



Proactive Crisis Management- Hindsight in advance

Workshop TIEMS

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Project manager, IntraPoint

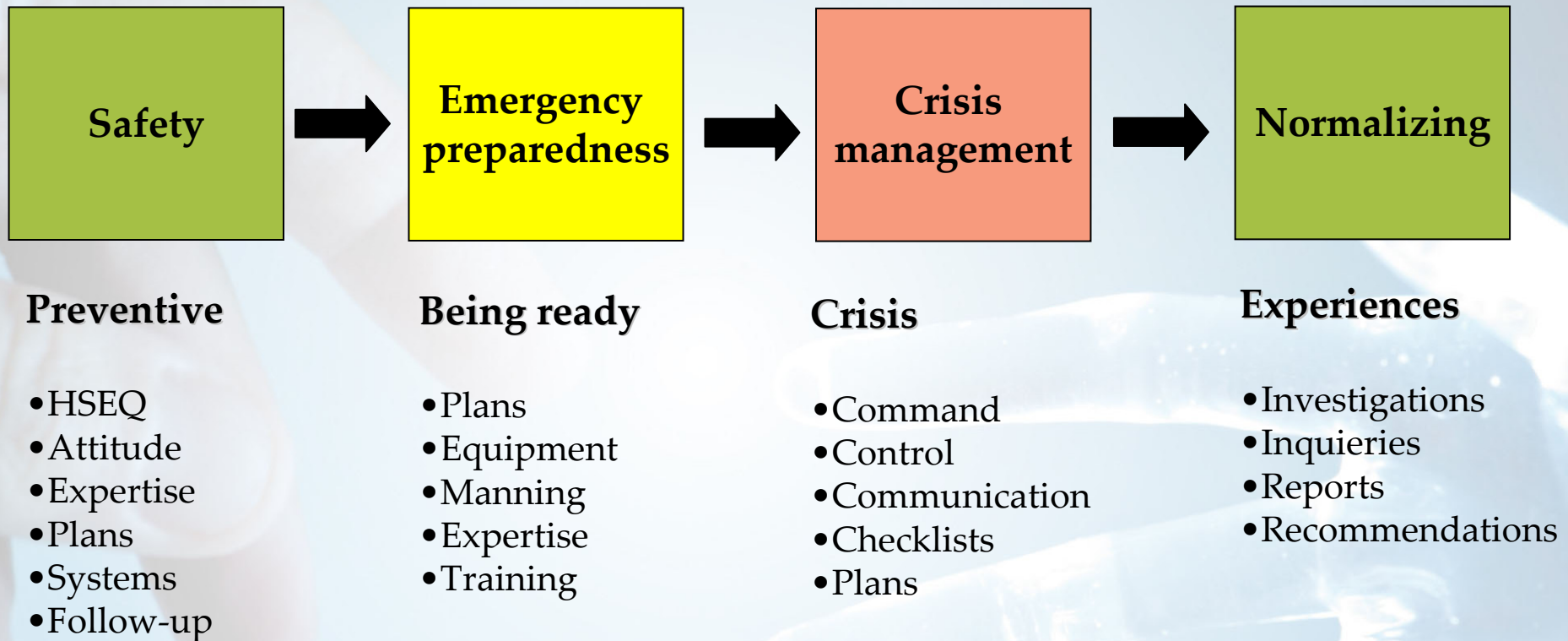
Background

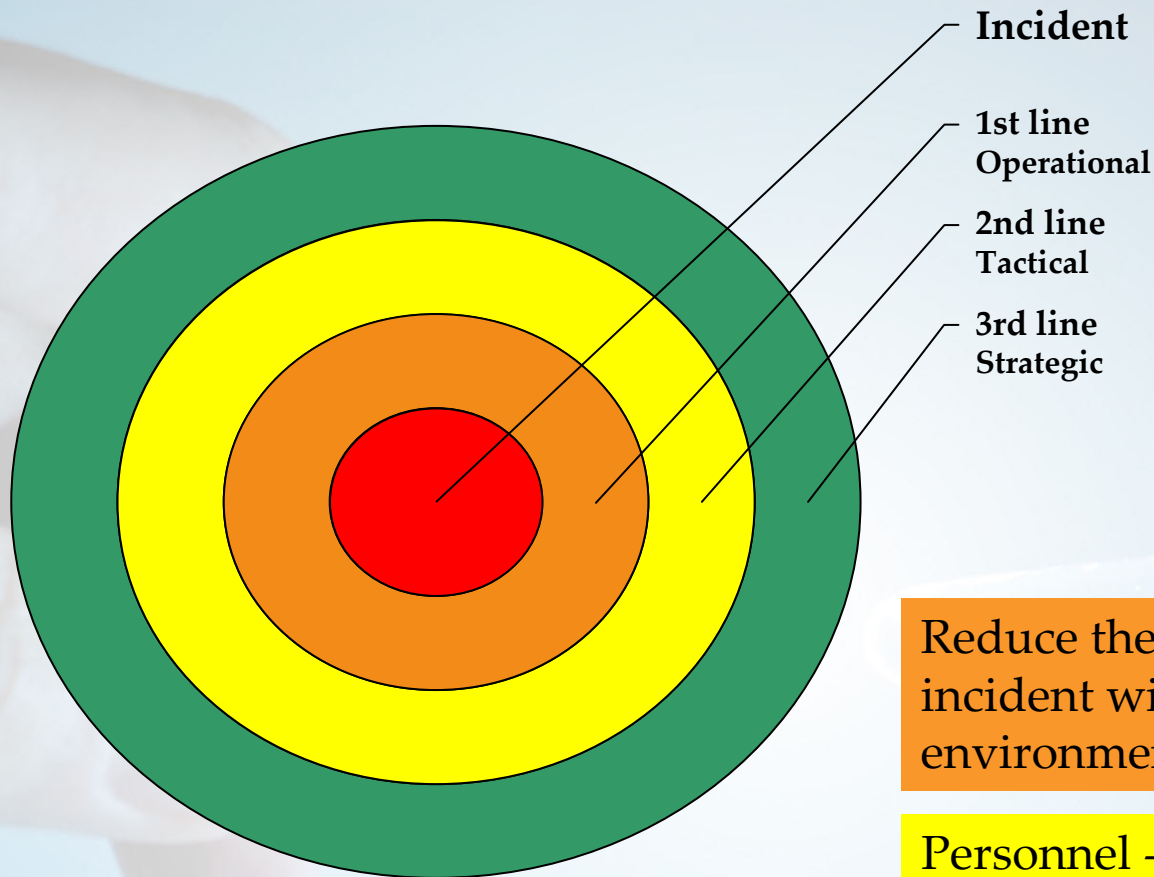
- IntraPoint
 - Originated informally from within the academic community at the Norwegian University of Science and Technology (NTNU) and The Foundation for Scientific and Industrial Research (SINTEF).
 - Founded in June, 1999.
 - Has grown into a highly successful global company and still maintains strong ties to the academic community in Trondheim, Norway.
- Lars Terje Rotabakk
 - Employee since march 2007
 - Originally a high-school teacher
 - Background as an instructor for 6 years in the Norwegian Civil Defense

Themes for this presentation

- Lifecycle
- Challenges
- Tools
- Improvements

Safety and crisis management





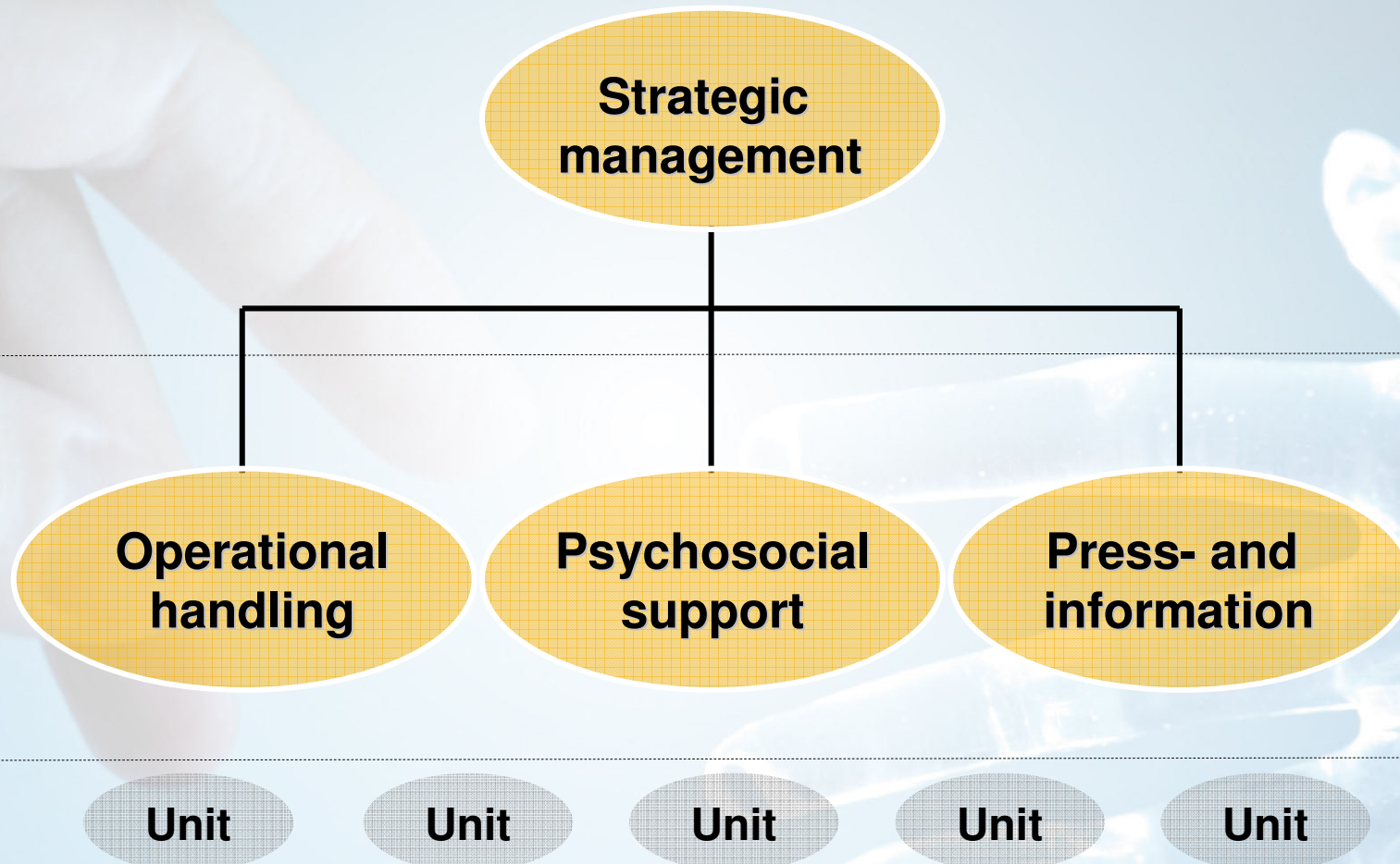
Reduce the harmful effects of the incident with focus on humans, environment and assets

Personnel - Technical support -
Authorities - Information - Media

Reputation - Finances - Insurance -
Stakeholders



Good handling is always depending on: Information control



Infoboards

- Four boards to be projected in the emergency room as a common focus. In addition each member has rolebased access to the system and own functionality.
- Infoboard
 - With incident type, observations, personnel status, weather conditions
- Focus and actions
 - Board with defined focus, next actions with timelimits and executed actions
- External Contacts
 - Communcation with external contacts, internal contact, when they were informed first time and last time
- External Resources
 - Available external resources with estimated time of arrival

Incident

DFU: Fire/Explosion **Seriousness:** Level 2 **Unit:** Main Office **Time:** 23.01 10:21

| Time | Observation | Reported by | Status | Released |
|-------------|--|----------------|-------------|----------|
| 23.01 10:55 | Conduct 1st meeting | Overvik, Helge | Unconfirmed | No |
| 23.01 10:46 | EMT mobilized, evacuation signal send. | Securityguard | Unconfirmed | No |
| 23.01 10:45 | A large explosion close to reception area by the main entrance | Securityguard | Unconfirmed | No |








Personnel status

Last updated: 23.01 10:40

Total: 456 Evacuated: 46 Missing: 2 Injured: 0

Weather

Last updated: 23.01 10:40

| Conditions  | Temp  | Wind  | Oceanic current  | Sun  | Significance |
|---|--|--|---|---|---|
|  Good visibility | Air: -4 Sea: 4 | Direction: NE Force: 3 Wave: NA | Direction: NA Force: NA | Up: 0823 Down: 1613 |  No impact |

Focus and Action (exercise)

Local time: 14:55:57

 Off

Focus

Evacuating personnel, kill fire

| Next action | Responsible | Time limit |
|-------------|-------------|------------|
|-------------|-------------|------------|

| | | |
|-------------------|--------------|-------------|
| Alert government | Duty Officer | |
| Notify management | Duty Officer | 23.01 10:36 |

| Executed actions | Time executed |
|------------------|---------------|
|------------------|---------------|

| | |
|----------------------|-------------|
| Conduct 1st meeting | 23.01 10:55 |
| Alert Firedepartment | 23.01 10:55 |
| Contact Police | 23.01 10:55 |
| Call CEO | 23.01 02:17 |

External Contacts (exercise)

Local time: 14:46:31



| Authority | Contact | Internal Contact | First notified | Last notified | Note |
|----------------------------|--------------|-------------------|----------------|---------------|--|
| Fire department | Duty officer | Crisis Manager, . | 23.01 10:51 | 23.01 10:51 | Informed about possible terrorbomb Helge Overvik, 01/23/2007 - 10:52 AM |
| Petroleum Safety Authority | Hans Hansen | Crisis Manager, . | 23.01 10:52 | 23.01 10:52 | Informed about the situation Helge Overvik, 01/23/2007 - 10:53 AM |

External Resources (exercise)

Local time: 14:56:57



| Resource type | From | When (ETA) | Where | Comments |
|---------------|----------|-------------|----------------------|--|
| Fire brigade | Downtown | 23.01 10:58 | Main office building | Will arrive as fast as possible |
| Police | Downtown | 23.01 10:59 | Main office building | Beaware of possible terrorbombs, will bring EOD team as well |




Handling during an incident

- Information update
- Role based checklists
- Registration of tasks

Crisis Manager
Local time: 10:59:56 You are logged in as: Helge Overvik Logged in users Log out

Boards Mobilize Reports **Check List** Observation New Action My Actions NoK Media Contacts Units Archive Log Plans



Exercise

Selected exercise:
Run Aground

Activated:
29.01.2007 10:45

Current focus:
Redde liv, skaffe ressurser

▶ **Check List**

▶ My Check List

▶ Modify ...

▶ **All Check Lists**

▶ Modify...

▶ **Available lists**

▶ **Duty officer**

All Check Lists

"Duty officer"

| CheckPoint | Description | Time limit | New action | Executed | N/A | Details |
|--|--|------------|--------------------------|--------------------------|--------------------------|---------|
| 1 <u>Notification</u> | | | | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.1 Inform duty organisation | Duty officer Army Duty officer Air Dutyofficer Navy Duty officer FOHK | 00:00:00 | | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.2 Inform VSTO | Phone no. 45678910 | 00:00:00 | | <input type="checkbox"/> | <input type="checkbox"/> | |
| 1.3 Inform Press and Information Officer | Phone 89900990 | 00:00:00 | | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2 <u>Mobilization</u> | | | | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.1 Mobilize relevant resources | Coastguard Army Territorial Forces Air Force | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.1.1 Coastguard | Ressurser Kvstvakten | | | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.1.2 Air Force | Luftforsvaret | | | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.1.3 Territorial Forces | HV-avdelinger | | | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2.2 Liaisson Officers | If applicable JRCC NN LO | | | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3 Handling | | | | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4 Normalisation | | | | <input type="checkbox"/> | <input type="checkbox"/> | |

Situation Update

| Incident type | Unit | Incident/Exercise | Seriousness | Activated | Current focus |
|---|--------------------|---|---|------------------|---|
| Leakage on upstream flange | Petrojarl Foinaven | Exercise | Serious incident | 22.08.2007 08:47 | Reception of Crew in Scalloway / Missing Person - NOK |
| Personnel status Last updated: 22.08 12:10 | | | | | |
| POB: 65 | Missing: 1 | Injured(offshore): 1 | Injured(onshore): | Evacuated: 64 | Info: |
| Weather Last updated: 26.03 11:48 | | | | | |
| Conditions | Temp | Wind | Oceanic current | Sun | Significance |
| ☀ Excellent weather | Air: Sea: | Direction: Force: 15.3 m/s (Near gale) | Direction: , 2 m/s Wave: Hs m, max m | Up: Down: | |

Observations

| Time | Observation | Reported by | Released |
|-------------|--|------------------|--------------------|
| 22.08 12:39 | The subcontractor has been informed that the sick person has meningitis. | Geir Arne Hansen | No |
| 22.08 12:24 | Medical Care in Lerwick has informed us that the sick person has Meningitis. (Hjernehinnebetennelse). They recomend all crew-members to be on quarantine on the standbyvessel. | Cris, Aberdeen | Media, Next of kin |
| 22.08 12:07 | Costguard-Helicopter have searched closed to FPSO and nearby area for missing person, but unfortunately missing person is still not located. | Chris | Media, Next of kin |
| 22.08 12:05 | Gramphion Concast is still at the field with all evacuated crew-members. Awaiting clarification for returning to the FPSO. | Chris | Media, Next of kin |
| 22.08 12:01 | Technical - Informed BP ERC operation pressure of gas injection riser 220 bar, prod riser 13 bar might increase. | OAW | No |
| 22.08 11:59 | Technical - Informed BP ERC level of riser ESD valve at connector deck, elevation 30 m from keel. | oaw | No |
| 22.08 11:45 | Sick Person has arrived Lerwick. Medical condition not confirmed. | Cris, Aberdeen | Media, Next of kin |
| 22.08 11:39 | The leakage is on the flange on riser no. 8 on connector-deck | Cris, Aberdeen | No |
| 22.08 11:34 | Technical - Informed BP ERC that with a gas detection an automatic blowdown for the pipeline system in the turret area. | oaw | No |
| 22.08 11:31 | Our agent at Shetland, OBC, will send personnel to Scalloway to receive personnel evacuated. | Geir Arne Hansen | No |
| 22.08 11:25 | Doctor from Abermed will arrive Shetland (Sumburgh) at 13:30 local time. | Geir Arne Hansen | No |
| 22.08 11:19 | 1-2 persons from Teekay Petrojarl Aberdeen will travel to Lerwick. Arrival at Sumburgh at 13:30 local | Elaine Purcell | No |

Actions

| Next action | Responsible | Deadline |
|--|----------------|----------------|
| Charter planes for NOK from Norway to Shetland | Størseth, Arve | 22.08.08 11:00 |
| Charter planes for NOK from Aberdeen to Shetland | Størseth, Arve | 22.08.08 11:30 |
| Notify NOK to offer them flight to reception area | Størseth, Arve | |
| Technical resource needed to check out fire & gas system - Safe to go onboard ?? | Weisath, Odd | 22.08.08 11:20 |
| Mobilize a new crew to be ready to mann Foinaven. | Størseth, Arve | 22.08.08 12:38 |

Check List

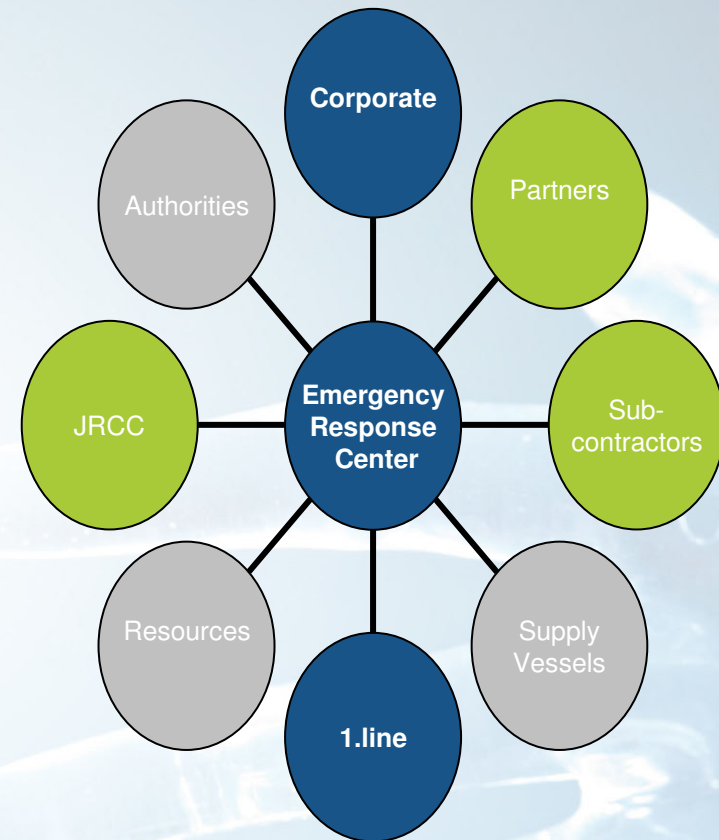
| ERC Plotter | Exec. | N/A | Act. |
|---|--------------------------|--------------------------|--------------------------|
| 1 Notification | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.1 Keep all boards updated at all times | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1.2 Ensure to update the notification screen when the relevant authority or Agency is notified and also when the next follow up call is planned | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 Mobilisation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 Emergency Response | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.1 Plot all information and actions based on input recorded by the members of the ERC team | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.2 Assist in setting proactive actions for handling the emergency situation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.3 Ensure that intended proactive actions is accomplished in time and that this is updated on the action board | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.4 Ensure that the latest Teekay Petrojarl holding statement/press release is available for all members of the ERC | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.5 Ensure that all information plotted on the screens/whiteboards is saved and available on request at all times | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 Normalisation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.1 Give advice regarding possible "normalisation project group" | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.2 Give advice regarding the investigation of the incident | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.3 Contribute to the final incident report | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Notification Board

| Authority | Contact | TK Contact | First notified | Note |
|------------------------------------|----------------|------------------|----------------|--|
| Authorities | | | | |
| Bahamas Emergency phone | Mr. Donaldson | | 22.08 10:50 | Ørjan Wolllebæk, 19.12.2007 11:14 Europe/Oslo |
| Insurance | | | | |
| GARD | Morten Fleines | Kolstad, Øystein | 22.08 09:13 | test Øystein Kolstad, 18.12.2007 13:37 Europe/Oslo |
| Norw. Hull Club | Leif Petterson | Kolstad, Øystein | 22.08 09:16 | test Øystein Kolstad, 18.12.2007 13:39 Europe/Oslo |
| Operating Company | | | | |
| BP ERC - Dyce | Lorain | Kolstad, Øystein | 22.08 09:20 | Øystein Kolstad, 18.12.2007 13:40 Europe/Oslo |
| Subcontractors | | | | |
| Det norske Veritas - DNV (Tr.heim) | Marin Melhus | Kolstad, Øystein | 22.08 09:18 | Øystein Kolstad, 18.12.2007 13:41 Europe/Oslo |
| Securitas Oslo | Duty | Kolstad, Øystein | 22.08 09:27 | Øystein Kolstad, 18.12.2007 13:42 Europe/Oslo |

Integrated Emergency Response Operations

- Granted full or limited access to Crisis Manager system
- Granted limited access to input or read information to/from Crisis Manager
- All communication logged by Crisis Manager users



Improved performance and regularity

