

## Prosjekt HC-lekkasjer:

### Oversikt over aktører/prosjekter, relevant litteratur og anbefalinger på britisk sokkel

Versjon: August 2014

#### Oversikt over aktører/prosjekter på britisk sokkel

Aktør	Rolle/forklaring	Lenke
HSE: Health and safety executive	Myndighetene på britisk sokkel.	<a href="http://www.hse.gov.uk">www.hse.gov.uk</a>
OGP	The International Association of Oil & Gas producers. Vision: To work on behalf of the world's oil & gas exploration and production (E&P) companies	<a href="http://www.ogp.org.uk">http://www.ogp.org.uk</a>
Oil & Gas UK (aktør)	Oil & Gas UK er bransjeorganisasjonen for olje- og gassindustrien på britisk sokkel, og har tilsvarende rolle som Norsk olje og gass har på norsk sokkel.	<a href="http://www.oilandgasuk.co.uk/">http://www.oilandgasuk.co.uk/</a>
Step Change in Safety (prosjekt)	Step Change in Safety er et UK-basert partssamarbeid som ble etablert i 1997. Step Change har følgende målsetting: At UK skal bli best på sikkerhet i verden. Følgende mål er formulert: <ol style="list-style-type: none"><li>1. Our industry has the competence to identify hazards and ensure that risks are properly controlled</li><li>2. We will have strong and sustainable leadership in health and safety</li><li>3. Our workforce will be fully engaged in health and safety</li><li>4. We will raise standards and continually improve our health and safety performance</li><li>5. Asset integrity issues will be safely managed across our industry</li><li>6. Health and safety issues will be effectively communicated across our industry</li></ol>	<a href="http://www.stepchangeinsafety.net/">http://www.stepchangeinsafety.net/</a>

## Oversikt over relevant litteratur og anbefalinger utgitt av aktører på britisk sokkel (i alfabetisk rekkefølge)

Utgiver	Tittel	Innhold/forklaring	Lenke
HSE (myndighetene)	Hydrocarbon release system database	Gir en oversikt over innrapporterte HC-lekkasjer på britisk sokkel. I utgangspunktet for operatører på britisk sokkel. Ved å ta kontakt med HCR på e-post vil imidlertid også andre brukere kunne få tilgang til databasen.	<a href="https://www.hse.gov.uk/hcr3/">https://www.hse.gov.uk/hcr3/</a>
HSE (myndighetene)	Offshore injury, ill health and incident statistics	Statistikk over uønskede hendelser på britisk sokkel, herunder hydrokarbonlekkasjer. Siste utgave gjelder 2012/2013.	<a href="http://www.hse.gov.uk/offshore/statistics.htm">http://www.hse.gov.uk/offshore/statistics.htm</a>
HSE (myndighetene)	The safe isolation of plant and equipment	Beste praksis dokument for isolering av utstyr og anlegg. Utviklet av arbeidsgruppe bestående av representanter fra næringsliv og fagforening. Inkluderer metode for å velge "baseline" standarder for prosessisolering og skisserer forebyggende og risikoreducerende tiltak.	<a href="http://www.hseni.gov.uk/hsg253_the_safe_isolation_of_plant_and_equipment.pdf">http://www.hseni.gov.uk/hsg253_the_safe_isolation_of_plant_and_equipment.pdf</a>
Utarbeidet av HSL (Health and safety laboratory) Utgitt av HSE (myndighetene)	Offshore Hydrocarbon releases 2001-2008	Rapport om HC-lekkasjer på britisk sokkel i perioden 2001 – 2008	<a href="http://www.hse.gov.uk/research/rrpdf/rr672.pdf">http://www.hse.gov.uk/research/rrpdf/rr672.pdf</a>
EnergyAPI	Process safety performance indicators for the refining and petrochemical industries  og  Fact sheet	ANSI/API Recommended practice 754, first edition, April 2010.	<a href="http://www.api.org/environment-health-and-safety/process-safety/process-safety-standards/recommended-practice-754">http://www.api.org/environment-health-and-safety/process-safety/process-safety-standards/recommended-practice-754</a>  og  <a href="http://www.api.org/Standards/new/upload/RP_754_Fact_Sheet.pdf">http://www.api.org/Standards/new/upload/RP_754_Fact_Sheet.pdf</a>
Energy Institute	Human factors Briefing notes	Korte dokumenter som konkrete anbefalinger. Et relevant eksempel er Briefing note #6: «Safety critical procedures». Dette dokumentet beskriver hvordan	<a href="http://www.energyinst.org/hf/briefingnotes">www.energyinst.org/hf/briefingnotes</a>

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		<p>prosedyrer bør utformes, blant annet hvordan språket bør være for å redusere sjansen for misforståelser. Sitat: «Failure to comply with procedures typically arises not because of their users' attitudes or ignorance but because of faults with procedures themselves, for example: they are poorly-written, difficult to find, not logically structured, contain assumptions (e.g. 're-assembly of the device is simply the reverse of dis-assembly'), or they do not cover unusual circumstances.</p> <p>Et annet eksempel er Briefing note #20 "Occupational safety vs. Process safety»: 'Don't assume that by identifying and addressing unsafe behaviors relating to occupational safety, it will be possible to influence process safety'.</p>	
Energy Institute	Guidelines for the management of the integrity of bolted joints for pressurized systems. 2 <sup>nd</sup> edition.		<a href="http://www.energyinstpubs.org.uk/pdfs/720.pdf">http://www.energyinstpubs.org.uk/pdfs/720.pdf</a>
Li, Amy (2011).	Cross industry hydrocarbon release analysis	Presenterer resultatene fra en årsaksanalyse gjennomført for hydrokarbonlekkasjer på britisk sokkel i perioden 2008 – oktober 2010. SPE paper 145449. SPE Conference 2011, Aberdeen, UK, 6-8 September 2011.	<a href="https://www.onepetro.org/conference-paper/SPE-145449-MS">https://www.onepetro.org/conference-paper/SPE-145449-MS</a>
Step Change in Safety	A guide to Step Change in Safety – what you need to know	En kort oversikt over aktivitetene i prosjektet Step Change in Safety.	<a href="http://www.stepchangeinsafety.net/knowledgecentre/publications/publication.cfm/publicationid/8">http://www.stepchangeinsafety.net/knowledgecentre/publications/publication.cfm/publicationid/8</a>
Step Change in Safety	Hydrocarbon Release Reduction Toolkit	<p>Utarbeidet av Step Change in Safety. Gir konkrete råd:</p> <p>Tool #1: Human factors in hydrocarbon releases: Forklarer hvordan man kan gå frem for å få oversikt over årsaker til HC-lekkasjer.</p> <p>Tool #2: Hydrocarbon release system database: Oversikt over HC-lekkasjer i UK. Styres av myndighetene.</p> <p>Tool #3: Good practice guidance. Følgende områder er nevnt som spesielt viktige, og håndbøker er utarbeidet:</p>	<a href="http://www.stepchangeinsafety.net/knowledgecentre/publications/publication.cfm/publicationid/23">http://www.stepchangeinsafety.net/knowledgecentre/publications/publication.cfm/publicationid/23</a>

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		<ul style="list-style-type: none"> <li>- Bolted joints</li> <li>- Flexible hoses</li> <li>- Small bore tubing</li> <li>- Vibration</li> <li>- Corrosion management</li> </ul> <p>Tool #4: Awareness and communication. Spesielt er følgende nevnt:</p> <ul style="list-style-type: none"> <li>- Toolbox talks before any job</li> <li>- Safety meetings</li> <li>- Inductions</li> <li>- Poster campaigns, notice boards and leaflets</li> </ul> <p>Tool #5: Audit. Her er det utarbeidet et skjema som ledelsen kan bruke til å vurdere om det er tilstrekkelig fokus på "riktige" aktiviteter.</p>	
Step Change in Safety	Guidance on HCR Reduction Plans	An overview of what a 'good' HCR reduction plan may include to aid the reduction of hydrocarbon leaks.	<a href="http://www.stepchangeinsafety.net/knowledgecentre/publications/publication.cfm/publicationid/95">http://www.stepchangeinsafety.net/knowledgecentre/publications/publication.cfm/publicationid/95</a>
Step Change in Safety	Safety Expectations of Site Leadership Guidelines	Presentasjon utarbeidet av Step Change in Safety. I undersøkelser er det identifisert at ledelsen på plattformene bruker for mye tid på kontoret og for lite tid ute i anlegget for å påvirke sikkerheten. «Too much paperwork». Presentasjonen foreslår konkrete fremgangsmåter for å oppnå at ledelsen minimum bruker 2 timer på hvert skift ute i felt.	<a href="http://www.stepchangeinsafety.net/knowledgecentre/LeadershipExpectationsGuidelines.cfm">http://www.stepchangeinsafety.net/knowledgecentre/LeadershipExpectationsGuidelines.cfm</a>
Step Change in Safety	Guidance on HCR Reduction Plans	An overview of what a 'good' HCR reduction plan may include to aid the reduction of hydrocarbon leaks.  This document has been produced using industry HCR reduction plans which were identified by HSE as being exemplar 'good' plans.	<a href="http://www.stepchangeinsafety.net/knowledgecentre/publications/publication.cfm/publicationid/95">http://www.stepchangeinsafety.net/knowledgecentre/publications/publication.cfm/publicationid/95</a>
Step Change in Safety	Incidents	A listing of all incident alerts that can be filtered either by consequence (potential or actual) or cause.	<a href="http://www.stepchangeinsafety.net/incidentsdiscussions/incidents/index.cfm">http://www.stepchangeinsafety.net/incidentsdiscussions/incidents/index.cfm</a>
Step Change in	Register	Registration form to receive email updates from the Step Change Forums.	<a href="http://www.stepchange">http://www.stepchange</a>

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Safety			<a href="http://insafety.net/register.cfm">insafety.net/register.cfm</a>
Step Change in Safety	Joined-up thinking	<p>Joined-up Thinking is a series of Step Change in Safety learning and engagement packs bringing together good practice to help you to play your part in the drive to prevent hydrocarbon releases:</p> <ul style="list-style-type: none"> <li>- Major accident hazards &amp; safety critical elements</li> <li>- Small bore tubing</li> <li>- Reporting &amp; lessons learned</li> <li>- Pipework</li> <li>- Control of work</li> <li>- Joints</li> </ul>	<a href="http://www.joinedup-thinking.co.uk/">http://www.joinedup-thinking.co.uk/</a>
Step Change in Safety	Asset Integrity Toolkit	A collection of good practices techniques & guidelines aimed to assist operators in their efforts to maintain and enhance asset integrity. Provides a central reference to managers, supervisors and the workforce.	<a href="http://www.stepchangeinsafety.net/knowledgecentre/publications/publication.cfm/publicationid/10">http://www.stepchangeinsafety.net/knowledgecentre/publications/publication.cfm/publicationid/10</a>
OGP	Process safety – recommended practice on key performance indicators	As part of continuing efforts to prevent major accidents, OGP has published this recommended practice that focuses on the practical implementation of a Key Performance Indicators System linked to establishing and reporting of leading and lagging indicators. The aim: to improve process safety.	<a href="http://www.ogp.org.uk/pubs/456.pdf">http://www.ogp.org.uk/pubs/456.pdf</a>
OGP	Human factors engineering in projects	Human Factors Engineering (HFE) focuses on the application of human factors knowledge to the design and construction of socio-technical systems. The objective is to ensure systems are designed in a way that optimises the human contribution to production and minimises potential for design-induced risks to health, personal or process safety or environmental performance. This Recommended Practice adopts a practical, cost-effective and balanced approach to applying HFE on oil & gas projects.	<a href="http://www.ogp.org.uk/pubs/454.pdf">http://www.ogp.org.uk/pubs/454.pdf</a>
OGP	Safety performance indicators – 2010 data	The principal purposes of this report are to present the safety performance of the global E&P industry in 2010, and to compare the performance to that of previous years. The report allows OGP members and others to benchmark their performance against that of the global E&P industry.	<a href="http://www.ogp.org.uk/pubs/455.pdf">http://www.ogp.org.uk/pubs/455.pdf</a>

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OGP	A guide to selecting appropriate tools to improve HSE culture	This document provides information about tools which can be used to improve HSE performance. It identifies circumstances where certain tools are unlikely to be effective and may even be counter-productive within a given HSE culture. The HSE tools most applicable for an organisation at a particular cultural level are identified and evaluated.	<a href="http://www.ogp.org.uk/pubs/435.pdf">http://www.ogp.org.uk/pubs/435.pdf</a>
OGP	Asset integrity – The key to managing major incident risk  og  Asset integrity – Question set	OGP's Managing Major Incident Risks Task Force has developed this guide to help organizations reduce major incident risks by focusing on asset integrity management. It may be applied to new and existing assets at every lifecycle stage. The information presented within it is derived from good practices in mature operating areas where operators are required to provide structured evidence of sound risk management practices. Although this guide may be used by anyone who contributes to the management of asset integrity, it is particularly targeted at senior managers, including those from a non-technical background, who lead operating organizations. Use of the included question set (see associated OGP document 415-1) can help assure that major incident risks are suitably controlled at all times for all upstream hydrocarbon operations. This document also includes references for those who require more in-depth understanding of asset integrity management.	<a href="http://www.ogp.org.uk/pubs/415.pdf">http://www.ogp.org.uk/pubs/415.pdf</a>  og  <a href="http://www.ogp.org.uk/pubs/415-1.pdf">http://www.ogp.org.uk/pubs/415-1.pdf</a>
OGP	Managing major incident risks – workshop report	OGP held a workshop to consider a range of issues associated with the management of major incident risk. While the focus was on risk management within the E&P industry, other industries were invited to participate in the workshop in an effort to identify risk management approaches and tools that could be used within the E&P industry. This report overviews the presentations and summarises some of the key issues arising from the workshop.	<a href="http://www.ogp.org.uk/pubs/403.pdf">http://www.ogp.org.uk/pubs/403.pdf</a>
OGP	Human Factors – A means of improving HSE performance	Human factors is the term used to describe the interaction of individuals with each other, with facilities and equipment, and with management systems. This interaction is influenced by both the working environment and the culture of the people involved. What may be a good system of work in one part of an organisation, may be found to be less than ideal in a region where culturally driven attitudes to risk taking may be significantly different. Human factors analysis focuses on how these interactions contribute towards the creation of a safe workplace.	<a href="http://www.ogp.org.uk/pubs/368.pdf">http://www.ogp.org.uk/pubs/368.pdf</a>

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OGP	Preventing the next major incident – OGP safety workshop summary	On 4th November 2004 a workshop was held titled 'Preventing the next major incident.' Its focus was on the identification and management of incidents with the potential for a large numbers of fatalities to occur. The workshop was attended by over 80 individuals, representing around 50 different E&P organisations, regulators and service providers from around the world. This report summarises some of the key items presented during the workshop, and the feedback from the breakout session at which participants were tasked with identifying the priority issues for the industry (in particular OGP) to address in this area.	<a href="http://www.ogp.org.uk/pubs/363.pdf">http://www.ogp.org.uk/pubs/363.pdf</a>
OGP	Shaping safety culture through safety leadership	The objective of this report is to raise awareness among leaders in the oil and gas industry of the way their leadership shapes Safety Culture. It explains what Safety Culture and Safety Leadership mean, and specifically describes the leadership characteristics that can influence Safety Culture.	<a href="http://www.ogp.org.uk/pubs/452.pdf">http://www.ogp.org.uk/pubs/452.pdf</a>
Oil & Gas UK	Oil & Gas UK's Asset integrity knowledge centre	Nettsted med oversikt over aktiviteter gjennomført av Oil & Gas UK med tanke på asset integrity. Herunder rapporten «Asset Integrity: An Industry Progress Report»	<a href="http://www.oilandgasuk.co.uk/AssetIntegrity.cfm">http://www.oilandgasuk.co.uk/AssetIntegrity.cfm</a>