SMOKING (NORTHERN IRELAND) ORDER 2006

HEALTH AND REGULATORY IMPACT ASSESSMENT

JUNE 2006

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1.0 Introduction

During the period 21 December 2004 to 25 March 2005 the Department of Health, Social Services and Public Safety (DHSSPS) undertook public consultation on three options for strengthening tobacco controls. Over 70,000 responses were received with the overwhelming majority (91%) supporting a ban on smoking in enclosed public places and workplaces. The consultation took place within the context of the DHSSPS Regional Strategy "*A Healthier Future – A Twenty Year Vision for Health and Wellbeing in Northern Ireland 2005 – 2025*". The Strategy outlines the Department's commitment to protecting public health by tackling the issues of active smoking and exposure to second-hand smoke in public places and workplaces.

A Regulatory Impact Assessment (RIA) including a Health Impact Assessment (HIA) has been prepared to assess the benefits and costs associated with three options for taking forward the Department's policy for tobacco control. The three options are (i) building on the existing policy of exhorting and supporting smoking cessation; (ii) a partial ban on smoking in public places which would prohibit smoking in enclosed public places and workplaces with exemptions for pubs and clubs which do not prepare or serve food; and (iii) a full ban on smoking in enclosed public places and workplaces.

2.0 Background

In 2003 there were over 5,000 deaths in Northern Ireland from lung cancer, ischaemic heart disease (IHD) and stroke. The hospital costs associated with treating these diseases is estimated at £118m (2003/2004). While not all of these deaths are attributable to smoking, scientific evidence shows that smoking is a primary contributor to death from lung cancer and IHD and is linked to the incidence of stroke and respiratory diseases.

There is also evidence to illustrate the health risks associated with exposure to second-hand smoke also referred to as passive smoking or environmental tobacco smoke (ETS). A recent report by the Scientific Committee on Tobacco and Health (SCOTH)[1] suggests non-smokers have a 24% increased risk of lung cancer from exposure to second-hand smoke. The report also highlights that second-hand smoke is a cause of heart disease and that the increased relative risk of heart disease in non-smokers from second-hand smoke is 25%. Similar results have been produced by studies from the USA.

While the evidence linking second-hand smoke with lung cancer and IHD is reasonably robust, the link between second-hand smoke and the risk of suffering a stroke is more limited. Research funded by the Scottish Executive has drawn upon findings from New Zealand and the USA in estimating the number of stroke deaths in Scotland attributable to second-hand smoke. The research found that exposure to second-hand smoke increased the risk of suffering a stroke by 29%.

In Northern Ireland, it is estimated that 26% of the adult population are smokers although there is an indication that smoking prevalence is declining. Based on the results of the Northern Ireland Continuous Household Survey (CHS) it is estimated that smoking prevalence in Northern Ireland decreased from 33% in 1983 to 26% in 2004/2005. However, the CHS indicates that there is a willingness among smokers to give up with 77% of those who currently smoked saying they would like to give up.

The CHS also highlights the relative inequality in smoking prevalence by socio-economic group with prevalence ranging from 15% for those in the professional socio-economic group to a level of 35% for those people employed in semi-skilled jobs.

[1] Department of Health (2004), "Secondhand Smoke: Review of evidence since 1998".Scientific Committee on Tobacco and Health (SCOTH)

To deter the uptake of smoking and to help smokers quit, the DHSSPS published a five year Tobacco Action Plan in 2003 with the overall aim of creating a tobacco-free society. The Plan provided a comprehensive programme of action to reduce the harm caused by tobacco use. Its key objectives are:

- preventing people from starting to smoke;
- helping smokers to quit; and
- protecting non-smokers from tobacco smoke.

The third of these objectives recognises the fact that the majority of people (74% adult population and 80% of total population) in Northern Ireland do not smoke. The policy to introduce smoke-free legislation for enclosed workplaces and public places (with or without exemptions) addresses this objective by protecting non-smokers from exposure to tobacco smoke whilst outside of their own home environment. The smoke-free legislation will also assist in meeting the other two objectives of the Tobacco Action Plan in that it should encourage smokers to give up or reduce their consumption and should encourage children and young people not to start in the first place.

Within the analysis of the potential impact of the policy, specific consideration will be given to the hospitality sector (hotels, restaurants and pubs). It has been argued smoke-free policies may have a disproportionately large impact on the hospitality sector compared to other sectors of the economy, however, it is recognised there are two opposing effects. Smoke-free policies may deter smokers from visiting a pub or restaurant while non-smokers may be attracted to pubs or restaurants which are smoke-free. This consideration will rely on empirical evidence which is by no means definitive. This is demonstrated by research undertaken by Scollio et al. which reviewed the quality of studies on the economic effects of smoke-free policies on the hospitality sector. The research examined 97 studies of which 35 found there would be or had been a negative impact on the hospitality sector. Of these 35 studies, 29 were linked in some way with the tobacco industry. Of the “independent” studies none concluded that there was a negative economic impact on the sector.

The hospitality sector is also being focused on, due to its progress on smoke-free provision generally being less pronounced than the rest of the economy. In addition, it is a sector where the effect of smoke on employees' health has been particularly highlighted. A number of studies have been undertaken to try to assess the level of exposure of employees in the hospitality sector to second-hand smoke. Allwright et al. 2005[2] undertook a study which examined the exposure of bar workers to smoke before and after the introduction of a smoking ban in the Republic of Ireland (ROI). The study found that salivary cotinine[3] concentrations (which were used as an indicator of exposure to smoke) of the bar workers dropped by 80% after the smoking ban in ROI compared to a 20% decline in Northern Ireland (where smoking in bars is permitted) over the same period[4]. A study conducted by the Harvard School of Public Health in conjunction with the Roswell Park Cancer Institute (2006)[5] examined indoor air quality in a global sample of smoke-free and smoking-permitted Irish pubs (total sample of 128 Irish pubs). The study concluded that Irish pubs in the ROI and smoke-free Irish pubs elsewhere were significantly less polluted than Irish pubs that permit smoking. The results of the study indicated that on average levels of a particular category of Respirable Suspended Particles (RSPs) known as $PM_{2.5}$[6] in smoke-free Irish pubs were 93% lower compared to smoking-permitted Irish pubs.

3.0 Options

For the purposes of the RIA and HIA, Option 1 will be considered the status quo option. Costs in addition to Option 1, the non-legislative option, will be detailed in the analysis.

[2] S. Allwright et al (2005), "Legislation for smoke-free workplaces and health of bar workers in Ireland: before and after study", British Medical Journal 38636.499225.55

[3] Cotinine is the major metabolite of nicotine

[4] Allwright et al state that the results in Northern Ireland may be explained by a downturn in the pub trade from 2003/2004 to 2004/2005.

[5] G. N. Connolly et al. (2006), Harvard School of Public Health, "How smoke-free laws improve air quality: a global study of Irish pubs".

[6] Harvard School of Public Health report states that $PM_{2.5}$ are very small particles suspended in the air which pose dangerous health effects.

3.1 Option 1 – Building on the existing policy of exhorting and supporting smoking cessation

3.1.1 Health Impact – *Active Smoking*

Smoking has long been recognised as a primary cause of ill-health and premature death. There is however no universally accepted list of smoking-related illnesses, and because smoking history is rarely recorded on death certificates in Northern Ireland, it is difficult to capture the full impact smoking has on the health of the population.

Numerous studies have been carried out which have attempted to quantify the effects of smoking on public health across the UK. However, few have provided figures specifically for Northern Ireland which has meant that UK estimates for impacts on disease and deaths have often been applied pro-rata for Northern Ireland. Using a range of UK and other research, for the purposes of the five year Tobacco Action Plan 2003-2008, DHSSPS estimated that smoking claimed between 2,700 and 3,000 lives per annum in Northern Ireland. More recent research published by the Health Development Agency[7] suggests that smoking contributes to around 2,300 deaths per annum in Northern Ireland. In the interests of conservatism, so as not to over estimate the potential gains of reduced smoking prevalence, the figure of 2,300 smoking-related deaths per annum has been used as the basis for this report.

Smoking prevalence has decreased on average around 2% per annum over the period 1990/91 to 2004/05. For the purposes of Option 1, it is therefore assumed that, if the existing policy of exhorting and supporting smoking cessation is built upon, the current trend is likely to be maintained.

[7] L. Twigg, G. Moon & S. Walker (2004) "The smoking epidemic in England", Health Development Agency

3.1.2 Impact on Business

DHSSPS carried out a survey of over 3,600 businesses to assess the extent to which they had smoking policies in place for their employees and the public entering their premises. Of the organisations surveyed, 79% had some sort of smoking policy with 57% of these prohibiting smoking anywhere on the premises. 23% of those with a smoking policy permitted smoking only in enclosed designated areas, while a further 19% permitted smoking in unenclosed designated areas.

The survey showed almost 55% of businesses continue to permit some degree of smoking on their premises. To try and ascertain the effect of current Government policy over the next year, those businesses without a smoking policy were asked whether they intended to introduce one. Almost 11% planned to introduce a smoking policy within the next year with around half of these saying smoking would be prohibited everywhere on the premises. A further 35% of those planning to introduce a policy within the next year stated that the new policy would restrict smoking to designated areas or rooms.

While the results of the survey indicate that a substantial number of businesses have a smoking policy, even when the businesses which state they intend to introduce a total restriction on smoking over the next year are included, there will be around 50% of businesses which permit smoking on their premises. This means around half of the non-smoking workforce could potentially be exposed to second-hand smoke.

The force with which smoking policies are implemented have an impact on their effectiveness. Two thirds of the organisations with a policy said they would issue a verbal warning to staff who did not adhere to the policy. Less than 10% said they would start formal proceedings while a quarter stated that no action would be taken.

Option1, the current policy, would not produce any significant change in the number of new firms implementing a smoking policy over the course of the next year. Therefore, no additional benefits have been counted for this option.

3.2 Option 2 – Smoke-free legislation for all enclosed workplaces and public places with exemptions for pubs and clubs which do not prepare or serve food.

The main risk with this option is that food-led licensed premises may make a choice to give up serving food in favour of allowing smoking on their premises. It is difficult to anticipate what the precise reaction of bar and club owners who currently prepare and serve food would be to smoke-free legislation with exemptions for those who do not. While some may give up serving food, it is likely that others would choose to have smoke-free premises and retain the catering side of their business. There are currently no comprehensive figures for the number of pubs and clubs in Northern Ireland that prepare and serve food. Therefore, for the purposes of this analysis, it is assumed that all pubs will be exempt from the legislation.

3.2.1 Health Impact - *Active Smoking*

In assessing the health impact of a policy on smoking in Northern Ireland, the results of a study which was carried out for the Scottish Executive and NHS Health Scotland, have been adapted for Northern Ireland. The research conducted by the Health Economics Research Unit (HERU) and Department of Public Health, University of Aberdeen attempted to quantify the health and economic consequences of the introduction in Scotland of a complete ban on smoking in enclosed workplaces and public places. Due to the wide range of estimates and the level of uncertainty around estimates of the benefits of reduced smoking, the report was particularly conservative in its assessment of the possible health gains of reduced smoking prevalence. This conservatism is therefore a feature of this report's estimates.

It is likely smoke-free legislation which allows an exemption for pubs and clubs which do not prepare and serve food would have lesser positive effect on the numbers of people who smoke, than smoke-free legislation for all enclosed workplaces and public places. A survey in Scotland of smoking habits[8] showed that 64% of individuals reported that they are exposed to passive smoking and of those surveyed 10% reported that they were exposed to passive smoking in pubs. This equates to 15.6% of people exposed to passive smoking being exposed in pubs.

In the absence of similar data for Northern Ireland it has been assumed the degree of exposure and places of exposure to second-hand smoke in Northern Ireland are similar to those in Scotland. This figure has then been used to estimate the potential change of health and economic impacts of smoke-free legislation with exemptions for pubs and clubs not serving food relative to comprehensive smoke-free legislation.

Based on the results of the Northern Ireland CHS survey it is estimated that there will be a 2% fall per annum in smoking prevalence. It is assumed smoke-free legislation with the exemptions outlined above would result in an additional annual fall of 1.69%[9] in smoking prevalence in Northern Ireland. Therefore, the estimated total decrease in smoking prevalence is estimated at 3.69%. As this paper is assessing the additional impact over the status quo,1.69% is applied to the estimated number of deaths from lung cancer, ischaemic heart disease and stroke associated with active smoking, it is estimated this policy would avert 23 deaths per annum. It will take time for the full effect on the number of deaths averted to materialise. Therefore, for the purposes of this document, it is assumed the full benefits will accumulate over 20 years.

[8] Scottish Executive (1991) "Scottish Health Survey 1998"
[9] It is assumed an additional 2% per annum reduction in smoking prevalence would result from legislation covering all workplaces and enclosed public places. 1.69% = 2%* (100-15.6)%

There is evidence to show that smoking can contribute to a range of other circulatory and respiratory diseases[10] in addition to lung cancer, IHD and stroke. Applying the assumption of 1.69% reduction in smoking prevalence, it is estimated that 16 deaths per annum associated with these additional diseases could be averted by a smoke-free policy. Therefore, the total number of deaths associated with active smoking which could be averted by a smoke-free policy, with exemptions, is estimated to be 39.

3.2.2 Health Impact – *Second-hand Smoking*

For second-hand smoking, the "cause specific" number of deaths has been estimated. This is calculated using a population attributable risk factor applied to the incidence of lung cancer, IHD and stroke[11]. It is estimated that annually in Northern Ireland there are 278 deaths associated with second-hand smoking. Of these, around 13 deaths can be attributed solely to exposure to second-hand smoke in the workplace.

There is some risk that smoke-free legislation for all enclosed workplaces and public places will merely displace social smoking, particularly from the hospitality sector, to the home. However, evidence is emerging that this is not the case. A recent report from the Royal College of Physicians "*Going Smoke-Free*: *The Medical Case for Clean Air at Home, at Work and in Public Places*, *July 2005*" shows that, as the number of smoke-free workplaces has increased, so has the number of smoke-free homes. This is backed up by figures from the Republic of Ireland which suggests that the number of smoke-free homes has increased by 5% in the year since the smoking ban was introduced[12].

Smoke-free legislation which permits exemptions for pubs and clubs, as outlined above, would undoubtedly deliver an increased number of smoke-

[10] Royal College of Physicians (2000) "A report of the tobacco advisory group of the Royal College of Physicians".
[11] K. Jamrozik (2005) "Estimate of deaths attributable to passive smoking among UK adults: database analysis", British Medical Journal.
[12] "Domestic twist on workplace smoking bans". Environmental Health News (22 July 2005).

free premises in comparison with Option 1 and would lead to a reduction per annum in the number of deaths due to second-hand smoking. However, bars and clubs are places where there is particularly heavy exposure to second-hand smoke and the number of deaths averted would be lower than with comprehensive smoke-free legislation. The extent of the reduction will be dependant on the number of pubs and clubs which adopt a smoke-free policy. Given the absence of information on this we have assumed, that all hotels and restaurants will be smoke-free while all pubs and clubs will not. It is calculated that 10 workplace deaths per annum will be averted under Option 2.

3.2.3 HPSS Resource Savings

The primary resource savings to the NHS from smoke-free legislation with exemptions for some pubs and clubs would accrue from the reduction in hospital costs associated with treating the main diseases linked to active and second-hand smoking, i.e. of lung cancer, IHD and stroke. For the purposes of the HIA, the total costs of smoking-related diseases are assumed to be those associated with elective and non-elective in-patient treatment, day case attendances at hospitals, rehabilitation, critical care, out-patient visits, chemotherapy, radiotherapy and palliative care.

For second-hand smoking, the expected monetary savings in Northern Ireland have been derived by applying the reduction in mortality expected from the reduced exposure to second-hand smoke[13] to the annual costs of treating the main smoking-related diseases[14] (as there is evidence to show that a reduction in second-hand smoking will have a similar impact on morbidity rates as it does on mortality rates). Based on the relevant Northern Ireland hospital costs for 2003/2004, the annual savings from a reduction in second-hand smoking due to the smoke-free legislation (with exemptions for some pubs and clubs) is estimated at £2.2m. However, it is

[13] A. Ludbrook, S. Bird & E. van Teijlingen (2004) "International Review of the Health and Economic Impact of the Regulation of smoking in Public Places" Health Economics Research Unit (HERU).
[14] Performance Review Unit, DHSS&PS

likely that the full impact on treatment costs may take around 20 years to be realised.

Cost savings from reduced active smoking can be derived in a similar way to those for second-hand smoking. The annual cost for treating active smokers for the main smoking-related diseases is approximately £30m (2003/2004). Using the previous assumption of a further 1.69% reduction in smoking prevalence, (with benefits accumulating over an average 20 year period) the smoke-free policy (with exemptions noted above) would yield estimated annual savings in hospital costs of £0.51m.

The analysis for active smoking can also be extended beyond the costs of treating lung cancer, IHD and stroke to include the costs of treating other circulatory and respiratory diseases of which smoking has been a contributory factor. The estimated hospital costs associated with these additional active smoking-related diseases is approximately £44m. Again using the assumption of an additional 1.69% reduction in smoking prevalence, the estimated annual savings in terms of hospital costs associated with treating these additional active smoking-related diseases is £0.74m. Therefore the total annual savings in terms of hospital costs associated with smoke-free legislation with exemptions for some pubs and clubs is estimated to be £1.25m.

3.2.4 Economic Impact

The economic impact, of a smoke-free policy, on the non-domestic sector, has been primarily assessed by estimating the impact upon turnover within the hospitality sector. A wider analysis also attempts to assess the knock-on effect for the whole economy by estimating the multiplier effects that might result from changes in expenditure within the hospitality sector.

The HERU report examined a number of studies which modelled the effect on the hospitality sector of several countries, following the introduction of smoking restrictions. These models were then used to estimate the

possible effect of a complete ban on smoking in enclosed public places on the hospitality sector in Scotland.

The survey evidence for the possible economic effects following the introduction of smoke-free legislation is not as robust as the evidence available for the health effects. Therefore, the HERU methodology has been replicated for Northern Ireland, with one exception, that of bars. The HERU estimate for the possible effect on the turnover of bars was based on just one study; therefore a more prudent view of the potential impact of a smoke-free policy has been adopted. The Scottish Executive estimate was largely adopted, which assumes a zero change on the turnover of bars following a total ban, rather than the positive impact which would result from using the HERU method. However, the model has been further adapted to reflect the assumption that exemptions for some pubs and clubs could shift spending from other areas of the hospitality sector that are subject to the legislation i.e. hotels and restaurants, to the pubs and clubs which are exempt.

Table 1: Potential Impact of Smoke-Free Legislation (with exemptions for Pubs and Clubs who do not prepare and serve food), on Hospitality Sector Turnover (NIABI 2003)

	Central Estimate £000's	Low Estimate £000	High Estimate £000's
Hotels	-3,609	-8,554	1,337
Restaurants	1,083	-5,718	7,841
Bars	722	2,854	0
Total	-1,804	-11,418	9,177
Total Sector Turnover (2003)	1,154,498	1,154,498	1,154,498
% of Turnover	-0.16%	-0.99%	0.79%

Table 1 sets out the potential impact of smoke-free legislation on the turnover of the hospitality sector in Northern Ireland (it is derived from HERU and the Scottish Executive methodology). For the central estimate it has been assumed that 20%[15] of the reduced spending from hotels is transferred to bars. It is assumed the predicted increase in sales in restaurants is due to people preferring the smoke-free atmosphere of restaurants to that of bars, therefore no additional adjustment has been made. For the low estimate, it has been assumed that 20% of the reduced spending in both restaurants and hotels has transferred to bars. For the high estimate, it is assumed that people prefer the smoke-free atmosphere of hotels and restaurants to that of bars. A zero change has been applied to bars as it is assumed patrons who dislike the smoke-free policy of hotels and restaurants compensate any negative effect of bars choosing not to be smoke-free.

The central estimate for Option 2 projects a £1.8m decrease in turnover, equivalent to a 0.16% decrease in total turnover in the hospitality sector. This would be equivalent to a ***loss*** of 64 direct jobs.

Unlike Scotland, Northern Ireland does not have an input-output model with which to estimate the knock-on effects of the potential changes in consumption as a result of smoking legislation in public places for each of the scenarios. Scotland's input – output model would suggest a backward linkage multiplier of around 1.07 for the Scottish hospitality sector. While this figure is not fully transferable to Northern Ireland it could be used to give an indication of the likely magnitude of the multiplier effect.

The backward linkage multiplier captures the benefits to supplier firms, in the Region, which result from the activities of another firm or sector. In this case we are trying to capture the effect on firms supplying the hospitality

[15] It is recognised that while hotel expenditure is not fully transferable to the other areas of the sector it is assumed some people who would have gone to a hotel prior to the introduction of smoking restrictions would choose to go to a bar or pub without a restriction on smoking. 20% is a relatively arbitrary estimate.

sector, which could include firms such as drink and food suppliers; there may also be longer term effects on other service suppliers such as outfitters and decorators. The purchases the hospitality sector make from its suppliers, creates additional employment and income in the form of wages to employees and profits to the owners of other firms in Northern Ireland. Therefore, if turnover changes in the hospitality sector as a result of smoking legislation, there is likely to be a secondary, though relatively smaller effect, on other firms throughout the Region. This is known as the backwards linkage multiplier.

There have been a number of attempts to calculate multiplier effects for Northern Ireland. The multiplier estimates for the Region have primarily been calculated for industrial development expenditure and have ranged from 1.7[16] to 1.4[17] for global multipliers, 1.1[18] to 1.3[13] for consumption multipliers with only one estimate made for a backward linkage multiplier, 1.3[13]. These multipliers are not fully transferable to the hospitality sector, as this sector will have significantly different supplier profiles than the manufacturing firms for which they were derived. Nevertheless they can again, be used to illustrate the magnitude of possible effects on jobs in the economy as a whole.

Given the range of the multipliers for Northern Ireland and taking into consideration the magnitude of Scotland's implied multiplier, it was decided to use the consumption multiplier estimates (1.1 – 1.3) to illustrate the possible impact of the legislation on Northern Ireland's economy. If Northern Ireland's hospitality sector multiplier was at the upper end of the consumption multiplier a total of 83 jobs could be ***lost*** to the local economy due to the additional lost output in key supplier and business services for the

[16] Northern Ireland Economic Council Report No 56 February 1986 "Economic Strategy: Industrial Development linkages

[17] Bond (1990) "Dynamic regional multipliers and the economic base: an application of applied econometric techniques"

[18] PACEC (1991) "The employment effect of Public Expenditure in Northern Ireland" unpublished report commissioned by DFP

hospitality sector. At the lower end of the multiplier estimate the local economy could expect a ***loss*** of 70 jobs.

These results assume that expenditure reductions in the hospitality sector are not spent elsewhere in the economy. Economic theory suggests that consumers are likely to switch consumption to other consumer goods in the economy. If it is assumed that all the expenditure goes to the retail sector, the net ***loss*** in terms of jobs would be between 40 and 57. (Again depending on which end of the multiplier the retail sector lies).

Given the less robust nature of the survey evidence which has been used to estimate the impact on the hospitality sector, it is necessary to examine the high and low estimates. The net effect on jobs in the economy is estimated to be as much as a ***loss*** of 361 jobs (low estimate) to an ***increase*** of 290 jobs (high estimate).

3.2.5 Benefits to Business

It is likely that the introduction of a smoke-free policy would result in productivity gains for Northern Ireland's non-domestic sector, arising from less time spent on smoking breaks. Based on research evidence from a survey of existing smoking policies in workplaces in Scotland and subsequent analysis by the Scottish Executive (which was net of any additional breaks that would take place in workplaces where there are presently no restrictions), it is estimated that a smoke-free policy (with exemptions for some pubs and clubs) in Northern Ireland would result in a saving in productive time of £23.8m per annum (based on the number employed in local units in Northern Ireland relative to Scotland).

It is expected that a smoke-free policy would also reduce productivity losses due to sickness absence associated with smoking-related diseases such as heart disease and asthma. Adopting a similar methodology as outlined in the HERU report, it is estimated savings of around £0.44m per annum will be generated in Northern Ireland.

A restriction on smoking in public places with the exemption of certain pubs and clubs is likely to be associated with a reduction in fire hazards and reduced cleaning and decorating costs. It is estimated there would be a resource saving of £3.9m per annum (based on the number employed in local units in Northern Ireland relative to Scotland).

3.2.6 Costs to the Northern Ireland Administration

A communications programme will have to be developed to raise awareness about a change in legislation in relation to smoking in public places and in turn encourage compliance and support for the legislation. The cost associated with the communications programme is estimated to be £0.39m[19].

The cost of establishing a compliance phone line to assist with the enforcement of the legislation by handling information calls, queries and complaints will be in the region of £100,000 in year 1 and £50,000 in year 2. Given the experience in the Republic of Ireland (ROI) the need for this service will be monitored and reviewed after the first year. The majority of calls to the ROI Smoke-Free Compliance Line were received in the first month of its set up. After the initial period calls declined to around 40-50 per week. This level of calls is unlikely to justify a dedicated phone line and so the service will be reviewed to assess the most efficient way of providing the information being sought.

Under Option 2 it is likely a compliance phone line would receive more calls than under a more comprehensive policy covering all enclosed workplaces and public places. This is due to the more complex rules surrounding the exemptions. It is likely there would be more calls both by publicans seeking advice on whether their premises were exempt or not and by the members of the public who may be unclear as to whether specific pubs are complying

[19] The Health Promotion Agency for Northern Ireland.

with the legislation. The volume of calls is thought not likely to impact significantly on the cost of setting up the service and the estimate above is assumed to be adequate.

The introduction of comprehensive smoke-free legislation is likely to increase the quit attempts of smokers both as a result of the increased difficulty in being able to smoke in workplaces and public places and also as a result of increased health awareness. The number of people seeking Nicotine Replacement Therapy (NRT) in Northern Ireland is likely to increase in line with quit attempts. Therefore, in the first year of legislation, expenditure on NRT is estimated to increase by 2.5 times the current level of expenditure (£2.4m). In the second year, quit attempts are expected to fall off but to continue to be above current levels. Therefore, it is estimated they will be 1.75 times existing expenditure. The additional expenditure on NRT associated with Option 2 would therefore be £3.6m in year 1 and £1.8m in year 2.

The impact of the smoking policy would be monitored on an ongoing basis and the policy subsequently evaluated to establish the extent to which it has impacted upon the level of exposure to second-hand smoke in workplaces and public places. The cost associated with monitoring and evaluating the policy is estimated to be in the region of £250,000.

The cost of providing publications and signage for commercial premises is estimated to be in the region of £150k[20] based on 62,000 occupied enterprises[21]. While pubs and clubs which do not serve food will be exempt from the legislation, they are likely to still require signage to denote smoking is permitted on the premises.

[20] Estimate Health Promotion Agency
[21] Source: Rate Collection Agency March 2006.

3.2.7 Costs to the UK Exchequer

Based on the assumption that there would be an additional 1.69% reduction in smoking prevalence due to smoke-free legislation, with exemptions for some pubs and clubs, it has been calculated that revenue from duty on tobacco could fall by £5.2m. However, a reduction in consumer spending on tobacco is likely to be offset by an increase in expenditure elsewhere in the economy with broadly equivalent macro-economic effects. The effect is likely to be distributional in that the losses to the exchequer are offset by gains elsewhere in the economy.

3.2.8 Costs to District Councils

District councils are likely to have responsibility for enforcing the legislation associated with a smoke-free policy (with exemptions). The costs associated with enforcing the legislation is estimated to be in the region of £0.3m per annum. It is also likely that district council staff will be involved in an educational and advisory role for approximately a year prior to, and a year following, any legislation being introduced. The cost of this function is estimated to be £0.2m per annum.

3.3 Option 3 – A smoke-free policy for all enclosed workplaces and public places

3.3.1 Health Impact - *Active Smoking*

As previously stated, the Northern Ireland CHS survey shows, over the past 10 years there has been approximately a 2% fall per annum in smoking prevalence, which is assumed to continue in the future. Using the HERU methodology it has been assumed that a comprehensive smoke-free policy would result in an additional fall of 2% per annum in smoking prevalence in Northern Ireland. Therefore, the estimated total decrease in smoking prevalence is estimated at 4%. Based on calculations of smoking–related deaths in Northern Ireland, it is therefore estimated that a smoke–free policy

could be expected to avert 27 deaths per annum due to active smoking, specifically associated with lung cancer, IHD and stroke. As in the case of Option 2, it is assumed that the full benefits of a decrease in smoking prevalence will be realised over 20 years.

There is evidence to show that smoking can contribute to a range of other circulatory and respiratory diseases in addition to lung cancer, IHD and stroke. It is estimated that 19 deaths per annum, associated with these additional circulatory and respiratory diseases, could be averted by a comprehensive smoke-free policy. Therefore, the total number of active smoking-related deaths estimated to be averted by a comprehensive smoke-free policy would be 46 deaths per annum.

3.3.2 Health Impact – *Second-hand Smoking*

It is estimated that there are 278 deaths in Northern Ireland annually as a result of lung cancer, IHD and stroke[22] associated with second-hand smoking. Of these, 13 deaths can be attributed solely to exposure to second-hand smoke in the workplace. Therefore a policy which introduces comprehensive controls on smoking in the workplace and public places will avert 13 deaths per annum.

3.3.3 HPSS Resource Savings

As in the case of smoke-free legislation with exemptions, the primary resource savings to the NHS from a more comprehensive smoke-free policy would accrue from the reduction in hospital costs associated with treating the main diseases linked to active and second-hand smoking i.e. lung cancer, IHD and stroke.

The same methodology has been applied to Option 3 as that adopted in Option 2 i.e. the estimated percentage reduction in mortality from reductions

[22] K Jamrozik (2005) "Estimate of deaths attributable to passive smoking among UK adults; database analysis", British Medical Journal

in exposure to second-hand smoke is applied to the estimated total hospital costs associated with treating lung cancer, IHD and stroke[23]. Using the hospital costs for 2003/04, the annual savings from a reduction in second-hand smoking is estimated at £2.6m. Again, the impact on costs is assumed to take around 20 years to be fully realised.

In Northern Ireland, the estimated cost of treating active smokers for the main smoking-related diseases is £30m (2003/04). Using the previous assumption of a further 2% per annum reduction in smoking prevalence, a smoke-free policy would bring savings of £0.6m per annum. Again, it is assumed these benefits will take 20 years to fully accumulate.

Once again the analysis can be extended to include the costs of treating other circulatory and respiratory diseases of which active smoking has been a contributory factor. The total hospital costs associated with these additional diseases is £44m (based on the applicable total Northern Ireland hospital costs for 2003/2004). Annual savings of £0.9m would be expected with the introduction of Option 3 (with benefits accumulating over an average 20 year period). Therefore, for active smoking, the estimated total savings in hospital costs associated with Option 3 is £1.5m.

3.3.4 Economic Impact

The economic impact of a comprehensive smoke-free policy on the non-domestic sector, has been primarily assessed by estimating the impact upon turnover within the hospitality sector and by estimating the associated multiplier effects. It has been arrived at by adapting the methodology developed by HERU for the Scottish Executive to estimate the impact of smoke-free legislation in Scotland.

[23] A. Ludbrook, S. Bird & E. van Teijlingen (2004) "International Review of the Health and Economic Impact of the Regulation of smoking in Public Places" Health Economics Research Unit (HERU).

Under Option 2, it was felt that the positive impact estimated for bars by the HERU study was too optimistic and so a more prudent view was adopted. The methodology was further adapted so as to capture possible shifts in spending between those hospitality businesses which would be exempt from the legislation and those which would not. Under Option 3, it is assumed there will be no transfer of business between the hospitality businesses as the legislation will apply equally to all pubs, clubs, hotels and restaurants. Therefore only the first change has been made to the methodology. Table 2 sets out the results of the analysis.

Table 2: Potential Impact of Smoke-free Legislation on Hospitality Sector Turnover (NIABI 2003)

	Central Estimate £000's	Low Estimate £000	High Estimate £000's
Hotels	-3,609	-8,554	1,337
Restaurants	1,083	-5,718	7,841
Bars	0	-18,980	33,416
Total	-2,526	-33,252	42,593
Total Sector Turnover (2003)	1,154,498	1,154,498	1,154,498
% of Turnover	-0.2%	-2.9%	3.7%

The central estimate projects a £2.5m decrease in turnover, equivalent to a 0.2% decrease in total turnover, in the hospitality sector. This would be equivalent to a loss of 90 direct jobs.

Again, using the consumption multiplier set out for Option 2, as illustrative of the possible magnitude of multiplier effects, at the upper end a total of 116 jobs could be ***lost*** in the local economy due to the additional lost output in

key supplier and business services for the hospitality sector. At the lower end of the multiplier a ***loss*** of 99 jobs would be expected.

As for Option 2, this assumes that expenditure reductions in the hospitality sector are not spent elsewhere in the economy. Economic theory suggests otherwise and it is once again assumed that all expenditure goes to the retail sector. The net ***loss*** in terms of jobs would be between 55 and 80. (Again depending on which end of the multiplier the retail sector lies).

Again, as for Option 2, given the less robust nature of the survey evidence for the impact on the hospitality sector, it is necessary to examine the high and low estimates. The net effect on the economy could be as much as a ***loss*** of 1,052 jobs (low estimate) to an ***increase*** of 1,348 jobs (high estimate).

3.3.5 Benefits to Business

For Option 3, it is estimated that a comprehensive smoke-free policy in Northern Ireland would result in a saving in productive time of £28.2m per annum (based on the number employed in local units in Northern Ireland relative to Scotland). The comparable figure for Option 2 is £23.8m.

It is further estimated that Option 3 would reduce productivity losses due to sickness absence associated with smoking-related diseases, such as heart disease and asthma, generating a saving of £0.6m per annum compared to £0.44m for Option 2.

A complete restriction on smoking in enclosed workplaces and public places could also be associated with a reduction in fire hazards and reduced cleaning and decorating costs. For Option 3, it is estimated that there would be a resource saving of £4.6m per annum. This compares with an estimated cost of £3.9m for Option 2.

3.3.6 Costs to the Northern Ireland Administration

The costs associated with the communications programme is estimated to be the same as Option 2 at £0.39m[24]. Regardless of the exemptions a campaign will have to be undertaken to alert business and the public to their responsibilities under the new legislation.

The cost of establishing a compliance phone line to assist with the enforcement of the legislation by handling information calls, queries and complaints will be in the region of £100,000 in year 1 and £50,000 in year 2. As with Option 2, the need for this service will be monitored and reviewed after the first year. Under Option 3 it is likely a compliance phone line would receive less calls than under Option 2 due to the legislation applying equally to all business and public places. However, it is not assumed the overall cost of the phone line will vary significantly between the options due to the fixed nature of most of the costs associated with its setting up and maintenance.

In Option 2 it was estimated that the number of people seeking NRT would rise due to an increase in the number of people using smoke-free provision as an opportunity to quit. The more comprehensive the restrictions the more likely it is smokers will attempt to give up smoking. Using the rationale set out in the Scottish Executive paper, it is assumed the first year of legislation will see the number of quit attempts treble their current level with the second year seeing rates at twice the current level. The additional expenditure on NRT will therefore be £4.8m in year 1 and £2.4m in year 2.

The cost associated with monitoring and evaluating the policy for Option 3 is the same as for Option 2 and is estimated to be in the region of £250,000.

[24] The Health Promotion Agency for Northern Ireland

The cost of providing publications and signage for commercial premises is estimated to be in the region of £150k[25] based on 62,000 occupied enterprises[26]. This cost is taken as being the same for Option 2 as premises will require signage.

3.3.7 Costs to the UK Exchequer

Based on the assumption that a smoke-free policy will result in a reduction in smoking prevalence then there will be a decrease in the revenue collected from duty on tobacco. Applying the assumption of a 2% reduction in smoking prevalence it is estimated that revenue from duty on tobacco could fall by £6.2m. However, a reduction in consumer spending on tobacco is likely to be offset by an increase in expenditure elsewhere in the economy with broadly equivalent macro-economic effects. The effect is likely to be distributional in that the losses to the exchequer will be offset by gains elsewhere in the economy.

3.3.8 Costs to District Councils

Again, as with Option 2, district councils are likely to have responsibility for enforcing the legislation associated with a smoke-free policy. The cost associated with the enforcement of comprehensive controls on smoking in enclosed workplaces and public places is not thought to differ significantly from legislation with exemptions. It is likely that a similar number of people will have to be on the ground to ensure compliance. Therefore, it has been estimated that the cost to district councils of enforcing the legislation would still be in the region of £0.3m per annum with the cost of employing staff to provide advisory and educational functions estimated at £0.2m per annum (for 2 years).

[25] Estimate Health Promotion Agency
[26] Source: Rate Collection Agency March 2006.

4.0 Costs and Benefits of Options

Table 3 shows the additional costs and benefits (over Option 1) for Options 2 and 3. Given the uncertainty around the links between some of the smoking-related diseases, two separate cost analyses have been shown. One taking account of the three main smoking-related diseases, the other with all identified smoking-related diseases. The Net Present Value (NPV) is considered to be the best method of illustrating the comparative benefits and costs associated with each option. The NPV shows the current day value of the stream of future costs and benefits. Option 3 has a higher positive NPV than Option 2 under both scenarios; this means that taking into consideration the benefits and costs associated with each option, Option 3 provides the greatest positive net benefits.

Table 3 Summary of Net Present Values of Option 2 and Option 3

		Three main smoking related diseases NPV in 2006 prices (£m) based on 30 year appraisal		All identified smoking related diseases NPV in 2006 prices (£m) based on 30 year appraisal	
		2	3	2	3
Health Benefits					
Economic value of lives saved	Reduced Exposure to ETS	51.49	59.25	51.49	59.25
	Reduced Active Smoking	104.83	123.06	177.76	209.66
Morbidity Saving	Reduced Exposure to ETS	131.89	156.26	131.89	156.26
(Human Cost of ill health)	Reduced Active Smoking	31.48	37.26	101.99	120.69
Resource Savings					
NHS Treatment Costs		29.36	34.67	37.38	44.42
Reduced Sickness Absence Savings		4.77	6.50	4.77	6.50
Productivity gains as a result of reduced smoking breaks		437.73	518.66	437.73	518.66
Cost savings from reduced fire hazards and reduced cleaning and decorating costs		71.73	84.60	71.73	84.60
Hospitality Sector Impacts		-33.11	-45.98	-33.11	-45.98
Implementation and Enforcement Costs					
Costs to the Northern Ireland Administration		-35.74	-47.36	-35.74	-47.36
Costs to Local Authorities		-5.91	-5.91	-5.91	-5.91
Total NPV		**788.52**	**921.02**	**939.97**	**1,100.81**

5.0 Distributional Effects

5.1 Tobacco Industry Impacts.

Northern Ireland has only one firm manufacturing tobacco products. Gallaher Ltd produces cigarettes, hand rolling tobacco and pipe tobacco. It employs around 870 people in the manufacture of tobacco products and in research and development.

5.1.1 Implications for Gallaher Ltd - Lisnafillan

Gallaher Ltd is one of the largest manufacturing companies in Northern Ireland. It claims to contribute £45m per year in wages and salaries to the local economy. All of Gallaher's UK cigarettes (around 20.2bn per annum) and tobacco products are manufactured at Lisnafillan, near Ballymena, with around half of the cigarettes produced exported to Europe and further afield.

As noted earlier, there has been a downward trend in smoking prevalence in Northern Ireland. Over the last 10 years smoking prevalence has decreased by an average of 2% per annum. Applying the HERU estimates of the effect of smoke-free legislation on smoking prevalence would double this rate to 4% per annum. A 4% fall in the demand for cigarettes in Northern Ireland would be expected to lead to a fall of around 0.1% of Gallaher's UK sales, or 0.05% of total cigarette production at Lisnafillan.

The HERU estimate of a decline in smoking prevalence was a reasonably conservative one, calculated primarily to capture possible health impacts of a ban on smoking. The evidence for positive health impacts are largely predicated on people stopping smoking, therefore the figure was an estimation of the reduction in smoking prevalence, not the quantity of cigarettes smoked. Studies examined by HERU showed, with the introduction of smoking restrictions, consumption of cigarettes could fall by as much as 20%. Indeed the Gallaher Group PLC Annual Report and Financial Statement 2004 reported an 11% fall in the total cigarette market in the Republic of Ireland in the first year of the introduction of a smoking ban (though Gallaher acknowledge there were other factors which could have reduced the market).

A 20% fall in the demand for cigarettes in Northern Ireland would represent just over half of one percent (0.6%) of Gallaher's UK sales. Given the proportion of Gallaher's sales this represents, it can be concluded that the introduction of a ban on smoking in enclosed workplaces and public places in Northern Ireland is unlikely to have a significant impact on Gallaher's

output and hence their profitability.

While the introduction of smoking restrictions in Northern Ireland will not significantly impact on Gallaher's sales, proposed restrictions for the rest of the UK, particularly England, is likely to have a measurable impact on its output. A reduction in smoking prevalence of 4% per annum in England would affect Gallaher's sales by around 3% per annum. A 20% reduction in the number of cigarettes smoked would see a 15% reduction in Gallaher's sales.

Gallaher has links to the Northern Ireland economy through the employment of local people, around 800 of whom are involved in the direct manufacturing process. Raw materials are largely purchased centrally for Gallaher Group Ltd and are imported into Northern Ireland. It spends around £25m each year in Northern Ireland, mainly in the engineering and transport fields.

It is difficult to predict what effect restrictions on smoking in enclosed workplaces and public places in Northern Ireland will have on Gallaher's economic activity in the local economy as there would not be a straight line relationship between its production and expenditure in Northern Ireland. Given the relatively small effect on Gallaher's overall sales, that a ban on smoking in Northern Ireland would have, it is assumed the overall economic effect on Northern Ireland would be negligible. Comprehensive restrictions in the rest of the UK would, once again, be expected to have a greater impact. If it is assumed that its market penetration remains at the same level, it is likely Gallaher would reduce its production of UK branded cigarettes. It is also possible it would reduce the amount spent on transportation and associated services to the rest of the UK.

While restrictions on smoking in enclosed workplaces and public places in Northern Ireland is unlikely to have a significant impact on Gallaher's sales and revenue, it is likely to impact on Gallaher's ability to test lit tobacco in its research and development (R&D) facility. Because the R&D facility is

classified as an enclosed workplace it would be subject to the restriction regardless of whether Option 2 or Option 3 was implemented. R&D jobs are usually an indicator of a company's commitment to a location. The jobs tend to be highly specialised in nature and provide a pool of skills for the company which could not easily be obtained elsewhere at a reasonable cost and within a reasonable time scale. Without the R&D facility, Gallaher's operations would consist largely of manufacturing jobs which could make the plant more mobile in terms of its overall location.

The impact of smoke-free legislation for enclosed workplaces and public places could therefore ultimately lead to the closure of Gallaher Ltd in Lisnafillan. This would not be due to the potential fall in sales resulting from smoking restrictions but, by outlawing some of the activities of the R&D facility, it may no longer be viable to have R&D activities on the site. This in turn would make the whole operation more mobile and more likely for the company to seek lower production costs elsewhere.

If the plant were to close, the impact on the area would be quite significant. It is assumed all those working in Gallaher Ltd live within the Ballymena Travel To Work Area (TTWA), and the claimant count (those claiming Job Seekers Allowance (JSA)) is used as an indicator of unemployment[27]. In December 2005, 983[28] people, representing 1.9% of the working age population, were claiming JSA in the Ballymena TTWA. This compares 2.6% for Northern Ireland as a whole. Under the ***worst case*** scenario, if Gallaher Ltd were to close and none of the staff were to find jobs elsewhere, the claimant count rate in the Ballymena TTWA would almost double. This would push the percentage claimant count from the 4th lowest in Northern Ireland to the 3rd highest and significantly above the Northern Ireland average.

[27] It should be borne in mind the limitations of this definition as a measure of unemployment
[28] Monthly Labour Market Report (January 2006) *Department of Enterprise and Investment*

On a policy wide level, the Department has concluded that there would be no disproportionate impact on any of the Section 75 categories with the introduction of a comprehensive smoke-free policy. However, as there is a potential differential impact on the tobacco industry it is necessary to consider the Section 75 categories in this context.

Given that the tobacco industry comprises of only one company in Northern Ireland, it is not possible to obtain specific information on many of the Section 75 categories. The only information obtainable was that on community background.

Table 4: Community Background of Monitored Workforce[29]

	Roman Catholic	**Protestant**
Northern Ireland	[42.3]%[30]	[57.7]% [30]
Gallaher Ltd	[14.5]%[30]	[85.5]% [30]

Table 4 shows the closure of Gallaher Ltd would have a significant negative equality impact on Protestants compared to the Northern Ireland monitored workforce.

In addition to the direct impact on the Gallaher workforce there would be wider implications for the NI economy with any reduction in the workforce would have a multiplier effect in the economy. A further 80 – 240 jobs (using a 1.1 and 1.3 multiplier as explained in above) could be lost to the local economy if Gallaher closed and all the workers failed to gain employment elsewhere.

Also, as stated earlier, Gallaher Ltd spends around £25m in the local economy. The worst case scenario could see a drop in spending in the local economy of between £27.5m and £32.5m. Of the £25m almost £10m

[29] Fair Employment Monitoring Report No 15. A Profile of the Northern Ireland Workforce – Summary of Monitoring Returns 2004. *Employment Commission for Northern Ireland.*
[30] Percentages exclude those whose community background could not be determined.

per annum is spent in the transport sector which equates to around 100 jobs. These jobs could also be lost to the local economy should Gallaher Ltd cease production in Northern Ireland.

5.2 Retail Sector Impacts

Based on an estimated 1.69% to 2% reduction in smoking prevalence due to smoke-free legislation, there is likely to be some impact on the retail sector in Northern Ireland. However, as the retail mark-up accounts for a relatively small amount of tobacco sales, the impact will be relatively small. Indeed, it is likely any reduction in expenditure on tobacco would be substituted for spending elsewhere in the economy, some of which may be on other consumer goods from the retail sector. The proposed legislation may however, impact disproportionately on certain businesses such as specialist tobacco suppliers.

5.3 Small and Rural Business.

The impact on small and rural business had been considered not to be disproportionate. The consultation exercise sought to ratify this conclusion. 89% of respondents agreed or didn't comment on the statement "Do you agree that the draft Order will not have a disproportionate adverse impact on rural businesses?". There was no new contradictory evidence presented. With respect to small businesses 98% of people agreed or didn't respond to the statement "Do you agree with the analysis of the sectors and business/organisations which might be particularly affected by the introduction of this policy?". No new contradictory evidence was presented in this case either. Therefore the assessment that there is no disproportionate impact on small and rural business is considered to be reasonable.

6.0 Summary and Recommendations

Option 1 makes minimal progress towards the policy objectives. The evidence suggests that without statutory backing, there is unlikely to be a significant further decrease in exposure to second-hand smoke in the workplace.

Option 2 would be likely to result in a reduction in both active and passive smoking. However, such reductions would be smaller than for comprehensive legislation and the benefits of the policy would be concentrated outside of the hospitality sector. Given the level of exposure to second-hand smoke that occurs in the hospitality sector, this option would have a reduced impact on the policy objectives than a more comprehensive ban. From a public health perspective this option is weaker than Option 3.

Option 3 involves comprehensive smoking restriction in enclosed public places and workplaces. It is likely to result in a pronounced fall in exposure to second-hand smoke and a measurable reduction in active smoking. Benefits from these restrictions will impact across the whole economy but are likely to be more concentrated in the hospitality sector where at present, there are likely to be higher rates of exposure to second-hand smoke compared with other enclosed public places. This option also has the advantage that it would be -easier to implement than option 2 which may lead to some confusion amongst the public about exempted premises.

Table 3 shows the additional economic impact of the two do something options, over and above the current policy (voluntary restrictions). This is based on the assumptions and evidence set out in this paper. Option 2 (the smoke free legislation with exemptions for pubs and clubs who prepare and serve food) is expected to result in additional health benefits and resource savings than for option 1. Although these benefits will be offset somewhat by the costs associated with the implementation and enforcement of the policy and the assumed negative impact on the hospitality sector, Option 2 has an additional net present value (NPV) of £940m (2006 prices) over

Option 1. Option 3, which would entail comprehensive restrictions being placed on smoking in enclosed public places would be expected to have higher health benefits and resource savings than for both Option 1 and Option 2. Nevertheless Option 3 is expected to have similar implementation and enforcement costs as Option 2 and therefore is estimated to have a higher NPV of around £1,100m over the do nothing scenario.

In value for money terms Option 3 is the preferred option, with Option 2 ranked second and Option 1 ranked last.

7.0 Monitoring and Review

A detailed evaluation plan will be drawn up. The proposed programme will ensure that the mechanisms are in place to monitor and evaluate the health, economic and behavioural/cultural impact of the legislation. The first full evaluation of the policy will be conducted five years following its implementation.

8.0 Declaration

"I have read the Regulatory Impact Assessment and I am satisfied that the benefits justify the costs."

Signed……

Date

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Appendix i

Net Present Cost Analysis

Table A1: Option 2 Smoke-Free Legislation with Exemption for Pubs and Clubs which Serve Food (3 Main Smoking Related Diseases)

Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Health Benefits																	
Economic value of lives saved	Reduced Exposure to ETS		0.21	0.42	0.63	0.84	1.05	1.26	1.47	1.68	1.89	2.10	2.31	2.52	2.73	2.94	3.16
	Reduced Active Smoking		0.48	0.97	1.45	1.94	2.42	2.90	3.39	3.87	4.35	4.84	5.32	5.81	6.29	6.77	7.26
Morbidity Saving	Reduced Exposure to ETS		0.61	1.22	1.83	2.43	3.04	3.65	4.26	4.87	5.48	6.09	6.69	7.30	7.91	8.52	9.13
(Human Cost of ill health)	Reduced Active Smoking		0.15	0.29	0.44	0.58	0.73	0.87	1.02	1.16	1.31	1.45	1.60	1.74	1.89	2.03	2.18
Resource Savings																	
NHS Treatment Costs			0.14	0.27	0.41	0.54	0.68	0.81	0.95	1.08	1.22	1.36	1.49	1.63	1.76	1.90	2.03
Reduced Sickness Absence Savings			0.02	0.04	0.07	0.09	0.11	0.13	0.15	0.18	0.20	0.22	0.24	0.26	0.29	0.31	0.33
Productivity gains as a result of reduced smoking breaks			23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
Cost savings from reduced fire hazards and reduced cleaning and decorating costs			3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Hospitality Sector Impacts			-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80
Implementation and Enforcement Costs																	
Costs to the Northern Ireland Administration																	
Communications programme			-0.39														
Compliance phone line			-0.1	-0.05													
Nicotine Replacement Treatment			-3.6	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8
Cost of signage and publications			-0.15														
Monitoring and Evaluation				-0.25													
Costs to Local Authorities																	
Enforcement			-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Associated advisory and educational functions		-0.2	-0.2														
Total undiscounted cost		-0.2	22.765	26.711	28.617	30.222	31.8275	33.433	35.039	36.644	38.25	39.855	41.4605	43.066	44.672	46.2771	47.8826
Discount factor		1	0.9662	0.9335	0.9019	0.8714	0.842	0.8135	0.786	0.7594	0.7337	0.7089	0.6849	0.6618	0.6394	0.6178	0.5969
Net Present Value (Annual)		-0.2	22.00	24.93	25.81	26.34	26.80	27.20	27.54	27.83	28.06	28.25	28.40	28.50	28.56	28.59	28.58
Net Present Value (Cummulative)			21.80	46.73	72.54	98.87	125.67	152.87	180.41	208.24	236.30	264.56	292.95	321.45	350.02	378.61	407.19
Total NPV																	

Option 2 Cont. (3 Main Smoking Related Diseases)

16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
3.37	3.58	3.79	4.00	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47
7.74	8.22	8.71	9.19	9.68	9.68	9.68	9.68	9.68	9.68	9.68	9.68	9.68	9.68	9.68
9.74	10.35	10.96	11.56	12.17	12.17	12.17	12.17	12.17	12.17	12.17	12.17	12.17	12.17	12.17
2.32	2.47	2.61	2.76	2.91	2.91	2.91	2.91	2.91	2.91	2.91	2.91	2.91	2.91	2.91
2.17	2.30	2.44	2.57	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71
0.35	0.37	0.40	0.42	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80
-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8
-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
49.4881	51.0936	52.6991	54.305	57.1721	57.172	57.1721	57.1721	57.172	57.172	57.1721	57.1721	57.1721	57.1721	57.1721
0.5767	0.5572	0.5384	0.5202	0.5026	0.4856	0.4692	0.4533	0.438	0.4231	0.4088	0.395	0.3817	0.3687	0.3563
28.54	28.47	28.37	28.25	28.73	27.76	26.83	25.92	25.04	24.19	23.37	22.58	21.82	21.08	20.37
435.73	464.20	492.57	520.82	549.55	577.32	604.14	630.06	655.10	679.29	702.66	725.24	747.07	768.15	788.52
														788.52

Table A2: Option 3 Smoke-Free Legislation (3 Main Smoking Related Diseases)

Option 3 - Comprehensive Smokefree Legislation

Additional Costs/Savings over Option 1 (£m)

Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Health Benefits																	
Economic value of lives saved	Reduced Exposure to ETS		0.27	0.55	0.82	1.09	1.37	1.64	1.91	2.19	2.46	2.73	3.01	3.28	3.55	3.83	4.10
	Reduced Active Smoking		0.57	1.14	1.70	2.27	2.84	3.41	3.98	4.54	5.11	5.68	6.25	6.81	7.38	7.95	8.52
Morbidity Saving	Reduced Exposure to ETS		0.72	1.44	2.16	2.88	3.61	4.33	5.05	5.77	6.49	7.21	7.93	8.65	9.37	10.10	10.82
(Human Cost of ill health)	Reduced Active Smoking		0.17	0.34	0.52	0.69	0.86	1.03	1.20	1.38	1.55	1.72	1.89	2.06	2.24	2.41	2.58
Resource Savings																	
NHS Treatment Costs			0.16	0.32	0.48	0.64	0.8	0.96	1.12	1.28	1.44	1.6	1.76	1.92	2.08	2.24	2.4
Reduced Sickness Absence Savings			0.03	0.06	0.09	0.12	0.15	0.18	0.21	0.24	0.27	0.3	0.33	0.36	0.39	0.42	0.45
Productivity gains as a result of reduced smoking breaks			28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
Cost savings from reduced fire hazards and reduced cleaning and decorating costs			4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Hospitality Sector Impacts			-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50
Implementation and Enforcement Costs																	
Costs to the Northern Ireland Administration																	
Communications programme			-0.39														
Compliance phone line			-0.1	-0.05													
Nicotine Replacement Treatment			-4.8	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
Cost of signage and publications			-0.15														
Monitoring and Evaluation				-0.25													
Costs to Local Authorities																	
Enforcement			-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Associated advisory and educational functions		-0.2	-0.2														
Total undiscounted		-0.2	26.28	31.15	33.37	35.30	37.22	39.15	41.07	43.00	44.92	46.84	48.77	50.69	52.62	54.54	56.47
Discount factor		1	0.9662	0.9335	0.9019	0.8714	0.842	0.8135	0.786	0.7594	0.7337	0.7089	0.6849	0.6618	0.6394	0.6178	0.5969
Net Present Value (Annual)		-0.2	25.40	29.08	30.10	30.76	31.34	31.85	32.28	32.65	32.96	33.21	33.40	33.55	33.64	33.70	33.70
Net Present Value (Cummulative)			25.20	54.27	84.37	115.13	146.47	178.32	210.60	243.25	276.21	309.41	342.81	376.36	410.01	443.70	477.41

Option 3 Cont. (3 Main Smoking Related Diseases)

16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
4.37	4.65	4.92	5.20	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47
9.09	9.65	10.22	10.79	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36
11.54	12.26	12.98	13.70	14.42	14.42	14.42	14.42	14.42	14.42	14.42	14.42	14.42	14.42	14.42
2.75	2.92	3.09	3.27	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
2.56	2.72	2.88	3.04	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
0.48	0.51	0.54	0.57	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50
-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
58.39	60.31	62.24	64.16	66.09	66.09	66.09	66.09	66.09	66.09	66.09	66.09	66.09	66.09	66.09
0.5767	0.5572	0.5384	0.5202	0.5026	0.4856	0.4692	0.4533	0.438	0.4231	0.4088	0.395	0.3817	0.3687	0.3563
33.67	33.61	33.51	33.38	33.22	32.09	31.01	29.96	28.95	27.96	27.02	26.10	25.23	24.37	23.55
511.08	544.69	578.20	611.57	644.79	676.88	707.89	737.85	766.79	794.76	821.77	847.88	873.10	897.47	921.02
														921.02

Table A3: Option 2 Smoke-Free Legislation with Exemption for Pubs and Clubs which Serve Food (All Identified Smoking Related Diseases)

Option 2 - Smoke Free Legislation with Exemption for Pubs and Clubs which serve Food.

Additional Costs / Savings over Option 1 (£m)

Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Health Benefits																	
Economic value of lives saved	Reduced Exposure to ETS		0.21	0.42	0.63	0.84	1.05	1.26	1.47	1.68	1.89	2.10	2.31	2.52	2.73	2.94	3.16
	Reduced Active Smoking		0.82	1.64	2.46	3.28	4.10	4.92	5.74	6.56	7.38	8.20	9.02	9.84	10.66	11.48	12.30
Morbidity Saving	Reduced Exposure to ETS		0.61	1.22	1.83	2.43	3.04	3.65	4.26	4.87	5.48	6.09	6.69	7.30	7.91	8.52	9.13
(Human Cost of ill health)	Reduced Active Smoking		0.47	0.94	1.41	1.88	2.35	2.82	3.29	3.77	4.24	4.71	5.18	5.65	6.12	6.59	7.06
Resource Savings																	
NHS Treatment Costs			0.17	0.35	0.52	0.69	0.86	1.04	1.21	1.38	1.55	1.73	1.90	2.07	2.24	2.42	2.59
Reduced Sickness Absence Savings			0.02	0.04	0.07	0.09	0.11	0.13	0.15	0.18	0.20	0.22	0.24	0.26	0.29	0.31	0.33
Productivity gains as a result of reduced smoking breaks			23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
Cost savings from reduced fire hazards and reduced cleaning and decorating costs			3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Hospitality Sector Impacts			-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80
Implementation and Enforcement Costs																	
Costs to the Northern Ireland Administration																	
Communications programme			-0.39														
Compliance phone line			-0.1	-0.05													
Nicotine Replacement Treatment			-3.6	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8
Cost of signage and publications			-0.15														
Monitoring and Evaluation				-0.25													
Costs to Local Authorities																	
Enforcement			-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Associated advisory and educational functions		-0.2	-0.2														
Total undiscounted cost		-0.2	23.4639	28.109	30.713	33.018	35.322	37.6264	39.931	42.235	44.54	46.844	49.1485	51.4529	53.757	56.0617	58.3661
Discount factor		1	0.9662	0.9335	0.9019	0.8714	0.842	0.8135	0.786	0.7594	0.7337	0.7089	0.6849	0.6618	0.6394	0.6178	0.5969
Net Present Value (Annual)		-0.2	22.67	26.24	27.70	28.77	29.74	30.61	31.39	32.07	32.68	33.21	33.66	34.05	34.37	34.63	34.84
Net Present Value (Cummulative)			22.47	48.71	76.41	105.18	134.92	165.53	196.92	228.99	261.67	294.88	328.54	362.59	396.96	431.60	466.44

Option 2 Cont. (All Identified Smoking Related Diseases)

16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
3.37	3.58	3.79	4.00	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47
13.12	13.95	14.77	15.59	16.41	16.41	16.41	16.41	16.41	16.41	16.41	16.41	16.41	16.41	16.41
9.74	10.35	10.96	11.56	12.17	12.17	12.17	12.17	12.17	12.17	12.17	12.17	12.17	12.17	12.17
7.53	8.00	8.47	8.94	9.41	9.41	9.41	9.41	9.41	9.41	9.41	9.41	9.41	9.41	9.41
2.76	2.93	3.11	3.28	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45
0.35	0.37	0.40	0.42	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80	-1.80
-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8
-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
60.6705	62.9749	65.2793	67.584	71.1502	71.15	71.1502	71.1502	71.15	71.15	71.1502	71.15015	71.15015	71.1502	71.1501504
0.5767	0.5572	0.5384	0.5202	0.5026	0.4856	0.4692	0.4533	0.438	0.4231	0.4088	0.395	0.3817	0.3687	0.3563
34.99	35.09	35.15	35.16	35.76	34.55	33.38	32.25	31.16	30.10	29.09	28.10	27.16	26.23	25.35
501.43	536.52	571.66	606.82	642.58	677.13	710.51	742.77	773.93	804.03	833.12	861.22	888.38	914.61	939.97
														939.97

8Table A4: Option 3 Smoke-Free Legislation (All Identified Smoking Related Dieseases)

Additional Costs/Savings over Option 1 (£m)

Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Health Benefits																	
Economic value of lives saved	Reduced Exposure to ETS		0.27	0.55	0.82	1.09	1.37	1.64	1.91	2.19	2.46	2.73	3.01	3.28	3.55	3.83	4.10
	Reduced Active Smoking		0.97	1.94	2.90	3.87	4.84	5.81	6.77	7.74	8.71	9.68	10.64	11.61	12.58	13.55	14.51
Morbidity Saving	Reduced Exposure to ETS		0.72	1.44	2.16	2.88	3.61	4.33	5.05	5.77	6.49	7.21	7.93	8.65	9.37	10.10	10.82
(Human Cost of ill health)	Reduced Active Smoking		0.56	1.11	1.67	2.23	2.78	3.34	3.90	4.46	5.01	5.57	6.13	6.68	7.24	7.80	8.35
Resource Savings																	
NHS Treatment Costs			0.21	0.41	0.62	0.82	1.03	1.23	1.44	1.64	1.85	2.05	2.26	2.46	2.67	2.87	3.08
Reduced Sickness Absence Savings			0.03	0.06	0.09	0.12	0.15	0.18	0.21	0.24	0.27	0.3	0.33	0.36	0.39	0.42	0.45
Productivity gains as a result of reduced smoking breaks			28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
Cost savings from reduced fire hazards and reduced cleaning and decorating costs			4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Hospitality Sector Impacts			-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50
Implementation and Enforcement Costs																	
Costs to the Northern Ireland Administration																	
Communications programme			-0.39														
Compliance phone line			-0.1	-0.05													
Nicotine Replacement Treatment			-4.8	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
Cost of signage and publications			-0.15														
Monitoring and Evaluation				-0.25													
Costs to Local Authorities																	
Enforcement			-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Associated advisory and educational functions		-0.2	-0.2														
Total undiscounted		-0.2	27.11	32.81	35.86	38.62	41.37	44.12	46.88	49.63	52.39	55.14	57.89	60.65	63.40	66.16	68.91
Discount factor		1	0.9662	0.9335	0.9019	0.8714	0.842	0.8135	0.786	0.7594	0.7337	0.7089	0.6849	0.6618	0.6394	0.6178	0.5969
Net Present Value (Annual)		-0.2	26.20	30.63	32.34	33.65	34.83	35.90	36.85	37.69	38.44	39.09	39.65	40.14	40.54	40.87	41.13
Net Present Value (Cummulative)			26.00	56.62	88.97	122.62	157.45	193.35	230.19	267.88	306.32	345.41	385.06	425.20	465.74	506.61	547.74
Total NPV																	

Option 3 Cont. (All Identified Smoking Related Diseases)

16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
4.37	4.65	4.92	5.20	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47	5.47
15.48	16.45	17.42	18.38	19.35	19.35	19.35	19.35	19.35	19.35	19.35	19.35	19.35	19.35	19.35
11.54	12.26	12.98	13.70	14.42	14.42	14.42	14.42	14.42	14.42	14.42	14.42	14.42	14.42	14.42
8.91	9.47	10.03	10.58	11.14	11.14	11.14	11.14	11.14	11.14	11.14	11.14	11.14	11.14	11.14
3.28	3.49	3.69	3.90	4.10	4.10	4.10	4.10	4.10	4.10	4.10	4.10	4.10	4.10	4.10
0.48	0.51	0.54	0.57	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50
-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4	-2.4
-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
71.66	74.42	77.17	79.93	82.68	82.68	82.68	82.68	82.68	82.68	82.68	82.68	82.68	82.68	82.68
0.5767	0.5572	0.5384	0.5202	0.5026	0.4856	0.4692	0.4533	0.438	0.4231	0.4088	0.395	0.3817	0.3687	0.3563
41.33	41.47	41.55	41.58	41.56	40.15	38.79	37.48	36.21	34.98	33.80	32.66	31.56	30.48	29.46
589.07	630.54	672.09	713.67	755.22	795.37	834.17	871.65	907.86	942.84	976.64	1,009.30	1,040.86	1,071.35	1,100.81
														1,100.81

Appendix ii

Summary of Consultation Responses

Respondent	Consultation Issue	Response
96, 95,92, 86, 85, 75, 74, 69, 66, 64, 63, 51, 45, 36,	The use of 2% decrease in smoking prevalence is an underestimation compared to the 4% reduction included in the Wanless review.	The figure in the RIA is consistent with the Wanless report.
96, 92, 75, 63, 50, 39, 14	The positive benefit of improved healing and shorter hospital stays has been overlooked by the RIA.	Noted.
93, 64, 56, 51, 55, 50, 39, 14 93, 64, 56, 51, 55, 50, 39, 14, 92, 88, 87, 86, 85, 75, 69, 67, 66, 63, 62, 56, 51, 55, 50, 39, 14,	There has been little reference to impact on child health and the benefits of smoke-free schools.	Child health is included in the overall assessment of reduction of illnesses.
57, 51, 50, 53, 48, 45, 42 37, 32, 31, 29, 25, 86, 79, 73, 69, 67, 66, 92, 88, 87, 86, 85, 75, 69, 66, 61	Consultation: Central Production and Distribution of signage would assist compliance.	The Department is considering the logistics of this. RIA changed to reflect potential for Department to sponsor this service.
51	Research from Europe	Noted
50, 45, 39, 37, 86, 85, 75, 69, 67, 66, 63, 62	Harvard School of Public Health – “A global study of Irish Pubs” - how smoke free laws improve air quality in bars.	Noted and included in RIA.
25, 74, 64, 62, 61,55, 51	BMJ paper by Shane Allwright “Air Quality in Irish pubs after the ban” BMJ Vol. 331 No. 7525 Pages 1117 – 1120.	Noted and included in RIA..
40, 82	Increased research e.g. Scottish smoke free evaluation available 2007 & ASH Scotland website	Noted
66	Evidence from ROI showing smoking prevalence decreased post implementation.	Noted.
47	States that Professor Richard Peto states that in relation to ETS “these risks are small and difficult to measure”.	Peto Research considered in RIA.
93,	Loss of jobs in hospitality effect on Part Time workers and minimum wage earners.	The loss of jobs in the hospitality sector is covered in some detail in the RIA.
17, 58	There is no evidence from ROI or elsewhere	

	stating that there are job losses in the hospitality sector.	
74, 64 92, 88, 75, 69, 66, 65, 63, 62, 56, 50, 65	Calculation of time saved due to the absence of smoking breaks seems high. Benefits from less time spent on smoking breaks.	A prudent approach to measurement of benefits was taken in the RIA. A reduction in smoking breaks is captured in the RIA.
92, 88, 87, 86, 85, 75, 69, 67, 66, 63, 62	Benefits of smoke free schools should be taken into account.	
92, 86, 85, 75, 74, 69, 66, 64, 63, 62, 61	Benefits to pregnant workers/mothers and babies, children should be taken into account.	Noted.
90	RIA needs to be considered in conjunction with social inclusion.	Noted.
89	There should be increased assistance to help smokers quit.	Since 1999 DHSS&PS has made almost £3.25m available to facilitate the provision of a range of cessation services across NI and the Department will continue to support this work
88	Wider view of health needed – e.g. impact on mental and social wellbeing – impact of wider positive effect on individuals to attend bars etc especially children, people with asthma.	Noted
88	Wider/ full health impact assessment would have been useful to give wider amount of stakeholders, greater assessments of benefits and also negative issues of order.	A health impact assessment was completed and accompanied the RIA.
86	NI Human Rights Commission human right to be protected from smoke exposure.	Noted.
83	Should be implemented at the same time as Scotland.	Not achievable as Scotland introduced smoke-free legislation in March 2006.
83, 62, 59	Evidence shows detrimental economic effects have been exaggerated.	A prudent view was adopted when considering the economic effects of the policy.
82	Increased demand for smoking help line.	The RIA considers this.
82	Increased demand for NRT.	The RIA considers this.
80	Impact on Gallahers i.e. number of well paid skilled jobs and likelihood of employment in equivalent jobs/wages suppliers and exemptions for R&D.	The impact on Gallaher Ltd was considered in detail in the RIA.
80	Impact on suppliers of Gallahers wider impact needs assessed.	Noted. Additional analysis provided on this point.
75, 74, 63	Cost of signage supplied by employers has not been included.	Noted and amended.
46	Legislation: Some areas of the legislation may be open to broad interpretation.	Noted.
47	Assessments are just statistical exercises and lack any degree of reliability.	Analysis is based on documented sources.
13	Continue to educate minors about the dangers of smoking.	This is in line with Departmental policy on tobacco control.

13	Make the purchase and use of tobacco products by minors unlawful.	Tobacco products are not currently sold to children under 16.
13	Raise minimum age of sale to 18.	This is under consideration.
13	Policy implications: (i)There should be a lead-in and implementation time for public smoking restrictions. (ii)Should have flexibility for businesses to accommodate smokers and non-smokers.	 Prior to implementation a media campaign will inform the public about the implementation of the policy. Views on exemptions sought and considered in the Smoking (Northern Ireland) Order 2006 Consultation.
67	Assistance /Guidance to aid employers in educating staff on how to enforce new legislation.	Appropriate guidance will be provided in the lead in to the implementation.
65	Reduced employee sickness absence.	Included in RIA.
61	Consistent, standardised and co-ordinated approach to signage.	Department is considering the logistics of this.
60	Effect on health is at best negligible if not zero	Medical evidence has shown that smoking has an adverse impact on health.
60, 47	No evidence that passive smoking is harmful and the health benefits of the smoking order would therefore be negligible.	Medical evidence has shown that smoking has an adverse impact on health.
60, 40, 67	Help/advice available to businesses.	Noted.
40	Raised turnover in pubs since ban introduced in Scotland.	Noted.
46	There are issues which will just impact on small businesses.	Considered in RIA.
46	Some areas of the legislation may be open to broad interpretation.	Noted.
47	A policy of voluntarily adopted self-regulation produced consistent and progressive results.	Considered in RIA and the indication was that this policy would not continue to produce significant change in the number of new firms implementing a smoking policy.
55	Communications programme, compliance phone line and provision of additional NRT are all essential for success of implementation.	These have been accounted for in the RIA.
51, 50	Reduced smoking breaks are a health benefit as well as an economic benefit.	Captured in RIA.
30	States how is it possible to ascertain what cost is attributable to second-hand smoke.	Calculated using methodology employed in the A. Ludbrook, S. Bird & E. van Teijlingen (2004) “International Review of the Health and Economic Impact of the Regulation of smoking in Public Places” Health Economics Research Unit (HERU).
47	In ROI the impact of a ban on rural pubs and bar business has been greater than the impact on urban businesses.	There are contradictory results on this.

Question **Response**	Q18. Do you agree with the analysis of the sectors and businesses/ organisations which might be affected by the introduction of this policy	Q20. Do you agree with the Department's view that a separate economic appraisal is not required?	Q21. Do you agree that the draft Order will not have a disproportionate adverse impact on Rural business?
Agree	36	38	34
Disagree	2	5	11
No response	58	53	51
Total Responses	**96**	**96**	**96**