Proposals for revised policies to address societal risk around onshore non-nuclear major hazard installations

This consultative document is issued by the Health and Safety Executive.

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to reach there no later than 2 July 2007

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Responses to this consultative document are invited on the basis that anyone submitting them agrees to their response being dealt with in this way. Responses, or part of them, will be withheld from the Information Centres only at the express request of the person making them. In such cases, a note will be put in the index to the responses identifying those who have commented and have asked that their views, or part of them, be treated as confidential.

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Consultative document on proposals for revised policies to address societal risk around onshore non-nuclear major hazard installations

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PREFACE

This Consultative Document seeks views on a Government proposal that information on ‘societal risk’ should be taken into account when assessing safety measures at onshore major hazard installations and for informing decisions on the use of land for development in areas around such sites. ‘Major hazard’ is the term used to describe installations that use, manufacture or store significant quantities of hazardous substances. Such sites have the potential for serious accidents that could harm significant numbers of people on-site and off-site. This is referred to as ‘societal risk’.

The study that led to this consultation process was initiated by analysis of information provided by major hazard site operators under the Control of Major Accident Hazard (COMAH) Regulations 1999. The document therefore only deals with such sites and does not cover other installations that may present off-site risk such as pipelines or nuclear installations (which are subject to their own specific safety legislation).

The work has been undertaken by an interdepartmental Government Task Group, chaired by the Cabinet Office, and comprising a number of Government departments with an interest in the issue. These include the Health and Safety Executive (HSE), the Department for Communities and Local Government (DCLG), the Department of Trade and Industry (DTI) and the devolved administrations in Scotland and Wales. This document is published by HSE on their behalf.

This work was ongoing before the major incident at the Buncefield fuel depot in December 2005. However, that incident and the subsequent investigations have clearly already focussed attention on the risks that major hazard sites present to the public. In relation to incremental development around the Buncefield site, in its initial report the Buncefield Major Incident Investigation Board noted that “[as]… most planning advice currently focuses on specific developments subject to planning approval, this could mean that in the future, more attention should be paid to the total population at risk from a major hazard site.”.

An initial regulatory impact assessment of the proposals has been prepared and is available at [http://www.hse.gov.uk/consult/condocs/cd212.htm](http://www.hse.gov.uk/consult/condocs/cd212.htm)

Societal risk is discussed in the current consultation on proposed changes to HSE’s land use planning advice around large-scale fuel storage premises, arising from the Buncefield incident at [http://www.hse.gov.uk/consult/condocs/cd211.htm](http://www.hse.gov.uk/consult/condocs/cd211.htm). The response to both consultations should help to address the Board’s concern over this issue.

The outcomes of the consultations will help HSE, other Government departments and agencies, and planning authorities (PAs) more effectively to ensure public safety whilst maintaining an appropriate balance with the need for economic and social development on land in the vicinity of major hazard sites.
Who should read this

The proposals will be of particular interest to operators of major hazard installations, local authorities, planning departments, developers, house-builders, economic and regeneration agencies, landowners and those people living and working around major hazard installations.

Why we are consulting you

This issue has implications for public safety, industry and land use policies, and this means we should take account of as many views as possible by publishing this document.

What we would like you to do

We would like you to comment on these proposals by 2 July 2007.

We have included a reply form at Annex 4 of this consultation document summarising the areas where we would welcome your views; it will also help us to analyse responses. You may also respond by completing the response form online at http://www.hse.gov.uk/consult/condocs/cd212.htm or by downloading the response form and returning it via the website or sending it to us at the address below. It is not intended to restrict the scope of the comments; we would welcome any comments you wish to make on the proposals.

Written comments or queries may be sent to:

Consultation Administrator
Societal Risk Consultation
Health and Safety Executive
Policy Group
5S.1 Redgrave Court
Merton Road
Bootle, L20 7HS

Fax: 0151 951 3418, e-mail: societalrisk.consultation@hse.gsi.gov.uk

Responses to consultation documents are normally made publicly available unless respondents request confidentiality. If you reply to this consultative document in a personal capacity, rather than as a post holder of an organisation, you should be aware that the information you provide may constitute "personal data" in terms of the Data Protection Act 1998. For the purposes of this Act, HSE is the "data controller" and will process the data for health, safety and environmental purposes. HSE may disclose this data to any person or organisation for the purposes for which it was collected, or where the Act allows disclosure. You have the right to ask for a copy of the data and to ask for inaccurate data to be corrected.

Many business e-mail systems now automatically append a paragraph stating the message is confidential. If you are responding to this consultation document by e-mail please state clearly if you are not content for response to be made public.
What happens next

We will acknowledge all responses and give full consideration to the substance of arguments in the development of proposals; we may also contact you again if, for example, we have a query. When a decision has been made on the issues raised in the document we will let you know how the work will proceed and how the decision reached reflects the results of the consultation.

Making responses public

To make our consultation process as thorough as possible we make the comments we receive available to the public at our Information Centre in Bootle. Copies will be made available at a small charge to cover our costs from the following addresses:

Health and Safety Executive
Information Centre
Redgrave Court
Merton Road
Bootle
Merseyside L20 7HS

If you do not want your views to be made public, please make this clear in your response, and we will respect your wishes.

Queries and complaints

If you have any queries about this consultation please contact:

HSE’s Infoline on 0845 345 0055 or
e-mail: societalrisk.consultation@hse.gsi.gov.uk

If you have any questions about the regulatory impact assessment please contact:

Chris Milne, e-mail: chris.milne@hse.gsi.gov.uk

If you are not satisfied with the way in which this consultation exercise has been conducted you can complain by contacting Gwyneth Deakins, Health and Safety Executive, Policy Group, Specific Interventions Division, 7NW, Rose Court, 2 Southwark Bridge, London SE1 9HS.

We aim to reply to all complaints within 10 working days. If you are not satisfied with the outcome of your complaint, you can raise the matter with the Chief Executive at the Health and Safety Executive, Rose Court, 2 Southwark Bridge, London SE1 9HS. You can also write to ask your MP to take up the case with us. Your MP may refer the matter to the Parliamentary Commissioner for Administration (the Ombudsman) who will investigate your complaint.
1. INTRODUCTION

1.1 Modern society has many expectations relating to quality of life. These include things such as clean water, reliable fuel supplies, and a wide range of everyday consumer products. However, to deliver these sometimes requires industrial installations and processes that use large quantities of toxic, flammable or explosive substances. Such installations and substances present the chance, albeit remote, of accidents that could result in harm to people working on-site and, in extreme circumstances, to those living or working in the areas around the site.

1.2 While there is a general acceptance of the need for hazardous installations, people rightly expect, and indeed the law requires, risks to be properly managed and all necessary measures to be put in place to prevent major accidents and to protect people from harmful consequences. But the chance of accidents cannot be completely eliminated and, even with stringent and rigorously enforced on-site measures, there will remain a very slight chance that a major accident could occur. As a result, some control is exercised over new building developments around these types of sites; HSE advises planning authorities (PAs) whether any particular proposed development is suitable given the small risks from a major accident at the installation and the location, size and type of the proposed development. PAs can then weigh this advice against other factors when deciding whether to grant planning permission.

1.3 HSE also provides advice to local authorities on the location of proposed new hazardous installations, based on an assessment of the risks that would be presented to the existing population at that location.

1.4 This document explains what we mean by societal risk, describes the work that has been done to get to this position, outlines the current arrangements for managing risk around major hazard sites and invites your views on a number of issues relating to how societal risk might be factored into the existing arrangements for managing major hazard risks.

Major hazard sites

1.5 Installations that use, manufacture or store significant quantities of hazardous substances have, as stated previously, the potential to cause serious harm to people (on-site and off-site) in the event of a major accident such as a fire, explosion or release of toxic substance. We refer to the chance of accidents that could harm a number of people in one go as ‘societal risk’. It is in effect a measure of several combined issues - what things could go wrong at such sites, how likely they are to happen and how many people could be affected as a result? Societal risk is therefore dependent on what processes and substances are at the sites, and on the size, location and density of the population in the surrounding areas. Examples of sites that could present significant societal risk include;

- Chemical plants, where toxic substances are manufactured or used.
- Some water treatment plants, where chemicals are stored for use in water purification.
- Large liquefied petroleum gas (LPG) and liquefied natural gas (LNG) storage facilities.
1.6 The risks from large-scale petrol storage sites are under review in the wake of the incident at the Buncefield fuel depot in December 2005. As a result of this, it may be the case that some of these sites could be significant in relation to societal risk.

1.7 It should be noted that, when properly managed, major hazard sites present a very low risk of a major accident. Under the COMAH Regulations (see Annex 1), the operators of the most hazardous sites must:

- Ensure that risks to the health and safety of people (those working on-site and those living or working in the areas around sites) are as low as is reasonably practicable (ALARP) by having in place all measures necessary to prevent major accidents.
- Prepare emergency plans and provide information to people in the surrounding area about what to do in the event of a major accident.
- Give information to the local authority so it can prepare an off-site emergency plan.
- Send HSE a written safety report that demonstrates that they have done all they should to prevent major accidents.

1.8 HSE enforces compliance with these requirements and assesses the information provided by site operators to ensure that they are complying with all their duties.

1.9 In addition to this primary role, as mentioned in paragraph 1.2, HSE also advises planning authorities when new developments are proposed in certain defined areas around such sites. HSE determines this area for each site and advises the PA. It is referred to as the consultation distance (CD). HSE assesses the risks within each CD and then advises the PA, for each development on which it is consulted, whether it believes there are safety grounds for refusing planning permission. HSE’s assessments are currently based on the concept of ‘individual risk’ (see paragraph 2.1 for an explanation of this) and consider risks and potential harm to people at each proposed development. Although consideration is given to the number of people who would be present at the new development itself, HSE advice to the planning authority does not currently take account of how many people are already present in existing developments.

1.10 During 2006 and 2007, HSE has been providing all planning authorities in England, Scotland and Wales with on-line access to the software it has developed to generate its land use planning advice, known as PADHI (Planning Advice for Developments near Hazardous Installations), so that they can generate the health and safety advice more quickly and efficiently themselves (although it is important to note that it is still HSE’s advice). More information on how the system works can be found on the HSE website at http://www.hse.gov.uk/landuseplanning/index.htm.

1.11 Further information about the arrangements in place for regulating major hazard risks can be found at Annex 1, and information on the national planning system at Annex 2.
Why societal risk is being looked at now

1.12 Health and safety legislation specific to major hazard sites\(^1\) has, for many years, required them to be designed, constructed and operated safely, and for operators to provide HSE with information on how this is done. Changes to this legislation\(^2\) meant that in the last few years site operators had to provide HSE with additional information about the potential effects of major accidents at their sites - their likelihood, how far the effects might be felt off-site and how much harm might be caused to people in the event. It will be emphasised throughout this document that such events are extremely unlikely due to the precautions operators must have in place to prevent them. Nonetheless, a significant number of people could be harmed if such an accident did take place.

1.13 HSE used the additional information it had been given to produce initial estimates of societal risk levels around major hazard sites. This indicated that there are a number of sites (54) where the population in the surrounding areas has built up over time, and consequently raised societal risk levels, to a point where it now would be appropriate to take account of it when considering further development proposals around the sites, and when operators assess risk reduction measures. There are other major hazard sites where a major accident that harms people is a possibility - but the very low likelihood and smaller number of people that may be harmed means that societal risk does not require the same consideration.

1.14 It is important to emphasise that the risks to individual people around these sites are no higher than before and remain very low and comparable with many other risks to which we are exposed every day (for example, the chance of being killed by a gas incident – fire, explosion or carbon monoxide poisoning is about 1 in 2.6 million per year).

1.15 Any change of policy to take account of societal risk could have an effect on other Government industrial, housing and planning polices. In particular, changes to the advice provided by HSE, and consequently the decisions made by planning authorities, could result in further constraints on new developments around major hazard installations. An interdepartmental Task Group was set up to consider how to address societal risk and all the various policy implications - economic, social and public health and safety.

1.16 The key objectives it has been pursuing are:
   - Ensuring the health and safety of workers and those living round major hazard installations.
   - Enabling available land to be put to the most efficient and productive use for housing, economic development, and public services and amenities.
   - Having a regulatory environment in which business and industry can invest and flourish, not only producing employment and wealth, but also meeting the UK’s strategic needs and delivering sustainable economic development

\(^1\) The Control of Industrial Major Accident Hazards (CIMAH) Regulations 1984
\(^2\) The Control of Major Accident Hazards Regulations (COMAH) 1999 which replaced the 1984 Regulations
2. BACKGROUND

More about risk

2.1 ‘Risk’ can be described in simple terms as the chance or probability of a particular event happening. What we are talking about in this document is risks to people, rather than things such as property or the environment. Risks to people can be represented in two ways. Both are a combination of the likelihood of an event happening (e.g. an accident at a major hazard installation), and the possible consequences - in terms of harm to people:

- ‘Individual risk’ is the chance that a particular individual at a particular location will be harmed. It is usually described in numerical terms such as “a 1 in 18,000,000 chance of being killed by lightning”. But assessment of individual risk does not take account of the total number of people at risk from a particular event.
- ‘Societal risk’ is a way to estimate the chances of numbers of people being harmed from an incident. The likelihood of the primary event (an accident at a major hazard plant) is still a factor, but the consequences are assessed in terms of level of harm and numbers affected, to provide an idea of the scale of an accident in terms of numbers killed or harmed.

2.2 Societal risk is not a new concept. In the 1960s and 1970s, sophisticated risk assessment techniques were developed which enabled experts, for the first time, to analyse in numerical terms the likelihood and consequences of various accident scenarios at major hazard installations. But such techniques were, and still are, very difficult and costly to carry out, requiring a lot of time and money, and the accuracy of the results is uncertain. The techniques HSE has recently developed meant it could use the information now provided by site operators to make a rapid but approximate estimate of societal risk levels. Further information on these techniques can be found in the HSE website at [http://www.hse.gov.uk/research/rrhtm/RR283.htm](http://www.hse.gov.uk/research/rrhtm/RR283.htm) and [http://www.hse.gov.uk/research/rrhtm/RR297.htm](http://www.hse.gov.uk/research/rrhtm/RR297.htm) Information can also be found in “A ‘worst case’ methodology for obtaining a rough but rapid indication of the societal risk from a major accident hazard installation”, Hirst and Carter, Journal of Hazardous Materials, A92 (2002), 223-237.

2.3 As mentioned above, a key factor in estimates of societal risk is the population around the relevant sites. If there is sufficient population spread fairly evenly throughout the area around a site, then it is more likely that, say, a toxic gas cloud resulting from an accident at the site (which could go in any direction depending mainly on the wind) would drift to a populated area and cause harm to a significant number of people. On the other hand, for a site with population distributed only in one direction, there would be less chance of a gas release reaching the populated area, even if the prevailing wind was in that direction (as it would not always be blowing that way). The concentration or density of the population will also affect societal risk – the more buildings (e.g. houses) in any particular area the more people could be harmed by a gas release going over that area.
How risks from major hazard sites are controlled

2.4 There is a well-established system in Britain for ensuring that risks from major hazard sites are controlled and kept low. This takes a three-strand approach as recommended by the Advisory Committee on Major Hazards (ACMH) which was appointed by the Health and Safety Commission to help to develop regulation on major hazards in the wake of the Flixborough explosion in 1974:\footnote{28 people on-site were killed in an explosion at a chemical plant in Flixborough when cyclohexane escaped from part of the plant and subsequently ignited. There was also extensive damage to property off-site.}

- **Identification** of major hazard sites – the first step is to know which sites have the potential for major accidents.
- **Assessment and Control** (through the Control of Major Accident Hazard Regulations (COMAH)) – measures taken by operators both to a) prevent, so far as is reasonably practicable, major accidents and b) reduce the chances of any incident that does occur escalating to more serious consequences e.g. one explosion leading to another.
- **Mitigation** – of consequences (lessening the effects) of major accidents that occur after the loss of ‘prevention’ and control. This includes functions carried out by local authorities such as land use planning controls and emergency planning.

2.5 The system recognises the need to have hazardous installations, and therefore that adequate controls need to be in place at these sites to prevent major accidents. But it also accepts that the chances of accidents can never be eliminated and so mitigation is also appropriate. More detail on how the various elements work is contained in Annex 1.

The principles on which HSE’s land use planning advice is based

2.6 HSE applies certain principles when providing advice to planning authorities. These are again based on the recommendations of the ACMH. The Buncefield land use planning consultation document sets out these principles at http://www.hse.gov.uk/consult/condocs/cd211.htm and asks if they are still appropriate in light of the incident. We will also consider whether any further change may be needed to them if societal risk is to form an element of HSE’s land use planning advice in the future.

3. ACCEPTABILITY OF RISK

3.1 When talking in numerical terms about calculated levels of risk, be it individual or societal risk, some form of benchmarks or criteria are needed to compare the figures against.
Individual risk

3.2 There are well established tolerability criteria for individual risk, both for workers and for members of the public, which are:
   • The annual risk of death for workers from work activities should be less than 1 in 1000.
   • The annual risk of death for members of the public who are exposed to an involuntary risk from work activities should be less than 1 in 10,000.

3.3 In practice, it should be noted, the actual fatality rates for the public and for workers in even the most hazardous industries are normally well below these levels.

3.4 For both workers and the public, an annual risk of death from an industrial activity of below 1 in 1,000,000 is considered to be a very low risk and comparable with those that people consider insignificant or trivial in their everyday lives.

3.5 It should be stressed that these criteria values are not laid down in law, but are HSE’s published benchmarks and have been widely accepted for a number of years.

Societal risk

3.6 The position is less straightforward for societal risk. Acceptability criteria have been the subject of numerous studies over the years. In 2001, HSE published ‘Reducing Risks, Protecting People’ (R2P2) which included a proposed societal risk criterion that said that, for any single industrial installation, “the risk of an accident causing the death of 50 or more people in a single event should be regarded as intolerable if the frequency is estimated to be more than one in five thousand per annum”. This was the first time there had been a widely consulted and published criterion. But the time may be right for us to consider whether this is still appropriate.

3.7 Ultimately, decisions on the levels of risk that should be considered acceptable are for society to decide. Estimating major hazard risks is an inexact science and calculations can only be used as an aid to decision-making. This applies both to decisions by site operators about investment in additional on-site safety measures, and by planning authorities about land use around such sites. There will almost certainly be other factors in addition to safety considerations in any particular case – for example, the effect of new on-site technical measures on business viability or the benefits that new development would bring to a community.

3.8 The Government’s view therefore is that informed public opinion, and not solely professional judgement, should guide decisions on where societal risk might be considered either so low that it can be ignored, high enough to be considered with other factors, or indeed so high that they might override other factors.

3.9 Further information about of risk acceptability is provided at Annex 3.

Question 1 – What factors and issues do you believe should be taken into consideration when determining what might be unacceptable in terms of societal risk from major hazard installations?
4. WHY CHANGE IS BEING CONSIDERED

4.1 We now have more information about risks from major hazard sites, and Government believes that this should be utilised when managing major hazard risks. We believe there should be a public debate about the extent to which this should be done. The current arrangements for controlling major hazards have been very successful in ensuring that the UK has one of the best safety records in the world concerning major accidents. However, there are two aspects where societal risk is not specifically considered.

On-site measures

4.2 The primary means by which risks from onshore major hazard sites are controlled and managed are the requirements in COMAH for proper design, installation and operation of the sites themselves. HSE’s focus is on monitoring these sites and assessing how well operators comply with their duties. To date, however, both operators and HSE have relied on ensuring that individual risk levels – to workers and people off-site – are reduced so they are as low as reasonably practicable. There has been no specific consideration of the total population, nor therefore of the societal risk around each site. Now that HSE’s work has enabled some estimation of societal risk, Government considers that it should be taken into account by operators when determining whether they have all measures necessary in place. The current principle that measures should be both reasonably practical and proportionate in cost would be maintained.

HSE advice to planning authorities

4.3 HSE’s current advice ensures that the potential risks to occupants of proposed new developments are taken into account by planning authorities, alongside all other relevant issues, when deciding whether to grant planning permission around major hazard sites. HSE’s advice aims to ensure that the risk to a person at a new development from major accident hazards should not be significant when compared to general risks from everyday life.

4.4 However, because HSE provides its advice case-by-case on the basis of individual risk, that advice is blind to the cumulative effects of separate developments over time on societal risk around a site. As a result, societal risk around the site plays no part in the formulation of HSE’s advice or therefore in planning authorities’ decision-making process.

4.5 In addition, HSE does not currently advise on any proposed development outside its notified CD. Whilst the level of risk to individuals falls with distance away from a site, the work HSE has done indicates that for some types of sites, certain large developments beyond the CD (up to about twice the CD) can increase societal risk.

4.6 The current situation does not mean that risks to individual people are too high or that there is a need to close sites or move people away. The level of risk to individuals living and working in areas around major hazard sites remains very low and does not require any specific action. The purpose of these proposals is to ensure
that consideration is given to the total number of people around sites when making decisions that will shape and influence future development around major hazard sites – because the adverse effect of any major incident (however rare) may be greater if more people are present. As such, we believe that any changes to the current arrangements need not be radical and it is a matter of making an improvement to a system that is already applying scrutiny to each new development.

**Question 2 – Do you think that assessment of societal risk should be used in the control of major hazard sites?**

**5. HOW SOCIETAL RISK MIGHT BE ADDRESSED IN THE FUTURE**

5.1 For the sites where societal risk is relevant, it could be factored into considerations by:

- Ensuring that site operators address societal risk at source when considering reasonably practicable on-site measures to prevent accidents occurring and to mitigate their effects if they do; and
- HSE providing advice to planning authorities about the potential effects on societal risk of development proposals, so this could be factored into their procedures.

5.2 Government believes HSE should deal with risk in a consistent way in both its COMAH regulatory work and its role in advising on land use planning. In other words, that societal risk should be included in both aspects. We believe that not to take account of the information now available on societal risk would run counter to the intent of the COMAH Regulations, which are aimed at preventing major accidents involving harm to people (or the environment, but this aspect is not the subject of this exercise). Information on the EU’s Seveso II Directive (which COMAH implements) and the European element of major hazard control is provided in Annex 1.

5.3 However, it should be done in a balanced and proportionate way so that:

- consideration of on-site measures that may be required to reduce off-site societal risk recognises both their feasibility as effective and technically possible solutions and the need to be reasonable practicable;
- any proposals for changes to planning advice must continue to allow planning authorities to balance health and safety considerations with the wider social, economic, and environmental benefits of development when making planning decisions.

**On-site controls**

5.4 If it was decided to take societal risk into account, operators of major hazard installations would be required to determine what measures they need to have in place based on consideration of both individual and societal risk. HSE would enforce compliance with COMAH on this basis.

5.5 Potentially this could mean that, as a result of societal risk levels, some site operators could be required to implement control measures over and above those they
currently have in place to address individual risk. Measures that would bring about a significant reduction in societal risk are likely to be major and therefore expensive. It could be argued that these costs would be imposed on operators as a result of matters beyond their control, i.e. development around the site. Generally speaking, however, it is likely that the impact on site operators will be offset by the reasonable practicability test that is applied under COMAH, which requires that measures must be implemented only where their costs are not grossly disproportionate to the benefit (i.e. risk reduction) they bring.

5.6 Our analysis suggests that in most cases the costs of further measures (where they are possible) may indeed be grossly disproportionate. But it is only when considering each site and the associated risks that such decisions can be made in practice. Also, this is not to say that, even if the position on- or off-site remain unchanged, operators would never have to implement further measures. As technology and knowledge change and improve over time, what is reasonably practicable may also change. If, for example, a risk reduction measure becomes cheaper in the future due to technological advances, it may become reasonably practicable to implement it.

**Question 3 – Should societal risk be taken into account by site operators when considering reasonably practicable on-site control measures?**

5.7 Note that, in any case where proposed development around a site would raise societal risk levels, we believe it would be entirely appropriate for consideration to be given by operators to what on-site measures might counter such an increase. There could then be a case for operators, developers and planning authorities considering if the costs of implementing these could be allocated in an economically rational way between relevant parties, so that the development could go ahead without societal risk increasing. The mechanism for this would need to be carefully considered and there is no legal requirement for companies to do more than is reasonably practicable but this is an idea that could be given further consideration.

**Question 4 - In any cases where development would raise societal risk levels significantly, should consideration be given to sharing the costs of any measures that might counter such an increase in order to enable development to go ahead?**

**Question 5 - If so, what arrangements do you think could be introduced to achieve this?**

**Land use planning controls**

5.8 As noted in section 1, HSE advises planning authorities on the risks that major hazard sites present to people in a number ways. Two roles are relevant here:

- as a consultee with whom planning authorities should consider the need to consult on relevant policies during the preparation of Regional Spatial Strategies and Local Development Frameworks; and
as a statutory consultee for specified types of development within a consultation distance established around a major hazard site.

We discuss below how we might incorporate societal risk considerations into our advice in each of these roles, in addition to the individual risk-based advice currently provided by HSE.

5.9 This would entail HSE advising planning authorities on the potential societal risk implications of proposed new development. Taking societal risk into account in this way may mean that planning authorities would refuse permission for some developments which at present are allowed, although this cannot be quantified until more work has been done on precisely how societal risk would be used in decision-making.

Question 6 – As well as site operators taking account of societal risk when considering on-site control measures, should societal risk be taken into account by planning authorities when making planning decisions?

Development plans

5.10 Planning authorities are required to prepare development plans for their areas. In adopting development plans, planning authorities are required to ensure that the objectives of preventing major accidents and of limiting the consequences of such accidents are taken into account in their land use policies. In England, the Town and Country Planning Regional and Local Development Plan Regulations 2004 specify the form and content of development plans and make clear that planning authorities should have regard to the need;

"in the long term, to maintain appropriate distances between establishments [where dangerous substances are present] and residential areas, buildings and areas of public use, major transport routes as far as possible, recreational areas and areas of particular natural sensitivity".

Similar requirements apply in Scotland and Wales.

5.11 Guidance to planning authorities notes that during the plan preparation stage they should consult with HSE. We expect that planning authorities will, as a matter of course, consult with HSE during the preparation of plans for areas that may be affected by the proximity of hazardous installations. We are however aware that to date such consultation may not always have happened; and even where it does that HSE may not have routinely commented on development plans. We believe that such consultation and the response is important if societal risk considerations are to be adequately factored into planning decisions.

5.12 Early consultation by planning authorities during the preparation of their development plans provides a very valuable opportunity for this. It would enable HSE to provide planning authorities with information about current societal risk levels around major sites and indicate how the differing land use (spatial planning)
options still under consideration might impact on them. HSE could advise how societal risk levels might change as the plan is implemented, and could liaise with the authorities on how, if necessary, it might be adapted so as to maximise use of the available land without resulting in significant increase in the levels of societal risk.

5.13 Land use decisions taken at this stage may still mean that societal risk would increase, possibly significantly. But such decisions by planning authorities would have been weighed against the full range of relevant considerations including national and regional policy guidelines, and the societal risk considered acceptable in that context. And of course they would still at this stage be subject to consultation and examination in public so there would be an opportunity for the public to confirm acceptance of the increased risk/benefits of development trade-off.

5.14 Factoring societal risk considerations into the early, strategic stages of plan-making in this way sets a framework against which future development proposals will be considered. It will also provide a degree of certainty for developers before they have to start designing and preparing detailed planning applications.

5.15 Development plans are prepared, reviewed and revised regularly, with the annual monitoring report providing a mechanism for reviewing the relevance of the local development documents and identifying any changes necessary. Building on this we propose to target those forty or so planning authorities, and as necessary the adjoining authorities, where the major hazard sites we have identified as requiring societal risk assessments are located. It will only be necessary to input to the development plans for these authorities, not every one. It may be possible quickly to commence a process of factoring societal risk considerations into the development plan documents relevant to land close to these sites.

5.16 We would aim to have societal risk considerations factored into all relevant development plans within a relatively short period of time from when any new arrangements commenced, say 5 years. In some cases supplementary planning guidance in advance of the development plan might be appropriate.

5.17 There is the potential for societal risk levels to increase at other major hazard sites, especially if small-scale development continues to accumulate around these sites. These sites would be periodically monitored by HSE to see if they need to be subject to the societal risk assessments described above. This might be done to coincide with the five-year review of COMAH safety reports; but will be decided at a later stage.

5.18 We do not consider that these proposals require that HSE should be a statutory consultee for development plans – the current guidance to planning authorities is considered adequate to ensure that appropriate consultation takes place. But successfully incorporating societal risk considerations into development plans does require a commitment to early and meaningful consultation, and we look to planning authorities to undertake this.
Question 7 – Should HSE be consulted by planning authorities during the preparation of development plans so that information about societal risk could be considered at this stage?

Development management (i.e. determining planning applications)

5.19 We consider that taking societal risk considerations into account at the development plan making stage will address much of the concern about it.

5.20 However, we also need to consider whether there is a need to address societal risk in the development management process by having planning authorities receive advice about the societal risk implications on specific applications. We should, however, reiterate here that HSE’s current advice to planning authorities - largely based on risk that an individual may be exposed to a specified level of harm – and the methodologies for providing it have evolved over a period of some 30 years. They are widely accepted as credible and reliable and we propose that this form of advice continues to be provided. Moreover, it is likely that advice about societal risk at this stage will only be relevant where there are no grounds to refuse a development on individual risk grounds.

5.21 Current indications from HSE are that, for some types of site and for certain types of development, particularly for residential housing, advice generated by the current PADHI system will prevent societal risk within the current CD increasing significantly in relation to individual applications and their contribution to existing risk levels. In other words, PADHI currently advises against individual developments that could raise societal risk significantly, and does not advise against developments where the societal risk increase would be insignificant.

5.22 It could therefore be argued that, if societal risk has been taken into account at the development plan stage, and is also covered in the advice given on many individual applications as outlined above, it would be unnecessary for HSE to provide separate advice on societal risk for individual planning applications. On the other hand, there may be cases where PADHI does not advise against developments that could have a significant influence on societal risk levels. If, at the development plan stage, such sites were not identified or there was insufficient detail about them to make an assessment, it may be appropriate to apply an additional societal risk assessment to individual proposals. These include commercial or industrial developments very close to sites and larger residential proposals in the outer zone of the CD (both of which would not be advised against under current arrangements).

Question 8 – Do you think that it would be appropriate for HSE to provide societal risk advice (in addition to the advice it provides currently) for individual development proposals around major hazard sites?
Developments outside existing consultation distances

5.23 There are some major hazard sites where societal risk could be significantly affected by large additional population beyond the existing CD.

5.24 The sites in question are those with specific types of substances kept in particular conditions which mean that, in the event of an accident leading to a release, the substances could travel a large distance off-site and still cause significant harm. Toxic gases kept under pressure, and flammable gases kept as a liquid under refrigerated conditions are such substances. These represent about half of the sites around which we propose to apply societal risk considerations. Only very large developments beyond the existing CD of these sites would be relevant and so it is only these that planning authorities would need to consult HSE about. HSE, DCLG and the planning departments of the devolved Scottish and Welsh administrations will develop guidelines for planners on the types of development that are relevant, but it would be things such as large housing estates or large retail developments. Essentially, this is because although the chances of damaging effects are considerably lower further away from the site, if there is still a large/dense enough new population there it could register a societal risk change. Although there are unlikely to be many such cases, considering societal risk in this way could result in some developments beyond existing CDs being turned down.

5.25 For these sites, therefore, HSE would agree an extended area (likely to be up to twice the existing CD but no more), in which the planning authority would consult on large development proposals. If at development plan stage there is sufficient information on such proposals, then an assessment of the societal risk implications at that stage may be sufficient.

5.26 It is important to note that we are not proposing a doubling of the size of existing CDs around the relevant sites. The need is for some societal risk consideration to be given to what is likely to be a relatively small number of very large developments beyond existing CDs. Planning authorities would not be consulting HSE on anything other than such proposals outside the existing CDs, the size of which will remain unchanged.

Question 9 - Do you think that societal risk should be taken into account when considering certain large developments outside existing consultation zones for sites with specific hazards?

How HSE could provide its advice on societal risk to planning authorities

5.27 Should it be agreed to take account of societal risk when advising planning authorities, further consideration will be needed on the form in which that advice could be provided. At present, HSE’s software-based system generates a response that either advises against, or does not advise against the granting of planning permission for a particular development. The planning authority will then weigh that advice against other factors in coming to its decision.
5.28 We are of the view that the best way to advise on the societal risk implications of draft development plans, is for HSE and planning authorities to discuss various options at the plan preparation stage, in order to achieve the best compromise between risk levels and long term development needs.

5.29 If, after further analysis, it is considered appropriate to advise on societal risk for certain individual planning applications, then we need to consider how that advice might be provided in those situations. One option might be to consider if societal risk advice could be provided in the same way as under the present individual risk-based arrangements. This would have the advantage of clarity for the planning authorities, providing advice in a familiar form. The initial view on whether the level of risk should be considered too high would, in the first instance, fall to HSE who would provide the planning authority with advice. It would be open, as now, for the planning authority to disregard HSE’s advice, subject of course to the same degree of careful consideration that presently obtains. There may be a reluctance to do so, with the result that some developments that the authority would otherwise wish to allow, are refused. On the other hand, the authority may be more prepared to challenge HSE’s advice because of the broader nature of the decisions that arise in relation to societal risk.

5.30 However, it could also be argued that since the planning authorities currently follow HSE’s advice in the great majority of cases, they would be likely to continue to do so on applications involving societal risk. This could result in an unnecessarily cautious approach to such applications and, because of the nature of societal risk and the need to allow decisions on what level is acceptable to be made on a case by case basis, it may instead be more appropriate to provide it in a different form. For example, HSE could give information about the levels of risk that would result from the development, which the planning authority could use in conjunction with a set of criteria to produce a decision. This aspect of how the arrangement would work is still to be addressed in further discussion between departments – for example we would need to consider carefully whether the guidance currently provided in the Government’s circular might need reviewing, and how such policy, possibly including criteria, would interact with existing national and regional planning policy guidance.

Question 10 - If HSE is to be consulted about societal risk for individual planning applications (see question 8), should consideration be given to framing it in a different way from that currently provided and based on individual risk?

Question 11 - If the answer to question 10 is yes, what form might this advice take?

6. CONCLUSION

6.1 As long as society accepts the need for materials and utilities that require hazardous process to produce or supply, then risk from such installations can never be completely removed. Such risk must be balanced against the benefits the installations bring. Similarly, any additional risk created through the development of land in the vicinity of the sites must also be set against the benefits. In proposing that
societal risk is taken into account in managing risks from major hazard sites and in advising on land development around them, we will aim to ensure that the right balance is struck.
ANNEX 1

CONTROL REGIME FOR MAJOR HAZARD INSTALLATIONS

Location of new major hazard installations

1 Because of the obvious hazards inherent in dealing with dangerous chemicals, anyone who wants to have on their site quantities of hazardous substances above prescribed thresholds, must obtain consent to do so from the local authority (referred to for this purpose as the Hazardous Substances Authority - HSA).

2 HSE must be consulted on consent applications, and advises whether consent should be granted, based on risks to the existing population around the site that the substances would present. HSE assesses both the potential individual risk levels and the societal risk levels when forming its advice. Although HSE then says whether or not it believes, on safety grounds, that consent should be granted, the final decision rests with the HSA.

3 If consent is granted the HSA have to inform HSE, who will then calculate and inform the planning authority of an area around the site in which it should subsequently be consulted on proposals for new developments which would involve additional population (e.g., houses but not mobile telephone masts, for example). This area is referred to as the Consultation Distance (CD).

Safe design, construction and operation of major hazard installations

4 Onshore, the primary legislative means by which non-nuclear major hazard installations are controlled is the Control of Major Accident Hazard Regulations 1999 (COMAH), which implement a European Directive known as Seveso II\(^4\). Information on these regulations can be found on HSE’s website at http://www.hse.gov.uk/comah/index.htm.

5 The Directive originates from the accident in 1976 at Seveso in Italy when a release of toxic substances from a chemical factory caused widespread contamination of the area around the site. In Britain, the Flixborough disaster in 1974 where 28 workers were killed in an explosion at a chemical plant meant we had already been working on a new law for major hazards.

6 COMAH applies if quantities of dangerous substances are held above prescribed thresholds. All operators of sites subject to COMAH must:
   • Notify HSE if they become subject to COMAH
   • Ensure that they take ‘all measures necessary’ to prevent major accidents and to limit their consequences to people and to the environment
   • Prepare a major accident prevention policy
   • Prepare emergency plans

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In addition to this, sites which have or will have higher quantities of substances and are therefore most hazardous (known as ‘top-tier’ sites, of which there are around 350) must also:

- Provide information to people in the surrounding area about safety measures at the site and what they should do in the event of a major accident.
- Supply information to the local authority so it can prepare an off-site emergency plan.  
  - Submit to HSE a written safety report that;
  - demonstrates that ‘all measures necessary’ to prevent major accidents are in place;
  - describes the site, its surroundings, the hazards and risks presented by it and the control measures in place;
  - includes information on the likelihood, extent and severity of possible major accidents.
- HSE assesses the information provided to determine whether a site has made the necessary demonstrations, and inspects sites to verify how the risks are being managed in practice.

Controlling land use around major hazard sites

Although the chances of a major accident are very small, we have said earlier in this document that even with the best management and control systems it can never be completely eliminated. Therefore, there remains a very low risk of an incident that could harm people around a site. Ideally, to overcome this and remove the chance of people being harmed, major hazard sites and areas of population would be located well away from each other. In reality, other factors – the historical proximity of workplaces and housing, economics or other practicalities - mean that this is often not the case and industry, housing, and other amenities exist alongside each other. The residual risks that exist are taken into account through the national planning system (for information, a brief overview of the planning system is included at Annex 2). HSE assesses the risks within the CD and advises the PA accordingly when consulted on developments within it.

It is important to note that HSE’s role is purely advisory and it has no power to direct refusal of planning permission. This is a quite deliberate arrangement, and recognises that planning authorities need to weigh all relevant issues when making decisions. Although planning authorities have discretion over the weight they attach to HSE’s advice, current government guidance to PAs says “in view of their acknowledged expertise in assessing the off-site risks presented by the use of hazardous substances, any advice from HSE that planning permission should be refused for development for, at or near to a hazardous installation or pipeline should not be overridden without the most careful consideration.”

In England and Wales, if a planning authority is minded to grant planning permission where HSE has advised against, it must inform HSE and give it the opportunity to consider whether to request the decision to be ‘called in’ for determination by The Secretary of State for Communities and Local Government (in England) or the National Assembly for Wales. In Scotland, if a planning authority is

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5 Planning Circular 04/00 - Planning controls for hazardous substances.
minded to approve an application contrary to HSE’s advice, it has to notify the Scottish Ministers who may decide to call in the case for their own. In something like 98% of cases, planning authorities follow HSE advice. However, for the reasons outlined above, PAs are not compelled to turn down applications solely on the basis of HSE’s advice, and in 2% of cases PAs grant planning permission where HSE has advised against a proposal. HSE however does undertake a further review in such cases to determine whether it believes other factors should not outweigh the safety advice. Only in a fraction of these cases has HSE believed the risks were such that it has requested call-in (in fact there have been only about three call-in cases in over thirty years).

11 It is important to note here that each proposed development on which HSE is consulted is assessed separately and independently of other existing or proposed developments. Therefore, HSE does not take account of existing population when determining its advice.

Development Plans

12 In England, Scotland and Wales, planning authorities periodically prepare development plans outlining general proposals for future development for whole areas and regions. These set out such things such as the number of homes that may be required and where, and the need for shopping facilities, hospitals, etc. They also lay out the authority’s policies for controlling development and are used as the basis for determining individual planning applications.

13 Guidance to planning authorities makes it clear that major accident hazards should be taken into account when plans are being prepared and that they should consider the need to consult HSE, although there is no statutory duty to do this. Currently, HSE does not generally make substantive comments on such plans.
ANNEX 2

OVERVIEW OF THE PLANNING SYSTEM

Development plans and development control

1. Planning involves taking account of a wide range of factors and frequently differing views and evidence in making decisions about land use and development. The legal basis of the planning system is set out in various Town and Country Planning Acts, Regulations and Orders. Decision-making is steered primarily by the provisions of local authority development plans, and planning applications have to be determined in accordance with the plans unless material considerations indicate otherwise.

2. The Government’s planning policies published in policy statements and guidance are material considerations. They may be backed up by the power of Ministers to intervene directly in specific cases. Responsibility for national planning policy rests with the Department for Communities and Local Government (DCLG), the Scottish Executive and the Welsh Assembly.

3. Planning authorities must also consider consultation responses, objections and other representations submitted to them throughout the planning process in making decisions on Development Plans and planning applications.

4. Development Plans are open to public scrutiny during their preparation, including a period for statutory objection and public inquiry. They are then approved and/or adopted by the planning authority although the Scottish Ministers approve structure plans in Scotland.

5. National planning policy says that Development Plans should “…ensure that they include a policy or policies relating to the location of establishments where hazardous substances are used or stored, and to the development of land within the vicinity of establishments where hazardous substances are present”, and that HSE should be consulted on such matters where appropriate (PPS12 Local Development Frameworks – England; similar in Circular 5/1993 Planning Controls for Hazardous Substances – Scotland; and Planning Policy Wales 2002). This provides flexibility for each authority to adopt a policy best suited to its area.

6. National planning policy also sets out guidance for supporting development in a way which is compatible with environmental and other objectives. Importantly it recognises that in relation to mixed uses “…it may not be appropriate to separate industry and commerce…. from the residential communities for whom they are a

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6 PPSs and PPGs in England; NPPGs/ SPPs and PANs in Scotland; and Planning Policy and Technical Advice Notes in Wales.
7 Development Plan – a collective term for structure plans, local plans, unitary plans, local development frameworks - including Development Plan Documents and Supplementary Planning Documents in England. They set out a council’s policies for controlling development and proposals for specific areas of land as the basis for determining planning applications.
source of employment and services....The fact that an activity differs from the predominant land use in any locality is not a sufficient reason, in itself, for refusing planning permission.” (PPG4: Industrial, Commercial Development and Small Firms - England). On the other hand, such guidance also suggests that PAs “…consider carefully whether particular proposals for new development may be incompatible with existing industrial and commercial activities.”

7 Government advice for development in the vicinity of hazardous installations is also contained in Circulars (Circular 04/00 Planning controls for hazardous substances in England; SOED Circular 5/1993 in Scotland; Assembly Circular 20/01 and HCS A Guide for Industry in Wales).

8 These circulars also make clear that “in view of their acknowledged expertise in assessing the off-site risks presented by the use of hazardous substances, any advice from HSE that planning permission should be refused for development for, at or near to a hazardous installation or pipeline should not be overridden without the most careful consideration.” - (English Circular 04/00 Planning controls for hazardous substances – England, similar in Circular 5/1993 in Scotland).

9 There are very few instances in which planning permission has been given when the HSE has advised against it. However, in cases where a planning authority are minded to approve an application when the HSE have advised against approval there are procedures whereby applications can be ‘called in’ so that Ministers in England, Scotland or Wales can make the decision.

10 Nevertheless the advice from the HSE is one of many material planning considerations that a planning authority have to consider. In a specific case it is possible for them or Ministers to decide that the other considerations have greater weight than the health and safety advice.

Legal basis for consulting HSE on planning developments

11 With a view to ensuring that planning authorities are properly informed about the risks, the HSE define consultation distances (CDs) for planning applications in the vicinity of hazardous installations. Within the CDs, the majority of significant planning applications have to be referred to the HSE. Their role is to provide advice to planning authorities on the nature and severity of the off-site risks presented by major hazards to people using the proposed development so that those risks can be given due weight and balanced against other relevant planning considerations.

12 Secondary legislation (The General Development Procedure Order (GDPO) 1995, as amended) says HSE is a statutory consultee for development within a consultation distance if it involves:
   • residential accommodation;
   • retail floor space over 250m²;
   • office floor space over 500m²;
   • industrial floor space over 750m²; or
   • is otherwise likely to result in a material increase in the number of persons working within or visiting the area.
13 If, having consulted the HSE, the planning authority is minded to go against their advice there are provisions for the case to come before Ministers so that they may decide whether or not to call-in the application for their determination.

14 In addition, the HSE has to be consulted where the development includes transport links, locations frequented by the public and residential areas in the vicinity of existing establishments, where the siting or development is such as to increase the risk or consequences of a major accident (COMAH Regulations 2004 amendment to the GDPO).

15 The HSE may also be consulted during the preparation of development plans although this is not a statutory requirement. Planning authorities are however required in preparing a plan to have regard to the objectives of preventing major accidents and limiting their consequences by maintaining appropriate distances between hazard sites, residential areas and areas of public use.
ANNEX 3

ACCEPTABILITY OF SOCIETAL RISK

1 Societal risk thresholds all relate to a particular frequency and size of incident. In themselves they tell us nothing about the acceptability of accidents with lower frequencies and higher consequences, or vice versa. Societal risk is often therefore represented by ‘FN curves’ that are plots of the cumulative frequency (F) of various accident scenarios against the number (N) of people that could be killed.

They look like this:

![Example of FN curve and criterion line](image)

KEY

- FN curve
- Criterion

2 It should be noted that calculating full FN curves is very resource intensive and can be expensive, as it requires in-depth mathematical analysis of all potential major accident scenarios. Therefore, not many major hazard site operators undertake the task (and it is not specifically required by COMAH).

3 If the chosen criterion point (say that given in the HSE publication “Reducing Risk Protecting People” (R2P2) – of 50 or more people being killed at a chance of 1 in 5000 per year) is then placed on such a graph, a line can be drawn through it (as shown above) to provide a comparison line against which the actual FN curve from the installation can be compared. One simple approach is then to see if the actual curve lies above the criterion line at any point - if so then this could be considered unacceptable. However, one must ask whether the actual curve must be below the criterion line at all points? Or can some excursions above the line be allowed, if these are ‘balanced’ by places where the curve is below the criterion line (see example above)? There is no universal agreement on this.
Moreover, when HSE set out to estimate SR for all COMAH sites, it did not have the resource to generate FN curves for all sites. Even if it had been possible, curves will have generally a similar shape but will be different. Comparing one with another for the purpose of deciding which represents the higher ‘overall’ societal risk is therefore impossible.

HSE therefore developed techniques to ‘sum up’ the societal risk for each site and represent it as a single number, hence allowing comparison and ranking.

Criteria for advising on land use planning

In providing advice on risks to development to planning authorities, HSE uses different criteria. This is because the kind of decision being made is different. In the previous section, the issue was identifying whether the risks generated by the installation were below what might be considered ‘unacceptable’, and seeking to reduce them to a level that is as low as is reasonably practicable (ALARP). For land use planning, we start with the assumption that individual risk off-site has already been reduced to ALARP, and what we are considering is the ‘residual’ risk that remains. The existing decision criteria that HSE has set recognise that it is neither practical nor desirable to prohibit all development around major hazard sites. Businesses, shops, community facilities and housing may all well be needed in such areas, and the system ensures there is balance between the benefits such development brings and the risks to the population.

Furthermore, the final decisions on development rest with the planning authorities who will weigh HSE’s advice on risks with other socio-economic issues as described above.

HSE generally advise against a proposed development which would introduce a significant number of people into an area where their individual risk levels would be significant/substantial when compared with other risks to which they are exposed in everyday life. Where the risks are lower than this, HSE will generally not advise against.

The criteria HSE use do include a societal risk consideration for each individual development, in that the number of people likely to be at the development is taken into account in arriving at its advice. However, there are as yet no land use planning societal risk criteria for assessing overall societal risk around a site, and against which decisions might be made. The threshold HSE developed from the R2P2 criterion point was for the purpose of assessing roughly what the actual levels of SR were – not for determining LUP advice.

How reliable are societal risk estimates/criteria

It is widely recognised throughout the world that quantification (i.e. describing in terms of numbers) of risks is a very uncertain exercise. There has to be a lot of approximation and estimation built into such calculations. One good reason for this is the fact that major accidents happen so rarely around the world that there isn’t sufficient experience of incidents to provide any reliable estimation of how often things go wrong. Therefore, experts make judgements on things like, for example,
how often a chemical storage vessel might fail while in use. This figure might then be used to estimate the risk of someone being harmed by this event.

11 In short, numerical precision in quantifying safety risks is not possible and has inherent uncertainties. For this reason, it is sensible, if not absolutely necessary, to regard societal risk estimates and criteria as no more than indicators or guidelines. But calculating them in a consistent way enables comparisons to be made.
ANNEX 4

RESPONSE FORM
Proposals for revised policies to address societal risk around onshore non-nuclear major hazard installations

Reply Form

Completing this Questionnaire

You can move between questions by pressing the ‘Tab’ / ‘Shift-Tab’ or ‘Page Up’ / ‘Page Down’ keys or by clicking on the grey boxes with a mouse. Please type your replies within the rectangular grey boxes, or click on the square grey boxes to select an answer (e.g. ‘Yes’ or ‘No’).

Part 1: Your details:

Name:

Job title:

Organisation:

Street address:

Town / City:

Postcode:

Telephone:

Fax:

Email:

Are you a safety representative?  
Choose one option

Yes

No
Number of employees in your organisation:
Choose one option:

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Representation - Are you responding as:
Choose one option:

- A member of the public
- An employer
- A local authority employee / councillor
- Other (please specify)
- A representative of an industry association
- A representative of a trade union
- A representative of a charitable / voluntary organisation

If you chose ‘Other’ please specify:

Confidentiality

Please indicate below if you do not wish details of your comments to be available to the public. (NB if you do not put a cross in the box they will be made public. This takes precedence over any automatic notes on e-mails that indicate that the contents are confidential.)
Part 2: Your responses:

1. What factors and issues do you believe should be taken into consideration when determining what might be unacceptable in terms of societal risk from major hazard installations?

Q2. Do you think that assessment of societal risk should be used in the control of major hazard sites?

Choose one option

Yes □
No □

Q2A. Comments:

□
Q3 Should societal risk be taken into account by site operators when considering reasonably practicable on-site control measures?
Choose one option

Q3A Comments:

Q4 In any cases where new development would raise societal risk levels significantly, should consideration be given to sharing the costs of any measures that might counter such an increase in order to enable development to go ahead?
Choose one option

Q4A Comments:
5 If so, what arrangements do you think could be introduced to achieve this?

Q6 As well as site operators taking account of societal risk when considering on-site control measures, should societal risk be taken into account by planning authorities when making land use planning decisions?
Choose one option

Q6A Comments:
Q7 Should HSE be consulted by planning authorities during the preparation of development plans so that information about societal risk could be considered at this stage?
Choose one option

Yes ☐
No ☐

Q7A Comments:

Q8 Do you think that it would be appropriate for HSE to provide societal risk advice (in addition to the advice it provides currently) for individual development proposals around major hazard sites?
Choose one option

Yes ☐
No ☐

Q8A Comments:
Q9  Do you think that societal risk should be taken into account when considering certain large developments outside existing consultation zones for sites with specific hazards?
Choose one option

Q9A  Comments:

Q10  If HSE is to be consulted about societal risk for individual planning applications (see question 8), should consideration be given to framing it in a different way from that currently provided and based on individual risk?
Choose one option

Q10A  Comments:
11 If the answer to question 10 is yes, what form might this advice take?

12 Please provide any additional comments that you may have on these proposals

Responses should be sent by 2 July to:

Consultation Administrator
Societal Risk Consultation
Health and Safety Executive
Policy Group
5S.1 Redgrave Court
Merton Road, Bootle, L20 7HS
Fax: 0151 951 3418

E-mail: societalrisk.consultation@hse.gsi.gov.uk
Proposals for revised policies to address societal risk around onshore non-nuclear major hazard installations

The full text of this and other Consultative Documents can be viewed and downloaded from the Health and Safety Executive web site on the internet: www.hse.gov.uk/consult/index.htm

Consultative Documents are available from:

HSE Books
PO Box 1999
Sudbury
Suffolk CO10 2WA

Tel: 01787 881165
Fax: 01787 313995

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