

Main conclusions and recommendations

Main Conclusions:

1. It is the opinion of the Panel that KM 4.2 should be designed in such a way as to avoid undesirable ecological effects in the Baltic Sea proper. Even then there will be some concern about the possibility of interference of migrations of herring through Øresund due to the link.
2. The Panel is *unanimous* in its wish to see a *Zero Solution* for the Baltic Sea adopted.
3. The Panel observes that at this stage the hydrodynamic models used to optimise the design do not include stratification. As a consequence *further development and validation of an operational model taking into account the stratification are needed*. A further meeting of the Panel is arranged in late *April* to discuss these aspects.
4. As an addition to the models used the Panel concludes that contemporaneously attention be given to the development and simulations using a *3D baroclinic model* for the near-field calculations for the final optimisation designs *and far-field simulations*.
5. *If KM 4.2 is proceeded with, there will be permanent changes in Øresund related to the creation of an artificial island and the peninsula at Kastrup, as well as the construction of the bridge supports. The effect will be a reduction of the extent of seagrass bed and blue mussel beds which are an important food resource for a variety of birds. The Panel considers it most unlikely that this habitat loss will significantly affect the number of birds using the area in winter although some may be relocated. The loss of part of the mussel beds used for feeding by eiders is unlikely to have a detectable effect on the size of the breeding population at Saltholm.*
6. Within Øresund the *increased suspension and deposition of sediment caused by dredging are the most damaging for the biological systems*. The Panel recommends various methods to minimise this impact to the environment, ranging from locating the artificial island in the lee of Saltholm to a *bored tunnel* to the artificial island.