

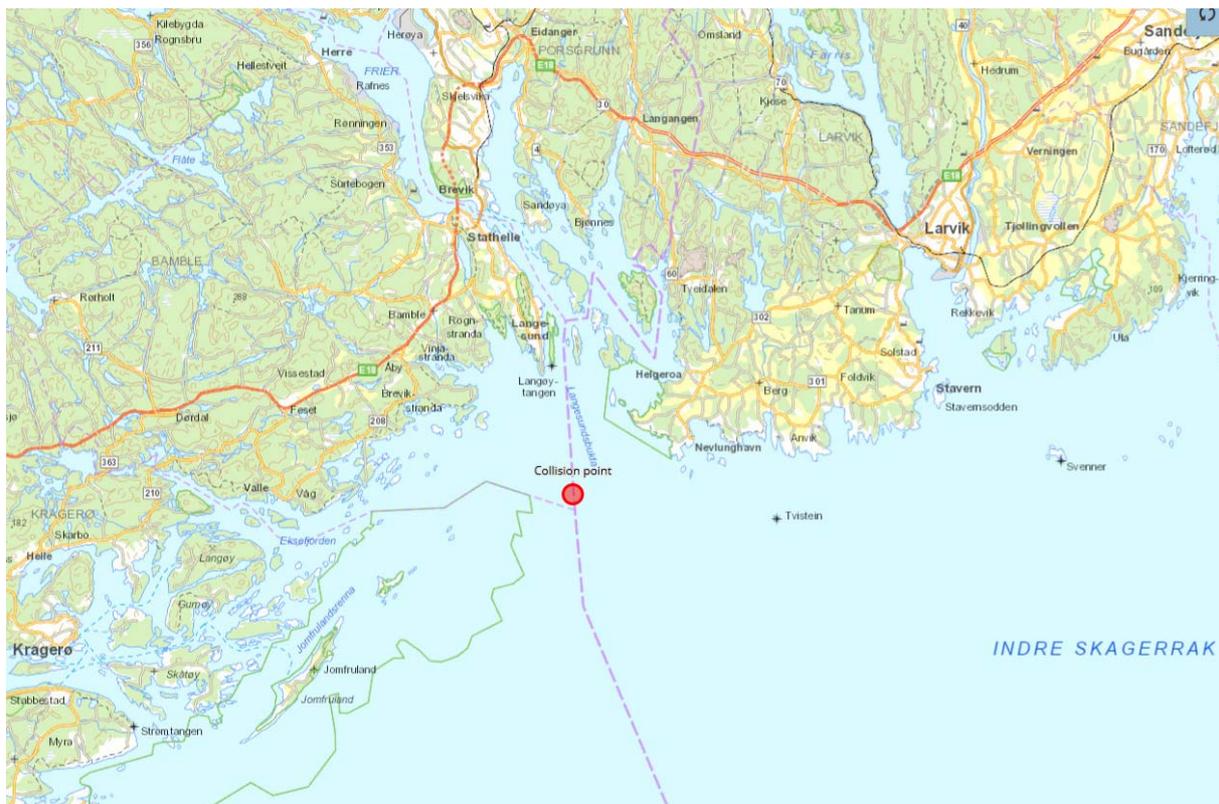
## MASTER SCENARIO DESCRIPTION – EXERCISE SCOPE 2017

### STORYLINE

On **September 26<sup>th</sup> 2017 at 02:14 local time**, the product tanker “NCA OIL”, IMO nr. 9682978, westbound from Slagentangen, collided with the gas (LPG) tanker “NCA CHEM”, IMO nr. 9744922 inbound for Herøya in Porsgrunn. The gas tanker was loaded with ammonia. The collision took place west of the pilot boarding area, outside Grenland in Telemark county, on the south east coast of Norway.

The collision occurred just before the pilot embarked the gas tanker.

Collision point: **N 58° 56,50 E 009° 46,85**



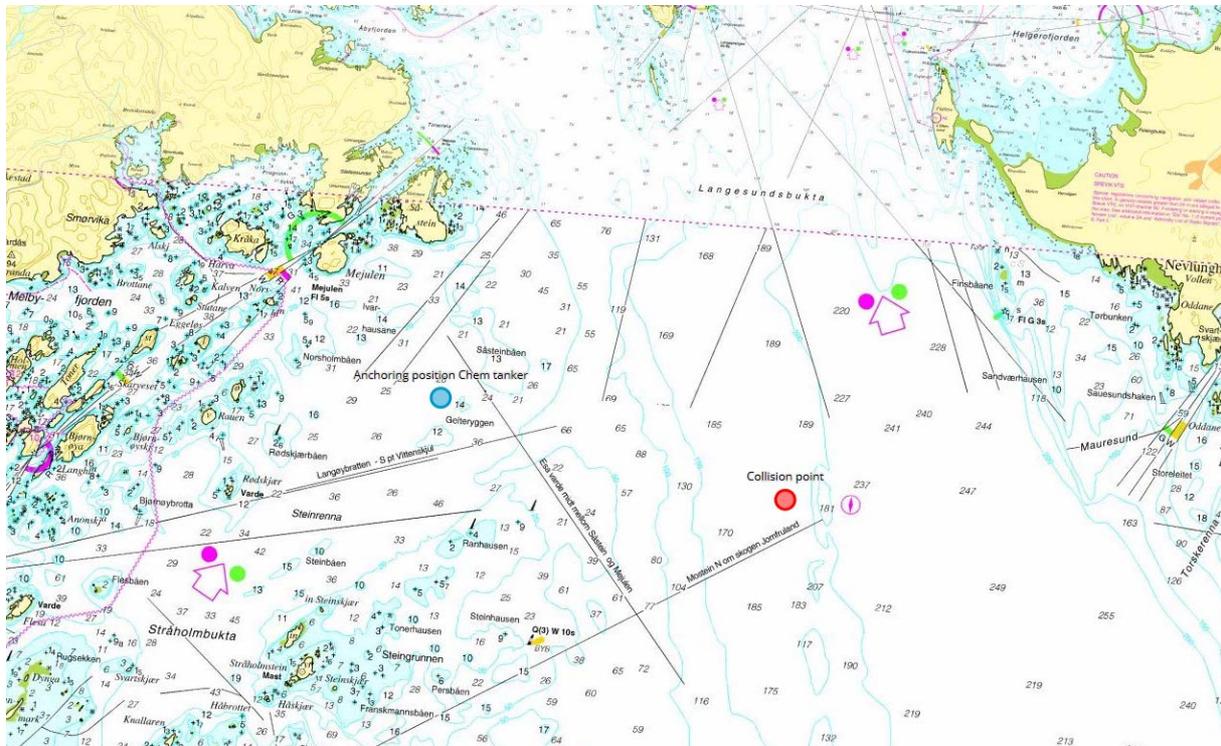
As a result of the collision, the two hulls were partly crumpled and stuck together, and approximately 40 m<sup>3</sup> of heavy fuel oil flowed into the sea. The winds were from the south at the time, and the leaked oil drifted north, mainly towards Krokshavn in the Langesund area.

A local tug and a rescue vessel responded to the accident. They managed to keep the two vessels in the same position. The cargo system on board the gas tanker was evidently damaged. Due to the potential for a large ammonia leakage from gas tanker, the masters decided it was imminent to separate the two vessels.

At **05:20** local time, the masters succeeded to separate the vessels by assistance from the tug. However, during the separation of the crumpled hulls, one cargo tank on the product tanker was punctured just above the waterline. A massive amount of oil flowed into the sea at this time. Also the cargo system on the gas tanker was even more damaged as a result of the separation operation, and the potential for a gas leakage was even higher than before.

During the morning hours the wind direction shifted from south to north east. The critical condition of the product tanker called for a place of refuge in Norway. At the same time, it was imminent to get the product tanker away from the gas tanker due to the risk of a gas leakage. The product tanker was assisted by a local tug, and was towed upwind to a secure berth in Larvik. The crew checked the damaged cargo tank, and estimated the oil spill to be approximately 1000 m<sup>3</sup> of heavy fuel oil (IF180). The massive part of this volume leaked out after the wind direction change, which caused this oil to drift outwards to the open sea. The product tanker did not leak oil during the towing towards Larvik. The vessel was berthed in Larvik Harbour, where IUA Vestfold has been mobilized and given the task to secure the area in case the vessel potentially should cause any further leaks while berthed.

After the separation operation, the damaged gas tanker drifted slowly towards «Såsteinflaket». The gas tanker dropped its anchors in position **N 58°56,95 E 009°42,83**. The crew then discovered a gas leakage from the damaged cargo system. The hull of the gas tanker was not reported leaking. The crew on board the gas tanker made a huge effort to stop the ammonia leakage. However, the crew was unable to stop the leakage themselves, and called for assistance. National MIRG teams from Oslo and Bergen were mobilized during the night, in order to handle the ammonia leakage.



NO CGV NORNEN was during the night appointed as On Scene Coordinator (OSC) by Joint Rescue Coordination Centre (JRCC) Stavanger.

Despite the ammonia leakage, the crew on board the gas tanker reported to be safe, and JRCC Stavanger handed over the lead of the operation to The Norwegian Coastal Administration (NCA) as the national competent authority at **05:55** local time. NCA had until then monitored the ongoing operation, and made plans for the upcoming chemical handling and oil spill operation, including notification to relevant parties, and mobilization of both municipal and NCA resources. After handover from JRCC Stavanger, NCA continued to keep NO CGV NORNEN as lead vessel on site, and appointed her as On Scene Commander for the upcoming MIRG CHEM and oil spill response operations.

NCA early judged that the accident called for a governmental lead response. Further planning of the oil spill operation both at sea and at shore commenced, and an extensive mobilization of national and international oil spill response resources was made during the night. This included the activation of the EUCP, and the use of SafeSeaNet and CECIS to notify and request support from the neighboring states and the EU. Experts from the EUCP are expected to contribute with technical support and guidance. International oil spill response contributions will be handled by NCA in accordance with regulations and procedures for host nation support. The Swedish vessels KBV 003 and KBV 307 happened to be in close proximity due to a bi-lateral training event. These responded quickly to NCA's mobilization request, and were capable of supporting the upcoming MIRG CHEM operation on board the gas tanker.

Due to the ongoing ammonia leakage, the oil spill recovery operation at sea has been on hold until further. The ammonia leakage required a safety zone, and no oil spill recovery assets have yet been on scene as of 06:00 local time.

NCA have arranged with the Norwegian Civil Aviation Authorities to establish an Air Danger-Area to allow for safe air operations. The MIRG team from Bergen, NO CGV NORNEN, and IUA Telemark have all reported that they intend to use drones (RPAS).

As of 06:00 on September 26<sup>th</sup>, no surveillance aircraft have been on scene. The Norwegian aircraft LN-KYV was in North-Norway at the time of the incident, and due to a small snag, the earliest available time in Langesund would be at 16:00 local time.

The Swedish aircraft KBV 501 would be available September 26<sup>th</sup> at 13:00 local time.

Sandefjord airport (Torp) has been arranged as the operating base for both aircraft.

NCA has received one satellite observation from KSAT, which confirms oil slicks in the area of the collision (see imagery below).

**The NCA Incident Commander declared a governmental lead response operation to be in effect from 06:00 local time on September 26<sup>th</sup>. The Incident Commander will direct further operations through orders, specifying priorities, tasks and guidance, to subordinate units.**

At 26 **06:00** local time, the mobilization and request for assistance status was as follows:

**AIR:**

- |  |           |
|--|-----------|
| • LN-KYV (NOR aircraft, by the time located in Tromsø) | ETA 16:00 |
| • International request: Offered by SE: "KBV 501"      | ETA 13:00 |
| • NO Rescue Helicopter (330 sqn) – For MIRG insertion  | ETA 08:30 |

**SEA:**

- |  |                         |
|--|-------------------------|
| • NO CGV "BERGEN"  | ETA 17:00               |
| • NO CGV "NORNEN"  | On scene                |
| • NCA "OV UTVÆR"   | ETA 15:00               |
| • NCA "OLJEVERN 03"                                      | ETA 14:00               |
| • International request: Offered by SE: "KBV 003"        | ETA 08:00               |
| • International request: Offered by SE: "KBV 307"        | ETA 08:00               |
| • International request: Offered by DK: "GUNNAR THORSON" | ETA 13:00               |
| • International request: Offered by DK: "METTE MILJØ"    | ETA 13:00               |
| • International request: Offered by DE: "EVERSAND"       | ETA 13:00               |
| • International request: Offered by EMSA: "MT NORDEN"    | ETA 15:00               |
| • International request: Offered by EMSA: "DESMI SWEEP"  | ETA 27 06:00 (Oil boom) |
| • NCA contract vessel: "RØSSESUND" (Hvasser)             | ETA 16:00               |
| • NCA contract vessel: "INGEBORG PLATOU" (Tønsberg)      | ETA 16:00               |
| • NCA contract vessel: "ANNY" (Langesund)                | ETA 11:00               |
| • NCA contract vessel: "TRISSET" (Kragerø)               | ETA 12:00               |
| • NCA contract vessel: "EVIS" (Kragerø)                  | ETA 13:00               |

- NCA contract vessel: "TUG FRIER" (Kragerø) ETA 15:00
- NO (NCA) TUG "BB Connector" ETA 13:30
- NO TUG (Only for towing the chem tanker) ETA 14:00

**MIRG assets:**

- NO MIRG (Bergen) ETA 08:00
- NO MIRG (Oslo) ETA 08:00
- International request: Offered by SE: "DIVE TEAM" ETA 08:00 (on KBV 003)

**LAND/SHORELINE:**

- IUA Telemark Mobilized
  - NO Civil Defence (with IUA Telemark) Mobilized
- NOFO special team (to Krokshavn) Mobilized
  - WWF (10 pax) through NOFO Mobilized
- IUA Vestfold Mobilized
- IUA Aust-Agder Notified
- IUA Vest-Agder Notified
- NCA depot Horten Mobilized
- NCA depot Kristiansand Mobilized
- SNO (Norwegian Environmental Agency field teams) Mobilized
- International request: Offered by SE: "STRANDBEKEMPARE" ETA 11:00

**OTHER ASSETS:**

- EUCP team (3 persons) ETA: 10:00

In addition, numerous national authorities and organizations were notified by NCA, and/or by JRCC:

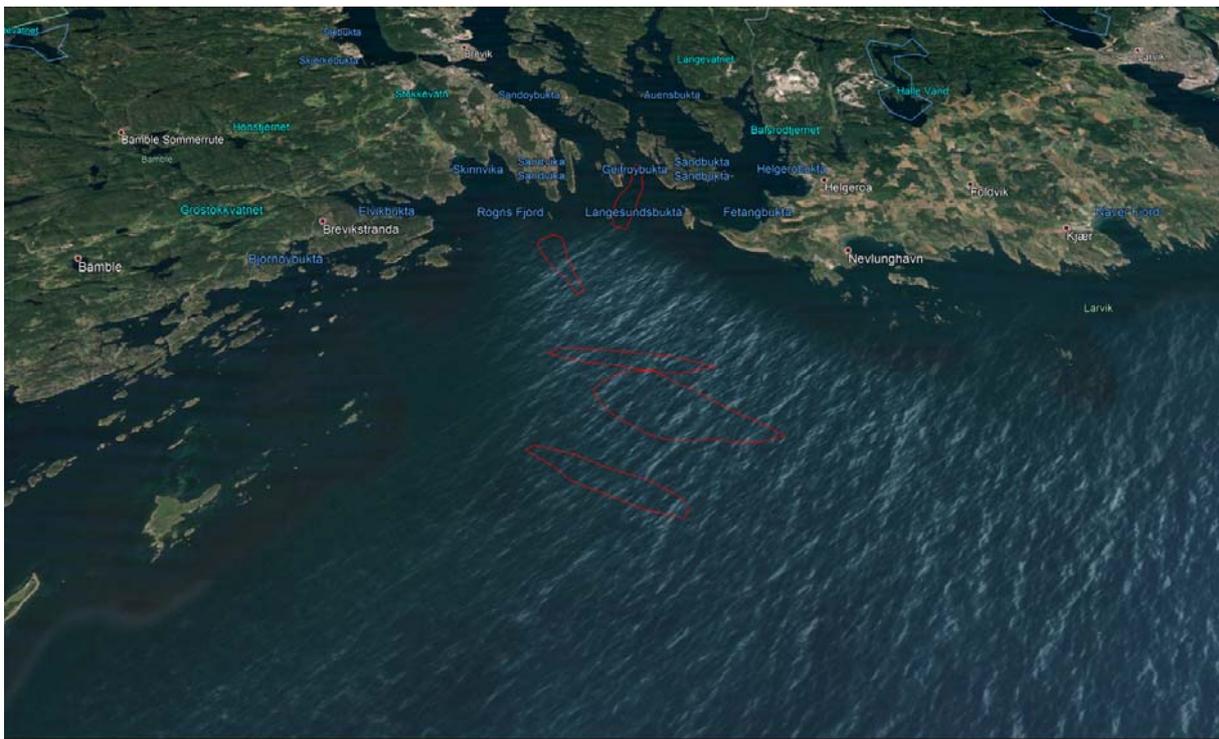
- Norwegian Ministry of Transport and Communications Samferdselsdepartementet
- Norwegian Maritime Authority (NMA) Sjøfartsdirektoratet
- Norwegian Environmental Agency (NEA) Miljødirektoratet
- NCA advisory group Rådgivende gruppe
- Norwegian Police, South East District Politiet Sør-Øst
- Accident Investigation Board Norway (AIBN) Havarikommisjonen
- Norwegian Clean Seas Association for Operating Companies NOFO
- Telemark County Governor Fylkesmannen
- Aust- og Vest Agder County Governor Fylkesmannen
- Vestfold County Governor Fylkesmannen
- Local Municipalities Kommuner
- Local port authorities Havnevesen

NCA has received one satellite observation from Kongsberg Satellite Services (KSAT), which confirms oil slicks in the area of the collision.

Satellite acquisition time was 0530 local time.

## Detection - Overview

Spill #	Central Position (WGS84/EPSSG4326)	Area	Length	Width	Orientation	Possible Source
1	58° 59' 17.51" N / 009° 46' 51.90" E	0.98 km <sup>2</sup>	2.69 km	0.57 km	21.34°	UNKNOWN
2	58° 58' 11.80" N / 009° 47' 01.15" E	1.25 km <sup>2</sup>	3.40 km	0.52 km	275.45°	UNKNOWN
3	58° 55' 24.93" N / 009° 47' 52.52" E	3.92 km <sup>2</sup>	3.90 km	1.76 km	283.06°	UNKNOWN
4	58° 54' 24.21" N / 009° 46' 41.97" E	1.63 km <sup>2</sup>	3.33 km	0.71 km	285.49°	UNKNOWN
5	58° 58' 01.23" N / 009° 45' 18.34" E	0.84 km <sup>2</sup>	2.31 km	0.73 km	318.93°	UNKNOWN



## PLAY INSTRUCTIONS:

An exercise director staff (DISTAFF) organization will be established. Some injects will be played from DISTAFF to participating units, however most of the play will develop as naturally based on the real players participation.

In order to facilitate the exercise in such a manner that the participant's goals can be met, some pre-arrangements are made. The development in the play is partly planned and coordinated in advance.

### **Please note the following:**

- The NCA Incident Command staff shall establish contact, as seen necessary, with relevant cooperating parties after exercise start on September 26<sup>th</sup>, in order to establish a common understanding of the situation, and/or make other coordination or agreements for the upcoming operation.  
**NOTE:** No real notification of other players is expected at STARTEX, since this is described in the scenario as already taken care of during the night. All players shall act as already notified and/or mobilized. The participating resources listed ETAs will be a guideline for expected arrivals (ready) times.  
All units shall, upon arrival, report to a higher echelon in accordance with the Command- and Control structure (as described in the Exercise Directive).
- All vessels are responsible to plan their transit in order to meet the given ETA as listed in the scenario description. All vessels shall report to the Supreme On Scene Commander (SOSC) before arrival (as a rule of thumb at least 1 hour prior to arrival).  
All vessels shall also report to DISTAFF (by phone) and indicate whether the given ETA will be met. (See phone number to DISTAFF Duty Officer in the "Communications Catalogue").
- NO CGV BERGEN may be visible, and shown on AIS, in the exercise area during daytime on Tuesday 26<sup>th</sup>. This vessel is then performing duties for the Exercise Director, and is not available for oil spill response or other duties from Incident Command. Hence, the Incident Command staff must disregard this vessel at this time, and adhere to the given ETA for NO CGV BERGEN.
- NO CGV NORNEN shall (after the JRCC handover to NCA) continue as Supreme On Scene Commander (SOSC) for the initial phase of the environmental operation. This shall be exercised until a handover of the SOSC role to NO CGV BERGEN is to be executed (when NO CGV BERGEN arrives in the afternoon according to the given ETA). NCA personnel will embark NO CGV BERGEN to act as SOSC from this time.
- The MIRG teams shall operate from the Swedish Coastguard vessel KBV 003, due to the CHEM-REC capability of this vessel. The transport of MIRG teams from shore shall be done by helicopter (pre-ordered from 330 squadron Rygge), eventually by boat (KBV 307). The MIRG teams will be inserted on KBV 003, then transported by boat to the gas tanker. When the

ammonia leakage is stopped, and the MIRG teams are demobilized, the KBV 003 will perform a decontamination and diver operation, and will be unavailable for oil spill response for some hours.

- The gas tanker shall be given a place of refuge in the harbour of Langesund (at the NATO-pier) after the ammonia leakage is stopped. The gas tanker shall be towed by the emergency towing vessel (ETV) BB Connector, assisted by a local tug.  
The NCA Incident Command shall consult the Norwegian Maritime Authorities well in time before the emergency towing operation commences.
- The local Police, the Accident Investigation board Norway (AIBN), and the Norwegian Maritime Authority shall investigate the incident on board the gas tanker. The gas tanker will be physically available for investigation after it is berthed in Langesund (NATO pier) on September 26th, and also on September 27th.
- The product tanker will only be a paper-played vessel during the whole exercise. There is no physical ship indicating this object.
- Oil spill response shall continue at sea during the night with the aid of available tools for working in darkness.
- During the exercise, considerations or decisions may arise (by the Police) concerning evacuation of the population in Langesund area, due to ammonia spill. Such an evacuation will not be physically played, and shall only be played as a paper/staff exercise.
- An EUCP team consisting of 3 members will be present in Norway during the exercise. The current procedures for reception and involvement shall be followed.
- All vessels shall deliver Next-of-Kin (NOK) list / POB list at least to the Supreme On Scene Commander (SOSC). SOSC shall forward these to the NCA Incident Command staff, with copy to the DISTAFF e-mail address.
- The vessels involved in the exercise collision, shall at all times be named "NCA CHEM" (gas tanker) and "NCA OIL" (product tanker). Even though the real name of the LPG tanker used as a physical exercise object will be visible for players, the real name shall not be used in any communication.
- All contact with Avinor (Oslo ATCC), including activation and deactivation of the established "Danger-Area AIR", shall be done by DISTAFF. DISTAFF will communicate with the appointed "Aircraft Coordinator" (ACO) on board the OSC vessel. The ACO shall coordinate the participating air traffic in the D-Area in real time.

- All aircraft / drones (RPAS) shall report to the Aircraft Coordinator (ACO) on board the SOSC vessel (see Communications Catalogue for contact data / frequencies).  
Aircraft shall report before entry of the D-Area, and when leaving the D-Area.  
Drones (RPAS) shall report before take-off, and after landing.  
QNH shall be given by ACO to participating air traffic in the D-Area.
  
- Aircraft (LN-KYV and KBV 501) shall be tasked by the NCA Incident Command.  
Available tasking times are as follows:  
KBV 501: 1300-2100 local time (26<sup>th</sup>).  
NOTE: Last flight shall be around sunset this day. Landing @2100.  
0900-1500 local time (27<sup>th</sup>).  
  
LN-KYV: 1600-2400 local time (26<sup>th</sup>).  
NOTE: Last flight shall be after sunset this day. Landing NLT 2400.  
1100-1500 local time (27<sup>th</sup>).
  
- Vessel details to be used for “NCA CHEM”:
  - IMO: 9744922
  - MMSI: 563000100
  - Call sign: 9V2908
  - Ship owner: Solvang ASA
  - P&I insurance: Skuld
  - H&M insurance: Norwegian Hull Club (NHC)
  - Class: DNV GL
  - Charter: Statoil(see “Communications Catalogue” for contact data)
  
- Vessel details to be used for “NCA OIL”:
  - IMO: 9682978
  - MMSI: 235108536
  - Call sign: 2ICI9
  - Ship owner: Teekay
  - P&I insurance: Gard
  - Class: DNV GL(see “Communications Catalogue” for contact data)