

Anatec offers comprehensive risk assessment for fishing interactions

Subsea Risk

Subsea infrastructure is often located in areas used by fishing vessels, which poses a risk to the crew, as well as potential risk of damage to the equipment, if interaction were to occur. Example subsea structures include:

- Cables;
- Pipelines;
- Wellheads; or
- Subsea manifolds.

Modelling

Anatec has developed models for assessing the risk to live and decommissioned infrastructure, including estimating the interaction, fatality and damage risk. This takes into account the three possible phases of interaction, namely:

- Impact
- Pullover
- Hooking (or Snagging)

Anatec can model the kinetic energies involved with the initial impact, based on vessel gear configurations and trawling speeds. An assessment can be made on the damage likely to result and worst case scenarios.

The pullover phase occurs when the gear is towed over the subsea structure. With the large weights and pull forces associated with trawling gear, this can cause damage to the underwater structures, as well as the trawling gear.

Finally, the hooking phase is the most hazardous to the vessel due to the possibility of capsize and loss of life. This is where the trawl gear snags on the subsea structure, e.g., a pipeline span. Ultimately the full bollard pull of the vessel could be exerted on the

snagged equipment.



The use of multiple data sources on fishing activity, including AIS tracking which covers vessels 15m and above in length, allows comprehensive input data to be used for the modelling. This can be validated through consultation with the fishing industry, if preferred.

The model outputs identify the frequency but also the spectrum of potential consequences. This allows a complete picture of the risk to be built up and focus to be placed on risk management, such as route planning, burial, trenching, design of “trawl friendly” protection structures and future monitoring of the area.

We have used our extensive experience to carry out fishing assessments worldwide for a wide range of clients including BP, Chevron, CNR, IGI, GDF Suez, Nexen, Nordstream, Talisman-Sinopec, Shell and URS.

Contact us below for more information.

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