DeSIRE tenure track position #8: Resilience by urban transformation

University:	Delft University of Technology
Faculty:	Faculty of Architecture & the Built Environment
Responsible Professor:	Dr. Taneha Bacchin
Expected to open:	This position is expected to open around July 2018

Description:
Urban transformations, such as renovations of buildings, upgrading of urban infrastructures and large scale redevelopment projects provide windows of opportunity for enhancing resilience of urbanized delta areas at relatively low costs, while also creating opportunities for wider benefits. Using these urban dynamics allows for a more incremental path towards resilience. However, until now resilience is not sufficiently integrated into urban planning and design approach, infrastructure management and area development investments decisions. It lacks an operational framework to identify, evaluate and select the most effective and beneficial investment options that increases urban resilience. Additionally, it often needs governance and financial innovations to unlock these opportunities. This TT research position will focus on the question: 'How can we use urban transformations as windows of opportunity for enhancing resilience and what is needed to unlock these opportunities to steer urban delta areas towards more resilient futures? The project results in an operational framework for the application of a transformation-based resilience planning approach and will test this approach in, and develop concrete design solutions for, cases in Houston and Rotterdam.

Position in framework of the programme (please delete what is not applicable):
- Approaches/discipline: research by Design / cross-cutting methodologies/ Policy & Governance aspects
- Scale/application area: Cities & regions of interconnected mid-size towns/ Water/ Urban - Infra

Synergy with other tenure track position(s):
- Flood Resilience (DUT, Civil Engineering and Geosciences)
- Modeling and Governance for the Response to large-scale disruptions (DUT, Technology Policy Management)
- Monitoring the resilience of artificial and natural infrastructure in cities and urbanized deltas (UT, Engineering Technology)
- Designing resilient urban climates (WUR, Environmental Sciences)