57 million, with benefits of £176.4K, giving a net cost of £1.4 m.

This is significantly less than the direct costs of option 1 of £17.26 million.

Option 2 also delivers the most benefits and is therefore preferred.

Wider impacts (in the context of other Impact Assessments in Policy Toolkit Workbook 4, economic assessment and NIGEAE

None identified