CASE STUDY

Netherlands

1. Noteworthy practices for project preparation

EXISTING ENABLING ENVIRONMENT

Distinct agencies to oversee the design of policy for infrastructure development and its implementation

In the Netherlands, the policy and implementation functions are housed under separate distinct entities. While the Ministry of Infrastructure and Water Management (MIWM) oversees the drafting of policies for infrastructure development, project preparation and procurement is undertaken by Rijkswaterstaat, the implementing agency of MIWM. Rijkswaterstaat is responsible for the construction and maintenance of the main roads network, the waterway network and major water systems.

PROJECT IDENTIFICATION AND CONCEPT DEFINITION

Using a broad-based approach to identifying and conceptualising projects

Under the Multi-Year Programme for Infrastructure, Spatial Planning and Transport (MIRT), project initiation entails incorporating all aspects of spatial planning and mobility management to design solutions to the country's infrastructure challenges. As an illustration, to address the daily tailbacks problem on a major motorway in the Netherlands, the MIWM explored solutions such as promoting the use of cycling in the province and building an express bicycle connection along the motorway.

PUBLIC MARKETING AND STAKEHOLDER ENGAGEMENT

A project development framework that centres on increasing stakeholder collaboration and cooperation

Active stakeholder engagement is central to the MIRT framework for project development. All stages of the MIRT process encourage a collaborative approach to project preparation, from project initiation in the 'exploration phase', which is supported by conducting multiple stakeholder consultations through political and administrative meetings, to ensuring that stakeholders provide input to the feasibility of the project under the 'plan exploration phase'.

Transparent disclosure of projects under development through the MIRT portal

The MIRT framework mandates that all projects are actively monitored by the MIWM, with updates published on a real time basis on the MIRT platform and also published in MIWM's annual MIRT Overview document. Furthermore, all decisions taken for MIRT projects are presented to the Lower House of Parliament on a periodic basis, along with progress updates on project development.

2. Snapshot of project preparation activities

INSTITUTIONAL FRAMEWORK

Public administration in the Netherlands is divided across four tiers: central government, the provinces, the municipalities and the water authorities. Project preparation is considered to be a joint effort of the different tiers of the Dutch public administration framework, in which each tier has a clear responsibility brought together under a unified framework.

Project preparation and development in the Netherlands is governed by procuring authorities, which include local governments, municipalities, and port authorities, amongst others. At the central government level, two agencies oversee and coordinate project development in infrastructure: the Ministry of Infrastructure and Water Management (MIWM) and the Ministry of Finance (MoF).

At the sub-national level, the project preparation and implementation responsibility is managed across the provinces, municipality and water authority.

Ministry of Infrastructure and Water Management (MIWM)

The MIWM oversees policy, implementation and inspection of infrastructure development in the Netherlands. To aid the development of policies, the MIWM houses three directorate-generals, responsible for designing overarching policies for development in the areas of mobility, water management, aviation and maritime affairs and the environment, as follows:

- The Directorate-General for Mobility and Transport (DGB) focuses on the continued development of the network quality of airways, waterways, railways, the road network, harbours and ports.
- The Directorate-General for Spatial Development and Water Affairs (DGRW) looks at integrating spatial development and mobility with the infrastructure and spatial planning vision.
- The Directorate-General for the Environment and International Affairs (DGMI) is responsible for monitoring the environmental impact of policies, projects and programs in the Netherlands.

The MIWM is also assisted by a host of support agencies in infrastructure development, which include:

- Rijkswaterstaat, which is the executive agency of the MIWM responsible for the main road network, the main waterway network, and the main water systems. It also undertakes project development and implementation on behalf of the MIWM.
- The Netherlands Environmental Assessment Agency (PBL), which contributes to political and administrative decision-making by conducting outlook studies, analyses and evaluations commissioned by the MIWM, other national bodies, and international agencies.
- The Knowledge, Innovation and Strategy Directorate (KIS), which leads the knowledge management and capacity building functions of the MIWM.
- The Council for the Environment and Infrastructure, which is the primary strategic advisory board for the Dutch government and parliament in matters relating to the physical environment and infrastructure. It provides independent advice to the MIWM and the parliament on matters relating to long-term policy for infrastructure development.

Ministry of Finance (MoF)

MoF is responsible for financial-economic policy in the Netherlands, the management of government finances and policy concerning the financial markets. It prepares the annual national budget and presents it to the parliament for approval, which outlines the planned expenditure of all ministries for the ensuing year.

PROJECT PREPARATION LANDSCAPE

The responsibilities for project preparation are decentralised to the respective line departments and sub-national entities, and the Ministry of Finance is responsible for establishing the policy on budget execution, including the normative Design-Build-Finance-Operate-Maintain (DBFOM) policy, monitoring application of the budget execution policy, and providing guidance on cross-project issues.

For large infrastructure projects, the Netherlands has adopted a unique collaborative approach, namely The Multi Year Programme for Infrastructure, Spatial Planning and Transport[1] (MIRT) framework, developed by the MIWM. MIRT comprises infrastructure projects and programs in which the national and regional governments collaborate to find a common solution to specific problems, after conducting analysis from different perspectives and development objectives.

[1] Meerjaren Programma Infrastructuur, Ruimte en Transport

ADOPTING A PROBLEM ORIENTED APPROACH UNDER MIRT – AN EXAMPLE

While a typical solution to tackle the daily tailbacks on a section of the motorway near a big city would be to upgrade the motorway, the Netherlands adopts a more holistic approach. MIWM consults the respective province, the municipalities, and the regional business community, asking about their plans for the area. The province has conducted a mobility analysis of the region and knows that the tailbacks are mainly caused by local commuter traffic. Additionally, the municipality has launched a 'Move Yourself to Health' program and aims to encourage residents to cycle. Together, the parties arrived at a joint ambition: improving mobility between the residential area and the business park and improving residents' health. Following an exploration of several solutions, they decided to implement a solution that involves an express bicycle connection to the business park, in combination with agreements with employers regarding the promotion of cycling and flexible working hours and influencing the behaviour of motorway users in order to improve traffic circulation. The package offers a solution to both accessibility and health issues. In addition, it contributes to the sustainability goal of MIRT, namely to reduce CO_2 emissions.

The MIWM is a participant in all MIRT tracks (project or program). However, other ministries and regional partners may also participate or launch MIRT tracks. Such regional partners may be the provinces, municipalities, transport regions, or district water boards. NGOs and businesses may also participate by providing input to solutions.

In the MIRT framework, the country is divided into five regions[2], with the central and local governments jointly designing the Area Agenda for each MIRT region. The Area Agenda presents a coherent vision for development in the area. Annually, administrative consultations take place between the central and local governments for discussion on current projects in the region and for making financial and/or administrative agreements where necessary.

[2] Noord (North), Oost (East), Zuid (South) , Zuidwest (South West) and Noordwest (North West) regions

The MIRT process for project preparation

In a MIRT track, the parties work phase-by-phase to substantiate the task in increasingly concrete terms. The MIRT program requires a project to go through four primary phases, with each phase ending with a political-administrative decision – MIRT Study, MIRT Exploration, MIRT Plan Elaboration and MIRT Realisation.

The starting point for every MIRT track is the Initial Decision to launch a MIRT Exploration. MIRT projects can be either implemented through public financing or through PPPs on a standard DBFOM basis. Each year, the MIRT is presented to the Lower House as an appendix to the budget of the MIWM and this provides the necessary political and fiscal commitment to the MIRT. The steps in project preparation are detailed below.

Project initiation and concept definition. The project initiation and concept definition is covered under the 'Plan Study' and 'Plan Exploration' phases of the MIRT framework. The MIRT study phase is conducted to develop a clear and common description of the needs, issues and necessities that the envisaged project must solve. This provides for a common starting ground for the involved stakeholders in the MIRT process of assessment. This phase ends with the Initial Decision, which relates to the choice on whether to conduct a MIRT Exploration. The Initial Decision also stipulates the role to be played by each of the stakeholders and requires that financing sources for 75% of the cost of the most obvious solution are identified.

The exploration phase of the MIRT framework follows a collaborative approach that requires project initiation to start with a series of political and administrative meetings. These meetings are aimed at discussing the development needs of an area, fixing the strategic development goals and the initiatives to meet these goals. Thereby, discussion, collaboration and consensus between important stakeholders is set as a requirement for starting a new project concept. The exploration phases typically comprise the following activities: evaluating the strategic alignment of the proposed concept, options evaluation to assess the benefits and impact of each alternative on the economy, environment and society, and selection of a preferred alternative to undertake the detailed project study. As options are collectively evaluated, the MIRT committee may reach a Preferential Decision to serve as a recommendation for the next phase – Plan Elaboration.

Project feasibility and structuring. The process of preparing detailed project studies under the MIRT framework is governed by the Plan Elaboration phase. At this stage, the identified solution at the end of the exploration phase is then further detailed, evaluating the design, compliance with legal regulations, financial viability and cost benefit analysis and the socioeconomic impact of the project. At this stage, the project study must culminate in a Project Decision to move to procurement and funding approvals. The essence of the project decision is that a final impression of the planning, scope and budget is presented, before the market is approached in the realisation phase.

Project approvals and processes. The Dutch Gateway Review Method is based on the Gateway Program in the United Kingdom. It is housed in the Bureau Gateway in the Ministry of Interior and Kingdom Relations. Since 2007, over 50 high risk projects and programs have been reviewed with very positive results. This is part of the Dutch Government's initiative to improve the management and delivery of high-risk projects by providing an independent confidential assessment and improving the capability of project management skills in government via actively sharing lessons learned. Typical project level gateway reviews include:

- *Gateway 1 - Purpose and justification* is performed at the start of a project to confirm its rationale.
- *Gateway 2 - Preparation and Procurement Stage* is executed once the project approach is firm and seeks to examine whether the project's rationale and the intended results are still demonstrable and desirable.
- *Gateway 3 - Realisation Stage* is executed as soon as the suppliers are formally approached and seeks to verify whether the intended approach will be successful in this realisation phase.
- *Gateway 4 - Readiness for implementation* is performed before the project team transfers its result to the line organisation(s) or just before the implementation phase.

The Gateway Review is not mandatory and is usually performed as a confidential peer review assessment at the request of a manager. The Gateway Review provides an independent view on the current progress of the project or program including observations and recommendations.

How has the MIRT framework streamlined project preparation in the Netherlands?

Good practice guidance on project preparation. Through the former PPP Knowledge Centre, the Netherlands has developed a knowledge base of good practices in developing large infrastructure projects. This know-how has evolved into the sophisticated framework of the MIRT. MIRT project preparation is steered by good practice procedural guidance and tools such as social cost benefit analysis, preparation of business cases, risk management, project governance, gateway reviews etc. that have contributed to successful project execution.

Prescribing a wide base approach for project evaluation. Complex projects benefit greatly from an integrated region-oriented approach to decision-making that cuts sectoral barriers. Through the prescribed Consultations Committee, MIRT helps to bring in varied perspectives on spatial functions, such as transport, residential and commercial development, flood risk management, and environmental impact, into the decision-making process for a project.

Enhanced ownership by all stakeholders.
A consultative approach to project development can often fail unless it is complemented by allocating responsibility for implementation. The MIRT framework requires that all stakeholders involved in the consultation are responsible for ensuring the feasibility of the project by providing financial resources wherever required and enabling implementation through legal and policy interventions. This furthers the broad-based approach, as inputs from multiple stakeholders must be accompanied by 'an intention to work things out together, from start to finish.'

A multi-layered decision-making approach. The MIRT process prescribes a funnelling approach to decision-making, with decisions being taken at multiple phases of project preparation and implementation. For each phase, the framework specifies the nature of the decision to be taken and the process to be followed. This multi-layered approach allows for less optimal solutions to be filtered, along with compelling the Consultations Committee to re-evaluate project decisions at each stage.

Increased transparency and accountability. The MIRT Overview, published on an annual basis as an annexure to the budget, is an informative publication on the state of affairs and the planning of government projects and programs in the MIRT framework. Furthermore, all decisions taken by the Consultations Committee for an area are presented to the House of Representatives, along with progress updates on site visits by members of the committee. MIRT also requires that all projects have a clear vision and well-articulated goals and success factors to enhance understanding.

Creation of a pipeline of bankable projects. Under the five-year planning horizon of MIRT, a pipeline of projects is developed. As projects are filtered through each of the decision stages, the quality of projects in the pipeline is increasingly strengthened – allowing for only viable projects to reach the realisation stage. Information on the project pipeline and its progress is kept updated on the MIRT portal. The phased decision process also provides for reasonable predictability in the planning for the projects in the pipeline.

Extensive capacity building initiatives to coach practitioners on the framework. MIWM has deployed a learning portal, with published guidance documents on the MIRT process, as well as a platform for practitioners to share their experiences and engage in discussions. The ministry also conducts intensive courses on the framework, open to civil servants as well as private experts, along with knowledge meetings and masterclasses on various aspects of the framework.

Gateway review process for quality enhancement. The Dutch Gateway Review process also provides an opportunity for government project managers to enhance the quality of their project preparedness.

3. Guidance for project preparation

Guidance	MULTI-YEAR PROGRAMME FOR INFRASTRUCTURE, SPATIAL PLANNING AND TRANSPORT
Owner	Ministry of Infrastructure and Water Management (MIWM)
Project development stage	Overall project lifecycle
Details	To improve the infrastructure project development process, the MIWM has developed an investment program called MIRT (Multi-Year Programme for Infrastructure, Spatial Planning and Transport). MIRT is an integrated program for the preparation and decision-making process of infrastructure projects. The MIRT program has rules, procedures and a framework– 'rules of the game' in order to direct how a project initiative that needs state funding should be developed and how decisions on project initiatives should be made. The MIRT program requires a project to go through four primary phases, with each phase ending with a political-administrative decision – MIRT Study, MIRT Exploration, MIRT Plan Elaboration and MIRT Realisation. **Link for further details:** **Overview (in English):** *https://www.government.nl/binaries/government/documents/leaflets/2018/02/07/the-dutch-multi-year-programme-for-infrastructure-spatial-planning-and-transport-mirt---summary/107287_MIRT_ENG_WEB.pdf* **Link for further details:** **Detailed guidance (in Dutch):** *https://www.leerplatformmirt.nl/over+mirt+nieuw/handreikingen/default.aspx*

4. Project case example: Afsluitdijk project

PROJECT BRIEF

The Afsluitdijk (Cut-off Dike) project is a causeway redevelopment plan that was implemented through the PPP model.

The Afsluitdijk is a 32 km-long, 90-metre wide major causeway in the Netherlands stretching from Den Oever on Wieringen in the North Holland province, to the village of Zurich in the Friesland province. The dike was constructed between 1927 and 1933, after the devastating floods of 1916, and over the last 85 years has been a check on the sea level rise and flooding. The dike sluices discharge surplus water from the Ijsselmeer Lake to the Wadden Sea at low water levels.

The redevelopment project (of the dike) was initiated in the context of rising sea levels and climate change challenges leading to revised design and structural considerations and enhanced safety standards. The key activities under the project scope include the strengthening of the causeway structure, and guards and sluices (including the lock complexes at Den Oever and Kornwerderzand), increasing the capacity to store and drain water, improvement of the A7 motorway and creating an eco-friendly space for recreational activities.

Rijkswaterstaat is responsible for the overall management of the project. The renewal project was initiated in 2012 and achieved financial close in May 2018. The concession is for a Design-Build-Finance-Maintain (DBFM) contract covering a period of 25 years. The concessionaire for the project is a consortium called Levvel, which includes BAM PPP PGGM, Van Oord Aberdeen Infrastructure Partners, and the Rebel Group (as financial adviser). The project construction is expected to be completed by 2022.

QUICK FACTS

VALUE
(IN US $ BILLION)

1.785*

STATUS

Pre-construction

PROJECT OWNERSHIP

Rijkwaterstaat

SOURCE OF PROJECT
PREPARATORY FINANCING

Budgetary allocation

SUPPORT AGENCIES

De Nieuwe Afsluitdijk**

* Budget set aside for the project, Exchange Rate: €1 = US $1.14 (as of December 2018)

** De Nieuwe Afsluitdijk is a cooperation between the provinces of Noord-Holland and Fryslân and the municipalities of Hollands Kroon, Súdwest-Fryslân and Harlingen (along with citizens, and private sector stakeholders).

PROJECT TIMELINE

- **2005-06** Initial study to assess the safety need of the Afsluitdijk
- **2007** Initiation of project "Future Afsluitdijk"
- **2008-09** Joint market reconnaissance by Rijkswaterstaat and local governments – four integral visions and two reference designs identified
- **2010** Preliminary environmental impact assessment, cost effective analysis of the initial designs
- **2011** Decision on preferred design under the Afsluitdijk master plan
- **2013** Plan elaboration and initiation of preparatory documents
- **2016** Launch of tender for procurement
- **2017** Finalisation and approval of all the phases of the integration plan
- **2018** Selection of preferred bidder – commercial and financial close
- **2023** Scheduled completion of construction

LEARNINGS FOR PROJECT PREPARATION

1. Establishing an integrated project vision maximising service delivery impact

While project preparation practices in most countries are initiated and prepared by the line departments in isolation and are generally targeted at the specific area of concern, the Netherlands, aided by the MIRT approach, facilitates integrated planning elements into the project concept. In the case of the Afsluitdijk project, the Rijkswaterstaat expanded the project objective beyond "improved flood protection standards" to include multiple other smaller sub-projects in line with the aspirations of the citizens. This integrated approach to project planning was detailed under the Afsluitdijk Master Plan, which outlined the strategies for sustainable development of the dike, potential for tapping renewable energy, improvement of service delivery standards and leveraging the unique spatial quality of the region for creating active recreational spaces for the local community. The project also gave due importance to renewable energy projects, especially considering that the primary project objective was driven by climate change considerations (rising sea levels or flooding).

In line with the Master Plan objective, the Rijkswaterstaat, along with De Nieuwe Afsluitdijk, designed multiple components under five broader categories:

i) Safety – Redevelopment of Afsluitdijk, and strengthening of Den Oever and Kornwerderzand locks

ii) Water management – Increase the capacity to drain water, solar energy pumps

iii) Economic activity – Tourist facilities, 'Icon Afsluitdijk', convention centre

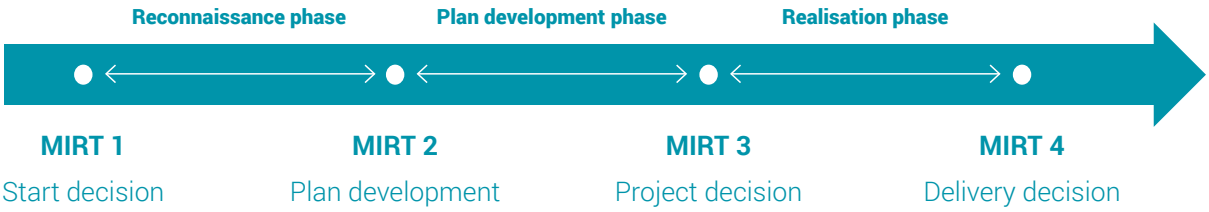
iv) Sustaining Nature – Initiatives for a passage for fish at Den Oever

v) Renewable energy – Blue energy system[3], tidal and solar energy, electric pumps

[3] Blue Energy is the technique by which energy is extracted from the difference in the salt concentration of salt and fresh water.

2. Stage-wise planning phase under the broader MIRT framework

The project planning and implementation for the Afsluitdijk project was guided by the MIRT framework and was divided into four stages of decision-making. While the early reconnaissance was undertaken during the period 2008-09, the detailed plan development was initiated in 2012.



The plan development phase for the Afsluitdijk project was further sub-divided into a seven-phase process:

- Phase 1 – Environmental impact report (2013)
- Phase 2 – Draft integration plan, environmental impact report and other design plans (2015)
- Phase 3 – Government integration plan and review of appeals against the plan (2016)
- Phase 4 – Review of the draft decision on the permit/licence on the basis of the Nature Conservation Act (2017)
- Phase 5 – Appeal against the Amendment Decree on the permit/licence issued (2017)
- Phase 6 – Supplement to the government integration plan[4] (2017)
- Phase 7 – Appeal against the government integration plan and finalisation (2018)

Each phase of development was initiated through a separate notification, followed by the development of a plan sub-component and stakeholder consultations and a specific notification indicating the end of the phase. The preparatory documents at each phase of development were made available for citizen inputs and comments. The project phasing also provided for flexibility in design mid-way through the process.

[4] Updated to include the spatial integration of solar panels, increasing the passage width of the locks on Kornwerderzand and more space for the construction of pump buildings.

3. Flexibility in project design and implementation for the bidder

While the Rijkswaterstaat's "Rijksinpassingsplan Afsluitdijk" (government implementation plan) serves as the blueprint for project implementation, the government also provides some flexibility in planning and implementation through the introduction of an innovative planning concept – "Oplossingsruimte" (Solution space). The innovative plan provides guidance on the maximum space allotted, general spatial requirements and the conditions for implementation. Under this overall guidance, the bidders were provided the flexibility to provide a detailed elaboration of the design and implementation plan. This gives the concessionaire the space for creativity and the possibility to develop cost-effective design solutions within the overall implementation plan boundaries. Because of this, there is a greater chance of an innovative and more functional design.

The boundaries of the solution spaces are also strengthened through the planning process, starting from an initial rough definition and then tightening along the way. The concept does not lead to dilution of the design or Environmental Impact Assessment (EIA) standards. This innovative structure ushered in a new approach to PPP and relationship management between stakeholders, especially Rijkswaterstaat and the concessionaire.

4. Stakeholder engagement integrated to each phase of project preparation

One of the stand-out factors in the Afsluitdijk project preparation is the range and depth of the consultation process. The regional authorities and the Rijkswaterstaat initiated open consultations with public and private parties to attract as many new ideas as possible. The strategy was aimed at getting 'more value' out of the dike by developing integrative ideas which could add new functions.

The public consultation process was divided into two distinct phases – initial reconnaissance and market survey (joint market reconnaissance by Rijkswaterstaat and regional governments during 2008-09) and the plan development stage (anchored by Rijkswaterstaat with active support from regional governments during 2013-17). Starting with the Afsluitdijk Master Plan, each stage of project preparation involved extensive stakeholder consultations. The consultations during the reconnaissance phase laid the foundation for the wider project design, especially the expansion of scope beyond "flood protection" functions. The consultations during the plan development phase were designed such that Rijkswaterstaat focused on strengthening the core components (the reinforcement of the dike) and aligned the public consultations with this focus, while the consultations surrounding the other project components were championed by the regional authorities (organised under 'De Nieuwe Afsluitdijk' / New Cutoff Dike).

The consultations during the plan development phase were led by Rijkswaterstaat and incorporated the highest standards in transparency and accountability. More than 17 rounds of stakeholder consultations were conducted during the plan development phase. The project documents and consultation minutes were uploaded in the "Platform Participatie"[5] portal.

5. Local government and local community ownership backed by innovative citizen engagement methods crucial to sustain project momentum

The initial reconnaissance for the project anchored by a partnership between local government and Rijkswaterstaat brought in ideas for the integrated redevelopment of the dike. The phase also involved a contest to pool-in innovative designs for redevelopment and rejuvenation of the dike and nearby areas. Rijkswaterstaat received inputs from eight consortia on a coherent integral vision on the development of the Afsluitdijk and its surrounding area, including spatial design and technical, legal and financial feasibility. The designs reflected a multifunctional transformation of the Afsluitdijk, combining water safety with nature, sustainability, energy production and tourism. The initial reconnaissance phase helped build promising new ideas and generate favourable brand equity for the project, especially with the local community.

However, the financial crisis and the subsequent government budget restrictions led to the government prioritising and focusing on the redevelopment of the dike. Backed by the strong brand equity generated during the reconnaissance phase, the provinces and municipalities joined together under the program 'De Nieuwe Afsluitdijk' (The New Afsluitdijk, DNA) to drive the broad vision for Afsluitdijk. The DNA played an active role in the development of design and implementation of the project components and also raised funds for project preparation and implementation.

[5] Link to the portal – https://www.platformparticipatie.nl/projectenlijst/Afsluitdijk/index.aspx