1 Introduction
1.1 Why there is a need for design rules for geotextile-encapsulated sand elements
1.2 Document structure

2 General design aspects
2.1 Basic principles of geotextile-encapsulated sand elements
2.2 Design approach
2.3 Safety considerations
2.3.1 Introduction
2.3.2 Deterministic method
2.3.3 Potential failure mechanisms
2.4 Material aspects of geotextiles
2.4.1 Raw materials
2.4.2 Sand tightness
2.4.3 Permeability
2.4.4 Tensile strength and strain
2.4.5 Seams
2.4.6 Damage during installation of gravel layers
2.4.7 Durability
2.4.8 CE marking

3 Geotextile bags
3.1 Application sand general experimental data
3.2 Installation procedure
3.3 Geometric design
3.4 Failure modes and safety considerations
3.5 Design aspects
3.5.1 Material choice
3.5.2 Required tensile strength
3.5.3 Stability in waves
3.5.4 Stability when subject to longitudinal current flows
3.5.5 Stability when subject to overtopping currents
3.5.6 Stability of geotextile bags placed in mounds
3.6 Construction aspects
3.7 Calculation example

4 Geotextile mattresses
4.1 Application areas and general experimental data
4.2 Installation procedure
4.3 Geometric design
4.4 Potential failure mechanisms and safety considerations
4.5 Design aspects
4.5.1 Material choice
4.5.2 Required tensile strength
4.5.3 Stability in waves
4.5.4 Stability in longitudinal currents
4.5.5 Geotechnical stability
4.6 Construction aspects
4.7 Calculation example

5 Geotextile tubes
5.1 Applications and general experimental data
5.2 Installation procedure
5.2.1 General
5.2.2 Pump speed and pump capacity
5.2.3 Fill material
5.3 Geometric design
5.4 Failure mechanisms and safety considerations
5.5 Design