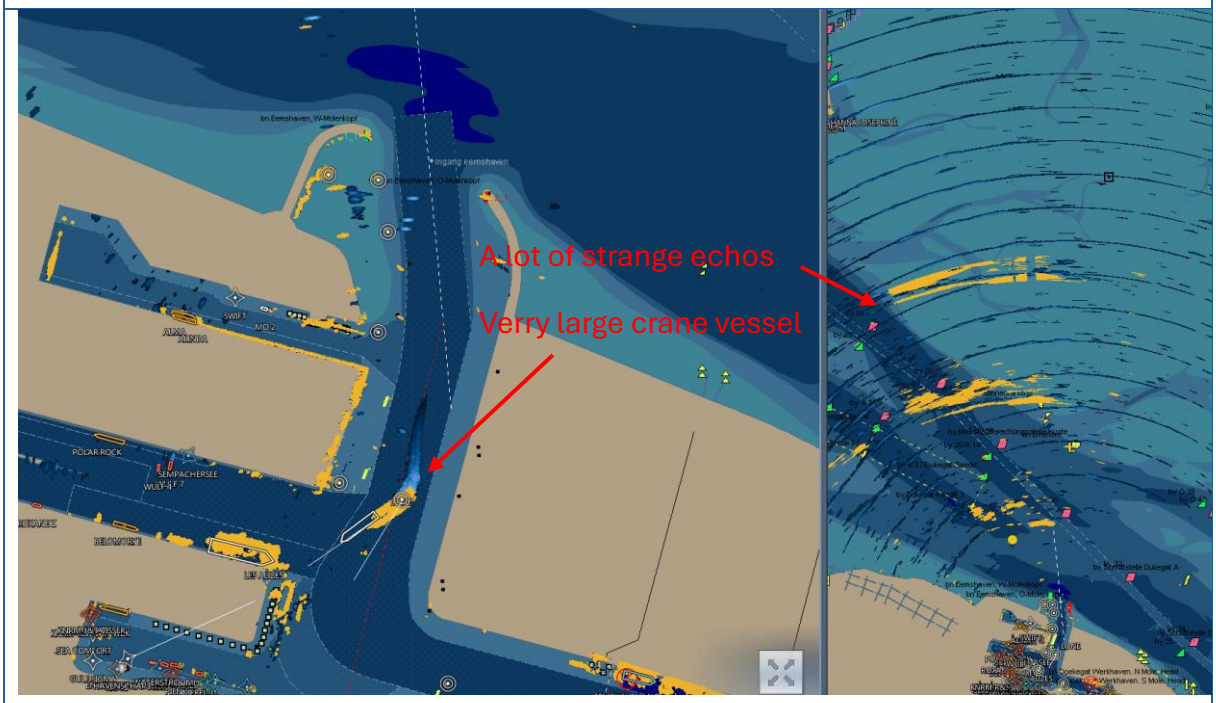
Occurring problems with present VTS radar system

The existing radar system has a number of problems that are not to occur in a new system. We ask the supplier to describe how each problem will be resolved in the system to be supplied.

1. Large vessels produce too much of an echo in the estuary

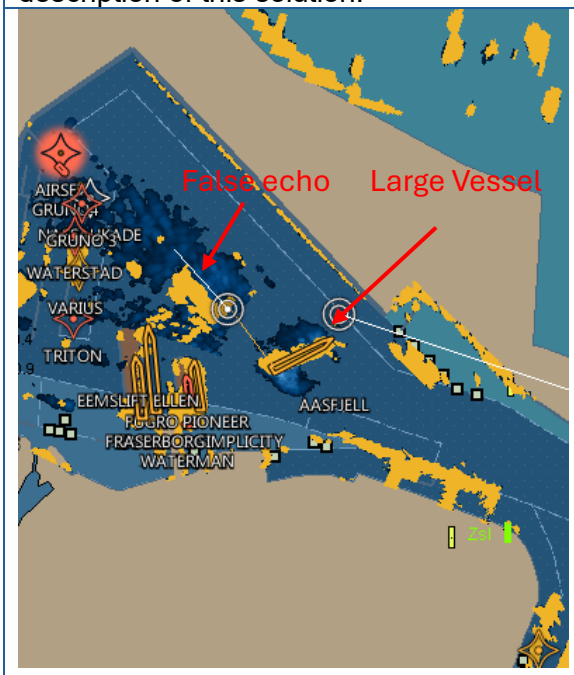
Extremely large vessels enter regularly in Eemshaven in particular, but enter Delfzijl as well. These vessels produce an enormous echo. This appears to be exacerbated by the vessels being hit by several radars at the same time. The result is that one large echo is presented in the estuary of the ports (Eemshaven and/or Delfzijl), causing the rest of the shipping to be virtually- or, in other cases, completely invisible on the operator's radar screen.
The supplier is asked to provide a solution for this problem. Please provide a clear description of this solution.

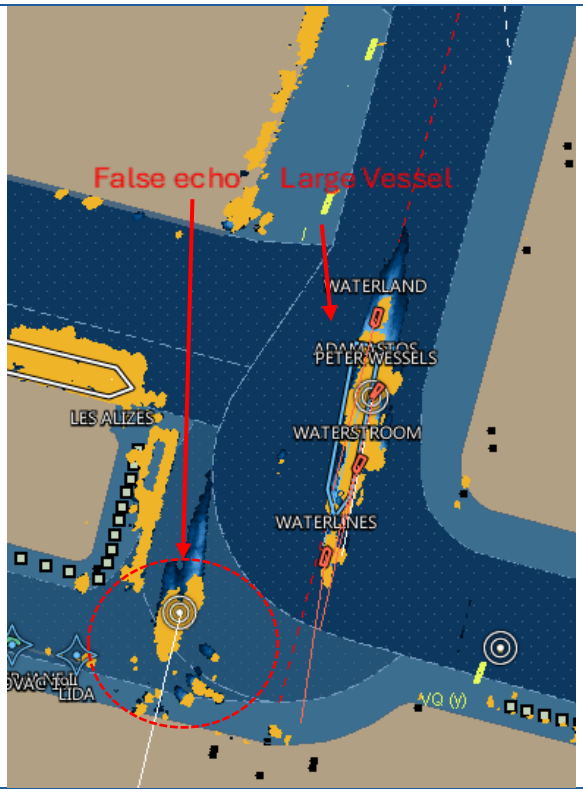


Answer:

2. Radar shadow

In Eemshaven and in Delfzijl, there are a number of locations where vessels are hit by several radars. The radar shadow produces an echo that is too large, which generates a picture that does not match the reality.
The supplier is asked to provide a solution for this problem. Please provide a clear description of this solution.

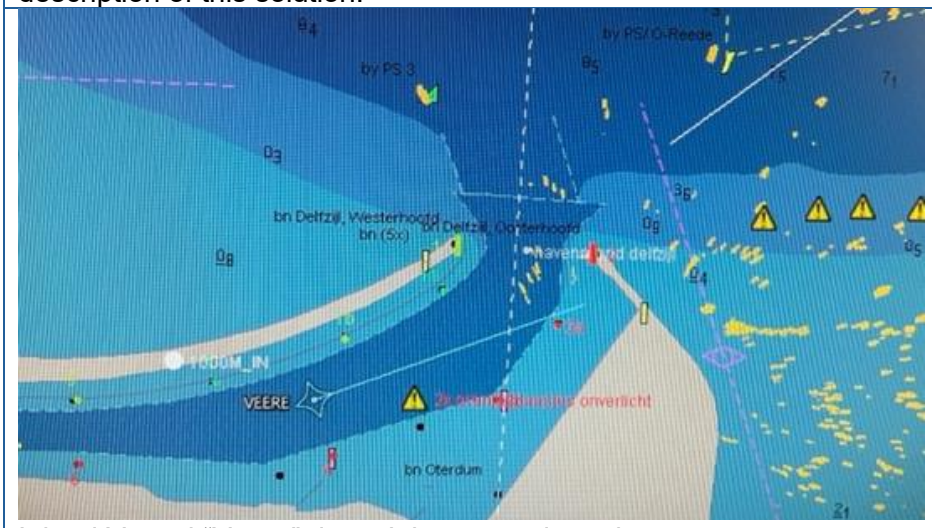




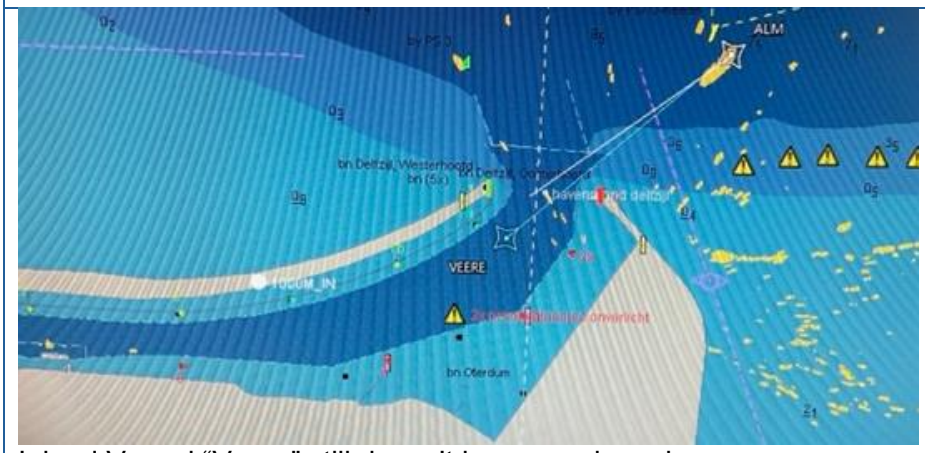
Answer:

3. The radar should perform well near and far

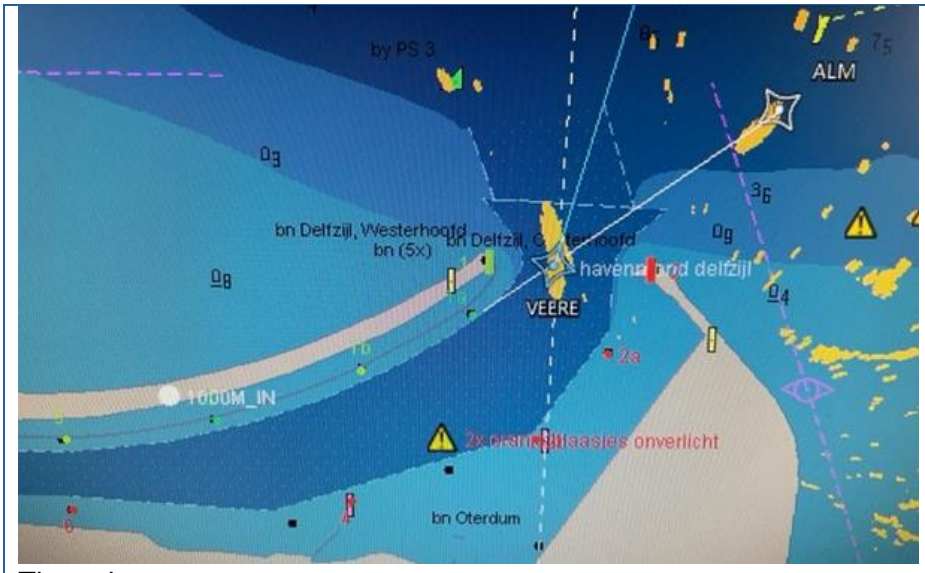
The seaport channel of Delfzijl is an elongated channel with 4 radar stations. Radar 2 is extremely close to the water. It occurs regularly that a vessel, which is extremely close to radar 2 (approx. 60m), is not seen by this radar, because this radar has been optimised for a slightly greater range. This radar station should have an optimum performance for vessels that sail close to the radar station and those that sail further away from it.
The supplier is asked to provide a solution for this problem. Please provide a clear description of this solution.



Inland Vessel “Veere” doesn’t have a radar echo



Inland Vessel “Veere” still doesn’t have a radar echo



The echo appears

Answer:

4. If one radar drops out, another radar should take over the area automatically
In Eemshaven there are 3 radar stations and in Delfzijl there are 4 . Every radar stations has an area of optimum performance. If one radar stations drops out, for example due to technical failure, one of the adjacent stations (the most suitable one) has to take over the image. The supplier is asked to provide a solution for this problem. Please provide a clear description of this solution.
Answer: