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## **An Evaluation of Rail Freight Facilities Grant Funding in Britain**

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### **Abstract**

Rail freight has been generally in decline in many European Union countries in recent years, contrary to European transport policy. State support for railway operations is commonplace in most countries, and this paper establishes the background to targeted rail freight grant funding in Britain. Through desk-based analysis of Freight Facilities Grant (FFG) awards, together with a survey of recipient companies, the paper assesses the extent to which the planned flows expected from these awards have materialised and evaluates the role of the grants in influencing rail freight volumes. The evidence suggests that FFG funding has been largely successful, attracting considerable private sector investment. Overall, FFGs have played an important role in developing or retaining rail freight flows, although the processes could be made more transparent and consistent. As other European countries liberalise their rail freight markets as a result of European Union legislation, such targeted funding may be an appropriate alternative to more general government subsidy of freight operations.

**Keywords:** Policy Evaluation; Rail Freight; Freight Grants; Government Funding

## 1. Introduction

Rail freight has been generally in decline in many European Union countries in recent years, particularly in terms of its share of all freight but also in absolute volume in some countries. From 1995 to 2004, rail's mode share of all freight (including sea and air) across the 25 European Union countries decreased from 12 per cent to 10 per cent (European Commission, 2006). This trend is contrary to European transport policy, with the 2001 White Paper setting a target to almost double rail's market share by 2020 (European Commission, 2001). The British government set a similarly ambitious growth target in its Ten Year Plan (DETR, 2000), though more recently this has been referred to as having been "aspirational" and not necessarily achievable. Despite this, the expectation of rail freight growth remains and was confirmed by the Secretary of State for Transport in July 2005 (Darling, 2005).

There has been considerable research into the effects of rail freight liberalisation in European Union countries (for example, Cantos & Maudos, 2001; Gouvernal and Daydou, 2005; Taylor and Ciechanski, A, 2006). Little attention, though, has been devoted to issues surrounding the financial support of rail freight operations by governments. State support for railway operations occurs for different reasons and takes many forms, but is commonplace in most countries, reflecting the inherent difficulties in operating a profitable rail system. In Britain, as with most European countries, the vast majority of state funding is targeted either at passenger services or at the provision and maintenance of rail infrastructure in general. It is common, however, for funds to be allocated specifically for freight infrastructure and service provision, although the sums involved are typically relatively small as a proportion of total rail financial support (Perkins, 2005).

This paper evolved from an earlier research project (Woodburn, 2004) which examined the opportunities and barriers for rail freight within the context of the growth target set out in the British Government's Ten Year Plan. That project did not directly consider grants, but they featured strongly during discussions with rail freight customers and it was clear that there had been little by way of rigorous monitoring and evaluation of the effectiveness of the awards made. As a result, this paper attempts to evaluate the effectiveness of the grant funding in Britain since its introduction in the mid-1970s, with a specific focus on the period from 1997/98 to 2005/06. The paper has four key objectives:

- to catalogue the evolution of the rail freight grant funding process in Britain
- to identify the schemes that have received Freight Facilities Grants (FFGs) since 1997/98
- to assess the extent to which the planned flows resulting from those FFG awards have materialised
- to evaluate the role of rail freight grants in influencing rail freight volumes, particularly in a liberalised rail operating environment

First, the history and policy context for rail freight grant funding is established and previous evaluation work relating to such funding is identified and discussed. The specific methods adopted in this study to address the key aims are then presented. The paper then analyses in detail the grant awards that were made between 1997/98 and 2005/06 and presents the evaluation that focuses on the latter two aims. Finally, the key conclusions are summarised and recommendations are made both relating to the funding process itself and to further evaluation work.

## **2. Background to Rail Freight Grant Funding in Britain**

The principles by which the rail freight industry in Britain receives grant funding are well-established, having been introduced under the Railways Act 1974 (Gourvish, 2002).

Unlike the vast majority of passenger services, rail freight was, and still is, expected to operate without general government financial support. However, the government recognised that there were wider benefits to be gained from the transfer of freight from road to rail and introduced “Section 8” grants to provide financial support for certain specific schemes, on the basis that road haulage was viewed generally not to pay its share of the significant external costs that it created. Grant funding was available to existing or potential customers to contribute towards the capital costs of new or replacement assets that were needed either to retain or attract freight on to the rail network (DfT, 2005d). According to Gourvish (2002) only 15 grants were awarded from 1974-76 at a total value of £2.0 million (in current prices). By January 1979, just four awards of more than £1.0 million had been made. Further detailed discussion of grant funding occurs later in the paper.

When British Rail was privatised as a result of the Railways Act 1993, Section 8 grants were retained under Section 139 of the 1993 Act and renamed Freight Facilities Grants (FFGs) to better reflect the use of the funding (HMSO, 1993). Whilst essentially the same as the previous Section 8 grants, the FFG appraisal process gives additional weight to the wider social and environmental benefits resulting from the use of rail rather than road. A new form of grant funding, Track Access Grants (TAGs), was introduced under Section 137 of the Railways Act 1993. These grants are direct revenue support payable to rail freight operators for specific flows that provide similar broad environmental and social

benefits assessed in a comparable manner to FFG applications. TAGs, however, have arguably brought little real benefit to the rail industry since they largely offset the increased operating costs to rail freight operators resulting from the charges from Railtrack (now Network Rail) to use the network, though it is likely that they led to certain flows being retained on rail. The funding made available through the TAG regime has been dwarfed by the subsequent halving of the track access charges payable by rail freight operators to Network Rail by order of the Office of the Rail Regulator. This change, which took effect in 2002, increases the government's payment to Network Rail by around £100 million per annum (Shaw and Farrington, 2003), far more than the funding provided through TAGs. In addition, the government has paid in the order of £26 million per annum towards rail freight charges for using the Channel Tunnel, as a result of an agreement from the time of the privatisation of British Rail's "International" rail freight business (EWS, 2004). This agreement expires in November 2006, with no guarantee of further state support for Channel Tunnel rail freight.

Responsibilities for grant funding transferred from the government to the Strategic Rail Authority (SRA) when it was formed in 2001, though the Scottish Executive took over responsibility for FFGs and TAGs within Scotland and the Welsh Assembly Government became responsible for FFGs in Wales. Despite these changes, the grant principles have essentially remained the same since the mid-1990s. The budget for rail freight grants was increased in the late-1990s but, due to funding constraints, the SRA suspended the FFG programme in England in early-2003. Revisions were made to the valuation of the benefits resulting from the lorry miles avoided as a result of using rail (SRA, 2003), but the impact of this has been limited due to the reduction in funds available. In 2004, Company Neutral Revenue Support (CNRS) grant was introduced, targeted at intermodal flows. While similar in many respects to TAG, CNRS is awarded on the basis of a pre-determined

matrix of rates between British regions while TAG is awarded on flow-by-flow comparisons of road and rail costs. Full details of the grant principles and funding criteria can be found in various guidance documents for FFGs (DfT, 2005a; Scottish Executive, 2005), TAGs (DfT, 2005b; Scottish Executive, 2003) and CNRS (SRA, 2004; DfT, 2005c).

When the SRA was wound up in July 2005, its grant funding powers were transferred to the Department for Transport (DfT). In preparation for this, DfT announced its intention to set up a Sustainable Distribution Fund (DfT, 2005d; DfT, 2005e) to bring together all grant funding for rail, water and road haulage in a single pot from April 2007 in order to allow prioritisation of applications so that they are treated on an equal basis across the three modes, with those projects offering greatest value for money being funded. The provisional budget allocated for 2007/08 is £22.6 million, subject to confirmation in 2006 Spending Review. It is anticipated that FFG awards will resume at this time. To summarise the situation as at early-2006, however, the following grants are available:

- FFG: the successor to the original grants introduced in the mid-1970s and paid to rail freight customers, though suspended in England at the time of writing; the Scottish Executive and the Welsh Assembly Government continue to make awards in Scotland and Wales respectively
- TAG: introduced at the time of rail privatisation and paid to rail freight operators by the Department for Transport for English and Welsh flows and the Scottish Executive for flows in Scotland
- CNRS: introduced in 2004 for intermodal flows and normally paid to rail freight operators (though can also be direct to others such as shipping lines) by the Department for Transport for all of Great Britain

A detailed analysis of FFG awards can be found in Section 5, following a discussion of previous evaluation work and the approach adopted in this study.

### **3. Previous Rail Freight Grant Evaluation Work**

Relatively little evaluation work relating to rail freight grant provision has taken place, particularly since the mid-1990s. The main reports to consider the subject were both in the mid-1990s, these being reviews conducted by the National Audit Office and the Public Accounts Committee. The National Audit Office (NAO, 1996) study examined all FFG awards in the period from 1985 to 1995 and found that 12 per cent of all rail freight utilised facilities paid for by grants. However, it also identified that the Department of Transport had spent just 46 per cent of the budget allocated to the grants during that time period. The vast majority of the 38 projects that received funding did not result in the anticipated traffic levels and, overall, carryings were 72 per cent of those forecast. A number of concerns were identified, notably the difficulties associated with companies giving assurances of future traffic volumes, the length of time taken to make decisions about grant applications and a lack of rigour in the determination of the valuation of environmental benefits.

The Public Accounts Committee (PAC, 1997) also assessed the FFG process, focusing mainly on the difficulties that applicants faced in obtaining funding as a result of overly-bureaucratic procedures which resulted in allocated funds not being spent. The PAC found that 80 applications for FFGs had been submitted in the three years to September 1995, but only seven were funded, leading to a budget under spend of approximately two thirds. The process was strongly criticised, particularly the fact that some applicants had



to wait more than a year for a decision, but there was no analysis of the effectiveness of those grants actually awarded. Quite clearly, both of those studies identified similar concerns and these were, to some extent, addressed in subsequent years. However, Haywood (1999) identified further problems associated with the grants system, including the fact that FFGs can be used only for company-specific schemes and not common-user terminals, and they cannot be awarded in situations where planning conditions specify that rail must be used. An assessment of rail freight grants awarded in Scotland was carried out in 2002 (MDS Transmodal, 2002). This study of the development of sustainable freight facilities in Scotland does not actually investigate the degree to which the planned volumes materialised following the implementation of the grant funding. It therefore appears that no systematic review of rail freight grant funding has taken place for almost 10 years.

#### **4. Method**

The main focus of this paper is on FFGs for the following reasons:

- they are long-established, giving time to monitor their impacts
- there has been a significant number of FFG awards, allowing a more comprehensive investigation
- much TAG funding resulted from increases in track access charges at the time of privatisation, so was not additional funding for the rail freight industry
- CNRS has been only recently introduced, so it is too early to identify its impacts

Two main data gathering methods were adopted for this study. The first was essentially desk-based, gathering relevant data relating to rail freight grant funding. This involved the collation of information from sources including government documents, press releases and rail freight industry websites. In addition, details were obtained from the Department for Transport (DfT) of all awards it (and its predecessors, including the Strategic Rail Authority) made in the period from 1997/98 to end-2005. The same data were obtained from the Scottish Executive (SE) of awards made in Scotland; a request to the Welsh Assembly Government for details of its four awards was not fulfilled. Information provided for each FFG award made by DfT and SE included the recipient company, the date of offer of the award, a brief description of the facilities to be funded, the value of the grant and the value of the private sector contribution. The information gathered was collated in a database of all awards during the time period under study, and was primarily aimed at satisfying the first two of the paper's objectives, these being to catalogue the evolution of the rail freight grant funding process and to identify the schemes that have received FFGs since 1997/98.

The second methodological approach consisted of a questionnaire survey of recipients of FFGs during the period from 1997 to 2005. The main information collected from recipient companies in the questionnaire was as follows:

- Basic details of FFG(s) awarded to the company (e.g. number of grant awards, year(s) of award, awarding body, value of grant(s), private sector funding contribution, nature of facilities funded), to allow cross-checking of details provided by companies with the official records
- Whether or not the full amount awarded was received by the company and, if not, why not

- Level of rail freight activity achieved as a result of the FFG(s), both in absolute terms and as a percentage of that planned at the time of grant application, together with reasons for any shortfall or additional volume
- Impacts of the suspension of FFG awards in England in 2003
- Appropriateness of the FFG application process, with opportunities for respondents to identify ways in which they believed the process could be improved

From the database of all FFG awards during the 1997 to 2005 period a total of 79 recipient companies were identified. Of these, four were no longer in business at the time of the survey and contact details could not be found for a further four recipients. Two British rail freight operators (EWS and Freightliner) were also excluded from the sample, as was the French rail network owner (RFF) which received a grant for security works at the Fréthun terminal. Of the 68 questionnaires that were distributed, 21 were returned, representing a 31% response rate. Table 1 summarises the response rate in terms of number of grant recipients, number of grant awards and value of grant awards.

*Insert Table 1 here*

The response rate from the questionnaire survey was higher than that typically achieved in a questionnaire survey of this nature. The responses represented a broad cross-section of award recipients in terms of commodity type, geographical coverage, year of award and award value. However, it is recognised that those who responded may not be typical of the recipient population at large, since it is possible that those who failed to achieve a reasonable volume of rail freight as a result of their grant funding may have been reluctant to respond. To more fully satisfy the third and fourth objectives of the paper, additional analysis has taken place, primarily utilising original rail freight databases of activity

conducted by the author on an annual basis, further details of which can be found in Woodburn (2004).

## **5. Freight Facilities Grant Awards in Great Britain**

More than 300 facilities grants (either Section 8 or the subsequent FFGs) have been awarded since their introduction under the Railways Act 1974, with a total value of around £430 million (in 2004/05 prices). Figure 1 shows the distribution of spend by financial year since 1975/76. It should be noted that there is a difference between “award” and “spend”, with recent official statistics typically referring to the latter. However, meaningful figures on annual spend are not available either for the full 30 year period or for FFGs separate from other rail freight grants, so the data relating to award in Figure 1 are the most consistent available, even allowing for the slight mismatch between the timing of the award and the spending of the money.

*Insert Figure 1 here*

It is clear that the majority of funding was awarded in two distinct time periods: first in the early years of the Section 8 grants, when funding averaged £18 million per annum (in 2004/05 prices) between 1976/77 and 1985/86; and second between 1997/98 and 2002/03 when an average of £30 million per annum was awarded. In the period between these two peaks, average annual awards amounted to just over £4 million, while in the last three years shown the annual average was just under £6 million. The resurgence in funding in the late-1990s is therefore particularly noticeable, coming as it did after the decade of limited funding between the mid-1980s and mid-1990s. Of interest, though, was

the decade-long period of relatively substantial funding soon after the introduction of the grants.

The period from 1997/98 is that upon which the majority of this research is focused, since that coincides with the resurgence in grant funding and is the time period for which the detailed grant information has been made available. Disaggregated spending for FFGs, TAGs and CNRS is not published in official statistics. From 1997/98 to 2003/04, a total of £255 million was spent on all forms of rail freight grant funding (SRA, 2005), while over the same time period the information gathered for this research shows that £171 million was awarded in FFG monies. FFGs therefore accounted for approximately two-thirds of total rail freight grant funding during this period, a proportion which will have subsequently reduced as a result of the moratorium on new FFG awards in England while other forms of grant funding have continued. It is clear, though, that FFGs have been the major source of grant funding for British rail freight. These statistics do not include the extra funding to Network Rail to counter the reduction in track access charges, since this is part of the general state support and as such is not classified as grant funding.

Between 1997/98 and 2005/06, a total of 119 FFG awards were made with a value of £181 million in current prices, giving an average award of just over £1.5 million. There has been a wide variation around this average, with awards ranging from £16,500 to £15.7 million. Figure 2 shows the geographical distribution of FFG awards in each year since 1997/98: the impact of the moratorium in England is apparent, with no new awards announced since 2002/03. Of the 119 awards, 91 were for England, 24 were in Scotland and 4 in Wales.

*Insert Figure 2 here*

Table 2 reveals the FFG awards disaggregated by commodity group: the groups relate to those used in the rail freight databases, with the “Miscellaneous” category referring to commodities not covered by the other groups (e.g. timber; paper; non-intermodal retail products; express parcels), or funds for non-commodity-specific works (e.g. security measures at the Channel Tunnel; terminal improvements relating to a wide variety of products). Where a grant was awarded to cover two different commodity groups the value has been split equally between those commodities.

*Insert Table 2 here*

Construction, metals and intermodal account for 62 per cent of all awards, though only 53 per cent of the total award value due in particular to the typical size of metals grants being considerably smaller than the overall average. By contrast, although relatively small in terms of numbers of awards, automotive and petroleum grants have a much higher average value. In both cases, the average is considerably influenced by a single large award: half of the £15.7 million for Portbury Docks (Bristol) in the case of automotive and the £10.0 million for BP for the movement of petroleum products from Grangemouth to a range of railheads. It is interesting to note that, of the 10 most recent awards, eight have been for the Intermodal or Miscellaneous sector, with the traditional bulk commodities being under-represented. In fact, the most recent Chemicals award was in 2002/03 and the last Automotive and Petroleum ones were both in 2001/02. There therefore appears to have been something of a shift away from funding facilities for bulk commodities, perhaps as a result of funding shortages (thus encouraging spending on cheaper projects), the withdrawal of FFGs in England, or the growth in interest in the provision of intermodal facilities.

The extent to which the private sector has contributed to projects that have been awarded FFGs since 1997/98 has also been analysed. Table 3 shows this information both by financial year and geographically (i.e. separately for England and Scotland, with Wales excluded due to the lack of detailed grant information). Overall, two-thirds of project funding has come from the public sector, with the remaining one-third being private sector funding from the companies involved. As can be seen, there has been considerable fluctuation in the ratio of public sector grant to private sector contribution between the different years, with the peak year of funding (i.e. 2000/01) coinciding with the smallest proportion for the private sector contribution. With the exception of 1997/98, in each year where grants were awarded in both England and Scotland the private sector share of funding has been lower in Scotland than in England.

*Insert Table 3 here*

## **6. Estimated Impacts of Freight Facilities Grant Awards**

Having identified the basic features and trends in FFG awards, this section attempts to establish the impacts that the awards since 1997/98 have had. Table 4 reveals the extent to which the companies that took part in the questionnaire survey had achieved the volume of rail freight activity that had been planned for in the FFG application and upon which basis the award had been made. This information is shown both in terms of the 21 respondents' companies and the 36 grant awards that these companies had received, since a number of respondents specified differing volumes associated with different grant awards.

*Insert Table 4 here*

For two of the respondents' companies, the facilities paid for from the grants had not yet been completed. Of the other 19 companies, 10 had achieved the target volume specified in the funding application; of these, six had exceeded the predicted volume. Of the remaining nine, just over half achieved between 75 and 99 per cent of the expected volume. Only four companies achieved less than three-quarters of the volume predicted, and this accounted for just five of the 34 completed grant-funded projects. Sufficiently detailed information was not forthcoming from enough of the questionnaire respondents to accurately work out the aggregate actual volume against that planned, but a weighted average of the number of respondents in each category calculated using the midpoint of each of the volume ranges reveals that, on a company basis, 90 per cent of the predicted volume was achieved across the sample companies, while on a grant award basis the average was slightly higher at 94 per cent. For the "125% or more" category, the assumed average volume achieved was 137 per cent: the evidence from the questionnaires suggests that this is relatively conservative, so the aggregate totals by company and grant are likely to be slight under-representations of the actual volumes. It must be emphasised that these calculations rely on approximations of some volumes, but it appears that the actual volumes achieved have been very close to those predicted when considering the sample as a whole. While a small number of the 19 companies achieved much lower volumes than those anticipated, this has been counterbalanced by others which have attracted higher traffic levels than predicted.

Three of the respondents' companies had not received the full amount of grant at the time of the questionnaire. In one case, the award had been relatively recent, so the project had not yet been completed, while the construction of one of the other respondents' facilities



had been delayed due to planning regulations but was expected to go ahead shortly. In the third company, the total project cost was lower than estimated which, together with a slower uptake in rail use than had been predicted, meant that the company had to date received just over half of its award. When this latter case is taken into account, the performance of rail freight volume against money spent increases slightly further towards the 100 per cent mark. It therefore appears that, on the basis of the questionnaire responses, the aggregate impact of the freight grants awarded has been almost as predicted. In a number of cases, respondents identified that, while the specific flow(s) set out in the grant application did not always materialise, other flows had been found to make up the shortfall.

Table 5 summarises the status (as at the beginning of 2006) of all of the 119 projects funded by FFGs between 1997/98 and 2005/06. In most cases, the status has been identified using the information contained in the author's database of rail freight activity in January 2006, which contains details of all known regular services (excluding coal). While providing much detail about rail freight not available from other sources, this method does not allow the identification of the use (or otherwise) of all facilities covered by the FFG awards. As a result, there are 23 of the facilities where it is not clear as to whether there is any regular use: of these, eight seem to be handling some traffic, although perhaps not on a particularly regular basis or not the commodities for which the FFG was awarded, while the remaining 15 seem to be only irregularly used if at all. Of the remaining 96 facilities, 81 (i.e. 84 per cent) are known to be handling traffic linked to the FFG award, while 15 definitely are not operational for the commodities covered by the FFG.

*Insert Table 5 here*

The evidence from the questionnaire responses and other sources suggests that the FFG awards typically do lead to the flows materialising on rail, although there are clearly some exceptions.

## **7. Factors Influencing the Effectiveness of Freight Facilities Grant Funding**

This section considers the key factors that influence the effectiveness of the grant funding, first by identifying the factors that have caused volumes to be different to those planned and then with a more general assessment of the issues surrounding the FFG process. Table 6 identifies the reasons for facilities funded by FFGs not being utilised for the anticipated flows, as at the beginning of 2006. Three of these facilities did actually function for their intended duration, which in two cases covered the extraction of coal, while the other was related to a construction project at Manchester Airport. Two companies within the steel sector ceased trading due to insolvency, while one retailer that had received two grants was taken over by a competitor, leading to the loss of the rail-based traffic. A further three projects are expected to proceed in due course, these all being in Scotland, two of which received funding only in January 2006. One of the other companies, a questionnaire respondent, no longer uses the facility covered by the grant due to problems with the rail service that was provided. For four of the grants, it has not been possible to identify the reasons for lack of use of the funded facility.

*Insert Table 6 here*

When account is taken of those facilities that are likely to be initiated in the future, it appears that less than 7 per cent of total FFG funding has been attached to projects that

could reasonably be judged a major failure. It seems likely that the majority of this money was not disbursed in any case, since most of it was attached to one large award which has not progressed, with the remainder typically being small value awards. Further, some of the facilities that have ceased to be used were actually operational for several years, so at least a proportion of the benefits planned for in the grant application will have been realised during that time.

Table 7 considers the questionnaire respondents who experienced either lower or higher than expected rail volumes. Of the nine who had lower than predicted volumes, rail service problems were the biggest single cause. These problems related to a lack of network capacity, high costs, poor performance (i.e. service reliability and punctuality) and, specifically, the disruption to Channel Tunnel services as a result of security issues. Changes in the structure of the supply chain included the closure of specific suppliers' or customers' locations, or the switching of traffic to alternative routes. The external factors were the 2001 outbreak of foot and mouth disease in Britain, which affected farming activity, and the variability of demand for one commodity as a result of unpredictability in weather conditions.

*Insert Table 7 here*

Six respondents had experienced higher than anticipated rail freight volumes. Company growth was the biggest single cause, either through sales growth (for a retailer) or the gaining of new contracts (for third-party logistics providers and terminal operators). One respondent specifically stated that rail was more reliable than had been anticipated, which had given the company the confidence to add more rail volume, while another highlighted the fact that only those volumes that were virtually guaranteed to be moved by rail could

be included in a grant application but that, once a facility is built or upgraded, additional flows are sent by rail. It seems logical that if a company is investing significant capital of its own into a project it will then try to maximise the return on its investment by utilising the new assets to the greatest extent possible.

In terms of the ways in which FFG applications are handled, 18 of the 21 respondents believed the application process to be appropriate, with only one respondent believing it not to be suitable. Despite this general satisfaction, 12 of the respondents identified possible improvements to the FFG scheme. Overwhelmingly, these related to simplifying, clarifying and speeding up the application and decision-making processes, with 10 companies making comments in this broad area. Specific suggestions included a clearer mechanism for repayment should rail volumes not be achieved, so that the process could be quicker and cheaper, or a simplified process for smaller grants of, perhaps, £1 million or less. Two respondents complained that the assessment procedures and associated guidance had not remained consistent, with their applications requiring greater effort and money as a result. There was a desire among a sizeable minority of respondents to receive a clearer justification of how the value of grant awarded had been decided. Another suggested improvement was for a mechanism to allow companies with only short-term guaranteed flows to obtain funding (although this is possible under the existing arrangements if the benefits in the specified period are substantial enough).

Perhaps not surprisingly, the suspension of FFG awards in England in 2003 had had a considerable impact on respondent companies' use of rail freight, with nine of the 21 stating that current volumes would most likely have been higher had it not been for the suspension, and another two being concerned that future plans will not proceed unless there is a reinstatement of funding in the near future. The main criticism related to the high

capital costs for new rail facilities, which often cannot be justified by companies on a purely commercial basis, certainly not in the short- to medium-term. For example, one respondent had planned “to build a rail-connected retail distribution warehouse, but the expense is prohibitive without a grant”. A number of respondents commented on the lack of direction and consistency from the government, particularly the former Strategic Rail Authority and now the Department for Transport, with pro-rail and pro-environment statements not being backed up with financial support and strong policy initiatives. At a general level, the questionnaire responses reveal a lack of confidence in future government support for the rail freight industry and this appears to be dissuading some companies from investing in rail since it is seen as being too high a risk, despite those companies having suitable flows that could switch from road.

## **8. Implications for other European Countries**

This research has focused upon government support for rail freight in Great Britain. It is possible, and indeed desirable, to generalise from the analysis, not least with reference to the liberalisation of rail services in other European Union countries as a result of recent legislation and associated policies designed to open up the rail freight market to competition, notably Directive 91/440/EEC and subsequent railway packages. Experience of the first 10 years’ of private sector operation in Britain has shown that it is feasible to introduce at least a certain degree of market competition, although the pace of the impacts of liberalisation is typically slow. The introduction of a competitive market to rail networks across Europe will invalidate the traditional high-level approach of providing either a non-flow-specific subsidy payment for rail freight support or a general subsidy to the state-owned rail freight operator to support all non-profitable rail services and/or infrastructure

provision. According to Perkins (2005), only 1 per cent of public contributions of €43 billion to the railways of the 15 EU countries in 2001 was specifically targeted towards freight and combined transport. Approximately two thirds of the total public contributions was general, covering payments for capital investment, debt servicing and restructuring, staff and pensions and infrastructure maintenance and operations. This support cannot easily be separated into freight- and passenger-specific totals.

While European legislation requires network access charges for rail freight to be set at a level whereby the marginal costs are covered so as to encourage greater activity, as is the case in Britain, it is likely that additional support will be required in order to retain many existing flows and to win new traffic. This support can be justified on the basis of the wider benefits to environment and society, and funding such as FFG (and, indeed, TAG or CNRS) can be applied in a neutral manner that does not distort competition or give undue preference to the incumbent monopolistic operator. Specifically relating to FFGs, this form of funding can be directed towards the freight customer (e.g. manufacturer, retailer, logistics provider) who can utilise rail for specific flows rather than the rail freight company that provides the service. In this way, the customer is free to select the service operator that provides the best option to suit its needs and funding for infrastructure and rolling stock can be independent of rail freight operators. Therefore, such support meets European policy criteria to encourage rail freight activity in an open access market and the principle should be evaluated to identify the extent to which it is applicable in those European countries' markets where such targeted support does not exist., since it may be an appropriate form of public contribution for flows in these markets as they continue to liberalise.

## 9. Conclusions and Recommendations

This paper has reviewed the rail freight grant funding system in Great Britain, with a particular emphasis on FFG awards since 1997/98, and has analysed the effects of these awards. More than 300 facilities-related grants have been awarded since their introduction in the mid-1970s, with two noticeable peaks in funding: from the mid-1970s to the mid-1980s and from 1997/98 to 2002/03. Since the mid-1990s, other rail freight grants have also been available, but these have not been detailed in this paper. £180 million was spent on FFGs between 1997/98 and 2005/06, with an average grant value of around £1.5 million. A broad range of projects has been supported by FFGs since 1997/98, traditionally focusing on bulk commodities but with a more recent emphasis on intermodal facilities. The evidence from this research suggests that FFG funding has been largely successful, as measured in a number of different ways. Since 1997/98, for every £1 of grant funding an additional 50 pence of private sector money has been invested in rail freight facilities. In the vast majority of cases, the facilities developed as a result of FFG awards do cater for the planned commodity flows detailed in the grant applications, although the survey responses show considerable variability in terms of the actual volumes compared with those predicted. That said, from the sample analysed, this variability was both below and above the predicted levels in almost equal measure, the net result being a close correlation between planned and actual volumes. From the wider analysis of all facilities funded since 1997/98, the main reasons for facilities not being utilised related to company or supply chain changes that were not foreseen at the time of the award. Overall, it is clear that FFGs have played an important role in developing or retaining rail freight flows. The suspension of the scheme in England in early-2003 is likely to have hindered this development, both directly in terms of the lack of funds to allow

specific schemes to proceed and indirectly in terms of the message sent out to businesses by government about its commitment to the rail freight industry.

Due to data availability issues, it has not been possible to fully assess the extent to which the actual volumes predicted in each of the 119 schemes since 1997/98 has met or exceeded the target. This would be a valuable additional piece of research but is one which would require access to commercially sensitive information, so can realistically only be carried out comprehensively by government or one of its agencies (e.g. the National Audit Office). Further, the analysis of the impacts of FFGs would have been enhanced by the financial quantification of the benefits of the flows attracted to, or retained on, rail using the official values for lorry miles avoided. This was not possible, however, as this information was not available from the Department for Transport on a scheme-by-scheme basis and many questionnaire responses excluded these figures. However, it seems clear that the FFG scheme, as part of a wider suite of funding sources, is an important and successful means by which rail can retain or gain freight flows. The planned reinstatement of facilities funding from 2007 is a welcome development, although concern remains about both the level of funding available and the commitment of the government to encourage greater use of the rail network by freight as part of its broader transport policies. In addition, concerns were raised by recipient companies that the grant decision-making processes are too complex and time-consuming, so attention should be paid to simplifying the procedures to make them more flexible and user-friendly, subject to retaining the necessary controls on the use of public funds.

Wider issues surrounding service costs and provision must also be addressed to ensure that the benefits of such funding can be maximised, since service quality problems appear to be the single most significant reason for actual flows being lower than those anticipated.



Early in the paper, it was identified that the halving of track access charges in 2002 was financially more significant than the typical annual FFG funds. It is difficult to assess the impacts on rail freight volumes of the access charge changes, though the finances of the operators clearly will have benefited. Targeted funding for specific freight facilities and flows is a key way in which rail freight can increase its mode share and is a more transparent, and therefore politically acceptable, measure than general subsidies. As other European countries liberalise their rail freight markets as a result of European Union legislation, such targeted funding may be an appropriate replacement for non-specific subsidy of monopolistic rail freight operators.

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Table 1: Freight Facilities Grant Questionnaire Response Rate (%)

Measure	Number of recipients	Number of grant awards	Value of grant awards
% of total	27	30	23
% of effective total (i.e. those included in sample)	31	34	25

Table 2: Freight Facilities Grant Awards (1997/98 – 2005/06; number and value of awards (in current prices), by commodity group)

<b>Commodity group</b>	<b>No. of awards</b>	<b>Total value (£m)</b>	<b>Average value (£m)</b>
Automotive	6	18.50	3.18
Chemicals	9.5	8.69	0.91
Coal	11.5	27.40	2.38
Construction	27	49.39	1.83
Intermodal	20.5	29.03	1.42
Metals	26.5	17.11	0.65
Miscellaneous	15	17.94	1.20
Petroleum	3	12.93	4.31
<b>Total</b>	<b>119</b>	<b>181.01</b>	<b>1.52</b>

Source: information provided by Department for Transport and Scottish Executive

Table 3: Grant funding as a percentage of total project costs (by financial year)

<b>Financial year</b>	<b>England</b>	<b>Scotland</b>	<b>Total</b>
1997/98	47	38	45
1998/99	61	77	63
1999/00	63	83	73
2000/01	80	82	81
2001/02	67	72	68
2002/03	56	73	58
2003/04	-	51	51
2004/05	-	41	41
2005/06	-	64	64
<b>Total</b>	<b>65</b>	<b>68</b>	<b>66</b>

Source: information provided by Department for Transport and Scottish Executive; private sector contribution information for the 4 grants awarded by the Welsh Assembly Government was not available



Table 4: Planned volume achieved (by number of respondent companies and number of grant awards)

<b>% of volume achieved</b>	<b>No. of respondent companies</b>	<b>No. of grant awards</b>
0	0	0
1 – 24%	2	2
25 – 49%	1	2
50 – 74%	1	1
75 – 99%	5	8
100%	4	9
101 – 124%	3	8
125% or more	3	4
Project not yet completed	2	2
<b>Total</b>	<b>21</b>	<b>36</b>

Source: questionnaire responses

Table 5: Use of facilities (as at early-2006) in receipt of grant funding since 1997/98

<b>Use of facilities?</b>	<b>No. of facilities</b>	<b>Percentage of facilities</b>
Yes	81	68
No	15	13
Unknown/irregular	23	19
Total	119	100

Source: analysis of author's databases

Table 6: Reasons for FFG-funded facilities not being used for funded flows (as at early-2006)

<b>Reason</b>	<b>No. of facilities</b>
Project now completed (short-life duration)	3
Insolvency of recipient company	2
Recipient company taken over	2
Recent ward, so project not yet commenced	2
Project delayed due to planning regulations	1
Poor quality/high cost of rail service	1
Unknown	4
<b>Total</b>	<b>15</b>

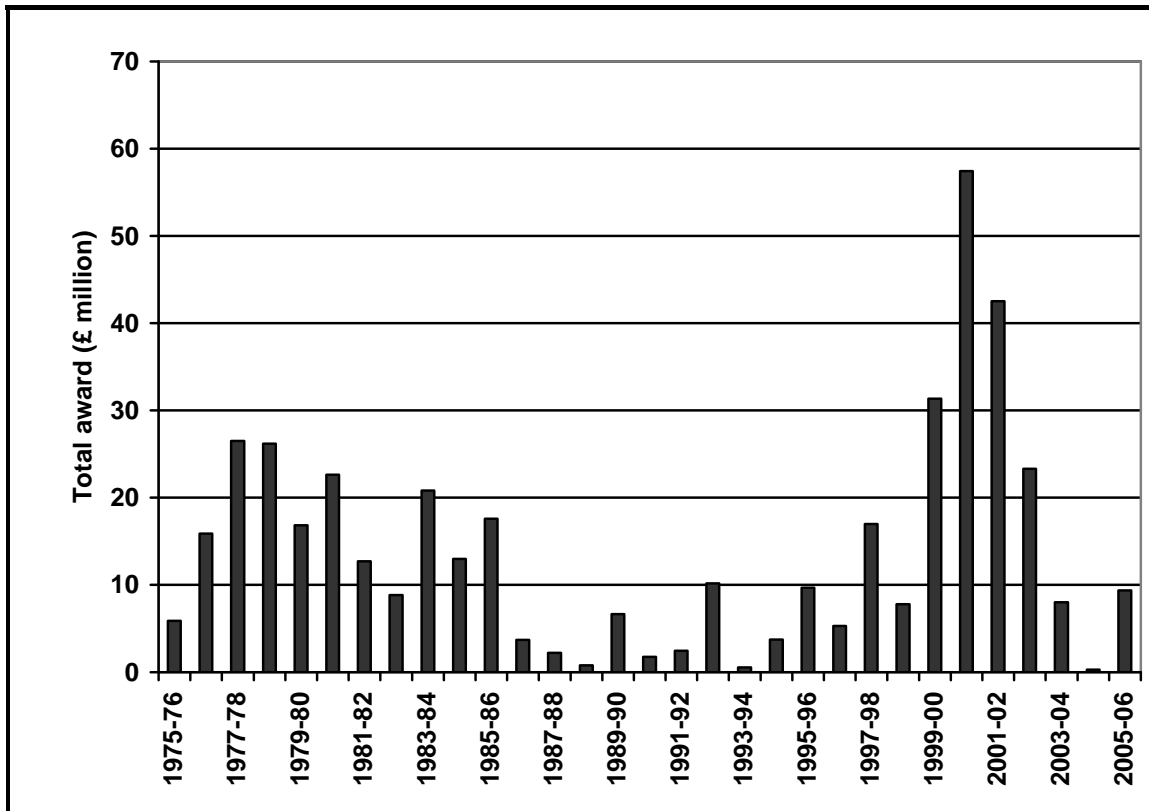
Source: information provided by Department for Transport and Scottish Executive; analysis of author's databases

Table 7: Reasons for lower or greater than predicted rail volumes

<b>Reason for lower than predicted volume</b>	<b>No. of companies mentioning reason</b>
Rail service problems	6
Changes in structure of supply chain	3
Factors external to the industry	2
Mining problems leading to lower volume extracted	1
<b>Reason for higher than predicted volume</b>	<b>No. of companies mentioning reason</b>
Company sales growth/gaining new contracts	4
Conservative volume estimates used in the grant application	1
Better than expected rail performance, so greater mode shift from road	1

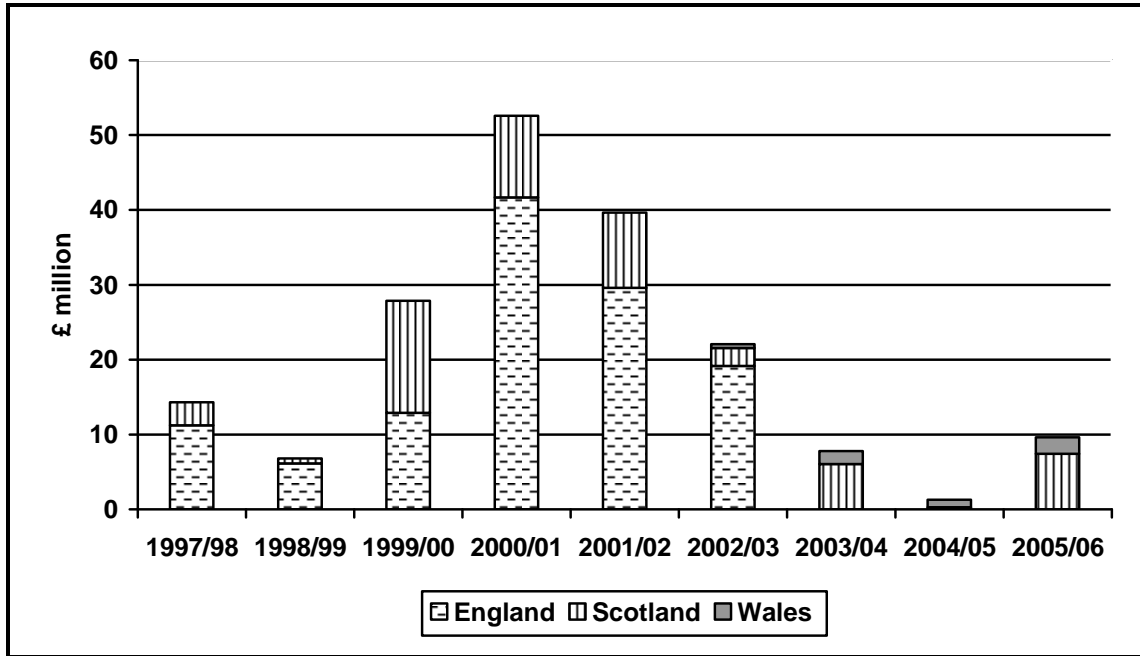
Source: questionnaire responses; N.B. Some companies mentioned more than one reason

Figure 1: Freight Facilities Grant Awards (1975/76 – 2004/05, in 2004/05 prices)



Source: Compiled from The Stationery Office (1997), DfT (2006), National Statistics (2006)

Figure 2: Monetary value of Freight Facilities Grant awards (1997/98 – 2005/06, by country; current prices)



Source: based mainly on information provided by Department for Transport and Scottish Executive