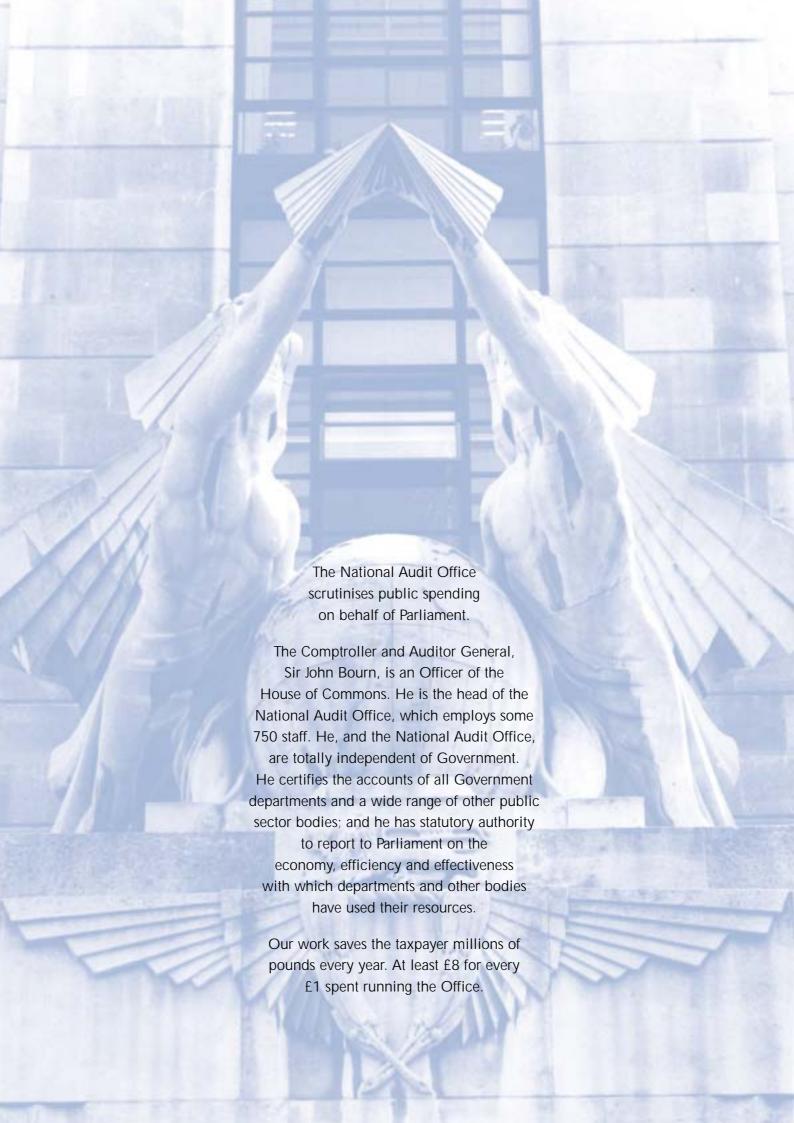


HM Customs and Excise

The Misuse and Smuggling of Hydrocarbon Oils

REPORT BY THE COMPTROLLER AND AUDITOR GENERAL HC 614 Session 2001-2002: 15 February 2002





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This report has been prepared under Section 6 of the National Audit Act 1983 for presentation to the House of Commons in accordance with Section 9 of the Act.

John BournNational Audit OfficeComptroller and Auditor General8 February 2002

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executive summary

executive summary

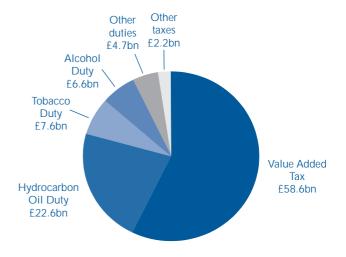
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The risks to the revenue

- In 2000-01, HM Customs & Excise collected £102.3 billion in taxes and duties, net of repayments of £42.6 billion (Figure 1). This is equivalent to the amount needed to fund the Department of Health, the Ministry of Defence and the Home Office.
- 2 All taxes are subject to the risk of fraud and evasion by a variety of methods, ranging from false declarations to smuggling. Under their Service Delivery Agreement for the period 2001-04, Customs are producing threat assessments for all major business areas. Customs aim to use these assessments to measure the impacts of fraud and to develop strategies for tackling them.
- 3 Customs current priorities on law enforcement are tackling drug and tobacco smuggling. The Government published its strategy for *Tackling Drugs To Build a Better Britain* in 1998 and for *Tackling Tobacco Smuggling* in March 2000. The results from the first year indicate that Customs are on track to achieve their aim of putting tobacco smuggling into decline. In *Tackling Indirect Tax Fraud*, published in November 2001, Customs set out their estimates of revenue loss in the oils and alcohol sectors and from VAT missing trader fraud¹. It also sets out the Government's proposals for tackling fraud in these areas.

1 Figure 1 shows the total revenue collected by HM Customs & Excise in 2000-01



NOTE

All figures are net. Total VAT collected was £101.2bn, repayments totalled £42.6bn.

Source: HM Customs and Excise

¹ These frauds involve fraudsters obtaining VAT registration with Customs to acquire goods VAT free from other Member States. The fraudsters then sell on the goods at VAT inclusive prices and disappear without paying over the VAT paid by their customers to Customs.

- We have reported on developments in Customs' counter fraud activities in the Comptroller and Auditor General's annual Standard Report on Customs collection of duties. The latest report, published with Customs' accounts for 2000-01, looks in particular at their work to combat Tobacco Fraud and a review of VAT registration. In July 2001, we published a separate report on the evasion of duties on alcohol through the diversion of duty-suspended products to the open market (HC 178, Session 2001-2002). And we have also commenced work on a wide ranging review of the way Customs, the Department of Work and Pensions and Inland Revenue tackle the major threat of external fraud against the public purse.
- In this report, we look at the risks Customs face on hydrocarbon oils duty and how well they are tackling the illegal use of rebated fuel (fuel on which the duty is substantially lower than petrol and diesel because it will not be used in vehicles on the highway) and smuggling. Hydrocarbon oils, which accounted for £22.6 billion from duties in 2000-01, include fuels such as petrol, diesel and kerosene. Our methodology is set out in Appendix A. How Customs are organised to collect the duty and tackle fraud and smuggling is summarised in Appendix B.

Main Findings

- 6 Customs collect 80 per cent of hydrocarbon oils duty from the nine large oil refineries operating in the United Kingdom. The balance comes mainly from smaller refineries and businesses that trade in imported oils. When the final consumer purchases the fuel, Value Added Tax is also due. Together, hydrocarbon oils duty and VAT made up 80 per cent of the retail price of unleaded petrol (as of January 2002).
- 7 In November 2001, Customs estimated that in 2000 the revenue loss from frauds on petrol and diesel could be between £450 million and £980 million in the UK (Figure 2).
- 8 On the UK mainland, frauds on diesel in 2000 amounted to £450 million, up from £200 million in the previous year. Customs are concerned that fraud losses in the diesel sector could continue to grow if concerted action is not taken to tackle the problem. For Northern Ireland, the estimated revenue loss from fraud and legitimate cross border shopping on petrol and diesel was £380 million for 2000, up from £140 million in 1998. Customs estimate the total revenue from hydrocarbon oils duty in Northern Ireland is around £750 million.



Figure 2 shows the revenue lost from the use of UK non-duty paid fuel in 2000

	Petrol £million	_	iesel nillion	Total £million
	Fraud and legitimate cross border shopping	Fraud	Legitimate cross border shopping	Fraud and legitimate cross border shopping
Mainland UK	150	450	900	1,500
Northern Ireland	150		230	380
Total	300	1,	580	1,880

NOTE

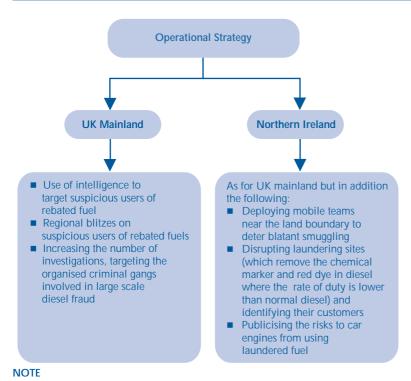
Customs estimate that £900 million is lost from legitimate cross border shopping for diesel which means that the maximum amount of fraud in the United Kingdom could be £980 million in 2000.

Source: HM Customs and Excise

- 9 Customs' developing strategy for tackling fraud on hydrocarbon oils duty is based on tackling misuse of rebated fuel and in addition in Northern Ireland disrupting the supply of smuggled fuel. The main elements of the strategy are summarised in Figure 3.
- 10 Customs believe that the smuggling of fuel is a material problem only between the Republic of Ireland and Northern Ireland. This is because of the long land border, the lower price of diesel and petrol in the Republic compared to the UK(for example on diesel there is a price difference of about 29 pence (38%) per litre, as of January 2002) and the presence of sophisticated criminal groups with experience in smuggling.
- 11 The illegal use of rebated fuel is also a problem in Northern Ireland, where in 2000-01 Customs found more laundering plants than on the mainland. Rebated fuels may only be used for off road purposes and attract significantly reduced rates of duty, for example red diesel (on which the duty is 3.13 pence per litre) is used principally in construction and agriculture, and marked kerosene (on which no duty is paid) is used in domestic heating. Laundering plants illegally remove the chemical markers and any dye from rebated fuels. The situation in Northern Ireland is inevitably affected by the political and civic situation in the Province.



Figure 3 shows how Customs have developed their strategy for tackling frauds on oils duty (as at November 2001)



Customers' strategy may change as a result of proposals set out in Tackling Indirect

- 12 Customs believe that smuggling to the mainland is limited at present, due to the difficulties in transporting oil in sufficient quantities without it being noticed and the relatively low profit margins compared with other types of fraud, such as tobacco or drug smuggling, and indeed other types of oils fraud. Where it does happen, however, there are also health and safety risks, for example to ferry passengers, if oil is transported in extra tanks which have not been properly secured. Although the normal tanks of vehicles can be filled with cheaper fuel on the continent, it is an offence to then remove this fuel later on for use in other vehicles in the UK. This is known as decanting.
- 13 Customs see the illegal use of rebated fuels in road vehicles as the main risk they face on hydrocarbon oils duty on the UK mainland. Customs have undertaken a number of intelligence led operations on the mainland and in Northern Ireland to track duty rebated supplies from the point of production through the distribution system to detect and disrupt illicit consumption.
- 14 Red diesel and kerosene are chemically marked so that Customs can detect illegal use by testing samples from fuel tanks. We found that contrary to Customs guidance, staff have placed too much reliance on sight tests to detect the obvious presence of the dye in red diesel.
- 15 Fraudsters can use laundering techniques to remove the markers from red diesel and kerosene, or mix red diesel with other agents to mask the dye, making the use of sight tests alone an ineffective method for detecting the illegal use of fuel. The chemicals used to launder fuel often remain in the fuel which can cause serious damage to engines.





- Specialist companies have developed sophisticated portable tests that may allow Customs' staff to carry out more accurate tests to confirm that rebated fuel is being used illegally. The Legitimate Oil Pressure Group consider that it might be easier for Customs to detect those retail sites in Northern Ireland which are selling smuggled fuel if all normal duty paid fuel in Northern Ireland is chemically marked, but this would need to be looked into further.
- 17 Since 1999-2000, when Customs started to develop their strategy for tackling frauds on hydrocarbon oils duty in Northern Ireland, the amount of fuel seized by Customs there has doubled and the number of vehicles seized involved in smuggling has more than tripled. But filling stations in Northern Ireland selling illicit fuel, of which there are estimated to be over 400 involved to some extent, are often back in business after Customs have seized fuel from them. The Northern Ireland region of the Petrol Retailers Association is concerned that if Customs are not more effective their members will continue to go out of business.
- 18 I provided my initial findings, conclusions and recommendations to Customs in June 2001. In November 2001, Customs published *Tackling Indirect Tax Fraud* which includes their outline strategy for tackling frauds on hydrocarbon oils duty and their estimates of revenue losses.

Main Conclusions and Recommendations

- As part of their overall change in approach to tackling fraud, Customs published their estimates of the revenue losses on hydrocarbon oils duty. These estimates will assist them in identifying areas where the duty is at risk and to develop their response. They are working further on their estimates as in Northern Ireland, in particular, these include legitimate cross border shopping. The Government has outlined in Tackling Indirect Tax Fraud what Customs are currently doing to tackle oils fraud and possible new initiatives currently being considered. I believe that these should include an assessment of the risks and resources. Some of the key elements under consideration by Customs include:
 - An authorisation scheme for the distributors of tied oils and rebated fuels;
 - A simultaneous strengthening of the obligations on distributors to take reasonable steps to check that sales of such fuels are made only to customers who intend to put them to an approved use;
 - Improved chemical and colour markings of rebated fuel to deter misuse;
 - Increased numbers of intelligence-led checks and investigations;
 - Tougher penalties against those engaged in the supply of fuels for illicit purposes, or for those found using such fuel in road vehicles; and
 - A targeted publicity campaign designed to highlight the danger of fuel misuse and the penalties for people caught misusing.
- **20** As part of Customs' continuing work to develop their strategy they are also:
 - Looking at whether the distribution of their resources between drugs, tobacco and other frauds is the optimum;
 - Considering outcomes-based targets for hydrocarbon oils duty;
 - As part of the Organised Crime Task Force in Northern Ireland, working with other public sector agencies on ways to tackle the supply and sale of illicit fuel in Northern Ireland;

- Developing their intelligence data to provide anti-smuggling teams with profiles of vehicles and individuals that are most likely to be smuggling oil;
- Ensuring that their road fuel testers comply with departmental guidelines, that require them to carry out full chemical tests on all fuel samples, taking into account other relevant factors.

21 In addition, I believe Customs should:

- Examine whether it would be cost effective to chemically mark all duty paid fuel in Northern Ireland. This could act as a deterrent to smugglers and launderers of fuel;
- Give fresh guidance to road fuel testing units to ensure that current penalties and sanctions are used to best effect in order to act as a sufficient deterrent to others; and
- Assess the effectiveness of measures taken by other European Union



Part 1

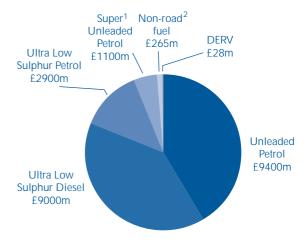
The risks to the revenue

1.1 This part of our report looks at the types and scale of risks to the collection of customs duties and tax from various forms of evasion and on hydrocarbon oils duty.

The revenue from hydrocarbon oils

- 1.2 In 2000-01, HM Customs & Excise collected £102.3 billion in taxes and duties net of repayments of £42.6 billion (Figure 1 on page 2). Of this £22.6 billion net was raised from hydrocarbon oils duty, around 6 per cent of total government receipts.
- 1.3 Refined hydrocarbon oils fall into two categories, light oils, such as petrol, and heavy oils, such as kerosene and diesel. Most of the revenue due from hydrocarbon oils is collected from unleaded petrol and diesel (Figure 4) but there are a variety of other fuels and over 16 further types of oils that are produced from crude oil for use in the production of paint, rubber, plastics and cosmetics. Appendix C summarises each type of fuel and their uses.
- 1.4 Hydrocarbon oils duty is collected when the oil leaves the refinery or storage depot. Traders who refine the fuel in the UK pay the tax directly to Customs. The nine large oil refiners operating in the United Kingdom account for approximately 80 per cent of the total amount of hydrocarbon oils duty (some £18 billion) collected by Customs. The balance comes mainly from smaller refineries and businesses that trade in imported oil. The large oil refiners own and franchise most of the service stations in the UK, except in Northern Ireland, where independent service stations are more prevalent.
- 1.5 Value Added Tax at 17.5 per cent is also due when the fuel is purchased by the final consumer. In 2000-01 Customs estimate that they collected £2.5 billion in VAT on petrol and diesel. Oils retailers, such as filling stations, account for VAT in the same manner as other VAT-registered traders, by means of regular VAT returns to Customs. For unleaded petrol around 80 per cent of the retail price is made up by hydrocarbon oils duty and VAT (as of January 2002).

Figure 4 shows that in 2000-2001 most of the revenue from hyrdocarbon oils duty was collected from unleaded petrol and ultra low sulphur diesel



NOTES

- Super unleaded includes lead replacement petrol which became widely available from October 1999.
- 2 Non-road fuels are products such as kerosene, see appendix c for full details of fuel oils. DERV is normal road diesel.

Source: HM Customs & Excise

- 1.6 Fuel producers, oils refiners and retailers pay other taxes that may be passed on to consumers in the price of fuel. Their profits are subject to corporation tax, while profits on the sale of offshore gas and oil, which make up only some of the oil consumed in the UK, may also be liable to Petroleum Revenue Tax. Both of these taxes are collected by Inland Revenue. We examined the collection of Petroleum Revenue Tax (PRT) in our report 'Inland Revenue: Petroleum Revenue Tax' (HC5, published 14 December 2000).
- 1.7 Appendix D outlines the oil distribution network in the UK.

The risks to the revenue from fraud

(a) All Customs taxes and duties

- 1.8 Under their Service Delivery Agreement for the period 2001-04, Customs are required to develop a rolling program to produce threat assessments for all major business areas of the department identified as facing the threat of serious external fraud. These assessments will measure the extent of fraud and guide the subsequent development of strategies, complete with measures to tackle them. They published their strategy for tackling tobacco smuggling in March 2000. The results from the first year of the strategy indicate that Customs are on track to achieve their aim of putting tobacco smuggling into decline. In Tackling Indirect Tax Fraud, published in November 2001, Customs set out their estimate of revenue loss in the oils and alcohol sectors and from VAT missing trader fraud. It also sets out what Customs are currently doing to tackle fraud in these areas and possible new initiatives currently being considered.
- 1.9 Customs' assessment of the risks on the main tax regimes is based on a number of factors, including those described in Figure 5. Tackling tobacco smuggling is one of Customs highest priorities at present.

(b) Hydrocarbon oil

- 1.10 In 2000-01 Customs had some 300 staff wholly dedicated to collecting and protecting the revenue from hydrocarbon oils duty at a total cost of around £10 million. Customs also have many other multifunctional staff who are part of the strategic response to fraud; for example, intelligence, investigation, detection and assurance officers. Their staffs' activities range from auditing taxpayers at their premises to roadside and frontier checks on vehicles. Because of the small number of large payers, the collection of hydrocarbon oils duty is efficient in terms of Customs' resource costs and the revenue it yields.
- 1.11 In November 2001, Customs estimated that in 2000 the revenue loss from fraud on petrol and diesel could be between £450 million and £980 million in the UK (Figure 6). On the UK mainland, frauds on diesel in 2000 were estimated to be £450 million, up from £200 million in the previous year. The revenue losses in Northern Ireland, from fraud and legitimate cross border shopping, have increased substantially from £140 million in 1998 to £380 million in 2000. The Northern Ireland region of the Petrol Retailers Association estimate the revenue losses to be around the same level (£380 million to £460 million a year). It is not possible to identify separately fraud and cross border

Figure 5 shows the overall progress made by Customs' in quantifying their risks

	VAT	Hydrocarbon Oils Duty	Alcohol Duty	Tobacco Duty
Was a large proportion of the total revenue lost in 2000-01 due to fraud?	£56.5 billion collected. Customs estimate that VAT missing trader fraud ² cost between £1.7 to £2.6 billion in 2000-2001. They are working on estimates of other types of VAT fraud.	No. £22.6 billion collected. Customs estimate that between £450 million and £980 million of revenue was lost from fraud in 2000.	Yes. £6.6 billion collected. Latest estimate of fraud is £800 million.	Yes. £7.6 billion collected. In 2000 Customs estimated that smuggling of tobacco cost the Exchequer £3.5 billion.
Is the level of fraud growing?	Customs became concerned at the growth of VAT missing trader fraud in 1999. Early indications are that this type of fraud peaked towards the end of 2000 and has started to decline.	Within the total hydrocarbon oils sector, diesel fraud has increased on the mainland, where the size of the problem has doubled from 1999 to 2000.	Estimates indicate that the illicit market has now reduced.	The estimated loss has increased year-on-year since 1996, but the rate of growth has slowed in 2000-01.
Are there large-scale repeat frauds by organised criminals?	Large value missing trader frauds have been detected.	Large-scale smuggling and laundering in Northern Ireland. Some laundering in Northern England involving organised crime groups.	Smuggling of spirits on a large scale by organised criminals.	The main threat is from smugglers of commercial quantities of tobacco products.

Figure 6 shows the revenue lost from the use of UK non-duty paid fuel in 2000

	Petrol £ million		iesel nillion	Total £ million
	Fraud and legitimate cross border shopping	Fraud	Legitimate cross border shopping	Fraud and legitimate cross border shopping
Mainland UK	150	450	900	1500
Northern Ireland	150	2	230	380
Total	300	15	580	1880

NOTE

Customs estimate that £900 million is lost from legitimate cross border shopping for diesel which means that the maximum amount of fraud in the United Kingdom could be £980 million in 2000.

Figure 7 shows that there are frauds which present high risks to the revenue



Likelihood²

NOTES

- 1 Severity is the impact on the revenue if the activity occurs widely
- 2 Likelihood is the probablity that the activity occurs on a regular basis.

shopping in Northern Ireland but Customs believe that cross border shopping is a material part of the revenue loss. Customs estimate that the oils market in Northern Ireland currently amounts to, in terms of hydrocarbon oils duty, some £750 million a year.

- 1.12 Our assessment of the likelihood and severity of the risks to the revenue from hydrocarbon oils duty is set out in **Figure 7**. The main risks to the revenue are:
- The illegal use of rebated fuel in the UK (fuels on which the duty is substantially lower than petrol and diesel because it should not be used in vehicles on the highway). These fuels contain a chemical marker and in the case of red diesel a dye as well to show that these are rebated fuels.
- In Northern Ireland, the smuggling of fuel from the Republic of Ireland.

- 1.13 There are other risks in the oils sector, for example the illegal decanting of diesel. This involves motorists filling the normal tanks of their vehicles, particularly lorries, with cheaper fuel on the continent, and then returning to the UK where the fuel may be decanted into a storage tank for use by other vehicles. Customs view this category as lower risk than the others mentioned above.
- 1.14 Customs believe that the smuggling of fuel is a material problem only between the Republic of Ireland and Northern Ireland. This results from the long land border, the lower price of fuel in the Republic compared to the UK (for example on diesel there is a price differential of about 29 pence (38%) per litre, as of January 2002) and the presence of sophisticated criminal groups. The illegal use of rebated fuel is also a problem in Northern Ireland where in 2000-01 Customs found more laundering plants than on the mainland. Laundering plants illegally remove the chemical markers and any dye from rebated fuels. The situation in Northern Ireland is inevitably affected by the political and civic situation in the Province.
- 1.15 Customs believe that smuggling to the mainland is limited at present, due to the difficulties in transporting oil in sufficient quantities without it being noticed and the relatively low profit margins compared with other types of smuggling. We explore the scale and type of risks and losses to the revenue from smuggling and the action being taken by Customs in Part 2 of this report.
- 1.16 Customs believe that the risk of decanting is low. We also look at the risks of decanting and the countermeasures taken by Customs in Part 2.
- 1.17 Customs believe that the illegal use of rebated fuels in road vehicles to be the main risk they face on hydrocarbon oils duty on the UK mainland because these fuels are much cheaper than normal diesel. They estimate that losses exclusively from fraud have been around £450 million in 2000. While this represents only 4 per cent of the diesel market at present, it has doubled since 1998 and Customs are concerned that fraud losses in the diesel sector could continue to grow if concerted action is not taken to tackle the problem. Every one percentage point increase in the illicit share of the diesel market represents a revenue loss of around £125 million a year. We look at the risks from illegal use of rebated fuel and the action taken by Customs to counter these risks in Part 3 of this report.

Other risks from frauds on hydrocarbon oils duty

1.18 There are factors other than the effects on the revenue which increase the impact of fraud and make it important that Customs take effective counter measures. These include:

Unfair competition

Traders involved in the illegal use of rebated fuels can gain an unfair advantage over competing businesses. The impact will be felt particularly by law abiding suppliers and businesses such as hauliers and taxi firms, where fuel forms a large proportion of overall costs.

Health and safety

The misuse of fuel poses significant health and safety risks. For example the chemicals used in laundering remain in the fuel and damage the vehicle's engines. Also, there are dangers if oil is transported in unsafe conditions on ferries. In some cases, the oil is smuggled in purpose-built road tankers, which can be readily purchased second-hand in the UK. Other types of tankers might also be used, or makeshift fuel tanks may be welded inside container lorries. Smaller amounts of oil can be smuggled in plastic containers stored in vans and trucks, or in belly tanks attached to the chassis of vehicles. Another problem is the danger posed by the storage of fuel and the chemicals used for laundering in unsuitable conditions, as well as the disposal of waste product.

Criminality

The black market in illicit fuel is a source of income for criminal groups. This raises particular problems in Northern Ireland where the political and civil environment is different. In September 2000 the Secretary of State for Northern Ireland set up the Northern Ireland Organised Crime Task Force. It has produced a threat assessment and identifies as a strategic priority reducing the loss to the Exchequer from the smuggling of hydrocarbon oils, fuel laundering, mixing rebated fuel and dilution of road fuel.

Environmental Risks

The laundering of rebated fuel which removes the chemical marker and dye in the fuel may use hazardous processes. The by-products of the processes may be disposed of by fraudsters without regard to the environmental consequences. For example one of the processes for laundering fuel involves the use of acid.



Customs' targets for tackling frauds on hydrocarbon oils duty

1.19 Customs have been changing their approach to tackling fraud, moving from an essentially tactical approach, where success was defined in terms of outputs, such as increased numbers of seizures, to a strategic approach

based on the achievement of outcomes which have a direct and measurable impact on the problem the Government is aiming to solve.

1.20 In the past Customs have set targets in the oils sector on an outputs basis reflecting their essentially tactical approach. Customs intend to develop an outcomes based oils fraud strategy during 2002-03.



Part 2

Tackling oil smuggling

2.1 This Part of our report looks at how Customs intend to improve their approach to tackling oil smuggling.

The smuggling of fuel

2.2 Customs believe that smuggling of fuel is a significant problem only between the Republic of Ireland into Northern Ireland. The Road Haulage Association, one of the UK's largest transport trade associations, agree that it is a problem in Northern Ireland but also consider that it is a significant and growing problem on the mainland. Customs however believe that all smuggling to the mainland, including cross-Channel smuggling, is limited at present (paragraph 1.13). The locations where Customs detected smuggling and the average value of cases in 1999-2000 supports this analysis (Figure 8).

Action taken or planned to reduce smuggling

2.3 The responsibility for detecting all forms of smuggling lies with Customs specialist teams. In addition to tackling drug smuggling, firearms, paedophila and other prohibitions and restrictions, anti-smuggling officers have, in the last five years, concentrated on tackling tobacco and alcohol smuggling. Although Customs do not think oil smuggling is a significant problem on the mainland, they are monitoring the situation more closely than they have in the past. Customs are however concerned about the amount of smuggling from the Republic of Ireland into Northern Ireland and since 2000 have been increasing their efforts to detect it.

(a) In Northern Ireland

2.4 Customs believe that the price difference in fuel between Northern Ireland and the Republic of Ireland has provided an incentive to smugglers in recent years. From April 2000 Customs began to take more vigorous action against oils fraud including smuggling in Northern Ireland when they increased resources targeted on oil duty evasion from 25 to currently over 160 staff, mainly by redeploying staff. Customs' staff in

Figure 8 shows that Customs detected oil smuggling mainly in Northern Ireland in 1999-2000

Region	Smuggling cases detected in 1999-00	Revenue value of oil detected £	Average value of cases detected £
Northern Ireland	111	901,000	8,117
Southern England (e.g. Southampton)	12	2000	166
South East England (e.g. Dover)	5	500	100
Total	128	903,000	7,054
Customs Target	30	400,000	Not applicable

Source: HM Customs and Excise

Northern Ireland are also supported by staff based on the mainland whose primary task is to tackle oils fraud in Northern Ireland. We observed the problem of smuggling in Northern Ireland and how Customs are tackling it (Case study 1).

- 2.5 To reduce smuggling, Customs' developing strategy proposes that they should:
 - have a substantial presence at the border. In 2000-01 Customs seized 312 vehicles involved in smuggling oil which was three times more than the previous year. Customs recognise that they will need to keep abreast of changes in the nature of smuggling as it adapts to the increase in their activities at the border. For example the border is over 300 miles long with almost 300 crossing points and smugglers can rapidly change their routes and methods for disguising consignments to evade Customs. To counter this Customs already have a flexible force to tackle smugglers as they transport the smuggled oil around the Province.

Case Study 1: How Customs are tackling oil smuggling in Northern Ireland

In October 2000 and November 2001 we visited Northern Ireland to observe Customs' approach to tackling the problem. During our visit we saw:



One tanker lorry making a delivery of smuggled petrol to a retail site near the border and two other tankers which Customs staff suspected had recently made deliveries. Some of the tankers used for smuggling can be easily spotted by Customs staff as they often have none of the usual company markings, are old vehicles, have number plates from the mainland and may have a number of defects, such as faulty brake lights, worn tyres and no hazardous chemicals warnings. In one case Customs checks showed that the vehicle was using false number plates. Customs identify these vehicles as they cross the border and will follow them to their destination where they will confiscate the vehicle and the fuel delivered to the retail outlet. However, more recently smugglers have been adapting their operations and will sometimes carry false documentation indicating that they are carrying legitimate consignments of fuel. Some smugglers have tankers which

are indistinguishable from those used by the legitimate trade, others are concealing loads in other types of vehicles usually in unsafe conditions and smugglers are starting to use the more remote crossing points to avoid detection.

- Two filling stations openly advertising unleaded petrol at 58 pence and 65 pence a litre in October 2000 when the retail price should have been around 83 pence a litre. A filling station selling illicit fuel will make a profit of 10 pence to 15 pence a litre whereas a legitimate site will make around 2 pence to 3 pence a litre. Customs' staff have been visiting filling stations where the price is below the normal market price to identify the source of the retailer's supplies and have confiscated fuel which they have identified as being smuggled. Customs have found that fraudsters have been prepared to underwrite the losses suffered by filling stations and in some cases have supplied retailers with false documentation to make the purchases of fuel look legitimate. As a result of Customs' action filling stations have been adapting their approach by advertising the full market price for fuel but giving a cash discount to the customer. More recently, illicit filling stations have been selling fuel close to the price of legitimate traders because they have found that customers will purchase fuel from filling stations where there are small differences in price as often as low as 1 pence a litre. Customs have responded by carrying out "mystery shopping" visits to suspected filling stations.
- Two huckster sites (illegal roadside sites) selling petrol and/or diesel to the public at 65 pence a litre. Where these sites are found Customs raid them and confiscate the equipment and the fuel but because the costs of setting up these sites is minimal (one or two pumps costing £200 or £300 each on the second hand market) they can be back in business very quickly.

Case Study 2: Closer working between HM Customs and Excise and Republic of Ireland Revenue Commissioners

There is a wide range of contact between various branches of both Customs authorities at both a formal and informal level. Recently Irish Customs officers have provided HM Customs and Excise with information on the movements of vehicles that might contain smuggled fuel, enabling them to track these vehicles when they enter Northern Ireland, and they also provide a daily service for on-line checking of vehicles registered in the Republic. Recently HM Customs and Excise received information from the Revenue Mobile Service (the Republic of Ireland's Road Fuel Testing Unit equivalent) regarding the movement of fuel concealed in a bulk grain trailer. This vehicle had been sighted filling up by the Garda and a joint operation was immediately set up with the RUC that resulted in the tractor unit being stopped.

HM Customs and Excise have assisted the Republic of Ireland authorities by passing on information on potential suppliers of kerosene that they believe is being smuggled into the Republic. UK Customs have recently worked with the Republic of Ireland Criminal Assets Bureau to target a major oil smuggler. This case involved the smuggling of kerosene into the Republic of Ireland from the UK and a linked UK VAT fraud.

In December 2001, a series of multi agency operations in Northern Ireland and the Republic of Ireland were carried out to tackle the evasion of road fuel duty. The agencies involved, including UK Customs, raided 31 premises and 10 people were taken into custody. Illicit fuel and cash were also seized.

- continue with their close cooperation with the Revenue Commissioners in the Republic of Ireland on tackling smuggling (Case study 2). In the past they have shared information that has enabled Customs to track the supply of smuggled fuel. Under the European Union Convention on Mutual Assistance between Customs' administrations, they are looking at how the arrangements can work more effectively.
- visit regularly filling stations involved in selling illicit fuel to make trading difficult for them and reduce their profits from illegal activities. Customs estimate that around 400 to 450 filling stations in Northern Ireland are involved of which around 200 to 250 sell only or largely illegal fuel. This is a high proportion of the 700 filling stations in Northern Ireland. Where Customs detect a filling station selling illicit fuel they will seize the fuel from the premises and may seize the fuel pumps. They will also raise an assessment for the duty and VAT owed and where the evidence is sufficient Customs will prosecute. The Northern Ireland Region of the Petrol Retailers Association told us that such filling stations are quickly back in business. The Association are concerned that if Customs' actions to curb the sale of illicit fuel by filling stations are not more effective their members will continue to go out of business. In one case provided to us, a filling station within one mile of another selling illicit fuel had lost around 25 percent of its petrol sales in two years.
- 2.6 Customs' efforts have led to seizures of illicit oil more than doubling to 3.25 million litres compared with the previous year (1999-2000). To put this into context, an average filling station in Northern Ireland sells around 1.8 million litres of fuel a year. Customs recognise that the level of fraud remains at unacceptably high levels, and are considering options for further initiatives to counter road fuel duty evasion and its associated problems in Northern Ireland. We looked at some of the further actions Customs could take.
- 2.7 Under existing powers, Customs can remove the underground storage tanks at filling stations selling illicit fuel but they have found that the costs of doing this are high and are concerned about the possible environmental consequences from possible leakage of any fuel. One possibility would be for Customs to target these sites where there are persistent offenders, and remove the underground tanks. Such an operation would be very costly, take a number of weeks and raise security issues.
- 2.8 Groups such as the Northern Ireland Legitimate Oil Pressure Group have suggested that it would be easier to detect the presence of smuggled fuel at a filling station in Northern Ireland if all normal, duty paid diesel had a

- unique marker injected in to it. The advantage of this would be that the absence or dilution of the marker in fuel sold at filling stations would indicate that the fuel is being sold without having had duty paid on it. Customs should be able to detect cases where non-duty paid fuel has been mixed with duty-paid fuel as it would not contain the correct concentration of marker. There would however need to be strong controls over the marker concentrate to make sure that it does not fall into the wrong hands as this would undermine the marking system. Customs would also need to be able to identify the sites at which they would test through intelligence work. The Legitimate Oil Pressure Group have suggested that it may be possible to limit the use of the marker for normal fuel to Northern Ireland, where filling stations have been found selling illicit fuel, thus reducing the costs, but Customs would need to examine whether it is legally possible to restrict its use to only a part of the United Kingdom.
- 2.9 The Northern Ireland Region of the Petrol Retailers Association has suggested that filling stations should be closed if they are found selling illicit fuel on a number of occasions. However, Customs are not the licensing authority and, therefore do not have the powers to do this. The Association has also suggested that licensing of all filling stations selling petrol, diesel or rebated fuel should be tightened and if an outlet is found selling illicit fuel large fines should be imposed. Local authorities license outlets to sell petrol, no licence is required to sell diesel or rebated fuels.
- 2.10 Customs are looking at whether they could take more effective action by working with other agencies in Northern Ireland such as the police, local authorities, the Health and Safety Executive and Trading Standards officers. For example by working with local authorities, Customs believe firmer action could be taken against filling stations for selling illicit fuel and therefore not complying with the petrol licensing requirements. Customs intend to take forward their proposals on closer working under the umbrella of the Northern Ireland Organised Crime Task Force (paragraph 1.22).

(b) The UK mainland

2.11 Over the past year, Customs with the Police have carried out four large exercises focusing on oil smuggling on the UK mainland. Customs have also used the results to test their assessment that only small amounts of oil are being smuggled across the English Channel or the Irish Sea by organised criminals. They have found less than ten cases of smuggling, of which seven cases involved the smuggling of a total of 130,000 litres of rebated fuel from the Republic of Ireland in container lorries, evading approximately £65,000 of duty. In each case the vehicles and fuel were seized.

- 2.12 Customs recognise that they will need to continue testing to see whether fraudsters are shifting their efforts towards smuggling onto the mainland as a consequence of their strengthened operations in Northern Ireland. In deciding on whether to undertake checks on the extent of oil smuggling, Customs take account of whether their resources will be diverted away from their priorities of detecting tobacco and drug smuggling. But in searching consignments for tobacco and drugs they will also look for evidence of oil smuggling. Mobile x-ray scanners introduced at ports during 2000-01 will allow Customs to check the contents of more vehicles (see photo). The scanners could provide evidence of the extent of smuggling by revealing the location of concealed tanks containing illicit fuel. However at Dover, Customs need to consider whether there is enough space for them to carry out their checks to the extent they need to.
- 2.13 We consider that the risk of decanting could be higher where lorries have tanks which hold larger than usual amounts of fuel. Checks undertaken by Customs staff at ports in the South East of England over a two-day period in the summer of 2000 found that over 70 per cent of

- haulage vehicles stopped had larger than normal fuel tanks, which may be used for legitimate purposes but could also be used to import fuel for use in other vehicles.
- 2.14 Customs consider that the majority of the vehicles passing through Dover are legitimate. They believe that there are vehicles with large non-standard fuel tanks because they are owned by international hauliers who travel large distances and that very few of these vehicles are used for decanting. For example, in exercises at ports in South East England in summer 2000 Customs staff only identified seven offenders which had clearly oversize tanks and who could offer no adequate explanation. Customs note that even if 10 per cent of the fuel in tanks of lorries entering through Dover were to be illegally decanted this would represent less than 0.3 per cent of the UK market, whereas were 10 per cent of the rebated fuel produced in the UK to be misused this would represent 3 per cent of the UK diesel market. Even if decanting were taking place on a significant scale, Customs cannot tackle this at the frontier since the offence only occurs when fuel is subsequently transferred to another vehicle at an inland location.



Part 3

Tackling the illegal use of rebated fuel

3.1 It is illegal for motorists to use rebated fuel in road vehicles, or other vehicles, unless they are explicitly entitled to do so under the legislation. This Part examines how Customs are tackling the illegal use of rebated fuel in the UK.

The illegal use of rebated fuel

- 3.2 Customs believe the illegal use of rebated fuels in road vehicles to be the main risk they face on hydrocarbon oils duty on the UK mainland because these fuels are much cheaper than normal diesel (paragraph 1.17) and the fuel is readily available. This type of fraud is also a material problem in Northern Ireland where Customs have found a number of laundering plants (Case study 3).
- 3.3 Rebates on fuel duty were introduced after the Second World War to help boost the growth of industry and increase food production. The rebates allowed certain traders to buy fuel at a reduced rate of duty. Industries such as agriculture and the road construction industry benefit from a lower rate of duty on fuel.
- 3.4 Rebated fuels can be purchased from oils distributors, and are also available from some filling stations. No license is required to either buy or sell rebated fuels. Approved distributors may also supply 'tied oils' such as solvents duty-free providing they are only used for industrial purposes.

Case Study 3: The financial returns that fraudsters get from laundering red diesel

The red dye and chemical marker used in rebated fuels to identify the lower duty paid on these fuels can be removed through a process of laundering.

Laundering plants detected in Northern Ireland reveal that processing plants can have the capacity to produce between 10,000 and in one case up to 200,000 litres of fuel a week when operating at full capacity. This amounts to a revenue loss of, between £5,000 and £90,000 of hydrocarbon oils duty when operating at full capacity. In Northern Ireland laundered



Second-hand tanker being used to launder fuel.

Source: HM Customs & Excise

fuel is often sold at filling stations and drivers may unknowingly be using laundered fuel purchased from them in their diesel vehicles. In 2000-01, Customs closed down 17 laundering plants in Northern Ireland, substantially more than the previous year.

When Customs have closed down the plants, the principals involved have not been present, but have employed 'watch men' to guard the premises.

In 2000-01, Customs detected three laundering plants in the North of England. One case involved a man based in the Republic of Ireland who was operating a laundering plant in West Yorkshire. In June 2001 he was sentenced to 3 years 9 months for evading duty amounting to almost £1 million.

Figure 9 shows that rebated fuels are much cheaper than normal diesel

	Normal Diesel (ULSD)	Chemically marked Rebated Gas Oil (Red Diesel)	Chemically marked Kerosene (Paraffin)
Definition	A heavy mineral oil distilled from crude oil	A heavy mineral oil similar to diesel	A heavy mineral oil which distils at a lower temperature than gas oil
Duty Rate	45.82 pence per litre	3.13 pence per litre	Fully rebated, i.e. no duty is paid
Main legitimate use	Motor fuel for road vehicles	Motor fuel for off-road vehicles such as tractors. It is effectively interchangeable with normal diesel	Heating fuel for domestic and commercial premises
Main suppliers	Filling stations	Oil distributors and some filling stations	Oil distributors and in small quantities in hardware stores

10 Figure 10 compares normal diesel, gas oil and kerosene

	Normal Diesel	Chemically marked Gas Oil	Chemically marked Kerosene
Appearance	Straw colour	Red	Clear
Markers for Customs to deter and detect illegal use	Not applicable	Red dye and chemical agent	Colourless chemical agent which can be detected only by laboratory tests
Main Suppliers	Filling stations	Oil distributors and some filling stations	Oil distributors

3.5 The two main types of rebated fuel are marked gas oil (commonly known as red diesel) and marked kerosene (Figure 9). Gas oil is a heavy fuel that is very similar to regular diesel. It is widely used to power tractors and industrial machinery, and is capable of powering most diesel-engined vehicles. Kerosene is predominantly used as a heating fuel but can be misused as a road fuel.

How Customs tackle the illegal use of rebated fuels

- 3.6 To enable Customs to detect whether rebated fuels are being used illegally, the fuels are mixed with chemical markers and dyes prior to sale (Figure 10). The marking process usually takes place at oil refineries. In the case of red diesel, a dye and a chemical marker known as quinizarin are added, while for kerosene a colourless marker called coumarin is used and from 2002 the Euromarker will be added which is yellow. It is illegal to remove these markers so as to pass off rebated fuel as regular diesel.
- 3.7 A part of Customs' overall approach to tackling oils fraud is testing for misuse of rebated fuels at the point of consumption. The responsibility for testing and detecting the misuse of rebated fuels at the point of consumption lies with Customs' 15 Road Fuel Testing Units (RFTU) and 16 Road Fuel Auditors located throughout the UK. In addition Customs have used teams of multifunctional officers to detect the misuse of rebated fuels. Up to the end of 2000 the majority of the Road Fuel Testing Units' work mainly involved organising roadside operations during which they stopped vehicles to test fuel for the markers which would show that the fuel is being used illegally. Customs Road Fuel Testing Units use two methods to detect the illegal use of rebated fuel in vehicles, sight tests and full chemical testing. In 2000-01 Units carried out 20,640 checks, mainly sight tests (Figure 11) and detected misuse of rebated fuels in 2,305 vehicles.
- 3.8 Historically, Customs staff have relied on the use of sight tests which would detect the misuse of red diesel which was the most prevalent form of fraud at the time. However, as fraudsters have increasingly used sophisticated fraud techniques, sight tests are not always sufficient. Customs' guidance to Road Fuel Testing Unit staff requires them to carry out full chemical tests on the

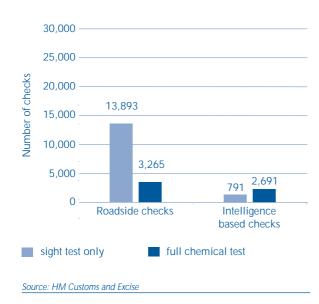


Figure 12 shows that intelligence based checks lead to a higher detection rate

Type of check	Number of challenges	Number of detections	Hit rate
Roadside checks	17,158	748	4.4%
Intelligence based checks	3,482	1,557	44.7%
Overall hit rate		11%	

fuel samples they take, although officers use their judgement about the nature of the fraud, the balance of the volume of tests and the time taken to carry out such tests when deciding on the exceptional use of sight tests.

Source: HM Customs and Excise

3.9 We found that Customs staff have relied on sight tests to detect the illegal use of rebated fuels. When checking for the illegal use of rebated fuels, Customs staff extract fuel samples into a clear plastic bottle and visually examine the fuel for the red colouring. The problem with a sight test is that it depends on the obvious presence of the red dye placed in gas oil. For example green diesel (the equivalent product in the Republic of Ireland) can be mixed with red diesel to turn the fuel a similar colour to normal diesel if it is done in the correct quantities. Other methods of evasion include mixing red diesel with waste oil (which is black in colour) to mask the illegal use of rebated fuel. Identifying the illegal use of kerosene using only sight tests can also be a problem for Customs staff as it is clear in colour and so is not easily distinguishable from regular diesel through sight alone. Customs have now reminded staff of the need to carry out chemical tests on each fuel sample.

- 3.10 Full chemical testing uses more objective methods such as specific gravity and chemical composition checks to detect traces of illicit fuel. Officers carry out these tests in the mobile laboratories that are fitted inside their vehicles but the results are not always conclusive. Specialist companies have developed more sophisticated portable testing units that could be more accurate and which could improve detection rates. Customs have recently trialled the units and although early results are promising further evaluation is required. In all cases where a detection has been made Customs staff submit samples of fuel to the Laboratory of the Government Chemist for testing.
- 3.11 The European Member States will introduce a common marker for rebated fuels in August 2002. Customs believe that the marker selected, commonly referred to as Solvent Yellow, would not provide a sufficient barrier to the laundering of fuel when used alone. Therefore, Customs are currently consulting with the trade to maintain the effectiveness of the marking system.
- 3.12 Another part of Customs' overall approach to tackling fraud in the oils sector, is to follow up on intelligence leads to investigate traders who may have been using fuel illegally. Figure 12 shows that in 2000-2001 the intelligence-based checks by Customs led to a much higher percentage of detections than the roadside checks.
- 3.13 Customs' developing strategy has involved a major change in the methods they use to detect fraud with a move towards a risk-based approach. Customs staff are tracking the sale and purchase of kerosene and red diesel from the oil producers and refiners to the distributors and wholesalers and onto the retailers and consumers and are identifying the illicit use of fuel. The Road Fuel Testing Units are visiting those traders who appear to be handling large quantities of rebated fuel to test whether the fuel is being misused. Where misuse is detected the fuel is seized and follow up action involves calculating the revenue lost, on which assessments are raised for the amount due. This is in addition to whatever penalty action is considered appropriate. This approach is helping Customs to detect fraudsters purchasing rebated fuel in large quantities.
- 3.14 The first exercise was carried out in January 2001 in the North East of England, with encouraging results (Case Study 4). Under their previous approach, Road Fuel Testing Units had mainly detected private individuals who were misusing rebated fuel. During these operations, Customs found evidence of duty evasion at 44 per cent of the traders that they visited, around the same detection rate as their previous rate for intelligence-based checks (Figure 12). However, the results included a much higher proportion of serious misusers, and small-scale misusers only accounted for around 12 per cent of the total detections. Customs intend to apply their approach throughout England, Wales and Scotland.

Case Study 4: Examples of detections made using the new strategy

Customs' staff reviewed sales records at an oil distributor and identified a garage repair shop that was purchasing large quantities of red diesel. On visiting the repair shop, Customs found that the garage had purchased a total of 98,000 litres of red diesel to use illegally in the four vehicles owned by the business.

During their recent audit of fuel distributors in the North East of England Customs' staff identified suspicious purchases of large quantities of rebated fuel. Road fuel officers subsequently found the traders who had made the purchases to be using the rebated fuel illegally. Follow up action on these cases is still ongoing and Customs now believe that these may be linked to a laundering plant in the area.

Source: HM Customs and Evoise

3.15 As announced in *Tackling Indirect Tax Fraud* Customs are looking at different ways to target their effort more effectively and which take into account our findings. Some of the key elements under consideration include an authorisation scheme for the distributors of tied and rebated fuels, and a simultaneous strengthening of the obligations on distributors to take reasonable steps to check that sales of such fuels are made only to customers who intend to put them to an approved use.

Action taken in the past against the fraudsters Customs detected

- 3.16 Fraud in the oils sector has been historically low and the sanctions Customs have used have reflected this position. If the penalties for committing fraud on hydrocarbon oil duty are sufficiently high then potential fraudsters may be discouraged from trying to evade the duty. In the past the most common action Customs have taken is seizure and subsequent restoration of the vehicle, following payment of the duty due, a fixed penalty and any storage costs incurred by Customs (Figure 13).
- 3.17 The maximum fixed civil penalty is currently £250 and Customs can impose this for each breach of the law. This course of action was taken for over half (1,030) of the detections made during 1999-2000 and resulted in the collection of £1.2 million of penalty and restoration fees. This was indicative of the type of challenges and detections made. The new approach will result in better targeting and more large scale commercial detections and as Customs roll out their risk based approach (paragraph 3.13) they expect to see a rise in the use of assessments.

3.18 Prosecution is a costly option and Customs only take such action if the likelihood of securing a custodial sentence is high. Prosecution is used as one of, but not necessarily the first, option. Prosecution action was taken against less than one per cent of offenders who were detected by Road Fuel Testing Units in 1999-2000. Customs consider that the level of prosecution was low because Road Fuel Testing Units have in the past detected small-scale evaders. Of the twelve prosecutions brought for road fuel offences in 1999-2000, three led to custodial sentences, the longest of which was 21 months, and a further three cases resulted in suspended sentences.

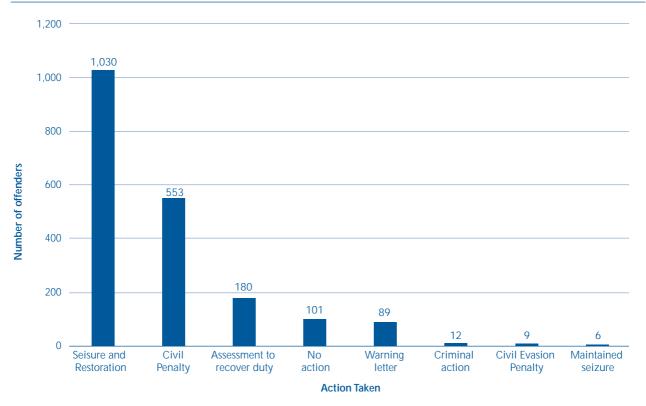
Action taken or planned by Customs to use publicity to deter potential fraudsters

3.19 Customs are highlighting to the public in Northern Ireland the dangers of buying "cheap" laundered fuel which can seriously damage car engines. In November 2001 Customs also proposed using a targeted publicity campaign on the UK mainland designed to highlight the danger of fuel misuse and the penalties for people caught misusing. This will target those groups who have a high financial incentive to misuse rebated fuel. For example leaflets or adverts could be placed in specialist and trade publications for hauliers, taxi firms and builders. These groups could be reminded of the penalties of duty evasion and informed of Customs' increased efforts to detect fraudsters.

Other European Union members have also adopted measures against the illegal use of rebated fuel

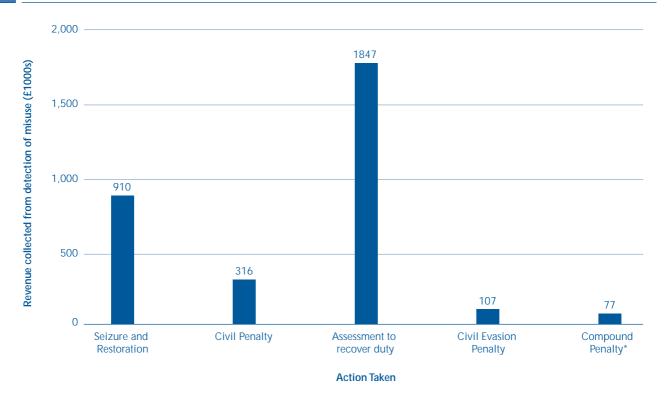
- 3.20 Other European Union states such as Denmark, the Netherlands, France, Spain and Belgium also supply oil at lower duty rates to certain industries for use in vehicles and for running machinery. An exception is Germany where rebated fuel is limited to heating oil and fixed machinery and plant but is prohibited for use in moving vehicles of any description.
- 3.21 We have examined what measures other European Union member states use in the oils fraud sector, but have not assessed their effectiveness. In developing their strategy to tackle hydrocarbon oils fraud, we recommend that Customs assess the effectiveness of these measures and consider whether they should be adopted. For example:
 - Some European member states have higher penalties than the UK. The current penalty in the Republic of Ireland stands at £1,000 per action and Customs there are currently seeking to increase this to £1,500.

Figure 13a shows in 1999-2000 that the main penalties imposed by Customs were seizure and restoration followed by civil penalties



Source: National Audit Office

13b Figure 13b shows the revenue collected and penalties imposed



* Discretionary penalty applied on top of the assessment to recover duty

part three

- In Belgium penalties range from £150 to £3,000 and duty is payable in addition to the fine.
- Both Belgium and the Republic of Ireland have a graduated series of penalties for repeat offenders. For example in the Republic of Ireland the penalties increase according to the number of times an offender has been caught using rebated fuel and the severity of misuse. In Belgium penalties double for a second offence.
- Prosecution is more common in the Republic of Ireland and Germany. During 1999-2000 Customs officers in the Republic of Ireland took legal action against 125 (10 per cent) of the 1,200 cases of misuse detected. Where the revenue involved is relatively large, such as in commercial vehicles, legal action is always taken. In Germany prosecution is triggered at a lower level than in the UK.
- 3.22 Denmark has different arrangements from other countries including the UK for controlling the use of rebated fuels. In 1999 Denmark abolished the system of selling rebated fuels at a price that took account of the lower duty rate and replaced it with a new system. Traders who are allowed to use fuel at reduced duty rates must now register with the tax authorities. However they must purchase the fuel at the normal duty paid rate and then reclaim the duty by netting it off from any VAT which is due to be paid to the tax authorities. This has tightened controls because the tax authorities have the details of all users and their levels of consumption. This would be a more complex system and administration costs may therefore be higher. Moreover, while such a system would remove the risk of fraudulent misuse it would create new fraud opportunities because traders may submit claims to which they are not entitled.

Appendix A National Audit Office Methodology

- 1 Our methodology for carrying out the study comprised:
 - Creating a risk log to identify areas where hydrocarbon oils duty is at risk;
 - Observation of Customs control of oil duty evasion at Dover, Belfast and Swansea;
 - Issuing a self-completion questionnaire to all the 15 road fuel audit units in the UK;
 - Issuing a self-completion questionnaire to all 11 excise risk managers in the UK;
 - Study of good practice in other European Union member states;
 - Forming an expert panel to advise on key stages of the study; and
 - Consulting interested parties on the scale of oils fraud and measures to tackle it.

Creating a risk log

- We appointed Risk Solutions as consultants to help us model the risks faced by Customs when collecting hydrocarbon oils duty, and to provide advice on how these risks should be managed. With the assistance of Risk Solutions and departmental staff, we attempted to complete a risk log that identified all the methods by which revenue could be lost. For each of these areas, the risk log would show the likelihood and severity of the loss (see Figure 7).
- At the time Customs did not hold all the data which our risk log required. As a result, we adapted our method to produce a more qualitative view of the likelihood and severity of each risk. Wherever possible, we drew on the results of work that Customs have already done to counter duty evasion. For example, we reviewed the results of roadside checks by road fuel testing units to gain an understanding of the amount of misuse of rebated fuel throughout the UK.

Observation of Customs controls against duty evasion

We visited Customs teams at Dover, Belfast and Swansea where at our request we observed how they carry out their controls on evasion of hydrocarbon oils duty. Dover was chosen as it is the busiest port for cross-

- channel traffic. At the port, we reviewed the facilities and processes that the South East England Road Fuel Testing Unit use to detect evasion by cross-channel traffic. We also interviewed staff from the local Anti-Smuggling team to determine their involvement in such work.
- Belfast was chosen as it is the region in which evasion of hydrocarbon oils duty is the most visible. We visited the regional headquarters to discuss local issues with senior managers and intelligence staff. We also accompanied operational staff who are involved in action against smuggling and laundering in Northern Ireland. The purpose of this work was to assess the risk of local trends in duty evasion being replicated in the rest of the UK, and to identify local good practice that could be used elsewhere in the country.
- We visited Swansea during our preliminary work to observe a typical roadside operation being carried out by the local road fuel testing unit. Our aim was to gain an understanding of the practical issues involved in planning and carrying out such operations. This work was then used to help plan a survey of road fuel testing units (see para 8).

Survey of Road Fuel Testing Units

We surveyed all 15 Road Fuel Testing Units (RFTUs) that operate in the UK. Our aims were to gather performance data from individual teams, and to identify strengths and weaknesses in the way that the teams operate. We designed and piloted a self-completion questionnaire with the assistance of the RFTU centre of expertise. We also drew on our observation of the operations of the Swansea RFTU (see para 6 above). The questionnaire was issued in July 2000, and we received a response from all 15 units.

Survey of Collection Risk Managers

We also issued a self-completion questionnaire to all the 11 excise risk managers throughout the UK. They are responsible for managing the process by which small oils traders are selected for audit each year. Our survey was designed to discover what factors determined the number of oils traders that were selected for audit. For instance, we asked whether the integrity of the hydrocarbon oils duty regime is an important factor in deciding how many oil traders to audit.

Study of approach in other states

- The evasion of hydrocarbon oils duty is a problem for many states. Most commonly, the evasion is due to smuggling or the illegal sale and use of duty-free oil in road vehicles. We aimed to identify examples of different approaches in other states that could be evaluated by UK Customs for their effectiveness in preventing and detecting evasion.
- 10 To do so, we circulated a questionnaire to the relevant authorities in 11 EU member states, plus the USA & Canada. In many cases, we were assisted by the supreme audit institutions in these states. The questionnaire asked how these states managed the risks to revenue and whether any measures had been particularly effective in tackling evasion. We supplemented this work by interviewing Customs officials in Sweden and the Republic of Ireland. These states were chosen as good comparators with the UK as they have both faced well-documented risks from the smuggling of excise products in recent years.

Forming an expert panel

- 11 During the course of this study we were advised by a panel of experts on fraud matters. We are grateful for the help and assistance of:
 - Chris Bull, Benefit Fraud Inspectorate;
 - Louise Bennett, Risk Solutions;
 - Mike Hoare MBE, Fraud Advisory Panel;
 - Richard Kent, Inland Revenue; and
 - Mark Thompson, KPMG.

Consulting interested parties

- 12 We sought the views of governmental and private bodies on aspects of oil duty evasion. We welcome in particular the contributions made by:
 - The National Criminal Intelligence Service
 - The Road Haulage Association Ltd
 - The Northern Ireland Organised Crime Task Force;
 - John Hogg Technical Solutions Ltd;
 - Orgachim UK; and
 - The Petrol Retailers Association.

In addition, we reviewed reports on oil duty evasion in Northern Ireland that were published by:

- The Northern Ireland Affairs Committee of the House of Commons: and
- The Legitimate Oil Pressure Group.

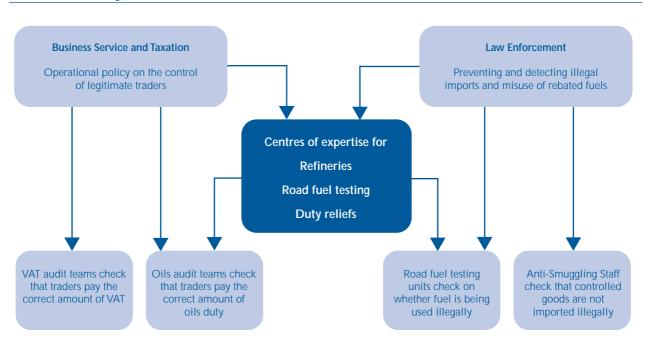
Appendix B

Customs objectives and how they are organised to collect hydrocarbon oils duty and tackle fraud and smuggling

- 1 HM Customs & Excise objective is to secure the UK revenue yield from indirect taxes while minimising cost to businesses, as a key component of ensuring sound public finances. In April 2001 Customs were reorganised into two directorates, Business Services and Taxes and Law Enforcement. The figure below shows where the responsibility for monitoring and enforcing the collection of hydrocarbon oils duty falls within Customs' two directorates.
- In 2000-01 Customs allocated some 300 wholly dedicated staff years to collecting and protecting the revenue from hydrocarbon oils duty at a total cost of

£10 million. Customs also have many other multifunctional staff who are part of the strategic response to fraud; for example, intelligence, investigation, detection and assurance officers. Their activities range from auditing taxpayers at their premises to roadside and frontier checks on vehicles. The antismuggling activity in recent years has focused on Northern Ireland, where the availability of cheaper fuel in the Republic of Ireland has encouraged both legal purchases of Irish fuel for personal use but also a significant level of fuel smuggling and misuse.

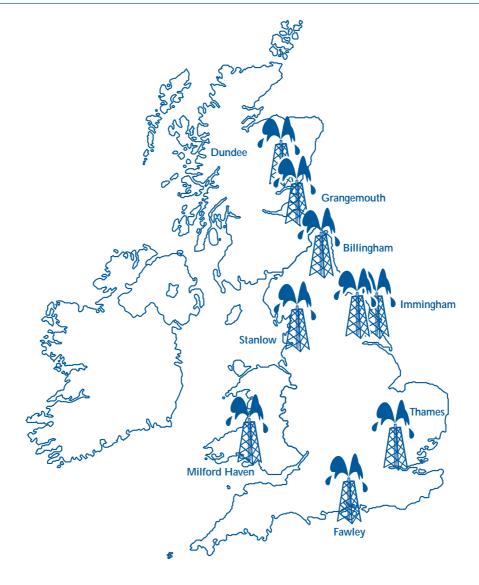
How customs are organised



Appendix C Details of Hydrocarbon Oils and their uses

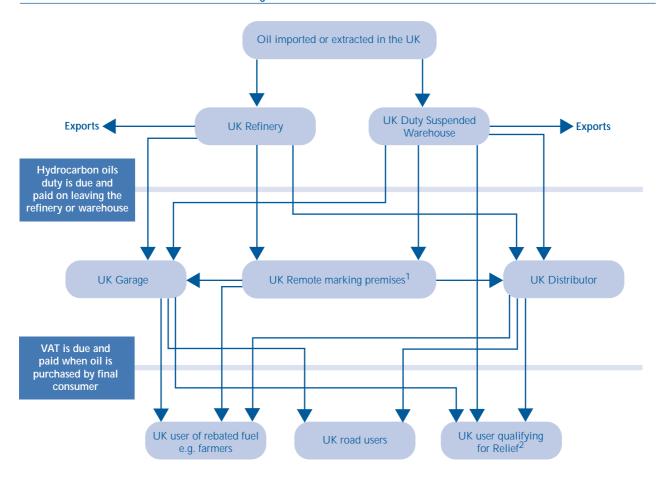
- 1 Hydrocarbon Oils are both produced in the UK, for export and home use, and imported into the UK for home use. There are currently nine oil refineries in the UK (shown below), which produced 90 billion tonnes of petroleum products in 2000, of which 21 billion was exported.
- 2 The raw material used at refineries is Crude Oil. Crude oil has a wide range of chemical properties and contains a variety of other compounds. In order to isolate the most useful hydrocarbon compounds the crude oil goes through a process of distilling. Refineries produce the more valuable products, such as petrol, diesel and heating oil (Kerosene), by further refining the residue from the distilling process.
- 3 Refined Hydrocarbon oils fall into two categories, light oils, such as petrol, and heavy oils, such as Kerosene and Diesel (DERV). Under these two categories there are over 16 further types of oils that are produced from crude oil for use in the production of paint, rubber, plastics and cosmetics.
- The most common type of oil is produced for road use. There are eleven types of oil used as fuel, these being; Leaded petrol; Unleaded petrol; Super Unleaded Petrol; Ultra Low Sulphur Petrol; Diesel (DERV); Ultra Low Sulphur Diesel; Liquid Petroleum Gas (LPG); Aviation Gasoline; Fuel Oil; Kerosene (burning oil); and Gas oil (Red Diesel). The figure overleaf sets out the quantities of each released for consumption in the UK in 2000/2001 and the main uses of these fuels.

The location of UK refineries



Appendix D The oil distribution network in the United Kingdom

The oil distribution network in the United Kingdom



NOTES:

- 1. Remote marking premises are facilities where chemical markers can be added to rebated fuels such as kerosene once they have left the refinery. The marker is added to indicate that there is a reduced rate of duty on the fuel and thus help prevent/detect fraud.
- 2. When duty paid oil is used for certain purposes (e.g. powering fishing vessels), the user is entitled to claim tax relief. Customs repay the duty on receipt of a valid claim.
- 3. Oil traders, who purchase refined products on the international oils market, and smaller-scale refiners can store imported oil duty-free at approximately 200 oil warehouses (Figure 5). Exports of oil from the UK (approximately 26 per cent of the oil refined in 1999-2000) are not subject to hydrocarbon oils duty and VAT.

Source: National Audit Office

Glossary

Assessment Demand issued by HM Customs & Excise to traders or individuals that have not paid tax for

which they are liable

Regions Customs are divided into different regions for management purposes with each function

having its own regional structure and head

Coumarin Statutory marker added to kerosene

Decanting Siphoning of fuel from one vehicle for use in another. This is illegal if the original fuel was

purchased outside the UK

DERV Fuel for a diesel engined road vehicle, taxed at the full rate

Duty Tax imposed by Government on products such as hydrocarbon oil

Full chemical test Analysis of the chemical properties of a fuel sample taken from a road vehicle. The tests are

carried out in mobile laboratories operated by Road Fuel Testing Units

Gas oil Also known as red diesel. An oil that is dyed red and chemically marked with quinizarin. It

bears a rebated rate of duty and must not be used as road fuel without the approval of

HM Customs & Excise

Kerosene Also known as paraffin. Kerosene is chemically marked with coumarin, and is supplied at a

fully rebated rate of duty (i.e. at a nil rate)

Laundering Process used to remove the statutory markers from rebate gas oil or kerosene

Markers Chemicals or dyes added to oil to indicate that a rebate rate of duty has been paid

Quinizarin Statutory marker for gas oil

Rebated Fuel Fuel on which lower rates of duty apply

Road Fuel Testing Units Customs teams that aim to prevent and detect the use of rebated fuels in road vehicles

Service Delivery Agreement Published documents that set out a department's agreed strategies for delivering its high-

level objectives

Sight test Visual examination of a fuel sample taken from a road vehicle by a Road Fuel Testing Unit

Solvent Yellow This is the common name for the proposed chemical marker to be adopted throughout the

European Union to indicate rebated fuel. The marker actually consists of the colourant

(Solvent yellow 124) and a chemical

Specific Gravity Ratio of the mass of a volume of a given substance to the mass of an equal volume of water

at a temperature of 15°C