



Dutch Delta programme

Facts and figures

1. Facts about the Dutch Delta

The Netherlands is situated on the delta of four rivers:

- The Rhine
- The Scheldt
- The Maas
- The Ems

59% of the country is vulnerable to flooding:

- Below sea level: 26%
- Above sea level: 29%
- Outside the dykes: 3%
- Meuse outside the dykes: 1%

The Netherlands is the world's best protected delta thanks to a centuries-old tradition of cooperation in combating water. The three near or actual 20th century flood disasters have spurred major projects in the Netherlands:

- The 1916 flood in the north of the country led to the Enclosing Dyke and with it the IJsselmeer, in 1932.
- The 1953 flood in the southwest of the country prompted establishment of the First Delta Commission. This was the basis for the 40-plus years of the Delta Works.
- 1993/1995 saw major rivers bursting their banks - and large-scale evacuations. This contributed to future safety – partly via planning-led solutions such as Room for the River and the Meuse Works.

The Delta programme has two objectives and three values:

- Current and future safety [2050-2100]
- Ensured supplies of freshwater – also during dry periods
- solidarity
- flexibility
- sustainability

2. Status of the Dutch Delta Programme:

- Dutch Delta Approach featuring the five Ds:
 - Delta Act
 - Delta programme
 - Delta fund
 - Delta commissioner
 - Delta decisions

The aim of the Delta programme is to protect the country against flooding, now and in the future, and to properly regulate freshwater supplies. The multiple aspects involved are in the areas of spatial and urban planning and the economy, plus agriculture, horticulture, nature and recreation.

- The current implementation programmes are:
 - Flood protection programme-2
 - The Enclosing Dyke
 - Weak Links on the Coast
 - Room for the River
 - Meuse works
 - Repair of stone cladding eastern and western Scheldt
 - Sand replenishment and the sand motor (Delta dune)

These implementation programmes focus on meaningful flood protection management- now. Completion is scheduled for between 2015 and 2020.

Our implementation programmes work towards meaningful flood protection management now. At the same time the Delta programme is preparing the Netherlands for the future. Nine sub-programmes are underway in preparation for five delta decisions which in turn pave the way for the future. These decisions will have a significant impact on the country's future while providing a basis for start-up of the 'Delta Works of the future'.

- The Delta decisions are:
 - *Flood risk management*
Safety levels ensured by the Dutch dyke system are based on standards developed following the 1953 flood disaster. Population numbers and capital invested have both risen apace since then. Alongside a proposal for updating relevant standards the delta decision on Flood risk management will also feature the safety strategies to be implemented.
 - *Freshwater strategy*
Current Dutch water systems and related control and policy appear to be reaching their useful limits. This was evidenced by the dry period in 2003 and arid spring of 2011. The Delta decision on freshwater comprises a strategy for sustainable and economically optimal supplies nationally, and sets out the measures required.
 - *Spatial adaptation*
Our immediate construction activities may not cause any unnecessary future expenditure or negative impact. The delta decision Spatial adaptation deals with options and conditions for robust development and redevelopment of built-up areas in the Netherlands. In concrete terms this means how spatial planning can help limit the impact of flooding, heavy rainfall, extended dry periods and exceptionally high temperatures. Development of built-up areas will be the focus of a national policy framework.
 - *Rhine-Meuse delta*
The major rivers flowing through the Rhine Estuary-Drechtsteden region and the Southwest Delta form the crucial transitional area in the Dutch delta – meeting place of rivers and sea. A wide range of interests need protection here – in terms of population and economic activity. The Rhine-Meuse delta decision comprises strategies to ensure flood protection and sustainable freshwater supplies in the area, up to 2050 and beyond.
 - *Waterlevel management IJsselmeer region*
The IJsselmeer region is a major freshwater basin. The delta decision covers a strategy for water level management in the IJsselmeer from 2015 to 2050 (with a forward view to 2100). The strategy is linked to safety tasking in the area - and the area's role in nationwide freshwater strategy.
- Delta decisions and related measures are prepared and developed in sub-programmes. Adequate resources have been reserved for 'Safety', 'Freshwater' and 'New Urban Development and Restructuring', the nationwide, generic sub-programmes.

These give objectives and strategies for safety, freshwater supplies and the potential role here for spatial planning. The frameworks are detailed per specific field and where possible synergised with regional plans and projects in the six regional sub-programmes 'Rhine Estuary-Drechtsteden', 'Southwest Delta', 'IJsselmeer region', 'Rivers', 'Coast' and 'Wadden Sea'.

- The government submits the Delta programme, as prepared by the Delta Commissioner, to parliament on budget day.
 - The plans of approach for the sub-programmes are determined in the first Delta programme, DP2011.
 - DP2012 as submitted on 20 September 2011 comprises the analyses of short, medium and long-term tasking around safety and freshwater.
 - DP2013 will focus on examining potential solution paths.
 - DP2014 will elaborate these solution paths into promising strategies.
 - This will lead to proposals, within DP2015, by the Delta Commissioner for the Delta decisions.
- The legal basis of the Delta programme is set out in the Delta Act as are the tasks and powers of the Delta Commissioner and establishment of the Delta Fund. This legal basis is essential for a steady approach to tasking around national flood protection and freshwater supplies. The Delta Act came into force on 1 January 2012.
- Establishment of the Delta Fund ensures structural funding for flood protection and adequate freshwater supplies for today and for generations to come. Sufficient funding has been reserved for the term of the current coalition government. The Delta Commissioner's recommendation to the state secretary on safeguarding finance for the Delta programme foresees a challenge in implementing current and future tasking around flood protection and freshwater supplies, up to 2050. All financial resources have been committed up to 2020. The level of the Delta Fund for the period 2021 to 2028 is €9.7 billion. A substantial part of this has already been reserved for projects including the Flood Protection programme, reinforcement of the Enclosing Dyke and for control and maintenance of these and other activities (e.g. flood defences).
- The Delta programme seeks to be a platform for the knowledge and innovation powering the Dutch business, information and social communities. Timely deployment of these resources means better solutions plus cost savings.
- On 1 February 2010 Wim Kuijken was appointed Delta Commissioner, government commissioner for the Delta Programme.