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منظمة الأمم المتحدة  
للتربية والعلم والثقافة

联合国教育、  
科学及文化组织

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Permanent Delegate of  
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7 Rue Eblé  
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Ref.: CLT/HER/WHC/EUR/17/9700

26 April 2017

Subject: **State of conservation of the World Heritage property "Defence Line of Amsterdam"**

Dear Ambassador,

I wish to inform you that ICOMOS has reviewed the Heritage Impact Assessment (HIA) of the three route alternatives for the A8-A9 Highway Link, within the boundaries of the World Heritage property "Defence Line of Amsterdam", submitted by your authorities to the World Heritage Centre on 28 February 2017.

Please note that ICOMOS concurs with the State Party that the Zero-plus Alternative appears the least impacting among the three selected route alternatives and therefore suggests that this is the option to be preferred for the construction of the link between the A8 and A9 motorways. However, ICOMOS considers that a more in-depth analysis of the potential impacts of this alternative, particularly at the junction with A9, would be helpful to monitor potential impacts deriving from the upgrading of the junction. Moreover, a landscape analysis may also be helpful to establish the most appropriate measures for the safeguarding of the landscape dimension of the property, with regards to its vulnerabilities due to development.

Therefore, I would be grateful if you could share the enclosed ICOMOS technical review (Annex I) with your relevant national authorities for their consideration and keep the World Heritage Centre informed of ways by which these comments are being taken into account.

Thanking you for your support and cooperation in the implementation of the *World Heritage Convention*, I remain,

Yours sincerely,

Mechtild Rössler  
Director  
World Heritage Centre

Enc.

cc: Netherlands National Commission for UNESCO  
National Focal Points for World Heritage  
ICOMOS International

## ICOMOS Technical Review

<b>Property</b>	<b>Defence Line of Amsterdam</b>
<b>State Party</b>	<b>Netherlands</b>
<b>Property ID</b>	<b>759</b>
<b>Date inscription</b>	<b>1996</b>
<b>Criteria</b>	<b>(ii)(iv)(v)</b>
<b>Project</b>	<b>A8-A9 link road alternatives</b>

### Background

The Stelling van Amsterdam (Defence Line of Amsterdam, hereafter DLA) is a complete ring of fortifications extending more than 135 km around the city of Amsterdam. Built between 1883 and 1920, the ring consists of an ingenious network of 45 forts, acting in concert with an intricate system of dikes, sluices, canals and inundation polders, and is a major example of a fortification based on the principle of temporary flooding of the land.<sup>1</sup>

As the surrounding area was a restricted military zone for many decades, its setting has been preserved through planning development control although some changes occurred over time, due to development pressures, that have led to the proposal of a minor boundary modification, currently being reviewed by ICOMOS. These pressures need to be controlled through appropriate protective measures.

The ring of forts makes up a group of connected buildings and other structures whose homogeneity and position in the landscape have remained unchanged and distinguishable in all its parts. They form the main defence line together with the dikes, line ramparts, hydraulic properties, forts, batteries and other military buildings, and the structure of the landscape.

No parts of the Stelling have been reconstructed. The Outstanding Universal Value is expressed in the authenticity of the design (the typology of forts, sluices, batteries, line ramparts), of the specific use of building materials (brick, unreinforced concrete, reinforced concrete), of the workmanship (meticulous construction apparent in its constructional condition and flawlessness), and of the structure in its setting (as an interconnected military functional system in the human-made landscape of the polders and the urbanised landscape).

The Stelling van Amsterdam is a coherent human-made landscape, one in which natural elements such as water and soil have been incorporated by humans into a built system of engineering works, creating a clearly defined landscape.

Key qualities (as presented in the Heritage Impact Assessment report, February 2017):

- Unique, coherent and well-preserved, late nineteenth century and early twentieth century hydrological and military landscape, consisting of a continuous system of dykes, locks, inlet channels, forts, inundation areas, firing range areas and prohibited circles;
- Relatively high level of openness;
- Green and relatively quiet ring around Amsterdam.

### Issues raised

In 2015, the State Party informed about the need to improve the road system in the region and to reduce traffic problems. A Heritage Impact Assessment (HIA) was submitted by the State Party for a number of alternatives and this, along with the traffic issues, were analysed in detail by ICOMOS. The ICOMOS Technical Review (November 2015) resulted in a set of recommendations, which are summarized below:

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<sup>1</sup> From the retrospective Statement of Outstanding Universal Value, adopted at 40<sup>th</sup> session of the WHC in 2016

- Retaining the integrity and authenticity of tangible attributes must be a central issue for the final decision;
- Paying attention to the existing visual features already compromising the Outstanding Universal Value (urbanism, A9 road, wind-turbine, etc.);
- Defining the main axis of view of the World Heritage property in this section; and second by producing 3D landscape models of what already exists and what could happen with the new projects;
- Solution n°7 appears to offer the least impact on heritage; but its sustainability in the medium long term needed to be considered;
- Simultaneously examine a more direct solution among the seven alternatives (n°3-4-5);
- Examine the possibility of defining a buffer zone to avoid visual impacts in the places where forts and dikes are close to the property's boundaries.

In 2016, the State Party informed that out of the seven alternatives, only alternative 2 and 5 were retained for the link between A8 and A9 and provided additional information for other projects. ICOMOS provided its response in August 2016.

The alternatives envisaged for the connection between the two motorways A8 and A9 all need to cross the Defence Line, although in some cases more transformations of the landscape appear to be needed.

On 28 February 2017, the State Party transmitted to the World Heritage Centre the Heritage Impact Assessment for three selected alternatives integrated with a visual analysis of development occurred since the inscription of the property on the World Heritage List and of 3D models visualizing the impacts of the new infrastructure on the attributes of the Defence Line of Amsterdam.

The present technical review concerns the Heritage Impact Assessment developed by the State Party to assess impacts of alternatives for the connection between A8 and A9.

The documentation consulted for the present review include:

- A8-A9 HIGHWAY LINK. Spatial impact of the three route alternatives on the Defence line of Amsterdam (February 2017)
- Previous documentation submitted by the State Party
- Previous ICOMOS technical reviews

ICOMOS has also received a third-party letter<sup>2</sup> concerning the selected alternatives for the A8 – A9 link road and on the analysis of the urban development in the target area for the construction of this road link. The information contained therein will also be considered in the technical review.

## Analysis

The February 2017 Heritage Impact Assessment considers three different alternatives, two of which were presented in the previous HIA (2015) – the Golf Course Alternative (as alternative 5) and the Heemskerk Alternative (as alternative 3) - and one which seems to be a new solution, the Zero-plus Alternative.

The Heritage Impact Assessment also examines the transformations suffered by the landscape surrounding the DLA since its inscription in the World Heritage List: these include progressive expansion of residential settlement development (urbanisation), transportation and energy infrastructure construction, and large-scale facilities which are frequent for a peripheral area of a large city. The analysis is based on a terrain visual survey which considers several points of views over the DLA features and highlights the new structures and facilities. ICOMOS notes that this analysis should have been preceded by a comparative analysis between cartographic material dating back to different periods, so as to achieve a clear understanding of the number and the scale of the

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<sup>2</sup> Letter from Mr Willem Roling, dated 21 March 2017, representing several third parties including Buurtschap Busch en Dam.

transformations occurred over the last twenty years in the area. This type of documentation has been presented as an annex of the third-party letter and in ICOMOS view could and should have been prepared also by the State Party, as the information that can be drawn by the comparison among maps of the same area dating back to different periods are particularly relevant.

#### *Zero-plus Alternative*

This option envisages the improvement of existing routes – the Provincial Highways N203 and N246 – and it is considered not having any significant impact on the World Heritage property Defence Line of Amsterdam (DLA) because no major development derives from it, as it is based on the upgrading of existing highways. This option concentrates its impacts on the city of Krommenie – Assendelft.

For this alternative no specific visualization of impacts has been developed nor compensation measures have been envisaged in the HIA.

#### *Golf Course Alternative*

This option route connects through a straight line A8 with A9 crossing through the defence line dike by means of a viaduct so as not to interrupt the DLA. It passes close to the Golf Course and has an impact also on this facility.

This option implies two crossings of the DLA: at Sint Aagtendijk to create the junction with A9 and at Groenedijk.

The Sint Aagtendijk crossing would occur at a point where a large junction with the A9 needs to be constructed, all within the DLA boundaries, and would make use of a fly over; the highway would be placed on pillars for a length of 180m, in order to prevent interruption of the DLA features and landscape. However, this structure would remain a dominant feature, as it could be perceived through the 3D models. Additionally, the ramps of the junction would erode much of the defensive moat of the DLA and of the landscape surrounding of Fort Veldhuis. The coherence of the DLA and of the Fort would be undermined by this structure.

At Groenedijk, the new road infrastructure would cut straight through an important landscape structure which conveys the significance of the property and scenic and recreational values. The crossing would occur at ground level, implying the raise of the dike itself to allow for agricultural and recreational traffic to over-cross the highway.

This alternative envisages also several compensation measures, including the removal of facilities that have disturbed the readability of the DLA and its features, enhancement of the ecological and landscape qualities, restoration of the inundation barrier and other features of the DLA.

#### *Heemskerk Alternative*

This option envisages a route for the linking highway coinciding with Golf Course route for its first half and then taking a north-eastern direction, to join A9 at a mid-point between the golf course and the zero plus option.

This alternative interferes at three points with DLA: the Kilzone underpass, the Heemskerk junction and the standard highway cross – section.

According to the HIA, the Kilzone Underpass implies the preservation of the Hoogedijk and its features as well as the reinforcement of the expressiveness of the DLA. ICOMOS has some serious reservations in this regard that are expressed in the following section.

The Heemskerk junction would need adjustments of the current junction as well as the relocation of energy and other infrastructures to create the necessary space for an upgraded motorway junction.

The Standard highway cross section: the highway is planned to cross the inundation area of the DLA, east of the A9 and, to reduce the visual impact of the highway, its profile is planned to be kept as

open as possible.

Also in the case of this alternative, compensation measures are envisaged, including: widening of creeks and waterways, construction of ecological banks, removal of service stations and related facilities, other measures to improve the readability of the features of the DLA as well as the partial restoration of the openness of the landscape.

### **Evaluation of the information received**

ICOMOS thanks the State Party for its willingness to continue the dialogue with the Advisory Body on this property and for the work undertaken in developing this additional HIA on the A8- A9 link road. The joint examination of the visual analysis prepared by the State Party and the cartographic analysis prepared by the third party indicates that several transformations have occurred in the area that have led to the fragmentation of the landscape continuity, thus undermining the capacity of the landscape to convey the sense of the overall functioning of the defensive structures and the ingenious use of the landscape and of the artificialized topography for defensive purposes.

This fragmentation and the progressive isolation from one another of the individual defensive structures need to be halted, if the integrity and authenticity of the property are to be maintained and, with them, the understandability of this 'defensive' landscape.

With regard to the assessment of the impacts of the alternatives for the A8 – A9 link road, ICOMOS considers that the HIA provides a fair analysis of the impacts that may derive from the infrastructures envisaged in each option.

The Zero-plus Alternative appears the least impacting as it makes use of existing road infrastructure facilities and envisages their upgrading.

The Golf Course Alternative implies the construction of a flyover and the transformation of the moat area near the Fort which the HIA itself says can have a substantial impact on the landscape character, additionally the surrounding of the Fort Veldhuis would be substantially and negatively impacted. The impacts have been clearly stated by the HIA and appear to be not acceptable.

ICOMOS notes that, in the case of Heemskerk Alternative, the assessment seems too optimistic, especially with regard to the underpass. The visualization through 3D model suggest that the underpass would remain quite superficial and therefore would require, to be constructed, the removal of the ground and of the historic and landscape features and its later reconstruction. This cannot be considered acceptable from an historical perspective, especially if built defensive structures are impacted by the project. The recreation of historic features should be avoided as much as possible.

### **Conclusions**

ICOMOS concurs with the State Party that the Zero-plus Alternative appears the least impacting among the three selected and therefore suggests that this is the option to be preferred for the construction of the link between the A8 and A9 motorways.

ICOMOS considers that the other two alternatives need infrastructural works that the HIA 3D visual models and analysis suggest to have substantial negative impacts on the tangible attributes of the World Heritage property as well as on its landscape dimension, which is very important for the understanding and appreciation of the significance of the Defence Line of Amsterdam.

As a matter of fact, they cannot be implemented without localized destruction of heritage features related to DLA and, although restoration measures are envisaged, these cannot be considered an acceptable solution, especially when a much less impacting solution is at hand (zero- plus alternative).

Additionally, the Golf Course and the Heemskerk options would cause a major fragmentation of a landscape which is still relatively intact and continuous, in an area which has been progressively and substantially urbanized, thus causing a considerable erosion of openness and of the landscape character of the DLA.

ICOMOS however considers that a more in-depth analysis of the potential impacts of the Zero-plus Alternative on the DLA, particularly at the junction with A9 would be helpful to monitor potential impacts deriving from the upgrading of the junction.

A landscape analysis may also be helpful to establish the most appropriate measures for the safeguarding of the landscape dimension of the property, with regards to its vulnerabilities due to development.

ICOMOS remains at the disposal of the State Party for further clarifications or assistance as required.

ICOMOS, Charenton le Pont  
April 2017