



HM Coastguard



UK National Contingency Plan Exercise

Exercise SHEN – Post Exercise Report

Final Report V2

19th December 2018

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Date of this revision:

Revision Date	Summary of Changes
21 August 2018	Incorporation of comments from OPRED
20 November 2018	Draft Final with comments from OPRED and MCA
7 December 2018	Incorporation of comments following inclusion of MRC evaluation report
19 December 2018	Consideration of further comments received from OPRED and Head of CP on issue of Final

ACKNOWLEDGMENTS

The exercise planners, directors and evaluators would like to thank Nexen Petroleum for hosting the UK National Contingency Plan Exercise as part of its triannual SOSREP exercise. The exercise team and exercise players were made to feel very welcome within Nexen Headquarters at Aberdeen, and despite a period of severe weather coinciding with the exercise, the safety and comfort of all participants was never in question.

A note of thanks is due to the exercise participants, who remained focused and engaged throughout the exercise, and who enabled the exercise aims and objectives to be achieved.

Thanks are also due to the Norwegian Coastal Administration for their participation, and in their valuable contribution to the NORBRIT element of the exercise.

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1. Executive Summary

- 1.1 Exercise SHEN was held on Tuesday 27th and Wednesday 28th February 2018 at Nexen Petroleum Headquarters in Aberdeen and was a test of the UK National Contingency Plan for marine pollution from shipping and offshore installations, including the invocation of the NORBRIT agreement. The exercise also served as Nexen's triennial SOSREP exercise.
- 1.2 The scenario revolved around the release of oil from a sub-surface well head in the North Sea, 30NM from the UK shoreline, and 90NM from the median line.
- 1.3 Evaluation of the various response groups was undertaken using independent evaluators, with observations recorded on a common format and provided to the lead evaluator for the purposes of compiling this report.
- 1.4 Recommendations were made based on the evaluator's observations and comments. These relate mainly to the NCP arrangements tested in the exercise. Other observations and recommendations relating to the individual response groups that are outside of the NCP are held in the group evaluation records.
- 1.5 Fifteen recommendations have been made relating to the NCP and NORBRIT arrangements.
- 1.6 Three areas of Good Practice were identified and reflected in the report.
- 1.7 The late submission of one evaluation report due to circumstances beyond the lead evaluator's control, it was not possible to release the Final version of the report until December 2018

2. Introduction

2.1 Aims and Objectives

- 2.1.1 Exercise SHEN was designed to test the UK National Contingency Plan (NCP) for marine pollution originating from an offshore installation, and incorporated activation of the 'Joint Plan on Marine Pollution Preparedness and Response between Norway and the United Kingdom' (NORBRIT agreement). In addition, the exercise allowed the participating oil company, Nexen Petroleum, to test its own emergency response mechanisms.
- 2.1.2 A full list of participating organisations and their Aims and Objectives are set out in the Exercise Instructions in [Appendix B](#).

2.2 Exercise Planning

- 2.2.1 A planning team consisting of representatives from industry, environmental regulators, government and the Norwegian Coastal Administration convened to plan the exercise in 2017. Meetings were held at OPRED offices and at the Nexen Petroleum UK Headquarters in Aberdeen. Terms of Reference supplied to the Evaluators is provided in [Appendix A](#). Details of the planning team membership is provided in the Exercise Instructions in [Appendix B](#).
- 2.2.2 Lessons identified from the previous national exercises, ('Grey Seal', 'Dragon' and 'Sula'), were incorporated into the exercise evaluation process to determine whether improvements and lessons previously identified had been learned.
- 2.2.3 Exercise Participants were invited to participate based on their statutory responsibility for responding to an incident of the type outlined in the exercise scenario. Where those organisations were likely to play a significant part in the exercise, they were live played during the two days of the exercise. Other organisations, roles and authorities were role played where necessary. A full list of the participating and role-played authorities is provided in the exercise instructions in [Appendix B](#).
- 2.2.4 Incident logs were maintained as official records by all participating authorities as would be expected during a real incident. A central email address was created to which paperwork used to inform or make decisions were copied in order to maintain a record for evaluation purposes post exercise.

2.3 Evaluation Methodology

2.3.1 Exercise Evaluators were assigned to key response groups. The work of the evaluators was coordinated by a Lead Evaluator (Tris Newey of the MCA). The following groups were formally evaluated as part of the exercise:

- Operations Control Unit, chaired by Les Chapman, SOSREP
- Marine Response Centre, chaired by Stan Woznicki, Maritime and Coastguard Agency Counter Pollution and Salvage Lead
- Environment Group chaired by Daniel Pendrey, Marine Scotland
- HMCG Operations (National Network)
- Media Cell

Details of the Evaluators within each group are provided in the Evaluation Team Briefing Pack in [Appendix C](#).

2.3.2 Nexen were also evaluated during Day 1 of the Exercise as part of OPRED's requirements for Nexen to exercise their OCU/SOSREP/Operator interface and implementation their oil pollution emergency plans on a three yearly basis.

2.3.3 Evaluation forms were used to capture observations. The forms used were consistent with those employed during previous exercises (e.g. Sula) and therefore provided consistency with evaluation methodology. Specifically, these covered; Policy and Procedures (initial alerting, set-up of response groups, management of group dynamics and decision making); Health and Safety (welfare, facilities, site safety), and Operations (decision making, information sharing, teamwork, communications).

2.3.4 For Exercise SHEN, an evaluation of Performance Influencing Factors (human factors) was included for each Group. This was used to explore opportunities to improve procedures, processes and effectiveness of information sharing and decision making between groups. Further information is contained within the Evaluation Team Briefing Pack in [Appendix C](#).

2.3.5 Exercise Controllers were appointed, details of which can be found in the Exercise Instructions in [Appendix B](#).

3. Exercise Evaluation

3.1 Policy and Procedures

- 3.1.1 Overall, the various policies and procedures utilised in the response to the incident were effective, with relatively few issues around response mechanisms causing any difficulty. Nexen's emergency response arrangements were tested adequately and in general the response groups stood up by Nexen were suitably staffed, managed and capable in providing a timely and effective plan to deal with the incident as set out in the exercise scenario. Similarly, the response groups stood up by media and regulatory bodies were able to deliver an overall effective response in relation to oil spill mitigation and impact assessment. Several weaknesses were apparent on day 1, but the majority of these were dealt with at the time or suitable fixes applied in readiness for day 2.
- 3.1.2 The main areas of concern related to a lack of structure to some group meetings where a lack of framework may have contributed to inefficiencies in decision making and communication between groups. This was particularly present in the early stages of the exercise, where concurrent group meetings prevented information flow between cells as Liaison Officers were hampered in their ability to effectively undertake their function. This was solved to some extent by meetings being staggered to facilitate inter-cell liaison. This matter may have been mitigated had there been a Heads of Cell meeting sooner and this problem been recognised. Cascade alerting and logistical arrangements in some cells were weak at the start of the exercise, but became more robust as the exercise progressed.

Recommendation 1:

Members of the various response groups should seek opportunities to exercise their functions, structure and communication links more often, rather than wait until national exercises of significant size to test arrangements. This may be facilitated through other means such as group participants meeting (virtually or physically) to discuss on a routine basis, roles, how the group works, liaison officers, what information individuals within the group would want, etc.

Recommendation 2:

A meeting of cell leads at the earliest opportunity to allow for deconfliction of meeting schedules should be incorporated into the response model. All cell leads should have a common understanding of the situation.

- 3.1.3 Both the Environment Group and the Norwegian Coastal Administration reported cascade alerting outside of procedure. Notification for the Environment Group came via JNCC notifying the Marine Scotland Duty Officer who notified the Environment Group chair. This initial alert was not routed through the Maritime and Coastguard Agency, with the result that the activation process circumvented normal command and control response procedures.
- 3.1.4 Both the OPRED and MRC group evaluators noted that the alerting of SOSREP was not in accordance with the instruction given by Hugh Shaw (the previous SOSREP), on 21 May 2013 which states that “the Duty CPS Officer and DECC Duty Inspector will discuss (where time permits) if they consider there is a need to contact the Duty SOSREP.” However, at the outset of the exercise, it was noted by evaluators that the SOSREP was informed by the CPSO prior to discussion and agreement with the duty inspector of the need to inform the SOSREP.

Recommendation 3:

In the copy of the Alerting Protocol provided to the lead evaluator, some terms were out of date. The Heads of Branches with responsibility for duty officers in MCA and OPRED are to ensure current copies of the Protocol are distributed to all duty officers and especially those recently added to the on-call roster(s). SOSREP, as the owner of the Protocol, should ensure up-to-date copies are shared with Heads of Branches for distribution to their teams.

- 3.1.5 Alerting the Norwegian Coastal Administration via the NORBRIT plan was not as per agreed procedure. However, it was recognised by the Norwegian authorities prior to the exercise that changes would be required to the alerting process and that the exercise would inform this. The first alert to the Norwegian Coastal Administration was made via phone by CGOC Aberdeen on request of the Duty CPSO. A POLWARN (Pollution Warning) format message was subsequently sent using the Common Emergency Communication Information System (CECIS) by the MCA Counter Pollution team. The early warning was received by all countries who use CECIS and as a result of several countries not being familiar with the system, numerous acknowledgments were made by email which generated further email alerts. This created an unnecessary “interference” in the Watch inbox.
- 3.1.6 The first alert received by the Norwegian Coastal Administration in accordance with the NORBRIT plan was an email from CGOC Aberdeen and was not in strict adherence with the POLREP system. The email from CGOC Aberdeen informed the Norwegian Coastal Administration that a POLWARN would be issued through SafeSeaNet (SSN). Vardø vessel traffic (who would receive and confirm receipt) did not receive this.
- 3.1.7 The POLWARN was itself not recognised by HM Coastguard staff in CGOC Aberdeen or at the NMOC. This resulted in some confusion as a request had gone to CGOC Aberdeen to send a POLWARN. Access to the CECIS system was held within HM Coastguard by Falmouth MRCC prior to the Future Coastguard modernization project, but was little used other than for exercise purposes. Post exercise, it was found that no standard operating procedure or operational detail for CECIS is held on HM Coastguard’s operational management system.

Recommendation 4:

MCA and Norwegian Coastal Administration review the NORBRIT warning and informing process to ensure it reflects current EU alerting mechanism protocols and practice. The incident highlighted the two routes through which an alert can be sent; CECIS via counter pollution, and CERS via the coordination network. HM Coastguard are to review their OmS system and produce Standard Operating Procedures, Operational Detail and ensure access to CECIS is maintained in the National Network.

Consideration should be taken in to account of the impact of a CECIS alert on email inboxes, and learning reported back to the CECIS system administrators on the need for wider instruction on use to prevent member countries inadvertently overloading inboxes by needlessly responding to incident alerts outside their geographic area or interest.

- 3.1.8 A number of observations were made by evaluators regarding siloed working and lack of effective communications between response groups. Contributory to this was an apparent lack of organisation with regards to cell set-up at initial formation, and the coordination of timings of cell meetings which prevented information flow due to people being in meetings at the same time. In particular, the Media cell and the OCU suffered from an element of ineffectiveness and lack of focus. This was mostly resolved through Day 1, after which effectiveness of the cells was markedly improved.
- 3.1.9 A meeting of Heads of Cells took place on Day 2 which was seen as beneficial to all cell leads. However, the meeting did not comply with the NCP's 'Head of Cells' meeting guidance which states the Head of Cells meeting should have outputs recorded on a 'three-minute brief' for the various cells. Ideally, the Heads of Cell meeting should take place on the first day after the first or second meetings of the other cells.

Recommendation 5:

Provision should be considered within the NCP for cell activation checklists for use by Cell Leads in setting up the required administrative and logistical elements of each cell. This could include a requirement for an early 'Head of Cells' meeting which can be used to set meeting schedules to facilitate better communication between cells.

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- 3.1.10 The time taken to gain approval of Phase 1 dispersant response was such that 6 hours of operational window was lost. The MRC group was unsure of what caused the delay, not knowing whether it was due to queries within the EG or at OPRED.

Recommendation 6:

A timescale should be included in the approving bodies dispersant procedure such that a response is provided within a set time limit. This is already in place for other approving bodies (MMO and NRW) who have 1 hour from time of receipt of request to approve or decline the request.

- 3.1.11 Overall, the MRC group meetings were on time, and timekeeping during the meetings was excellent. The MRC timeout agenda was used and followed which provided good structure to the MRC meetings. The MRC evaluator recommended that the Joint Decision Model from JESIP be incorporated into the agenda for the group. Taking this recommendation into the wider context, there may be advantages realised for all responders in the NCP adopting some the JESIP structures. This would have the added advantage of following a widely accepted and proven model of decision making in the wider multi-agency and resilience setting.

Recommendation 7:

Consideration of inclusion of the Joint Emergency Services Interoperability Principles 'Joint Decision Model' within the NCP and response group agendas so assist in group discussions.



3.2 Health & Safety

- 3.2.1 No Health & Safety concerns were raised with regards to the facilities made available to the response groups which were fit for purpose. A comprehensive brief was given to staff visiting Nexen Headquarters on arrival. Additional security was put in place for the duration of the exercise to test arrangements that would be used in a real incident. Exercise participants, evaluators and directors made use of the arm bands and tabards provided.
- 3.2.2 There was a real-world severe weather warning and event during the exercise, with cold, ice and snow affecting the area. As a result, a non-exercise meeting was held on Day 1 to appraise all heads of cells about the forecast weather which was expected to worsen by the end of the second day and into the end of the week. Consideration was given to finishing the exercise early on Day 2. However, the exercise ran until all objectives were met and end-ex was called near the original planned time. Travel home for some exercise players was affected by the severe weather, but no adverse incidents were reported.

3.3 Operations

- 3.3.1 Some inefficiencies were experienced with technology used for notification, notably pagers and mobile phone reliability. In the early stages (initial notification and briefing), the pager system for MCA media failed. Key people, such as the DCPSO, were placed under heavy demand and as a result, their mobile phone remained engaged for significant periods of time. This caused some frustrations in obtaining and sharing information in the first hour of the exercise.

Recommendation 8:

Media and Duty Officers (DCPSO) to consider how more robust lines of communication can be developed to assist briefing and contact. For example, the use of a pre-recorded message by key roles that can be accessed by callers, such that they receive a recorded brief that can be updated by the officer as required, negating the need for multiple requests for the same information.

- 3.3.2 During Day 2, a delay in obtaining the dispersant strategy to the EG prevented timely decisions on use of dispersants. The document was crucial to the EG, to allow effective review and understanding of future dispersant requests. Multiple requests were made to the MRC liaison officer and to the MCA representative within the EG. While the MRC does not produce the dispersal strategy in an offshore (oil and gas) incident (it is produced by the Operator and their response contractor), the MRC will advise on the strategy and monitor its execution at sea.
- 3.3.3 It was recommended in both the MRC and the EG evaluations that use of a file sharing site e.g. ResilienceDirect to allow various organisations and response groups to view key documents would be advantageous. This is included here as being of relevance to all response organisations. Note: Subsequent to the NCP exercise, ResilienceDirect was used in a pollution response to good effect. The MCA's Counter Pollution branch team are currently investigating use of RD for sharing information during a response.

Recommendation 9:

The use of ResilienceDirect in the response to a significant pollution incident is investigated and considered and, if accepted, adopted in the NCP arrangements.

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- 3.3.4 The Environment Group Chair had a focus sub-group set up which was an effective use of resource within the cell in considering use of dispersants and waste collection and storage.

Good Practice:

The use of sub-groups within the EG, as directed by the EG chair, was effective in moving forward decisions and progress on work.

- 3.3.5 Use of a technical advisor in the OCU to assist the SOSREP was not requested on day 1, and only requested on day 2 after prompting. As a result, the technical advisor did not prepare to mobilise until after the first OCU on Day 2 and just before exercise end. As a result, it was hard to assess the operators short and long-term plans.

Recommendation 10:

As per Recommendation 5 under 3.1.9, a cell activation checklist may help to ensure key requirements, such as the use of a technical advisor who is identified at the outset.

- 3.3.6 Within the MRC, it was noted that communication between international countries and their representatives was excellent, and that situational awareness within the groups was maintained to a high standard throughout.

3.4 Communications

- 3.4.1 Communication flow and liaison between groups was weak, particularly at the outset of the exercise. The individual cell evaluation reports suggest this was a result of poor coordination between cell meeting times, preventing effective coordination taking place. Although this was rectified after the Heads of Cells meeting on Day 2, there remained some challenges to effective coordination between the cells. However, previous incident and exercise experience shows that holding meetings around the same time allows for information sharing between meetings and is a 'tried and tested' method.

Recommendation 11:

The suggestion by evaluators from this exercise that meetings be staggered, and the current 'best practice' of holding meetings around the same time, indicate that the issue that needs tackling is that of ensuring effective communication between cells occurs in a timely and effective manner. A review of how key information can be shared quickly between Heads of Cells or their Liaison, possibly through a common messaging platform (e.g. WhatsApp) or other means, should be undertaken to see if efficiencies can be realised.

- 3.4.2 Press statements given out during the exercise did not make sufficient the distinction between the operator and government within the media strategy. The focus on statements was on joint strategy dealing with the incident and did not ensure that political consequences and media criticism of government and industry appearing to be too closely linked were avoided.
- 3.4.3 Over the two days of the exercise, leadership of the media cell was increasingly taken by the Nexen press officer, rather than by a member of the MCA press team as per the NCP arrangements. This was likely a result of the relative lack of experience in dealing with this type of exercise resulting in a natural progression towards the Nexen press officer taking a leading role. As a result, press statements were perceived to have been more skewed towards the operator perspective.
- 3.4.4 Linked to 3.4.2, key messages were not set in light of the organisation presenting. This was illustrated in the Day 1 press video, for which no separate briefs were prepared for the CEO of Nexen or SOSREP, which was apparent in the video. The video itself was filmed on an MCA phone and did not utilize the on-site media crew to facilitate the press video.

Recommendation 12:

The media cell should have a clear understanding of key government representatives. This may be captured in a media cell guide or checklist. Key representatives such as SOSREP should have media training as part of their role, and chairmanship of the Media cell should be led by the MCA or other suitable government representative (as per the NCP).

Good Practice:

A record of journalistic approaches was kept by the media cell. This was shared across all cells so that all agencies were aware of the contact being made with regards to the incident.

3.5 Equipment and Resources

- 3.5.1 Facilities at the Nexen headquarters were suitable for the hosting of the various response cells, with good room facilities, security, welfare requirements and resources. Two areas of limitations were identified; poor mobile phone coverage and some Wi-Fi limitations were apparent during the exercise.

Recommendation 13:

Nexen is approached by OPRED to suggest they investigate how mobile phone and Wi-Fi coverage could be improved at the Nexen headquarters.

- 3.5.2 Use of conference call facilities was not always effective due to the poor quality of sound for those using a phone to join a meeting.
- 3.5.3 During the response, areas of environmental sensitivity were identified by the EG using data sets held within members home organisations. Reference to the OPEP was also made to good effect during the response to identify environmental sensitivities.

Good Practice:

The OPEP and other environmental datasets held by participating organisations were used to good effect by the Environment Group in assessing the sensitivity of areas.

3.6 Record Keeping

- 3.6.1 Evaluators observed that record keeping in some cells was weak, particularly in the media cell and in the Heads of Cells meeting. There were also weaknesses in the OCU SOSREP / OPRED admin support staff relationship, with a lack of co-operative relationship between the SOSREP and loggist on capturing and managing actions. The OPRED admin support staff in the OCU reported feeling undervalued at times.
- 3.6.2 Accurate records are crucial for providing assurance and reference during the incident response and for any investigation or inquiry following an incident. Within the MRC, although there was a narrative log produced by a loggist and a separate Action log kept, a review of both identified that the rationale for decisions made was not always captured.

Recommendation 14:

Formal minutes and actions are required within the various response groups to ensure decisions taken and discounted are accurately reflected and can be explained and justified post incident.

Recommendation 15:

Role Descriptions should be reviewed for the OCU membership with a view to strengthening understanding of the key roles within the group. These could be made available to members on first forming the group in order to obtain a clear understanding of roles between members, setting out clearly the working relationship and responsibilities of each. This is good practice within civil resilience strategic response groups and could be easily adopted. Note that this was adopted within the MRC following an action from the previous NCP exercise and was observed to have worked very well.

3.7 Performance Influencing Factors

- 3.7.1 In general, there were relatively few observations made against the Performance Influencing Factors. However, many observations made within the bulk of the evaluation reports were equally applicable to PIFs as they relate to procedures, competency, and communication.
- 3.7.2 With regards to Task Factors, matters arising from clarity of instructions and briefing have been covered elsewhere in this report with recommendations made for improvement. Divided attention, while not arising from poor procedure, was apparent in the EG and OCU. Within the EG, this was managed by the chair in dividing responsibility clearly to avoid any confusion and inefficiency. Within the OCU, it appeared at times that focus of attention was not on the core task of the OCU, and that time was spent instead concerning the responsibilities of other groups. This has been covered elsewhere in this report. Time available for task was in the most part sufficient, with communication between groups also good with the exception of the EG obtaining input from the MRC in the closing stages of the exercise in relation to dispersant strategy. This may however have been a factor of the exercise rather than procedural matters.
- 3.7.3 Person Factors did not reveal any undue stress or fatigue impacting members of response groups during the exercise. Competence was in the most part sufficient, with issues raised elsewhere in the report regarding competency and leadership observations and recommendations.
- 3.7.4 Organisational Factors concerning leadership and clarity of roles and responsibilities have been covered elsewhere in this report where inefficiencies were identified.

4. Recommendations List

No.	Recommendation	Action Owner	Completion Date
1	Members of the various response groups should seek opportunities to exercise their functions, structure and communication links more often, rather than wait until national exercises of significant size to test arrangements. This may be facilitated through other means such as group participants meeting (virtually or physically) to discuss on a routine basis, roles, how the group works, liaison officers, what information individuals within the group would want, etc.		
2	A meeting of cell leads at the earliest opportunity to allow for deconfliction of meeting schedules should be incorporated into the response model. All cell leads should have a common understanding of the situation.		
3	In the copy of the Alerting Protocol provided to the lead evaluator, some terms were out of date. The Heads of Branches with responsibility for duty officers in MCA and OPRED are to ensure current copies of the Protocol are distributed to all duty officers and especially those recently added to the on-call roster(s). SOSREP, as the owner of the Protocol, should ensure up-to-date copies are shared with Heads of Branches for distribution to their teams.		
4	MCA and Norwegian Coastal Administration review the NORBRIT warning and informing process to ensure it reflects current EU alerting mechanism protocols and practice. The incident highlighted the two routes through which an alert can be sent; CECIS via counter pollution, and CERS via the coordination network. HM Coastguard are to review their OmS system and produce Standard Operating Procedures, Operational Detail and ensure access to CECIS is maintained in the National Network. Consideration should be taken in to account of the impact of a CECIS alert on email inboxes, and learning reported back to the CECIS system administrators on the need for wider instruction on		

	use to prevent member countries inadvertently overloading inboxes by needlessly responding to incident alerts outside their geographic area or interest.		
5	Provision should be considered within the NCP for cell activation checklists for use by Cell Leads in setting up the required administrative and logistical elements of each cell. This could include a requirement for an early 'Head of Cells' meeting which can be used to set meeting schedules to facilitate better communication between cells.		
6	A timescale should be included in the approving bodies dispersant procedure such that a response is provided within a set time limit. This is already in place for other approving bodies (MMO and NRW) who have 1 hour from time of receipt of request to approve or decline the request.		
7	Consideration of inclusion of the Joint Emergency Services Interoperability Principles 'Joint Decision Model' within the NCP and response group agendas so assist in group discussions.		
8	Media and Duty Officers (DCPSO) to consider how more robust lines of communication can be developed to assist briefing and contact. For example, the use of a pre-recorded message by key roles that can be accessed by callers, such that they receive a recorded brief that can be updated by the officer as required, negating the need for multiple requests for the same information.		
9	The use of ResilienceDirect in the response to a significant pollution incident is investigated and considered and, if accepted, adopted in the NCP arrangements.		
10	As per Recommendation 5 under 3.1.9, a cell activation checklist may help to ensure key requirements such as the use of a technical advisor are identified at the outset.		
11	The suggestion by evaluators from this exercise that meetings be staggered, and the current 'best practice' of holding meetings around the same time, indicate that the issue that needs tackling is that of ensuring effective communication between cells occurs in a timely and effective manner. A review of how key information can be shared quickly between Heads of Cells or their Liaison,		

	possibly through a common messaging platform (e.g. WhatsApp) or other means, should be undertaken to see if efficiencies can be realised.		
12	The media cell should have a clear understanding of key government representatives. This may be captured in a media cell guide or checklist. Key representatives such as SOSREP should have media training as part of their role, and chairmanship of the Media cell should be led by the MCA or other suitable government representative (as per the NCP).		
13	Nexen is approached by OPRED to suggest they investigate how mobile phone and Wi-Fi coverage could be improved at the Nexen headquarters.		
14	Formal minutes and actions are required within the various response groups to ensure decisions taken and discounted are accurately reflected and can be explained and justified post incident.		
15	Role Descriptions should be reviewed for the OCU membership with a view to strengthening understanding of the key roles within the group. These could be made available to members on first forming the group in order to obtain a clear understanding of roles between members, setting out clearly the working relationship and responsibilities of each. This is good practice within civil resilience strategic response groups and could be easily adopted. Note that this was adopted within the MRC following an action from the previous NCP exercise and was observed to have worked very well.		

Appendix A – Terms of Reference

MARITIME & COASTGUARD AGENCY – NATIONAL CONTINGENCY PLAN

TERMS OF REFERENCE (TOR) – EXERCISE SHEN EVALUATION TEAM

Date of TOR

5th February 2018

Revised

Version DRAFT 0.1 - Dated 05 February 2018

1. Introduction

1.1 Exercise SHEN will take place over 2 days on 27-28 February 2018 with the aim of testing the response of a number of organisations to a marine pollution incident in order to validate and verify the Operational response arrangements of the operator (Nexen), NORBRIT arrangements and the National Contingency Plan. A full planning team has been established to develop the Exercise components, which includes an evaluation process.

2. Purpose & Role of the Evaluation Team

2.1 The Evaluation Team has been established and an Evaluation Team Lead from the Maritime and Coastguard Agency (MCA) seconded to the role (Tris Newey).

2.2 The Evaluation Team will be comprised of multi-agency membership to ensure that a broad and varied assessment of individual organisation and Exercise aim(s) and objectives are

evaluated during live play to identify achievements, learning, best practice and opportunities for continual improvement.

2.3 The Evaluation Team will submit a timely report to the Exercise Director confirming the collated findings arising from the evaluation process. This will enable the Exercise Planning Team to consider the results of the evaluation process to help confirm the tested arrangements are fit for purpose or whether adjustments should be recommended.

3. **Membership**

The following organisations will provide members to the Evaluation Team:

- Maritime and Coastguard Agency
- Environment Agency
- Natural Resource Wales
- OPRED

4. **Accountability**

4.1 The Evaluation Team Lead (MCA) is responsible for reporting to the Exercise Director at various stages of the Evaluations team's life span, this will include but may not be limited to:

- Confirm establishment of a multi-agency Evaluation Team;
- Issue of DRAFT and FINAL TOR's;
- Organisation of an Evaluation Team planning meeting in advance of the main Exercise;
- Adoption of an Agenda, Minutes and resulting Action Plan in respect of the Evaluation Team planning meeting;
- Progress reports during live Exercise evaluation;
- Post Exercise collation of individual organisation evaluation reports;
- Presentation of DRAFT and FINAL Evaluation Team Report;
- Monitoring and follow up of actions;
- Closure of the evaluation process and securing records.

4.2 The Evaluation Team by organisation is responsible for reporting to the Evaluation Team Lead at various stages of the evaluations team's life span, this will include but may not be limited to:

- Confirm commitment and provide contact details to the multi-agency Evaluation Team;

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- Review and agree circulated DRAFT and FINAL Evaluation Team TOR's;
 - Attend a pre-agreed Evaluation Team planning meeting in advance of the main Exercise (by teleconference and on the evening before exercise commencement)
 - Contribute to an Agenda for the Evaluation Team planning meeting, review and agree the circulated Minutes and resulting Action Plan;
 - Contribute to the timely closure of actions where applicable;
 - Set the content and confirm the availability of individual organisation evaluation aide memoires to meet organisational Exercise aim(s) and objectives;
 - Establishment of internal organisation evaluation team where necessary;
 - Confirm Exercise evaluation has been conducted prior to the Exercise hot wash up;
 - Post Exercise completion, review and submission of individual organisation evaluation reports;
 - Review and agree circulated DRAFT and FINAL main Exercise Evaluation Report;
 - Monitoring and follow up of actions resulting from evaluation of organisation;
 - Maintain and audit trail, closure of the evaluation process and maintaining records.

5. Methodology

5.1 Each Evaluation Team member will be assigned an operational cell to assess the Exercise activities to determine if the pre-agreed aim(s) and objectives have been met or not. It is acceptable to employ additional staff within organisations to carry out this process as part of a wider team, this is recommended if more than one site is used, or wide spread work places exist.

5.2 The approach suggested for the evaluation is:

- The design, content and use of individual organisation aide memoires is the responsibility of the organisational Evaluation Lead to capture the Exercise aim(s) and objectives of the organisation;
- Evaluation must be recorded only after detailed observation of relevant processes, which may include but not be limited to;
 - Policy & Procedural;
 - Health and Safety;
 - Operations;
 - Communications;
 - Equipment and Resources;
 - Record Keeping;
 - Performance Influencing Factors
- To ensure that the hand-written notes made on aide memoires are clear and intelligible, it is recommended that information is transferred to an electronic version to ensure accuracy and clarity exists to support the process of collation to a main Exercise Evaluation Report;
- Share ideas that have the potential to improve the evaluation process.

6. **Review**

6.1 The Evaluation Team will continually review the process at each stage to ensure the approach is able to meet the desired outcome to evaluate Exercise activities, adjusting the process accordingly as and when required.

7. **Information Sharing**

7.1 The Evaluation process must consider the commercial interests of the companies involved, accepting that certain aspects of may be redacted where there is sensitivity.

7.2 Similarly the use of personalised information is not required as the evaluation process aims to identify organisational achievements, learning, best practice and opportunities for continual improvement, not based on individual identity.

7.3 Should the sharing of information cause any concern, the matter should be directed to the Evaluation Team Lead who will in turn bring about a discussion with the Exercise Director and parties involved.

8. **Author**

8.1 Tris Newey – Policy and Resilience Lead, HM Coastguard Operations - Maritime & Coastguard Agency.



**UK National Contingency Plan
Exercise
Exercise Instructions**

National Exercise 2018: Exercise Shen

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ACRONYMS / ABBREVIATIONS

This is designed to cover most of the commonly used acronyms and abbreviations that may be used during Exercise Shen.

Name	Description
CGOC	Coastguard Operations Centre
DBEIS / BEIS	Department for Business, Energy and Industrial Strategy
DCPSO / CPSO	MCA Duty Counter Pollution and Salvage Officer
DfT	Department for Transport
DOD	MCA Duty Operations Director
DSV	Dive Support Vessel
EG	Environment Group
ELO	Environment Group Liaison Officer
EOM	Emergency Operations Manager
EPC	Offshore Installations (Emergency Pollution Control) Regulations 2002
ePON1	(electronic) Petroleum Operations Notice
ERRV	Emergency Response Rescue Vessel
HMCG	Her Majesty's Coastguard
IC	Incident Commander

ICP	Incident Command Post
ICS	Incident Command System
IMT	Incident Management Team
IRC	Incident Response Co-ordinator
JNCC	Joint Nature Conservation Committee
JRCC	Joint Rescue Coordination Centre
MCA	Maritime and Coastguard Agency
MODU	Mobile Offshore Drilling Unit
MPA	Marine Protected Area
MRC	Marine Response Centre
MSA	Merchant Shipping Act
NCA	Norwegian Coastal Administration
NCP	National Contingency Plan – A Strategic Overview for Responses to Marine Pollution from Shipping and Offshore Installations
NMOC	National Maritime Operations Centre
NORBRIT	Joint Plan on Marine Pollution Preparedness and Response between Norway and the United Kingdom
OCU	Operations Control Unit
OIM	Offshore Installation Manager
OPEP	Oil Pollution Emergency Plan
OPRC	Oil Spill Preparedness, Response and Co-operation Convention
OPRED	Offshore Petroleum Regulator for Environment and Decommissioning
OSC	On-Scene Commander
OSRL	Oil Spill Response Limited
POB	Persons on-board

POLREP	Pollution Report
PUQ	Production Utilities Quarters
SAR	Search and Rescue
SEPA	Scottish Environment Protection Agency
SG	Scottish Government
SITREP	Situation Report
S/LO	Safety Liaison Officer
SOSREP	Secretary of State's Representative for Maritime Salvage and Intervention
TDA	Temporary Danger Area
TEZ	Temporary Exclusion Zone
UKCS	United Kingdom Continental Shelf
WWCI	Wild Well Control Incorporated

DISTRIBUTION LIST

Organisation	Name
MCA	Stephan Hennig / Neil Chapman
BEIS	Guy Heaton / Michelle Hickson
Nexen	Alison Taylor / Andrew Robertson
Marine Scotland	Jim McKie
Petrofac	Jason Lomas
Norwegian Coastal Administration	Ole Kristian Bjerkemo / Kjetil Aasebo

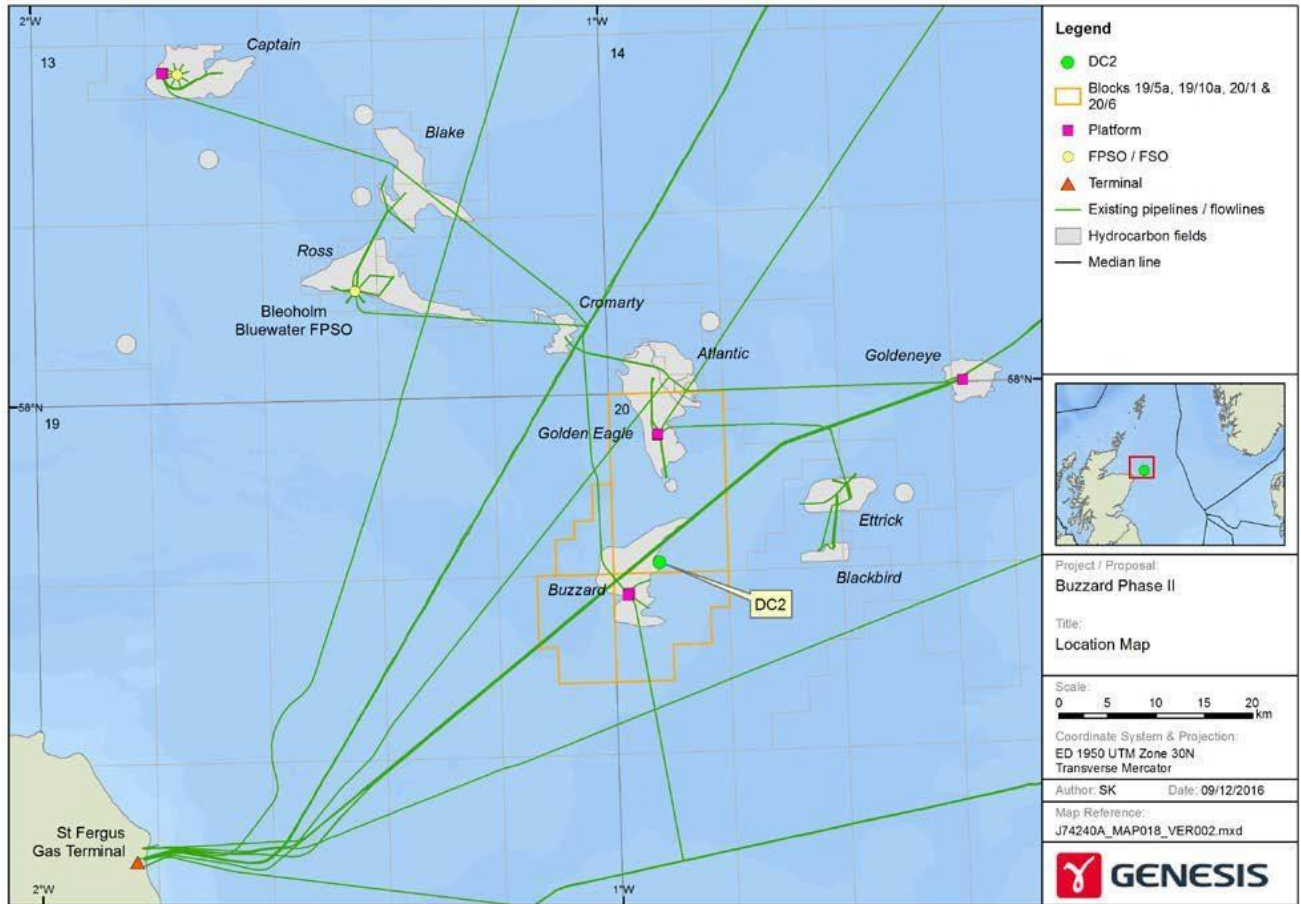
1.0 PLANNING TEAM

The planning team consists of a number of personnel from various different organisations:

- Stephan Hennig – Deputy to the SOSREP
- Guy Heaton – BEIS / OPRED
- Michelle Hickson – BEIS / OPRED
- James McKie – Marine Scotland
- Neil Chapman – Maritime and Coastguard Agency
- Alison Taylor – Nexen
- Andrew Robertson – Nexen
- James Shannon - Nexen
- Jason Lomas – Petrofac
- Kjetil Aasebo – Norwegian Coastal Administration
- Ole Kristian Bjerkemo – Norwegian Coastal Administration

2.0 LOCATION

For the Exercise a simulated incident will take place in the Buzzard Field at Drill Centre 2 (DC2) location.



3.0 DATE & TIME

Day 1	Tuesday, 27 th February 2018
Time	0600 hrs
Day 2	Wednesday, 28 th February 2018
Time	0600 hrs

4.0 EXERCISE PARTICIPANTS

The Exercise will incorporate a significant Counter Pollution element. The organisations and companies participating in the Exercise are detailed below.

The following organisations and companies will play live during the Exercise:

- Secretary of State's Representative for Maritime Salvage and Intervention (SOSREP)
- Maritime and Coastguard Agency (MCA)
- Department for Business, Energy and Industrial Strategy (BEIS)
- Offshore Petroleum Regulator for Environment and Decommissioning (OPRED)
- Marine Scotland
- Joint Nature Conservation Committee (JNCC)
- Scottish Environment Protection Agency (SEPA)
- Oil and Gas Authority (OGA)
- Food Standards Scotland (FSS)
- Port Authorities (Aberdeen)
- Norwegian Coastal Administration (NCA)
- Scottish Natural Heritage (SNH)
- Health and Safety Executive (HSE)
- Braemar Response
- RVL
- Briggs Environmental Services
- Oil Spill Response Limited (OSRL)
- European Maritime Safety Agency (EMSA)
- Wild Well Control
- Support Companies
- Vessels Operators
- Helicopter Operators

The following organisations, companies and individuals will be role-played:

- Drilling Rig OIM
- Drilling Supervisor
- Drilling Contractor Incident Management Team

-
- Other installations
 - Other operators
 - Any other organisation or agency not listed above

5.0 INTRODUCTION AND OVERALL AIM

To test the UK National Contingency Plan for marine pollution from shipping and offshore installations including the invocation of the NORBRIT agreement. The Exercise will also serve as Nexen's triennial SOSREP exercise.

6.0 OBJECTIVES

The objectives for each of the participating organisations are as follows:

Maritime and Coastguard Agency (MCA)

- To exercise the NCP's incident alerting and response activation procedures, culminating in a coherent and effective national commitment
- To exercise the Marine Response Centre (MRC), assess the effectiveness of current internal procedures and to test the interaction between the MRC and other maritime response cells
- To exercise interfaces and interdependences across all response levels, looking at Environment Group (EG), cross-government and inter-agency liaison, and the coordination of public communication arrangements
- To test the integration of aerial activities with industry
- To test the integration of at sea response activities with industry
- To trial vessel of opportunity configuration
- To review command and control links between OCU, MRC and EG
- To test the implementation of the NORBRIT agreement, liaison between authorities, handover of co-ordination and information dissemination on a National and International basis

Secretary of State's Representative (SOSREP)

- To exercise the SOSREP function within Government in relation to a major incident involving an offshore installation
- To establish an operations control unit (OCU) in accordance with the National Contingency Plan and in relation to a major incident involving an offshore installation
- To exercise interaction between the OCU and other response cells under NCP arrangement during a major incident response

-
- To exercise cross Government communications in relation to significant pollution from an offshore installation

Department for Business Energy and Industrial Strategy (BEIS) / Offshore Petroleum Regulator for Environment and Decommissioning (OPRED)

- To assess and evaluate whether Nexen Offshore and Onshore OPEPs are effectively implemented in response to a major pollution incident
- To assess and evaluate communications between Nexen, the SOSREP and the OCU
- To assess and evaluate the source control options tabled by Nexen
- To evaluate the notification to the SOSREP and the mobilisation and function of the OCU
- To evaluate BEIS procedures in response to a major pollution incident
- To evaluate information transfer between Nexen, MRC, EG and OCU

Environment Group (EG)

- To exercise the setting up of an 'Offshore' Environment Group to advise National response units
- To exercise liaison between the Environment Group and National response units
- To further develop the roles and responsibilities of the Environment Group

Nexen Petroleum UK Limited (Nexen)

- To test Nexen's response to a large scale pollution incident
- To test and validate Nexen's Buzzard and Onshore Oil Pollution Emergency Plans
- To test and validate Nexen's Emergency Response Plans
- To test the interface between Nexen, the SOSREP and National Contingency Cells
- To provide recommendations to improve current procedures, processes and facilities
- To test Nexen's *Initial UK ICS Emergency Response Procedure*
- To test Nexen's media response
- To test the communication with, and mobilisation of, Nexen's oil spill response contractors (OSRL).
- To test the ongoing interface with OSRL including the deployment of personnel into Nexen response centre to coordinate the Counter Pollution Response.

Norwegian Coastal Administration

- To receive and follow up notification from the UK according to the NORBRIT plan and national procedures

- To clarify the lead and supporting roles when the main area of pollution or activity moves from one side of the median line to the other
- In case of Joint Operations, to clarify routines for the use of liaisons
- To test national routines for establishing a Temporary Danger Area (TDA)

Media

- To test the mobilisation of and communication between BEIS, MCA and Nexen media personnel
- To test the media handling and communication links between UK and Norwegian authorities.
- To test ability to coordinate response to traditional and social media

7.0 SCENARIO

Full details of the scenario are restricted to Controllers only so as to preserve the spontaneity and reality of response. The scenario has been designed to provide circumstances that will enable the Exercise aim and participants’ objectives to be achieved.

Fictitious weather conditions will be created to guarantee that the notional hazards (i.e. pollution etc.) will impact upon specified locations as per the outline scenario. Where artificial conditions are required to be used these will be made clear in the Exercise Briefing Notes which will be handed to the Exercise participants on arrival – see Participants Briefing Notes.

7.1. Exercise Program

The Exercise will run over two days. The schedule is as follows:

26 th February 2018	Time
Core Planning Team to convene at Nexen	1330

Final review of Exercise documentation	1400
Role-players briefing and communications check with external agencies	1500
Exercise Controllers and Evaluators briefing (Nexen)	1500

Tuesday 27th February 2018	Time
Exercise Command Team arrive at Nexen	0600
Exercise Controllers and Evaluators communication checks	0615
Exercise Pre-Briefing (Nexen IMT only)	0630
Start of Exercise	0700
Team mobilisations	All Day
Observers (Escorted tour around response teams)	All Day
End of exercise (Day 1)	Est. 1700
Participants Hot Wash (To be conducted by the Exercise Controllers of each team)	Est. 1700 – 1730
Hot wash (Exercise Controllers and Evaluators only)	Est. 1730 – 1830
Exercise Command Team to issue 'overnight activities' to all Exercise Controllers in preparation for the overnight activities briefing on Wednesday 28 th February.	To be issued by circa 21h00.

Wednesday 28th February 2018	Time
Exercise Command Team arrive at Nexen	0630
Exercise Controllers and Evaluators communication checks	0645
Overnight activities briefing for participants	0715
Start of Exercise	0730
Team mobilisations	All Day
Observers (Escorted tour around response teams)	All Day

End of Exercise	Est. 1700
Participants Hot Wash (To be conducted by the Exercise Controllers of each team)	Est. 1700 – 1730
Hot wash (Exercise Controllers and Evaluators only)	Est. 1730 – 1830
Completion of Exercise	1830

8.0 CONDUCT OF EXERCISE

8.1. Level of Participation

To ensure Exercise objectives are fulfilled, a certain degree of pre-exercise organisation has been undertaken with respect to timings and level of participation. Where this affects participants, relevant organisations and personnel will receive asset-specific 'Exercise Briefing Notes' prior to the start of the Exercise.

Throughout the Exercise, the 'players' will be expected to respond to the situation as it unfolds; to react realistically to the developing situation by fulfilling their roles as normal and to develop responses as if it were a genuine incident.

Where additional assets and resources would be requested or expected to be involved, these will be simulated. Participants should identify resources which are required and request their involvement as per procedure. Where appropriate, Controllers shall monitor such activity and with the Exercise Directors, will ensure notional assets are represented as appropriate.

8.2. Exercise Artificiality

To ensure the Exercise develops during the course of the event, a number of elements associated with the scenario such as weather conditions will be artificially simulated. The operators of specific resources will receive 'Exercise Briefing Notes' to indicate the artificialities. Controllers and Role-players will be clear where the artificiality lies and if need be, provide clarification for those participating.

Participants are reminded that the exercise artificialities are determined in order to facilitate the overall conduct and progress of the exercise scenario.

8.3. Weather

Fictitious weather conditions will be created to guarantee that the notional hazards (i.e. pollution etc.) will impact upon specified locations as per the outline scenario. Where artificial conditions are required to be used this will be made clear in the Exercise Briefing Notes.

8.4. Coordination & Evaluation

Overall coordination of the Exercise will be undertaken by the Exercise Controllers. They will be strategically located across the response organisation to ensure the Exercise is conducted within the pre-determined parameters. In addition, a team of Evaluators will also be located with the key responding teams to evaluate the performance of the response cells and to provide post exercise feedback.

- Appendix A details the roles and responsibilities of all Exercise personnel
- Appendix B lists Controllers and their locations during the Exercise
- Appendix C lists Evaluators and their locations during the Exercise

8.4.1. Identification

All Controllers and Evaluators will wear distinguishing tabards. Observers will be provided with identity armbands.

8.5. Observers

In order to avoid overloading the Exercise participants and causing congestion in control centres, observers will be divided into small groups and accompanied by a Coordinator at all times.

A program of the location(s) and activities they are able to observe will be notified in advance.

All observers are to be fully briefed by their parent authority in particular with regard to Health and Safety requirements; an exercise brief will be provided by the appointed Coordinator. Appendix A details the roles and responsibilities of Exercise Observers.

The Exercise Instructions contain all the necessary information to engage participants whilst providing planning information for use by the Controllers and Role Players.

Exercise Instructions

Scenario Outline
Scenario Timeline
Telephone Directory
Role-players Guide
Participants Brief / Joining instructions
Participants Briefings - PowerPoint (Nexen only)
Blank faxes/forms
Role-player Call Log
Controllers Briefing
Attendance Sheets
Weather Forecast Offshore
Oil Spill Modelling
Aerial surveillance reports
Exercise Communications and Interface Plan (CIP)

During the Exercise, participants should use agreed operational documents including emergency response procedures, Security procedures, maps, charts, checklists etc.

8.6. Incident Logs

All players are required to maintain full and accurate Incident Logs/Records as they would in a real incident. Incident Logs and other associated paperwork are official records of events and should provide the rationale for decisions taken during an incident. These are important documents for evaluating practices and procedures.

Logs must be carefully maintained in a neat and legible fashion. During exercise play all participants, controllers, role-players and observers are requested to maintain a simple timed log of events and actions. All logs will be collected at the end of the exercise and collated for evaluation purposes.

8.7. Real Incidents

If a real emergency occurs during the Exercise which affects any of the locations or participants, details of the emergency are to be passed to the nominated controllers and to the controllers coordinator using the following prefix: -

“EXERCISE SAFEGUARD”

This will indicate that the report is real and not related to the Exercise.

The initiation of a Safeguard message will likely indicate the suspension or any further participation in the Exercise by the Person(s), Team(s) or Organisation from where the Safeguard was broadcast.

All Safeguard messages must be immediately communicated to the Controllers Coordinator and to the Exercise Directors. On receipt of a Safeguard message the Exercise Directors will decide upon the necessity to promulgate information to other participating Teams.

All Controllers will then await instructions from the Exercise Directors.

9.0 COMMUNICATIONS

9.1. Telephone Directory

A comprehensive telephone directory will be issued to all participants and role-players taking part in the Exercise. The Exercise Planning Team have endeavoured to ensure all the necessary telephone numbers required for the Exercise have been included, however if a required number is not listed it should be brought to the attention of the Controllers. Telephone calls must be confined to those numbers in the exercise telephone directory.

9.2. Exercise Messages

It is extremely important that ALL communications during the Exercise are prefixed by the words “EXERCISE SHEN”.

It is the responsibility of the person originating/transmitting the message to ensure that this instruction is complied with.

This will confirm to the recipient that the message relates to the Exercise, if the recipient has any doubts over the authenticity, clarification should be sought from the originator of the message and/or Controller.

10.0 HEALTH & SAFETY

All participants in the Exercise have a responsibility for the safety of themselves and others - including the public. Any person who becomes aware of a hazard that could result in risk of injury to another must take immediate action as appropriate to make the situation safe. They must also bring the hazard to the notice of Controllers or other persons in authority.

Staff in all organisations must adhere to the Health & Safety Policy and regulations of the parent organisations.

Every organisation is responsible for undertaking its own Risk Assessment against the activities they will be engaged in during the course of the Exercise.

A copy of these Risk Assessments should be forwarded to the Exercise Directors prior to the commencement of the Exercise.

11.0 MEDIA ARRANGEMENTS

Throughout the Exercise there will be realistic media participation from selected journalists, social media platforms and camera teams. This exercise play will be directed at pre-identified aspects, to a level commensurate with that which would be expected in a real incident of this nature. As per Exercise procedure, all messages and enquiries from

‘role-play’ media will be pre-fixed “Exercise Shen”.

12.0 DE-BRIEFS AND POST EXERCISE REPORTS

12.1. Exercise Players Hot-Wash Debrief

On conclusion of Exercise on each day, Exercise Controllers shall lead a 'Participants Hot Wash' session of no longer than 30 minutes, in each of their locations. All records and documents shall be collected. Participants will be invited to submit up to 3 key observations, what went well and what did not go as well, to the Controllers for consideration in the final debrief session.

12.2. Controllers Debrief

Controllers and Evaluation Team members will meet with the Exercise Planning Team to provide information obtained from the Participants Debriefs. Feedback obtained at this time will be collated, and an overview of initial findings will be prepared for presentation at the Stakeholder's Debrief.

12.3. Stakeholders Debrief

The Exercise Directors will facilitate a debrief on the whole exercise to all Stakeholders at a date and location to be confirmed.

12.4. Post Exercise Report

The full exercise report will be published on the MCA and BEIS websites and available for download. Prior to this date, all participating persons and agencies are invited to provide feedback to the Exercise Director. This information will be discussed and considered for inclusion in the final exercise report; an acknowledgement of receipt will be issued to the originator.

APPENDIX A

EXERCISE TEAM - ROLES AND RESPONSIBILITIES

Exercise Sponsor

The exercise sponsor(s) are accountable for the event. The sponsors identify the need for the exercise, monitor delivery and are responsible for ensuring lessons are identified during the exercise and followed-up afterwards.

The sponsor can be an individual, an organisation or a collection of organisations, for example the MCA and OPRED as is the case with Exercise Shen.

Exercise Director

Guy Heaton and Michelle Hickson have been jointly appointed Exercise Directors for the exercise. The Exercise Directors are accountable to the Sponsor for the management of the exercise. This includes: managing the planning, exercise play and post exercise procedures. During the planning phase of the exercise the Exercise Director will retain an overview and ensure that the competing or conflicting objectives of the various agencies meet the overall exercise aim and objectives.

During the planning phase of the Exercise the Exercise Directors will retain an overview and ensure that the competing or conflicting objectives of the various agencies meet the overall exercise aim and objectives. The Exercise Directors are responsible for seeking agreement on the parameters and defining the limits of the exercise in terms of:

- Type of exercise
- Level of participation
- Constraints (real play, geography, finance etc)
- Timeframe (when and for how long)

Planning Team Managers

The Exercise Planning Team Managers are responsible for planning the exercise in detail. The exercise planning team is populated by members of the key agencies involved in the exercise and the key areas they may be responsible for are:

- Coordinate the activities of those involved in the preparation stages of the exercise
- Report the course and progress of planning to the Exercise Sponsors on a regular basis
- Be responsible for producing the draft Exercise Instructions

Exercise Directing Staff

Working under the direction of the Exercise Directors will be a number of Directing Staff.

The Directing Staff will be split between two primary functions; Controllers and Evaluators.

Exercise Controllers

An Exercise Controller will be present within each participating response cell / team / location.

The Exercise Controllers will monitor the pace of the exercise and the responses taken by the participating teams. Depending upon their assessment it may be necessary to introduce additional, unscripted injects if required to enhance learnings and increase and / or reduce the pressures on the teams.

In addition, members of the planning team will be utilised as Exercise Controllers and they will be located in the Exercise Control Cell, along with the Exercise Directors, ensuring the exercise is run in line with expectations.

It should be appreciated that there may be elements of exercise artificiality incorporated into the exercise which enable the planning team to direct the scenario so as to ensure all the response teams are able to realise their objectives.

Intervention by any member of directing staff should be minimal and a last resort. Nevertheless, Controllers should intervene when there is confusion about the scenario or an organisational problem out of the control of the players. They should also intervene if the exercise objectives or safety of participants are threatened or when one person's action / inaction is jeopardising the opportunities afforded by the exercise.

Evaluators

Exercise Evaluators will be present in all relevant response cells, as dictated by the Exercise Director. Evaluators will be responsible for evaluating and assessing the various exercise activities against set evaluation criteria to determine to what degree the objectives have been achieved.

An Evaluation Co-ordinator has been assigned for Exercise Shen. All evaluation reports are to be submitted to the co-ordinator for collation. They will then determine any lessons identified for improvement and make recommendations to be included in the final report.

Observers

The role of Observers is a passive one and they will be clearly briefed to that effect, they will be required to wear identification, armbands or tabards, clearly displaying their observer status. They may be requested to visit the exercise for the purpose of assessing their own staff but not to assess the exercise itself. They may also visit the exercise to identify and learn lessons in preparation for future exercises. Observers should where possible, be invited to attend the debriefing after the exercise. Those unable to attend should submit their comments to the respective co-ordination personnel responsible for collating the information.

For Exercise Shen an Observer Co-ordinator has been appointed who will act as an escort, provide commentary on the exercise, and collate any comments submitted by the observers for inclusion in the debrief.



Exercise Players

Players are agency/authority/company personnel who have an active role in responding to the simulated emergency and will perform and/or discuss their regular roles and responsibilities during the exercise. Various events will prompt reaction and players should proceed in accordance with established plans and/or procedures. All players must understand:

- The exercise overall aim and their objectives
- Health and safety arrangements - including procedures to be followed in the event of an actual emergency occurring during the exercise - and the need to undertake all exercise activities with due regard to the health and safety of themselves and others
- Procedures for the conduct of the exercise, including STARTEX and ENDEX, notional aspects of the exercise (e.g., the involvement of 'paper' units, etc) and visits by Exercise Directors, Controllers and Observers
- Their own limitations and the limitations of their equipment, and the need to advise Controllers if in doubt
- The effect of their actions on other activities
- The roles and responsibilities of the Exercise Directing staff
- The necessity of obtaining clarification from Controllers of unclear briefings, instructions or actions
- Procedures for reporting on the exercise, including comments and 'lessons learned'.

APPENDIX B

Controllers

Name	Organisation	Cell / Location
Jason Lomas	Petrofac	Exercise Control Cell
Alison Taylor	Nexen	Exercise Control Cell
James Shannon	Nexen	Exercise Control Cell
Stephan Hennig	Deputy to the SOSREP	Exercise Control Cell
David Wright	Petrofac	Incident Management Team
Rona Boyd	Petrofac	Incident Management Team
Neil Fraser	Petrofac	Business Support Team
Layla Gill	Petrofac	Operations Control Unit
Andy Matthews	Petrofac	Marine Response Centre
Jessica Romani	Petrofac	Environment Group
Graham Brown	Petrofac	Media Response Centre

Marc Duncan	Petrofac	Technical Support Team
Michael Coull	Petrofac	Role Player Coordinator

APPENDIX C

Evaluation Team

The evaluators will assess the productivity against the aims and objectives provided by the particular organisation to which they have been assigned.

Name	Organisation	Cell / Location
Stuart Hankey	Environment Agency	Environment Group
Dean Cogings	BEIS / OPRED	Operations Control Unit
Moira Langmuir	BEIS / OPRED	Operations Control Unit
Jo Evans	Natural Resources Wales	Marine Response Centre

Appendix C – Evaluation Team Briefing Pack

EXERCISE SHEN – EVALUATOR BRIEFING

1) Introduction

Thank you for participating on Exercise SHEN in the capacity of evaluator. Around 20 organisations are taking part in this exercise, which will test and validate the response to a pollution incident as part of Nexen's triennial SOSREP exercise, and involve the invocation of the NORBRIT agreement. It is imperative that the activities of participating organisations are assessed in line with their aim(s) and objectives to be able to confirm they are achieved or identify any shortfalls.

Your role as an evaluator will provide a qualified and independent review of each exercise cell's response to a table top scenario developed to test the activation and utilisation of the NCP, NORBRIT and responding organisations emergency plans. Using a discreet set of evaluation criteria you will be able to check and report on the effectiveness of a variety of functions and activities played out by those being exercised. This will ultimately provide the Exercise Director with reliable observations and recommendations, identifying learning opportunities and best practice. Constructive evaluation will assist plan owners, organisations and individuals to continually improve their future preparedness, response and recovery to pollution incidents.

2) References

The following references are applicable to the Evaluation Team:

- Terms of Reference – Evaluation Team;
- Exercise Orders, Timeline and Telephone Directory;
- Evaluation Forms;
- NORBRIT
- National Contingency Plan (NCP) for Responses to Marine Pollution from Shipping and Offshore Installations <https://www.gov.uk/government/publications/national-contingency-planncp>

3) Exercise Dates

The exercise will be conducted during the period 27th to 28th February 2018. Evaluator's briefing will be held on 26th February at Nexen.

4) Exercise Type

The exercise is a table top test of operational response cells and command post staff.

5) Exercise Scenario

Stena Drilling have been contracted for a drilling campaign at the Buzzard Phase II Development Project. The semi-submersible drilling rig Stena Spey is in the well testing phase of the 20/06a – CP13 well. The well is flowing at approximately 3,180m³ / day through the well test package.

Severe weather conditions consisting of high wind and waves necessitate the unlatching of the subsea test tree and Lower Marine Riser Package (LMRP). All relevant valves are activated / shut in and the BOP is disconnected from the rig at the LMRP. The Stena Spey unlatches the LMRP and skids off, on its anchor chains, 100m south west of the appraisal well.

Unknown to the drilling rig there is an ongoing subsea release. Due to the bad weather and the oil moving in a north easterly direction before surfacing approx. 200+m north east of the well location, there are no indications of the oil release.

On the morning of 27th February, around 0530, the severe weather has abated and a large slick has developed, extending north east. This is spotted by a fishing vessel transiting through the area who notify the Coastguard and the drilling rig as they have passed their position recently. The ERRV immediately deploys to the area and confirms a huge slick which is too large to quantify, this is confirmed to the OIM.

The OIM begins the notification process by contacting the Buzzard OIM and Stena ERT. The Nexen Drilling Supervisor contacts the Nexen Incident Commander via Security. A decision is made to activate the Nexen IMT.

The Stena Spey ROV is tasked with determining the source of the release and is deployed to examine the subsea infrastructure.

The Coastguard National Network and BEIS / OPRED are notified as per OPRED procedures.

At 0700, the Nexen IMT and Stena Rep are in position in the Nexen ERR where the team receive the initial brief.

6) Exercise Focus

The primary focus of the exercise is on pollution response and testing of the NORBRIT agreement.

7) Exercise Management Structure

The exercise will be overseen and managed by a centrally located Command Team at Nexen. Directing staff based at exercise cells will act as the eyes and ears of the command team. The evaluation team will also be present at specific exercise cells to measure the effectiveness of those participating.

Clear arrangements will be in place for the effective coordination of the at sea and on land response and to provide liaison between exercise cells. Local plans should address this requirement, including the provision of liaison officers in each cell to represent the interests of their organisation. Exercise SHEN is a regional exercise with international liaison serials.

8) Evaluation Team Cell Allocation and Contact Details

Cell	Evaluator	Mobile	E-mail
Eval Lead	Tris Newey		
EG	Stuart Hankey		
MRC	Jo Evans		
OCU	Moira Langmuir		
OCU	Dean Cogings		
HMCG Ops	Sandie Tomlinson		
Media	Emily Tofts		

9) Evaluation Forms

The cells identified in the table above are those that will be formally evaluated during the exercise. Each exercise cell has its own *personalised* evaluation form. The cells are:

- National Maritime Operations (HM Coastguard)
- Environment Group
- MRC (Marine Response Centre)
- OCU (Operational Control Unit)
- Media

The evaluation team lead will ensure those responsible for individual organisation evaluation forms are distributed to their nominated evaluator.

Evaluation Forms can be used to keep rough hand written or word processed notes during the Exercise, but the submission of the final evaluation report from individual cells must be word processed. The word document template of the evaluation form will expand as you add free text.

10) Timetable

26 February 18	
1500-1700	Briefing for the exercise control team, directing staff and evaluators

27 February 18 (Day 1)	
0600	Exercise Command Team arrive at Nexen
0615	Exercise Controllers and Evaluators communication Checks
0630	Exercise Pre-briefing (Nexen IMT only)
0700	Start of Exercise
All Day	Team mobilisations
All Day	Observers (Escorted tour around response teams)
1700 Est.	End of exercise (Day 1)
1700-1730	Participants Hot Wash-up (to be conducted by the Exercise Controllers of each team)
1730-1830	Hot Wash-up (Exercise Controllers and Evaluators Only)
Circa 2100	Exercise Command Team to issue 'overnight activities' to all Exercise Controllers in preparation for the overnight activities briefing on Wednesday 28 th February.

28 February 18 (Day 2)	
0630	Exercise Command Team arrive Nexen
0645	Exercise Controllers and Evaluators communication checks
0715	Start of exercise
All Day	Team mobilisations
All Day	Observers (Escorted tour around response teams)
1700 Est.	End of exercise (Day 2)
1700-1730	Participants Hot Wash-up (to be conducted by the Exercise Controllers of each team)
1730-1830	Hot Wash-up (Exercise Controllers and Evaluators only)
1830	Completion of Exercise

11) Evaluation Team Communications

During the exercise the following opportunities to communicate will exist;

- Open line of mobile and e-mail communication with evaluation team leader at any time;

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- Evaluation team leader to communicate any important exercise information to the team, one way, no replies needed;
 - Evaluation team daily hot wash-up.

12) Conference Calling

If a conference call facility is required for use of the evaluation team for daily briefings or wash-up meetings, details for the conference call are given below:

[Redacted]

Times and duration of the conference call will be set as required by the Evaluation Lead.

13) Post Exercise Dates

The following dates will rely on the timely input of evaluation reports:

- 30 March – Deadline for evaluation team to submit evaluation reports to lead;
- 20 May – Deadline for the lead to collate individual reports into a single evaluation report;
- 17 June – Deadline for the evaluation team to review and comment on the DRAFT evaluation report. Report in FINAL DRAFT and submitted to Exercise Director;
- Week Commencing 30th July – Formal Exercise De-Brief.

14) Exercise Cell Liaison

Directing staff and evaluators are encouraged to liaise during each day's activities, sharing views, observations and bouncing ideas off one-another to facilitate individual work streams. There is formal requirement for directing staff and evaluator to conduct a hot wash up at respective cells between 1730-1830 to cross reference their assessment of the day's activities and identify any matter that requires the attention of the Command Team. Directing staff will report exercise control matters to the Command Team at the daily meeting.

15) Exercise Instructions

The Exercise Instructions accompany this briefing pack. The Instructions provide a useful overview of exercise arrangements.

16) Exercise Timeline

A copy of the exercise timeline accompanies this briefing pack. This provides an overview of the timetabled and flexible injects that will allow the exercise command team and directing staff to control and steer the exercise. The timeline is provided to evaluators so they are able to track key elements of

the exercise for evaluation purposes. It also identifies the exercise start, end and briefing timings. Please DO NOT share the timeline with exercise players.

17) Exercise Venue

The various response groups will be located at Nexen Headquarters at the following address:

Nexen Petroleum UK Ltd

Discovery House

Prime Four Business Park

Kingswells Causeway

Kingswells

Aberdeen, AB15 8PU

18) Security

All visitors to Nexen HQ will be required to undergo an induction to the Building on first arrival. Please allow up to 20 minutes for induction on first arriving at Nexen. Reception staff at Nexen will arrange for the induction to take place.

It is recommended that identification is worn at all times while on Nexen premises and for the duration of the exercise.

19) Guidance on evaluating against Human Elements (Performance Influencing Factors)

There are three areas of evaluation common across all evaluation forms which relate to Human Elements, particularly in relation to Performance Influencing Factors. These are factors recognised by HSE which are important to the efficient and safe operation of such things as chemical manufacturing, oil refinery or factory production procedures and processes, but which are equally applicable to the performance of decision making groups or individuals when

following a system of work. Therefore, some PIF's can be applied to such activities as incident management where a formal process is followed involving decision mechanisms, standard operating procedures or checklists.

For Exerciser SHEN, it has been agreed that a set of common PIF's will be evaluated against across all groups in order to inform how well the human element of the exercise engaged with the procedures and management groups in response to the incident. Recommendations against those procedures and processes can therefore be made in the evaluation report.

The three evaluation areas chosen for the exercise are:

- Task Factors
- Personal Factors
- Organisational Factors

Within each area a subset of indicators have been chosen that reflect the tasks being asked of the group's and their individual members.

Evaluation of each area is subjective; there are no scoring or 'rules' for how each area is assessed. The requirement is to note, in general, over the course of the exercise what observations are made against these indicators. For example, when evaluating the 'clarity of instruction and briefing', you may comment on whether a formal (structured) briefing format was used, and how effective the briefing was to those receiving it, or whether the briefing was relaxed and informal, and if the giver had the attention of the room. Outcomes of such observation may lead to a recommendation of a formal briefing system across all cells, for example.

The Lead Evaluator will be able to provide guidance before and during the exercise, and discussion can be held at any time to gain consensus of observation.