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HEALTH & SAFETY LABORATORY

The development of a Knowledge Based System to enable Programme Managers to objectively determine the preventability and dependency factors for the Index of Harm

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EXECUTIVE SUMMARY

Background

The Index of Harm was designed to assist the Health and Safety Executive (HSE) in prioritising its resources to achieve its Public Service Agreement targets as set out in the HSC/HSE Revitalising Health strategy (now the FiT3 Strategic Programme). To enable an index to be calculated it is necessary to determine the impact HSEs Priority Programmes (PPs) are having on the particular topic they are addressing. In order to do this two factors need to be quantified: the potential for further reduction of harm by HSE initiatives and the dependency of that reduction on HSEs continued intervention. The purpose of this work was to determine a systematic and objective way for PP managers to quantify these factors.

Purpose

To develop a knowledge based system for programme managers to enable them to assess preventability/dependency factors in the Index of Harm matrix, in order to allocate HSE resources effectively.

As a first step: to develop the system for the Slips and Trips Priority Programme

Aim

To develop a systematic and objective means, that will enable programme managers to complete both the preventability and dependency factors in the Index of Harm matrix, based on relevant factors that impact on the potential for injury/ill health reduction in a given Priority Topic area.

To determine suitable weightings for each of the factors and a means of combining them into an overall summary factor for preventability.

Methodology

Two focus groups were run with the Slip and Trip Priority Programme team and with delegates from the other PP teams to determine the factors, which would need to be addressed to assess preventability and dependency. These were then put into a questionnaire format using a seven point Likert scale and Anchored Rating Scales derived to aid consistency of responses.

Main Findings and Conclusions

The above process identified the factors pertinent to addressing the preventability/dependency index and enabled an objective questionnaire to be derived from them. The findings from the focus groups would suggest that because of the maturity of individual programmes, determining an index is more complex than first envisaged.

To take this work forward the question set, will need to be refined. Using external stakeholders to get their ‘buy in’ and add further face/external validity best does this. At best the index will always be a crude indicator as precise psychometric properties will be difficult to gain. However, a consensus of opinion by key players, as to how such an index is arrived at and of its utility, will provide it with the face/external validity, to underpin its function in guiding senior HSE management in allocating funds across HSE programmes as well as establishing the reliability of the final question set.

Recommendations

To refine the question set for the preventability and dependency factors and reduce the number of questions for completion.

To use external stakeholders to provide Face/External validity to the final question set.

To ensure the final question set is psychometrically reliable.

To ‘weight’ the factors.

1 INTRODUCTION

1.1 Background

The Index of Harm is an attempt to solve two difficulties that face the consideration of priorities across the Health and Safety Executives' (HSE's) activities as a whole. The first difficulty is that the events HSE are concerned to prevent are extremely various in the nature, seriousness, onset and duration of their consequences. These inherent differences can be exaggerated by the nature of the available instruments to count cases of these outcomes. For example, one may reasonably assume that the average seriousness of a self reported case of work-related illness is less than that of a case compensated under the industrial injuries scheme. What is needed is some sort of common currency in which these various outcomes can be compared.

The second difficulty arises because the numbers of cases, even when converted to some common scale, do not, on their own, determine intervention priorities. These depend on the difficulty (ideally, if this is known, the unit cost) of reducing the numbers.

In order to achieve this, the factors identified to enable programme managers to complete both the preventability and dependency part of the matrix, need to be worked up into a knowledge based system, which would generate numerical values in response to questionnaire answers based on the factors. This would apply an appropriate weighting to the factor concerned. Users of the index would thus be guided through the considerations necessary for each intervention to provide an overall value for impact and preventability factors within the Index of Harm in a consistent way, ensuring that the results are comparable between the nature of harm groups.

1.2 Purpose

To develop a knowledge-based system for programme managers to enable them to assess preventability/dependency factors in the Index of Harm framework, in order to allocate HSE resources effectively.

As a first step: to develop the system for the Slips and Trips Priority Programme

1.3 Aim

To develop a systematic and objective means, that will enable programme managers to complete both the preventability and dependency factors in the Index of Harm matrix, based on relevant factors that impact on the potential for injury/ill health reduction in a given Priority Topic area.

To determine suitable weightings for each of the factors, and a means of combining them into an overall summary factor for preventability.

2 METHODOLOGY

HSE subject matter experts were brought together for a one-day event to seek consensus agreement on:

- the appropriateness and completeness of the preventability/dependency factors (see annex 2), within the Index of Harm.
- the production of objective criteria for completing the matrix and the weighting to be given to each factor.

Following this event the product generated, was taken to a further focus group consisting of subject matter experts from other Priority Programmes (PPs) to validate the deliberations of the slip and trip focus group and reach a consensus across all Priority Programmes.

The format for both groups was as follows:

The subject matter experts scrutinized the factors, which had been posited for the preventability/dependency index, for completeness and appropriateness (see annex 2). The resultant factors were then taken individually and turned into questions that programme managers will need to answer in order to arrive at an index[1], this will be a numerical figure. To enable programme managers to objectively respond to the questions, using a Likert scale. Each of the points on this scale were 'anchored' (determined using the subject matter experts). This allows for consistency of responses across individuals.

Once the Slip and Trip Programme team were content with its validity for their purpose, a further focus group was arranged comprising of representatives from all the PPs to discuss the finished product in terms of the evolved factors and weightings. From this a consensus across the Priority Programmes was established.

This work was scheduled to start mid 2005 but due to the inception of the 'Watch Your Step' campaign the work was postponed until November/December 2005. Originally this work was planned for two two-day sessions. However, on contacting the delegates they felt they could not commit to a two-day session. Therefore, the session involving the use of repertory grid technique was dispensed with, which made it difficult to determine the weightings of the factors.

[1] *The term index will be used throughout to mean the numerical number derived from the preventability/dependency factors and not the overall Harm Index.*

3 RESULTS

The initial factors were discussed as to their relevance in determining the preventability/dependency factors (see annex 3). These were then put into a questionnaire format using a five point Likert scale. Anchored rating scales (ARS) were considered necessary to achieve consistency. Once this was done it was then sent back to participants for further comment. The factors and questionnaire, with the anchored rating scales, (see annex 4) were then taken to the second group comprising representatives of other Priority Programmes (see annex 5). This group preferred a seven-point likert scale to give greater sensitivity. Across both of the groups concerns were raised as to the objectivity of such an index, see annex 1 for the main concerns raised.

4 DISCUSSION

The above process resulted in a questionnaire being produced that could be used to determine preventability/dependency factors, (see annex 5). Some concerns were raised that such an instrument could not be objectively determined and as some programmes were less developed than others, there was not enough information available to make rational judgments to differentiate between them. One of the main points emerging was that PP teams were likely to 'safeguard' their own particular programmes to ensure that funding would not be reduced. Neither did participants feel they could give any weightings to the factors i.e. give a relative figure as to the contribution each factor makes to the final index. The issue of the impact of the PPs on different sectors was also raised, whereas, in one industrial sector the programme may be having an effective impact, in another sector it may not be. Therefore it would be difficult for a PP to arrive at an overall assessment of the PPs impact across all industrial sectors. There were also issues around the interlinking nature of PPs, e.g. slips and trips can result in musculo-skeletal disorders (MSD), if funding is reduced for the slip and trip PP, then this could have an impact on the MSD PP performance. In the opinion of the focus groups information would have to be gathered from a number of sources and that no one person could not complete the questionnaire.

In order to deal with the issue of objectivity and to enable an index to be derived, which is robust enough to be accepted, a systematic attempt at description and quantification of the factors needs to be demonstrated. To some extent this has already been done with the focus groups in establishing the factors that PP members believe to be essential in arriving at such an index and in determining the ARS for consistency of reporting. Therefore a degree of content validity has been achieved.

To further this objectivity issue, the resultant questionnaire needs to be further trialled to ascertain its utility across industrial sectors. This will allow a great deal of information to be collected and the robustness of the factors to be tested, e.g. are they giving the information HSE wants.

The questionnaire as it stands would be arduous to fill in because of its length and is likely to deter completion. Further trialling is recommended to enable the question set to be cut down and make it more manageable. Reliability of the final question set would then need to be established. Using repertory grid technique[2], with external participants, the factors could be weighted to determine their relative contribution to the final index.

Potentially this could be trialled over two or three regions of the country with HSE inspectors actually using the questionnaire and getting their opinion of its usability and for further validation of the preventability/dependence factors.

As the questionnaire is to be used to guide senior managers in their decision-making in the allocation of funds across major HSE programmes, then this may also attract political comment from external organizations such as trade unions and industry pressure groups. Their 'buy in' to this tool would, therefore be advantageous. Further refinement of the preventability/dependence

[2] *The term* repertory *derives from the repertoire of constructs which a person has developed on any issues. Constructs represent a judgement or evaluation and by definition they are scalar: that is, the concept* good *can only exist in contrast to the concept* bad, *the concept* gentle *can only exist as a contrast to the concept* harsh. *Any evaluation can be answered with the question 'Compared with what?' The process consists of taking three elements and asking for two of them to be paired in contrast with the third. This allows the two poles of the construct to be elicited and intermediate points to be determined.*

factors should also take place using key industrial players. Focus groups and/or Delphi Technique[3] could be used for this.

One other way an index could be produced would be to refine the factors to two or three questions each and reproduce them in The Labour Force Survey[4]. This could produce an annual index that could be used which would have a large degree of face/external[5] validity, as the data will be based on the perceptions of a randomized sample of the population. The questions for this could be derived through either focus groups or Delphi Technique.

[3] Delphi technique is a cyclical, iterative process whereby subject matter experts are invited to comment and respond to key issues, in this case to the refinement of the factor questions. These responses are in turn sent to other subject matter experts for their input until a consensus is reached.

[4] The Labour Force Survey (LFS) is a quarterly sample survey of households living at private addresses in Great Britain. Its purpose is to provide information on the UK labour market that can then be used to develop, manage, evaluate and report on labour market policies. The questionnaire design, sample selection, and interviewing are carried out by the Social and Vital Statistics Division of the Office for National Statistics (ONS) on behalf of the Statistical Outputs Group of the ONS.

[5] External validity involves the extent to which the results of a study can be generalized beyond the sample. In other words, can they be applied to other people and settings

5 CONCLUSIONS

The original aim of this work was for Priority Programme managers to complete the questionnaire based on evidence they had from their particular programmes. The findings from the focus groups would suggest that the situation, regarding the maturity of the individual programmes, is more complex and that the information needed to provide a clear picture of the issues underpinning the preventability/dependency factors is not at the same level of sophistication for all programmes. Neither is this information at the same level of sophistication within a particular programme, across industrial sectors.

If the information for the preventability/dependency factors was to be collected by field inspectors then this would amount to a great deal of information being generated, which could not be expected to be handled by individual programme managers themselves.

To take this work forward the question set as it now stands (see annex 5) will need to be refined. This is probably best done by using external stakeholders to get their 'buy in' and add further face/external validity. At best the index will always be a crude indicator as precise psychometric properties will be difficult to gain. However, a consensus of opinion by key players, as to how such an index is arrived at and of its utility, will provide it with the face/external validity, to underpin its function in guiding senior HSE management in allocating funds across HSE programmes as well as establishing the reliability of the final question set.

6 RECOMMENDATIONS

To refine the question set for the preventability and dependency factors and reduce the number of questions for completion.

To use external stakeholders to provide Face/External validity to the final question set.

To ensure the final question set is psychometrically reliable.

To ‘weight’ the factors.

7 APPENDICES

7.1 Annex 1 Main themes from focus groups

Some PPs are more developed than others (e.g. the slips and trips PP is relatively new). This makes it difficult to score/rate the factors, especially if little evaluation has been done.

Evaluation of work:

Has only really begun in the past 2-3 years (therefore might not have been done at all)

May be incomplete or yet to be started when the factors on the questionnaire need scoring

'You don't know what you don't know' – i.e. it is difficult to know how far along the PP is. Current or future work can identify further work that could/should be done. It might be that a PP thought to be at the end of the line suddenly has much more work remaining

The Index quantifies a vast amount of qualitative information. It was suggested that the figure produced would be relatively meaningless. The approach was suggested to be too simplistic and was likened to a quest for a 'holy grail'.

The answers to some factors are unknown by many PP managers – e.g. current knowledge of HSE inspectors/LA enforcers

Ranking of factors would be unscientific – essentially plucking figures out of the air

Many PP members generally felt that an unscientific approach will inevitably be adopted to answer the questions, resulting in subjective answers

It is difficult to separate variables when completing the questions – i.e. each PP takes into account various sectors/industries. Some sectors/industries might be nearer completion than others. Some questions may need answering a number of times (i.e. for each sector) – reducing (and losing) information even further. In some cases it will be difficult for PP managers to dissect the programme in such a way. 'A meaningful taxonomy needs to consider the different sectors'

Some work might be cyclical and therefore need continued resources (i.e. no maturity of the programme). Some programmes or work streams will need to be maintained

Other concerns raised

Weighting given to fatalities

Interlinking of PPs not considered – for example a slip at height would be recorded as a fall from height; whilst a slip or trip might impact on MSDs (i.e. the PPs are only understood within the HSE framework)

Resources should not reduce based on the fact that a PP is reaching its final objective, or else it will never quite achieve the objective

Important issues might be overlooked that are not the focus of HSE

Disparity between attention from public concern and number/rate of accidents

Central tendency could be high if PP managers are unsure of the answers for the questionnaire

‘Running solely with a numerical taxonomy can be misleading’

There are too many variables for the index – fear it will end up valueless

Closing point

It was also added by a few PP members that the index in theory would be a useful tool

7.2 Annex 2 Possible relevant factors for considering the potential for HSE to have any further impact in terms of injury/ill-health reduction in a given area.

Broad Topic	**Factors to consider**
Current state	What is the injury/ill health trend – & degree?
Understanding causes and controls	Are the hazards and risks in this area well understood: by HSE/LAs? by duty holders? and is that understanding improving? Are sensible controls known about: by HSE/LAs? by duty holders? and has their effectiveness been evaluated?
'Environment' factors re. ease/difficulty of achieving influence	What is the profile of the sector(s) concerned, e.g.: small firms? large firms? unionised? Do strong/influential representative trade bodies exist? Are they amenable to approach? Are other actors (e.g. trade bodies, government depts, etc.) currently taking or contemplating action, for example: directly focussed on bringing about the type of change we want to see; or likely to have some impact on it as a consequence of action focussed elsewhere? Do we understand the current or potential level of effect this may have on the changes we want to see?

7.3 Annex 3 Factors determined by PP delegates

Prospect of further impact-PFI

Understanding causes

How well are the hazards and risks in this area understood by HSE?

How well are the hazards and risks in this area well understood by LAs?

How well are the hazards and risks in this area well understood by duty holders?

How much is this understanding improving?

Ownership and perceptions

To what extent do associated bodies within this sector have leverage or the ability to impact / influence?

To what extent are associated bodies (e.g. trade/professional bodies, TUs) likely to take further action?

To what extent is the current potential level of effect of associated bodies (e.g. trade/professional bodies, TUs) likely to have on the changes HSE want to see?

How many other regulators / bodies are there that could have some influence?

Effective tools

How easy / difficult is it for inspectors to 'get things done' with current interventions?

How costly / inexpensive are the interventions?

Intervening

How much work has been done in this area and how much is there left to do?

To what extent have interventions been evaluated?

Are we getting anywhere with the work that has been done (e.g. do evaluations show positive impacts)?

How reliably has any impact been separated form other factors (e.g. migration)?

Dependence of Control on continued HSE activities - DC

Understanding controls

How much are sensible controls known about by HSE?

How much are sensible controls known about by LAs?

How much are sensible controls known about by duty holders?

How well have these controls been evaluated?

How much knowledge, confidence and competence do HSE inspectors have regarding the understanding of causes and controls?

How much knowledge, confidence and competence do LA enforcers have regarding the understanding of causes and controls?

Level and impact of enforcement

To what level do duty holders see as the likelihood of enforcement action being taken?

To what extent is the current level of enforcement in proportion to the scale of the problem?

To what level is the wider effect of enforcement on other duty holders (i.e. the 'ripple effect')?

Ownership and perceptions

To what extent do associated bodies within this sector have leverage or the ability to impact / influence?

To what extent are associated bodies (e.g. trade/professional bodies, TUs) likely to take further action?

To what extent is the current potential level of effect of associated bodies (e.g. trade/professional bodies, TUs) likely to have on the changes HSE want to see?

To what extent is there a need for better regulation / legislation?

7.4 Annex 4 Factors as questions from first focus group with Anchored Rating Scales

Prospect of Further Impact-PFI

Understanding causes

How well are the hazards and risks in this area understood by HSE?

1	2	3	4	5
No understanding of hazards or risks. Substantial work needed	Little understanding of hazards or risks. Scope for much more work	Moderate understanding of hazards or risks. Still further work required	Good understanding of hazards or risks. Still a little scope for progress	Substantial understanding of hazards or risks. No further work needed

How well are the hazards and risks in this area well understood by LAs?

1	2	3	4	5
No understanding of hazards or risks. Substantial work needed	Little understanding of hazards or risks. Scope for much more work	Moderate understanding of hazards or risks. Still further work required	Good understanding of hazards or risks. Still a little scope for progress	Substantial understanding of hazards or risks. No further work needed

How well are the hazards and risks in this area well understood by duty holders?

1	2	3	4	5
No understanding of hazards or risks. Substantial work needed	Little understanding of hazards or risks. Scope for much more work	Moderate understanding of hazards or risks. Still further work required	Good understanding of hazards or risks. Still a little scope for progress	Substantial understanding of hazards or risks. No further work needed

How much is this understanding improving?

1	2	3	4	5
No improvement of understanding hazards or risks. Substantial work needed	Little improvement of understanding of hazards or risks. Scope for much more work	Moderate improvement of understanding of hazards or risks. Still further work required	Good improvement of understanding of hazards or risks. Still a little scope for progress	Substantial improvement of understanding of hazards or risks. No further work needed

Ownership and perceptions

To what extent do associated bodies within this sector have leverage or the ability to impact / influence?

1	2	3	4	5
No ability to impact Work would not be worthwhile	Very little ability to impact. A little work might be beneficial	Moderate ability to impact. Work would be beneficial	Good ability to impact. Work would be very beneficial	Substantial ability to impact. Scope for a large amount of work

To what extent are associated bodies (e.g. trade/professional bodies, TUs) likely to take further action?

1	2	3	4	5
Not at all likely to take further action. Work would not be worthwhile	Possibly likely to take further action. A little work might be beneficial to scope this further	Fairly likely to take further action. Work would be beneficial	Very likely to take further action. Work would be very beneficial	Will definitely take further action. Scope for a large amount of work

To what extent is the current potential level of effect of associated bodies (e.g. trade/professional bodies, TUs) likely to have on the changes HSE want to see?

1	2	3	4	5
No effect. Substantial work needed	Little effect. Scope for much more work	Moderate effect. Still further work required	Good effect. Still a little scope for progress	Substantial effect. No further work needed

How many other regulators / bodies are there that could have some influence?

1	2	3	4	5
All regulators / bodies are known and influenced. No further work needed	Most regulators / bodies are known and are influenced well. Still a little scope for progress	Some regulators / bodies are known and are influenced relatively well. Still further work required	Some regulators / bodies are known but they are influenced very little. Scope for much more work	None of the regulators / bodies are known and they could potentially be influenced. Substantial work needed

Effective tools

How easy / difficult is it for inspectors to ‘get things done’ with current interventions?

1	2	3	4	5
Very Difficult. Substantial work needed	Difficult. Scope for much more work	Neither difficult nor easy. Still further work required	Relatively easy. Still a little scope for progress	Very easy. No further work needed

How costly / inexpensive are the interventions?

1	2	3	4	5
A very wide impact for very little cost.	A wide impact for relatively little cost	A medium impact for a reasonable cost	Fairly expensive with a fairly narrow impact	Very expensive with a very narrow impact

Intervening

How much work has been done in this area and how much is there left to do?

1	2	3	4	5
No work done so far. Substantial work needed	Little work done so far. Scope for much more work	Moderate amount of work done so far. Still further work required	A large amount of work done so far. Still a little scope for progress	Area / topic exhausted. No further work needed

To what extent have interventions been evaluated?

1	2	3	4	5
Area poorly evaluated. Substantial work needed	Little evaluation done. Scope for much more work	Moderate amount of evaluation. Still further work required	A large amount of evaluation. Still a little scope for progress	Area very well evaluated. No further work needed

Are we getting anywhere with the work that has been done (e.g. do evaluations show positive impacts)?

1	2	3	4	5
Very poor / negative findings. Substantial work needed	Relatively poor findings. Scope for much more work	Ambivalent findings. Still further work required	Positive findings. Still a little scope for progress with evaluation	Very positive findings. No further evaluation work needed

How reliably has any impact been separated form other factors (e.g. migration)?

1	2	3	4	5
The impact factors have not been separated at all. Substantial work needed	The factors have been separated a little. Scope for much more work	The factors have been separated a moderate amount. Still further work required	The factors have been separated to a large extent. Still a little scope for progress	All of the impact factors have been separated from other factors. No further work needed

Dependence of Control on continued HSE activities - DC

Understanding controls

How much are sensible controls known about by HSE?

1	2	3	4	5
No understanding of controls. Substantial work needed	Little understanding of controls. Scope for much more work	Moderate understanding of controls. Still further work required	Good understanding of controls. Still a little scope for progress	Substantial understanding of controls. No further work needed

How much are sensible controls known about by LAs?

1	2	3	4	5
No understanding of controls. Substantial work needed	Little understanding of controls. Scope for much more work	Moderate understanding of controls. Still further work required	Good understanding of controls. Still a little scope for progress	Substantial understanding of controls. No further work needed

How much are sensible controls known about by duty holders?

1	2	3	4	5
No understanding of controls. Substantial work needed	Little understanding of controls. Scope for much more work	Moderate understanding of controls. Still further work required	Good understanding of controls. Still a little scope for progress	Substantial understanding of controls. No further work needed

How well have these controls been evaluated?

1	2	3	4	5
No evaluation of controls. Substantial work needed	Little evaluation of controls. Scope for much more work	Moderate evaluation of controls. Still further work required	Good evaluation of controls. Still a little scope for progress	Substantial evaluation of controls. No further work needed

How much knowledge, confidence and competence do HSE inspectors have regarding the understanding of causes and controls?

1	2	3	4	5
No knowledge, confidence and competence. Substantial work needed	Little knowledge, confidence and competence. Scope for much more work	Moderate knowledge, confidence and competence. Still further work required	Good knowledge, confidence and competence. Still a little scope for progress	Substantial knowledge, confidence and competence. No further work needed

How much knowledge, confidence and competence do LA enforcers have regarding the understanding of causes and controls?

1	2	3	4	5
No knowledge, confidence and competence. Substantial work needed	Little knowledge, confidence and competence. Scope for much more work	Moderate knowledge, confidence and competence. Still further work required	Good knowledge, confidence and competence. Still a little scope for progress	Substantial knowledge, confidence and competence. No further work needed

Level and impact of enforcement

To what level do duty holders see as the likelihood of enforcement action being taken?

1	2	3	4	5
No likelihood of enforcement action. Substantial work needed	Little likelihood of enforcement action. Scope for much more work	Moderate likelihood of enforcement action. Still further work required	Good likelihood of enforcement action. Still a little scope for progress	Substantial likelihood of enforcement action. No further work needed

To what extent is the current level of enforcement in proportion to the scale of the problem?

1	2	3	4	5
No enforcement in this area. Substantial work needed	Some enforcement, but nowhere near satisfactory. Scope for much more work	Moderate level of enforcement action, but not quite satisfactory. Still further work required	A satisfactory level of enforcement. Still a little scope for progress	A perfect level of enforcement relating to the scale of the problem. No further work needed

To what level is the wider effect of enforcement on other duty holders (i.e. the 'ripple effect')?

1	2	3	4	5
No enforcement in this area and therefore no effect. Substantial work needed	Very little wider effect. Scope for much more work	Moderate level of a wider effect. Still further work required	A satisfactory level of a wider effect. Still a little scope for progress	A perfect level of a wider effect. No further work needed

Ownership and perceptions

To what extent do associated bodies within this sector have leverage or the ability to impact / influence?

1	2	3	4	5
No ability to impact Work would not be worthwhile	Very little ability to impact. A little work might be beneficial	Moderate ability to impact. Work would be beneficial	Good ability to impact. Work would be very beneficial	Substantial ability to impact. Scope for a large amount of work

To what extent are associated bodies (e.g. trade/professional bodies, TUs) likely to take further action?

1	2	3	4	5
Not at all likely to take further action. Work would not be worthwhile	Possibly likely to take further action. A little work might be beneficial to scope this further	Fairly likely to take further action. Work would be beneficial	Very likely to take further action. Work would be very beneficial	Will definitely take further action. Scope for a large amount of work

To what extent is the current potential level of effect of associated bodies (e.g. trade/professional bodies, TUs) likely to have on the changes HSE want to see?

1	2	3	4	5
No effect. Substantial work needed	Little effect. Scope for much more work	Moderate effect. Still further work required	Good effect. Still a little scope for progress	Substantial effect. No further work needed

To what extent is there a need for better regulation / legislation?

1	2	3	4	5
Currently no regulation / legislation. Substantial work needed	Little regulation / legislation or has very limited effects. Scope for much more work	Moderate regulation / legislation. Still further work required	Good regulation / legislation. Still a little scope for progress	Excellent regulation / legislation. No further work needed

N.B. One questionnaire to be completed for each industrial sector that the Priority Programme is engaged with / wishes to be engaged with.

7.5 Annex 5 Revised Questionnaire

Prospect of Further Impact- PFI

Understanding causes

1. How well are the hazards and risks in this area understood by the HSE programme managers?

1	2	3	4	5	6	7
No understanding of hazards or risks. Substantial work needed	Very little understanding of the hazards or risks. Scope for a large amount of work	Little understanding of hazards or risks. Scope for much more work	Moderate understanding of hazards or risks. Still further work required	Fair understanding of the hazards or risks. Still some scope for progress	Good understanding of hazards or risks. Still a little scope for progress	Substantial understanding of hazards or risks. No further work needed

2. How well are the hazards and risks in this area well understood by Local Authorities?

1	2	3	4	5	6	7
No understanding of hazards or risks. Substantial work needed	Very little understanding of the hazards or risks. Scope for a large amount of work	Little understanding of hazards or risks. Scope for much more work	Moderate understanding of hazards or risks. Still further work required	Fair understanding of the hazards or risks. Still some scope for progress	Good understanding of hazards or risks. Still a little scope for progress	Substantial understanding of hazards or risks. No further work needed

3. How well are the hazards and risks in this area well understood by duty holders?

1	2	3	4	5	6	7
No understanding of hazards or risks. Substantial work needed	Very little understanding of the hazards or risks. Scope for a large amount of work	Little understanding of hazards or risks. Scope for much more work	Moderate understanding of hazards or risks. Still further work required	Fair understanding of the hazards or risks. Still some scope for progress	Good understanding of hazards or risks. Still a little scope for progress	Substantial understanding of hazards or risks. No further work needed

4. How well are the hazards and risks in this area well understood by stakeholders?

1	2	3	4	5	6	7
No understanding of hazards or risks. Substantial work needed	Very little understanding of the hazards or risks. Scope for a large amount of work	Little understanding of hazards or risks. Scope for much more work	Moderate understanding of hazards or risks. Still further work required	Fair understanding of the hazards or risks. Still some scope for progress	Good understanding of hazards or risks. Still a little scope for progress	Substantial understanding of hazards or risks. No further work needed

5. How much is this understanding improving with HSE programme managers?

1	2	3	4	5	6	7
No improvement of understanding hazards or risks. Substantial work needed	Very little improvement of understanding of hazards or risks. Scope for a large amount of work	Little improvement of understanding of hazards or risks. Scope for much more work	Moderate improvement of understanding of hazards or risks. Still further work required	Fair improvement of understanding of hazards or risks. Still some scope for progress	Good improvement of understanding of hazards or risks. Still a little scope for progress	Substantial improvement of understanding of hazards or risks. No further work needed

6. How much is this understanding improving with Local Authorities?

1	2	3	4	5	6	7
No improvement of understanding hazards or risks. Substantial work needed	Very little improvement of understanding of hazards or risks. Scope for a large amount of work	Little improvement of understanding of hazards or risks. Scope for much more work	Moderate improvement of understanding of hazards or risks. Still further work required	Fair improvement of understanding of hazards or risks. Still some scope for progress	Good improvement of understanding of hazards or risks. Still a little scope for progress	Substantial improvement of understanding of hazards or risks. No further work needed

7. How much is this understanding improving with duty holders?

1	2	3	4	5	6	7
No improvement of understanding hazards or risks. Substantial work needed	Very little improvement of understanding of hazards or risks. Scope for a large amount of work	Little improvement of understanding of hazards or risks. Scope for much more work	Moderate improvement of understanding of hazards or risks. Still further work required	Fair improvement of understanding of hazards or risks. Still some scope for progress	Good improvement of understanding of hazards or risks. Still a little scope for progress	Substantial improvement of understanding of hazards or risks. No further work needed

8. How much is this understanding improving with stakeholders?

1	2	3	4	5	6	7
No improvement of understanding hazards or risks. Substantial work needed	Very little improvement of understanding of hazards or risks. Scope for a large amount of work	Little improvement of understanding of hazards or risks. Scope for much more work	Moderate improvement of understanding of hazards or risks. Still further work required	Fair improvement of understanding of hazards or risks. Still some scope for progress	Good improvement of understanding of hazards or risks. Still a little scope for progress	Substantial improvement of understanding of hazards or risks. No further work needed

Ownership and perceptions

1. To what extent do associated stakeholders (e.g. duty holders, trade/professional bodies, TUs) within this sector have leverage or the ability to impact / influence?

1	2	3	4	5	6	7
No ability to impact	Very little ability to impact	Little ability to impact	Moderate ability to impact.	Some ability to impact	Good ability to impact.	Substantial ability to impact.

2. To what extent are stakeholders (e.g. duty holders, trade/professional bodies, TUs) likely to take further action?

1	2	3	4	5	6	7
Not at all likely to take further action	Possibly likely to take further action	Fairly likely to take further action	Quite likely to take further action	Likely to take further action	Very likely to take further action	Will definitely take further action

3. To what extent do stakeholders have the potential to deliver or stimulate the changes that HSE want to see?

1	2	3	4	5	6	7
No potential	Very little potential	Little potential	Moderate potential	Fair potential	Good potential	Substantial potential

4. How easy or difficult is it to get other (new / different) stakeholders involved / engaged

1	2	3	4	5	6	7
Extremely Difficult	Quite Difficult	Fairly Difficult	Neither Easy or Difficult	Fairly Easy	Quite Easy	Extremely Easy

5. To what extent are other regulators likely to have influence in this area?

1	2	3	4	5	6	7
Extremely Unlikely	Quite Unlikely	Fairly Unlikely	Neither Likely or Unlikely	Fairly Likely	Quite Likely	Extremely Likely

6. How likely are HSE to influence these other regulators?

1	2	3	4	5	6	7
Extremely Unlikely	Quite Unlikely	Fairly Unlikely	Neither Likely or Unlikely	Fairly Likely	Quite Likely	Extremely Likely

Effective tools and interventions

1. To what extent have interventions been evaluated?

1	2	3	4	5	6	7
No interventions have been evaluated	One or very few interventions have been evaluated / evaluation has started	Just under half of the interventions have been evaluated	Approximately half of the interventions have been evaluated	Just over half of the interventions have been evaluated	Almost all interventions have been evaluated	All interventions have been evaluated

2. How costly / inexpensive are the interventions? (Objective measure needed – cost per unit)

Use percentage increase in budget

1	2	3	4	5	6	7
Interventions can be completed well within the current budget	Interventions can be completed just within the current budget	Interventions can be completed within the current budget	Interventions can be completed with a 1-2% increase in budget	Interventions can be completed with a 3-4% increase in budget	Interventions can be completed with a 5-6% increase in budget	Interventions can be completed with a 7-8% increase in budget

3. How easy / difficult is it for inspectors to 'get things done' with current interventions?

1	2	3	4	5	6	7
Extremely Difficult / impossible	Very Difficult	Difficult	Neither difficult nor easy	Quite Easy	Very Easy	Extremely easy

4.a) How much work has been done in this area?

1	2	3	4	5	6	7
No work done so far	Very little work done so far	Little work done so far	Moderate amount of work done so far	A fair amount of work done so far	A large amount of work done so far	Extensive work done so far

4. b) How much work is there left to do in this area?

1	2	3	4	5	6	7
Substantial work needed	Scope for a large amount of work	Scope for much more work	Still further work required	Still some scope for progress	Still a little scope for progress	No further work needed

5. Are we getting anywhere with the work that has been done (e.g. do evaluations show positive impacts)?

1	2	3	4	5	6	7
Current interventions show no effectiveness	Current interventions show very little effectiveness	Current interventions show little effectiveness	Current interventions show some effectiveness	Current interventions good effectiveness	Current interventions excellent effectiveness	Current interventions perfect effectiveness

6. How reliably has any impact been separated form other factors (e.g. migration)?

1	2	3	4	5	6	7
The impact factors have not been separated at all	The factors have been separated very little	The factors have been separated a little	The factors have been separated a moderate amount	The factors have been separated to a fair extent	The factors have been separated to a large extent	All of the impact factors have been separated from other factors

Dependence of Control on continued HSE activities -DC

To what extent is the maintenance or further improvement in Health & Safety performance dependent on continued HSE influence

1. How well have these improvements or the maintenance of performance been evaluated?

1	2	3	4	5	6	7
Improvements / maintenance have not been evaluated	One or very few Improvements / maintenance procedures have been evaluated	Just under half of Improvements / maintenance procedures have been evaluated	Approximately half of the Improvements / maintenance procedures have been evaluated	Just over half of the Improvements / maintenance procedures have been evaluated	Almost all Improvements / maintenance procedures have been evaluated	All Improvements / maintenance procedures have been evaluated

2. How essential is continued HSE activity to the prevention or control of harms?

1	2	3	4	5	6	7
Extremely essential need for continued HSE activity	Essential need for continued HSE activity	There is some need for continued HSE activity	There is a moderate need for continued HSE activity	There is a slight need for continued HSE activity	There is a very slight need for continued HSE activity	There is no need for continued HSE activity

3. What is the danger of the stakeholder removing their input?

1	2	3	4	5	6	7
Very high level of danger / risk. The positive outcomes are likely to be lost or reversed	Substantial danger / risk	High level of danger / risk	Some danger / risk	Little danger / risk	Very little danger / risk	No danger / risk. The removal of input would not effect the momentum of improvements / maintenance

4. How likely are the stakeholders to remover their input?

1	2	3	4	5	6	7
Not at all likely	A very slight possibility this is likely	A slight possibility this is likely	Moderately likely	Likely	Very likely	Extremely likely

5. To what extent does HSE know how to control the harms?

1	2	3	4	5	6	7
No knowledge on how to control the harms	Very little knowledge on how to control the harms	A little knowledge on how to control the harms	Moderate knowledge on how to control the harms	Some knowledge on how to control the harms	Substantial knowledge on how to control the harms	Complete knowledge on how to control the harms

6. To what extent are HSE staff knowledgeable on the maintenance and improvement factors?

1	2	3	4	5	6	7
No knowledge on the maintenance and improvement factors	Very little on the maintenance and improvement factors	A little knowledge on the maintenance and improvement factors	Moderate knowledge on the maintenance and improvement factors	Some knowledge on the maintenance and improvement factors	Substantial knowledge on the maintenance and improvement factors	Complete knowledge on the maintenance and improvement factors

7. To what extent are Local Authority staff knowledgeable on the maintenance and improvement factors?

1	2	3	4	5	6	7
No knowledge on the maintenance and improvement factors	Very little on the maintenance and improvement factors	A little knowledge on the maintenance and improvement factors	Moderate knowledge on the maintenance and improvement factors	Some knowledge on the maintenance and improvement factors	Substantial knowledge on the maintenance and improvement factors	Complete knowledge on the maintenance and improvement factors

8. To what extent would the knowledge and behaviours of stakeholders and duty holders be sustained without further HSE activity?

1	2	3	4	5	6	7
Not sustained at all	Sustained very little	Sustained a little	Moderately sustained	Sustained a fair amount	Substantially sustained	Completely sustained

Level and impact of enforcement

1. From the duty holder's perspective, what is the likelihood of enforcement action being taken?

1	2	3	4	5	6	7
No likelihood of enforcement action	Very little likelihood of enforcement action	Little likelihood of enforcement action	Moderate likelihood of enforcement action	High likelihood of enforcement action	Very High likelihood of enforcement action	Substantial likelihood of enforcement action

2. From the HSE/ LA perspective, to what extent is the current level of enforcement proportionate?

1	2	3	4	5	6	7
Not at all proportionate	Not very proportionate	Hardly proportionate	Moderately proportionate	Somewhat proportionate	Very proportionate	Substantially proportionate

3. From the HSE/LA perspective, to what extent does enforcement have on other duty holders (i.e. the 'ripple effect')?

1	2	3	4	5	6	7
No enforcement in this area and therefore no effect	Very little wider effect	Little wider effect	Moderate level of a wider effect	A satisfactory level of a wider effect	A good level of a wider effect	A perfect level of a wider effect

Ownership and perceptions

1. To what extent do associated stakeholders (e.g. duty holders, trade/professional bodies, TUs) within this sector have leverage or the ability to impact / influence?

1	2	3	4	5	6	7
No ability to impact	Very little ability to impact	Little ability to impact	Moderate ability to impact.	Some ability to impact	Good ability to impact.	Substantial ability to impact.

2. To what extent are stakeholders (e.g. duty holders, trade/professional bodies, TUs) likely to take further action?

1	2	3	4	5	6	7
Not at all likely to take further action	Possibly likely to take further action	Fairly likely to take further action	Quite likely to take further action	Likely to take further action	Very likely to take further action	Will definitely take further action

3. To what extent do stakeholders have the potential to deliver or stimulate the changes that HSE want to see?

1	2	3	4	5	6	7
No potential	Very little potential	Little potential	Moderate potential	Fair potential	Good potential	Substantial potential

4. How easy or difficult is it to get other (new / different) stakeholders involved / engaged

1	2	3	4	5	6	7
Extremely Difficult	Quite Difficult	Fairly Difficult	Neither Easy or Difficult	Fairly Easy	Quite Easy	Extremely Easy

5. To what extent are other regulators likely to have influence in this area?

1	2	3	4	5	6	7
Extremely Unlikely	Quite Unlikely	Fairly Unlikely	Neither Likely or Unlikely	Fairly Likely	Quite Likely	Extremely Likely

6. How likely are HSE to influence these other regulators?

1	2	3	4	5	6	7
Extremely Unlikely	Quite Unlikely	Fairly Unlikely	Neither Likely or Unlikely	Fairly Likely	Quite Likely	Extremely Likely

7.a) To what extent is there a need for improved / better or more laws?

1	2	3	4	5	6	7
No need	A very small need	A small need	A moderate need	A fair need	A strong need	A very strong need

7.b) To what extent is there a need for improved / better or more inspections?

1	2	3	4	5	6	7
No need	A very small need	A small need	A moderate need	A fair need	A strong need	A very strong need

7.c) To what extent is there a need for improved / better or more communication?

1	2	3	4	5	6	7
No need	A very small need	A small need	A moderate need	A fair need	A strong need	A very strong need

7.d) How often does communication need to be to be repeated?

1	2	3	4	5	6	7
Never	Approximately every five years	Approximately every four years	Approximately every three years	Approximately every two years	Approximately every year	More than twice a year