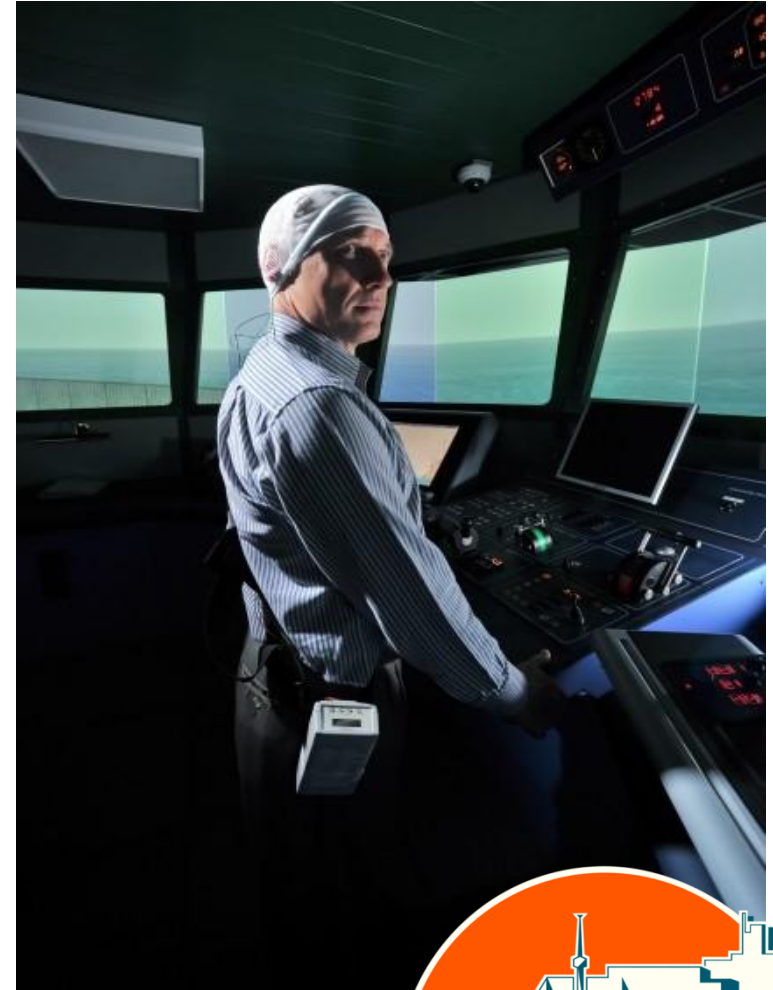
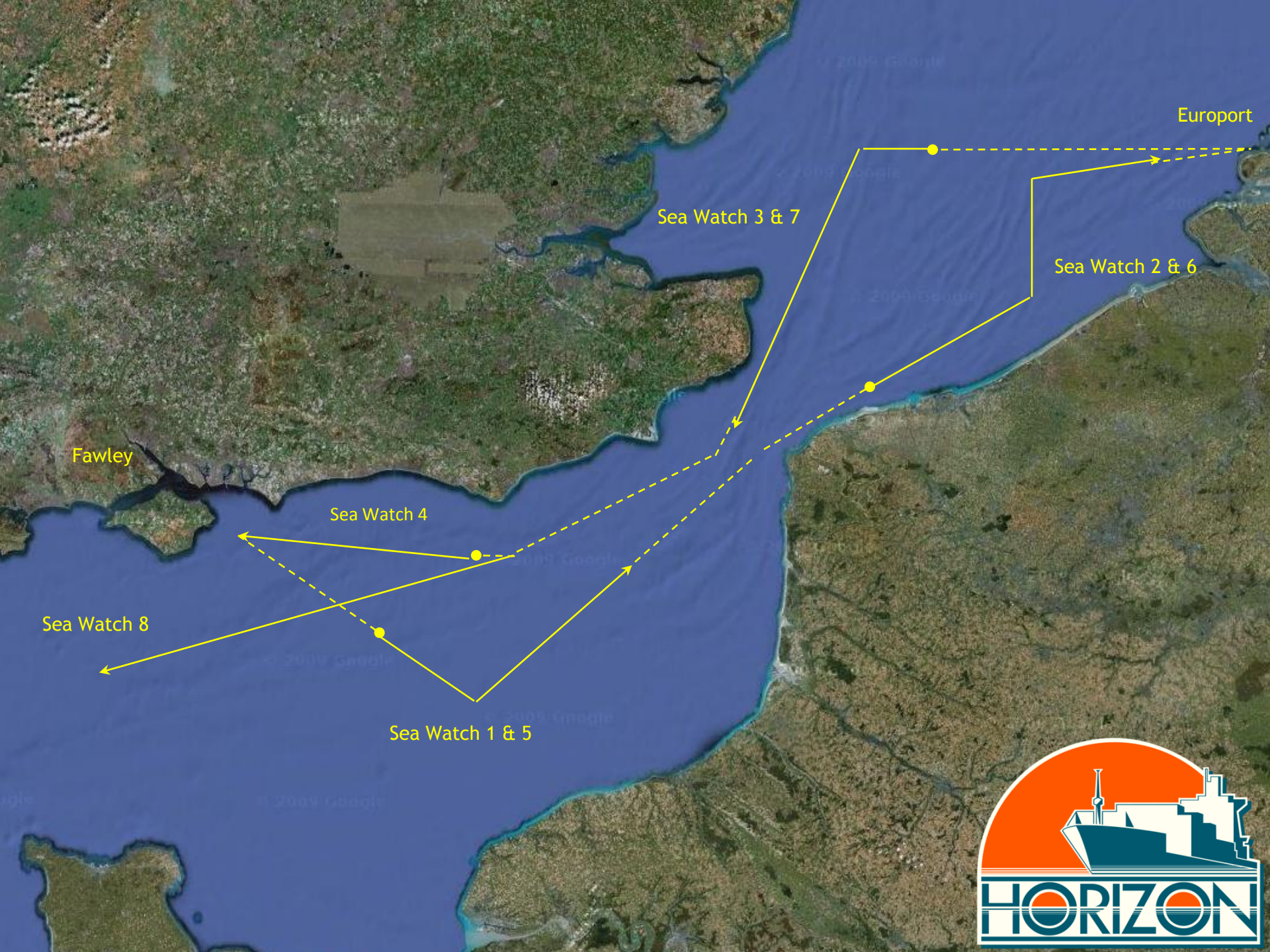


Linked bridge, engine and cargo control simulators





Fawley

Europort

Sea Watch 3 & 7

Sea Watch 2 & 6

Sea Watch 4

Sea Watch 8

Sea Watch 1 & 5



The KSS Scale - Karolinska Sleepiness Scale

1. extremely alert
2. very alert
3. alert
4. quite alert
5. neither alert nor sleepy
6. some signs of sleepiness
7. sleepy, no effort to stay awake
8. sleepy, some effort to stay awake
9. very sleepy, great effort to keep awake, fighting sleep.



Karolinska Drowsiness Test - KDT

- At the end of each watch fitted with the EEG, the participants do a KDT:
(Karolinska Drowsiness Test)
- It is a standardised test for measuring drowsiness
- It involves sitting comfortably in a chair and:
 - blinking 10 times to start the test;
 - staring at a “black spot” that is pinned on the wall for 5 minutes;
 - sit relaxed on the chair for 5 minutes with eyes closed

Summary of measurements

Before watch

- PVT test
- Rating of sleepiness and stress (KSS)

During the watch,

- Rating of sleepiness and stress every hour

After watch

- Final rating of sleepiness and stress
- PVT test
- Stroop test
- KDT (only on watches when wearing the EEG)
- Fill in the Work diary

During off-watch

Fill in the Wake diary, if awake off watch

Fill in the Sleep diary after every sleep period

Current Status of project

- Phase 1: Design of Experiment Protocol completed in December 2009
- 4on/8off and “disturbed” 6on/6off experiment runs with 50 participants completed at Chalmers in August 2010
- 6on/6off experiment runs with 40 participants completed at Warsash in April 2011
- Final results and analysis by December 2011



Thank You



WARSASH
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