



## Challenge 1.3

### Installing large volumes offshore

Material durability and protection	 Medium-term	 Medium priority
<p><u>Description and scope</u></p> <p>Foundation materials degrade, corrode and require frequent monitoring and maintenance. There is potential to find alternative materials that are better in terms of costs, tensile strength (e.g. that can maintain their integrity and self-heal when deficiencies occur), light weighting, easiness to manufacture, environmental emissions or improved environmental performance. Potential cost reduction from this element are material cost or damage resistance that would decrease maintenance cost.</p> <p>Corrosion protections are generally applied on the outside and in some cases in the inner part of the structure. The best technique for corrosion protection is yet to be found.</p> <p><u>Recommended research actions</u></p> <ul style="list-style-type: none"><li>• Investigation into system reliability, operational procedures and requirements for air ventilation/water exchange to validate corrosion protection.</li></ul>	<p><u>Milestones</u></p> <ul style="list-style-type: none"><li>• Improved prediction performance of validation models for corrosion.</li><li>• Development of new corrosion protection measures.</li></ul>	