FAIR Flood infrastructure Asset management & Investment in Kenovation, adaptation & maintenance.



Application of a stilling wave basin in Middelkerke, BE













Results

stations

investment opportunities (combi-

nations of investments with other

planning objectives, re-planning)

• Inventory of best practices in the

adaptive infrastructure upgrades

The project will deliver:

Background

Flooding is a major risk for loss of life and economic damage in the North Sea Region (NSR). Flood protection is the cornerstone of our strategy to reduce these risks with benefit-cost ratio of 6:1. The >100Bn Euro worth infrastructure assets that protect us from flooding in NSR, such as dykes, sluices and dams are ageing (many are 70-100y old) and often its performance is no longer at the desired level.

The flood protection infrastructure needs renovation, adaptation, and maintenance all across NSR.

Aim

The overall objective of the FAIR project is to reduce flood risk across the NSR by demonstrating climate change adaptation solutions to improve the performance of flood protection infrastructure.

FAIR demonstrates improved approaches for cost-effective investments across national-system-asset levels as well as application of adaptive, innovative and integrated technical designs.

Approach

Develop and implement an innovative approach for adaptive investment planning and design for flood asset infrastructure by:

- Optimise investment planning by exploring mainstreaming of these investments with other policy domains; and by mapping planned investments across a wide portfolio of flood protection assets in a country (optimisation of timing)
- Identify cost-optimal adaptive infrastructure upgrades by exploring variety of technical designs: with adaptability and life cycle costing for various performance levels.
- Support delivery of 6 demonstration projects, in 6 NSR countries: NL, DK, D, UK, SE, BE.

Ultimately, the risk of flooding will be mitigated in the most effective way.

 6 demonstration projects levering multi million Euro investments change. in: dyke strengthening, sluice renovation, upgrades of pumping Recommendations for adaptive

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Interreg North Sea Region

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Pumps removing floodwater at Dunball, UK

Impact

Flood protection infrastructure will deliver the required performance also if requirements change due to climate

A new adaptive investment approach will be established that results in multi million savings in the flood infrastructure adaptation and maintenance. In several demonstration projects infrastructure works will have created multiple values.