

- Compliments on the Marebasse project; many technical challenges on getting the data; multidisciplinary interesting
- Data and data management: I took note of the complexities of compiling data bases and converting formats. Is there a need for standardised European protocols? Who should recommend and develop?
- Environmental Impact Assessment; EIAs need to predict effects at short term / near field, but also long term / far field. In order to have access to adequate tools, one needs to be able to refer to similar projects in the past with observed effects, or one needs a range of models that are sufficiently reliable for predictions. Is it realistic to expect that 3D models hydrodynamic models can predict long term effects? What did the project contribute in this perspective?
- Several suites of codes for sediment transport have been applied. The sediment transport modelling is particularly difficult and results typically vary with factors. In view of the uncertainty and complexity the questions rise: -Is it possible to quantify uncertainty? I suspect that the uncertainty is higher than the predicted sediment transport flow itself. If so, is the sophisticated 3D modelling justified? Should one not focus on pragmatic 2D models that give probably better results anyway?
- The results relative to the Kwintebank are in line with the intuition of the dredging professional. We acknowledge the relative long term stability of exploitation and deposition sites. We also noted that the effects on the coastline are not detectable. One would expect that the effect of introducing morphological change at the seabed may have a long term effect at larger distance, but the effect is caused by a change in wave climate. Is this a subject for further multidisciplinary study?
- The observation that the depression on the Kwintebank is not filling in quickly makes sense if one notes that the relative velocity of water masses over the bed is on the high side; the sandbank almost acts as a ventur. These higher velocities do not accommodate deposition of suspended sand or even of the bedload.
- Finally, in view of the increased capacity of sand and gravel dredgers and the limited quantities of available sand on the BCS, and also considering future needs for beach restoration if the sea level rises, I recommend to make sure that a strategic reserve of sand is maintained on the BCS. I wonder whether future large scale exploitation of sand for other purposes is wise.