Can a company really measure its own Safety Culture?

Natasha Perry, Principal Consultant, DNV GL, Palace House, 3 Cathedral Street, London, UK, SE1 9DE

Martine Berg Hannevik, Leadership Development Consultant, DNV GL, Veritasveien 1, Høvik, Norway

Sarah A. D. Grøndahl, Head of Group HSE & Management System, DNV GL, Veritasveien 1, Høvik, Norway

The concept of 'Safety Culture' is no longer reserved for safety consultants, academics or the higher levels of senior management; it has become a well-known term that is used by a wide variety of people to describe and explore the way organisations manage safety and respond to risk. With more and more organisations becoming familiar with the concept, it is not surprising that companies are looking less to external consultants to help them assess their Safety Culture, and more to themselves to carry out their own internal Safety Culture evaluation. In January 2015 DNV GL embarked on a project to assess its own Safety Culture to understand more about why a series of undesirable events had occurred and to develop interventions that would help put a stop to them. However, in reality, was this a wise idea? Can a company really measure its own Safety Culture? Although leaving external consultancies behind and going it alone would appear an attractive proposition initially, can you really get the results you need to make robust long term safety improvements? This paper explores the issues surrounding a number of biases inherent in self-assessment, including the methodological approach taken to self-assessment in order to help remain objective and impartial during data collection and analysis, the lessons learnt whilst directly tackling sometimes sensitive safety issues during interviews with colleagues and whether the typically 'anonymous' nature of Safety Culture measurement can still be maintained even though people know each other. This paper charts the process of Safety Culture self-assessment. It considers ways to mitigate against some of the main pitfalls, such as biases in the interpretation of 'uncomfortable' findings. It also attempts to conclude whether or not self-assessment really is a possibility if an accurate and meaningful assessment is genuinely sought; or whether turning to an external body to assist is actually more effective in the long term.

Keywords: Safety Culture; Safety Culture self-assessment; biases; objective; impartial; anonymous.

Introduction

The term 'Safety Culture' can be traced all the way back to the Chernobyl accident in 1986. Since this time the concept has grown hugely in terms of the importance industries and organisations place on it as a key factor in the execution of good safety management and the prevention of incidents and accidents. With such a high priority placed on Safety Culture it is not surprising that more and more companies seek to assess and strengthen their own Safety Culture in an effort to actively manage safety risks. In January 2015 DNV GL did exactly this; it embarked on a project to assess its Safety Culture to understand more about why a series of undesirable events had occurred and to support the development of interventions that would help put a stop to them. However, rather than choosing to commission a specialist contractor to undertake the assessment on DNV GL's behalf, it made the bold decision to assess its own Safety Culture. This paper describes the process of self-assessment undertaken by DNV GL, the technical issues encountered during the main phases of the assessment work, the potential benefits and pitfalls of the self-assessment approach and what a company can do to strengthen its approach to self-assessment. Overall, the paper attempts to address the question: can a company really measure its own Safety Culture?

Approach taken to Safety Culture Self-Assessment

The self-assessment team

DNV GL operates in more than 100 countries with a workforce of around 15,000 professionals. It provides classification and technical assurance along with software and independent expert advisory services primarily to the maritime, oil & gas and energy industries. It also provides certification services to customers across a wide range of industries. The business is divided into five main business areas: oil & gas, energy, maritime, business assurance, and software, as well as support functions within a global shared service centre (GSS) and Group centre. Each business area operates largely independently. The team created to conduct the Safety Culture assessment consisted of two project managers; a communications specialist; a steering committee (led by the Chief Human Resources Officer); an 'expert' group (nominated by the steering committee and the Chief Executive Officer's (CEO's) from the six different business areas and including HSE experts from each business area) and a technical project team of consultants. Most notably, the technical project team came from different parts of the DNV GL business and were selected on the basis of their technical knowledge and competence in the field of Safety Culture assessment and improvement. Additionally, the technical team included four MSc Psychology students from the University of Oslo, Norway.

The methodology applied

The Safety Culture self-assessment methodology applied consisted of five phases, as follows:

- Phase 1: Review of the main organisational risks the main health and safety risks and challenges in DNV GL were identified, as well as all the relevant stakeholders for the project, to ensure that the results were representative and owned by the most relevant stakeholders in the company.
- Phase 2: Development of the 'envisioned' state a description of how a world class Safety Culture would 'look and feel' was developed with the help of internal and external research and decisions were made on the key dimensions of a strong Safety Culture.

• Phase 3: Assessment of where DNV GL currently is with regard to Safety Culture - the level of Safety Can a company really smeasure its own Safety Culture Survey and review of the accident and incident data) and qualitative analyses (one-to-one interviews and a review of management system Natasha Party meintained). Onput and all employees across the organisation was a Rev aspect of this phase.

Martine Berg Hannevik, Leadership Development Consultant, DNV, GL, Veritasveien 1, Høvik, Norway Phase 4: Analysis of the gap – the project team evaluated each of the seven Safety Culture dimensions in terms of Sarah A. DY Grøndahy, Alagurgothup FISE when a lagenerites bacand Drevice of the aswelent yer other, average maturity levels

and the envisioned state. The concept of 'Safety Culture' is no longer reserved for safety consultants, academics or the higher levels of

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considers ways to mitigate against some of the main pitfalls, such as biases in the interpretation of In Phase 4 the property in the individual and the standard and the second and the

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actually more effective in the long term. The one-to-one interviews and gap analysis were therefore two key areas that could be perceived as presenting the highest risk of inher Kay sentas sets in the set of t

Interviewing of Interviewing

The term 'Safety Culture' can be traced all the way back to the Chernobyl accident in 1986. Since this time the concept has grown hugely in terms of the importance industries and organisations place on it as a key factor in the execution of good BateweenaAppenaent and the prevention violants and use identity. DWith Gluchraphighessionithin taiced was bafebu and there is a The surfaction was more and more from the surface of the surface o inanatigatafebe riskson Inb Haindarchi 2015 EDADYO GLs didings activitationally signafkachiday) alardjeer sto assets spices aftern Culture wo busiessand more about why a series off suffering being the state when the series of th webed to the help participatopint on the rise webed were reather than a charge sing 0 to response some as preciaily station trade to the the reation of the trade takes were reader to the reasonable of the reader to the reader assessment dih DNM of L forbeltal 6 witrenade sthe about edecision to taskess lits to vem Stafetes Chalt theing This i labour de state beieve percense the year of a season of the matter of the season assEssibent (worky, the tpotential benefits and patials Eagline hears effective strate http://worky, the tpotential benefits and patials Eagline hears effective the second strategy and the strategy and the second strategy hts vappeoacbxtpl siele classes share. Of versially take appethetigenetist take address y be true prior to and plannes tegelab measuring y takes over Safety Colleane le.

Apply values it is Safety OutpresSelfs Assessment tely one hour. The interview started with an introduction to the interviewer and scribe, as well as a presentation of the project. Interviews were conducted via an in-house visual The self-assessment teamhone, video conference or in person. Each interviewee was informed that the interview was

voluntary, confidential, and could be ended at any time. They were also reminded of the importance of answering honestly. DNV GL operates in more than 100 countries with a workforce of around 15,000 professionals. It provides classification They were told that they could choose not to answer questions if they did not want to and that the specific answers they and technical assurance along with software and independent expert advisory services primarily to the maritime, oil & gas provided would not be used individually of traced back to them specifically. Furthermore, the transcripts from the and energy industries. It also provides certification services to customers across a wide range of industries. The business is interviews were anonymised using a numerical coding system so that no information could be traced back to the individual, divided into five man business areas: oil & gas, energy, maritime, business assurance, and software, as well as support the transcripts were also staved in a special secure (GSS) and Group centre. Each business area operates largely independently.

The even wiregestime onduct the Safaty Culture assessment consisted of two project managers; a communications specialist: a steering committee (led by the Chief Human Resources Officer); an 'expert' group (nominated by the steering committee and one chief Executive officer) and the chief Human Resources officer); an 'expert' group (nominated by the steering committee and one chief Executive officer) and the chief Human Resources officer); an 'expert' group (nominated by the steering committee and one chief Executive officer) and the chief Human Resources officer); an 'expert' group (nominated by the steering committee and one chief Executive officer) and the chief Human Resources officer); an 'expert' group (nominated by the steering committee and one chief Executive officer) and the chief Human Resources officer); an 'expert' group (nominated by the steering committee and the chief Executive officer) and the chief Human Resources officer); an 'expert' group (nominated by the steering committee and the chief Executive officer) and the chief Human Resources officer); and the chief of th the the control becaute on the stephonen of the interviewers were full time permanent members of DNV GL staff who may have worked with any one of the interviewees. The interviewers were asked if they ever interviewed anyone they knew, and one **Epeamethodology** applied

The Safapp Gulture is elfrassessment method hogy applied mensisted of tweephases cashed hows uarantee my objectivity and so I asked someone else to do the interview; the other time I felt comfortable and asked prior to starting up the interview if the interviewee felt comparison with the main organisational risks—the main health and safety risks and challenges in DNV GL were identified, as well as all the relevant stakeholders for the project to ensure that the results were representative interview results since Tknew more about his working context I might not have usked the same follow up questions as I might have done with a there were relevant stakeholders in the company.

This feedback suggests that by the trewing someone state in a description of how a world class Safety Culture would 'look interviewend stituations resultingen withorten construction of the solution of interview where they feel they know someone too well and this relationship could bias or influence the direction of the Ganea company really measure its own Safety Culture?

Handst Pand Brienings Consultant, DNV GL, Palace House, 3 Cathedral Street, London, UK, SE1 9DE

Martine Buty Hawnevika Ltaderships Detaelopment Consoltanta DNM Gki, Wenitas weiewel; Hawik, Norwithough this is the case in any interview situation, it is clearly more of an issue during self-assessment. However, the interviewers generally felt that Sarah A. D. Grandahl, Head of Group HSE & Management System, D. Yurd Veritasveien J. Havik, Norway, too much (and office people had warned up they were very open euring interviews, with some instances of people sharing too much (and sometimes uneconcept of insertant daturbout about about about the series for Juney venerations, bearderide or phanagraphic terms in the series of the series tended to been barten and the second and the second and the second and the second s engaging. Being the water we and have a state of the second the second the second and the second Furthermore and in Neitrice Space of the state of the sta

To further characteristic of undesirable events had to surred and its develope intersections that would have used and its develope intersections that would have used and its developed and its have provided the have been and the second and going it alone would appear an attractive proposition explained, initially, can you really get the results you need to make robust long term safety improvements? This paper

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a difficult topic. Keywords: Safety Culture; Safety Culture self-assessment; biases; objective; impartial; anonymous.

Conducting the Gap Analysis Introduction

The workshop The term 'Safety Culture' can be traced all the way back to the Chernobyl accident in 1986. Since this time the concept has Thouse faired with means some to the second deviation of the second second second where Rew factor to the second of the factor of the second of the factor of the second o Sarbury management of the second second water conditions with a second second second second second second second hour supprising that make and anot a companies exection discover and scale place time in wards are indered and the invariant interview of the second second and the second second and the second s managebafetyonskan Gonanatary 2015 DNV GL did exactly this; it embarked on a project to assess its Safety Culture to Indrage sately disks. In value years of undesirable events had occurred and to support the development of interventions that in order to conduct the gap analysis the Safety Culture assessment indings, were categorised into different maturity levels would help put a stop to them. However, rather than choosing to commission a specialist contractor to undertake the for all seven dimensions during a one-day workshop attended by the multidisciplinary project feam in May 2015. The assessment on DNV GL's behalf it made the bold decision to assess its own Safety Culture. This paper describes the analysis used evidence from the survey findings and results of a document review (of mernal management procedures) and process of self-assessment undertaken by DNV CL the technical issues encountered during the main phases of the assessment work, the potential benefits and pittalls of the self-assessment approach and what a company can do to strengthen were only conducted with two business areas, the team was careful not to apply these findings yere also apply on the paper attempts to address the paper attempts to address the question: can a company really measure its own safety Culture?

During the workshop, the conclusions from the survey and document review were presented and discussed, before **Approvals**, where **Self the server** under the dimensions. The process was repeated for all seven dimensions until unanimity was reached for each dimension from all workshop participants.

Enverset biases? in more than 100 countries with a workforce of around 15,000 professionals. It provides classification and technical answraphe along with serit and independent expert and visory services, primarily to the maritimer all as an and energy judustries. It also provides certification, services of sustamers, across havide, cause interdustries. The hysinessile divided in safeye chain business areasi with Edgaratenorgy atmatine by business as an area software character with an at a present of the second software character and software characte functions within a global shared service centre (GSS) and Group centre tEach business area aperates largely independendy. These appressed in conduct the Safety a Gulture assessment consisted of two project managers: a communications specialist Risterning committee and hatheachief Hupan Resources Officer); and expert' stepped nominated by the steering committee ande the Schief Free wire of the est of the state of the second st kusiness assed archeotochnical assign to an of an automatics. Mast activity the bearing of the provided the second and strain a second differences and the second party of the DNX solution and the parts of the business. This interest included here the been de overlan analysis impartant as party of the DNX solution and the parts of the basis of the When the range of dyres; worwayas asked directly whether they felt that they were influenced in their conclusions there was a slightly mixed response. On one hand team members did not feel they were influenced because they worked for the **Thepmethedalogyhapplied**alysis team had each worked on several of the different project work packages (e.g. document review, survey creation etc.), and this created opportunities for triangulation, or confirmation of conclusions from different The Safety Culture self-assessment methodology applied consisted of five phases, as follows: work package approaches. It was also felt that because the project was so large and encompassing (10,000+ survey results) that the gPhasel si Review of the main or generational acknowledge and the provide the description of the Division of the Divi had been ware identified a submitter to an a submitter the particular the provided by the provided of the provided by the prov result that and solvenes they They not state the low and state the company honesty in order that the organisation could improve. This motivated the gap analysis team to dig deep for the direct and underlying causes of issues, as without those, it would not be possible of direct and underlying causes of issues, as without those, it would 'look

and feel' was developed with the help of internal and external research and decisions were made on the key dimensions of a strong Safety Culture.

However, there was also an alternative view from the gap analysis team. One consultant commented "of course" the Gansan company creally imeasure its own a Safety Culture? of employees of DNV GL and, additionally, had a background in human factors was believed to have sub-consciously influenced both the analysis and Natesha Percon Principal and constraints of the same consultant o Altarmade the constitute to the same constitute of the same constitu company, however to mitigate against this the team were always careful to check back with the facts to ensure conclusions were based so hard existing the back with the facts to ensure conclusions were based so hard existence. Fither the back beck with the facts to ensure a ways careful to the were based so hard existence in the back with the facts to ensure conclusions were based so hard existence in the back with the facts to ensure conclusions were based so hard existence in the back with the facts to ensure conclusions were based so hard existence in the back with the facts to ensure conclusions were based so hard existence in the back with the back with the facts to ensure conclusions were based of the back with the back with the back with the back with the facts to ensure conclusions were based of the back with the back with

Dealing with uncomfortable findings safety and respond to risk. With more and more organisations becoming with uncomfortable findings.

Assessing the Safety Culture is not subjusting that comparise are comparised to extern a consumity to extern the contents to the safety Culture is not subjusting that comparise and more to the merely so the arry out their own internal Safety Culture it will always be difficult to hear that people are soft and external to a project to assess its own Safety Culture to understand to the arrow of any 2015 DNV GL emparted on a project to assess its own Safety Culture to understand or working in a potentially unsafe situation. In January 2015 DNV GL emparted and to develop interventions that would help put a potentially unsafe situation where they are not appreciate to a project to a set of a set of the safety culture is and more assess its contrast and comparison of the put a potentially unsafe situation where they early culture to and to develop interventions that would help put a potentially unsafe situation. The analysis are not appreciate the safety culture to understand experimentation of the safety culture to any th see approprintian portion look year the control of the feature instruction of the feature in the control of the organisation explores the issues surrounding a number of biases inherent in self-assessment, including the methodological

approach taken to self-assessment in order to help remain objective and impartial during data collection and This issue was was you of the taken of taken of the taken of the taken of the taken of taken One member worf through jecoptea know plante other. This paper charts the process of Safety Culture self-assessment. It

considers ways to mitigate against some of the main pitfalls, such as biases in the interpretation of "Some of the uties diversity of the source of the uties of the uties of the source of the which could an facourare and differing to addessmen Hogen winebe sought for finding running form external budy on assiste is a fety Culture survey and decivally-more affactive in which any technique was pointing us in a clear direction of what needed to be improved to help our colleagues. I think I felt more that it was important to highlight this, because we had a responsibility to let management know about the weak areas. I felt we were doing the management a favour rather than feeling uncomfortable in reporting **Introductions**."

Therefore Same and the Sun our need that the was a basking the college and a college of this time this time the college of the same and a college of erowith meetry in remarged of the remains and the second of the second o safety management and the prevention of incidents and organisations mace on reasonable priority placed on Safety Culture it is Other project team internet and more and more service services and accidents to report of sensitive the more and more service in the service service service in the project team of the provident to accidents to report of sensitive the more and more service in the service service service and the provident to accident to the provident team of the provident to accidents the provident team of the provident of the service and the provident team of the provident to accident to the service and the provident team of the service and the service and the provident team of the service and the service and the provident team of the service and the service and the provident team of the service and the service and the provident team of the service and the service and the provident team of the service and the service assessment on DNV GL's behalf, it made the bold decision to assess its own Safety Culture. This paper describes the IF the Begiefits as festige and the main phases of the technical issues encountered during the main phases of the assessment work, the potential benefits and pitfalls of the self-assessment approach and what a company can do to strengthen Its tapping on the sent as a sent as a property of the sent as a sent the sent as a sent the sent a company can do to strengthen and the sent as a sent a company frame, sent a

Approach taken to safety Culture Self Assessment organisation and helps team members know who to talk to, when to talk to them, what to ask and how.

The self-assessment team It helps to provide knowledge of, and access to, relevant information (e.g. accident data, management systems, DNV GL poperades cinencorevitian dollerosisteries with edoes reference of the dollar o and technical assurance along with software and independent expert advisory services primarily to the maritime, oil & gas and energy industries if also provides certification services to customers across a wide range of industries.¹ The business is divided into five many subscription of the gas, energy, maritime, business assurance, and software, as well as support functions within anglobal shared service centre (GERS) and Group centre, sEach business stee operates largely independently. The team created to conduct the Safety Gulture assessment consisted of two project managers; a communications specialist; a steering committee (led by the Chief Human Resources Officer); an 'expert' group (nominated by the steering committee and the Chile Extensive Whiterist (GEOds) grand new sixtidifferent stushes so jet sheeps of the and of the diago HSE externation as the chile of the set o business area) and a technical project team of consultants. Most notably, the technical project team came from different parts of the DNV GL business and were selected on the basis of their technical knowledge and competence in the field of Safety Culture assessment and improvement. Additionally, the technical team included four MSc Psychology students from the University of Qsin Nervanicipants talked the same 'language' and understand the same reference points and company

The methodology applied

The Safety Culture self-assessment methodology applied consisted of five phases, as follows:

- Hallows for closer follow-up with the key project stakeholders (including senior management) and helps them to Phase 1: Review of the main organisational risks the main health and safety instantion and challenges in DNV GL better undernined, as well as all the relevant stakeholders for the project, to ensure that the results were representative :
- and wined by the mark is levent stakeholden in the assessment is being handled in an appropriate and positive way.

The benef Phase 2 is Development of than envisioned a state ula description who would be lass Safety gulture would be and Culture. And decisions were made on the key dimensions of a strong Safety Culture.

The Potential Pitfalls of Self-Assessment. Can a company really measure its own Safety Culture? Although the benefits are clear, it is important to also consider some of the less optimal aspects of self-assessment; these are National Observes Following Consultant, DNV GL, Palace House, 3 Cathedral Street, London, UK, SE1 9DE

Martine Bargh Hannevik, Leadership Development forseltentin DNV and ys Verites ystem the Havikin Norway elation to their own Sarah A. D. Grøndahl, Head of Group HSE & Management System, DNV GL, Veritasveier I, Høvik, Norway

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- explore the way organisations manage safety and respond to risk. With more and more organisations becoming It railing which the concept's the sucception of the to companies are proxide is so external consultants to help internet Safety Culture, and more to themselves to carry out their own internal Safety Culture
- evaluation. In January 2015 DNV GL embarked on a project to assess its own Safety Culture to understand It mile about why a series of understable events that occurred and to develop interventions that would werp put as personal live want object is the analytic assesses in the series of the serie the throught tearing verifying it is in the state of the
- initially, can you really get the results you need to make robust long term safety improvements? This paper It and results and results in the results of the results of the result of the result of the result of the results of the re authonotical yakod looseffasses she in the perturbed help remain objective and impartial during data collection and
- analysis, the lessons learnt whilst directly tackling sometimes sensitive safety issues during interviews with Notiflagues and whether the synchryse morifle out at the or safety conduct ness the weather than the same th results though people know each other. This paper charts the process of Safety Culture self-assessment. It

considers ways to mitigate against some of the main pitfalls, such as biases in the interpretation of Use of an Lasternal Constructor and the source of the main pitfalls and the source of the source

an accurate and meanings of also attempts to contract of the stratsessment reary is a possibility in A good test of which the stratsessment is genuinely sough; or whether turning to an external body to assist is exercise, or if given the option, use an external agency to run the assessment. Opinions on this varied across the project team. However, or the stratses after the stratses are stratses and the second to run the assessment. More stratses and the stratses are stratses and the second test of the stratses are stratses and the second test of the stratses are stratses and the stratses are stratses are stratses are stratses are stratses and the stratses are stratses are stratses are stratses and the stratses are stratses competence to carry out an assessment could be found within DNV GL. Also, the organisation is of a sufficiently large size that it permits a significant degree of anonymity between the project team and the rest of the 15,000+ employees. The berm Suffic Comportantal bernautical the cover basef to the One as the second an idu 1985 Since this nine the confidences propurchugette pendents of the millionarces industries and romanisate of the preservation swhite a factor in the second good sailtynkandgeiniensanhoute wheventhenboundatientofathe aesidennen wink soch aunghe produty praced dimesatory commert af interviewisingethad more and more configurates seeken assessant seengine in the safety cillatily avait effort as a drivers manage safets marks.even January 20015 DNVy GLACIVAL 20015 the niver the niver the niver to assess its Safety Culture to understand more about why a series of undesirable events had occurred and to support the development of interventions that Under members of the project iteam were more undecided. Some felt that due to the size of the company and the competence would help put a stop to them. However, rather than choosing to commission a specialist contractor to undertake the within it, it was the treft fectision to self-assess. However, they also acknowledged that having an external agency involved assessment on DNV GL s behalf, it made the bold decision to assess its own Safety. Culture is the agency for the other assessment indertaken, by DNV GL, the technical issues conclustered during the main of the aspects of the other assessment undertaken, by DNV GL, the technical issues encountered during the main of aspects of the other assessment work, the potential benefits and pitfalls of the self-assessment appropriate mix. One consultant assessment, work, the potential benefits and pitfalls of the self-assessment approach and what a company can do to strengthen assessment, work, the potential benefits and pitfalls of the self-assessment approach and what a company can do to strengthen assessment, work, the potential benefits and pitfalls of the self-assessment approach and what a company can do to strengthen its approach to self-assessment. Overall, the paper attempts to address the question: can a company really measure its own Strety Reultmeeto-one interviews I may prefer to use an external contractor; however, there are advantages to having that same external contractor have all of the data and therefore the whole picture, instead of being expected to jump in, in the Approach taken to Safety Culture Self-Assessment

Finelselfrassessment team project team felt they would opt to use an external contractor to conduct the Safety Culture assessment again, primarily to seek a different perspective on the organisation which could then be appropriately challenged DNV GL operates in more than 100 countries with a workforce of around 15,000 professionals. It provides classification and technical assurance along with software and independent expert advisory services primarily to the maritime, oil & gas Conservating This gains provides certification services to customers across a wide range of industries. The business is divided into five main business areas: oil & gas, energy, maritime, business assurance, and software, as well as support When the miting tagen balasharked set vice wanner (CSB) and Group veloures a Barchi business after operatives the geory independently Thereany strenged to conduce the Sector Quarte have shired in the product of the product of the communication of the sector of t The sensity commission fred by the 10 hor the theory sense of the sens anding on Chiefs Breeding i Officers sn(CEO's) stille thensi project tranbusiness are a land, including HSE experts from each business area) and a technical project team of consultants. Most notably, the technical project team came from different if you have a sufficiently competent project team that is also divided across various work packages, then the work can be parts of the DNV fit business and were selected on the basis of their technical knowledge and competence in the field of some as objectively as external consultants would manage. The challenge lies more in defining what is mean by Safety Safety Culture assessment and improvement. Additionally, the technical team included four MSC Psychology students from Culture and operationalizing it properly, but that is the same challenge that external consultancies would also encounter. So the key is to have a competent project team that understands the challenges related to Safety Culture analyses and that can The line the diord wathout dat triangulates the results to reduce subjectivity and increase the likelihood of robust results.

The same senside is the method of the sensitive assessment or not. For example, if a company had less than 50 people then it would be hard to conduc **Phase 1: Review of the original forgation of the** confidentiative identified as the bar all the states and the bar and the states a close proxand owned by the prost relevant state of discrete the company) then objective self-assessment may still be possible.

Another iRhase 2a Developmenth of this lieuvisioned' state maches cription inf how as most dislass Safety Culture from the first of the state of the assessmenandr feeld avascilavel opeding that be dielpe of internalianth external faster Candreleniston to were Ordeprojective that member editionsibns of a strong Safety Culture.

To self-assess, I feel that the larger challenge for a company is defining the criteria around what to measure. We used a Ganta company/really measure its own Safety Gulture? Culture projects our project team members had managed, and this led to a set of valid indicators we were comfortable using. However, if a company starts Notasha Renxwith using Cansultans essence of valid indicators we were comfortable using. However, if a company starts Martitle Belightisatterski, echiersmer Devekspalende Gondultahin, Drovoce, we sould use there is the source of the stand more

- about their strong and weaker areas of Safety Culture." Sarah A. D. Grøndahl, Head of Group HSE & Management System, DNV GL, Veritasveien 1, Høvik, Norway This paper presents a range of arguments for and against self-assessment as a way of measuring organisational Safety Culture. If Ebenganner wishafety full measuring organisational Safety senior management; it has become a well-known term that is used by a wide variety of people to describe and advice: explore the way organisations manage safety and respond to risk. With more and more organisations becoming
 - Figurilian with the sconcere icompany was in a company as the second a second a second second to be address of the second se
 - Culture assessing in the company-does not invertice in house skins and experience required to conduct a Safety Culture assessing in January 2015 DNV, GL embarked on a project to assess its own Safety Culture to understand successing with DNV CL Dit this was the team having repeatedly conducted assessments more about why a series of undesirable events had occurred and to develop interventions that would help put a stop to them. However, in reality, was this a wise idea? Can a company really measure its own Safety Culture?
 - FAlthough leaving external consultancies behind and gping it alone would appear an attractive proposition initial style company. Select project team meet to make robust long term safety improvements? This paper and imparitance the results you need to make robust long term safety improvements? This paper explores the issues surrounding a number of blaces inheren in Self-assessment, including the methodological
 - Arapproach taken to self-assessment in order to help memoin objective and impartial during data collection and analysis, the lessons learnt, whilst directly fackling sometimes sensitive safety issues during interview with include of Safety Safety and whether the typically anonymous nature of Safety Culture interview and whether the typically anonymous nature of Safety Culture interview and whether the typically anonymous nature of Safety Culture interview and interview with excellences and whether the typically anonymous nature of Safety Culture interview and the collective set of results and health of the typically anonymous nature of Safety Culture interview and the astronement can still be maintained results of the typically anonymous nature of Safety Culture interview and the astronement can still be maintained even to be a structure of the typically anonymous nature of Safety Culture interview and the astronement can still be maintained results of the typically anonymous faultion of the typical structure of the typical struct
 - 'uncomfortable' findings. It also attempts to conclude whether or not self-assessment really is a possibility if Select project learn and meaning the statistic protection of the self self setting up the endertying HSt processes and practising within the meaning of the mean of the self setting to an external body to assist is practising within the mean of the mean of the setting company HSE tools. Keywords: Safety Culture; Safety Culture self-assessment; biases; objective; impartial; anonymous.

For the survey itself, if possible, commission an independent survey firm to administer it independently to assure Introduction pants of confidentiality and anonymity.

The term (Safaty Gulture's can be traced all the way back to the Chernoby accident in 1,986. Since this time the coecept has grown hugely, in terms of the importance industries and or spisations place onsit as a key darter in the expention of another and safety management and the prevention of incidents and accidents fewith such a high priority intered wer Safety Cipiture sites not surprising that more and more from the second and strengthen their own Safety Culture in an effort to actively manage safety risks. In January 2015 DNV GL did exactly this; it embarked on a project to assess its Safety Culture to understan Organisation with raiseries of hut desirable venus hater occurred and to support the develop high the venus on a that assessment with ONV GIL'the other the material polar newsion of the set of th process obusiness of using the main phases of the technical issues encountered during the main phases of the assessment work, the potential benefits and pitfalls of the self-assessment approach and what a company can do to strengthen when analysing findings, try not no fill in gaps in the findings will personal experiences. The project team need to its approach to self-assessment. Overall, the paper altempts to address the question: can a company really measure its own Safety Culture? The project team of a team. Certainly final conclusions should always be made by consensus.

Approach taken to Safety help unsue that self-Assessment can be an objective, insightful and pragmatic way to The self-assessment team Safety Culture assessment.

DNV GL operates in more than 100 countries with a workforce of around 15,000 professionals. It provides classification and technical assurance along with software and independent expert advisory services primarily to the maritime, oil & gas and energy industries. It also provides certification services to customers across a wide range of industries. The business is divided into five main business areas: oil & gas, energy, maritime, business assurance, and software, as well as support functions within a global shared service centre (GSS) and Group centre. Each business area operates largely independently. The team created to conduct the Safety Culture assessment consisted of two project managers; a communications specialist; a steering committee (led by the Chief Human Resources Officer); an 'expert' group (nominated by the steering committee and the Chief Executive Officer's (CEO's) from the six different business areas and including HSE experts from each business area) and a technical project team of consultants. Most notably, the technical project team came from different parts of the DNV GL business and were selected on the basis of their technical knowledge and competence in the field of Safety Culture assessment and improvement. Additionally, the technical team included four MSc Psychology students from the University of Oslo, Norway.

The methodology applied

The Safety Culture self-assessment methodology applied consisted of five phases, as follows:

- Phase 1: Review of the main organisational risks the main health and safety risks and challenges in DNV GL were identified, as well as all the relevant stakeholders for the project, to ensure that the results were representative and owned by the most relevant stakeholders in the company.
- Phase 2: Development of the 'envisioned' state a description of how a world class Safety Culture would 'look and feel' was developed with the help of internal and external research and decisions were made on the key dimensions of a strong Safety Culture.