

**A Study into the Management Strategies  
Currently Employed to Maximise Crowd Safety  
Within the  
United Kingdom Live Music Industry**

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## **Abstract**

The live music industry fuses together the worlds of art, commerce and science to bring forth events in what is expected to be the safest environment possible...or is it?

Over the last twenty years there has been a catalogue of crowd related disasters argued by crowd safety experts to be a recurring problem growing in terms of casualties.

This research project was a study in order to evaluate whether the management strategies, currently employed by the live music industry in the United Kingdom, maximise crowd safety. The study focussed primarily on secondary research facilitating a complete review of literature, determining three core concepts affecting crowd safety in: Risk Management; Legislation; and Corporate Safety Culture. This was then triangulated by primary research, which took the form of in-depth semi-structured interviews, with a range of industry experts, to determine views and perceptions on current strategic management processes.

Subsequently on analysis it was evaluated current management strategies do not maximise crowd safety due to a multi-layered trade off with regard to commercial profit margins, increased safety procedures, perceived risk, current legislation and corporate safety culture. There was found to be a lack of crowd safety strategy by the industry as a whole with weak systems involving large variations in knowledge and skills, exacerbated by a disjointed approach from governmental organisations. Furthermore leading experts think it is only time before an accident occurs with fatalities.

Education was evaluated to be a rational way forward for the industry to facilitate effective risk management and improve corporate safety culture. Further studies would look to pinpoint individual personnel and locations for localised training.

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## **I. Introduction**

*'Security & Safety Just a Lottery...'*, (Harding, 2001:19)

This comment by a senior crowd safety manager only five years ago could be seen to be a startling indication of the importance of safety planning for any future event. Over the last 20 years there has been a catalogue of crowd related disasters. From Hillsborough in 1989 where ninety-five people lost their lives due to overcrowding, (HMSO, 1990) to nine music fans dying at Roskilde in 2000 crushed to death while watching a rock band, (Audience, 2000). The latter deaths were due to acute compression of the individuals' chest areas with multiple bruising; and believed to have been caused by slow evaluation of how serious the situation was accompanied by a 'doubt' of who was in 'command', (Kornerup and Rungstrom, 2000:23).

In 2002 a concert by FatBoy Slim resulted in 'four times the expected number of people' attending the event which led to the event 'spiralling out of control' into 'scenes of chaos', and resulted in serious injuries following a crowd related incident, (BBC, 2002). Most recently seventy-three people died in the Philippines due to a stampede while queuing for a game-show thinking the gates to the event had opened, (Sky News, 2006).

So many accidents have occurred in the past with figures of at least one hundred and ninety three fatalities all over the world at licensed events, (Kemp et al, 2004). This is argued by Upton (2004:1) to be a 'recurring problem.....growing in terms of casualties.' This surely is a sobering fact that needs urgent attention by the live event industry.

Music by its very nature is a well-defined art form, and when juxtaposed with the live music industry, the worlds of art, commerce and science come together. This synergy facilitates the kind of promotional event enjoyed by hundreds of thousands of people every year, hopefully in a safe, enjoyable environment. Events can be staged anywhere from a village hall to the largest of stadia and maximising safety for spectators and fans, wherever and whenever, is an important concern now as it was almost twenty years ago at Hillsborough.

Project management in the live music industry can involve many complex issues surrounding political; environmental; sociological; cultural; geographical; technological; legal; financial and ethical issues, (Kemp, 2000). However 'the safety aspects of promoting concerts, particularly in the U.K, are the single most important factor', (Kemp, 2000:127).

The management of safety has to consider all of the issues and importantly as with any successful management process the utilisation of an effective strategy, plan or policy is needed to affect successful objectives (Mullins, 2002).

Indeed the live music sector can be seen as no different from any other industry and its safety levels depend on how objectives are carried through in terms of corporate safety policy. Unfortunately some critics see the live music industry as a banding together of

small cottage industries in a 'loose collection' of 'renegade individuals' while at the same time delivering a high profile business model, (Hill, 2003). It is to this area in terms of strategic management that the research project will concentrate. What strategies do the industry utilise? How effective are the strategies? Are the safety policies up to a standard that facilitates maximised safety for audience members? Which factors affect strategy? Does the live music industry successfully utilise post-event evaluation and implement feedback and adjustment?

The research project was brought about after evaluation of a research article titled 'Security & Safety, Just a Lottery...' . (Harding, 2001, pg.19), and a desire to assess from a qualitative perspective how safe the live music industry is in the new millennium. This puts forward the level of importance of crowd safety management and the ongoing evaluation of its effectiveness. To this end Harding (2001) argued for efficient assessment of risk, people & process management.

Key findings from previous studies argue that the process of safety management should employ an effective risk management system, Hannam (2004:401) with Upton (1995) advising strategy and effective risk management are vital to crowd safety.

Kemp *et al*, (2004) further advised in the case of crowd safety management that policy should be formulated with regard to effective understanding of behaviour, risk assessment and strategy. Further research by Health & Safety Executive (1998) pursued an analysis of current risk assessment and Challis (2003) debated safety regulation as did Hill (2003) from an industry perspective.

Studies have also been carried out into crowd safety particularly at sports grounds, with reference to Frosdick and Whalley (1997) and the application of crowd movement modelling techniques by Still (2002). Finally, Upton (1995) clarified leadership, training and communications strategy are vital to crowd safety.

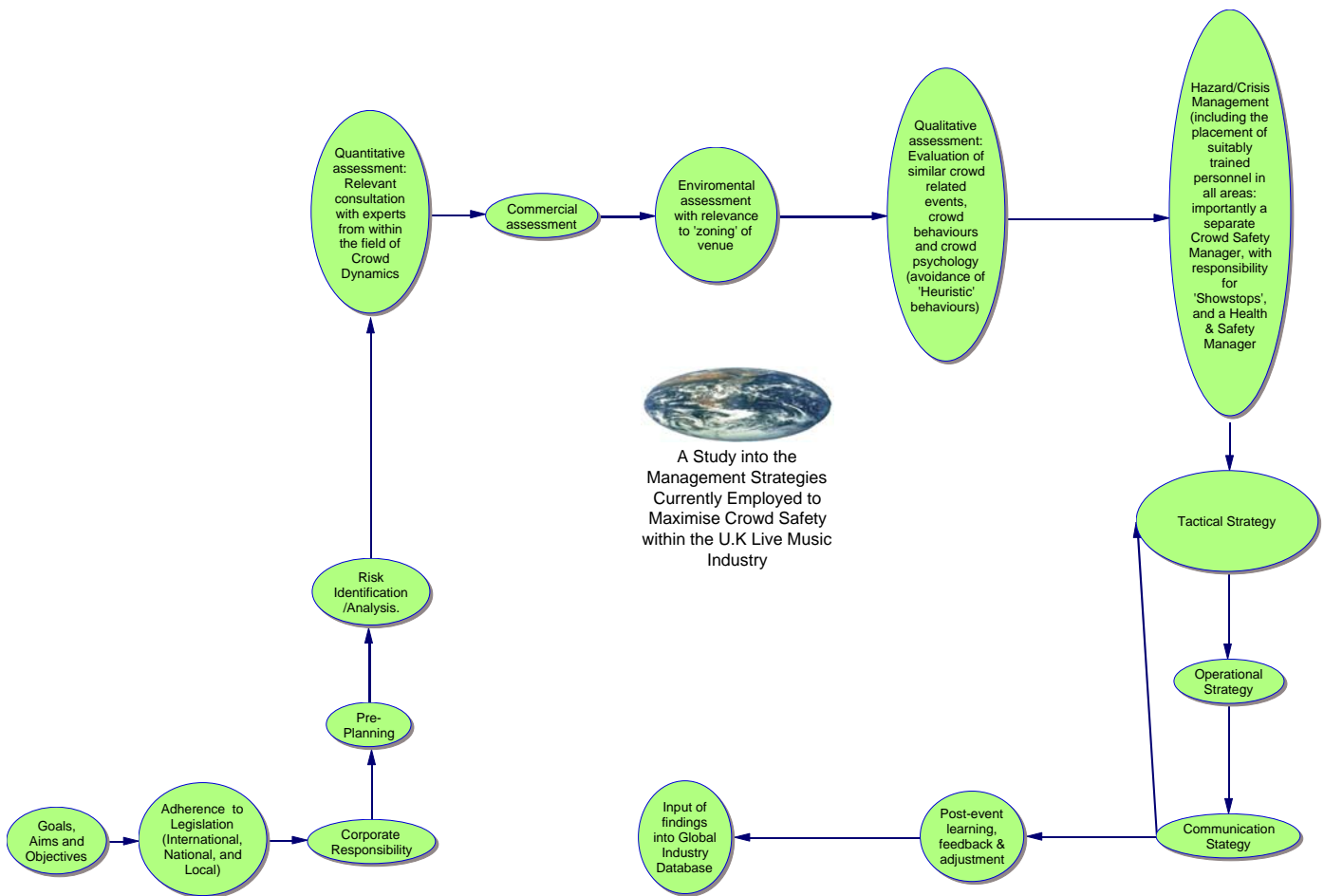
The research so far could be seen to have been disjointed with respect to its particular focus and a study has not been put forward to look at the overall management strategy in the live music industry and effect on levels of crowd safety management. Most research has tended to concentrate on technical issues and process management, which allow implementation of operational plans, but not adequately looked at the strategic planning process. As the precursor to implementation it could be seen to subsequently affect the success of the event, in terms of the safety of the audience. Furthermore previous studies have not utilised an underpinning of management theory to evaluate current management strategy and its impact on crowd safety.

This study looks to address this issue and research how practitioners in the field of crowd safety management can move forward, learning from the past in a rational, scientific nature. An intellectual public debate on the subject could be seen to be well overdue.

It was subsequently evaluated that three concepts would be focussed on, in relation to effects on strategy and these are from a perspective of: how the industry manages risk in terms of safety; how the current legislative processes co-exist with management strategies to affect and maximise safety; and how the live music industry within the United Kingdom deals strategically with the notion of maximising crowd safety

management, in terms of corporate safety culture. This will allow the development of the coherent research project to tackle what could be seen as a dangerous ongoing scenario with respect to the earlier comments of Upton (2004:1) and the 'recurring problem.....growing in terms of casualties.'

The aim of the study therefore is to clarify existing issues and evaluate existing knowledge to bring forth a rational way forward for all stakeholders. The research question is subsequently whether the management strategies currently employed by the live music industry in the United Kingdom maximise crowd safety.



## A Study into the Management Strategies Currently Employed to Maximise Crowd Safety within the U.K Live Music Industry

## **Goals, Aims and Objectives**

### **I. Adherence to Legislation (International, National, and Local)**

#### **A. Corporate Responsibility**

##### **1. Pre-Planning**

###### **a. Risk Identification /Analysis.**

**(1) Quantitative assessment: Relevant consultation with experts from within the field of Crowd Dynamics**

###### **(a) Commercial assessment**

**i) Environmental assessment with relevance to 'zoning' of venue**

**(1) Qualitative assessment: Evaluation of similar crowd related events, crowd behaviours and crowd psychology (avoidance of 'Heuristic' behaviours)**

**(a) Hazard/Crisis Management (including the placement of suitably trained personnel in all areas: importantly a separate Crowd Safety Manager, with responsibility for 'Showstops', and a Health & Safety Manager**

**i) Tactical Strategy**

**(1) Operational Strategy**

**(a) Communication Strategy**

**i) Post-event learning, feedback & adjustment**

**(1) Input of findings into Global Industry Database**

## II. A Review of Literature

As a basis for this research project it was important to conduct an in-depth review of literature in order to assess current viewpoints and strategic process existing in the live music industry. As a basis for the review an overview of strategic management theory is an essential starting point and allows an important underpinning for further research.

### 2.1 Strategic Management

‘Objectives and policy are formalised within the framework of a corporate strategy which serves to describe an organisation’s sense of purpose, and plans and actions of implementation’, (Mullins, 2002:138) (see Figure 2.1.1 below)

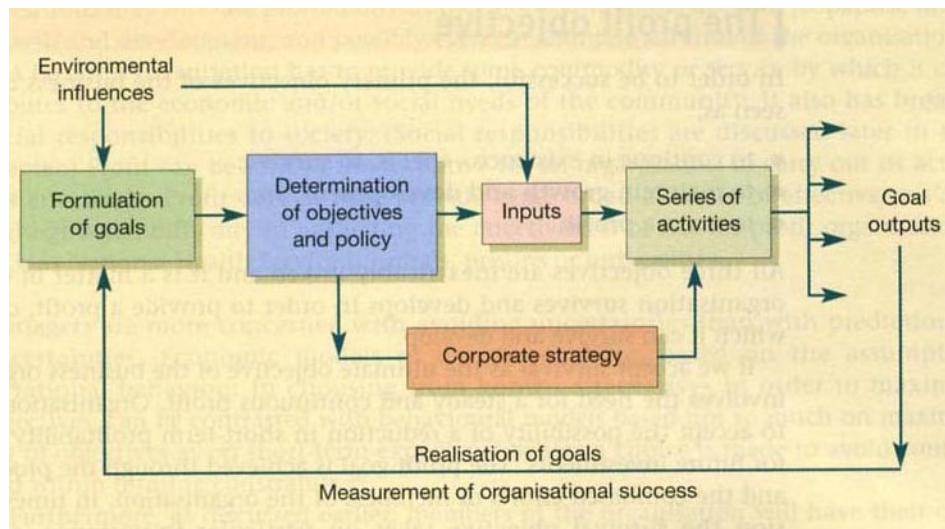


Figure 2.1.1: From Mullins, L.J. (2002) *Management and Organisational Behaviour*.

Studies by (Mullins, 2002:135) suggest the evaluation of strategy should be seen in terms of a ‘systems view of organisational success’ and realise that all objectives lead to a system of activities which produce outputs. These outputs should always be discussed,

analysed and the results seen as an input towards the formulation of new and improved goals. This utilises a system of SWOT analysis with regard to strengths, weakness, opportunities & threats with successful strategy dependant on effective management of opportunities and risk. Strategic plans look at focussing on the means of achieving goals as compared to operational plans which look at implementation of strategy. This explanation follows on from Mintzberg *et al* (1995) and the diagnosis of strategy as a plan dealing with a situation; a pattern of action; or a perspective of the world. In terms of perspective, safety is an essential human need as per Maslow's hierarchy of needs theory, (Maslow, 1987) (see Figure 2.1.2 below).

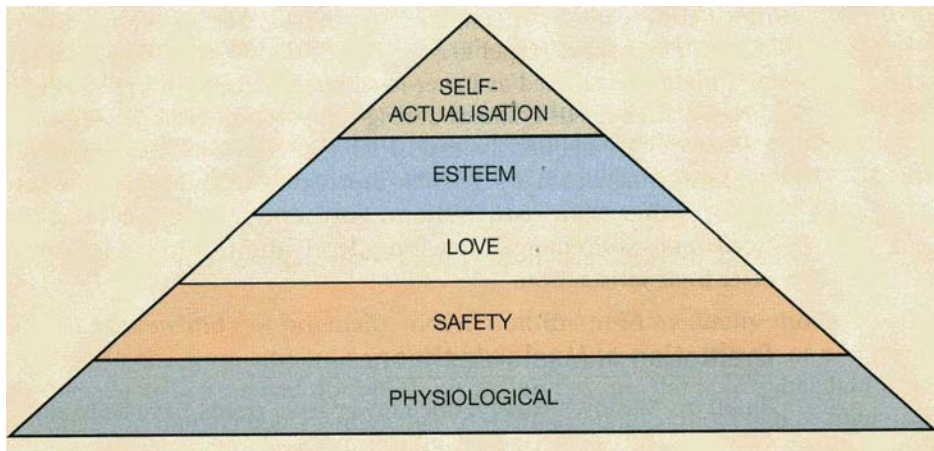


Figure 2.1.2: From Maslow, A.H. (1987) *Motivation and Personality*.

This seminal work argued that safety, protection from dangers and threats of physical attack, and the need for security and orderliness is a primary set of inbred human objectives.

Furthermore strategy can be affected by issues surrounding political, environmental, sociological, technical, legal and ethical viewpoints (PESTLE). These can have a direct

impact on resources, social responsibility, organisational structure, company values, process management, behaviour and leadership, (Minzberg *et al*, 1995). Formulation of strategy can also be affected by competitive forces due to Porter's five force theory and the affect of new entrants to the market, substitute products, intensity of rivalry and availability of suppliers.

From this underpinning of strategic management theory the first concept to be evaluated is that of risk management and how the function affects strategic planning.

## 2.2 Risk Management

The concept of risk as per Lowrance (1976) is a measure of the probability and severity of adverse events or hazards, which should be based on a quantitative, scientific measurement. However the analysis can become a qualitative, political activity when an event manager judges the acceptability of risk.

Kaplan et al (1981) further clarified the individual charged with analysing the risk seeks to answer three questions of:

- What can go wrong?
- What indeed is the likelihood of it going wrong?
- What are the consequences of it going wrong?

It also, as per Haimes (1991), looks to answer three more questions with regard to:

- What can be done
- What options are subsequently available
- What is the cost-benefit analysis in terms of risk.

A total risk management strategy looks to combine a systems management approach with risk management and must address: failure of hardware (equipment); human failure; organisational failure or software failure (information) which can all subsequently lead to a systems failure. It is this management of risk that has not only an impact from a mathematical viewpoint it could also be seen to be dependent on the subjective nature of the individual performing the measurement, (Haimes, 1991).

Could the live music industry be making risk management decisions, on safety, based negatively on a cost-benefit analysis of risk?

It is this mix of quantitative and qualitative processes that could be seen to be an important issue in crowd safety management. What is the strategy utilised by crowd safety managers and how does that affect the ability to maximise crowd safety?

With respect to the decision-making process a recent study by McDonnell *et al* (1999:293) advised risk perception to be a 'social phenomenon' which is 'not easily measured, described and predicted'. It may involve a human action of 'heuristics' as per Kahnemann *et al* (1982) which suggested individuals may make evaluative decisions based on previous events of a similar type. These shortcuts could lead to a severe bias in judgement and if an individual has not experienced a particular situation they may not be able to fully conceptualise the outcome. This could lead to possible failings in risk analysis and implementation of contingency measures. This point is backed up by Frodick and Whalley (1997:37) who comment good safety management means a reduction of risk as far 'as is reasonably possible' allowing for the fact perception of risk may be different in individuals. However event managers are seen to be ultimately responsible for risk

management and in the event of an accident or death will be called to account for the 'adequacy of their arrangements'.

Risk management could therefore be seen to be, as per Haines (1998), a strategic calculation in terms of a multi-layered trade-off between risks and benefits for shareholders which could lead to a conflict of objectives.

Studies by Tarlow (2002:37) advise experience can allow for intuition and subsequently cross-over with levels of knowledge and expertise. The rationalisation of strategic risk management in the live music industry then moves from 'pure science to art' but is this advisable in terms of maximising crowd safety?

Further recent studies on risk assessment in the live music industry have been by Upton (2004b:1) who advises risk assessment should be based on qualitative assessment but with an input from quantitative methodology in terms of the movement patterns of individuals (pedestrian planning) and the movement of individuals at high densities (crowd dynamics). He concludes that without input from experts in these areas along with a detailed understanding of crowd behaviour:

'Risk assessment for casual rock concerts will continue to be based on pure speculation or informed opinion.' (Upton, 2004b:4).

Upton (2004a) further argued that risk assessment in the live music industry should examine all environmental factors in terms of site or venue; set out qualitative measures in terms of risk assessment; back them up with quantitative measures from experts and examine any commercial activity which takes place as part of the event. Furthermore the

assessment of risk should involve a 'comprehensive risk analysis of similar events', (Upton, 2004a:6).

The study of Kemp *et al* (2004) advised that any assessment technique to aid crowd safety should be a live ongoing risk assessment process with constant monitoring, evaluation and developing of process as the event proceeds. It concludes risk assessment planning should take place on various levels with regard to strategic, tactical and operational planning, and should pay particular respect to the understanding of crowd behaviour, crowd psychology, crowd dynamics and venue specific knowledge. Harding (2001) furthermore argued effective safety measures can be put in place by performing an efficient assessment of risk with respect to: venue design and systems, effective documentation and planning, and suitable levels of management skill base.

Unfortunately Hannam (2004) advises some companies produce detailed risk assessment documentation but do not implement effective systems and they may also produce the same assessment for different events. Hannam (2004:22) advises 'documentation alone is not sufficient' and that health and safety is an 'essential part of quality control'.

Further studies by Kemp *et al* (2004:9) advised that potential problems exist in the live industry with regard to the risk management of crowd and their accompanying behaviours. The understanding of this risk is argued to be a fundamental factor in making events safer but the methods to control this risk 'continue to divide the industry'. The study also concluded that existing methods of risk assessment and analysis may be flawed with respect to the estimation of safe capacity and argued to be a 'high risk

strategy' that will need a 'complete rethink'. However to change systems and strategies utilised for many years 'will, however, be difficult', (Upton, 2004:60).

A further potential flaw affecting risk management strategy is argued by Still (2000), a leading expert on the subject of crowd dynamics. His study on the modelling of crowd movements in high density situations advises present guidelines and methodologies for risk assessment methodology may be inappropriate, and lead to potential problems affecting levels of crowd safety.

Further research by Health & Safety Executive (1998) on current risk assessment measures concluded that further research was needed on the qualitative and quantitative risk assessment models utilised by the event industry. They also advised little information existed on how analysis was applied in terms of crowd behaviour or crowd dynamics and that was required by practitioners in the:

'Identification of complex safety hazards, qualitative risk estimation and issues concerning tolerability of risks', (HSE, 1998:71)

It was also advised that cost-benefit analysis could not be used as it could mislead judgement. However the area of risk management, its function of risk analysis and the health and safety of individuals are an internal part of the legislative process and the next section will focus on this area.

### 2.3 The Legislative Process

In the United Kingdom the notion of safety is protected by legislation under the **Health and Safety at Work Act 1974** and **The Occupiers Liability Act 1957 (and 1984)**. The HSW Act 1974 advises event managers, as part of their legal duty, they have an obligation to

provide safe and adequate protection, as far as is thought to be 'reasonably practicable', for third parties exposed to risks created by their undertaking. However, reasonable may depend on current guidelines or regulations, industry practices or standards, and the role of the parties concerned, (Challis, 2004:67).

With regard to HSW Act 1974 the event organiser has ultimate responsibility for 'protecting the health, safety and welfare' of all who attend an event, and for providing effective documentation, (HSE, 1999:1). The Occupiers Liability Act 1957 (and 1984) similarly advises an occupier of land is obliged to do 'all things reasonable in the circumstances' to provide for the safety of a visitor, (Challis, 2004:67).

The HSW Act 1974 works alongside a 'myriad of legislative Acts of Parliament and associated regulations', (Challis, 2003:1) and guidance documents including **The Event Safety Guide** or Purple Guide used by the event industry as an effective reference material, (Hannam, 2004).

This document represents collaboration between the live industry and the legislative bodies, (Winsor, 2004) and brings together necessary technical and logistical guidelines in order to satisfy basic health and safety standards.

However, Hannam (2004:24) advises many industry personnel confuse the guidelines of the Purple Guide with complying with legal requirements. The Event Safety Guide is also utilised to assist with the recommendations and adherence with current legislation, (Kemp et al, 2004) but there seems to be confusion over what should be considered.

With respect to administration of relevant legislation in the United Kingdom, an executive body set up by government operates under the Health and Safety Executive

(HSE). It works alongside various stakeholders to draft new legislation and enforce existing legal duties although in practice the administration and enforcement is conducted by local authorities, who provide Public Entertainments Licenses under the **Licensing Act 2003**, (Winsor, 2004). The Act has as one of its main objectives to maintain public safety.

With respect to effective evaluation of risk, legislation is with relevance to the **Management of Health and Safety at Work Regulations 1992**. This item of legislation 'makes more explicit' the management of health and safety under the original HSW Act. It gives 'key steps' to ensure any activity, including those that are event based, are driven by an adequate assessment of risk, (HSE, 2000).

To obtain a license under the Licensing Act 2003 this includes self-assessment of fire safety, first aid provision and emergency planning procedures and should employ a 'competent person', (Winsor, 2004:54).

However Hannam (2004) argued that the idea of competency has caused confusion and does not have a finite definition in legislation. It could mean knowledge, skill or experience.

A recent study by Challis (2003:1) has argued with so much legislation and guidance documentation regulations may be 'passed but not implemented' and may initially change procedures but 'become lax where enforcement is weak and costs rise'.

Harding (2001) also argued that there is no consistency of legislation as each licensing authority has its own interpretation of health and safety law, guidelines and may have varying standards of knowledge and expertise.

The enforcement of Health and Safety legislation could be seen to rest with effective deployment of knowledge and monitoring of procedures by all stakeholders.

However a study by van Beek (2000:45) advises safety officers can turn up to the venue or event 'an hour or so' before the start of the show leading to little time for evaluation of potential risk to safety. Van Beek (2000:11) further commented the methods utilised by the Health in terms of funding may mean they do not act until 'there is a major incident'. This would be 'too late' and lead to the entire industry being 'tainted'.

In studies by Hannam (2004:401) it was argued 'authorities are very lax when it comes to enforcement' of legislation as there is no incoming revenue from Health and Safety unlike similar regulatory bodies in the financial industry.

At present in terms of a civil sanction due to 'negligence' or lack of 'duty of care' the penalties can be up to £20,000 in a civil action or if found criminally liable, with regard to statutory law a custodial sentence can be applied, (Challis, 2003).

The Roskilde event now known as 'the safest event in the world' (crowdsafe.com, 2005) was put under safety scrutiny by Bowdin *et al* (2001:209) who advised that 'core recommendations' provided by The Event Safety Guide 'were not followed.

How truly safe are we in the United Kingdom when attending a musical event?

In a study by Hannam (2004:22) it was argued some industry personnel comment 'health and safety is just common sense' but he further advises if this is a rational assessment then why are live outdoor event site plans still being badly designed; and certain promoters still allowing incitement of dangerous crowd behaviours by a number

of artists . He further advised, in terms of management strategy, health and safety legislation should be seen as an 'essential part' of a 'quality control' system (Hannam, 2004:22), and suggested three new offences including Corporate Killing may push responsible event organisers towards safer policies for its customers.

With respect to existing legislation Frosdick and Whalley (1997:27) argued that the HSW Act 1974 is inadequate and ill-equipped to enforce safety for large numbers of people and legislation constantly tries to solve 'sociotechnical solutions with technical solutions' by revising documents after disaster enquiries instead of 'developing radical solutions'.

Frosdick and Whalley (1997:25) advised a process of 'examining legislation as a whole' instead of implementing a 'short-term panic measure' after every disaster. However some official inquiries including the Kings Cross disaster due to fire have 'emphasised the need' for 'organisational safety cultures', (Frosdick and Whalley, 1997:152). It is to this area that the concluding section of the review of literature will focus.

#### 2.4 Corporate Safety Culture

It could be seen that a consideration of crowd safety is also a social responsibility of an ethical nature. This is backed up by Richardson and Thompson (1994) when they advise strategic management, to be effective, should create an alliance between nature, the environment, the culture of an organisation and its organisational resources.

Subsequently safety culture should be seen to co-exist alongside the desires of business stakeholders and the current legislative system (Mullins, 2002). In terms of safety it could be seen that the actions of management within an organisation not only impinge on its own internal customers but strategic decisions have 'an increasing impact on individuals,

other organisations and the community', (Mullins, 2002:142). This is due to the open system of the environment having a direct effect on the business.

Harding (2001:21) advised there is a 'disjointed approach from the government, licensing authorities' and leading industry bodies which could be seen to have a negative impact on maximising crowd safety.

He further comments the standards of training, skills, resources are inconsistent and the 'massive variations' could lead to another disaster if an effective safety culture is not implemented, (Harding, 2001:22).

With regard to implementation of health and safety management Hannam (2004:1) suggests the essence of crowd safety culture is couched in the term 'reasonably practicable' and the evaluation of the limits of application of health and safety by event managers. This can be balanced against 'time, trouble, cost and physical difficulty' and can eventually lead to interpretation by the court system which is a reactive rather than proactive measure.

Hill (2003:2) argued that when the Glastonbury Festival lost its license in 2001 due to intense overcrowding in 2000 it had to increase spending to gain its license and could be seen to put safety before expenditure but it would not have been given permission to stage the event if criteria were not met. Hill further argued 'money is the key issue of safety at live music venues' and in terms of safety culture the event organisers had not been proactive in assessing the relevant risks prior to this incident.

If conditions similar to Roskilde had occurred there would have been 'severe repercussions'. He also advised that increased premiums for public liability insurance could induce the industry to tighten its safety procedures.

However, bodies such as the Safety Focus Group have been set up by the industry to look at crowd safety, Challis (2003). The industry body, set up in 2001 post Roskilde to rethink safety procedures, have received criticism from experts in the industry who advise the SFG are not demanding standards be adhered to or looking effectively at 'deficiencies' within the industry, (Crowdsafe, 2003).

Education also has recently played its part to increase knowledge with the recent development of a Foundation Degree in Crowd and Safety Management, which looks at crowd psychology and crowd dynamics as part of its content, (BCUC, 2006). This course based at Buckinghamshire Chilterns University College works with several industry bodies including the PSA, SIA and UKCMA to license security companies and deliver security and safety training. As per (Kemp et al, 2004), how do we measure the skill, knowledge and experience of personnel charged with the responsibility of crowd safety when the subject is 'not a recognised social science'.

Existing research by the review of literature has very much concentrated on technical issues and implementation of operational plans, but not adequately looked at the strategic planning process.

This research project looks to examine and evaluate the current management strategies utilised, with regard to crowd safety, and the effect current practice has. How do the

concepts of risk management, legislation and safety culture interact in strategic planning issues?

This study looks to address how practitioners and stakeholders in the field of crowd safety management can move forward, learning from the past in a rational, scientific nature. Lord Taylor advised in his summing up in the wake of the Hillsborough Stadium disaster in 1989:

‘all those responsible for certifying, using and supervising....should take a hard look at their arrangements and keep doing so. Complacency is the enemy of safety.’ (Taylor, 1990).

If management strategies, are in anyway, negatively focussed on the issues of crowd safety, a disaster in the United Kingdom’s live music industry, ‘may be waiting to happen’, (Harding, 2001:19).

### **III. Methods**

#### 3.1 Purpose of Investigation

The purpose of the study was to evaluate whether management strategies currently employed by the U.K live music industry maximise crowd safety. Primary research collection of data targeted practitioners of live event management (licensing officers, crowd safety managers, crowd safety consultants and educational experts) to understand respondent’s views, feelings and perceptions. This was in order facilitate investigation of various concepts, allowing in-depth appraisal and critical analysis.

The study had three aims which were to discover: how the live music industry manages risk in terms of safety; how current legislative processes co-exist with management

strategies to affect and maximise safety; and how the live music industry within the United Kingdom deals strategically with the notion of maximising crowd safety management, with respect to a corporate safety culture.

### 3.2 Choice of Research Approach

The study utilised a qualitative research approach to evaluate the opinions of experts within the field of crowd safety management. Qualitative research allowed, as per Marshall and Rossman (1989:28), the evaluation of 'real world observations, dilemmas and questions' which looked to capture perceptions and opinions of respondents and allow further analysis.

This was further advised by Burns (2000:3) to allow a 'naturalistic' approach which would 'emphasise the importance of the subjective experience of individuals'.

Whereas qualitative research looks at interpretation of an in-depth understanding within a context, it was deemed impractical to utilise a quantitative research to study the phenomenon. This was evaluated as quantitative methods use empirical research in the form of numbers and statistics as per Punch (1998) and would have assumed the 'social reality' was 'objective and external to the individual', (Burns, 2000:3).

Silverman (1997:1) argued the method should not be seen 'provisional' or an 'initial hypotheses' and that qualitative studies as a social science have already built up a usable body of knowledge. As the subjective living experience of the respondents with regard to reality was the focus of the study, this was deemed to be a satisfactory starting point.

Limitations of this method include as per Burns (2000) a difficulty to apply conventional standards of reliability as conditions cannot be replicated to any degree. However the social interaction of the researcher and the researched was important.

With respect to research design, evaluative research was chosen due to its specificity of approach, as strategic evaluation was the goal. Swetnam (2000:41) advised with regard to questioning 'social policy and activity' the research style allowed 'success criteria' to be measured with respect to an implementation of plans.

In terms of methods not adopted one of ethnographic observation was discarded in terms of restraints of timescale and complexity.

Secondly case study was not adopted as in terms of a review of literature the subject matter of Glastonbury and Roskilde were discussed. Furthermore this approach would not have allowed a breadth of knowledge, opinion and perception to be evaluated which was the purpose of the study.

The final method deemed not to be employable for the purposes of the study was one of historical research and documentary analysis as the skill and timescale to complete analysis would have been a restraint and as per Swetnam (2000) the 'academic rigour' needed may have proved additionally limiting.

### 3.3 Sampling Methodology

The aim was to obtain a spread of respondents, from a range of occupations within the live event management sector of the music industry, considered by their peers to be experts in their respective professions. Fourteen professionals were contacted by email

following the sourcing of contact details from The Music Week Directory, International Showcase and company websites following secondary research.

Attached to each email was a formal letter of introduction from the Centre for Crowd Management and Security Studies based at Buckinghamshire Chilterns University College.

Ethical procedures were followed as per Burns (2000) with an explanation of exact details of the study, choice of anonymity, rights to discontinue at any time, confidentiality and researcher obligations.

This technique produced eight responses, and subsequently four respondents advised availability within timeframe and locality of the study. The eventual sample covered enough of a spread of expert knowledge to allow successful progress including senior representatives from licensing, crowd safety management, crowd safety consultancy and education.

The sample was corroborated by Punch (1998) who advised there is no simple summary of sampling techniques in qualitative methods. The sample should be relevant within the conceptual framework, consist of a good spread of respondents and be feasible within money, time and access to individuals.

Burns (2000) similarly argued sampling should be guided by a search to 'clarify the analysis' to achieve 'maximum identification of emergent categories'.

From this viewpoint it was considered to be a completely viable sampling of industry professionals.

Limitations were seen to involve issues of availability and timescale constraints.

### 3.4 Methods of Data Collection

The choices of data collection centred on the possible use of two differing methods, namely a questionnaire or interview format. It was evaluated that the questionnaire method would not allow in-depth analysis of the respondents' knowledge or experience, within the social reality they found themselves a part of.

Burns (2000) argues surveys do not allow feelings, beliefs or perceptions to be evaluated. Consequently this choice of data collection could have adversely affected and prevented any rapport or trust between the interviewer and respondent.

Conversely the interview method, as per Punch (1998:175), argues interviews are utilised in order to assess:

'perceptions, meanings, definition of situations and constructions of reality' and is a 'powerful way of understanding others'.

Subsequently the interview process was chosen to allow further analysis.

Furthermore a semi-structured approach to the interview process was conducted to allow the interviewer to:

'follow up questions, probe responses and ask for clarification or elaboration', (Arksey and Knight, 1999).

The format of the interview utilised an open questioning style as per Patton (1990:280). This approach took each respondent through the 'same sequence' although flexibility was dependent on 'the skills of the interviewer, (Patton, 1990:281).

This was considered to be the best strategy within the timescales allowed and the academic rigour required.

As per Burns (2000) an important pilot of the interview was conducted. This was facilitated in conjunction with an experienced production manager and input from the research study supervisor. The only negative feedback from the pilot was the possibility of slight subjectivity of questions but interactivity was the key to success as well as a sound knowledge base. The questions were then forwarded onto the respondents pre-interview which allowed them to make any advance notes.

Silverman (1997) advised competencies in 'active listening' with knowledge of the subject matter and respondent are important criteria for success. Subsequently the intensive review of literature along with background searches of respondents fed into the process.

**\*Please see Appendix 1 for the interview schedule and Appendix 2 for a full rationale of the interview questions.**

With respect to the content of the questions eleven points of focus were utilised covering the three concepts of Risk Management, Legislation and Corporate Safety Culture:

Question one was used to create rapport and establish a broad overview. Questions two and three established respondents' views on risk management, risk perception and risk analysis. Questions four and five were used to assess viewpoints on legislation and self-regulation. Questions six and seven facilitated an assessment of corporate safety culture and strategy within the industry. Questions eight and nine established

respondents' perceptions of how we learn from the past to move forward and subsequent industry facilitation. Question ten was asked to determine knowledge levels within the industry. Finally question eleven was asked to determine if any further comments were applicable.

Limitations of the interview method, as commented by Silverman (1997:113) are that the process can be seen as a source of 'bias, error or misunderstanding' but with the correct questions asked in the proper manner the respondent will become a 'pipeline' to aid the transmittance of knowledge. The secondary limitation related to time constraints of the respondent.

Transcription was aided in three out of four cases by the use of a Dictaphone. Arksey and Knight (1999) advised this method shows the serious nature of the interview process and allows concentration on what is being said. No respondent objected to this process.

### 3.5 Data Analysis

The method utilised for analysis of data from the qualitative interviews was that of abstraction and comparison to group data utilising the concepts of risk management, legislation and safety culture. As per Punch (1998:210) this technique allows the researcher 'to compare concepts'. Punch(1998:22) further advises to extract conclusion from the data the analysis should be:

'systematic, disciplined, transparent and described' .

Using the three concepts within the literature review as a basis for analysis it was felt a suitable starting point for the semblance of results and discussion thereof. Burns

(2000:389) supports this process explaining the literature may give 'some form of triangulation'.

Methods that were not adopted by the study included those of semiotics which as per Miles and Huberman (1994) is an 'analysis done with words' to compare linguistic patterns. The method would have been time consuming and require greater skill levels than was available. Similarly conversational analysis was not employed to analyse how interview responses affect the next response, as this required extended skills and timeframe, (Punch, 1998).

## **IV. Results**

The interview questions presented to each of the respondents are located in within Appendix 3. Each of the respondents subsequently are referred to from this point as **Respondent A** (Mr Philip Winsor), **Respondent B** (Mr Mark Harding), **Respondent C** (Dr Mick Upton) and **Respondent D** (Professor Chris Kemp). The fully transcribed interviews have been abstracted, summarised and grouped into three results sub-sections: Risk Management, Legislation and Corporate Safety Culture.

### 4.1 Risk Management

**Respondent A advised:** Although hazards have "not changed a great deal...many people get hazards and risks totally confused".

He commented that perceptions of safety are down to the beholder and a "judgement call" is sometimes needed.

He argued crowd managers may use a "generic format" for risk assessment and this can lead to non-identification of hazards.

He expressed concerns over artist behaviour which with the best planning “causes mayhem...and then in a split second you’re got a fatality”.

He advised licensing officers need to “quantify” risks of human behaviour but are “no more qualified generally speaking than crowd safety managers.”

He also argued that licensing authorities “may not ask” for risk assessment but should always see it and be ratified by personnel with the “experience and knowledge to challenge” the contents.

He advised government “ethos” in many areas is “the individual undertakes the risk assessment” utilising “competent experienced personnel” which could mean “years of experience” but not “terribly academic”. Subsequently it’s all about “getting the balance right”.

He stated some authorities bring in a third party risk management company with a “track record”.

**Respondent B advised:** Risk Management and risk perception are still in early development and the industry needs a “more proactive approach” to bring the crowd manager in” at an earlier stage” of the event planning as “we are usually brought in at the last minute.....that’s when we have a negative outlook by saying we think this is wrong.”

He commented risk analysis must involve a “cultural aspect....systematic approach...mathematical...qualitative...quantitative...implementation...and of course the contingencies” and not just a “mathematical model”.

He advised an effective crowd management plan has the culture of the crowd as its biggest influence" as well as the "psychology of a crowd" and can "diminish those measurements in seconds". Subsequently the "morphing" element of crowd behaviour should be understood.

He argued "there should be an "underpinning basis of Keith Still's work which is very important".

He advised crowd managers should not "continuously replicate the information" from previous events as this can affect risk analysis and bring forth complacency. The entire system should be re-examined with a "fresh assessment of every event" to allow "active and reactive strategies".

He advised crowd managers should make professional decisions knowing who to ask for external assistance as no one person can "understand the full knowledge of an event". Subsequently documentation of evidence for decisions is a foundation.

He argued there will always be crowd related incidents involving sociotechnical elements involving people and systems. Subsequently a "reactive force" is needed to deal with contingencies.

**Respondent C advised:** Currently risk management strategy is based on theory of risks being "measurable or objective" and a "lack of understanding" exists. Crowd related risks are subjective in the "mind of the individual". A strategy would be a "need for risk analysis" prior to risk assessment.

He commented decisions could be flawed in perception of the beholder and the “science...must combine...issues of analysis, assessment and management to be fully effective”.

**Respondent D advised:** Risk assessment should be fluid as things change during the event and should analyse physical factors (including climate), cultural factors, psychological factors and social factors. Every concert should be assessed on “its own merits” and planning is a key consideration. If this is not done properly “people will die”.

He commented a “risk management matrix” would facilitate a “good strategy outline that people can build on” to identify risk.

He argued a majority of promoters may not carry out assessment or understand the effectiveness and “it’s often not a competent person” who is employed as a risk manager. Subsequently an inexperienced risk manager may “make decisions based on false information” due to lack of experience and knowledge.

#### 4.2 Legislation

**Respondent A advised:** The “cottage industries” have “come a long way” since the Taylor Report and The Purple Guide is seen as a “benchmark” giving “tools” to “improve standards” not allowing for complacency. However guidance may be “out of date” and following recent research “we need to reflect on that”. Subsequently “we need a third edition of the pop code” and industry “lobbying the government”.

He advised documentation should identify/quantify “acceptable” and “unacceptable” risks, what is “reasonably practicable”, “flag up key issues in crowd safety management

and advise key personnel should have required levels of competency. However a one size fits all document raises concerns.

He argued authorities having “very few conditions” and allowing “self regulation” is “absolutely not” the right way to maximise crowd safety. Licensing officers may have to defend “due diligence” in the Coroner’s court and be able to “robustly” defend license conditions.

He advised the Licensing Act 2003 allows interpretation of public safety as authorities “see fit” however differing licensing conditions can exist at similar venues and some licensing authorities may be “not so knowledgeable” as others.

**Respondent B advised:** “Legislation can always be updated”. It takes time, is hard to enforce and needs “right idealism” and the “right support behind it...to be effective...otherwise you spend your time enforcing”.

He was not sure current legislation was wrong but may be “little out of date” needing “more measurement...data collection...and an independent collector of data”

He advised everyone should “question the accuracy of data” as risk assessments and method statements “could be based on false data”. Subsequently guidance is “not prescriptive its just guidance.”

He argued any “authoritative body” “should encompass more than just the events industry”

He advised crowd managers have “become braver” are supported in their decision making process through “fear of prosecution” with “health and safety and the corporate manslaughter legislation”.

He advised changes in legislation would not “change the safety culture of crowd management or the industry.

**Respondent C advised:** Current legislation does not enforce efficient strategy to maximise crowd safety although “better understanding or education” of current guidelines is needed.

He argued self-regulation is not effective.

**Respondent D advised:** Licenses should insist on meetings between the promoter and the crowd manager with the local authority” to allow effective crowd safety management strategies which would create a “fallback mechanism in a triangulation” of knowledge for the particular audience.

He argued license documents should include effective conditions to make the licensee criminally liable under legislation and include a “statement or legislation” to enforce employment of qualified risk managers.

He commented guidance is utilised as legislation has to cover a multitude of events although current legislation identifies use of “mechanical factors” but not “psychology because you can’t”.

He argued for more stringent regulations as per the production industry although increased legislation “stop people from going to concerts”.

He argued effective enforcement needs properly trained licensing officers or an accident could happen.

He advised the “industry can self regulate but it won’t because the promoters don’t care...and they would try to get away with as much as they could.

He advised the industry has “big strengths”, recognise weaknesses but “not looking at opportunities” and know there are serious ever changing threats.

He further advised revision of the Purple Guide is “really important because things have changed” although “you need to get the best people to do it. You need a guide “that is expansive” and people to use “the guide properly”.

#### 4.3 Corporate Safety Culture

**Respondent A advised:** Promoters sell a show “subject to license”, and can “jump the gun in terms of strategy”. Subsequently event managers should be “accountable....taking responsibility” or “shouldn’t be doing the job”. Event managers have to be “knowledgeable” but that can give “no guarantees” in prioritising safety.

He commented the industry means “a lot of money” There is a balanced judgement between not “saying no” and “making show safe”. However “the bottom line is King” and the aim to maximise profit. Subsequently trying to save money which “impacts on crowd safety” is “wholly unacceptable” but “generally speaking promoters don’t...or not knowingly”.

He expressed doubts over licensing officers attending shows to complete checks and advised its “how seriously you take the role....and I’m quite sure this is going to be a variable”.

He was concerned “most licensing officers in the U.K...wouldn’t know what Roskilde was” and the sector has to make sure “everyone is on message”. Similarly he was “not aware” of the SFG but commented a “pan-European forum” can look at the “common problems”.

He argued in terms of Glastonbury's overcrowding someone should have "had the foresight to say that was unacceptable...and I think we have been remiss but we play catch up very quickly". The industry is sharing knowledge due to the consolidation of the industry.

He advised BCUC "is in part taking the embryo...to bring the key players together" and if they say "we need to do it differently...they will start to listen". However at present the "more enlightened" will see training benefits as "an edge on the competition" allowing safety product to be sold with added monetary value.

He argued SIA accreditation does not train personnel to work in all safety roles however it's becoming "increasingly apparent" the security sector is not "investing in the higher trained staff". For certain positions he clarified personnel need "particular skill sets" and in others "higher different levels of training" are required.

He concluded crowd safety "will become more scientific" although reservations include the "handful" of "crème de la crème" crowd safety managers may mean lack of depth in crowd safety teams.

**Respondent B advised:** although standards have "continuously improved" with "drivers of legislation...threat of litigation....standards set by the industry...standards set by government" things can always be improved. The rate of change is "inhibited by commercial factors" inhibiting development of "professionalism". Subsequently crowd management are usually "brought in at the last minute".

He commented there is a "commercial mistrust inside the crowd management industry and the "ideals of crowd management...still not been quantified".

He argued for regeneration of the crowd management industry in terms of “knowledge and understanding...of behaviours and the cultural issues”.

He advised crowd managers were “under commercial pressure to save money for promoters” although there is a “balance between safety culture, the essentials and also enjoyment” and between “safety and commercial analysis” with the safety element coming first. He did not believe promoters were “scared of spending money” and had consistently “taken a much more positive approach to safety” and even although there are commercial pressures it would not “endanger anybody’s attendance at an event”. Subsequently a decision has to be signed off based on the event being safe with regard to the evaluated facts.

He argued the “number of injuries...and issues...were miniscule in comparison to the number of attendees.”

He advised an educational process to “change the culture within the crowd management industry and “BCUC is helping” to do that although the course is based on “white electric music gigs which had no cultural feeling”.

He further commented “inhibiting factors” could be “surpassed by having a European culture” sharing information and personnel between companies, allowing a European idealism.

Finally the respondent advised we need to start thinking globally and how the frights we received from Roskilde and Glastonbury have not evolved into serious incidents. However “something will happen, nobody knows when but it will...because systems are weak and the system will fail”. He advised immediate action.

**Respondent C advised:** “Crowd safety management is an underdeveloped science...many events are poorly managed due to a lack of expertise”. He felt knowledge in the industry was not at a high enough standard to maximise safety but “by extending the education programs” this could be addressed and negate future incidents.

He commented the FD at BCUC is a “major step forward” and once better known will improve the industry which does not have an established safety culture. This is “beginning to happen” with projects by BCUC and the SFG and “hope for the future”. The course focuses on changing strategy to review legislation, risk assessment and safety culture to bring together academics and professionals from all areas.

He argued areas of the industry could be maximising profits, to meet license provisions and minimise insurance premiums and there is an ethical argument for safety improvements on non cost analysis basis.

He argued that promoters regard previous crowd related incidents as “traffic accidents” that “will never happen to them”.

**Respondent D advised:** from crowd management perspectives the current level of safety is probably “fine” although the industry wants “to save money...and the one thing they cut out are safety and management strategies”. Promoters “don’t give the crowd managers the tools” to facilitate effective strategy and “there is room for improvement.

He argued promoters are interested in safety only if a fatality gives “bad press” and they are “technically legally responsible”. Subsequently “the industry are guilty of maximising profits” with an ethical argument for increasing safety and should realise if they know how to make events safer and don’t implement measures because of money

they may have to explain that in court if somebody dies. Therefore the ticket price could be increased concomitantly with levels of safety.

He further advised the industry has learned lessons from previous incidents but “it costs money to institute” additional measures.

He argued although some larger promoters, including Live Nation and MCD, because of consolidation, are proactive and interested in current academic projects the industry pays “lip service to safety”. This is further affected by lack of interest outside of the industry in funding the type of safety studies such as by the SFG. The industry The BCUC FD course has “up-skilled the work force”. If licensing officers came onto the course they would be able to judge the competency of risk assessments and that would be a further move forward. Subsequently a strategy would be to get all of the experts in the same room.

## **V. Discussion of Results**

The primary research adopted by this study, looked to evaluate the whether the live music industry in the United Kingdom employed effective management strategies, to maximise crowd safety.

Following an extensive review of literature three main concepts were identified with respect to: risk management, legislation and corporate safety culture.

Subsequently this section, in which the results of primary research are discussed, has been divided into the three sub-sections, with each section evaluating a ‘systems view of organisational success’ as per Mullins (2002:135).

The aim, in discussion of the study results, is to shed light on the issue under investigation and bring in relevant literature from the initial review chapter to justify conclusions.

#### 5.1 Does the industry's strategic management of risk maximise safety?

From the review of literature it can be seen if the systematic evaluation of risk as per Kaplan et al (1981) and Haines (1991) is not completed effectively a systems failure may occur and negatively affect safety.

With regard to replies from the respondents, there was a general consensus that basic competencies in strategic risk management are be lacking within areas of the industry which can lead to serious crowd safety problems.

Respondent A and Respondent B were negative about the knowledge base, and lack of qualifications with regard to key industry personnel, including areas of the licensing authorities and crowd safety industry. Subsequently competency adversely affects the identification of risks.

All respondents further agreed that the perception of risk was also an important determining factor. However as they advised decisions are based on experience and knowledge and subsequently this was difficult to quantify within the industry in terms of a benchmark an effective safety strategy is difficult to determine. Furthermore Respondent C clarified current important crowd safety decisions could be flawed due to inaccurate perception of hazards and risks which agrees with the literature review.

To combat this Respondent B advised professional decisions cannot be made by one person and risk managers should know who to ask for external assistance but without input from experts as per Upton (2004b) the concert environment could continue to be based on opinion or speculation. However this decision making process is made untenable in certain concert scenarios by event managers as per the comments of Respondent B. He explained when crowd safety managers are brought in at the last minute they have a negative outlook, as proactive strategies of contingency planning are limited by timescale.

With respect to documentation Respondent D advised a risk management matrix would allow strategic identification of hazards and risks to provide an outline for analysis, but this must be done on an individual concert basis, as corroborated by Respondent B. Unfortunately Respondent A and Respondent B advised crowd managers may use generic risk assessment procedures and documentation which can lead to non-identification of particular hazards. From a negative standpoint, as per Kahnemann et al (1982), these sort of heuristic decisions based on a similar type of events could be fatally flawed. Consequently if there is a lack of effective contingencies due to inaccurate decision making processes this could negatively affect crowd safety.

All respondents identified as per the literature review that a scientific assessment of risk is needed. Respondent D clarified this as one with respect to physical, cultural, social and psychological factor of the respective audience element, although doubt was placed on the fluidity of current assessments in a

changing concert environment. Kemp et al (2004) had clarified a fluid assessment is paramount to maximising crowd safety. Therefore if ineffective decisions are being made before the event due to inaccurate risk assessment and the risk analysis is not ongoing throughout the event safety will be impacted upon.

It could therefore be seen from this initial section that a lack of adequate skills, knowledge, training and effective risk management strategies exist in some areas of the industry. These could be seen as serious strategic failings by the industry which could lead to: software (information); human and organisational failures culminating in systems failure, and ultimately human fatalities.

The question is, how many key personnel are lacking in core risk-based competencies and making decisions based on flawed perceptions. Conversely how does the industry make sure the effective decisions are being made in the future?

Respondent A advised the use of external risk management specialists is one way forward but put simply the industry surely must address this point immediately before there is a serious crowd related incident.

As Respondent D argued, if strategic risk management is not planned effectively “people will die”.

## 5.2 How does current legislation impact on maximising crowd safety?

With regard to current documentation the Respondents argued the industry has progressed since the initial Purple Guide, which is seen as a benchmark by

the industry, although it was thought to be out of date and a revision due. Respondent D suggested that as there are now experts in the fields of crowd dynamics, crowd behaviour and crowd psychology these types of individual should be highly involved but it appeared so far that they are not brought into relevant processes. Respondent A advised recent research had made future revision an issue which could be seen to relate to the studies of both Kemp *et al* (2004) and Still (2000). The respondents did not advise data or guidelines were incorrect although Respondent B commented current assessment and documentation could be based on false data and the research of experts should be taken on board. He also advised guidance may not be prescriptive enough which relates to the previous section on risk assessment and if the data is incorrect the findings will be incorrect and a systems failure could occur.

With respect to the findings of Still (2000) and Frosdick and Whalley (1997), Respondent C advised current legislative and guideline frameworks do not enforce efficient strategies to maximise crowd safety, although Respondent B argued the decisions of crowd safety managers had become 'braver', due to fear of prosecution under new Corporate Manslaughter legislation.

Additionally the critical comments of Respondent A flagged up; current guidelines not identifying acceptable or unacceptable risks or indeed the key issues in crowd safety. In both of these critiques the perceptions of Hannam (2004) are alluded to in those areas of the industry confused between guidelines and legislation. This was further corroborated by Respondent C and Respondent

D who argued that current legislation and guidelines were not effectively utilised or understood by some sections of the industry, although additional training or education could play an important role.

The respondents argued the actual legislation has to cover a multitude of events and cannot be a one size fits all document, however a Public Entertainments Licence may have very few stipulated conditions attached which can further adversely affect safety enforcement. These conditions if added, as per Respondent D, would make the licensee criminally liable which would be an effective measure. Additionally Respondent D argued existing guidance does not advise particular levels of competency for key personnel including risk managers which if this was in place would almost definitely raise safety levels.

In terms of enforcement there was a general negative slant on some areas of the licensing community. Respondent A advised the Licensing Act 2003 allows individual interpretation by licensing authorities, some of whom were less knowledgeable than others. This kind of self-regulation he stipulated was “absolutely not” the correct way to maximise safety. Furthermore the lack of insistence in the PEL, of an early meeting between the promoter, crowd safety manager and local authority is seen by Respondent D to be a major failing in identifying effective crowd safety strategy.

Respondent A argued some authorities do not even ask for documentation but even if they did some licensing officers may not be able to ratify, challenge or question its contents and in effect they are no more qualified than crowd

managers. The flaws that may be present in a risk assessment if not picked up could lead to possible fatalities. Additionally Respondent A put serious doubt on the numbers of licensing officers turning up to events to do inspections. The importance of the role to these individuals was argued to be a wide variable within the industry and needs to be addressed. This is corroborated by Van beek (2004) in that many Licensing personnel turn up late to events and leave little time to evaluate hazards and risk analysis.

Furthermore Respondent D argued a lack of properly trained licensing officers leads to lack of enforcement and an increase in crowd related incidents.

However Hannam (2004) argued lax enforcement exists due to minimal revenue from the government through the Health & Safety Executive.

And one could rationally evaluate from all the evidence given so far, and all the previous historical crowd related incidents, that financial support should be made available. This would allow the effective training of licensing personnel to enforce legislation and impose reasonable license condition before another disaster. The argument by Respondent A was that ineffective personnel may have to robustly defend conditions (or lack of) and their own due diligence in a Coroner's court, so they better be sure they did everything that was reasonable as the time of issue. Similarly it could be seen if event managers know that certain safety procedures could have been put in place but were not due to financial expense they may have to similarly defend that decision.

Current legislation may be a long way from perfect as Frosdick and Whalley (1997) advised due to the HSW Act 1974 being ill equipped and subsequently providing mechanical solutions to sociotechnical problems. The respondents agreed with this point although Respondent B advised to change legislation takes time, needs idealism and importantly support for the change. He did not think legislation would affect the safety culture of the industry. Respondent D supported this point as increased legislation may affect attendance looked for more stringent regulations.

He also importantly argued self regulation would not work as the industry don't want to spend money and would try to get away with as much as they could.

From all the evidence in this section it could be seen that an urgent review should be carried out with respect to documentation, guidance, process and people with the full backing of the industry, relevant experts and government.

With such an important current emphasis on public safety coupled with the imposed use of risk assessment by the Licensing Act 2003, it is necessary that effective documentation, enforcement of legislation and employment of suitably trained personnel are needed to maximise safety. Unfortunately the probable lack of effective knowledge and skills in some areas of the industry, is a worrying fact that could lead to future crowd related incidents. Additionally in terms of HSW Act 1974 and the Occupiers Act 1957 areas of the industry do not seem to be doing what is reasonably practicable in the light of current legislation, guidelines, and practices and could be found criminally liable. They may be

found negligent in their duty of care by not appointing competent personnel in key positions. They could also be found not to have facilitated reasonably practicable processes when faced by the Coroner's Court.

If effective guidelines are put in place, licensing documentation and processes are effective, and legislation is enforced the live event industry will be a safer place. With reference to the work of Harding (2001) and Still (2000), until then it could be a gamble of ageing legislation, flawed guidelines, and ineffective documentation coupled with inexperienced personnel who are lax in enforcement.....leading to eventual fatalities.

The claim by Respondent D of self regulation not being an option, due do some promoters not caring about a safety, was a worrying claim.

However, as he further argued, if more stringent regulations may stop attendance and any legislative change would not affect any safety culture in the industry this was doubly so. If you can't regulate or give an industry the option of self-regulation where do you go? As Harding (2001) argued, the disjointed approach from government, licensing and the industry can have negative impacts on crowd safety. Strategically five years later we may very likely have the same problems. Importantly what is the safety culture within the industry?

### 5.3 How does Corporate Safety Culture impact on maximising crowd safety?

It was clear from the results that the cottage industries comprising live music industry have developed a great deal since the Taylor Report in 1989. However the standards have improved because of legislation, threat of litigation and

higher standards set by the industry and government. All of these external factors have impacted on crowd safety strategy.

Unfortunately the respondents' advised the strategies pursued, involve promoters' selling shows before a license has been agreed and not involving crowd managers, as already discussed, at an early enough stage.

Commercialism is further argued to have a negative impact on the professionalism of the crowd safety industry with promoters seen to be knowledgeable in most instances but can give no guarantee with respect to the prioritisation of safety. What are the reasons for this?

From the results money seems to be the key with a balanced judgement between safety culture and a commercial analysis with the aim on maximising profit. However the respondents did not think event managers, as an industry, knowingly put lives at risk and some are taking a more proactive response to safety. Since this included the multinational entertainment organisation Live Nation and the respondents focussed on industry consolidation this was a positive way forward.

Respondent B further clarified the number of injuries were a very small percentage of attendees which was a very positive statistic.

However the respondents felt that the cost-benefit analysis completed by promoters did not allow for effective safety strategy as the correct tools are not given to crowd safety management to effectively maximise safety.

All of the respondents agreed there is much room for improvement and the industry has learned some elements from past incidents although the institution of further safety measures has a monetary cost the industry would rather not pay if in any way possible.

Respondent D argued at present the bad public relations viewpoint is all the industry worry about if a fatality did occur. This could relate to the lack of precedent for a conviction of corporate manslaughter and a very small fine of £20,000 under civil law, which is small in comparison to additional safety measures. Although they would have to explain lack of proactive safety strategy in court it may be a balanced risk event managers are willing to take. This is corroborated by Hill (2003) who argued the event management responsible for safety at Glastonbury in 2001 only changed their safety procedures to fulfil licensing regulations and the respondents felt this was very much an industry standard. Ethically they may never have done anymore to maximise safety if they had not been caught out.

Following this issue it could be seen the ethical argument a strategy, as argued by Respondent D, is to increase ticket costs in line with additional safety but how ethical is the industry when money is involved?

Hill (2003) had previously argued money is seen to be the key issue at live music events and in 2006 this is still seen to be the issue on a pure cost-benefit analysis.

Is the industry being proactive in its changing safety culture?

As developed by Richardson and Thompson (1994) there should be an ethical and social responsibility in any strategic operation within the business world. Additionally as per Mullins (2002) it should co-exist with desires of stakeholders and the legislative system realising any positive or negative actions can impinge on the community. Unfortunately it is possible that, as per Haines (1998), a strategic calculation is made by event managers between risks and benefits for shareholders. This could then lead to a conflict of objectives with regard to safety and become a multi-layered trade off.

It appears from the results that common safety problems are being discussed through the Safety Focus Group although conversely some licensing authorities would not know either who the SFG were or what happened at Roskilde and this needs to be corrected. Furthermore past incidents at events such as Glastonbury have occurred, as per Respondent A, because not one key member of the event management team advised the unacceptability of the situation.

Even although the industry is seen to play "catch up", at speed, the dangerous near misses should not happen again if an effective safety culture does exist.

Respondent C argued promoters see past incidents as "traffic accidents...that will never happen to them", but that could be seen both as an irresponsible or a pure commercial risk evaluation depending whether you are an audience member or an event manager.

Subsequently the respondents advised, to make significant changes to the safety culture, proactivity has to come from within and the leading experts from

the industry to lead the way for others to follow. The sector has to converse and find common targets, exhibiting a form of idealism that will not significantly affect profit margins but allow for effective safety strategy.

However there is a judged mistrust in the crowd management sector that was thought by the respondents to be prevalent across the entire industry.

Following this point the results concluded the recent formation of a Foundation Degree in Crowd & Safety Management at BCUC will assist greatly with the expansion of knowledge within the industry and is an important step forward in safety strategy and lack of safety culture. Its impact on educating key personnel on legislation, risk analysis & management was seen by the respondents to give hope for the future by bringing together academics and professionals from all areas of the industry.

Respondent B argued the regeneration of knowledge is so important to any change in safety culture to further understand cultural, psychological and behavioural factors for risk management purposes. It was evaluated regeneration of knowledge was not entirely prevalent within the industry.

Furthermore crowd safety is not an accepted science and needs development to effectively manage live events. However the FD course at present only concentrates on one type of audience and needs to expand its cultural focus into all genres of music as limiting types of behaviour under study will impact negatively of the knowledge base and crowd safety.

The results showed the lack of effective knowledge within the industry could only be addressed through educational programmes although little funding is available from the industry or externally from governmental sources to fund work by bodies such as the SFG.

However two of the largest promoters are highly interested in the academic projects underway on this course which have evaluated recent events such as Oasis, Green Day and Robbie Williams with respect to Kemp *et al* (2004). The entire industry needs to take note and at least have a rational conversation on future safety strategy. Time and money needs invested into effectively trained staff from crowd safety to licensing authorities to event management. However the industry may be guilty of not utilising personnel trained higher levels again because of cost.

As an example the results showed even with the Private Licensing Act 2001 events were not employing adequate numbers of SIA badged individuals and the respondents agreed this must change to maximise safety.

In conclusion of the results it was found at present the lack of skills and depth of knowledge within the industry are at the base of effective safety culture. The respondents felt the future would become more scientific and would allow particular skills sets to be fulfilled for key positions.

Courses such as the type at BCUC are seen to up skill the workforce and if the entire industry took the educational route bringing experts and professionals together, evaluating effective strategy from licensing to crowd safety, the entire

industry could progress to a higher level of effectiveness than it has been ever before.

However as Respondent B argued if the industry does not start thinking globally, learning from past incidents, and moving towards a defined safety culture steeped in crowd safety strategies an accident could happen. Systems at present are weak and systems failure could subsequently occur unless immediate action is taken.

#### 5.4 Affect of Methodological Factors on Results

In terms of the impact on the results of methodological factors it could be seen that there were various factors. Primarily, any professional being interviewed may only impart information to give a good impression of their professional standing due to a hidden agenda and a pressure to conform to what they interviewer should be hearing, and directing questions away from negativity. However it was not felt to be the case in any of the interviews. In evaluation this brought forth frank, expressive and at times very critical comments surrounding industry peers.

Secondly, as per Punch (1998) the validity of the research depended on interviewer bias or dishonesty of either party towards the results however this was not found to be the case and objectivity was strictly monitored. It was subsequently felt that responses to the researcher's interview questions were deepened through the rigorous review of literature.

In terms of reliability as per Silverman (1997) the same answers would not be given again in different circumstances as the results emerged from a social interaction within the interview. However even although the results have high validity and allow in-depth insight for the sector, if time constraints had not been an issue a larger sample of respondents would have been interviewed.

Furthermore an evaluative on-site study could look to determine where strategy was failing.

## **VI. Conclusions**

In conclusion to the study an evaluation has to be made, as to whether the strategies exhibited by live event industry maximise crowd safety. Primarily it is difficult to have a strategy in an industry ultimately comprised of renegade individuals whose main goal is to maximise profit. The study does not evaluate that the entire industry is full of greed or unacceptably puts public safety at risk, but it does show a lack of systematic evaluation as a whole, which could lead in some areas to systems failure. The industry therefore needs to be accountable to all of its shareholders and importantly to its external customer base that it commercially thrives on.

In terms of risk management there are basic competencies missing in many areas of the industry which need to be pinpointed and addressed. Key personnel in crowd safety management and licensing are not qualified to a benchmark level and a lack of knowledge base leads to ineffective identification of risk and

subsequent enforcement of policy. However until a benchmark exists this will continue to be a strategic failing.

Similarly some individuals ineffectively perceive risk either due to a heuristic pattern of decision making or lack of experience. Certain areas of the industry also seem guilty of not knowing when to bring in relevant experts to allow effective risk analysis and this should be a stipulation in any documentation.

Unfortunately there are also instances where individual risk assessment is not even carried out, leading to non-identification of hazards, and further unacceptable procedures in current practice of non-fluid risk assessment. The former reliant on previous event documentation tenders a fatally flawed evaluation by the individuals concerned. Furthermore if a non-fluid risk strategy is then additionally followed, due to the constant morphing of the concert environment, proactive and reactive strategies are severely impacted upon. Subsequently this negatively affects crowd safety to a high degree.

However it is recognised crowd safety managers are often brought in late to the event planning process, to save money, and this negatively affects with respect to strategic safety planning.

In terms of legislation it is recognised the industry has progressed extensively since the Taylor Report however it was concluded the Purple Guide is out of date and in need of revision by experts. All data should be re-assessed in light of recent and current research as serious doubt has been put on the validity and reliability of current methodologies. Furthermore current guidelines do not flag

up unacceptable risks, and as certain areas of the industry do not understand their roles under the guidelines, and even more importantly current Health and Safety legislation, this negatively impacts on strategy and urgently needs attention.

With reference to enforcement of legislation it was found certain licensing authorities may be producing ineffective PEL documentation or have lack of effective knowledge and skills to negate systems failure. Furthermore some authorities may not even be asking for risk documentation or have the ability to robustly evaluate risk documentation. An evaluation was also made of great variance in ability and motivation of licensing authorities where some licensing officers do not attend events.

All of these issues lead to potential fatal flaws in judgement which could lead to fatalities. The evidence suggested lack of financial support for Health and Safety Executive was to blame for lack of skill, knowledge, ability, motivation and enforcement and therefore this issue needs immediate governmental attention.

Changes in legislation or self-regulation were seen not to be the way forward by the study. The former was thought to negatively affect future event attendance and subsequent profits and the latter would not work due to the maximisation of profits by event managers. However if the industry does not put its house in order and a fatality occurs through negligence they may not have a choice. Self-regulation seems the more credible option if facilitated effectively.

Finally with reference to the safety culture of the industry standards were evaluated to have improved since Roskilde and Glastonbury in 2000 however there is seen to be much room for improvement.

The study showed commercialism has a negative impact on the professionalism of crowd safety managers and does not give them the correct tools to do the job effectively. Subsequently from the evidence an event manager may think in terms of minimising risk to commercial success rather than minimising risk to his external customers. Furthermore the strategic calculation can become a multi-layered trade off due to the competing desires of all stakeholders, including the threat of litigation and negative public relations if an incident was to occur.

The study evaluated the industry, during its consolidation, is being proactive in its interest of current academic study. Large concert promoters such as Live Nation are interested in discussing the problems on a rational basis but there is a lack of support for current crowd safety projects. The study concluded current educational pathways and scientific research are the way forward with experts in all fields leading the way to change safety culture within the live event industry.

Subsequently in terms of the study, the research question and the evidence presented, it was evaluated the live music industry in the United Kingdom is not maximising crowd safety.

Strategy is affected by the impact on resources, safety culture, legislation, social responsibility, competitive forces, suppliers and substitutes in the market.

However if an efficient assessment of risk, people and process management is not carried out systematic failure will occur. Even although there are a reported small number of incidents in the live music industry within the United Kingdom the experts think it is only time before an accident occurs with fatalities. This is due to a lack of crowd safety strategy by the industry as a whole with weak systems involving large variations in knowledge and skills, exacerbated by a disjointed approach from governmental organisations.

Furthermore the process is not assisted proactively due to the constant cost-benefit analysis of event managers who do not show the most effective ethical responsibility. In terms of a SWOT analysis the industry was evaluated to have strengths in knowledge and skill base and weakness in commercial pressure. Furthermore the opportunities exist although the sector may not recognise their existence and threats are ever present in the form of potential crowd related incidents that ineffective systems allow. It is therefore important for the industry to think globally, to be proactive, to discuss, to learn. However if people do not learn from the past systems will fail and subsequently people will die. Until then safety and security will continue to be a lottery.....

## **VII. Suggestions for Further Work**

From the study an evaluation was formed due to existing management strategies in the U.K live music industry and their negative affects on crowd safety. A future project would facilitate the production of an event focussed on crowd safety management. This would bring together the world's experts in all

relevant areas for informed debate and proactive discussion. The involvement of the Safety Focus Group, Live Music Forum and Health and Safety Commission would be paramount.

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## **Appendix 1: Interview Schedule**

1. **Respondent A:** Mr. Philip Winsor: Chief Licensing Officer, Milton Keynes Council at Milton Keynes Council Licensing Department, Milton Keynes, on 23<sup>rd</sup> January 2006 at 1400hrs.
2. **Respondent B:** Mr. Mark Harding: Managing Director, Showsec International Ltd at The Event Show, Olympia, London, on 26<sup>th</sup> January 2006 at 1215hrs.
3. **Respondent C:** Dr. Mick Upton: Head of Centre for Crowd Management and Security Studies and world-renowned Crowd Safety Management Consultant on Tuesday 7<sup>th</sup> February 2006 at 1153hrs (by email due to unforeseen illness).
4. **Respondent D:** Professor Chris Kemp: Dean of Leisure & Tourism Faculty, Buckinghamshire Chilterns University College & Educational and Project Consultant to the Centre for Crowd Management and Security Studies, at Buckinghamshire Chilterns University College, on Thursday 16<sup>th</sup> February, 2006 at 1000hrs.

\* (none of the respondents chose to seek anonymity)

## Appendix 2: Interview Question Rationale

The interview consisted of eleven questions differing in objective and to evaluate the three concepts of Risk Management, Legislation and Corporate Safety Culture:

**Question 1:** *What are your views on the current levels of crowd safety management in the live music industry and do you feel there is room for improvement? If so, which measures would be suitable?*

This was asked to establish a broad overview of the industry and, to create rapport and set a solid base for following questions and comparison with other respondents.

**Question 2:** *What are your views on risk management strategies within the live music industry and do you feel current measures maximise crowd safety? If no, which measures would increase levels of safety?*

Questions two was asked to determine the how risk management affects strategy.

**Question 3:** *Is there a possibility risk management decisions made, based to a degree on the risk perception of the individual, could be flawed and contribute to possible crowd related incidents?*

Question three was to assess the perception of heuristics on determination of risk.

**Question 4:** *Do you think current legislation enforces efficient management strategies to promote and facilitate maximised crowd safety? If no, which legislative measures would increase facilitation?*

Question four was asked to establish the respondents' viewpoints on legislation with regard to strategy and possible improvements.

**Question 5:** *The crowd safety expert Paul Wertheimer has suggested that one of the leading industry bodies, the Safety Focus Group, has not successfully met objectives to increase crowd safety, since its inception in 2001. Do you think the industry can self regulate or will legislation have to change primarily to maximise crowd safety?*

Question five was asked to determine views on self regulation and assess views on self-regulation. By utilisation of an expert's previous negative comments this showed competency in the knowledge of existing literature and encouraged positive interactivity.

**Question 6:** *Could areas of the industry be guilty of maximising profits, at the expense of maximising safety, and will only increase safety measures to meet license provisions and minimise public liability insurance premiums. Subsequently is there a justified ethical argument for increasing levels of crowd safety, not simply based on cost-benefit analysis?*

Question six looked directly at cost-benefit analysis as this was an important point from the literature review with respect to corporate culture.

**Question 7:** *Do you think the current live music industry has an established safety culture and recognises evolving its own strategy to deal with strengths, weaknesses, opportunities and threats?*

This was asked in order to focus on the strategic awareness in the live industry.

**Question 8:** *Do you think that the industry has learned any constructive lessons from previous crowd related incidents including Roskilde and the Big Day Out in Australia to allow these types of incidents to be negated?*

Question eight again aimed to discover and assess perceptions with respect to real life incidents and their effect on strategy.

**Question 9:** *With recent examples of:*

- *Overcrowding at the Glastonbury Festival in 2000 and the Big Beach Boutique in 2002*
- *Recent studies concluding calculations for ingress/egress, pedestrian planning, crowd dynamics and venue design could be potentially flawed when dealing with crowd safety management.*
- *Academics advising each and every revision of guidance documents, after crowd related incidents, provide technical solutions to more complex problems, instead of radical solutions.*
- *Academic studies suggesting decision making processes with regard to risk management, crowd psychology and crowd behaviour could be questioned as they relate only to the extent of knowledge and experience of event personnel.*

*Should there be a change in strategy allowing a complete review of Risk Management, Legislation and Crowd Safety Management.*

*This would bring together, leading academics, government experts and crowd safety managers. Would this facilitate a proactive move towards maximising crowd safety negating future incidents?*

Question nine was asked to assess possible changes in the industry giving credible examples from the literature review to create interaction. It covered all of the concepts to allow the respondents to strategically look forward and give proactive insight.

**Question 10:** *Do you think the current level of knowledge within the industry from event managers, licensing personnel, crowd safety managers and security/stewarding personnel is at a high enough standard to maximise crowd safety. If not how can you perceive the industry being proactive in this measure and be consistent throughout the U.K?*

Question ten took one step back from question nine to allow reflection on current levels of safety and juxtapose the *what is* factor with *what could be*.

**Question 11:** *Do you have any further comments?*

Question eleven provided an opportunity for the respondent to cover areas not previously discussed and make general comments about the interview process.