NETHERLANDS

Mill Network at Kinderdijk-Elshout

Brief description
The outstanding contribution made by the people of the Netherlands to the technology of handling water is admirably demonstrated by the installations in the Kinderdijk-Elshout area. Construction of hydraulic works for the drainage of land for agriculture and settlement began in the Middle Ages and have continued uninterruptedly to the present day. The site illustrates all the typical features associated with this technology – dykes, reservoirs, pumping stations, administrative buildings and a series of beautifully preserved windmills.

1. Introduction
Year(s) of Inscription 1997

Agency responsible for site management
- Netherlands Department for Conservation
  (since 1st November 2006: Netherlands Department for Archaeology, Cultural landscape and Monuments – RACM (Rijksdienst voor Archeologie, Cultuurlandschap en Monumenten), in contact with the Kinderdijk World Heritage Foundation (Stichting Werelderfgoed Kinderdijk))
  Broederplein 41
  3703 CD Zeist
  The Netherlands
  e-mail: R.deJong@racm.nl
  website: www.racm.nl

2. Statement of Significance
Inscription Criteria C (i) (ii) (iv)

Justification provided by the State Party
The Kinderdijk-Elshout mill network is a group of buildings, which is part of a man-made landscape, which has developed organically over the centuries and is now protected by the government as a cultural heritage as well as a nature reservation.

Kinderdijk-Elshout, as a hydraulic historic monument, is in its entirety of outstanding universal value, based on the following criteria (Guidelines/Revised February 1995, par. C, 24.a):

- The Kinderdijk-Elshout network with its historic 'high and low polder areas with natural drainage', watercourses, mills and mill courses, pumping stations, outlet sluices and Water Board Assembly Houses is practically unchanged. It has been able to retain its vast, typically Dutch and characteristic features of the landscape and the environment, created since the Middle Ages and specifically during the first half of the 18th century (criteria 24, a, (i), (ii) and (iv);
- It is the realisation of an extremely ingenious hydraulic system which still functions today and which through the ages made it possible to populate and cultivate a large peat area and is nationally and internationally the only example of this size, making it a unique and outstanding example of an architectural ensemble as well as a landscape which typifies The Netherlands, which illustrates a significant stage in human history (criteria 24, a, iv).

As provided in ICOMOS evaluation
Qualities: the Kinderdijk-Elshout mill network is an exceptional man-made landscape in which the centuries-long battle of the Dutch people to drain parts of their territory and protect them against further inundation is dramatically demonstrated through the survival of all the major elements of the complex system that was devised for this purpose. The area proposed for inscription on the World Heritage List retains all those features without any irrelevant or discordant intrusions.

The landscape is striking in its juxtaposition of its horizontal features, represented by the canals, the dikes, and the fields, with the vertical rhythms of the mill systems.

Recommendation: that this property be inscribed on the World Heritage List on the basis of criteria i, ii, and iv:

The Kinderdijk-Elshout mill network is an outstanding man-made landscape that bears powerful testimony to human ingenuity and fortitude over nearly a millennium in draining and protecting an area by the development and application of hydraulic technology.

Committee Decision
Bureau (June 1997): the Bureau recommended the Committee to inscribe this site on the World Heritage List on the basis of cultural criteria (i), (ii) and (iv). The Kinderdijk-Elshout Mill network is an outstanding man-made landscape that bears powerful testimony to human ingenuity and
fortitude over nearly a millennium in draining and protecting an area by the development and application of hydraulic technology.

Session (1997): the Committee decided to inscribe this site on the basis of criteria (i), (ii) and (iv) considering that the Kinderdijk-Elshout mill network is an outstanding man-made landscape that bears powerful testimony to human ingenuity and fortitude over nearly a millennium in draining and protecting an area by the development and application of hydraulic technology.

- Statement of Significance adequately defines the outstanding universal value of the site
- No change required

**Boundaries and Buffer Zone**
- Status of boundaries of the site: adequate
- Buffer zone: no buffer zone has been defined but none is needed as the site is adequately protected by existing legislation

**Status of Authenticity/Integrity**
- World Heritage site values have been maintained

3. **Protection**

**Legislative and Administrative Arrangements**
- Protected townscape ('bescherm dorpsgezicht') under article 35 of the 1988 Monuments Act (Monumentenwet 1988)
- ‘Municipal Zoning Plan for the Rural Area of Nieuw-Lekkerland’ (Bestemmingsplan Buitengebied Nieuw-Lekkerland)
- since 2 September 2005, the ‘Preliminary Zoning Plan for the Rural Area (Voorontwerp Bestemmingsplan Landelijk Gebied) has been available for general inspection in the municipality of Alblasserdam
- Nature Conservancy Act (Natuurbeschermingswet)
- Part of the ‘Green Heart’ (Groene Hart) National Landscape in the Space Document - Space for Development (Nota Ruimte. Ruimte voor ontwikkeling) published in 2004
- On the basis of the Environmental and Water Policy Plan (Beleidsplan Milieu en Water), the Province of Zuid-Holland has designated the reservoirs at Kinderdijk as an environmental protection area
- Article 23 of the 1993 Aquatic Areas and Pleasure Boating Bye-Law for Zuid-Holland (Verordening watergebieden en Pleziervaart Zuid-Holland)
- The 2005 Shipping Rules Bye-Law for Water Board District Rivierenland (Keur Scheepvaartregeling Waterschap Rivierenland)
- The protection arrangements are considered sufficiently effective

4. **Management**

**Use of site/property**
- Visitor attraction
- Other:
  - The Wisboom pumping station, used as an exposition centre, and the Nederwaard 2 mill are open to visitors
  - The sites designated as nature reserves (the reservoirs, which also have a soil hydrological / water management function) are for the most part closed to the public
  - The other inhabited historic drainage mills, with their surrounding yards and fields (most of which are designated wildlife areas) and the two working 20th-century pumping stations are entirely closed to the public

**Management/Administrative Body**
- Steering group: Kinderdijk World Heritage Foundation (Stichting Werelderfgoed Kinderdijk) holds a 30-year lease on the site’s 19 mills, including the surrounding premises, access paths and any outbuildings, since 29 April 2005. Its goal is to exercise effective management according to a set of uniform standards. It consists of the municipalities of Alblasserdam and Nieuw-Lekkerland, the Province of Zuid-Holland and the District Water Board Rivierenland, which was formed from the Polder Board of the Alblasserwaard and the Vlijheerenlanden on 1 January 2005
• Site manager (Responsibilities have been added to an existing job)
• Levels of public authority who are primarily involved with the management of the site: national; regional; local. Other: Kinderdijk World Heritage Foundation (Stichting Werelderfgoed Kinderdijk) and District Water Board Rivierenland (Waterschap Rivierenland)
• Co-operation between local governments (the municipalities of Nieuw-Lekkerland and Alblasserdam, the Province of Zuid-Holland and the District Water Board Rivierenland) and the Kinderdijk World Heritage Foundation (Stichting Werelderfgoed Kinderdijk), as formalised in a convenant (2002)
Moreover, the Articles of Association of the Kinderdijk World Heritage Foundation (Stichting Werelderfgoed Kinderdijk) also function as guidelines
• The current management system is sufficiently effective

Actions proposed:
• Clarification of the management structure by initiating a division into two entities (the one geared towards preserving the historic mills and enhancing the tourism/recreational aspects, and the other geared towards strengthening the professionalism of management)

5. Management Plan
• Management plan is being implemented
• Implementation commenced: 2004 (reservoirs)
• The Polder Board of the Alblasserwaard and the Vijfheerenlanden commissioned a management plan for Kinderdijk’s higher reservoirs, namely those of De Nederwaard, De Overwaard and the municipality of Nieuw-Lekkerland, to be implemented in the period from 2004-2013. This appeared as ‘High Reservoirs at Kinderdijk. Management Plan, June 2004’ (Hoge Boezems Kinderdijk. Beheersplan, june 2004)
• In 2004, the Province of Zuid-Holland established the area encompassing Kinderdijk in its ‘Area Programme for Eastern Zuid-Holland, 2003-2007’ (Gebiedsprogramma Zuid-Holland Oost, 2003-2007), targeting the actual improvement of the quality of water and nature
• In 2005, the Kinderdijk World Heritage Foundation (De Stichting Werelderfgoed Kinderdijk) drew up a business plan for 2006-2010 (Bedrijfsplan 2006-2010)
• Goals: to make authenticity a core value; to improve accessibility by water; to make awareness building the basis of the presentation of the World Heritage; to raise Kinderdijk’s profile
• Effective
• Responsibility for over-seeing the implementation of the management plan and monitoring its effectiveness: Kinderdijk World Heritage Foundation; District Water Board Rivierenland; Province of Zuid-Holland; Municipality of Nieuw-Lekkerland; Municipality of Alblasserdam; Ministry of Education, Culture and Science (OCW); Staatsbosbeheer (Dutch Forestry Commission)

6. Financial Resources

Financial situation
• Parties to the Covenant, sponsors, government, funds
• No funding drawn in through World Heritage Fund
• The Kinderdijk World Heritage Foundation (Stichting Werelderfgoed Kinderdijk) is supported financially by the Province of Zuid-Holland, the municipality of Nieuw-Lekkerland and the District Water Board Rivierenland (until 1 January 2005 the Polder Board of the Alblasserwaard and the Vijfheerenlanden). The Province of Zuid-Holland awards annual maintenance subsidies, such as ‘turning bonuses’ (‘draaipremies’), to mills. The Foundation receives maintenance subsidies for the mills from the Netherlands Department for Conservation (Rijksdienst voor de Monumentenzorg (since 1st November 2006: Netherlands Department for Archaeology, Cultural Landscape and Monuments – RACM) of the Ministry of Education, Culture and Science (Ministerie van Onderwijs, Cultuur en Wetenschap – OCW)
The Foundation receives occasional contributions from sponsors, funds and EC grants
• Insufficient

7. Staffing Levels
• Number of staff: 0

Rate of access to adequate professional staff across the following disciplines:
• Average: conservation, management, interpretation, visitor management
• Bad: promotion, education
• The site also receives support from the Mill Support Point of Zuid-Holland (Molensteunpunt
Zuid-Holland), set up by the Province of Zuid-Holland; mill owners, mill managers and others can go there for technical and practical information about mills; the Netherlands Department for Conservation (Rijksdienst voor de Monumentenzorg – RDMZ (since 1st November 2006: Netherlands Department for Archaeology, Cultural Landscape and Monuments - RACM) and their mill experts

- Staff resources are inadequate (Limited human and financial resources of the Kinderdijk World Heritage Foundation (Stichting Werelderfgoed Kinderdijk), especially in terms of promotion, education, visitor management and legal and managerial skills)

8. Sources of Expertise and Training in Conservation and Management Techniques

- The mill network is a ‘continuing cultural landscape’. With the exception of the visitors mill (Nederwaard 2) and the Wisboom pumping station, which was recently converted into an exhibition centre, the site has no capacity for installation or management of museum facilities
- No training on site management

9. Visitor Management

- Visitor statistics: about 300,000 visitors come to the site, which is free to the public. Of these, 46% come from outside the Netherlands, especially Germany (13%) and France (9%). 90,419 people visited the mill in 2004. This was 11.9% more than in 2003
- Visitor facilities: water transport and water taxis; jetties at the visitors mill (Nederwaard 2) and the Wisboom pumping station; cruise of the site on the lower reservoir of De Overwaard; Exhibitions; special events and illumination at the mills; marked cycle route; marked walking routes; Bicycle rental; information panels in Dutch and English; Molenhoek skating club house, restaurants, souvenir shops
- Visitor facilities are inadequate
- Visitor needs: improved accessibility and security at the visitors mill (Nederwaard 2); improved parking facilities; larger jetty in the River Lek (note: the municipality of Nieuw-Lekkerland has contracted to have a design made for this); improved restaurant facilities
- There is no tourism/visitor management plan for the site

10. Scientific Studies

- Is there an agreed research framework/strategy for the site? Not provided
- Monitoring exercises, condition surveys, visitor management, transportation studies
- The 19 mills have their own specific software that has enabled the programming of long-term maintenance schedules; ‘Study of Problems Caused by Dampness. Stone Mills, Phase 1’ (Onderzoek Vochtproblematiek. Stenen Molens 1e Fase.), published by the Delft Technical University, September 2002
- Studies used for management of site: the results have been incorporated in the Kinderdijk World Heritage Foundation’s business plan for 2006-2010 (Bedrijfsplan 2006-2010), which will also serve as its general management plan for the mills and to implement the measures listed in ‘High Reservoirs at Kinderdijk. Management Plan, June 2004’ (Beheersplan Hoge Boezems Kinderdijk, June 2004)

11. Education, Information and Awareness Building

- An adequate number of signs referring to World Heritage site
- World Heritage Convention Emblem used on publications
- Adequate awareness of World Heritage among: visitors, local communities, businesses, local authorities
- There is no education strategy for the site
- Targeted education is needed to raise the awareness of local youth. The interactive exhibition ‘Wind, Water and Sails’ at the Wisboom pumping station in June 2005 was an initial step in this direction
- Website available
- No local participation

12. Factors affecting the Property (State of Conservation)

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Conservation interventions

- Conservation and restoration works: not provided
- Present state of conservation: needs more resources
Threats and Risks to site

- Visitor/tourism pressure. Other problem: not receiving funds for restoration in a timely manner (no possibilities exist yet for the structural financing of the necessary large-scale restorations at Kinderdijk)
- Emergency measures: in the near future, the Kinderdijk World Heritage Foundation (Stichting Werelderfgoed Kinderdijk) wants its ‘area partners’ to draw up and determine an ‘area document’ setting out the tasks and responsibilities necessary for conservation of the site, as well as the obligations, such as education and public awareness, that go along with World Heritage status. No timeframe provided

13. Monitoring

- No formal monitoring programme
- Aspects being monitored: monitoring of water management, water quality, fluctuations of the water table and wave action; vegetation management, annual taking of aerial photographs and analysis of vegetation structures; monitoring of populations of birds (including breeding birds), mammals and dragonflies / butterflies
- Key indicators: various methods used, including photographic evidence, to conduct systematic and regular inspections of the structural condition of the mills

14. Conclusions and Recommended Actions

- Main benefits of WH status: conservation
- Weaknesses of management: convenience and accessibility of location, quality of presentation

Future actions:

- Drawing up, determining and implementing an ‘area document’ for the mill network at Kinderdijk-Elshout
- WH Funding sought? Not provided
- No timeframe provided