Amphibious vital infrastructure, relating time and scales

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Abstract

Amphibious vital infrastructure is part of a flood adaptive strategy that can deal with shock or stress by flooding. The amphibious concept on the larger urban scale is the definition of a flood-resilient urban landscape, this includes flood adaptive architecture, urban public space and vital infrastructure. How can vital infrastructure remain functional in a flood-resilient urban landscape? This paper concentrates on the Dutch case and explores plans and concepts of flood adaptive area's and the inclusion of vital infrastructure in these plans. First the conditions of vital infrastructure in flood prone areas are described and next it is discussed what this means for the amphibious concept on the larger scale. To bring back water in the urban situation is quite more difficult due to the techno sphere. The city is a technical construction so bringing back water or letting water come in and become amphibious is quite an intervention, especially for vital infrastructure. Besides the different in urban or natural setting the scale and timespan of flooding is crucial. The scale of the project in relation to the water management system and the fact if the flooding takes place only a few days or a few months sets the conditions for the design of vital infrastructure.

Keywords: amphibious; vital infrastructure; time and scale

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