Review of Section 481 of the Taxes Consolidation Act 1997

PricewaterhouseCoopers Report to the Irish Film Board and the Department of Arts, Sport and Tourism

PRICEWATERHOUSECOOPERS

Table of Contents

Executive Summary

The key questions in the Terms of References were:

- is there a compelling economic and/or competitive justification for continuing fiscal support for the Irish film Industry after 2004?;
- if such a compelling justification exists, what form should the incentive take?.

Chapter 2 shows that the value of audiovisual production activity in Ireland grew from an annual average of €14 mn in the decade up to 1993 to €139 mn in 2001.This growth was mirrored by a significant growth in Ireland's film industry infrastructure in this period, with Ireland now having six feature film production crews and two major studios. The chapter shows that Section 481 was the main driver of this growth.

Chapter 3 analyses the economic impact of Section 481. The consultants did a cost benefit analysis for the years 1999 - 2001 inclusive, which was based on the Department of Finance guidelines and which used a deliberately conservative approach. This analysis showed that there was a net benefit of €6.6mn derived over the three years, with this trend improving each year. In reviewing the figures, the consultants found that the larger the production spend in Ireland, the higher the economic benefit is to the State. As preliminary examination of the 2002 and 2003 data showed that there were four films with significant Irish spend, it is expected that this positive economic trend will continue.

Chapter 4 examines the impact of Section 481 being discontinued. It concludes that more than 3,500 jobs are likely to be displaced and that the value of Ireland's audiovisual output would be expected to decrease by 66%.

In Chapter 5 the incentives available in Ireland's key competitor states are reviewed. The research showed that Ireland was to the forefront in introducing a major tax incentive for the film industry in the 1980's but that competitor locations now offer incentives which are comparable for film budgets below the Section 481 cap of €10.48 mn, but significantly more generous for film budgets above this cap. The consultants surveyed overseas producers and confirmed that the availability of financial incentives had become a key criteria in choosing an overseas location for shooting a film and the survey showed that producers would rarely consider Ireland in the future unless an incentive comparable to, or better than, Section 481 was in place.

Following on from the above, the report concludes that there is both a compelling economic and competitive justification for continuing fiscal support for the Irish film industry after 2004.

The report then considered the most appropriate form for the incentive to take, and in Chapter 6 Section 481 is compared to the other two conceptual incentive models used by competitor states. The conclusion was that a direct subsidy model would not be appropriate and that Section 481 or a tax credit model would be broadly similar in meeting the objectives for a successful tax incentive from the Government and industry perspective. The report concluded that the preferred option was to continue with an enhanced version of Section 481 rather than incurring the investment costs and lead in time associated with introducing a new tax credit system.

The report made five recommendations in this regard in Chapter 7:

- the Section 481 fiscal incentive for film production in Ireland should be retained for a minimum period of five years;
- appropriate specialist expertise should be brought in to assist the Department of Arts, Sport and Tourism in the certification of Section 481 budgets;
- directors of Section 481 production companies should be required to make a statutory declaration that confirms that the certified Irish production spend has been incurred;
- the Irish spend figures of at least two Section 481 incentivised production companies should be subject to Revenue audit on an annual basis;
- production companies should be eligible to raise Section 481 funds on 30% - 50% of Ireland expenditures in excess of the existing cap of €10.48 mn, up to a maximum of €50 mn.

Chapter 1 Introduction

1.1 Background to the Report

This study was commissioned jointly by the Irish Film Board and the Department of Arts, Sport and Tourism in response to the approaching expiry date for the statutory-based tax incentive for film production in Ireland contained in Section 481 of the Taxes Consolidation Act, 1997. In his budget speech of the 4th of December, 2002, the Minister for Finance brought forward the expiry date for the incentive from the 5th of April, 2005 to the 31st of December, 2004 to align the cessation of the relief with the calendar income tax year.

1.2 Study Terms of Reference

The Terms of Reference for this report require that the consultants:

(a) assess the economic consequences for the audiovisual industry and its associated services sector of the discontinuation of the scheme after end-2004;

(b) offer a reasoned opinion as to whether, in the light of any similar packages or incentives offered by other EU states in particular, and the conclusions reached under (a) above, there is a compelling economic and/ or competitive justification for continuing fiscal support for the Irish film sector after 2004;

(c) if it is concluded at (b) that such compelling justification does exist, the consultants should make recommendations on the form that this should take, having regard to the need to: avoid deadweight wastage; maintain probity, regularity and transparency in the operation of the scheme; maintain Ireland as a competitive film making location relative to Ireland’s main competitors in this context;

(d) include an assessment of the costs to the Exchequer over a five-year period and the benefits to the audiovisual industry and its associated services sector of any incentive proposed, expressed in gross and net terms.

It should be noted that the consideration of non-economic or cultural benefits are not within the scope of these Terms of Reference. It is, however, widely acknowledged that the existence of a vibrant indigenous film production sector confers a range of benefits of a strategic, social and cultural nature, which are not given consideration in the remainder of this document. This should be borne in mind in assessing the report’s findings and in the consideration of any course of action relating to the issue under examination.

1.3 Research Approach

The research approach adopted to meet these requirements incorporated qualitative and quantitative elements. Key research inputs were as follows:

- review of relevant secondary materials;
- development of a framework for cost-benefit analysis of Section 481;
- collation and analysis of relevant data;
- consultations with key national informants of the Irish film production industry;
- survey of and consultations with international and domestic film producers.

PricewaterhouseCoopers (PwC) wish to extend thanks to all of those individuals and organisations that contributed to the research process. In particular, the consultants wish to acknowledge the assistance provided by the Audiovisual Federation of IBEC.

1.4 Report Structure

The remainder of this report comprises five main research chapters:

Chapter 2 - traces the evolution of Section 481 and describes development of the Irish production industry;

Chapter 3 – compares the costs and benefits associated with Section 481 from the perspective of the Exchequer;

Chapter 4 - considers the implications of the discontinuation of Section 481 for the national economy and audiovisual sector in Ireland;

Chapter 5 - examines incentives for film production available in key competitor destinations;

Chapter 6 - assesses the strengths and weaknesses of Section 481, vis-à-vis, incentive models in other jurisdictions and also in its own right.

The Report’s conclusions and recommendations are presented in Chapter 7.

Chapter 2 S481 and the Irish Film Production Industry

2.1 Introduction

This chapter provides an introduction to Section 481 and describes the development of the film industry in Ireland since the relief was first introduced.

The remainder of this chapter comprises four sections:

- Section 2.2 describes the origin and evolution of Section 481 since a tax relief for the film production sector was first introduced in 1984;
- Section 2.3 presents an example of how the relief operates in practice;
- Section 2.4 briefly describes scheme administration;
- Section 2.5 presents a high-level overview of how the film industry in Ireland has developed since the tax incentive was introduced.

Key chapter findings are presented in Section 2.6.

2.2 Evolution of Section 481

Section 481 has its origins in the introduction of the Business Expansion Scheme (BES) in 1984, which allowed individuals to claim tax relief on annual investments in designated enterprise sectors, including film production. The dissolution of the Irish Film Board in 1987 coincided with the introduction of a tax incentive specifically for film production, known as Section 35. Initially, the tax incentive was only available to corporate investors, but the legislation was changed in 1993 to permit individual investors avail of the relief. In the consolidation of the Taxes Acts in 1997, Section 35 became Section 481.

Table 2.1 summarises the evolution of the legislative provisions governing the development of the tax incentives for investment in film production in Ireland since 1984.

Table 2.1 Evolution of Tax Relief for Film Production Investment in Ireland (Major Developments Only)

Statute	Year	Nature of Change/ Amendment
Finance Act	1984	Tax Relief for investment in the film production sector introduced as part of the Business Expansion Scheme
Finance Act	1987	BES provision replaced by Section 35 of the 1987 Finance Act. Major provisions were as follows:
		- 75% of production work must be carried out in Ireland
		- a maximum of 60% of the total budget can be raised using Section 35
		- scheme open to corporate investors only
Finance Act	1989	Amended regulations concerning the upper limits on corporate investments and CGT holding periods
Finance Act	1993	- extension of the relief to personal investors to S481
		- maximum annual personal investment set at IR£25,000 (€31,750)
		- increase in maximum corporate investments allowable
		- reduced holding period for CGT purposes
Finance Act	1994	- changes to S35 administration, including certification role for the Department of Arts, Culture and the Gaeltacht
		- 75% requirement is subject to Ministerial discretion, albeit with a minimum requirement for 10%
Taxes Consolidation Act	1997	- 60% maximum pertains to productions with budgets of < IR£4 mn (€5.1 mn) only
"S35" → "S481"		- 50% maximum pertains to productions with budgets of > IR£5 mn (€6.4 mn)
		- staggered maximum between 50% and 60% pertains to productions with budgets of > IR£5 mn < IR£4 mn
The changes included		- maximum investment capped at IR£7.5 mn (€9.5 mn), but higher for corporate investors
In Finance Acts 1996		- investment eligible for relief capped at 80%
And 1997 also		- off-peak and post-production incentives introduced
Included here.		- reduced holding period for CGT purposes
Finance Act	2000	- 60% maximum increased to 66%
		- 50% maximum increased to 55%
		- cap of IR£7.5 mn raised to IR£8.25 mn (€10.48 mn)
		- S481 extended to April 2005

Source: Irish Statute Book/ PwC Derived

Major developments of note are the following:

- introduction of the first tax incentive specifically for the film production sector in 1987;
- extension of the incentive to individual investors in 1993;
- in 1997, the amount of an investment that qualifies for tax relief was reduced from 100% to 80%;
- introduction of a cap of IR£7.5 mn (€9.5 mn) on the total value of Section 481 funds that may be raised in relation to a single qualifying project in 1997;
- increase in the maximum % of total production budget that may be raised using Section 481 funds from 60% to 66% in 2000;
- increase in the cap on the total value of Section 481 funds that may be raised in relation to a single qualifying project from IR£7.5 mn to IR£8.25 mn (€10.48 mn) in 2000.

The central provisions of the relief for investment in film production as it exists at the present time are the following:

- **production companies** qualifying for assistance under the relief may raise:
    - up to 66% of the total cost of production of a film with a budget of €5,080,000 or less, with Section 481 funds raised not allowed to exceed total Ireland spend;
    - between 55% and 66% of the total cost of production of a film with a budget between €5,080,000 and €6,350,000, with Section 481 funds raised not allowed to exceed total Ireland spend;
    - no more than 55% of the total cost of production of a film with a budget greater than €6,350,000, with Section 481 funds not allowed to exceed the lower of Irish spend or €10,480,000.
- **individual investors** availing of the tax incentive may:
    - invest a minimum of €250 and up to a maximum of €31,750 under the scheme in any single tax year;
    - claim tax relief on 80% of their investment;
    - carry forward any unrelieved amount to the following tax year should earnings in the year of investment be insufficient to absorb the full investment.
- **corporate investors** availing of the tax incentive may:
    - invest up to €10,160,000 under the scheme in any 12 month period, subject to a cap of €3,810,000 on investment in any single film, and subject to the requirement that a single investment of €3,810,000 in one film is made in one year, the balance of funds must be invested in films with budgets under €5,080,000; claim tax relief on 80% of their investment;
    - claim tax relief on 80% of their investment.

It should be noted that, as a result of the successive reductions in rates of corporation tax in Ireland, the incentive has become less attractive to corporate investors and, for that reason, almost all of the investors in Section 481 projects in recent years have been individual taxpayers.

2.3 Examples of Section 481 in Operation

From the producer's perspective Section 481 gives a contribution to the production budget via the tax relief afforded to investors. The production company gets an investment from the taxpayers but due to the tax relief the production company can ultimately return a lesser amount to the investor, who will still make a return on the investment due to the tax relief obtained.

Table 2.2 provides practical examples of the operation of Section 481 from a producer's perspective for three hypothetical projects with different budget levels.

Table 2.2 Examples of S481 In Operation

	Project 1	Project 2	Project 3
Total Production Budget	€ 25,000,000	€ 10,000,000	€ 3,000,000
% of Total Production Budget eligible for S481 (subject to cap of €10.48 mn)	*55%*	*55%*	*66%*
Total Ireland Spend	€ 11,500,000	€ 10,000,000	€ 2,800,000
Eligible for S481 Investment - Irish spend subject to 10.48 mn cap	€ 10,480,000	€ 5,500,000	€ 1,980,000
	=========	========	=======
Total Production Budget	€ 25,000,000	€ 10,000,000	€ 3,000,000
Eligible for S481 Investment	€10,480,000	€5,500,000	€1,980,000
Balance to be funded by Producer	€14,520,000	€4,500,000	€1,020,000
Approximate Return to Investors from pre Sales	€ 8,384,000	€ 4,400,000	€ 1,584,000
Cost of Production for Producer	€22,904,000	€8,900,000	€2,604,000
% Contribution to Budget (before Professional Fees)	8.4%	11%	13.2%

Source: PwC Derived

The analysis contained in Table 2.2 indicates that the contribution to budget obtained by the producer varies between 8.4% and 13.2% for the hypothetical projects. The key reasons for this variation are: the overall size of the production budget, the level of spend in Ireland, and whether the amount which can be raised is limited by the statutory cap.

A taxpayer invests up to a maximum of €31,750 for which relief is obtained for 80% of this at the marginal rate. Typically this investment is funded by way of own equity and borrowing from a bank. The investor obtains a "return" on his investment in the film from two sources, namely: a) the tax refund from Revenue; and b) a share of the pre sale advances for the film which are only released when a completed film is delivered to, and accepted by, the relevant distributor. The latter element is used to repay the taxpayers bank borrowing taken out to make the investment and related interest. Typically the gross return to the investor is approximately €3,118, and after repaying the borrowings and associated interest the net return is €2,168.

2.4 Administration of Section 481

The Government Department that has primary responsibility for the administration of Section 481 is the Department of Arts, Sports and Tourism. This Department is charged with the review of Section 481 applicant projects to ensure that they comply with scheme guidelines and with the issuance of a certificate, on behalf of the Minister, if the criteria are met. These guidelines are designed to ensure that all projects approved for Section 481 relief meet the stated objectives of the incentive, namely:

(a) to act as an effective stimulus to film making in Ireland, through, inter alia, the provision of quality employment and training opportunities; and/or
(b) to be of importance to the promotion, development and enhancement of the national culture, including, where applicable, the Irish language, through the medium of film.

It is also the responsibility of the Department of Arts, Sports and Tourism to check that the special purpose production companies availing of Section 481 finance have complied with the terms of their certificates. These "checks" focus on two sources, namely: a) information contained in the audited accounts of the production company in question, including an auditor's certificate confirming the level of eligible expenditures in the State; and b) information contained in the "compliance pack", which primarily deals with the non-financial aspects of the Section 481 certificate.

In addition to the certification process conducted by the Department of Arts, Sports and Tourism, it is also necessary for the special purpose production company to obtain a certificate from the Revenue Commissioners in order for the investors to obtain the necessary document to allow them claim the tax relief. This procedure effectively allows the Revenue Commissioners obtain whatever information they require to establish whether the conditions of Section 481 have been met.

2.5 Section 481-incentivised Film Production in Ireland

This section describes Section 481 investment since 1993 and tracks the impact the existence of the incentive has had on the development of the audiovisual sector in Ireland.

Although legislation was in place since 1984, it was only in 1993 that the incentive started to be utilised effectively, coinciding with the extension of the relief to personal investors. Table 2.3 shows the total annual value of Section 481 funds raised since 1993.

Table 2.3 Total Value of S481 Funds Raised, 1993 to 2002

Tax Year	S481 Funds Raised	As a % of Annual Average
1993-1994	€ 55,375,338	80%
1994-1995	€ 105,229,989	153%
1995-1996	€ 54,473,494	79%
1996-1997	€ 38,520,817	56%
1997-1998	€ 59,523,034	87%
1998-1999	€ 93,254,631	136%
1999-2000	€ 65,803,028[1]	96%
2000-2001	€ 82,965,999	121%
2001 (short year)	€ 33,554,869	49%
2002	€ 64,016,254	93%
Annual Average (excluding 2001)	€ 68,795,843	100%

Source: Revenue Commissioners/ PwC Derived

The annual average value of Section 481 funds raised for the period under review was €68.8 mn, with significant annual variation. The annual variation is largely attributable to changes introduced to the scheme – the reduction in the percentage of investment which can be claimed against taxable income in 1996/1997 from 100% to 80% leading to a sharp fall in the value of investment funds raised, and a sharp increase in 1998/99 when the holding period was reduced to one year and in 2000/01 when the investment cap was raised. The exceptionally large value of Section 481 funds raised in 1994 is mostly attributable to the filming of *Braveheart* in Ireland in that year.

The importance of Section 481 to the audiovisual sector in Ireland is evidenced in Table 2.4, which shows that investment leveraged by the relief has accounted for nearly 80% of the total value of audiovisual production activity (including amounts spend by national broadcasters) in Ireland in recent years.

[1] Differences between figures presented here and those presented in Chapter 3 are attributable to the fact that they have distinct sources, i.e. the Revenue Commissioners and IBEC, as well as to the fact that the Revenue data was collected for most of the years reviewed on an April to April basis, as opposed to a calendar year basis.

Table 2.4 S481-incentivised Production Activity in Context of National Audiovisual Sector

	1999	2000	2001
	€ mn	€ mn	€ mn
S481 Incentivised Investment in Ireland[2]	€ 92	€ 99	€ 111
Total Value of Audiovisual Production Activity in Ireland	€ 117	€ 129	€ 139
S481-incentivised Investment as a % of Total	78%	76%	79%

Source: IBEC/ PwC Derived

It is further evidenced in the strong growth of the audiovisual sector in the period since the incentive was introduced – see Table 2.5

Table 2.5 Audiovisual Production in Ireland, 1982 to 2002

	No. of Productions	Ireland Spend €mn
82 to '92 (Annual Average)	6	€ 14
1993	16	€ 39
1994	61	€ 72
1995	97	€ 81
1996	122	€ 78
1997	105	€ 112
1998	132	€ 108
1999	125	€ 117
2000	162	€ 129
2001	175	€ 139

Source: IBEC/ PwC Derived

Table 2.5 shows that the value of audiovisual production activity in Ireland has grown from an annual average of just €14 mn in the period 1982 to 1992 to €139 mn in 2001, i.e. by a factor of nearly ten. IBEC estimates put employment in the audiovisual sector in Ireland at 1,500 full-time equivalents, more than 800 of which are involved in the production of feature film and major TV dramas. Historical data for the value of feature film and major TV drama production activity in Ireland are not available. However it is clear that feature films, major TV dramas and animation are the focus of Section 481 and that growth in these particular categories has been at least on a par with that for the sector as a whole.

Growth has been driven, to a significant extent, by Ireland's performance in the attraction of productions from the major US studios due to a combination of Section 481 and the availability and quality of film production infrastructures and personnel, which have evolved in tandem with the utilisation of Section 481.

[2] It should be noted that these figures pertain to all S481-leveraged investment as opposed to just the value of S481 funds, although there is a close correlation.

More specifically, Section 481 has promoted major increases in the capacity and capability of the indigenous film production sector by:

- creating a critical mass of demand for high quality film production services (e.g. studios and post production services), leading to the development of the sector's infrastructures;
- exposing indigenous industry participants to the high specifications attaching to big budget US productions such as *Braveheart*, *Saving Private Ryan* and *Reign of Fire*;
- related to the foregoing, creating training opportunities for newly qualified film production personnel.

Evidence of the increased availability and quality of film production infrastructures and personnel is found in the fact that the value of big budget US-commissioned productions that are now attracted to Ireland each year is growing. Two such films are currently in production in Ireland (i.e. *King Arthur* and *Laws of Attraction*), and two were produced in 2002 (i.e. *Veronica Guerin* and *Ella Enchanted*). Indeed, with six feature film production crews in 2003 compared with one just ten years ago, Ireland can now support the production of a number of big budget productions at any one time – with nearly all senior positions (i.e. heads of department) occupied by Irish personnel. A decade ago, the film production skill base and infrastructure could not have supported more than one.

An overview of film production infrastructures and personnel is presented in Box 2.1.

Box 2.1 The Indigenous Film Production Sector in Ireland

Production studios – Ireland is now home to two major production studios (in Dublin and Galway), which offer a range of services including world class sound stages. The significant investment in and development of Ardmore Studios has been particularly important in the attraction of bigger budget films to shoot in Ireland.

Post-production facilities – the post-production sector in Ireland has invested heavily in the upgrading of its services in recent years. Ardmore Sound, for example, has specialised in the area of sound post-production. At this point, the only post production services not available in Ireland are film process laboratories, which are highly capital intensive.

Personnel – recent years have witnessed a dramatic improvement in the skill base of the Irish film production sector. There are now six feature film production crews in Ireland compared with just one a decade ago. These are d

Training – there are an estimated 1,000 students enrolled in courses with film-specific content in Ireland. In addition, Screen Training Ireland has provided training services to more than 2,000 individuals since its inception in 1987.

Source: IFB/ Screen Producers Ireland

2.6 Key Chapter Findings

Key chapter findings are as follows:

- incentives for the film production industry in Ireland were first introduced in 1984 as part of a general scheme aimed at promoting corporate investment in indigenous enterprise (i.e. the Business Expansion Scheme), and developed into a sector-specific initiative in 1987 with the introduction of Section 481 (formerly Section 35);
- significant changes to Section 481 were effected in 1993 when individual investors were allowed avail of the film relief for the first time and as a result of these changes the incentive began to be utilised and developed into a workable model that began to attract overseas producers**;**
- the period 1993 to 2002 witnessed average annual incentivised investment in film production in the region of €69 mn per annum with significant annual variation in response to major changes to the scheme;
- this period also saw the rapid growth of the audiovisual sector in Ireland – fuelled by Section 481-incentivised production activity - with the annual value of audiovisual production activity growing by a multiple of ten in the decade to the end of 2001;
- the role played by Section 481 in the promotion of this growth is evidenced in the fact that tax-incentivised investment now accounts for close to 80% of the total value of audiovisual production activity in Ireland;
- the availability and quality of film production infrastructures and personnel has developed in tandem with the growth of the sector, with Ireland now home to six feature film production crews and two major production studios;
- the development of the infrastructure, coupled with the availability of Section 481, have resulted in Ireland attracting productions from nearly all of the major US studios, as well as in the attraction of a growing number of big budget US films, e.g. *King Arthur* and *Laws of Attraction* in 2003;
- in summary, the existence of tax incentives particular to the film production has been the main driver of the audiovisual sector in Ireland, which has shown exponential growth in the past decade.

Chapter 3 Cost Benefit Analysis of Section 481

3.1 Introduction

This chapter presents PwC's analysis of the Exchequer costs and benefits associated with the operation of Section 481 for the years 1999 to 2001 inclusive. In producing this analysis, the consultants adopted a deliberately conservative approach to the estimation of costs and benefits, taking care to:

- include all Exchequer costs associated with the operation of Section 481, including the estimated costs of scheme administration;
- consider only those benefits that resulted in a tangible financial return to the Exchequer, e.g. PAYE taxes paid as opposed to total value of PAYE earnings;
- exclude all benefits to the Exchequer arising from non-recouped Irish Film Board (IFB) investments in Section 481-incentivised investment in film production in Ireland, given that the original source of these funds is, in fact, the Exchequer itself;
- exclude all employment-related benefits (e.g. PAYE tax) that would have occurred regardless of the existence of Section 481, i.e. adjustment for employment displacement;
- exclude all benefits to the Exchequer associated with Section 481-incentivised investments in film production in Ireland that would have occurred in the absence of the relief, i.e. adjustment for investment deadweight;
- ensure that there was no scope for the double counting of Exchequer benefits in the application of tax multipliers;
- exclude all benefits, the value of which cannot be computed with a high degree of reliability, e.g. indirect taxes on the expenditures of non-national Section 481 employees while in Ireland and taxes generated from stimulation of out-of-state tourism demand.

These practices ensured a tight methodological adherence to Department of Finance guidelines on the preparation of cost benefit analyses of this nature[3].

The remainder of the chapter comprises three sections:

[3] http://www.eustructuralfunds.ie/htm/publications/evaluation/wkrule.doc

- Section 3.2 describes the methodology and assumptions underpinning the estimation of Exchequer costs and benefits;
- Section 3.3 compares total Exchequer benefits and costs for the years 1999, 2000 and 2001;
- Section 3.4 considers the validity of including tourism-related benefits in the analysis.

Key chapter findings are presented in Section 3.5.

3.2 Cost Benefit Analysis Methodology

3.2.1 Introduction

This section describes the methodology applied by the consultants in estimating the annual costs and benefits to the Exchequer associated with the operation of Section 481. An overview of the major categories of cost and benefit is provided in Table 3.1

Table 3.1 Overview of S481 Exchequer Costs and Benefits

Costs	Foregone Tax Revenues
	Scheme Administration
Benefits	Employment-related Benefits
	PAYE Taxes
	PRSI Payments
	Tax Payments on Schedule D Earnings
	Social Welfare Savings
	Miscellaneous Taxes
	Corporation Taxes
	Capital Duties
	Taxes generated as a Result of Incremental Irish Economy Expenditures (IEEs)
	Taxes generated as a Result of incremental S481 Employee Expenditures
	Taxes generated as a Result of the Irish Economy Expenditures of S481-incentivised Production Companies

The remainder of this section comprises four sub-sections. Section 3.2.2 describes the economic database form which all Section 481-incentivised productions must complete as a condition of their funding. Collated by the Audiovisual Federation of the Irish Business Employers Confederation (IBEC), this datasheet was the primary source of information used by the consultants in the computation of both costs and benefits. Section 3.2.3 outlines the methodology underpinning the estimation of Exchequer costs, while Section 3.2.4 outlines the approach taken to the computation of employment-related benefits. Section 3.2.5 presents PwC estimates of the value of miscellaneous taxes arising from the operation of Section 481, while Section 3.2.6 explains the methodology underpinning the computation of Exchequer returns from Section 481-engendered incremental expenditures on goods and services in the Irish economy. Section 481 investment deadweight is the subject of Section 3.2.7.

3.2.2 The IBEC Economic Database Form

Statistics relating to the costs and benefits to the national economy of Section 481 are collated annually by the Audiovisual Federation of the Irish Business Employers Confederation (IBEC). Production companies availing of Section 481 finance are required to provide IBEC with details of funding sources and expenditures in Ireland. Table 3.2 presents an overview of the most significant items of information contained on this form.

Table 3.2 Overview of Information contained in IBEC S481 Economic Database Forms and Used in PwC Analysis

A	**Details of Film Produced**
A.1	Name of Film
A.2	Name of Production Company/ Producers
B	**Total Project Funding**
B.1	Total Project Funding (S481)
B.2	Total Project Funding (Irish Film Board)
C	**Total Expenditures in Ireland**
C.1	Total Labour Expenditures in Ireland
C.1.1	Total Labour Expenditures in Ireland (subject to PAYE)
C.1.2	Total Labour Expenditures in Ireland (not subject to PAYE)
C.1.3	Total PAYE Paid
C.1.4	Total PRSI Paid
C.1.5	Total Corporation Tax Paid
C.2	Total Expenditures in Ireland on Goods and Services
C.2.1	Total Expenditures in Ireland on VAT Irrecoverable Items
C.2.2	Total Expenditures in Ireland on Petrol
D	**Total Project Employment**
D.1	Irish Employment
D.1.1	Irish Employment Hours
D.1.2	Irish Employment Hours by Job Description

Source: PwC

These datasheets have formed the basis of all previous analyses prepared on the economic impact of Section 481 and represented an invaluable information source for the exercise at hand. IBEC provided PwC with detailed project-level data of this nature for the years 1999, 2000 and 2001 inclusive – detailed data for 2002 being, as yet, not available. The consultants subjected the data provided by IBEC to a series of checks to ensure internal consistency and comprehensiveness – leading to the elimination of a very small number of projects[4].

3.2.3 Overview of Section 481 Exchequer Costs

The major Exchequer costs associated with Section 481 are the foregone tax revenues and the annual cost of scheme administration. Estimates of the cost of foregone tax revenues, which were found to be broadly consistent with those produced by the Revenue Commissioners, were computed by applying the average higher rate of personal taxation in the year under review to 80% of Section 481 funds raised – details of which were obtained from the IBEC forms. Findings for 1999, 2000 and 2001 are presented in Table 3.3.

Table 3.3 S481 Foregone Tax Revenue, 1999, 2000 and 2001

	A	B	C	D	E
Source	IBEC		=A*B	RC	=D*C
Year	Total S481 Funds	% Eligible for Relief	S481 Investment Eligible for Relief	Average Higher Rate of Personal Taxation	Cost of Foregone Tax Revenue
1999	€ 73,621,235	80%	€ 58,896,988	46.0%	€ 27,092,614
2000	€ 75,046,294	80%	€ 60,037,035	44.5%	€ 26,716,481
2001	€ 65,228,579	80%	€ 52,182,863	42.5%	€ 22,177,717

Source: IBEC/ PwC Derived

The costs of scheme administration were estimated by applying the relevant rates of public service pay[5] in 2002 (deflated by 2.5% for each year to reflect wage inflation) to the number of individuals within the Department of Arts, Sport and Tourism and the Revenue Commissioners[6] involved in the administration of Section 481 – adjusted to reflect the proportion of the relevant individual's time spent on the scheme. Miscellaneous expenses (e.g. cost of producing information booklet) were assumed at €20,000 in 1999 and indexed annually. Estimates are presented in Table 3.4.

[4] Four out of a total of seventy project files were eliminated on this basis.
[5] The lowest point on the standard pay scale for each of these grades was assumed in 2002.
[6] Consultations with the relevant organisations indicated a resource allocation of: one Executive Officer (100%); three Higher Executive Officers (100%); and one Principal Officer (5%). A total of two HEOs was assumed for the Revenue Commissioners,

Table 3.4 Estimated Costs of S481 Administration

	Personnel	Miscellaneous Expenses	Total
1999	€ 151,758	€ 20,000	€ 171,758
2000	€ 155,551	€ 20,500	€ 176,051
2001	€ 159,440	€ 21,013	€ 180,453
Annual Average	€ 155,583	€ 20,504	€ 176,087

Source: PwC Derived

While the costs of foregone tax revenue and scheme administration were relatively easily computed, the question of how to treat non-recouped or net Irish Film Board (IFB)[7] assistance to Section 481-incentivised projects for the purposes of computing benefits, proved more conceptually challenging. The consultants identified three potential approaches to the treatment of net IFB assistance in the estimation of Section 481 costs and benefits, namely:

- inclusion of the full value of net IFB assistance to projects as a cost to the Exchequer;
- exclusion of net IFB assistance for the purposes of computing benefits;
- inclusion of net IFB assistance for the purposes of computing benefits.

A detailed review of the rationale underpinning each of these approaches led PwC to conclude that the second approach, i.e. (b) or the exclusion of net IFB assistance for the purposes of computing benefits, was the most appropriate. This conclusion was based on the following considerations:

- approach (a) implies the erroneous assumption that the discontinuation of Section 481 would lead to a commensurate decline in the annual budget of the Irish Film Board, when the likelihood is that dependence on this funding source would increase considerably as a direct result;
- approach (c) implies the reality that the benefits to the Exchequer generated as a result of net IFB assistance are not additional, i.e. alternative investment of these funds by Government would also yield Exchequer benefits, and for this reason should not be included in the computation of total benefits.

The practical application of this approach entailed the pro-rata reduction of all Ireland expenditures (i.e. labour and goods & services) by the ratio of total production expenditures

[7] Irish Film Board assistance is reclaimed in part or in full in a situation where an assisted production enjoys commercial success.

less the non-recouped IFB spend to total production expenditures. This ensured that no Exchequer benefits were attributed to the non-recouped IFB spend[8].

3.2.4 Computing Section 481 Employment-related Benefits

The computation of the Section 481 employment-related benefits to the Exchequer required the consultants to undertake a series of tasks, namely:

- modify PAYE and PRSI payment details contained in the IBEC forms (see Table 3.2) to ensure exclusion of benefits derived from non-recouped IFB investment;
- formulate assumptions regarding the effective rate of tax paid on the Schedule D earnings (i.e. self-employed) of Irish residents arising from Section 481 – details of which are contained in the IBEC datasheet, and apply these to the Schedule D earnings of Irish residents reduced for non-recouped IFB spend;
- formulate assumptions regarding the extent to which Section 481-related employment benefits would have occurred in the absence of Section 481, i.e. employment displacement;
- formulate assumptions regarding the number of individuals that would have made a social welfare claim in the absence of Section 481 to allow for the computation of the social welfare savings to the Exchequer associated with the relief.

Taxes Paid on Employment [(a) and (b)]

With regard to (a) and (b) above, a review of the Revenue Commissioners annual reports for the years 1999, 2000 and 2001 pointed to an assumed average effective rate of Schedule D taxation of the order of 21%. Applying this assumption, Table 3.5 provides an overview of how gross (i.e. not adjusted for displacement) Section 481 employment benefits to the Exchequer were computed for the three years under review.

[8] Details of IFB investments in S481-incentivised productions were contained in the IBEC datasheets, while the IFB provided PwC with estimates of the % of funds invested in S481 projects that had been recouped. These are: 1999 (28%); 2000 (5%); 2001 (15%).

Table 3.5 Computation of Gross S481 Employment Benefits (€ mn) to the Exchequer[9]

	A	B	C	D	E	F	G	H	I
Source	IBEC	IBEC	IBEC	PwC/ IBEC	PwC/ IBEC	PwC/ IBEC	PwC	=F * G	= H +E + D
				Adjusted for Non-Recouped IFB Spend					
	PAYE Taxes	PRSI Taxes	Schedule D Earnings	PAYE Taxes	PRSI Taxes	Schedule D Earnings	Rate of Schedule D Taxation[10]	Schedule D Taxes	Total Employment Taxes
1999	€ 3.6	€ 2.4	€ 29.2	€ 3.5	€ 2.4	€ 28.3	21%	€ 5.9	€ 11.8
2000	€ 3.7	€ 2.7	€ 35.8	€ 3.6	€ 2.7	€ 35.2	21%	€ 7.4	€ 13.7
2001	€ 3.3	€ 2.8	€ 35.5	€ 3.3	€ 2.7	€ 34.7	21%	€ 7.3	€ 13.3

Source: IBEC/ PwC Derived

Table 3.5 shows that the Exchequer received €13.3 mn in PAYE, PRSI and Schedule D tax payments from Section 481-employed Irish residents in 2001. Estimates for 2000 and 1999 are €13.7 mn and €11.8 mn respectively.

Adjusting Employment Taxes for Displacement (c)

The data in Table 3.4 are, however, gross estimates of employment related returns, i.e. they reflect no adjustment for the fact that in a labour market as tight as that which characterised the three years under review, many of the individuals in receipt of Section 481 employment earnings could have found employment elsewhere in the economy. To allow for the formulation of a reliable overall estimate of net or incremental employment-related benefits to the Exchequer, the consultants – based on consultations with industry experts - formulated a series of assumptions of the likely employment status of the four major categories of Section 481 Irish employee[11] if the film production(s) on which they were employed did not proceed. These assumptions are presented in Table 3.6.

Table 3.6 Assumptions regarding Employment Status of S481 Employees if Film Production in Question had Not Taken Place

Employment Status	% that would find alternative employment of similar value in Ireland	% that would emigrate in pursuit of employment opportunities	% that would reside in Ireland and earn 60% of film production earnings	% that would seek social welfare assistance	% of Earnings which are Displaced/ Would have Happened regardless of S481
Column Number	A	B	C	D	E
Source	PwC	PwC	PwC	PwC	'= A + (C * 0.6)
Sector-specific / Highly Skilled	10%	70%	20%	5%	19%
Sector-specific / Moderately Skilled	10%	40%	30%	20%	28%
Transferable Labour/ Non Sector Specific	40%	0%	50%	10%	70%
Casual Labour	60%	10%	10%	20%	66%

Source: PwC

[9] It should be noted that only income payments to Irish residents have been included in this analysis. No regard was had to payments made to non-national workers in Ireland.
[10] This assumption is based on the effective rate of taxation paid on Schedule D incomes given in the Annual Statistical Report of the Revenue Commissioners 2001.
[11] Details of the jobs falling into each of these categories is presented as Annex 2.

It is assumed that the greatest share of the Section 481 earnings of "transferable" employees (e.g. construction) would have been realised regardless of the existence of the relief. This is also assumed to be the case for casual labour (66%), although the proportion is marginally lower to reflect the fact that a higher share of employees in this category (e.g. retired individuals) would not seek an alternative source of earnings if the film(s) on which they were employed had not been produced. By contrast, rates of employment displacement are assumed to be lowest for employees whose skills are highly specific to the film production sector, e.g. principal cast, directors and producers. It thus follows that those Section 481-incentivised productions with relatively large shares of transferable or casual full-time equivalent jobs (ftes) will have high levels of employment displacement (i.e. employment-related benefits must be discounted heavily) and vice versa.

The assumptions contained in Table 3.6 pertain to earnings and, for this reason, it was necessary to prepare estimates of the composition of Section 481 PAYE and Schedule D earnings for the four categories of employee listed in the table for all of the projects under review. This required the formulation of standard assumptions regarding the earnings relativities of a single full-time equivalent job in each of these categories. These assumptions are shown in Table 3.7 (see column B – "earnings relativities"), as is the means by which they were applied to IBEC-provided employment data for a single, randomly selected, S481-incentivised film produced in 2001.

Table 3.7 Application of Earning Relativity Assumptions to Produce Estimate of Earnings Displacement/ Randomly Selected S481 Production

	A	B	C	D	E	F	G	H	I
	IBEC	PwC	' = A * B	= C/ Total C	IBEC	= D * E	Table 3.6	= F * G	= H/ F
	Total FTEs	Earnings Relativities (1 FTE)	Earnings weighted FTEs	% Distribution of Earnings	Irish Labour Spend	Distribution of Earnings	Earnings Displacement	Total Earnings Displaced	% of Earnings Displaced
Sector-specific / Highly Skilled	8.2	2	16	70%		€ 271,089	19%	€ 51,507	
Sector-specific / Moderately Skilled	4.1	1.5	6	26%		€ 102,054	28%	€ 28,575	
Transferable Labour/ Non Sector Specific	0.7	1	1	3%		€ 11,603	70%	€ 8,122	
Casual Labour	0.4	0.6	0	1%		€ 4,114	66%	€ 2,715	
Total	13		24	100%	€ 388,859	€ 388,859		€ 90,919	23%

Source: IBEC/ PwC Derived

Table 3.7 shows that the application of the earnings relativity assumptions – coupled with assumptions regarding "normal" employment status of employees of Section 481 companies – led to an estimated incidence of employment displacement of 23% for the project selected. Gross estimates of PRSI, PAYE and Schedule D tax payments were reduced by this amount to arrive at an estimate of net Section 481 employment benefit to the Exchequer for the project in question. This process was repeated for all of the projects under review to allow for the production of annual aggregate estimates of gross and net employment-related tax payments to the Exchequer. Findings are presented in Table 3.8.

Table 3.8 Displacement Rates of S481 Irish Employee Earnings (Applied to Gross Tax Revenues), 1999, 2000 and 2001

	A	B	= 1 – (B / A)
	Gross PAYE, PRSI and Schedule D Payments of S481 Employees	Net PAYE, PRSI and Schedule D Payments of S481 Employees	% of Irish Earnings which are Displaced
1999	€ 11,834,473	€ 7,533,557	36%[12]
2000	€ 13,719,478	€ 8,481,702	38%
2001	€ 13,300,905	€ 8,121,681	39%

Source: IBEC/ PwC Derived

Table 3.8 shows assumed rates of employment displacement for Section 481 as a whole in excess of 35% for the three years under review. The relatively low incidence of displacement in the case of the project reviewed in Table 3.7 points to a relatively high share of sector-specific employment compared with the total for all Section 481 projects.

Computing the Value of Social Welfare Savings (d)

The second employment-related benefit accruing to the Exchequer as a result of Section 481 is savings on social welfare payments, i.e. employment created as a result of Section 481 reduces the incidence of social welfare claims. Applying assumptions of the share of the employees of Section 481 production companies that would have depended on social welfare in the absence of the incentivised production (see Table 3.6) to the total number of full-time equivalent jobs attributable to Section 481-incentivised productions and multiplying this number by the average annual cost to the State of social welfare (unemployment benefit) claimants allowed the consultants to place a value on this benefit. Details are provided in Table 3.9.

[12] It should be noted that these figures are rounded.

Table 3.9 Estimating the Value of Social Welfare Savings associated with S481 to the Exchequer, 1999, 2000 and 2001

Column Name	A	B	C	D	E	F	G	H	I	J
Source	PwC/ Table 3.6	IBEC	IBEC	IBEC	= A * B	= A * C	= A * D	= E * B	= F * C	= G * D
Employment Type	% of employees that would have claimed social welfare if no S481	1999	2000	2001	1999	2000	2001	1999	2000	2001
Sector-specific / Highly Skilled	5%	385	309	275	19	15	14	€ 99,841	€ 87,878	€ 115,655
Sector-specific / Moderately Skilled	20%	254	246	229	51	49	46	€ 263,275	€ 279,911	€ 384,367
Transferable / Non Sector Specific	10%	353	420	382	35	42	38	€ 183,412	€ 238,895	€ 320,972
Casual Labour	20%	111	63	81	22	13	16	€ 115,564	€ 71,404	€ 135,568
Total	n.a.	1,103	1,037	967	128	119	114	**€ 662,092**	**€ 678,087**	**€ 956,561**
Average Annual Cost to State of Single Benefit Claimant (DoSCFA)		€ 5,192	€ 5,691	€ 8,404						

Source: Department of Social, Community & Family Affairs/ PwC Derived

The value of Section 481-driven social welfare savings to the Exchequer in 2001 is estimated at €956,561. The respective figures for 1999 and 2000 are €662,092 and €678,087.

3.2.5 Computing the Value of Miscellaneous Taxes

Two additional sources of benefit to the Irish Exchequer arising from Section 481 are:

- capital duties payable on Section 481 shares issued to investors;
- payment of corporation taxes by special purpose production companies.

Capital duties payable by the special purpose production companies on Section 481 investments amount to 1% of the total amount invested, while IBEC provide data on the value of corporation taxes paid in Ireland by Section 481 special purpose production companies. Details of both are provided in Table 3.10.

Table 3.10 Total Value of Miscellaneous Taxes paid by S481 Companies/ Investors

	1999	2000	2001
Total Value of S481 Investment (Table 3.3)	€ 73,621,235	€ 75,046,294	€ 65,228,579
Capital Duties Payable	€ 736,212	€ 750,463	€ 652,286
Corporation Taxes paid	€ 35,712	€ 9,416	€ 6,663
Total Value of Miscellaneous Taxes	€ 771,925	€ 759,879	€ 658,949

Source: IBEC/ PwC Derived

The total value of miscellaneous taxes arising from the operation of Section 481 to the Exchequer in 2001 was €658,949. This compares with €759,879 in 2000 and €771,925 in 1999.

3.2.6 Computing the Tax Take from Section 481-induced Irish Economy Expenditures

Section 481-incentivised film production activities contribute to the volume of expenditures on goods and services within the Irish economy in two ways, namely:

- indirectly through the incremental consumer expenditures of Irish individuals in receipt of earnings from Section 481-incentivised production companies;
- directly through the expenditures of the film production companies on goods and services (excluding direct labour[13]) in the Irish economy.

IBEC collect data on the expenditures of Section 481 film production companies on goods and services and labour in the Irish economy. Summary details (deflated to remove the value of non-recouped IFB spend) are presented in Table 3.11.

Table 3.11 S481-incentivised Production Company Spend on Goods & Services in Ireland

	1999	2000	2001
Total Expenditures in Ireland	€ 88,669,451	€ 96,916,443	€ 108,582,882
- Labour	€ 46,456,797	€ 53,618,791	€ 53,180,418
- Goods and Services	€ 42,212,654	€ 43,297,652	€ 55,402,464

Source: IBEC/ PwC Derived

The incremental consumer expenditures of Irish employees are estimated by:

- adjusting the total Section 481 earnings of Irish residents (e.g. €53 mn in 2001) to reflect the occurrence of employment displacement;
- reduction of the balance of earnings for tax payments, i.e. net income;
- reduction of net income by the total value of consumer expenditures that would have been sustained by the State in the absence of Section 481, i.e. the total value of social welfare savings;
- reduction of this amount by an assumed amount of savings to produce an estimate of the incremental consumer expenditures of employees of Section 481 production companies.

Details of these computations for all three years under review are presented in Table 3.12.

[13] Exchequer benefits attaching to which were estimated in Section 3.2.4.

Table 3.12 Estimating Incremental Consumer Expenditures of S481 Employees

			1999	2001	2001
A	Table 3.11	Total Earnings	€ 46,456,797	€ 53,618,791	€ 53,180,418
B	Table 3.11 * Table 3.8	Total Additional Earnings	€ 29,912,053	€ 33,259,571	€ 32,968,523
C	Table 3.8	Total Tax Payments	€ 7,533,557	€ 8,481,702	€ 8,121,681
D	Table 3.9	Social Welfare Savings	€ 662,092	€ 678,087	€ 956,561
E	= B – (C+D)	Total Incremental Earnings less Tax & SW	€ 21,716,404	€ 24,099,782	€ 23,890,281
F	PwC	Assumed Rate of Savings	15%	15%	15%
G	= E * (1-F)	Incremental IEEs	€ 18,458,943	€ 20,484,815	€ 20,306,739

Source: PwC Derived

Benefits to the Exchequer from incremental Irish economy expenditures such as those described in Tables 3.11 and 3.12 fall into three distinct categories, namely:

- **direct benefits** – including indirect taxation on expenditures, as well as incremental income and corporation taxes stemming from the increased profits of businesses that benefit directly from the additional spend;
- **indirect benefits –** the incremental income and corporation taxes stemming from the increased profits enjoyed by suppliers to those enterprises that benefit directly from the incremental expenditures within the economy;
- **induced benefits –** the indirect taxes paid by those individuals in receipt of incremental employment income.

The computation of these Exchequer benefits requires the use of tax multipliers.

Tax multipliers show the tax take from a given unit of incremental expenditure as the effects of the spend work their way through the national economy. In common with employment and national output multipliers, they are derived using sectorally-based Input Output tables prepared by the Central Statistics Office (CSO). The use of indirect and induced multipliers in cost benefit studies of this nature is considered legitimate practice by the Department of Finance, as long as care is exercised to ensure that the potential for double-counting is minimised and that the data to which these multipliers are applied are specific to the Irish economy. These requirements are clearly met in the case of this exercise, i.e. benefits are described in tax take terms only and the data to which the multipliers are applied are taken directly from Ireland-based film productions.

While tax multipliers for the film production sector in Ireland do not exist, the profile of expenditures (both employee and film production company) represents a good fit with the

CSO-defined "other market services" (NACE) sector, from which tax multipliers for the tourism sector have been derived. These tax multipliers were first derived by Professor Eamonn Henry of the ESRI for the year 1993 and have recently been updated, on behalf of Fáilte Ireland, to 2000. Together with employment and national output multipliers which were devised at the same time, these multipliers have been used extensively in the preparation of cost benefit analyses on behalf of Government Departments and State Agencies in Ireland, and form the basis of Fáilte Ireland estimates of the annual economic contribution of the Irish tourism sector. They have also been employed extensively in the preparation of cost benefit analyses of projects/ programmes that are likely to engender a general "market services" spend within the economy, including the Special Olympic World Games, the National Conference Centre and the National Stadium.

The tax multipliers are shown in Table 3.13.

Table 3.13 Exchequer Tax Take from Market Services Expenditure in Ireland (% of Expenditure), 2000

	Direct	Direct & Indirect	Direct, Indirect & Induced
Domestic Tourism/ Market Services Expenditures	28.9%	35.4%	35.4%
Out-of-State Tourism/ Market Services Expenditures	30.2%	37.1%	47.2%

Source: Fáilte Ireland, 2002

Table 3.13 shows that €1 of domestic expenditure generates €0.29 or 29% in tax revenue for the Exchequer – made up of a combination of indirect taxes (e.g. VAT and excise) and the incremental taxes generated as a result of the increased profitability of the businesses that benefit directly from their expenditures. The respective share of out-of-state expenditures that finds its way back to the Exchequer (directly) is just marginally higher at €0.30. A high rate of assumed displacement of domestic expenditures (i.e. a high likelihood that domestic tourism expenditures would have occurred in the Irish economy even if the domestic trip was not undertaken) means that no benefits are assumed after the indirect stage – with the tax take per €1 of expenditure capped at €0.35. This is not the case for out-of-state expenditures which are assumed to generate €0.47 in tax for every €1 of expenditure when direct, indirect and induced benefits are considered.

There are, however, clearly a number of important distinctions between the incremental consumer expenditures of Section 481 employees and domestic tourism expenditures, as well as between the incremental expenditures of Section 481-incentivised film production companies (indigenous or otherwise) and the "market services" expenditures of international tourists in Ireland[14] which have implications for the direct applicability of these tax multipliers to this cost-benefit analysis of Section 481. Primary among these are the following:

- the fact that film production companies availing of Section 481 are able to recover a significant share of their VAT payments;
- the fact that PwC computations of the expenditures of Section 481 employees are incremental (i.e. entirely stripped of the value of spend that would have occurred in the absence of Section 481) – unlike domestic tourism expenditures which are considered to incorporate a high level of displacement[15].

The implication of the first of these points is that the tax take from €1 of out-of-state tourism expenditure is greater than that from €1 spent by a VAT-registered film production company. The implication of the second is that the tax take from domestic tourism at the direct, indirect and induced stage represents a considerable underestimate of the tax take from the entirely incremental consumer expenditures of Section 481 employees.

Given these facts, it was considered necessary to adjust the multipliers presented in Table 3.13 to render them more applicable to the film production industry.

Adjusting the Domestic Multiplier

In adjusting the multiplier for domestic expenditures, the consultants had regard to the fact that the assumed potential for displacement is the major factor underpinning the sharp deviation of the tax multiplier for domestic expenditure from that of international expenditures when induced effects are considered, i.e. the differential between the domestic and international tax multiplier is less than 2% in the case of the direct and indirect multipliers, but rises to 12% when induced benefits are taken into account. To compensate for the fact that the potential for expenditure displacement has been entirely stripped from PwC estimates of the consumer expenditures of employees of Section 481 production companies, the direct, indirect and induced multiplier for domestic expenditures was inflated by six percentage points, i.e. from 35.4% to 41.4%. This is conservative, to the extent that the differential between the domestic and international multiplier at the direct, indirect and

[14] Multipliers for international tourism spend are applied to production company spend for a number of reasons, namely: a) the relatively high incidence of displacement built into the domestic tourism multipliers are not applicable to the S481 film production activity – the likelihood of S481 funds having been invested elsewhere in the economy if the productions in question had not proceeded in Ireland being low; b) a very large share of the finance for S481-incentivised productions is sourced, directly or indirectly, from overseas; c) the profile of Ireland economy expenditures is reported not to differ considerably between productions that are financed predominantly using indigenous finance and those that are financed predominantly using international finance; d) all S481 companies are VAT-registered – regardless of their sources of finance.

[15] i.e. in devising the multipliers, it was assumed that a very large share of the domestic tourism expenditures would have been incurred in the Irish economy, even if the domestic tourism trip was not undertaken. In other words, it was assumed that individuals might have substituted their domestic tourism spend with some other form of expenditure within the Irish economy (e.g. refitting of kitchen/ purchase of white good).

induced stage (i.e. 6%) is still much higher than at the direct or indirect stages (i.e. < 2%).

Adjusting the International Multiplier

By contrast, the multiplier for international consumer expenditures is reduced to reflect the fact that film production companies have much smaller VAT liabilities per €1 of spend than international tourists/ consumers. In making this adjustment, the consultants had regard to the facts that: a) the VAT component of €1 in 2001 was €0.1736 (i.e. €1 - €1/1.21[16]); b) IBEC data for 1999, 2000 and 2001 indicate that film production companies typically make VAT payments to the value of 2% of total Ireland expenditures on goods and services[17].

Adjusting the direct tax take multiplier for international expenditures (see Table 3.13) for these factors (i.e. 30.2% - 17.36% + 2%) gives a direct tax multiplier for the Ireland expenditures of Section 481-incentivised film production companies of 14.9%. The "direct and indirect" and "direct, indirect and induced" were reduced by the same percentage amount[18]. Resultant multipliers are presented in Table 3.14.

Table 3.14 Assumed Exchequer Tax Take from Film Production Expenditure in Ireland (% of Spend)

	Direct	Direct & Indirect	Direct, Indirect & Induced
Incremental Consumer Expenditures of Film Production Employees	28.9%	35.4%	41.4%
Film Production Company Expenditures on Goods and Services	14.9%	21.8%	31.8%

Source: Failte Ireland 2002/ PwC Derived

These multipliers were applied to estimates of Section 481-engendered incremental expenditures in the Irish economy to produce estimates of the full value of these incremental expenditures to the Exchequer, i.e. the tax take. Findings are presented in Table 3.15.

16 While the VAT rate fell to 20% in the tax year 2000, for the purposes of simplicity a standard 21% is assumed for the three years under review. The adjustment for the 20% rate in 2000 would serve to increase the value of tax take from the IEEs of film production companies in this year.
17 These payments are made on VAT irrecoverable items, e.g. accommodation services.
18 i.e. 30.2% – 14.9% = 15.36%. The original direct and indirect multiplier was, therefore, reduced from 37.1% to 21.8% and the original direct, indirect and induced multiplier was reduced from 47.2% to 31.8%.

Table 3.15 Tax Take from S481-induced Incremental Irish Economy Expenditures (IEEs)

	1999	2000	2001
Incremental Employee Spend (Table 3.12)	€ 18,458,943	€ 20,484,815	€ 20,306,739
	Direct	Direct & Indirect	Direct, Indirect & Induced
Tax Multipliers (Table 3.14)	29%	35%	41%
1999	€ 5,329,097[19]	€ 6,528,928	€ 7,636,465
2000	€ 5,913,966	€ 7,245,479	€ 8,474,568
2001	€ 5,862,555	€ 7,182,493	€ 8,400,898
Total Incremental Company Spend (Table 3.11)	€ 42,212,654	€ 43,297,652	€ 55,402,464
	Direct	Direct & Indirect	Direct, Indirect & Induced
Tax Multipliers (Table 3.14)	15%	22%	32%
1999	€ 6,278,975[20]	€ 9,183,206	€ 13,442,463
2000	€ 6,440,365	€ 9,419,243	€ 13,787,976
2001	€ 8,240,910	€ 12,052,600	€ 17,642,709
Total Tax Take from S481 IEEs	Direct	Direct & Indirect	Direct, Indirect & Induced
1999	€ 11,608,072	€ 15,712,134	€ 21,078,927
2000	€ 12,354,331	€ 16,664,722	€ 22,262,544
2001	€ 14,103,466	€ 19,235,093	€ 26,043,606

Source: PwC Derived

It is clear from Table 3.15 that the Exchequer derives considerable benefit from the incremental Irish economy expenditures engendered by Section 481. The total value of these benefits in 2001 is estimated at more than €26 mn when all impacts (i.e. direct, indirect & induced) are considered. This figure marks an increase on the years 2000 and 1999 when benefits of the order of €22 mn were recorded.

3.2.7 Adjusting Benefits for Section 481 Investment Deadweight

The deadweight concept relates to the volume of Section 481-incentivised film production activity that would have proceeded in Ireland even in the absence of the incentive. As part of the research process for this report, PwC questioned international and indigenous producers about the incidence of project deadweight in Section 481. Key findings were the following:

- 73% of international producers surveyed as part of this exercise indicated that they would not consider producing films in Ireland in the absence of Section 481 or some

[19] This figure was arrived at by multiplying the total value of incremental employee spend (€18.5 mn) in 1999 by the direct tax multiplier, i.e. 29%. The direct and indirect figure in 1999 (i.e. €6.5 mn) was arrived at by multiplying the total value of incremental employee spend (€18.5 mn) by the direct and indirect tax multiplier, i.e. 35%, and so on and so forth.

[20] Similiarly, this figure was arrived at by multiplying the total value of incremental company spend (€42.2 mn) in 1999 by the direct tax multiplier, i.e. 15%. The direct and indirect tax take in 1999 (i.e. €9.1 mn) was arrived at by multiplying the total value of incremental company spend (€42.2 mn) by the direct and indirect tax multiplier, i.e. 22%, and so on and so forth.

other incentive that made a similar contribution to budget – reflecting the mobility of film production activity particularly in the current cost climate;

- in the case of off-shore productions with a content bias towards Ireland, it was reported that the financially "marginal" nature of the majority of such productions meant that, in the absence of Section 481, it may well have been decided not to proceed with the production;
- indigenous production companies reported that Section 481 had assumed an even greater importance in their production activities in recent years – as a result of the virtual collapse of the pre-sales market for small to mid-sized productions;
- it was additionally reported that the discontinuation of Section 481 would lead to many of the leading indigenous producers moving to work in locations retaining film production incentives, with important implications for the volume of indigenous film production domestically;
- the Section 481 beneficiaries least likely to be very seriously affected by the discontinuation of the incentive are the television broadcasters – reflecting a recent commitment to the promotion of local or "home-grown" production.

Based on the foregoing, and having regard to the fact that the information provided to the consultants by IBEC did not allow for a distinction between off-shore productions with a creative bias towards Ireland and those without, the consultants formulated a series of assumptions regarding project deadweight by project type – see Table 3.16.

Table 3.16 Assumed Incidence of Deadweight by S481 Project Type

	% of Film Production Value in Ireland that would have Proceeded in the Absence of S481
Off-Shore Production[21]	10%
Co-production	20%
Indigenous	35%

Source: PwC Assumption

While the distinctions contained in Table 3.16 are somewhat simple, their application marks an improvement on previous approaches to the issue of deadweight in relation to Section 481, where no distinction was made between the nature of the productions.

With the exception of capital duties payable by the Section 481 special purpose production companies (which would not have been incurred in the absence of Section 481), all of the benefits described in the previous sections must be deflated to allow for the fact that certain

[21] Off-shore was defined as a production that was in receipt of no indigenous funding with the exception of S481. Co-production was defined as a production dependent on non-national sources for at least 10% of its non-S481 budget, while productions with a dependence lower than this were classified as indigenous.

of them would have been realised even in the absence of Section 481. This was achieved through the application of the relevant deadweight assumption contained in Table 3.16 to the total value of the individual benefit items on a project-by-project basis. Differences in the off-shore, indigenous and co-production composition of Section 481 projects between the years led to marginally different rates of benefit deadweight – see Table 3.17.

Table 3.17 Assumed Incidence of S481 Investment/ Benefit Deadweight, 1999, 2000 and 2001

	% of S481 Exchequer Return that would have been Realised in Absence of S481
1999	15%
2000	14%
2001	16%

Source: PwC Derived

Benefits are deflated to reflect these assumptions in the next section, which compares the costs and benefits of Section 481 to the Exchequer.

3.3 Total Costs and Benefits to the Exchequer of Section 481

Table 3.18 presents a summary overview of the costs and benefits to the Exchequer associated with the operation of Section 481.

Table 3.18 S481 Costs and Benefits to the Exchequer Compared, 1999, 2000 and 2001

	1999	2000	2001	Total
Costs				
Total Foregone Tax Revenues (Table 3.3)	€ 27,092,614	€ 26,716,481	€ 22,177,717	€ 75,986,812
Cost of Scheme Administration (Table 3.4)	€ 171,758	€ 176,051	€ 180,453	€ 528,262
Total Costs	€ 27,264,372	€ 26,892,532	€ 22,358,170	€ 76,515,074
Benefits				
Incremental Taxation on Irish Employment (Table 3.8)	€ 7,533,557	€ 8,481,702	€ 8,121,681	€ 24,136,940
Social Welfare Savings (Table 3.9)	€ 662,092	€ 678,087	€ 956,561	€ 2,296,741
Taxes raised on Incremental Employee Expenditures (Table 3.15)	€ 7,636,465	€ 8,474,568	€ 8,400,898	€ 24,511,930
- Direct	€ 5,329,097	€ 5,913,966	€ 5,862,555	€ 17,105,618
- Indirect	€ 1,199,831	€ 1,331,513	€ 1,319,938	€ 3,851,282
- Induced	€ 1,107,537	€ 1,229,089	€ 1,218,404	€ 3,555,030
Additional Taxes raised on Film Production Spend on Goods and Services in Ireland (see Table 3.15)	€ 13,442,463	€ 13,787,976	€ 17,642,709	€ 44,873,147
- Direct	€ 6,278,975	€ 6,440,365	€ 8,240,910	€ 20,960,250
- Indirect	€ 2,904,231	€ 2,978,878	€ 3,811,690	€ 9,694,799
- Induced	€ 4,259,257	€ 4,368,733	€ 5,590,109	€ 14,218,098
Total Other Taxes and Duties (see Table 3.10)	€ 771,925	€ 759,879	€ 658,949	€ 2,190,752
- Capital Duties	€ 736,212	€ 750,463	€ 652,286	€ 2,138,961
- Corporation Tax	€ 35,712	€ 9,416	€ 6,663	€ 51,791
Total Benefits	€ 30,046,501	€ 32,182,212	€ 35,780,797	€ 98,009,511
Total Benefits- Adjusted for Deadweight	€ 25,437,236	€ 27,695,907	€ 30,008,262	€ 83,141,405
Cost & Benefits Compared				
Total Benefits – Total Costs	-€ 1,827,136	€ 803,375	€ 7,650,093	**€ 6,626,331**
Average Annual Net Benefit				**€ 2,208,777**

Source: PwC Derived

Table 3.18 shows that the Irish Exchequer gained more than €6.6 mn from the operation of Section 481 in the years 1999 to 2001 inclusive. The return to the Exchequer was not, however, even across all of these years – rather 1999 cost the Exchequer an estimated €1.8 mn, compared with a net yield of €7.7 mn in 2001.

Year-on-year variations of this nature are attributable to a combination of the reduced cost of Section 481 to the Exchequer as a result of falling tax rates as well as annual variations in the project composition. This is evidenced in Table 3.19 which shows the ratio of costs (excluding administration costs on the basis that they cannot be allocated by project) to benefits by project type and the size of the Ireland production budget.

Table 3.19 S481 Costs to Exchequer as a % of Benefit by Project Type and Size of Irish Production Budget, 1999, 2000 and 2001

	1999		2000		2001	
Size of Irish Production Budget	Number of Projects	Cost as % of Benefit	Number of Projects	Cost as % of Benefit	Number of Projects	Cost as % of Benefit
< = IR£1,000,000	2	113%	7	116%	1	167%
> IR£1,000,000 < = IR£2,000,000	5	116%	2	109%	6	100%
> IR£2,000,000 < = IR£3,000,000	10	118%	3	124%	2	111%
> IR£3,000,000 < = IR£5,000,000	3	114%	7	98%	7	100%
> IR£5,000,000 < = IR£10,000,000	3	89%	3	99%	3	89%
> IR£10,000,000	0	0%	1	70%	1	27%
Total	23	107%	23	96%	20	74%

Source: PwC Derived

It is clear from Table 3.19 that there is a relatively strong correlation between project size and the likelihood of a project yielding a positive return to the Exchequer. Related to this, and reflecting their typically larger size, off-shore productions are more likely to make a positive return to the Irish Exchequer than their often less well-resourced indigenous counterparts or co-productions. Assumptions of investment deadweight presented in Table 3.16 also have a role to play in this regard.

3.4 Section 481 and Promotion of International Tourism

The foregoing analysis of the Exchequer benefits of Section 481 had regard only to taxes generated as a direct result of film production activity in Ireland. Film production activity can, however, also have very favourable knock-on effects on other sectors of the economy with positive implications for Exchequer finances – most notably tourism. New Zealand presents an excellent case study in this regard – the tourism promotional value associated with production of the "*Lord of the Rings*" trilogy there is estimated at some €37 mn by the New Zealand Institute of Economic Research.

The extent to which benefits of this nature have been realised in Ireland as a result of the operation of Section 481, and related to this the case for the incorporation of such benefits into this cost-benefit analysis, is less clear. A number of factors, however, point to the film production sector in Ireland as a significant driver of tourism demand.

Firstly, statistics produced annually by Fáilte Ireland point consistently to Irish film as a source of influence in the choice of holiday destination – with the importance of this factor coming close to the influence of Tourism Ireland marketing in certain markets. Notwithstanding this, the multiple choice nature of the question from which these findings are derived – coupled with the fact that films of relevance may date back to the time of

Ryan's Daughter or even *Quiet Man* – mean that the consultants are reluctant to place undue reliance on these findings for the purposes of computing tourism-related Section 481 benefits to the Exchequer.

Secondly, it is clear that a number of Section 481-incentivised productions in recent years have had a very significant impact on tourism demand.

The co-produced TV series *Ballykissangel* is a prime example in this regard as it attracted huge weekly audiences in the UK at its peak in the late 1990s. According to a spokesman from its commissioning body, BBC, it is highly unlikely that the series (54 episodes) would have been produced in the Republic of Ireland in the absence of Section 481. Its showing coincided with exceptionally strong growth in the short-break market from the UK, as well as with the rapid tourism development of the County Wicklow village of Avoca.

On the other hand, however, a significant number of Section 481-incentivised productions do not identify Ireland as the location where the film was shot. Further certain productions which present Ireland in a highly favourable light fail to reach large audiences in Ireland's major tourism source markets (i.e. UK, France, Germany and the US).

In summary, while it is without doubt that Section 481-incentivised film production activity has contributed to the very strong out-of-state tourism demand for Ireland that has characterised the last 10 years, it is the view of the consultants that the unquantifiable nature of this impact means that it is difficult for it to be meaningfully incorporated into the Section 481 Exchequer benefits outlined in Section 3.3. Notwithstanding this, the potential for an incentive such as Section 481 to deliver tourism benefits on the scale of those currently being realised in New Zealand as a result of the *Lord of the Rings* trilogy should be considered in any decision regarding the future of Section 481[22].

3.5 Key Chapter Findings

This chapter presented findings of the PwC analysis of the Exchequer costs and benefits associated with the operation of Section 481 for the years 1999, 2000 and 2001 inclusive. In preparing this analysis, PwC adhered closely to Department of Finance guidelines on the preparation of studies of this nature and, in addition, the consultants adopted a

[22] See Chapter 4

conservative approach in arriving at the assumptions underlying the calculations. Key findings are as follows:

- the operation of Section 481 resulted in a net benefit of €6.6 mn in revenues for the Exchequer for the three year period under review;
- the relationship between Exchequer costs and benefits, however, varied considerably year-on-year – with a net cost of €1.8 mn in 1999, compared with net benefits of €0.8 mn and €7.7 mn in 2000 and 2001 respectively;
- it is clear that the trend between Section 481-induced Exchequer costs and benefits has been tipping heavily and consistently in favour of the latter in recent years, with a deficit in 1999 converting to a considerable surplus in 2001;
- this trend is attributable to two main factors, namely: a) Ireland's growing success in the attraction of a growing number of big-budget US-commissioned films, which yield a particularly large net benefit to the Exchequer; and b) the reduced unit cost of S481 to the Exchequer as a result of successive reductions in the higher rate of personal taxation in recent years;
- related to this, a project-level analysis indicated that, as a general rule, the larger the Ireland production budget, the larger the net contribution to the Exchequer;
- by extension, off-shore productions which are typically larger in size than indigenous productions, are the most likely to yield a net positive return to the Exchequer;
- with regard to the indirect Exchequer benefits of Section 481, while it is clear that the relief has contributed to the strong growth in out-of-state tourism demand for Ireland in recent years, the unquantifiable nature of this benefit – coupled with a desire to adhere closely to Department of Finance guidelines – meant that the consultants did not include tourism benefits in this analysis.

Chapter 4 Impact of the Discontinuation of Section 481

4.1 Introduction

This chapter describes the likely impact of the discontinuation of Section 481 for the national economy, as well as for the film production and wider audiovisual sector in Ireland. Findings presented in this chapter should be read in light of the fact that the relief delivered a net benefit of €6.6 mn to the Exchequer in the period 1999 to 2001 as a whole, equivalent to an annual average benefit of €2.2 mn. In other words, the immediate implication of the discontinuation of Section 481 is that annual net tax revenues will be reduced by some €2.2 mn.

The remainder of the chapter comprises five sections:

- Section 4.2 describes the national economic impact of the discontinuation of Section 481;
- Section 4.3 considers the implications of the cessation of the relief for the Government's return on a series of film-related investments, including training and education;
- Section 4.4 assesses the impact of the discontinuation for production activity and employment levels in the wider audiovisual sector; and
- Section 4.5 examines the impact the removal of Section 481 would have for the quality and general availability of film and TV production with Ireland-specific content.

Key chapter findings are presented in Section 4.6.

4.2 National Economic Impact

4.2.1 Introduction

This section describes the national economic impact of the discontinuation of Section 481 – a topic distinct from that of Chapter 3 to the extent that measures of the economic impact of Section 481 move the sphere of taxes to a consideration of employment, national output and the balance of payments. These are the subjects of Sections 4.2.2, 4.2.3 and 4.2.4 respectively.

4.2.2 Employment

Table 4.1 shows the average annual employment (full-time equivalents) associated with Section 481-incentivised investment in film production in Ireland that would not have taken place in the absence of Section 481 for the period 1999 to 2001, i.e. total full-time equivalent jobs adjusted for Section 481 investment deadweight.

Table 4.1 Profile of S481-dependent Employment (FTE)[23] in the Film Production Sector

	Annual Average S481 Employment 1999-2001 Table 3.9 & Table 3.17	Total Number that Will Work Abroad	Total Number that Will Seek Social Welfare	Total Number that Will Not Find Alternative Employment in Ireland
Sector-specific / Highly Skilled	273	191	14	205
Sector-specific / Moderately Skilled	205	82	41	123
Non Sector-specific / Skilled	325	0	33	33
Casual Labour	72	7	14	21
Total	874	280	101	381

Source: PwC

Table 4.1 shows that the discontinuation of Section 481 will lead to an annual displacement[24] of the order of 874 full-time equivalent jobs (ftes) in the film production sector in Ireland. The fate of the individuals associated with these jobs will be crucially determined by their skill sets, with choosing to work abroad being the most likely path for those highly skilled in the area of film production. By contrast, it is estimated that a majority of casual workers (i.e. 51 ftes out of a total of 72) will find alternative employment in Ireland.

In total, it is estimated that the discontinuation of Section 481 will lead to the decision of close to 300 ftes with film production expertise to work abroad and to an increase of circa 100 ftes claiming social welfare. While it is estimated that the balance of displaced labour (i.e. 491 ftes) will be accommodated immediately within the Irish labour market, the assumptions on which this estimate is based (see Table 3.6) may prove somewhat optimistic given recent rises in the national rate of unemployment.

However, Section 481 employment related benefits stem not alone from film production company direct spend on Irish labour, but also from the employment impacts of their expenditures on goods and services within the Irish economy and from the incremental Irish economy expenditures of Section 481 Irish employees. The estimation of the scale of the

[23] It should be noted that the figures presented in this table relate to full-time equivalent jobs or man years. The actual number of people that gained some employment income from S481-incentivised productions is much greater.
[24] i.e. a requirement to find a new job or a measure equivalent to notified redundancies.

employment impact of these incremental Irish economy expenditures (IEE) requires the use of employment multipliers. As discussed in Chapter 3, employment multipliers for the tourism sector – derived from the CSO Input Output tables for the market services sector - were found to be the most applicable to the profile of IEE under review. Employment multipliers for all tourism expenditures within the Irish economy are available for the year 2000. These are shown, together with an adjustment for inflation in the period 2000 to 2002, in Table 4.2.

Table 4.2 No. of Tourism Jobs (FTEs) created per €1 mn of Tourism Expenditures in Ireland

		Direct	Direct, Indirect, Induced & Govt. Recycling[25]
A	Total Jobs	54,212	111,726
B	Total Tourism Expenditures, 2000 (€ mn)	€ 2,099	€ 2,099
C = A/B	Estimated Jobs per € 1 mn Expenditure	25.8	53.2
D = B * (1.05 ^ 2)	Total Tourism Expenditures, 2000 (2003 Prices - € mn)	€ 2,314	€ 2,314
E = A/ D	Estimated Jobs per €1 mn Expenditure, 2003	23.4	48.3

Source: Fáilte Ireland (Bord Failte)/ PwC Derived

Table 4.2 shows that €1 mn of tourist (domestic and international) or market services expenditure in the Irish economy in 2003 creates an estimated 23.4 jobs directly and 48.3 jobs when all impacts (i.e. direct, indirect, induced and government recycling) are taken into account. These multipliers are applied to PwC estimates of S481-induced incremental Irish economy expenditures (adjusted for deadweight) in Table 4.3 to produce an estimate of total employment in Ireland that is dependent on the incremental Irish economy expenditures generated by the relief i.e. Section 481-induced employment over and above that which is paid for directly by Section 481-incentivised film production companies and included in Table 4.1.

Table 4.3 Direct, Indirect & Induced Employment Associated with S481-induced Incremental Irish Economy Expenditures

	Total S481 Incremental Irish Economy Expenditures (€ mn) (Adjusted for Investment Deadweight)[26]	Direct	Direct, Indirect, Induced & Government Recycling
1999	€ 51.1	1,196	2,466
2000	€ 54.7	1,282	2,642
2001	€ 63.5	1,488	3,067
Annual Average	€ 56.4	1,322	2,725

Source: PwC Derived

[25] The report from which these multipliers are taken (BFE Draft Report – The Impact of Tourism on the Economy of Ireland) did not specify whether this included government recycling, i.e. the tax benefits associated with Government expenditures of incremental tax revenues. However, a comparison with employment multipliers for 1993 suggest that government recycling is included.

[26] These figures are computed by adding the incremental IEE figures contained in Table 3.15 and deflating these for assumed investment deadweight (see Table 3.17).

In the period 1999-2001, the incremental Irish economy expenditures generated by Section 481-incentivised investment (adjusted for deadweight) supported in the region of 2,700 full-time equivalent jobs annually across the Irish economy. Coupled with employment that is paid for directly by Section 481-incentivised production companies (i.e. 874 – see Table 4.1), the total number of jobs that at a minimum are likely to be displaced by the discontinuation of S481 stands at more than 3,500.

4.2.3 National Economic Output/ Gross National Product

The incremental Irish economy expenditures generated by Section 481-incentivised productions also make a contribution to the output of the Irish economy[27]. Again, the application of output multipliers devised for the tourism sector, based on Input Output tables for the market services sector of the Irish economy, to Section 481-induced incremental Irish economy expenditures (adjusted for deadweight) provide a good indication of the value of this contribution – see Table 4.4.

Table 4.4 Contribution of S481-induced Incremental Irish Economy Expenditures to National Output

	1999	2000	2001
S481-induced Incremental Economy Expenditures (€ mn) (Adjusted for Deadweight) (Table 4.3)	€ 51.1	€ 54.7	€ 63.5
	Direct	Direct & Indirect	Direct, Indirect & Induced
GNP Multipliers[28] (Contribution to GNP per € of Incremental IEEs)	0.47	0.70	0.95
	Direct	Direct & Indirect	Direct, Indirect & Induced
		€ mn Contribution to GNP	
1999	€ 24	€ 36	€ 49
2000	€ 26	€ 38	€ 52
2001	€ 30	€ 44	€ 60

Source: Fáilte Ireland/ PwC Derived

Table 4.4 shows that Section 481-induced incremental Irish economy expenditures contributed some €60 mn to Irish national output (GNP) in 2001. This represented an increase of €8 mn on the respective contribution in 2000 and a €11 mn increase on the situation in 1999.

[27] The labour expenditures of Irish film production companies also contribute to national output, but multipliers that would allow for the estimation of this contribution do not exist.
[28] These multipliers are an aggregate of the multipliers for domestic tourism spend and international tourist spend.

4.2.4 Balance of Payments

A large number of films produced using Section 481 finance are dependent on finance from non national sources. Funding from non national sources takes two forms:

- direct funding, which with Section 481 and indigenous monies actually finance the film;
- pre-sales agreements.

IBEC collate data on the former. They do not collate data on the latter although the value of these funds is relatively easily estimated. The application of a standard set of assumptions regarding the source of pre-sales funds to projects classified as "indigenous", "co-productions" and "off-shore"[29] allowed for the computation of a general estimate of the value of non-national investment in the Ireland production activities of Section 481-incentivised companies. Details are provided in Table 4.5.

Table 4.5 Estimating the Incremental Value of S481 Investments in Ireland funded with Non-National Finance, 1999, 2000 and 2001

		1999	2000	2001
A (IBEC)	Total Production Expenditures	€ 152,074,239	€ 171,617,588	€ 221,544,620
B (IBEC)	Total Non National Funds	€ 65,753,145	€ 90,941,294	€ 144,410,925
C (IBEC)	Total National Funds (Gross S481 included)	€ 86,321,094	€ 80,676,294	€ 77,133,695
D (IBEC)	Total S481 (Gross)	€73,621,235	€75,046,294	€65,228,579
E = D X 80%	Value of Pre Sales (approx)	€ 58,896,988	€ 60,037,035	€ 52,182,863
F (PwC)	% of Pre Sales Funded from National Sources	28%	19%	28%
G = F * E	Pre Sales Funded from National Sources	€ 16,333,890	€ 11,684,627	€ 14,358,800
H = G + (C—E)	Total National Funds (Net S481 Only Included)	€ 45,289,317	€ 33,344,516	€ 39,570,546
I	Total Ireland Expenditures	€ 88,669,451	€ 96,916,443	€ 108,582,882
	Ireland Expenditures Not Met Through National Funds	€ 43,380,134	€ 63,571,927	€ 69,012,336
J	Annual Assumption of Deadweight	15%	14%	16%[30]
	Incremental International Expenditures in Ireland	€ 36,725,430	€ 54,709,793	€ 57,878,539

Source: IBEC/ PwC Derived

Table 4.5 shows that an estimated €69 mn of off-shore funds were spent on labour and goods and services in Ireland in 2001 as a result of Section 481. Adjusting this total for deadweight, the investment of off-shore funds that will be lost to the Irish economy if Section 481 is discontinued is estimated at close to €58 mn. The respective figures for 1999

[29] It was assumed that 100% of pre-sales were from national sources in the case of projects classified as indigenous. The respective figure for co-productions was 50%, compared with 0% for off-shore productions. These percentages were applied to total Ireland expenditures for the relevant project and resultant values totalled for each year. This total was then divided by total Ireland expenditures to produce estimates of 28%, 18% and 28% for the three years under review.

[30] The use of the deadweight estimates for the scheme as a whole is conservative here to the extent that off-shore productions are assumed to have much lower incidences of deadweight than their indigenous counterparts. There was, however, no reliable basis on which to compute an alternative and for this reason the aggregate assumption is applied.

and 2000 are €37 mn and €55 mn. This off-shore investment in Ireland clearly makes a positive contribution to the national balance of payments. The precise value of this contribution requires the use of assumptions regarding the import content of this spend, i.e. the % of the spend that goes on imports as opposed to domestically produced goods and services. Research commissioned by Fáilte Ireland in 2000 shows the expenditures of international visitors to Ireland to have an import content in the region of 33%. Table 4.6 shows the application of this assumption to the estimated value of off-shore investment in film production in Ireland, to produce an estimate of the net contribution (i.e. deadweight adjusted) to the national balance of payments for the three years under review.

Table 4.6 Estimating the Net Contribution of S481-incentivised Films to the Balance of Payments, 1999, 2000 and 2001

		1999	2000	2001
A	Incremental Off-Shore Investment in Ireland	€ 36,725,430	€ 54,709,793	€ 57,878,539
B	% of Investments which are Imports	33%	33%	33%
C = A * B	Expenditures on Imports	€ 12,119,392	€ 18,054,232	€ 19,099,918
D = A – C	€ Contribution to National Balance of Payments	€ 24,606,038	€ 36,655,562	€ 38,778,621

Source: PwC Derived

Table 4.6 shows that Section 481 made an increasing contribution to the national balance of payments in the 1999 to 2001 period – a contribution of €25 mn in 1999, €37 mn in 2000 and €39 mn in 2001. Ireland recorded deficits on its current account of the balance of payments in the years 2000 and 2001, and recorded a small surplus (€226 mn) in 1999.

4.3 Return on Government Investment in the Film Production Sector

The discontinuation of Section 481 will have major implications for the return the Irish Government can expect to receive on resources invested to date in the promotion of the indigenous film production sector, including:

- foregone tax revenues and scheme administration costs associated with Section 481 - the analysis contained in Chapter 3 shows that this Exchequer outlay has generated a positive return (i.e. net tax yield) in recent years;

- the allocation of funding to the training of film production personnel;

- the negotiation of a series of bilateral and multilateral conventions on film production, including the European Convention on Cinematographic Co Productions.

With regard to the first of these points, analysis contained in Chapter 3 showed increasingly positive returns to the Exchequer as a result of the operation of Section 481. This trend is, in large part, attributable to the impact that the existence of the relief has had on the capacity and quality of film production infrastructure and personnel in Ireland in addition to Ireland's growing success in the attraction of big budget films from the major US studios. Evidence of this is found in the fact that two big budget US films are being produced in Ireland at the present time, i.e. *King Arthur* and *Laws of Attraction*. Similarly, the year 2002 saw the production of *Veronica Guerin* and *Ella Enchanted* – also big budget US-commissioned productions.

Should Section 481 be retained beyond 2004, the outlook for the continued attraction of such productions appears to be favourable. It has, for example, been widely reported that a US Studio is currently considering shooting a major film trilogy in Ireland, based on the best selling novel, Artemis Fowl, by Wexford based author, Eoin Colfer. This is seen by the studio as a series of films set to rival *Lord of the Rings* and *Harry Potter* and the cost of the first film is estimated to be in the region of €70 mn with a total cost expected to be well in excess of €200 mn for the three films. The filming of such a blockbuster trilogy in Ireland would obviously result in a significant amount of money being spent in Ireland and would support the argument that the trend in recent years has been for an increased benefit to the economy from Section 481 supported projects. In addition to the expenditure in Ireland, a production of this nature could be expected to give significant exposure to both the Irish film industry and Ireland as a tourism location. However, in discussions with the producers they made it very clear that (despite the Irish connections) the trilogy would not be shot in Ireland if they do not have certainty that Section 481 will continue beyond 2004.

Moreover, just as it has taken many years for the indigenous industry to reach a level of sophistication that allows it to compete successfully with more established film industries in other jurisdictions for the attraction of big budget films, the effects of the discontinuation of Section 481 on the capacity of the industry will not be easily reversed. Rather, it is expected that the very favourable impacts of the relief on the Irish film production industry will be rapidly unravelled and that major State investment over many years will be required if the effects of discontinuation are ever to be erased (see Table 4.8).

A related issue is the diminished return that will be yielded on Exchequer investment in the formal and practical training of film production personnel should Section 481 be discontinued. Government supports the formal or academic training of film production personnel through:

- the provision of direct financial support to Screen Training Ireland (FÁS) – the state-funded national training and development resource for Ireland's film and television industry;
- the payments to independent and/or publicly-owned colleges and universities for the provision of academic training in film production/visual communications (see Table 4.7).

Table 4.7 Major Academic Courses in Film Production/ Visual Communications in Ireland, 2003

University College Dublin	
	M.A. in Film Studies
	PhD in Film Studies
	B.A. (Evening Modular) in Film Studies
Dublin City University	
	B.A. in Communications Studies
	M.A. in Film and Television Studies
Galway Mayo Institute of Technology	
	National Diploma in Film & Television
Dun Laoghaire Institute of Art Design & Technology	
	BDes in Visual Communications
	B.A. in Animation
	M.A. in Scriptwriting
Ballyfermot College of Further Education	
	Higher National Diploma in Classic Animation
	Higher National Diploma in Television Operations and Productions
	Higher National Diploma in Film Operations and Production
	Higher National Diploma in Multi-Media
National College of Art and Design	
	BDes in Visual Communications
	B.A. in History of Art, Design & Visual Communication
Huston School of Film & Digital Media/ NUIG	
	M.A. in Screenwriting
Trinity College Dublin	
	B.A. in Drama Studies
	B.A. Degree in Film Studies
	Bachelor in Acting Studies
	M.Phil in Irish Theatre and Film

Source: PwC

Forecasts of the impact of the discontinuation of Section 481 on levels of audiovisual production activity and employment - presented in Section 4.4 – suggest very limited employment opportunities for the graduates of many of these courses, as well as real medium-term viability issues for the courses themselves and the employment they sustain.

The Irish Government has implemented a legal and administrative framework necessary for the promotion of an outward-looking indigenous film production industry such as Ireland's. As part of this strategy, Ireland became a signatory to the convention in April 2000 with effect for films produced after 1st August of that year. The importance of being a signatory to the convention is evidenced by the growing number of films that are being made on co productions. However, Ireland's ability to be a party to a qualifying co production would be significantly reduced in the absence of Section 481 or a commensurate incentive. This is because it is necessary for Ireland to bring 20% of the finance to the table in order to qualify as a co production and it would be very difficult for this level of finance to be raised in the absence of Section 481. Accordingly, the strategic investment made by the Government is likely to be effectively lost if Section 481 or a commensurate incentive is not made available to Irish producers.

Finally, the discontinuation of Section 481 will mean that the potential for Ireland to reap tourism benefits on the scale of those realised in New Zealand as a direct result of the production of "Lord of the Rings" trilogy is seriously diminished.

4.4 Impact on the Audiovisual Sector in Ireland

(i) Value of Film Production

Production activity that is incentivised by Section 481 constitutes an important part of the audiovisual sector in Ireland. This is evidenced in Table 4.8 which shows the impact the discontinuation of Section 481 would have had on the total value of audiovisual production in the State for the three years reviewed in this report, i.e. 1999, 2000 and 2001.

Table 4.8 Impact of Discontinuation of S481 on Annual Value of Film Production in Ireland

	1999	2000	2001
Total Investment	€ 117mn	€ 129mn	€ 139mn
S481 Investment			
S481-incentivised Investment in Ireland (see Table 3.11)	€ 89	€ 97	€ 109
S481-incentivised Investment (Adjusted for Deadweight) (Table 3.11 * Table 3.17)	€ 75	€ 83	€ 91
Impact of S481 Discontinuation on Activity			
% Reduction in All Production Activity if S481 Discontinued	64%	64%	66%

Source: IBEC/ PwC Derived

Table 4.8 indicates that the non-existence of Section 481 in 2001 would have resulted in a total value of audiovisual production activity some 66% lower than that which was actually realised. The respective reduction in 1999 and 2000 was 64%. It should, however, be noted that the value of total audiovisual production shown in Table 4.8 includes the value of all production at RTE and TG4 which, although precise figures are not available to the consultants, is known to represent a reasonable share of total audiovisual spend. In other words, the impact of the discontinuation of Section 481 on the independent audiovisual production sector will be much greater than indicated in Table 4.8.

(ii) Employment

Table 4.9 shows the impact the absence of Section 481 would have had on total employment in the audiovisual sector in Ireland in 1999, 2000 and 2001.

Table 4.9 Impact of Discontinuation of S481 on Employment (FTEs) in the Audiovisual Sector in Ireland

	1999	2000	2001	Average 1999-2001
Total Audiovisual Employment	1,464[31]	1,641	1,414	1,506
Total S481 Employment (Table 3.9)	1,103	1,037	967	1,035
Total S481 Employment (Adjusted for Deadweight) (Table 4.1)	929	891	803	874
% Reduction in Audiovisual Employment if S481 Discontinued	63%	54%	57%	58%

Source: IBEC/ PwC Derived

Table 4.9 shows that the total number of full-time equivalent jobs in the audiovisual sector in Ireland would have been some 60% lower in the period 1999 to 2001 if Section 481 had not existed. Again, the proportionate drop would be much greater if employment attaching to RTE and TG4 could be excluded for the purposes of this analysis.

As outlined in Section 4.2, the most likely path for individuals who are highly skilled in the film production sector is the decision to work abroad. This body of expertise and experience will not be easily rebuilt and the quality of the post-Section 481 residual of audiovisual production activity will be significantly diminished as a result of its loss.

(iii) Impact on Indigenous Sector

Similarly, the strong growth in film production activity in Ireland engendered by Section 481 has promoted the development of sophisticated film production infrastructures that benefit indigenous and international productions alike. Ireland is now home to six feature production film crews and some 50 film production facilities companies, including two major film studios. Their business model is typically characterised by:

[31] These figures are derived from IBEC estimates of total audiovisual employment hours.

- a heavy commercial dependence on services provided to Section 481-incentivised productions during the peak filming season – particularly those which are funded by major US film production studios or UK/ Ireland-based television broadcasters;
- the provision of off-peak and shoulder season services to smaller indigenous productions, on a cost recovery or even pro bono basis.

The revenues generated by certain types of Section 481-incentivised production activity (and that which is most likely to disappear with the discontinuation of Section 481) allow providers of film production support services to provide their services to indigenous producers at a discount. This facility to the indigenous film production industry will disappear should the relief be discontinued.

In summary, the discontinuation of Section 481 will have implications for the indigenous audiovisual sector well beyond the immediate loss of a high share of Section 481-incentivised activity. The reduced availability of key personnel and the higher cost of film production services will impact very negatively on the volume and quality of all remaining indigenous audiovisual output, including that which was not Section 481-dependent.

(iv) Taxes

Finally, the reduction in activity in the audiovisual sector in Ireland will have revenue implications for the Exchequer, namely:

- a reduction in corporate or Schedule D tax payments associated with profits realised on equity held by Irish co-producers in Section 481-incentivised productions – partly reflecting a practice of accepting such equity as part payment for services;
- a reduction in income tax payments associated with the out-of-state earnings of film production personnel that are tax resident in Ireland but will relocate if Section 481 is discontinued – the practice of working on non-Ireland based productions being common place among high-ranking film production personnel in Ireland.

The precise value of these Exchequer contributions cannot, however, be estimated with a high degree of certainty and, for this reason, is not incorporated into the computation of Section 481-related Exchequer benefits presented in Chapter 3.

4.5 Impact on Quality and Availability of Irish Film and TV Drama

Section 481 has facilitated the production of a range of films and major TV series with significant Irish themes, which has delivered a multiplicity of benefits to Irish society as a whole. Primary among these are the following:

- international show-casing of the talents of Irish writers, relevant Section 481-incentivised productions including *The Butcher Boy* (Patrick McCabe), *Angela's Ashes* (Frank McCourt), *Watermelon* (Marion Keyes) and *The Borstal Boy* (Brendan Behan);
- familiarisation of Irish and international audiences with the works and lives of certain of Ireland's most talented individuals, including James Joyce and Samuel Beckett;
- representations of contemporary Irish life – conferring a range of benefits on national and international audiences alike. Examples include *About Adam*, *When Brendan Met Trudy, Bachelor's Walk* and *On Home Ground*;
- promotion of the Irish language – the most obvious example being the successful TG4-commissioned *Ros na Run* series.

These benefits are unquantifiable but have clearly added significantly to the lives of Irish individuals and underpin recent improvements in international awareness and perceptions of Ireland.

4.6 Key Chapter Findings

PricewaterhouseCoopers research presented in this chapter shows that the discontinuation of Section 481 would have a range of consequences for the national economy, the indigenous audiovisual sector and the Irish population. Primary among these are the following:

- the displacement of more than 3,500 jobs within the Irish economy;
- an annual reduction of circa €60 mn in national output and a reduction of some €35 mn on the current account of the balance of payments;
- a major reduction in the medium-term return to the Exchequer from state financial and non-financial investments in the promotion of the indigenous film production sector, e.g. education and training;
- a reduction of some 65% in the value of audiovisual production activity in Ireland, with related employment expected to fall by close to 60%;

- a reduction in the tax take associated with the out-of-state earnings of film production personnel that are currently resident in Ireland and the equity holdings of Irish individuals (i.e. co-producers) in productions that are Section 481 dependent[32];
- a serious decline in the quality and availability of film and TV output with content that is of particular relevance to Irish audiences;
- the gradual elimination of Section 481-induced tourism benefits, as well as a substantial reduction in the potential for Ireland to garner tourism benefits on the scale of those associated with the production of the *Lord of the Rings* trilogy in New Zealand.

These findings need also to be viewed in light of the fact that research presented in Chapter 3 estimates that Section 481 delivered a net benefit of close to €7 mn to the Exchequer in the period 1999 to 2001 as a whole, equivalent to an annual average return of €2.2 mn.

[32] These tax benefits are not included in Chapter 3.

Chapter 5 Section 481 in an International Perspective

5.1 Introduction

As part of the Terms of Reference for this report, PwC have been asked to comment whether, in light of any financial or fiscal incentives offered in other competitor territories, there is a compelling competitive justification for continued fiscal support of the Irish film sector. The provisions of Section 481 have been described in Chapter 2 and in this chapter the incentives made available by certain other key territories are examined in summary form.

Ireland's competitor territories in terms of film production can broadly be broken down into three categories as follows:

- other EU States (in particular the UK, Germany, France);
- other English speaking territories (Australia, New Zealand, Canada and Isle of Man);
- EU Accession/Candidate States.

The Terms of Reference specifically asked the consultants to look at the incentives available in other EU States in particular and a brief analysis of the incentives available in key locations is detailed in 5.2. However, PwC have concluded that the analysis would be incomplete without a review of the primary incentives available in certain other English speaking territories throughout the world, due to the fact that they are in direct competition with Ireland for many projects.

In addition, there are various EU production support funds and schemes in respect of which producers can apply for funds, including Eurimage and Media Funds. These schemes have not been profiled as this falls outside the scope of this report.

The remainder of this chapter comprises five sections:

- Section 5.2 provides an overview of the incentives in each of these countries;
- Section 5.3 describes these incentives in more detail;
- Section 5.4 compares the incentives in English-speaking competitor countries and
- Section 5.5 summarises the results of the consultants survey of international producers on the competitiveness of Section 481.

Key chapter findings are in Section 5.6.

5.2 Availability of Incentives in Other Key Territories

When Section 35 (as it was known) was introduced in Ireland in 1987, it was unusual in the international context with very few, if any, countries offering any sort of comparable tax benefit. However, in recent years the offering of significant financial contributions by Government to film production has become increasingly common. As the contents of table 5.1 demonstrate, almost every competing country introduced their current main film incentives after Section 481 was introduced. Although many of these countries had some limited incentives available in the 1980s, it can be seen that in most cases the important incentives were only brought in within the last decade.

The incentives provided by different jurisdictions can be broken down into three main categories, namely investor based deductions (such as Section 481), tax credits or direct grants. Indeed many jurisdictions offer a combination of the different type of incentives – evidenced in Table 5.1.

Table 5.1 Overview of Availability of Incentives to Film Production in Competitor Jurisdictions

Country	Year Major Incentive Introduced[33]	Investor Based Fiscal Incentive	Tax Credit	Direct Subsidies
Ireland	1987	✓	×	✓
United Kingdom	1992 / 1997	✓	×	✓
Australia	2002	✓	✓	✓
New Zealand	2003	✓	✓	✓
Canada	1995	×	✓	✓
Isle of Man	1997	×	×	✓
Luxembourg	1998	×	×	✓
Germany	1980	✓	×	✓
France	1985	✓	×	✓

Source: PwC

[33] UK: Three year write off introduced in 1992 and in 1997 the one year write off period was introduced for films with a budget of >Stg£15m; Australia: Prior to 2002 there was a relief which offered a tax deduction for investing in Australian content films; New Zealand: Prior to 2002 there was a more limited relief which offered a tax deduction for certain film spend; Canada: The first Federal tax credit scheme was introduced in 1995 and an additional Federal Scheme was introduced in 1997. The provincial schemes were implemented after this date; Germany: The first regional film fund was established in 1980 and subsequent to this other regional funds were established.

Noteworthy points from Table 5.1 are as follows:

- seven of the eight countries reviewed provide fiscal based incentives to film production, the exception in this regard being the Isle of Man;
- these seven countries offer an investor based tax incentive such as Section 481 or tax credits to film production companies;
- while all of the countries provide direct Government subsidies, these are generally much less significant than the incentives offered by the tax credit or investor model. The direct subsidies also tend to be for the development of low budget indigenous projects as opposed to the attraction of mobile productions;
- investor based tax incentives are more pervasive than tax credits – with five of the eight countries reviewed offering investor based incentives compared with three offering tax credits.

It is clear from the PwC survey of international film producers that raising the necessary finance for a production is becoming increasingly difficult. For that reason, reducing the cost of production (either by utilising incentives or shooting in a low cost territory) has become a key driver in the decision making process as to whether a particular production will be made and where it should be shot. Interviews carried out by the consultants have strongly indicated that a high percentage of US originated films are location neutral.

In general, in the case of large budget productions, incentives tend to be used by the producer to reduce the cost of production of the film. In the case of small or medium sized productions, the availability of incentives allows the producer to raise the additional funds for the production that could not otherwise be raised from other commercial sources such as pre sales. Indeed, it is becoming increasingly common for co-productions to take place where films/TV series are made in a number of territories, thus enabling the production to benefit from incentives available in each of the territories. Accordingly, particularly for low to medium budget films, the incentives in different countries should be viewed as complementary to, rather than competing with, each other.

5.3 Profile of Incentives in Key Competitor Destinations

5.3.1 The United Kingdom

The UK has a number of provisions supporting the British film industry and the key provisions are outlined below:

- the key UK incentive was introduced in 1992 and is an investor scheme. A first year tax write off for tax depreciation is available for films with production expenditure of less than Stg£15m. Where production expenditure exceeds Stg£15m, a three year write off is obtained. To qualify for the accelerated write off the film must be certified as a qualifying British film, and specified conditions must be fulfilled in order to achieve this status.
- this accelerated tax depreciation forms the basis of the UK "sale and leaseback" and film partnership structures that are the primary tax structures utilised by companies producing in the UK. A completed film is sold by the production company either to a bank, or a film partnership for high net worth individuals. The bank or partnership is able to utilise the tax deductions in Year 1 (or over 3 years as appropriate) and is thus able to lease the film back into the producer at rates that significantly reduce the producers financing costs. In essence, the tax assisted cost to the production company of "leasing" the film back from investors is cheaper than the cost of producing and "owning" it.
- the net benefit to producers has increased in recent years and can now be expected to generate a contribution of between 10 and 15% of the production budget.
- the section of the UK legislation which allows for a one year write off is due to expire in July 2005. It is interesting to note that significant debate is currently taking place between the Government and the film industry in the UK as to what should be put in its place beyond July 2005. In any event the sale and leaseback structure can still be used as the three year write off provisions have no expiry date (although the change in the write off period will mean that the net contribution to budget will be reduced for films with a budget below Stg £15 mn);
- the UK operates an "Enterprise Investment Scheme" which is similar to the Irish Business Expansion Scheme and which gives individuals a tax deduction for investing in film companies;

- the UK Film Council is allocated at least Stg £27 mn annually from the National Lottery to develop the British film industry through various programmes such as the film production franchise, the Premier Production Fund and the Film Development Fund.
- finally, at the end of April 2003 a new Stg £10 mn package was introduced to support film making and television production in Northern Ireland.

5.3.2 Germany

Significant financial support for filmmaking is provided in Germany by a number of different means, namely:

- an investor incentive is available whereby German individuals who invest in a film financing scheme obtain a tax deduction at their marginal tax rate for up to 100% of their investment in the scheme. There is no requirement for the film to be made in Germany and there are currently no limits on the amount that can be invested, although there are some restrictions imposed to limit excessive loss set off.
- funding is also available from a number of national and regional film funds (including the Hamburg Film Fund, the Bavarian Film Fund, the Berlin Brandenburg Film Fund and the North Rhine Westphalia Film Foundation). The total financing available from these funds is generally in excess of €200 mn per year and the contribution varies from interest free loans from the North Rhine Westphalia Film Foundation to 50% subsidies by the German Federal Film Board. The level of funding provided is generally based on the level of production in the particular region.

5.3.3 France

France also has a number of different incentives available for French film production including investor based incentives and direct subsidies:

- individuals can obtain tax relief on 100% of their investment in Soficas (special purpose limited liability companies) and these Soficas lend the funds invested to producers to finance film production.
- the French Government also provides assistance to producers, where up to 50% of a qualifying loan is guaranteed.
- other supports provided to the French film industry include supports sourced from cinema seats and video distribution and French broadcasters are obliged to meet detailed expenditure targets on the production of French films.

5.3.4 Australia

Australia has a number of measures that contribute to film production, most of which are fiscal:

- a number of statutory provisions give a tax deduction to individuals for investing in qualifying films. These include an upfront 100% tax deduction for an investment in Australian content films and a 100% tax deduction spread over two years for investment in films shot in Australia.
- the Australian Government recently decided to introduce a significant new incentive, principally aimed at attracting overseas producers to shoot in Australia. This new relief allows a film company receive a refund of up to 12.5% of the production's qualifying Australian production expenditure. The refund is firstly applied against any federal taxes payable by the production company and the balance is refunded to the company. The Australian Government has estimated that the introduction of this incentive will quadruple the value of production in Australia between 2002 and 2006.
- a minimum level of qualifying Australian production expenditure of AUS$15mn (approximately €8.66 mn) is required and where expenditure is between AUS$15 and AUS$50 mn (approximately €28.85 mn) there is a condition that 70% of the film's total expenditure must be "qualifying Australian expenditure", as defined. However, where the qualifying production expenditure is more than AUS$50mn, the 70% percentage restriction is no longer applied.
- the Australian Government is reported to be currently considering extending its relief to television series.

5.3.5 New Zealand

- Up to recently New Zealand had provided quite limited tax incentives for the film industry in the form of tax deductions for film expenditure. However, the Government in July 2003 announced a new scheme to encourage large budget film productions into the country. The announcement of these new initiatives follows the economic benefits achieved by New Zealand following the filming of the "Lord of the Rings" trilogy.

  The scheme is quite similar to the Australian scheme and grants of up to 12.5% of the New Zealand production expenditure can be obtained by a production company. There is a minimum of NZ$15mn (approximately €7.74mn) production expenditure in New Zealand required, provided that at least 70% of the total production expenditure is in

New Zealand, and this percentage restriction is removed where New Zealand production expenditure exceeds NZ$50m (approximately €25.8 mn).

- This announcement was only made in July 2003 and details of the criteria and administration of the scheme are not yet available.

5.3.6 Canada

The Canadian Government at a federal level has consciously introduced support for film production in Canada with a view to attracting US producers in particular to shoot in Canada. The provincial Governments have followed suit and in addition to the federal incentive there are approximately 20 provincial incentives available. This strategy has proved highly successful and the US Centre for Entertainment Industry Data and Research stated that, in 2001, approximately 19% of global gross production expenditure on film was incurred in Canada.

- The key incentive is the Canadian film or video production tax credit scheme, which allows a refund of 25% of qualified labour expenditure up to a maximum of 48% of the film's total production costs. Thus the maximum credit available is 12% of the total production cost. This credit system is available for the production of a qualifying Canadian film or video or the Canadian component of an official treaty based co-production.

  Companies unable to benefit from the aforementioned tax credit can instead obtain a tax credit at a rate of 16% of qualified labour spend (recently increased from 11%). This latter scheme is primarily aimed at foreign producers.

  Each of the country's provinces also offer incentives for shooting in their respective provinces, with enhanced credits being given for films shooting outside the key production centres such as Toronto, Montreal and Vancouver. Examples of the provincial incentives are a refundable credit equal to 11% of qualifying labour expenditure in British Columbia and Ontario, and a grant of 20% of production costs spent in Alberta up to a maximum of 10% of the total production budget.

- In addition, the Canadian Ministry of Heritage has two CAN$100 mn Canadian funds, one for feature film production and marketing and the other for TV production and marketing.

5.3.7 Isle of Man

The Isle of Man provides financial assistance to film makers rather than fiscal incentives. The Government provides a contribution of up to 25% of the total production budget, by means of loans, equity, letters of credit or guarantees. It also provides a subsidy towards the making of television programmes but the contribution per production cannot exceed Stg£350,000. It is possible to obtain a combination of both these subsidies but the total assistance provided generally will not exceed 25% of the total budget, unless exceptional economic and/or cultural benefits can be demonstrated to the satisfaction of the Isle of Man Department of Trade and Industry. There is no annual limit on the level of funds available.

Various qualifying criteria must be met, the most important of which are that at least 50% of principal photography must be completed in the Isle of Man and the production must be capable of spending at least 20% of below the line production costs (i.e. the majority of the productions costs with the exception of items such as development costs, director and producer fees and the talent fees) on Isle of Man spend. This latter criteria is interesting in that the Isle of Man Government appears to be satisfied that economic benefits can be achieved by obtaining at least 20% Isle of Man spend even though 25% of the budget is contributed by the Isle of Man Government. This contribution is recoupable out of net profits of the film but the consultants understand that in practice recoupment is limited.

In practice, producers going to the Isle of Man to produce a film generally tend to bring in their own crews and facilities, who then leave the island once filming has completed. Accordingly, very limited infrastructure, facilities or production management expertise have developed in the Isle of Man and it seems clear that overseas producers who shoot in the Isle of Man do so principally because of the available subsidy.

5.3.8 EU Accession / Candidate States

Over the last few years, a number of the EU Accession/Candidate States (such as the Czech Republic and Romania) have been successfully competing with the more established territories to attract film production. It is widely accepted that these countries attract this investment because of their low cost base rather than on foot of fiscal or financial incentives and for that reason, these countries have been excluded from the analysis.

5.4 Comparison of Incentives in English-speaking competitor countries

As noted in the introduction to this chapter, the consultants believe that it is the other English speaking countries that are generally the direct competitor countries for Ireland in attracting mobile productions and, for this reason, Table 5.2 focuses on the contribution to budget offered by the incentives in these jurisdictions.

Table 5.2 Contribution to Total Production Budget of Film Production Incentives

Country	Average Contribution to Budget	Comments
Ireland	10 - 12%	The percentage contribution into budget reduces as the cap of €10.48 mn is exceeded, e.g. contribution closer to 8% for €25mn budget, and closer to 4% for €50mn budget.
United Kingdom	10-15%	It is possible to obtain a full contribution with only 20% UK spend for qualifying co-productions.
Australia	12.5%	Again, only applicable for large budgets (Over €8.66mn Australian expenditure required and less restrictions where over €28.85m Australian expenditure incurred.)
New Zealand	12.5%	Only available for large budgets (minimum of €7.74mn must be spent in New Zealand and less restrictions where more than €25.8 mn is spent in New Zealand).
Canada	>12%	Maximum 12% contribution from labour credit. Extent to which contribution exceeds 12% will depend on which province is used for filming, e.g. a further 10% contribution possible in Alberta.
Isle of Man	25%	In theory, a high contribution but it is recoupable and producers incur extra costs in importing crew and props etc.

- The consultants acknowledge that the contributions to budget shown in Table 5.2 are indicative only. In order to establish the exact contribution to budget for a particular film, the precise make-up of the budget needs to be examined – level of spend in the local territory vis-à-vis total budget, level of labour spend, etc. However, it does show that most of the countries offer a contribution to budget of at least 12%. Canada can generally be expected to give the highest contribution to budget due to the combination of federal and provincial incentives. The Isle of Man is the only country that can get close to matching this level of contribution, but unlike Canada, producers have significant additional costs in filming in the Isle of Man as they must bring in crew and equipment due to the lack of local infrastructure.

- Although the Section 481 contribution to budget is generally around 10% to 12%, where the cap of €10.48 mn is exceeded the contribution to budget starts to quickly become less competitive for large productions. This is because any excess of Irish spend over the cap cannot be raised by using Section 481. This position can be contrasted to the other countries where there are no caps and in particular New Zealand and Australia, where the 12.5% incentive is only available for larger productions.

5.5 Overseas Producer Views on Section 481

The consultants corresponded with the key decision makers in eleven overseas production companies in relation to their views on Section 481. Apart from one producer, all these overseas producers had previously filmed in Ireland using Section 481 and the other recently considered using Ireland for a big budget film but instead shot the film in New Zealand. Eight of the eleven producers are based in Hollywood, with the other three coming from the UK.

Table 5.3 summarises the findings and shows the most popular answer to the questions raised, together with the percentage of respondents who gave this answer.

Table 5.3 Key Findings of Producer Survey

Question	Most Popular Response	% Giving this Response
1. Percentage of films considered for overseas shoots	25% - 50%	60%
2. Importance of Section 481 in decision to come to Ireland	Very important	70%
3. Structure of Section 481 easy to understand and operate	Yes	90%
4. How does operation and administration of Section 481 compare to other jurisdictions?	Favourably	50%
5. How does Section 481 contribution to budget compare with incentives available elsewhere?		
a) Budget below €10.48 mn cap	Similar	55%
b) Budget above €10.48 mn cap	Poorly	100%
6. Would Ireland be considered as a location in the absence of Section 481 or similar incentive?	No	73%
7. How important is it that Section 481 can be used in conjunction with incentives in other countries?	Very important	60%
8. Has Section 481 contribution become more or less attractive relatively in the last 5 years?	Less attractive	100%

Source: PwC Survey

Key Points to emerge from producer survey:

- a large number of films are now considered for shooting in countries outside the producer's home location;

- 70% of the producers who have filmed in Ireland rated Section 481 as being very important in their decision to film in Ireland and 73% said that they wouldn't consider shooting in Ireland in the future unless Section 481 remained or a similar incentive was introduced;
- 90% of producers believed Section 481 was easy to understand and operate in practice;
- 60% of the producers said it was very important that Section 481 can be used in conjunction with incentives in other countries and it was clear from the survey that a high number of producers now use complementary incentives in order to reduce production costs (in particular using Section 481 with UK sale and leaseback);
- all of the producers who expressed a view on the comparative attractiveness of Section 481 vis-à-vis competing international incentives in 2003 as opposed to five years ago said that Section 481 has become relatively less attractive;
- the producers expressed the view that the principal reason why Section 481 has become less attractive was due to the fact that in the last five years countries such as Canada, Australia and New Zealand have introduced incentives that make large contributions to big budget films, whereas the existence of the €10.48 mn Irish cap means that the bigger the budget the less attractive Ireland becomes;
- consistent with the previous finding, all the producers believe that the Section 481 incentive is not competitive for big budget films whereas they felt that for films with budgets below the cap it was either similar to, or more favourable than, other available incentives.

5.6 Key Chapter Findings

Key chapter findings are as follows:

- when it was introduced, Section 481 was ahead of its time in the global context of film incentives. However, since the 1990's Ireland's key competitor countries have introduced significant film incentives;
- reducing the cost of production has increasingly become a key driver within the international film industry. Although some productions for creative reasons need to locate in a specific location, productions are becoming more and more "location neutral" i.e. they are not tied to a specific location;
- this means that the availability of incentives has become increasingly important in formulating the decision as to where to base production. It is clear that Ireland's

competitor destinations offer incentives for film production which can reduce production costs by an amount which is at least comparable to the contribution from Section 481. For higher budget films, Section 481 ranks poorly vis-à-vis competitor incentives;

- the most recent trend is towards incentivising big budget productions, as the incentives introduced by Australia and New Zealand over the last twelve months illustrate. Section 481, on the other hand, does not favour big budget productions because of the €10.48 mn cap;
- the key messages from the consultants' survey of international producers were that while Section 481 was perceived to be easily understood and to operate efficiently, the contribution is seen as becoming uncompetitive for big budget films in recent years due to a combination of the existence of the Irish cap, together with the introduction of significant incentives without a cap, particularly in Canada, New Zealand and Australia.

Chapter 6 A Future Financial Incentive

6.1 Introduction

The Terms of Reference require PricewaterhouseCoopers to consider, if there is a compelling economic and/or competitive justification for a film incentive, what is the most appropriate form for that incentive to take.

The remainder of this chapter comprises four other sections:

- In Section 6.2, the three conceptual incentive models operated by the other key territories are examined;
- Section 6.3 outlines the views of the consultants as to the key criteria for judging the efficacy of a film incentive and evaluates Section 481 and the other alternative models against these criteria;
- Section 6.4 examines certain other aspects of Section 481 that are seen as weaknesses that need to be addressed.

Key chapter findings are contained in Section 6.5.

6.2 Alternative Models for an Incentive

In Chapter 5 the incentives operated by countries which (based on the consultants' interviews with foreign producers) can be considered Ireland's main competitors in the film production industry were outlined. The incentives are based on three alternative conceptual models, namely;

- Investor Deduction Model;
- Tax Credit Model;
- Direct Subsidy Model.

The principles of each of these are summarised overleaf.

6.2.1 Investor Deduction Model

The exact form such a model will take varies from country to country. However, the basic principle is that the taxpayer is given a tax deduction for investing in the film (typically in a particular film or a fund which invests in film production) with the risks and rewards being shared in some agreed proportion between the film producer and the taxpayer. In order to stimulate film production the investor deduction model is generally structured in a way that will contribute an expected level of contribution to budget for the film production company.

Section 481 is an investor deduction model where the production company will expect to receive a contribution to budget of between 10% and 12% for films with a budget below the legislative cap of €10.48 mn. This percentage falls for films with Irish spend above this cap as no Section 481 benefit is available on this excess. By comparison, in the UK the sale and leaseback investor deduction model contributes approximately 10 to 15% of budget with no limit.

Other countries mentioned in Chapter 5 of this report that use the investor deduction model include Germany and France.

6.2.2 Tax Credit Model

In this model, a government grants the film production company a tax credit against that company's tax liabilities by reference to an agreed percentage of spend. The defined spend is usually local spend or an element of this. The exact form of the tax credit model varies from country to country but generally takes the form of a refundable tax credit (i.e. to the extent the credit exceeds the production company's tax liabilities, a cash payment for the excess is made).

In Australia, the production company obtains a tax credit of up to 12.5% of the production's qualifying Australian expenditure. The credit is firstly applied against federal taxes payable by the production company with the balance refunded. Although full details of the New Zealand scheme have not yet been announced, it is expected to follow the Australian model and it has already been stated that the credit will be based on 12.5% of New Zealand expenditure on production.

In Canada the main incentive allows credit based on qualifying Canadian labour expenditure only, and a 25% credit is available where the production entity fulfils certain criteria. The maximum credit is capped at 12% of the film's total budget. An alternative credit system also operates which offers a 16% credit for qualifying Canadian labour spend and is aimed primarily at attracting overseas producers. As well as these credits from the Federal Government, production companies can avail of different rates of credits for labour spend under the Provincial credit systems, depending on where production is based. As in the Australian system, the credit is firstly applied against taxes of the production company and the balance is then refunded.

As the Australian and New Zealand models were only introduced in the last twelve months, most of the comments in Section 6.3 below refer to Canada as this system has been in place since 1997.

6.2.3 Direct Subsidy Model

The direct subsidy model is relatively simple. In this context the direct subsidy model is used to describe a scheme where a government gives an upfront grant directly to film production companies, the level of grant being based on the criteria laid down by a particular government. The key criteria often links the receipt of the subsidy to a specified level of production company spend in the local economy.

As outlined in Chapter 5, while all the countries reviewed offer direct subsidies to film companies, in most cases these subsidies are of relatively low value, are primarily aimed at indigenous development and do not act as the primary stimulus for attracting film production to a particular country.

The main exception to this is the Isle of Man where its key incentive is a subsidy of up to 25% of budget once the relevant conditions are satisfied.

6.3 Criteria for a Successful Film Incentive

In order to properly evaluate the strengths and weaknesses of Section 481 and the other two incentive models, it is important to identify the key criteria for a successful film incentive. While there is some element of subjectivity in deciding on what should be the key criteria and the weighting which could be given to each, the list below is based on PwC analysis and interviews and discussions with primary stakeholders encompassing both the users, beneficiaries and operators/overseers of the relief.

In order for a film incentive to be successful it must meet both the objectives of the Government and also the film industry itself. Accordingly, the criteria set out below incorporates what the consultants believe to be the key criteria for both (and these are dealt with further in the sections below). The first four criteria are the key issues that the consultants believe a Government will look to ensure are covered by its incentive while the remaining criteria are the issues that are of greater concern to the production company.

- Transparency
- Ease of administration
- Cost of administration (a production company requirement also).
- A close linkage between incentive offered and benefits derived, including the development of film industry infrastructure.
- The certainty of incentive being available.
- Competitiveness with other available incentives.
- The timely receipt of incentive.

In the rest of Section 6.3 the consultants examine Section 481 under each heading vis-à-vis the Tax Credit and Direct Subsidy models, as implemented by competitor locations.

6.3.1 Transparency

Transparency in this particular context is the term used to refer to the potential for "abuse" in the incentive models i.e. the potential in the system which would allow producers to increase the quantum of the incentive they receive, over that intended to be given by the system, by "manipulating" the budget to which the incentive is applied.

(i) Section 481

It is clear from the consultants' review that a number of different controls have been put in place over the years to improve the transparency of how the Section 481 scheme works and to minimise the potential for any "abuse" of the relief. Although the relief is based on the legislative provisions in Section 481, guidelines have also been put in place at various stages by both the Department of Arts, Sports and Tourism and the Revenue Commissioners and the procedures which are in place mean that the production companies utilising Section 481 are currently operating in an environment which is subject to quite a high level of checks and controls.

Based on interviews with stakeholders, it appears there may have been difficulties with the scheme in the past. However, it seems to be generally accepted by all interested parties that any such manipulation of the scheme has significantly decreased and would currently be considered to be at a low level.

There would seem to be two key areas where "excessive" benefit could be derived from Section 481. Firstly, it is possible for payments to be made to Irish/EU individuals which would qualify as Irish spend for the purposes of Section 481 even though a high percentage of this receipt can effectively be passed on to a non-EU person, so that the tax on this income does not become payable in Ireland or the EU. For example, in theory, the production company could be charged by an Irish supplier – Irish spend - which has in turn been billed on by that supplier to a non Irish / non EU supplier. The second potential for abuse seems to be that budgets could be overstated so that an increased Section 481 benefit is derived. However there is limited evidence of this type of "budget inflation" happening in practice.

(ii) Tax Credit Systems

The first of the problems outlined in the previous paragraph is not unique to Section 481 or indeed to investor incentives and the same problem arises in practice in countries that operate a tax credit system. For example, discussions with PwC Canada personnel who specialise in the film industry revealed that the same problem arises in that country where a tax credit is given for expenditure on Canadian labour even though some or all of this spend could effectively be passed on to a non-Canadian person.

Although this problem has already arisen in Canada, it is too early to determine whether the same problem will arise in Australia and New Zealand, although the nature of how the tax credit system works is such that at least the potential for the same issue to arise exists.

Overall, the opportunities for abuse in a tax credit system should be less than under Section 481 as receipts must be furnished in order to obtain the refund. This effectively eliminates the excessive budgeting issue referred to in the context of Section 481 as an extremely detailed audit is usually conducted of the expenditure on which the credit is granted.

(iii) Direct Subsidies

It is difficult to comment on transparency and scope for abuse under this heading because different types of subsidy systems exist and they operate different criteria etc. However, in general terms transparency issues and scope for abuse of direct subsidies are likely to be similar to those applicable to Section 481. It is still theoretically open for the grant applicant to "inflate" budgets to increase the level of local spend if this is a criteria for the grant and similarly amounts thought to be local spend could be passed on to non local residents. However, the nature of most grant schemes (whether for film production or in other industrial sectors) require a very detailed verification audit to verify the amount of local spend and potentially this reduces the scope for abuse.

(iv) Comment

Overall, under any incentive model there is always scope for abuse by those who wish to push the system beyond its intended limits and beyond the "spirit" of the legislation. However, while it could be argued that the direct subsidy scheme is the most transparent of the models (especially if the grant of the funds is on the basis of a full verification audit), any safeguards that are required in relation to ensuring an acceptable degree of transparency under any model can be implemented where necessary.

6.3.2 Ease of Administration

(i) Section 481

Although in theory a Section 481 structure looks relatively complex, it is clear that the operation of the scheme has evolved to a position where it is now clearly understood and efficiently administered and this was confirmed by the producers in the international survey (see section 5.5). In effect the administration of the scheme is shared between (a) the Irish co-producer, (b) the Department of Arts, Sports and Tourism; (c) the Revenue Commissioners; and (d) the banks and legal and tax professionals.

The key administration elements from the perspective of this report are those of the Government and the producers. From the Government's perspective it has a relatively limited role in scheme administration and there are fewer than five people dealing with the certification of films in the Department of Arts, Sport and Tourism. However, the Irish co-producer does need to spend quite a considerable amount of time dealing with the administration of the scheme and Government requirements. As well as certification from the Department of Arts, Sport and Tourism perspective there is also the Revenue certification process that must be adhered to by the producers.

(ii) Tax Credit System

On the face of it a tax credit system is also relatively easily administered. While all the relevant receipts must be forwarded to the Government authority for certification, apart for this there is relatively little administration from a producer's perspective.

From the Government's perspective, however, more administrative time has proved to be required in other countries than might be apparent from a relatively simple system. This is evidenced by the Canadian experience where it was originally anticipated that one full time Government employee would be able to deal with the certification process. However, it now transpires that fifty Government employees are now employed full time to look after this area and they are located throughout Canada in four different offices.

(iii) Direct Subsidies

Once again this will depend on the structure and criteria of the particular grant scheme. However, the administration burden will be structured in a fundamentally different way to Section 481.

Under a direct subsidy scheme the Government will be significantly more involved in the process both at the grant approval stage and at the end where it is verified that criteria have been met. Accordingly from a Government's perspective there will be a heavier time and cost input than there is currently under the Section 481 scheme.

In theory, the only other party in the administrative area will be the producer, who will need to make the grant application and provide whatever evidence is required to verify that the criteria have been met. However, in practice it is likely that the production company will need to purchase the services of a professional to deal with the application, as tends to happen in the overseas territories with direct subsidies.

(iv) Comment

It is clear from the above that each of the models will result in some degree of administration input, and it is probable that a direct subsidy system requires the greatest Government input in this regard. Overall, it appears that a Section 481 as a "mature" investor based model requires the least Government input in its administration. While, at a conceptual level, it could be expected that the administration of a tax credit system should be similar to the level of administration involved in Section 481, the experience in Canada has been that quite a considerable level of resources are needed to operate the system.

This is as a result of a combination of factors, including an underestimation at its inception as to the number of people needed to operate the system and the considerable success that the scheme has enjoyed in terms of attracting productions to Canada.

Section 481 requires the most input from the private sector, and conversely the Direct Subsidy Model tends to require the least private sector input.

6.3.3 Cost of Administration

Linked to the issue of the ease of administration of a scheme, is the issue of administration costs. The non-Governmental or 'private' element of administration costs will generally reduce the net Government investment / credit / subsidy which "stays" with the producer of the particular film.

(i) Section 481

The consultants have referred above to the limited role played by the Government in the administration of Section 481 and therefore there is inevitably a reasonably high level of private administration costs involved in an investor based model. The return to the investor also has to be factored in, and the combination of private administration costs and investor return means that there will always be quite a significant difference between the net contribution by Government and the contribution received by the producer.

Section 481 is no exception in this regard and in broad terms approximately 60% of the tax relief granted ends up as a contribution to budget for the production company. This is a lower level of leakage than arises under other investor based incentives such as the sale and leaseback mechanism in the UK. Under the sale and leaseback model, there are very significant professional costs and the net benefit from the incentive is shared between corporate investors (usually a bank) and the production company. Also, it was established that under the investor based scheme previously operated by the Canadian Government, the leakage was extremely high and generally only 10% of the funds raised actually reached the production company.

It is also important to put the level of private administration costs into commercial context. As already indicated, administration of the scheme is principally operated by the private sector (unlike direct subsidies where the administration burden is largely on the Government's side) and the very nature of an investor based incentive is that part of the risk and reward is taken by the investor.

Under Section 481, approximately 29% of the tax relief granted is allocated to the investor's return[34]. This is lower than most of the other investor schemes reviewed and reflects the more limited risk taken by the Section 481 investor.

However, it must be remembered that the investors do take some risk (see 6.5 below). They will have borrowed to invest in the production and if the film is not delivered and accepted by the deliveree, the investors will be obliged to repay the borrowings and the interest due in full and the return is therefore set at a level which compensates them for this risk. Under other investor incentive models, the investment is often made in a form where the investor takes on greater risk in relation to the films potential commercial success and as a result can expect to share in any upside in this regard. This structure would not be appropriate in Ireland as, in the consultant's view, there is a limited pool of high earning taxpayers who would be willing to invest risk capital in the film production area.

Section 481 provides finance to a production company and there is always an investment of time and an element of cost involved in obtaining production finance (bank negotiations, guarantees, legal opinions etc), regardless of whether this finance is Section 481 finance or from another source. In addition, the roles played by the bank, lawyers and tax advisor do not represent sunk costs to the Government or the production company as the intermediaries play a key role in terms of both risk management and documentation review etc. and this can be contrasted with the position in relation to direct subsidy schemes as outlined below.

From the Government's perspective there is a fairly limited administration cost (as outlined in Chapter 3, for 2001 this cost was estimated to be €180,453). As already mentioned, this is because the administration is shared between various parties, so that there are limited administration costs attributable to the roles played by the Department of Arts, Sport and Tourism and the Revenue Commissioners.

(ii) Tax Credit System

On the face of it, a tax credit system appears to give rise to much less administration costs than the investor based model in that the incentive is paid directly by the State to the producer. However, in practice there tends to be quite significant administration costs. However, it is harder to quantify this in a tax credit system as the costs payable to

[34] The return to investor is made up of the net cash return plus the cost of financing the taxpayer's investment.

intermediaries will differ from film to film and part of the administration cost is actually incurred by the Government (as already indicated, 50 full time employees are now required in Canada to administer the tax credit system).

The private costs in the tax credit system come from two main sources. Firstly, because the cash incentive is not upfront the producer will generally need to borrow funds from a bank to finance the tax credit, which will not be forthcoming for some time. Banks historically charge high interest rates for film "gap" financing due to the high risk element involved in film making (8% would be a typical rate currently according to PwC Canada) and an arrangement fee is also typically payable. Furthermore, less established producers have often found it very difficult to get a bank to provide the gap financing in these circumstances.

The other main private cost is that as the credit is received after production has been completed, banks need to satisfy themselves from the risk management perspective that they should lend the gap finance to a particular production. They will generally require that a professional report is carried out into the background of the film to offer an opinion as to whether the credit will be forthcoming (and the viability of the film etc.) and payment for this report is a cost to the production company - again this happens under the Canadian system.

(iii) Direct Subsidies

Under a direct subsidy scheme, the direct administration costs for Government will be significantly higher than in the other models and for the producer there is likely to be professional fees payable to industry professionals in obtaining their assistance in the grant application process.

From the production companies' perspective, availing of a direct subsidy scheme may require them to spend more time on the process than they currently spend on the Section 481 arrangements. The experience would be that at the back end stage the production company administration time would be similar to Section 481 but that more time would need to be spent at the subsidy application stage.

Overall, while there are costs of administering a direct subsidy system from the producers' perspective, it is reasonable to assume that overall these costs will be less than the investor incentive model or the tax credit model. However, as previously outlined, this is principally because the risk and responsibilities taken on by investors or the production company effectively shifts to the Government. The security or risk evaluation provided by the review activities carried on by banks, lawyers and accountants is removed under a direct subsidy scheme. In Section 481 the investment in a particular film is market driven. The market (i.e. investors together with bank and professional advisors) determines whether a particular film is commercially viable and has the necessary finance and expertise to be successful. However, in a direct subsidy scheme the Government has to satisfy itself that all the necessary elements are in place unless of course the Government decides to pay professionals to review film proposals – and in that case similar professional costs are likely to arise as would arise under Section 481.

(iv) Comment

In summary, it is clear that each of the incentive models involves quite significant administration costs. However, under each scheme these costs arise in different ways:

- under Section 481 there are professional and banking costs and the return for investors;
- under the tax credit system there are professional and financing costs of a different kind and higher Government administration costs;
- the main cost associated with the direct subsidy model is not in the form of professional costs but it is reflected in the greater role played by Government in scheme administration.

The different ways that administration costs occur effectively represents the different allocation of roles and risks and the different ways in which the evaluation process is managed under each model. Accordingly, the Government has the smallest role to play in Section 481 and the private sector cost is highest and the Government administration costs are lowest. The Government has the most involved role to play in a direct subsidy scheme where the private sector costs should be lowest and Government costs highest. Although the level of private sector costs is quite high within both the tax credit and Section 481 systems, overall it should be lower in a tax credit system. Conversely, the cost of government administration should be higher in a tax credit system.

6.3.4 A Close Link between Incentive and Benefits, including Development of Film Infrastructure

(i) Section 481

Section 481 has been formulated in a manner that ensures that the level of incentive granted by the Government is closely linked to the level of economic benefit derived by the Government. This is principally because the amount of funds that can be raised by a production company is limited by the amount of Irish spend. Indeed, under Section 481 the Government can obtain an increased net benefit in circumstance where a production's full budget is spent in Ireland yet the legislation provides that only a limited specified percentage of the budget can be raised. This is in contrast to, for example, UK sale and leaseback incentive where the full benefit of the UK incentive can be achieved for a co-production once a minimum of 20% spend is in the UK (as the UK legislation is not tied to UK spend in the same way).

As outlined in Chapter 2, it is clear that the Irish film infrastructure has developed quite dramatically since Section 481 started to operate effectively in the early 1990s. The provisions of Section 481 are such that it has enabled such an infrastructure to develop. This is due to a combination of factors, including the requirement for an Irish co-producer, the Irish spend criteria and the other developmental criteria such as the requirement to employ specific numbers of trainees.

Section 481 has also contributed to the development of the Irish industry as it provides a financing mechanism that enables Irish producers retain equity in their films, in particular where the films have Irish creative content and/or have a high degree of Irish creative input (e.g. writer, talent). Many of these are small to medium sized productions that are made via co productions with other territories. The fact that the Irish co producer can bring Section 481 finance to the negotiating table (generally this will result in a contribution of 10%-12% of budget) allows the Irish producer to obtain a greater share in the film's distribution rights and retain a greater share in the film's profits if it is a commercial success. This type of reward allows the producer build up a "library" of rights in the production and forms the basis of the funds that are available for reinvestment into the industry.

(ii) Tax Credit System

A tax credit system, as with the Section 481 regime, is clearly linked to the economic benefit derived by the particular Government as it directly relates to the spend in the particular territory.

In theory, a tax credit system is similar to Section 481 encouraging development of the film industry infrastructure as spend needs to take place in the territory granting the credit. Given that the schemes in Australia and New Zealand are relatively new, the best example of this is in Canada, where there has been significant development in terms of the personnel and facilities available to productions. However it should be noted that in Australia the increased production has already led to a significant improvement in studio facilities. In addition, in Canada, a Canadian producer can use the contribution offered by the incentive to gain equity in the film provided he can get a bank to provide the gap financing. However, in general it is perceived to be harder to use tax credits in negotiating equity arrangements than it is with Section 481.

(iii) Direct Subsidies

As with other models, it is common for Governments to ensure that any subsidy given is directly linked to the economic benefits to be derived.

The situation in relation to the building up of infrastructure under the other two models can be contrasted with the Isle of Man where the lack of appropriate requirements has meant that limited infrastructure has developed and producers simply bring in crews who exit once the film is completed. Having said that it would be relatively easy to have a direct subsidy system that seeks to build up local infrastructure, by having suitable criteria included.

(iv) Comment

Overall, provided that the detailed particulars of a specific incentive scheme are carefully designed, the incentive models are relatively neutral in terms of ensuring that the benefit offered is linked to benefits in the local economy as many of the existing schemes have been designed with this clear objective in mind.

In addition, provided the correct criteria are included, an incentive under any of the models can ensure that the increased production that occurs as a result of the incentive contribute to the development of local facilities and skilled personnel. This is especially true where the incentive has the ability to attract overseas producers to a territory and requires them to use local infrastructure. The provisions of Section 481 have been particularly effective in building up the Irish infrastructure as have the provisions of the Australian and Canadian tax credit systems. The direct subsidy system operated by the Isle of Man has been less successful in this regard.

6.3.5 Certainty

(i) Section 481

The interview process with producers established that it was essential for the producer to know in advance that they could avail of a specific incentive in a particular country when determining the financial structure for a project. If there was any real uncertainty (due to say, subjectivity issues) then this would significantly reduce the chance of that country being considered as a location when there were alternative countries where such certainty existed.

All the producers interviewed acknowledged that the objective conditions of Section 481 were such that they had certainty that Section 481 relief would be available once those conditions were fulfilled.

(ii) Tax Credit System

Tax credits are similar to Section 481 in terms of certainty as producers know that they will get the agreed refund once they meet the prescribed criteria.

(iii) Direct Subsidies

It is under a direct subsidy system where producers feel most concerned in terms of certainty. Historically, there has always been an element of subjectivity in deciding who gets grants and how much a particular production should get and as noted above, this makes producers nervous about considering a country with a direct subsidy incentive scheme as a potential location.

A separate but somewhat related point is that direct subsidies generally tend to have an annual limit placed on them (i.e. a predetermined fund). As well as creating uncertainty, this may result in a "first come first served" scenario which would lead to scheduling problems and the risk of the first but not necessarily the most appropriate films getting funding. In Holland there is a subsidy available on an annual basis and this leads to the very unsatisfactory position of producers queuing overnight the day before the subsidy becomes available! Even if no annual limit was placed on the grant, the general view is that the "fund" available via a direct subsidy system can be subject to change at short notice and often competes with other areas for Exchequer resources and this can increase the uncertainty as to its availability. This would cause particular problems for the film industry where projects have long lead times.

A common view expressed particularly by the overseas producers being interviewed was that a direct subsidy scheme could only work if there was no limit on the annual grant, that there would be no subjectivity, that the grant would be available once certain conditions were fulfilled and provided that the grant was legislated for a number of years, rather than being decided upon on an annual basis.

(iv) Comment

As noted above, one of the key issues for producers in putting together the financing plan for a project is the knowledge that if a particular location is chosen then, provided the criteria are met, the incentive available in that location can be availed of. In this regard, under the tax credit model, producers feel there is this certainty that provided the production spend laid down is met, that the credits will be available to them, and indeed this confidence is also reflected in their comments in relation to Section 481 and, to a lesser extent, in relation to other investor models such as sale and leaseback. As noted above, it is the implementation of direct subsidy systems which gives rise to the most concern as it can be difficult to implement these systems without an element of subjectivity – real or perceived - being associated with them, especially where the subsidy pool is a finite sum.

6.3.6 Competitiveness

(i) Section 481

As already outlined, Section 481 generally contributes approximately 10% to 12% to a producer's budget once the cap on the €10.48 mn has not been exceeded. This level of contribution is broadly comparable to Australia, New Zealand and the UK. It is less generous than the incentives available in the Isle of Man (25% subsidy) and Canada, although the exact contribution from Canada will depend on the level of Canadian labour involved and in which province the film is shot. However, the labour credit offers up to 12% of budget with provincial incentives likely to broadly double that contribution.

A number of the producers indicated that in order to consider a country as a location they would be looking for a contribution of at least 10% – 12%. Accordingly, Section 481 is competitive in this regard, but only for spend below the €10.48 mn legislative cap. A point consistently made by all the producers corresponded with was that the Section 481 incentive was not competitive for budgets exceeding the cap, and the more the cap is exceeded the less attractive Ireland becomes (see section 5.5). Where Ireland has attracted large budget productions it was largely because of the opportunity to link Section 481 with the UK sale and leaseback incentive that the film was actually made here.

(ii) Tax Credit System

Whether a tax credit system is competitive with Section 481 and other incentives will of course depend on what terms are laid down by a particular Government. However, the three tax credit systems considered in this report (Canada, Australia and New Zealand) currently provide incentives that are competitive, as indicated above, particularly for big budget films.

(iii) Direct Subsidies

In general it should be possible for a competitive direct subsidy to be given. However, as shown in Chapter 2, for Section 481 projects different films receive differing contributions to budget. Accordingly, deciding on the appropriate level of contribution that any new direct subsidy incentive should offer could be difficult. However, the Isle of Man's direct subsidy of 25% is clearly competitive.

(iv) Comment

As noted above, the general benchmark that producers seek as a contribution to budget from incentives is circa 10% to 12%. This is broadly in line with the tax credits offered by New Zealand and Australia and less than the amount available under the Isle of Man and Canadian systems. In relation to Section 481, this benchmark contribution is available for projects where the Irish spend does not exceed the €10.48 mn cap but the benefit decreases for projects with Irish spend in excess of this. A direct subsidy scheme can be made competitive but there may be difficulty deciding on the appropriate subsidy to be given to a particular film.

6.3.7 Timeliness of Receipt

(i) Section 481

Section 481 is recognised as providing the cash incentive on a very timely basis. The cash is generally made available before production starts and this cash flow advantage is particularly important to small and medium sized production companies trying to finance a film. The other related benefit of this is that as the Section 481 funds are received upfront, the balance of the funding for the production must be in place before the Section 481 funds are released. This is attractive to many producers as otherwise it can often be mid way through production (or indeed later) before all financing agreements are signed and agreed. Obtaining the finance pre-production also helps Irish producers negotiate favourable equity arrangements.

(ii) Tax Credit System

As already referred to, the tax credit system does not provide a timely receipt of the cash incentive to the production company. In practice, the leakage that results tends to be more of an issue for the small to medium production companies who may find it more difficult to pay for or indeed obtain the finance whereas for large production companies it may simply be an increase in financing costs.

(iii) Direct Subsidies

Timely receipt of the funds by the production company can easily be arranged under the terms of any direct subsidy scheme. However, in light of comments on the risk shift, the Government may be slow to advance funds before a film is made if is not satisfied that all the necessary conditions are in place for a particular film.

(iv) Comment

In summary, receiving the cash benefit from an incentive up front is a particularly important issue for smaller and medium size productions where they many not have the ability to borrow against these funds with a commercial bank. For well established producers and major studios, while receiving the cash upfront is always welcome, their borrowing power etc would usually allow them to borrow against the funds in the open market and at current interest rates the cost of funds is at a relatively low level. Section 481 currently offers the most timely receipts with the Tax Credit system being the least timely.

6.3.8 Summary of Incentive Model Comparisons

As the preceding subsections illustrate, the different conceptual models have differing strengths and weaknesses when compared and contrasted with each other under the criteria outlined above. Table 6.1 shows the ranking the consultants believe should be attached to the different models under the criteria, where 1 is the highest position and 3 is the lowest. While the ranking of the models could be viewed as subjective (and differing weighting could be ascribed to the criteria), the consultants view took into account the combined views expressed in the survey of international producers that was undertaken, as well as interviews with key national informants.

Table 6.1 Ranking of Incentive Models by Major Criteria

Criteria	Investor Based Model – S481	Tax Credit Model (Canada/Australia/New Zealand)	Direct Subsidy Model (Isle of Man)
Transparency	3	2	1
Ease of Administration	1	2	3
Cost of Administration	2	2	1
Linkage between Incentive & Benefits	1	1	3
Certainty	1	1	3
Competitiveness	3	1	2
Timely Receipt of Funds	1	3	2

Source: PwC Derived

The most noteworthy points from the ranking above are that:

- there is no "ideal" incentive model and the model that is preferred will depend on the stakeholders' own evaluation of the relative importance of the key criteria ;
- the investor based model and the tax credit model are ranked higher than the direct subsidy model, reflecting the fact that as key incentive models these two schemes are more popular as a primary stimulus than the direct subsidy scheme. This trend is evident from the specific country by country analysis dealt with in Chapter 5;
- it should be noted that in the table above Section 481 is ranked least favourable under the competitiveness criterion. This reflects the fact that where the Irish spend is above the cap, Section 481 contributes less to budget. If viewed solely in relation to projects below the cap, Section 481 would be ranked more favourably (again see section 5.5).

6.4 Other Issues in Relation to the "Weaknesses" of Section 481

There are also two other specific issues that have historically been raised by commentators in relation to Section 481. These points are addressed below but PwC would comment that the profile of investors and the sharing of risk always need to be addressed in the context of an investor based incentive model.

(i) Investor Profile

A comment frequently made to the consultants during the preparation of this report was that Section 481 was seen as an investment for a "golden circle" of well off taxpayers.

Because it is an investor incentive which gives taxpayers a tax deduction for their investment, by definition such individuals will always need to have a reasonably high level of income in order to have such disposable income to invest. For Section 481, a single individual needs approximately €60,000 of taxable income in order to maximise an investment from a personal perspective (i.e. to make a maximum Section 481 investment of €31,750). However it is common practice for "half slots" to be made available and an individual in this case would only need to have approximately €45,000 of taxable income.

When viewed in the context of the main investor incentives operating in the other key countries, Section 481 has not been an incentive for "high rollers". For example, in the UK sale and leaseback model the investors are either large banks or film partnerships with individuals typically earning high six figure salaries. Similarly, the investors who typically invest in a German film fund are high income earners rather than middle earners. The experience of financiers is that Section 481 investors tend to come from middle income/ middle management taxpayers rather than high net worth individuals.

A related criticism that is sometimes raised in this regard is that there is a closed circle of investors. Compared to other investor based incentives Section 481 is relatively wide ranging. This is because each person invests a relatively small amount and it takes numerous people to raise the funds. For example it takes 330 investors all investing the maximum amount to raise the maximum Section 481 funds and there were over 2,000 investors in Section 481 schemes during 2001. This is significantly more people than would generally be involved in a sale and leaseback transaction in the UK (typically one bank or a handful of individuals in a film partnership). However, because of the speed in which investors need to be "lined up", the financiers inevitably start by drawing on investors who have previously been involved in a Section 481 investment.

(ii) Risk

Another criticism sometimes levelled at Section 481 is that no risk is taken by the investor. Therefore, some risk is taken by the investor but it is quite limited and the "reward" or return on investment (typically now circa €2,000) is also quite limited.

As mentioned earlier in this section, having a scheme involving higher risks / high returns would not be appropriate in the Irish market. The key risks for the investor are (a) that the film is not completed and delivered/accepted and (b) that there are unpaid creditors in the special purpose company that must be paid before the share capital can be repaid. It must be remembered that the investment is in a commercial venture and by its nature there will always be some level of risk, albeit a limited risk. At present, the view of the industry is that the risk profile of these investments is set at the correct level to ensure that sufficient private funds are available in the market place.

In addition, there appears to be a perception that the existence of a completion bond "closes off" the investors' risk. This is not the case as the existence of a completion bond does not guarantee that the film will be completed or that it will be delivered to the satisfaction of the deliveree and in a commercial context it is often difficult for production companies to recover funds under the bond in the event of a budget overrun.

6.5 Key Chapter Findings

Key chapter findings are as follows:

- there are three key conceptual models under which the specific film incentives introduced by countries can be grouped. As Chapter 5 illustrates, different countries have chosen to implement different models to act as their primary incentive, with the most recent trend being towards implementing a tax credit model for large budget films;
- each of these models can be measured against a set of key criteria but there is no "ideal" incentive model and the stakeholders' preferred option will depend on the weighting and ranking they place on the different key criteria;
- the results show that the tax credit model and Section 481 rank more favourably than the direct subsidy model;
- overall, Section 481 compares favourably to other investor based incentives when ranked under the key criteria;
- criticism sometimes levelled at Section 481 in terms of the risk profile of the investment and the profile of the investors, is not warranted when Section 481 is examined more closely and measured against other investor based incentive models under these headings.

Chapter 7 Film Production Incentives and the Future

7.1 Introduction

This chapter brings together the findings from the foregoing chapters to provide answers to the three main questions posed in the Terms of Reference, namely:

- is there a compelling economic and/or competitive justification for continuing fiscal support for the Irish film sector after 2004?;
- if such a justification does exist, what form should such an incentive take?;
- what are the projected costs to the Exchequer associated with the recommendations?

PricewaterhouseCoopers opinions in relation to each of these questions are provided in Sections 7.2, 7.3 and 7.4 respectively. Key chapter findings are presented in Section 7.5.

7.2 Is there a Case for an Incentive for Film Production in Ireland post-2004?

The existence of a compelling economic and competitive justification for continuing fiscal support for the Irish film sector after 2004 is a function of three key factors:

- the net cost or benefit to the Exchequer associated with the operation of Section 481;
- the impact of the discontinuation of Section 481 on the national economy;
- the extent to which the discontinuation of Section 481 will result in the loss of film production activity to jurisdictions with tax incentives.

(i) Cost Benefit Analysis

Chapter 3 presented PricewaterhouseCoopers' analysis of the costs and benefits to the Exchequer associated with the operation of Section 481 for the years 1999, 2000 and 2001. High-level findings are presented in Table 7.1.

Table 7.1 S481 Costs and Benefits to the Exchequer , 1999, 2000 and 2001 (derived from Table 3.18)

	1999	2000	2001	Total 1999-2001	Annual Average 1999 to 2001
Total Costs	€ 27,264,372	€ 26,892,532	€ 22,358,170	€ 76,515,074	€ 25,505,025
Total Benefits	€ 30,046,501	€ 32,182,212	€ 35,780,797	€ 98,009,511	€ 32,813,584
Total Benefits (adjusted for Deadweight)	€ 25,437,236	€ 27,695,907	€ 30,008,262	€ 83,141,405	€ 83,141,405
Total Costs less Total Benefits	**-€ 1,827,136**	**€ 803,375**	**€ 7,650,093**	**€ 6,626,331**	**€ 2,208,777**

Source: PwC

Table 7.1 shows that the operation of Section 481 generated some €6.6 mn of net benefit to the Exchequer in the period 1999 to 2001 or an annual average return of €2.2 mn. As stated in Chapter 3, this net benefit was derived using a deliberately conservative approach which was based on Department of Finance guidelines on the preparation of cost benefit analyses. In terms of Exchequer benefit, there was an economic justification for the existence of the incentive for the overall period under review. While the return to the Exchequer was not positive in 1999, the trend is undoubtedly upwards, with a positive benefit in 2000 and an increased positive benefit in 2001. This trend is primarily attributable to Ireland's success in the attraction of a growing number of big budget US-commissioned films. Although the detailed empirical data for 2002 and 2003 are not yet available, preliminary data indicate that the trend is continuing.

(ii) Discontinuation

An analysis of the impact of the discontinuation of Section 481 on the national economy, presented in Chapter 4, found that some 3,500 jobs within the Irish economy are dependent on the relief – equivalent to the total direct employment of Intel Ireland.

It was also found that the discontinuation of the relief would have major implications for the audiovisual sector in Ireland (i.e. results in a 66% reduction in sectoral output), as well as for the quality and availability of film with Ireland-specific content.

In conclusion, a detailed analysis of Exchequer costs and benefits (defined in tax terms only) for the years 1999, 2000 and 2001, and a review of Section 481-incentivised projects in 2002 and 2003, indicate strongly that there is now, and is likely to continue to be, a compelling economic justification for the incentivisation of film production activity in Ireland.

(iii) Competitive Justification

The third factor relevant to an assessment of whether there is a case for the continuation of a film production incentive in Ireland pertains to the extent to which the existence of an incentive is necessary for the promotion of film production activity[35], particularly that which is internationally mobile. This was the subject of Chapter 5, which found that:

- while Section 35 was to the forefront of tax incentives for the film production sector when it was introduced in 1987, the intervening period has witnessed the introduction of a wide range of incentives to mobile film production activity in most English-speaking countries (excluding the US) and in many EU states;
- no developed economy is competing effectively for the attraction of mobile film production activity in the absence of some form of significant financial or fiscal incentive;
- the relative attractiveness of Section 481 has been gradually eroded, particularly for big budget films, principally by the emergence of more generous incentives to such productions in competitor jurisdictions and the existence of the €10.48 mn cap in the context of bigger budgets.
- 73% of production studios/ broadcasters that used Ireland as an off-shore location for film production in recent years would not consider Ireland as a location for filming if Section 481 or an equivalent incentive was not in place.

Thus, PwC's research indicates that not only is there a compelling economic justification for a film production incentive in Ireland, but that there is also a compelling competitive justification, i.e. the economic benefit shown in Table 7.1 will not be sustained in the absence of an incentive that is, at least, as attractive as Section 481.

7.3 What Form Should Such an Incentive Take?

7.3.1 Introduction

Recommendations regarding the shape of a future incentive for Ireland are based on the consideration of two primary issues, namely:

- the strengths and weaknesses of the investor deduction model (and in particular Section 481) vis-à-vis other conceptual incentive models in operation in other jurisdictions;
- the weaknesses of Section 481 and how these might be addressed.

[35] It should be noted that the answer to this question is reflected in the figures contained in Table 7.1 to the extent that benefits have been adjusted for assumed investment deadweight.

Summary findings in relation to these two issues are the subject of Sections 7.3.2 and. 7.3.3 respectively.

7.3.2 Comparative Strengths and Weaknesses of the Investor Deduction Model (Section 481)

The strengths and weaknesses of the investor deduction model as represented by Section 481 vis-à-vis models in operation in other jurisdictions (i.e. tax credit and direct subsidy) were analysed in Chapter 6. A summary of findings is presented in Table 7.2.

Table 7.2 Ranking of Investor Model/ S481 and Alternatives Models against Relevant National Administration and Producer Criteria

	Investor Deduction Model/ S481	Tax Credit System	Direct Subsidy
Transparency	3	2	1
Ease of Administration	1	2	3
Cost of Administration	2	2	1
Close Link between Incentive & Benefit	1	1	3
Certainty	1	1	3
Competitiveness/ Contribution to Budget	3	1	2
Timeliness	1	3	2

Source: PricewaterhouseCoopers

Table 7.2 shows that the investor deduction model, as represented in Ireland by Section 481, performs relatively strongly compared with the alternative incentive models. There is no "ideal" model and the stakeholders preferred option will depend on the weight they place on how a model ranks under each of the criteria.

As Chapter 6 shows, the direct subsidy model as a primary incentive tool has been ranked least favourably by the consultants. In addition, as Chapter 5 illustrates, this model is not the key incentive model adopted by most countries. Accordingly, the consultants do not believe that a direct subsidy model would be the appropriate form for a future Irish incentive to act as the primary stimulus for the film industry.

As outlined in Chapter 6, the best models are Section 481 and tax credits, which rank closely on the criteria outlined. The key areas where a tax credit system (as enacted by Australia, New Zealand and Canada) have an advantage over Section 481 in its current form are in the areas of (a) transparency and (b) competitiveness (in relation to the contribution to bigger budget films because of the €10.48 mn cap). Section 481 on the other hand is more favourable in terms of (a) ease of administration from the Government's perspective and (b) timely receipt of funds.

Although the most recent trend in other jurisdictions has been to introduce new incentives based on the tax credit model, on balance the consultants believe that the retention of Section 481 is more desirable than introducing tax credits. This conclusion is based on the following factors:

- no distinction is made between off-shore and indigenous productions in the computation of benefits under the tax credit system, although the potential for deadweight is clearly higher in the case of the latter;
- the tax credit system does not provide the film producer with production finance upfront – an important benefit of Section 481 and reported to be crucial to the work of indigenous film producers;
- the attachment of qualifying conditions in a tax credit system (e.g. requirement that all heads of department are indigenous) would generally be less than is the case for Section 481, with consequences that this might not contribute to the same degree to the development of the indigenous production sector;
- the areas in which the competitor tax credit system rank more favourably to Section 481 could be addressed by enhancing the existing incentive;
- the Section 481 incentive systems and supporting structures have been fine tuned and developed by all parties into a mature model that has found its level, works smoothly and is easily understood;
- the resource and lead time implications associated with introducing a new system, including the requirement to educate all potential users on the detail of the incentive, the public resources associated with implementation of the new system to ensure Government objectives are met and to minimise the scope for abuse; and the likelihood that certain off-shore producers may opt not to use the system until it has been "tried and tested" by others;
- that there is no national precedent for the introduction of sector or activity-based refundable tax credits in Ireland.

Due to the long lead time from initial planning to production it is important for producers to have confidence that the incentive will be in place when production starts. Thus it is important for the legislation to provide that Section 481 will remain in place for at least five years.

7.3.3 Weaknesses of S481

As outlined above, the two areas where Section 481 trails behind the competitor tax credit model are in relation to the issues of (a) transparency and (b) competitiveness (in relation to the contribution to bigger budget films).

In order to address these two weaknesses, the following issues need to be considered:

- the perceived inadequacy of current budget certification and compliance procedures – fuelling comment that the incentive is open to occasional "abuse";
- the limited attractiveness of Section 481 to big budget productions (which the report has shown to particularly add net benefit to the Exchequer), owing to the existence of a cap of €10.48 mn on the value of Section 481 funds that may be raised on any one project.

Addressing these weaknesses will require:

- an enhancement of existing administrative arrangements attaching to Section 481 certification and compliance to ensure that the scope for any abuse of the incentive is minimised;
- the modification of the existing provisions of Section 481 as they apply to productions with an eligible Irish spend in excess of €10.48 mn.

(i) Administrative Enhancement

The consultants believe that adopting some or all of the measures below will significantly reduce the potential for abuse:

- obtaining assistance from individuals with appropriate industry expertise to assist the Department of Arts, Sport and Tourism, as required, in the certification of budgets submitted as part of the Section 481 application process;
- the introduction of a requirement for the directors of Section 481 special purpose production companies to make a statutory declaration that confirms that the certified Irish production spend has indeed been incurred;
- a requirement that the Revenue Commissioners subject the Irish spend figures of at least two Section 481-incentivised production companies to audit annually.

Measure 1

When a budget is submitted to the Department of Arts, Sport and Tourism, the first measure envisages that the Department would, if considered appropriate, ask an expert to review the budget of a particular project. Although the level of fees for reviewing a film would obviously need to be negotiated, the consultants would envisage that the overall administrative cost to the Government should be relatively small, with a significant enhancement to the system resulting.

Measure 2

The second measure is easier to implement and the consultants envisage that a very simple wording could be included in such a statutory declaration. The scope of the declaration would be limited to confirming that the certified Irish production spend has been met in accordance with the submission to the Department of Arts, Sport and Tourism. Appropriate penalties should be introduced for incorrect declarations.

Measure 3

For the third measure, the consultants recommend that the scope of the audit to be carried out by the Revenue Commissioners be akin to a grant audit whereby the level of spend on which Section 481 is based is certified by an appropriate review of invoices. While the Revenue authorities have responsibility for the care and management of the tax system, they may wish to enlist assistance from either the Department of Arts, Sport and Tourism or outside consultants to facilitate this.

The implementation of these measures would ensure that a producer, who intends to push the limits of the level of Section 481 funds to be raised for a particular film, would do so in the knowledge that: (a) an expert with a detailed knowledge of the film industry is reviewing the budget; (b) the producer himself would need to sign a statutory declaration that the certified Irish spend has been met; and (c) an audit of the invoices will be undertaken for approximately 1 in 10 of the films made in Ireland that year.

(ii) Modifications of the Provisions in relation to the legislative cap of €10.48 mn

As outlined in Chapter 5, the second significant issue impairing Section 481's attractiveness is that the incentive in its current form provides limited attractiveness to big-budget productions. There are three main reasons for focusing the modifications to Section 481 toward attracting bigger budget films:

- the low level of deadweight associated with this type of production;
- the fact that these productions deliver the highest return to the Exchequer; and
- the attraction of big budget productions assists with the development of the indigenous industry and infrastructure.

The consultants considered three means of increasing the attractiveness of Section 481 to bigger budgets, namely:

- removal of the Section 481 cap;
- increase in the size of the Section 481 cap to say €20m;
- additional, but reduced, incentivisation of spend over the existing Section 481 cap of €10.48 mn.

Having considered the issue, the consultants concluded that the third option was the most appropriate. More specifically, it was considered that the first option would erode the economic benefit to the State too dramatically and that the second option would encourage Irish spend to the restated cap only. The consultants believe that introducing a significantly higher cap, but with a reduced percentage incentivisation above the existing cap of €10.48m would best achieve the objective of attracting bigger budget films to Ireland without significant erosion of the Exchequer benefits associated with big budget films. The consultants believe that 50% incentivisation above the existing cap would strike an appropriate balance between the interests of the Exchequer and overseas producers. It is considered that this would encourage significant incremental Irish production spend, while the Government would only be contributing €16.8 for every €100 of spend above the existing cap[36].

Although the benefits to the Exchequer could be increased further by reducing the incremental incentivisied percentage below 50%, the consultants believe that any significant reduction would lead to diminishing returns. The consultants believe that a reduction below 30% would mean that the new enhancement would be of limited attractiveness to overseas producers.

In order to preserve Exchequer benefits, it is proposed that a cap of €50m is introduced for the new incentive. The consultants believe that on the one hand €50m would allow producers obtain a significant contribution towards big budget films, while preserving the

[36] 100 X 80% X 42% X 50% = 16.8

potential for Irish spend in excess of €50m to be achieved for particular big budget films, with no incremental Exchequer cost.

An example of how this proposal would operate in practice is presented in Table 7.3.

Table 7.3 Raising the S481 Cap – PwC Recommendation in Operation

A	Total Production Budget	€ 45,000,000	€ 45,000,000
B	Ireland Spend	€ 25,000,000	€ 25,000,000
C	Eligible S481 Funds (August 2003)	€ 10,480,000	€ 10,480,000
D = B – C	Unincentivised Expenditure	€ 14,520,000	€ 14,520,000
E	% of Spend > €10,480,000 which is Eligible for S481	30%	50%
F = D * E	Additional S481 Funds that may be Raised	€ 4,356,000	€ 7,260,000
G = F+ C	Total S481 Funds that may be Raised	€ 14,836,000	€ 17,740,000

The effect of this enhancement of Section 481 would be to raise the contribution to the total production budget set out in Table 7.3 from 5% to a maximum 8%[37] - still considerably less than that offered in key competitor jurisdictions (e.g. Australia), but much more attractive to big budget productions than under the present scheme.

A review of the implications that this move would have had on Exchequer costs and benefits in 2001 under three scenarios indicates that the implementation of this recommendation will have very a favourable impact on Exchequer finances – in this review it is assumed that Ireland succeeds in the annual attraction of between one and three incremental[38] big budget productions as a result of the change (see Table 7.4).

[37] Assuming 50% of Ireland spend over the €10.48 mn cap is allowable for S481.
[38] The number of incremental projects of scale required will depend on what precise % of Ireland spend over the existing cap is eligible for S481. If this % is 30%, then the attraction of one incremental project of scale (i.e. > €35 mn) will suffice to generate a positive return to the Exchequer. This rises to three if 50% of eligible spend over the existing cap is allowed for S481 spend. While the costs associated with 50% eligibility are clearly higher than when only 30% of Ireland spend over the cap is allowed, the larger contribution to total production budget associated with the 50% recommendation would render it easier for Ireland to attract big budget productions.

Table 7.4 Implication of Implementation of PwC Recommendation to Increase S481 Eligibility for Exchequer Costs and Benefits[1]

		30% of Spend > €10.48 mn Eligible for S481	Change on Actual 2001	50% of Spend > €10.48 mn Eligible for S481	Change on Actual 2001
2001 (Actual)	Exchequer Costs	€ 22,358,170		€ 22,358,170	
	Exchequer Benefits	€ 30,008,262		€ 30,008,262	
	Exchequer Benefits - Exchequer Costs	€ 7,650,093	n.a.	€ 7,650,093	n.a.
2001 (Same Project Composition)	Exchequer Costs	€ 25,035,264		€ 26,819,993	
	Exchequer Benefits	€ 30,008,262		€ 30,008,262	
	Exchequer Benefits - Exchequer Costs	€ 4,972,999	-€ 2,677,094	€ 3,188,269	-€ 4,461,824
2001 (1 Incremental Project of Scale)	Exchequer Costs	€ 30,517,358		€ 34,086,817	
	Exchequer Benefits	€ 40,381,129		€ 40,381,129	
	Exchequer Benefits - Exchequer Costs	€ 9,863,772	€ 2,213,679	€ 6,294,313	-€ 1,355,780
2001 (3 Incremental Projects of Scale)	Exchequer Costs	€ 41,481,546		€ 48,620,464	
	Exchequer Benefits	€ 61,126,864		€ 61,126,864	
	Exchequer Benefits - Exchequer Costs	€ 19,645,317	€ 14,672,319	€ 12,506,400	€ 9,318,130

In reviewing Table 7.4, it should be noted that while Exchequer costs rise in accordance with the incentivised percentage of Ireland spend over €10.48 mn, the likelihood of attracting big budget productions is clearly greater as the percentage contribution to total production budget rises. Similarly, incremental spend may arise not just from the attraction of incremental big budget productions, rather also as a result of an increase in the Ireland spend of productions that would have been attracted to Ireland regardless.

7.4 What are the Projected Costs to the Exchequer?

The costs of the foregoing proposals to the Exchequer depend on the extent to which the proposed change to the maximum Ireland spend that is eligible for Section 481 funds succeeds in the generation of incremental big budget production activity in Ireland.
Should no incremental Irish spend transpire, the costs to the Exchequer will be:

- the cost associated with the incentivisation of film production activity that would have come to Ireland regardless of the change, estimated at some €4.5 mn if the upper limit of the proposed change (i.e. 50% eligibility for Ireland spend greater than €10.48 mn) had existed in 2001;
- the cost entailed obtaining expert assistance, as well as the costs to Revenue associated with the completion of Ireland spend audits on two Section 481 projects annually, estimated at €100,000 annually.

Thus, in the worst case scenario, where no extra Irish spend resulted from the allowance of Section 481 investment on a share of Ireland spend in excess of €10.48 mn (subject to a cap of €50 mn), the relief would still (using 2001 figures) have generated a net Exchequer yield of more than €3 mn (assuming 50% eligibility). The consultants are, however, of the firm view that this "worst case scenario" will not come to pass and rather believe that the proposed change will render Ireland considerably more attractive to big budget productions.

While the Terms of Reference asked the consultants to estimate net cost for a five year period, this was not possible with a high degree of precision owing to uncertainty regarding the impact of the move on Ireland's performance in the attraction of big budget productions.

7.5 Report Conclusions and Recommendations

Report conclusions and recommendations are as follows:

Conclusion 1

- there is a compelling economic and competitive justification for continuing State support for the Irish film sector after 2004;

Conclusion 2

- Section 481 is the appropriate form that the incentive should take going forward;

Conclusion 3

- a number of features of Section 481 in its current form are in need of improvement, including the certification and compliance procedures, and the attractiveness of the relief to big-budget productions vis-à-vis those available in other jurisdictions;

Recommendation 1

- the Section 481 fiscal incentive for film production in Ireland should be retained for a minimum period of five years;

Recommendation 2

- appropriate specialist expertise should be brought in to assist the Department of Arts, Sport and Tourism, as required, in the certification of budgets submitted as part of the Section 481 application process;

Recommendation 3

- directors of Section 481 production companies should be required to make a statutory declaration that confirms that the certified Irish production spend has been incurred;

Recommendation 4

- the Revenue Commissioners should subject the Ireland spend figures of at least two Section 481-incentivised production companies to audit on an annual basis;

Recommendation 5

- production companies should be permitted to raise Section 481 funds on between 30% and 50% of Ireland expenditures in excess of the existing cap, i.e. €10.480m up to a maximum of €50m

Annex 1 Acknowledgements

The consultants wish in particular to thank the following organisations for their assistance in the preparation of the report:

- Anglo Irish Bank Corporation Plc;
- Ardmore Studios;
- BBC Northern Ireland;
- Crossday Productions;
- Department of Arts, Sports and Tourism;
- IBEC Audiovisual Federation;
- Irish Film Board;
- Little Bird Productions;
- Matheson Ormsby Prentice;
- RBK Cleary & Associates;
- RTE;
- Miramax Films;
- Motion Picture Association of America;
- Screen Producers Ireland;
- Wicklow Film Commission;
- World 2000 Entertainment.

Annex 2 Classification of Film Production Jobs

Above the Line		
	Story and Script	sector-specific (1)
	Producer/ Director	sector-specific (1)
	Main Cast	sector-specific (1)
Below the Line	Production Management	sector-specific (1)
	Assistant Director/ Continuity	sector-specific (1)
	Technical Advisors	sector-specific (1)
	Camera	sector-specific (1)
	Sound	sector-specific (1)
	Editing	sector-specific (1)
	Stills Camera	sector-specific (1)
	Wardrobe/ Costumes/ Wigs	sector-specific (2)
	Make-up/ Hairdressing	sector-specific (2)
	Casting	sector-specific (2)
	Production Accountancy	sector-specific (2)
	Projectionists	sector-specific (2)
	Miscellaneous Studio Staff	sector-specific (2)
	Foreign Unit Technicians	sector-specific (2)
	Art Department	sector-specific (2)
	Cast (non principals)	sector-specific (2)
	Extras	casual
	Music	sector-specific (2)
	Travel & Transport	transferable
	Publicity	transferable
	Miscellaneous Expenses	transferable
	Construction Labour	transferable
	Set Dressing Labour	transferable
	Operation Labour	transferable
	Striking Costs	transferable
	Special Effects	sector-specific (2)
	Lighting/ Spotting Labour	transferable
	Other	transferable

[1] The precise computations cannot be revealed owing to the confidential nature of individual project details. However, it should be noted that they are based on empirical Exchequer costs and benefit data for a project with an Ireland spend of €36 mn in 2001.