

ICOMOS ADVISORY MISSION

DEFENCE LINE OF AMSTERDAM
KINGDOM OF THE NETHERLANDS

REPORT
Proposed Highway Link A8/A9

Dates of mission: 5th-7th October 2017

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1. ACKNOWLEDGEMENTS

The mission expert wishes to thank everyone involved in the organisation and coordination of this Advisory mission. The two days spent during the mission were carefully organised so that the State Party's administration was represented as well as the landscape architects responsible for the proposals. This meant that all questions posed and all information required was available immediately, helping the fluidity of work and comprehensive understanding of the issues addressed.

The State Party has also provided additional documents within a week of the mission taking place, for which we are grateful as they enable the completion of this report. We must therefore commend the State Party as well as the permanent escort we had during the mission, which we thank for their support, clarity of work and transparency in their analysis.

Equally, we wish to thank all public and private agents that gave us their time and opinions during the site inspections and meetings during the mission.

Lastly, we would like to express our gratitude to our Committee in the Netherlands –Mr. Hildebrand P.G. de Boer, member ICOMOS The Netherlands-, who gave his support during our mission, as well as to the ICOMOS team in Paris. This mission has been organized thanks to the help of the staff at its World Heritage Unit: Rebecca Currie, as well as its Director, Mrs. Regina Durighello. We wish to thank all those mentioned above for inviting and relying upon us to undertake this task.

2. EXECUTIVE SUMMARY AND LIST OF RECOMMENDATIONS

The State Party of the Netherlands invited an ICOMOS Advisory mission to assess an infrastructure project proposed for development within the World Heritage property of the Defence Line of Amsterdam (hereafter DLA).

The Advisory mission, which took place from 5th -7th October 2017, had as objectives to examine the proposed options for a highway link road (A8/A9) in the north-western part of the DLA in the province of Noord-Holland. The assessment of the options was made in relation to the transport strategy of the area, considering the positive and negative impacts this might have on the Outstanding Universal Value of the property, as well as any possible mitigation measures or possible improvements for traffic management. Finally, the mission was to also assess the adequacy of planning provisions regarding the project implementation of the link road project A8/A9.

This report is the result of the Advisory mission; to undertake it the mission expert not only conducted site visits and meetings with responsible authorities and other stakeholders, but also reviewed the necessary technical documents and material submitted by the State Party.

The project had previously weighed up seven alternatives, taking into account the situation of the Defence Line of Amsterdam's forts and other attributes (canals, dikes, flooding zones, etc.) which convey the Outstanding Universal Value of the property (hereafter OUV). Out of these seven alternatives, three were selected –the Zero-plus alternative, the Heemskerk alternative and the Golf Course alternative- during an evaluation process which has been going on since 2015 with the consultation of ICOMOS. ICOMOS has reviewed this process on three occasions.

The first time, in 2015, the ICOMOS review pointed out that, with regard to the documents submitted by the State Party, the Zero-plus alternative appeared to offer the least impact on the OUV of the property. It nevertheless recommended that it *"would also be necessary to document whether it [would be] a sustainable transportation solution, considering the use of a segment of national road"*.

The ICOMOS review of 2016 had no new recommendations, as there was no further documentation to be assessed regarding the proposed highway link. It was only in April 2017 that further advice was sought from ICOMOS. In its 2017 review, ICOMOS continued to point out that the Zero-plus alternative still appeared to offer the least impact on heritage. The review nevertheless recommended 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". Concerning the alternative options, ICOMOS considered that, with regard to the HIA, 3D visual models and analysis, these seemed 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*".

This mission has therefore focused on the three alternatives selected, though it has also reviewed the preliminary options, and agrees with the previous selection process. This mission report is based on further documentation provided by the State Party as well as onsite visits and meetings.

In the heritage and socio-economic context discussed in this report, the fact that the Highway link between the A8/A9 is needed, as well as that the landscape expression of the Outstanding Universal Value is already partially compromised in this area, two issues were taken into consideration when providing an assessment of the possible alternatives.

From a broad point of view, it seems that this part of the landscape of the Defence Line of Amsterdam was already partially compromised at the time of inscription. Since then, further development has taken place, and there is now a notable risk of increased negative effects with the current proposed projects. Thus, the 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 readability of this 'defensive' landscape. The maintenance of the integrity and authenticity of tangible attributes has therefore been a central issue for the assessment of the alternatives and the final recommendation.

From the assessment of the Zero-plus alternative, the Heemskerk alternative and the Golf Course alternative, the mission concludes that the only possible solution which does not imply heritage loss and unacceptable impact on OUV is the Zero-plus alternative, but this will have a detrimental effect on the quality of life of the inhabitants in the vicinity of the property, and will also not provide a sustainable transportation solution.

The mission therefore concludes that at the current time, there is no alternative that can be supported. In this context, it is recommended that further work is pursued so as to identify other options that might be able to satisfy the three main parameters stated above, namely: protection of OUV, population health, and mobility.

Such further options need to be explored, following the above recommendations that visual studies and virtual images of the global landscape taking into account the existing attributes which compromise heritage values are clearly shown. Maps, HIA and an equal procedure to that established for the assessment of the previous alternatives should be followed. Equally, both a modelling exercise to test traffic impacts and show the acceptable network performance as well as noise assessments could also be helpful.

The mission notes that, though some tangible attributes such as the forts are clearly strong and well-preserved in the area, as is their continuity as evidence of the defence line; the landscape expression of the area itself as a cultural landscape, by means of other features such as the landscape's geomorphology, and water system, as the expression of its Outstanding Universal Value is already partially compromised.

Although the State Party must be commended for the conservation of the monumental attributes of the DLA, such as the forts, what is at stake is the landscape dimension as an expression of its Outstanding Universal Value. In this sense, the State Party's efforts to restore and preserve these components will be crucial for the conservation of the property in the future.

The mission is also aware that the vulnerabilities of this segment of the DLA are to be found similarly in other locations, as acknowledged in the submission for a Minor Boundary Modification in 2016, and development pressures, particularly from infrastructure requirements, are considerable in several parts of the property.

First, the mission considers that the possibility of a buffer zone needs to be examined, at least for the most sensitive parts of the property's components, based on a clear definition of the setting of the property.

Secondly, remedial work is needed for some areas of landscape as touched on in this report.

Thirdly, the mission suggests that in response to these issues, more detailed strategic approaches need to be developed for the property as a whole and its wider setting, particularly in relation to infrastructure, as considering infrastructural projects on a one-by-one basis within the narrow confines of segments of the property is particularly difficult, as this report has shown.

The mission 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 the additional documentation needed for this assessment, not only the HIA and the EIA on the A8-A9 link road, but also the in-depth spatial analysis, as well as complimentary reports. The quality and transparency of the work has greatly contributed to the fulfilment of this report.

3. BACKGROUND TO THE MISSION

3.1. Inscription History

The Defence Line of Amsterdam was inscribed on the World Heritage List during the 20th Session of the World Heritage Committee which took place at Merida (Yucatán, Mexico) between 2nd and 7th December 1996.

3.2. Criteria and Outstanding Universal Value

The Stelling van Amsterdam (Defence Line of Amsterdam, 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.

Since the 16th century, the people in the Netherlands have used their special knowledge of hydraulic engineering for defence purposes. The area around the fortifications is divided into polders, each at a different level and surrounded by dikes. Each polder has its own flooding facilities. The depth of flooding was a critical factor in the Stelling's success; the water had to be too deep to wade and too shallow for boats to sail over. Water levels were maintained by means of inlet sluices and barrage sluices. Forts were built at strategic locations where roads or railroads cut through the defence line (accesses). They were carefully situated at intervals of no more than 3500 m, the spacing being determined by the range of the artillery in the forts. The earlier ones were built of brick, the later of massed concrete.

The land forts have an important place in the development of military engineering worldwide. They mark the shift from the conspicuous brick/stone casemated forts of the Montalembert tradition, in favour of the steel and concrete structures that were to be brought to their highest level of sophistication in the Maginot and Atlantic Wall fortifications. The combination of fixed positions with the deployment of mobile artillery to the intervals between the forts was also advanced in its application.

Criterion (ii): *The Stelling van Amsterdam is an exceptional example of an extensive integrated European defence system of the modern period which has survived intact and well conserved since it was created in the late 19th century. It is part of a continuum of defensive measures that both anticipated its construction and were later to influence some portions of it immediately before and after World War II.*

Criterion (iv): *The forts of the Stelling are outstanding examples of an extensive integrated defence system of the modern period which has survived intact and well conserved since it was created in the*

The fortifications have been preserved as they were designed and specified. The materials and building constructions used have also remained unchanged. Repair in arrears applies in some cases. 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.

Protection and management requirements

The Province of Noord-Holland is the site-holder. Responsibility for the conservation is also in the hands of the national government, the Province of Utrecht, 23 municipal authorities and three water boards. In addition, the many management bodies and owners of sections of the Stelling van Amsterdam (e.g. nature conservation organisations and private parties) play a role. The north side of the Stelling van Amsterdam overlaps with the Beemster Polder, another World Heritage property. The Stelling van Amsterdam has no buffer zone.

Protection of the properties is multi-level and comprehensive. The Stelling is protected by the Provincial By-law governing Monuments and Historic Buildings [Provinciale Monumenten-verordening] (more than 125 elements of the Stelling are provincial heritage sites) and the national 1988 Monuments and Historic Buildings Act [Monumentenwet 1988] (more than 25 elements are state monuments).

In 2011, the Dutch government adopted the National Policy Strategy for Infrastructure and Spatial Planning (SVIR). This agenda came into force in 2012 and ensures the maintenance of World Heritage properties when it comes to the spatial development of the Netherlands. In line with this national policy, a specific preservation regime on the basis of the Dutch Spatial Planning Act (Wro) has been adopted for the Defence Line of Amsterdam in the General Spatial Planning Rules Decree (Barro). This regime involves legally binding rules that instruct provinces to ensure that the maintenance of the attributes of the World Heritage properties is guaranteed in local zoning plans.

In 2005, the Province of Noord-Holland set up a programme office for the Stelling van Amsterdam in order to manage the property (preservation and development). The programme office is in charge of carrying out the Stelling van Amsterdam Implementation Plan [Uitvoeringsprogramma] 2009-2013, adopted by the Provincial Council of Noord-Holland in 2009. The planning framework for the Stelling has been set out in the Policy Framework for Spatial Planning [Ruimtelijk Beleidskader] (2008); quality assurance is regulated in the Visual Quality Plan [Beeldkwaliteitsplan] for the Stelling van Amsterdam (2009).

The Stelling van Amsterdam is subject to the provincial Strategic Structure Agenda for 2040 [Structuurvisie 2040] since 2010. The relevant provincial By-law lists the key attributes and Outstanding Universal Value of the Stelling van Amsterdam and sets out rules for dealing with spatial aspects of the Stelling van Amsterdam as a World Heritage property and National Landscape. The relevant municipal authorities will incorporate these policy rules into their zoning plans. The section of the Stelling van Amsterdam located in the Province of Utrecht is covered by the 2005-2015 Regional Plan for Utrecht [Streekplan Utrecht], superseded by the Strategic Structure Agenda for Utrecht [Structuurvisie Utrecht] in 2013.

The Stelling van Amsterdam programme office intends to develop three visitor centres: one on the southeast side of the Stelling (Fort Pampus, opened in 2011), one on the west side (Fort Benoorden Spaarndam) and one in the northwest (Fort bij Krommeniedijk). Because the Stelling van Amsterdam is located in a spatially and economically dynamic area, planning tools and management mechanisms will be crucial to ensure that spatial developments do not have a detrimental impact on the Outstanding Universal Value of the property and the original open nature of its landscape setting.

The Mission notes that, in current Dutch national policy, Section 2.13 of the General Rules for Spatial Planning Decree (BARRO) sets out rules for heritage properties of Outstanding Universal Value.

These include rules regarding the DLA. Schedule 8 to the BARRO outlines the attributes of the Outstanding Universal Value of the DLA:

1. The unique, unified and well-preserved late-nineteenth and early twentieth-century hydrologic and military landscape consisting of:
 - a continuous system of rampart dikes in a large ring around Amsterdam; sluices and back and front channels;
 - forts, located at regular intervals, mainly along dikes;
 - inundation areas;
 - former fields of fire (visually open) and prohibited areas (largely land not built on);
 - the incorporation into the landscape and camouflaging of the former military structures;
2. a relatively large measure of openness;
3. a green and relatively quiet ring around Amsterdam.

3.3. Examination of the State of Conservation by the World Heritage Committee

The last examination of the State of Conservation of the property by the World Heritage Committee dates back to the 41st Session of the World Heritage Committee which took place at Krakow (Poland), between 2nd-12th July 2017¹. In this session, upon the request of the State Party for a proposed minor modification to the boundaries of the DLA, the World Heritage Committee:

Recommends that the State Party, with the advice of ICOMOS and the World Heritage Centre if requested, to take the following actions to further support the protection and management of the property:

1. *Consider the implementation of a buffer zone for the World Heritage property in order to improve the protection of the property and its visual integrity, particularly for sections near industrial and residential development areas (and in particular, the Geniedijk area near the Schiphol Airport),*
2. *Continuing to strengthen the legal protection and monitoring for the remaining areas inside the inscribed property,*
3. *Ensuring that the protection of the World Heritage property is effectively incorporated into all existing and future zoning plans,*
4. *Continuing to support communication and capacity building initiatives for local and provincial governments and stakeholders,*
5. *Ensuring the use of 'Heritage Impact Assessment' processes for all zoning and development proposals inside and adjacent to the Defence Line of Amsterdam (particularly in relation to proposals for expansions to the Schiphol Airport and its associated facilities and surrounds),*
6. *Ensuring that all major projects that could impact on the Outstanding Universal Value of the property are communicated to the World Heritage Centre in line with paragraph 172 of the Operational Guidelines,*
7. *Providing updated mapping for the Fort Kijkuit component (no. 042), and an updated figure for the overall area (in hectares) of the inscribed World Heritage property,*
8. *Continuing to work cooperatively with a broad range of public and private owners and stakeholders to ensure the conservation (including possibilities for adaptive reuse) of the fort structures and their settings.*

¹ Decision: 41 COM 8B.46

3.4. Justification of the mission (terms of reference, programme and composition of mission team provided in Annex)

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:

- *The maintenance of the integrity and authenticity of tangible attributes must be a central issue for the final decision;*
- *It seems necessary to pay attention to the existing visual features already compromising the Outstanding Universal Value (urbanism, A9 road, wind-turbine, etc.). This could be done first by definition of the main axis of view of the WH 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 [...] It seems preferable to simultaneously examine a more direct solution (n°3-4-5);*
- *Examining 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 needed to cross the Defence Line, although more transformations of the landscape were needed for some options over and above those needed for others.

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

In April 2017, the ICOMOS Technical Review concerning the Heritage Impact Assessment developed by the State Party to assess impacts of alternatives for the connection between A8 and A9, resulted in a set of 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.

In July 2017, as a result of this final report, the Cultural Heritage Agency of the State Party of the Netherlands, in line with the *Operational Guidelines for the Implementation of the World Heritage Convention*, requested ICOMOS carry out an Advisory Mission with the following objectives:

1. Examine the proposed preferred option for a highway link road (A8/A9) in relation to the full transport strategy that underpins the proposal as well as other relevant environmental aspects, and the assessment of other options;
2. Assess the potential positive and negative impacts of the proposed option and other options on the Outstanding Universal Value of the property;
3. Consider whether the negative impacts of the proposed option might be mitigated to remove or reduce potential negative impacts;
4. If the negative impacts of the proposed option cannot be satisfactorily mitigated, consider possible other approaches for improved traffic management and/or highway improvements;
5. Assess the adequacy of the planning provisions, regulations and strategies in dealing with the link road project A8/A9 and, in particular the use of HIA.

Between 5th and 7th October 2017, the Advisory Mission was carried out, in line with the above request. All the items requested in the most recent ICOMOS report (April 2017, as stated above) have been submitted in time for the Mission, namely including a more in-depth analysis together with a landscape analysis of the proposals. ICOMOS thanks the State Party for the work undertaken in developing this additional information on the A8- A9 link road, which is of excellent professional quality.

Nevertheless, during the Mission, the following information was deemed appropriate and thus requested to the State Party:

- 1a: Presentation DLA by Joanna Geldhof.pdf
- 1b: presentation A8-A9 ICOMOS.pdf
- 1c: 20171006 ICOMOS by Bosch Slabbers.pdf
- 2a: DESIGNBOOK 3 DEF MARCH 2017 Zero-plusalternative (dutch version).pdf.
- 2b: DESIGNBOOK 3 DEF MARCH 2017 Heemskerkalternative (Dutch version).pdf.
- 2c: DESIGNBOOK 3 DEF MARCH 2017 Golfcourse alternative (Dutch version).pdf.
- 3. Arguments choice junction with A9.pdf. An explanation of why the junction of the Golf Course alternative with the motorway A9 on ground level is not possible;
- 4. Spatial policy on agricultural farms.pdf. An explanation of spatial policy on agricultural buildings/extensions and the system of supervision on the quality of building within the province of North Holland;

5. Zoning-plan area DLA A8-A9 with explanation.pdf. A map with all the zoning-plans within the area of the Defence Line of Amsterdam/ A8-A9 link road, with an explanation in English;
6. Area DLA A8-A9 and restriction areas.pdf. Some screenshots of the map with the spatial regulations in the area Defence Line of Amsterdam/A8-A9 link road, with a brief explanation in English;
7. Historical map 1900 area DLA A8-A9.pdf. A screenshot of the historical map (1900) of the Defence Line of Amsterdam for the examined area;
8. Explanation Minor Boundary Modification.pdf. A map with the boundaries of the Defence Line of Amsterdam in the examined area and indicated which parts of the Defence Line in this area where a part of the Minor Boundary Modification;
9. Transformations and future transformations area DLA A8-A9.pdf. A map with all the transformations (or planned transformations) in the examined area between 1996 (year of inscription on the World Heritage List) and today;
10. Map roadstructure.pdf. A map with the broader mobility-structure around Amsterdam;
11. Advice Board of Government Advisers sept. 17.pdf. The English translation of the advice of the Board of Government Advisers on Landscape and Environment, on the issue of the Defence Line and the A8-A9;
12. Landscape Analysis Defence Line of Amsterdam and New Dutch Waterline (Dutch Version).pdf. This Landscape Analysis will be part of the Significant Boundary Modification for the Defence Line of Amsterdam;
13. Background information stakeholders.pdf. A list with the names and backgrounds of the stakeholders the mission expert spoke with;
14. Costs overview.pdf. An overview of the costs of the three road alternatives.

The information was handed in on October 13th, thus enabling the assessment of the issues addressed in the "Terms of Reference" of the mission that were proposed by the State Party.

This complex case involves potential impact on the OUV of the property as well as its sustainable conservation, the perception of visitors and inhabitants of the OUV of the property, together with the social and economic dynamics in which the DLA is immersed. The mission has also considered realistic future management interventions in the inscribed property. The TOR objectives have been dealt with in the context of the structure of the report, which is the result of this working methodology.

4. NATIONAL POLICY FOR THE PRESERVATION AND MANAGEMENT OF THE WORLD HERITAGE PROPERTY

4.1. Protected area legislation

The State Party of the Netherlands has a clear framework for preserving the OUV of the Defence Line of Amsterdam through its spatial planning and heritage conservation systems and, as such, the protection of the property is multi-level and comprehensive. The Stelling is protected by the Provincial by-law governing Monuments and Historic Buildings [Provinciale Monumenten-verordening] (more than 125 elements of the Stelling are provincial heritage sites) and the national 1988 Monuments and Historic Buildings Act [Monumentenwet 1988] (more than 25 elements are state monuments).

In 2011, the Dutch government adopted the National Policy Strategy for Infrastructure and Spatial Planning (SVIR). This agenda came into force in 2012 and ensures the maintenance of World Heritage properties when it comes to the spatial development of the Netherlands. In line with this national policy, a specific preservation regime on the basis of the Dutch Spatial Planning Act (Wro) has been adopted for the Defence Line of Amsterdam in the General Spatial Planning Rules Decree (Barro). In these provisions, central government specifies the boundaries of the Defence Line of Amsterdam (according to the 1996 Nomination Dossier) and a regime for spatial

planning developments. This regime involves legally binding rules that instruct provinces to ensure that the maintenance of the attributes of World Heritage properties is guaranteed in local zoning plans.

The provinces are required to set out the rules for the protection regime in separate regulations. The Province of Noord-Holland has done so in the Provincial Spatial Planning (Policy Strategy) Regulations [*Provinciale Ruimtelijke Verordening Structuurvisie*] (2010) and the Provincial Policy Strategy 2040 [*Provinciale Structuurvisie 2040*] (2011). The Province of Utrecht has done so in its own provincial Spatial Planning Policy Strategy 2013-2028 [*Provinciale Ruimtelijke Structuurvisie 2013-2028*] (2013) and Provincial Spatial Planning Regulations [*Provinciale Ruimtelijke Verordening*] (2010). A provincial policy strategy is binding with regard to the actions taken by the province. The regulations in turn require municipalities to include the preservation regime in their zoning plan. The extra regulations regarding World Heritage properties consequently find their way into the zoning plan.

The Stelling van Amsterdam has been subject to the provincial Strategic Structure Agenda for 2040 [Structuurvisie 2040] since 2010. The relevant provincial by-law lists the key attributes and Outstanding Universal Value of the Stelling van Amsterdam and sets out rules for dealing with spatial aspects of the Stelling van Amsterdam as a World Heritage property and National Landscape. The relevant municipal authorities will incorporate these policy rules into their zoning plans. The section of the Stelling van Amsterdam located in the Province of Utrecht is covered by the 2005-2015 Regional Plan for Utrecht [Streekplan Utrecht], superseded by the Strategic Structure Agenda for Utrecht [Structuurvisie Utrecht] in 2013.

In addition to protection for World Heritage properties by means of the BARRO regulations, there are various procedures with which development plans in the Netherlands must comply. Planning and decision-making for the development and improvement of roads that are of provincial importance are subject to the procedure laid down in the Spatial Planning Act [Wet ruimtelijke ordening], the Integration Plan.

Part of that procedure is the Environmental Impact Assessment (EIA), with which the initiator clarifies the environmental consequences (including those for heritage) of the proposed project. For the A8-A9 Link Road, it is the competent authority that draws up the HIA; therefore, the Province of Noord-Holland. In addition to the environmental consequences of a project, the competent authority can also explicitly include the impact of the project on the OUV of the World Heritage property in its decision-making.

As above, ICOMOS concludes that the protection of the property's component sites is multi-level and comprehensive. Nevertheless, the decentralisation of the Dutch system of spatial planning implies that the basis of the system is the municipal authority's zoning plan [*bestemmingsplan*]. This constitutes the assessment framework for applications by initiators of development, for example, involving building construction or functional changes in land use. When drawing up and implementing their spatial planning policy, municipalities are required to take cultural heritage into account.

In the past, the decentralisation of the system implied that when the nomination of the Defence Line of Amsterdam was put forth by the State Party, there were already decisions taken at municipal and regional level which were not recorded in the nomination dossier, resulting in changes which have had serious consequences to the Outstanding Universal Value of the property in the area in which the highway link road A8/A9 now intends to be developed (see section "5.2.2. State of conservation in the area of proposed changes" of this report).

To alleviate this situation, the central government has formulated an extra protection policy, specifically for the conservation of World Heritage in the General Spatial Planning Rules Decree (BARRO) as explained above. This is binding on both the provincial and municipal levels of government.

Nevertheless, the "bridging" from one legislation to another (which covers various scales –municipal, regional, national, etc.- as well as concepts –cultural, natural, etc.-) does not seem to be clearly inventoried with regard to the World Heritage property. During the visit, information on the planning zoning was requested. This has been kindly submitted by the State Party. In it, we can see the different uses allowed in the DLA property.

These include the protected area for the Schiphol runway, environmentally-protected areas, the new building provisions (for housing and offices), as well as agricultural plots. The DLA delimitation area, as well as other areas or isolated monuments with geological or archaeological values, is also mapped.

As these are spatial planning maps, they do not contain any information regarding the attributes of the World Heritage property (i.e. not only the isolated monuments but other attributes such as the openness of the landscape, the inundation areas, the firing ranges, geomorphological cultural components, etc.). It is therefore deemed highly necessary that accurate mapping, which includes both the spatial planning provisions as well as the attributes of Outstanding Universal Value, is produced. This holistic and systemic reading of the property will then be able to show and protect the property's integrity and authenticity (Image 2 on following page).

4.2. Institutional framework

The Province of Noord-Holland is the property owner. As such, in 2005, it set up a programme office for the Stelling van Amsterdam in order to manage the property (preservation and development). The programme office is in charge of carrying out the Stelling van Amsterdam Implementation Plan [Uitvoeringsprogramma] 2009-2013, adopted by the Provincial Council of Noord-Holland in 2009. The planning framework for the Stelling has been set out in the Policy Framework for Spatial Planning [Ruimtelijk Beleidskader] (2008); quality assurance is regulated in the Visual Quality Plan [Beeldkwaliteitsplan] for the Stelling van Amsterdam (2009).



- Enkelbestemming**
bestemmingshoofdgroep
- agrarisch
 - agrarisch met waarden
 - bedrijf
 - bedrijventerrein
 - bos
 - centrum
 - cultuur en ontspanning
 - detailhandel
 - dienstverlening
 - gemengd
 - groen
 - horeca
 - kantoor
 - maatschappelijk
 - natuur
 - overig
 - recreatie
 - sport
 - tuin
 - verkeer
 - water
 - wonen
 - woongebied

Zoningplan Use:
Agricultural
Agricultural Use with Landscape value
Manufacturing
Area for manufacturing
Woods
Center
Culture
Shopping
Services
Combined use
Green
Restaurant, hotel
Office
Social
Nature
Other
Recreation
Sports
Garden
Traffic
Water
Housing
Residential Area

4.3. Management structure

In 2015, the provinces of Noord-Holland and Utrecht adopted Management Plan 2015. The plan clarifies what the provinces, as site owners, will do up until and including 2020 to preserve and protect the attributes of the World Heritage property. In addition, the Province of Noord-Holland – in the 2014-2016 implementation programme for the Defence Line of Amsterdam – deals with the preservation of the Defence Line of Amsterdam and the development of the World Heritage property into a distinguishable and cohesive area with special value.

Site management is also in the hands of the national government, the Province of Utrecht, 23 municipal authorities and three water boards. In addition, the many management bodies and owners of sections of the Defence Line of Amsterdam (e.g. nature conservation organisations and private parties) play a role.

As only a 5-page English summary of the 2015 Management Plan has been submitted, ICOMOS is unable to assess its adequacy.

5. IDENTIFICATION AND ASSESSMENT OF ISSUES

5.1. Description of changes proposed: Highway link A8/A9

5.1.1. General considerations

The State Party informed in 2015 about the need to improve the road system in the region of Amsterdam. The State Party's state of conservation report highlights the general level of urban and economic pressure nearby the large city of Amsterdam, and more specifically the need to complete the missing links between the different highways of the province (North Holland) and to facilitate local and regional traffic in order to improve the everyday quality of life of inhabitants. The report also recalls the protection framework and the spatial planning rules in force:

"Since as far back as the 1960s, central government and the province have been discussing the necessity and benefit of filling in a missing link in the national road network (A7, A8, and A9) in the area to the north of Amsterdam [...] The existing link between the A8 and A9 motorways – which consists of a stretch of the N246 and a stretch of the N203 – is unable to cope effectively with the (through) traffic." (October 2015 State Party SOC report, p. 7)

The State Party is therefore proposing an A8-A9 Link Road infrastructure located specifically within the Uitgeest-Heemskerk-Krommenie-Assendelft section of the Province of Noord-Holland, which is the competent authority for its execution.

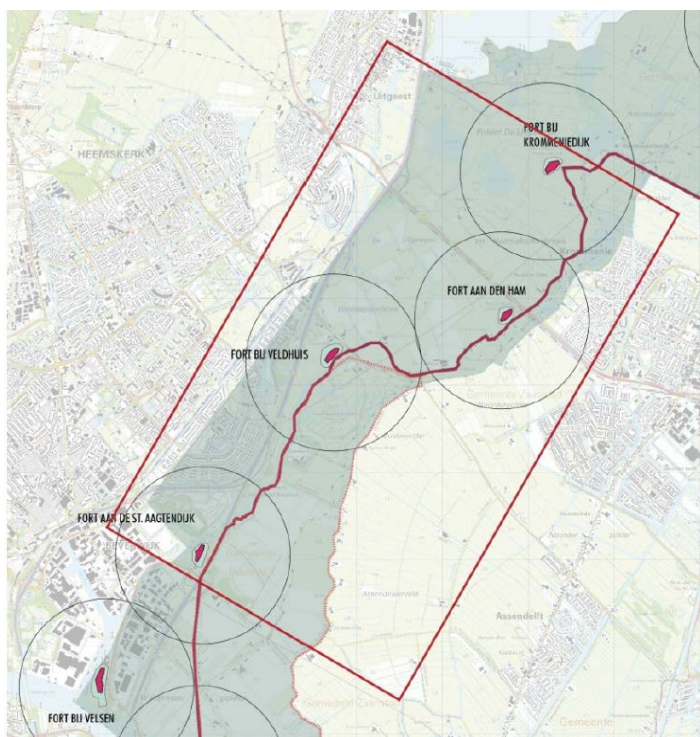


Image 3: Area of the proposed Highway link, as regards the DLA.

The project had previously comprised seven alternatives, taking into account the situation of the Defence Line of Amsterdam's forts and other attributes (canals, dikes, flooding zones, etc.) which convey the Outstanding Universal Value of the property. Out of these seven alternatives, three were selected –the Zero-plus alternative, the Heemskerk alternative and the Golf Course alternative- during an evaluation process which has been going on since 2015 with the consultation of ICOMOS. ICOMOS has reported on three occasions on this process.

The first time, in 2015, the ICOMOS report pointed out that, with regard to the documents submitted by the State Party, the Zero-plus alternative, appeared to offer the least impact on heritage. It nevertheless recommended that it “would also be necessary to document whether it is a sustainable transportation solution, considering the use of a segment of national road”.

The ICOMOS report of 2016 had no new recommendations, as there was no further documentation to be assessed regarding the proposed highway link. It was only in 2017 that further advice was sought from ICOMOS. In this 2017 report, ICOMOS continued to point out that the Zero-plus alternative still appeared to offer the least impact on heritage. The report nevertheless recommended 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”. Concerning the other alternatives, ICOMOS considered that, with regard to the HIA, 3D visual models and analysis, these seemed 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”.

This mission has therefore been focused on the three alternatives selected, though it has also reviewed the preliminary options, and agrees with the previous selection process. This new review is based on further documentation handed in by the State Party as well as onsite visits and meetings.

Apart from one of the solutions (Zero plus alternative/Nulplus alternative), the other two proposed alternatives are inside the World Heritage property. The alternative solution that is not inside the World Heritage property is on the limit of the property (there is no buffer zone).

Studies for the project were carried out following national, provincial and local regulations, and in consideration of the *Operational Guidelines for the implementation of the World Heritage Convention*. For this reason, an extensive Heritage Impact Assessment has been carried out following the ICOMOS document: *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties* (2011).

A short description with comments on the three alternatives follows. Further information can be consulted on the extensive information handed in by the State Party, namely the HIA, the EIA & the design books for each one of the alternatives.



Image 4: The three proposed alternatives.

5.1.2. Zero-plus Alternative

This option envisages the improvement of existing routes – the Provincial Highways N203 and N246 – and it is considered to not have 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 cities of Krommenie – Assendelft.

Impact on OUV:

- As the proposal is outside the DLA there is no direct impact.
- For this alternative, no specific visualization of impacts has been developed nor have compensation measures been envisaged in the HIA.

Traffic impacts:

As regards the ICOMOS review by transport specialists, this alternative will “increase through traffic in urban areas resulting in increased air and noise pollution”. Already pollution exceeds acceptable standards in the area, and it is estimated that this will get worse if this proposed alternative is undertaken. This Alternative does not comply with the EIA standards submitted by the State Party.

As regards the Zero-plus alternative, cross sections included in the design booklets show the difficulty of managing traffic in a densely-populated area. Motorway traffic will be diverted here, and there will be increased railway traffic as the new train depot is going to be built close to the N203 /A9 junction, implying trains every 6 minutes. In addition to this, there is a canal used for shipping merchandise, plus the crossing traffic between Krommenie and Assendelft, both transport and by foot, as many of the town’s facilities (around 35.000 people and 8 schools are situated less than 200 metres from this road) lie at one side or the other of the new proposed link.

With reference to transport solving, this alternative has an important default in that it implies a derivation of the A8 traffic on a short segment of classical road (N 203) before joining the A9, which could be not entirely satisfactory in the future due to traffic jam problems.

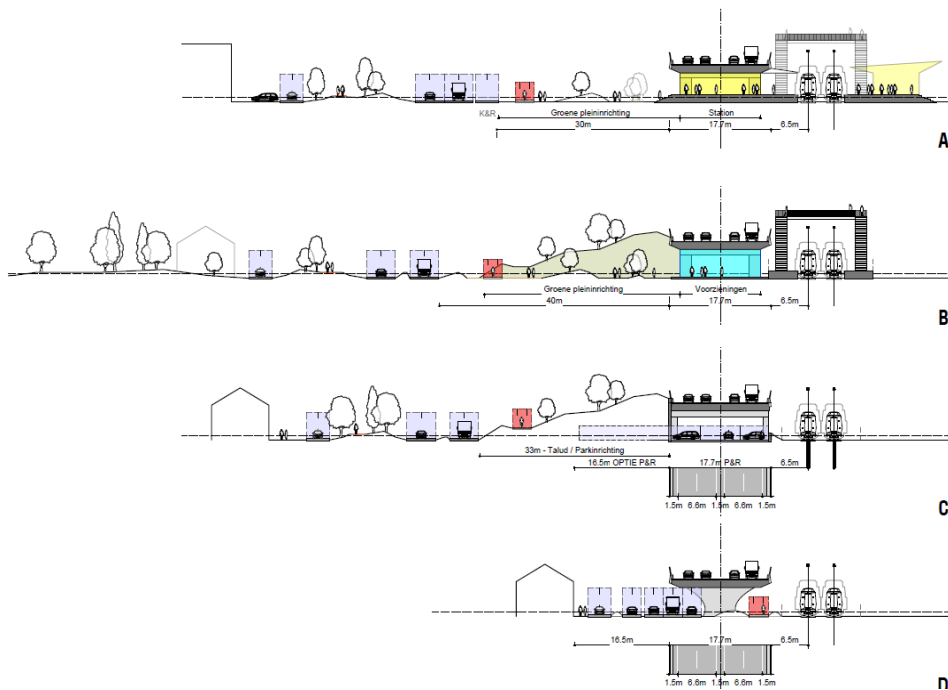


Image 5: Zero-plus alternative, with possible cross sections.

5.1.3. Heemskerk Alternative

This option envisages a route for the linking highway which coincides with the Golf Course route for its first half and then takes a north-eastern direction to join the A9 at a mid-point between the golf course and the Zero-plus option. This option curves around the edge of the field of fire of Fort Veldhuis and links up with the existing Heemskerk junction with the A9. This alternative interferes at three points with the DLA: the Kilzone underpass, the Heemskerk junction and the standard highway cross-section.

Kilzone underpass

Impacts:

- According to the HIA, the 120 m long Kilzone underpass implies the preservation of the Hoogedijk and its features, which would be unaffected. Nevertheless, ICOMOS has serious doubts about this, as it would mean that the earthen structures would need to be rebuilt once the underpass is completed, affecting the authenticity of the original fabric.

The Heemskerk junction

The Heemskerk junction would require the current junction to be adjusted, as well as the relocation of energy and other infrastructures to create the necessary space for an upgraded motorway junction. To facilitate the required number of lanes and merging lanes, an additional viaduct would need to be constructed immediately to the north of the existing viaduct, at the junction with the A9. The traffic here would be regulated by crossings with a traffic control system (VRI).

Impacts

- This junction would create the highest visual and noise disturbance in the area, affecting undoubtedly the understanding of the property's integrity to a high degree.

Standard Highways:

As regards the standard highway, the road to Heemskerk would be widened with a second lane and linked to the existing roundabout. The highway is thus planned to cross the inundation area of the DLA, east of the A9, and, so as to reduce its visual impact, its profile is planned to be kept as open as possible.

Impacts:

- It would nevertheless impact on the authenticity of the property as the form and design of the main defence line would be affected because the sheltered road would be relocated from the foot of the dike to the crown of the dike at the location of the Link Road.
- The original function as a sheltered road would therefore be lost.
- The same applies to the flood defence function: the fact that the dike would no longer be intact means that this would be lost.
- On the other hand, though the cross sections shown might mitigate the visual impact, noise levels would very much increase creating intense disturbance in the area.

Traffic impacts:

As regards transport solutions, taking into account ICOMOS's review by transport specialists, this option provides a more direct link to Heemskerk and also provides an alternative choice for motorists by maintaining the existing N8 link. It also provides an alternative route between the A8 and A9, which makes this part of the road network less sensitive to disruption. It is likely to reduce traffic on the N8 and, therefore, this alternative may reduce noise and air pollution from the towns of Assendelft and Krommenie.

With reference to the attributes of OUV, the following extract from the HIA submitted by the State Party adequately describes the changes on the property's integrity and authenticity (pp.63-65):

“Planning area Integrity:

Main defence line

There would be a minor change because part of the main defence line would no longer be intact at the place where it is cut through by the new Link Road in a cutting. There would be a moderate adverse effect (-2).

Water management system

In the water management system, there would be a change in the important historic landscape structure of the DLA. Part of the polder landscape that is characteristic of the inundation areas would

be affected. As a result, for example, the land subdivision and ditches structure would no longer be intact. There would be a moderate adverse effect (-2).

Military system

The structures making up the military system would be unaffected. The transection would be between Fort Veldhuis and Fort Den Ham, on the edge of the field of fire around Fort Veldhuis. This transection between the two forts would have a slight impact on the (sight) relationship between the forts. This alternative therefore has a score of slightly adverse (-1).

Planning area Authenticity:

Main defence line

There would be a moderate change as regards the authenticity of the main defence line. The form and design of the main defence line would be affected because the sheltered road would be relocated from the foot of the dike to the crown of the dike at the location of the Link Road. The original function as a sheltered road would therefore be lost. The same applies to the flood defence function: the fact that the dike would no longer be intact means that this would be lost.

Finally, perception and understanding of the DLA would be seriously affected because it would be transected at a unique and crucial place: namely where the single line forks into a double line. Constructing the road at this crucial location would affect understanding of this forking of the main defence line. There would therefore also be a large adverse effect (-3).

Water management system

The structures making up the water management system would be unaffected. There would, however, be a minor change because the road would transect the inundation polder. The latter is characterised by the open polder landscape that was used for inundation. These characteristics would be affected by the urban appearance of the road. There would therefore also be a moderate adverse effect (-2).

Military system

Because the Link Road would be located (almost entirely) outside the fields of fire, the design and form would be unaffected. The use and function would also remain intact. The sense of place would be affected, however: the Link Road would be visible from the various structures of the Defence Line of Amsterdam (Fort Veldhuis, Fort Den Ham, and the associated secondary batteries and magazines). This alternative therefore has a score of slightly adverse (-1).

Conclusion

Construction of the Heemskerk alternative would have a moderate adverse effect (-2) on the universal values within the planning area.

Study area Integrity:

A small portion of the main defence line and the inundation area would be transected and these would consequently no longer be intact.

[Here, the mission wants to add to this to state that as the Link Road would run in between two fields of fire, the view between the forts would be strongly impaired visually. Furthermore, the visual intrusion of the double flyover would have a strong visual impact on the whole area.]

Study area Authenticity:

[Heemskerk Alternative] cuts through the main defence line at a unique and crucial place in the DLA, namely where the single line forks into a double line. This would have an adverse effect on the Defence Line of Amsterdam as a whole. As for the other aspects associated with the water management system and the military system, the effect on the entire defence line would be negligible."

The mission considers that the visual intrusion of the double flyover would have strong visual impact on the whole area.

Possible mitigation measures:

All in all, this alternative would have a high adverse effect on the area, and mitigation measures have been provided by the State Party (Spatial Impact Assessment, p77):

- *Nature and water can be offset by the widening of creeks and waterways, construction of ecological banks, wet nature and agricultural nature.*
- *Removing the rest areas, service stations and associated structures offers an opportunity to clean up the field of fire, hereby partially restoring openness around the fort;*
- *Enhancement of the readability and ecological qualities of the landscape by increasing the water levels for a more diverse vegetation, and agricultural nature management;*
- *Restoring the inundation barrier (original access to the Fort) in order to be visible again on both sides of the A9;*
- *Restoring of the lost section of the Groenedijk (north of the Communicatieweg) and adding a recreational path on top;*
- *Increasing the readability of the Kil, a former sea inlet, by broadening the watercourse and developing the surrounding Kilzone into a form of ecologically managed agriculture with higher ground water tables and more species diversity;*
- *Improving the quality of the inundation zone / open firing range by planting a line of (Ash) trees parallel to the A9 along De Trompet business area;*
- *Improving the local recreational network by connecting the Zuidermaatweg acces to the Communicatieweg / Vogelmeerweg;*
- *(Re)planting the boundaries of the farmyards for less visual impact of the large barn structures.*
- *Restoring the readability of the Liniewall by creating a clear coupure through the wall near the Communicatieweg and restoring the route and view along the wall towards Fort Veldhuis.*

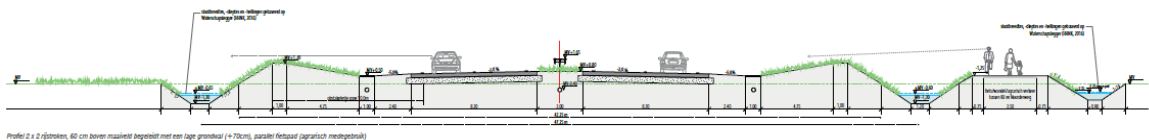


Image 7: Hemskeerck alternative, showing the standard highway section.



Image 6: Hemskeerk alternative, showing the layout of the proposed alternative with the three nodes of intersections, as well as the mitigation measures.

5.1.4. Golf Course Alternative

This route option connects the A8 with the A9 through a straight line, 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 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

This 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 120m, in order to prevent interruption of the DLA features and landscape.

Impact:

- The highway on pillars would remain a dominant feature, as it could be perceived through the 3D models.
- The sense of place, in particular, would be affected by the construction of the fly-over, which would further urbanise the landscape.
- The continuous line of the main defence line would be less perceptible.
- The main defence line would become less distinguishable.
- The second line rampart, which is currently continuous, would be divided up. The fact that the second line rampart would be transected would also affect the sense of place, distinguishability, and accessibility.
- There would be a large adverse effect on the main defence line.
- Additionally, the ramps of the junction would erode much of the defensive moat of the DLA and of the landscape surrounding Fort Veldhuis.
- The coherence of the DLA and of the Fort would be undermined by this structure.

Groenedijk, crossing

Impact:

- The new road infrastructure would cut straight through an important landscape structure – the second line rampart (Groenedijk) which is the only double rampart located in the DLA - which conveys the significance of the property and scenic and recreational values, losing the openness and visibility.
- The relationship between St. Aagtendijk, Fort Veldhuis, the associated secondary battery, and the free field of fire would also be affected.
- Furthermore, the crossing would occur at ground level, implying the raising of the dike itself to allow for agricultural and recreational traffic to over-cross the highway.
- Additionally, construction of the road would lead to a negligible change in the water management system.
- Although the presence of the golf course means that the characteristic open polder landscape of the inundation area has already been transformed, construction of the road would lead to the green character of the site being lost.
- The area would be further urbanised.
- Specifically, there would be a further impairment on the experiential dimension of the open polder landscape belonging to the inundation area, resulting in an adverse effect on the property's attributes.

Traffic impact:

- Though the cross sections shown might mitigate the visual impact, noise levels would very much increase, creating intense disturbance in the area.

As regards transport solutions, taking into account ICOMOS's review by transport specialists, traffic levels in Assendelft and Krommenie may be lowered, reducing air and noise pollution. This option requires a new junction on the A9, not far from the A9/A22 junction, where, presumably, both roads have high traffic flows and vehicle speeds. Locating the new junction in very close proximity to the existing A9/A22 junction may result in vehicles blocking back and heavy queuing due to the short

merging and diverging sections. For the motorist arriving or heading on the A9 North, the existing N8 road route may still offer similar travel time and, therefore, it is possible that the new link road will be underutilised.

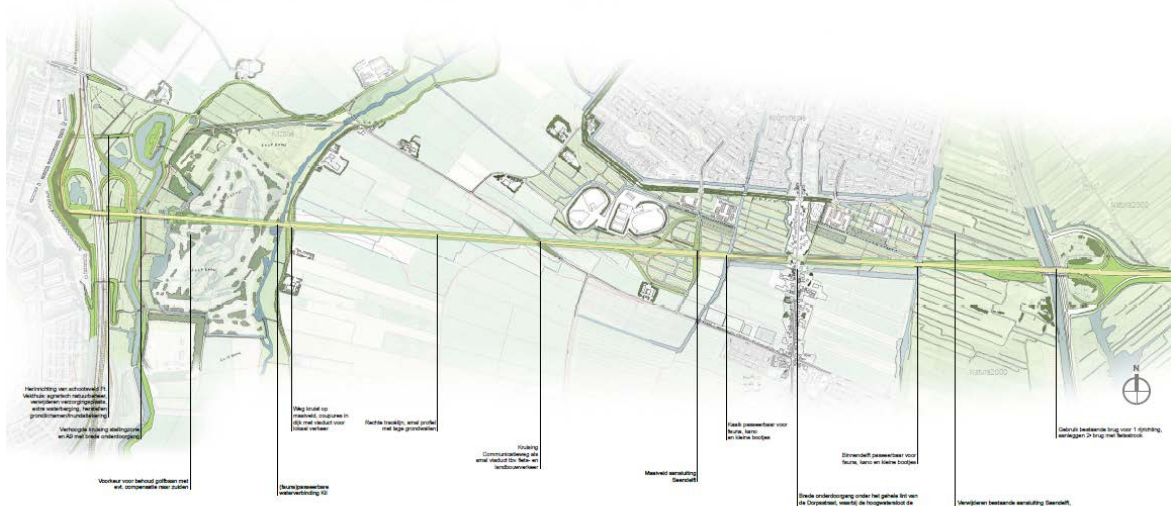
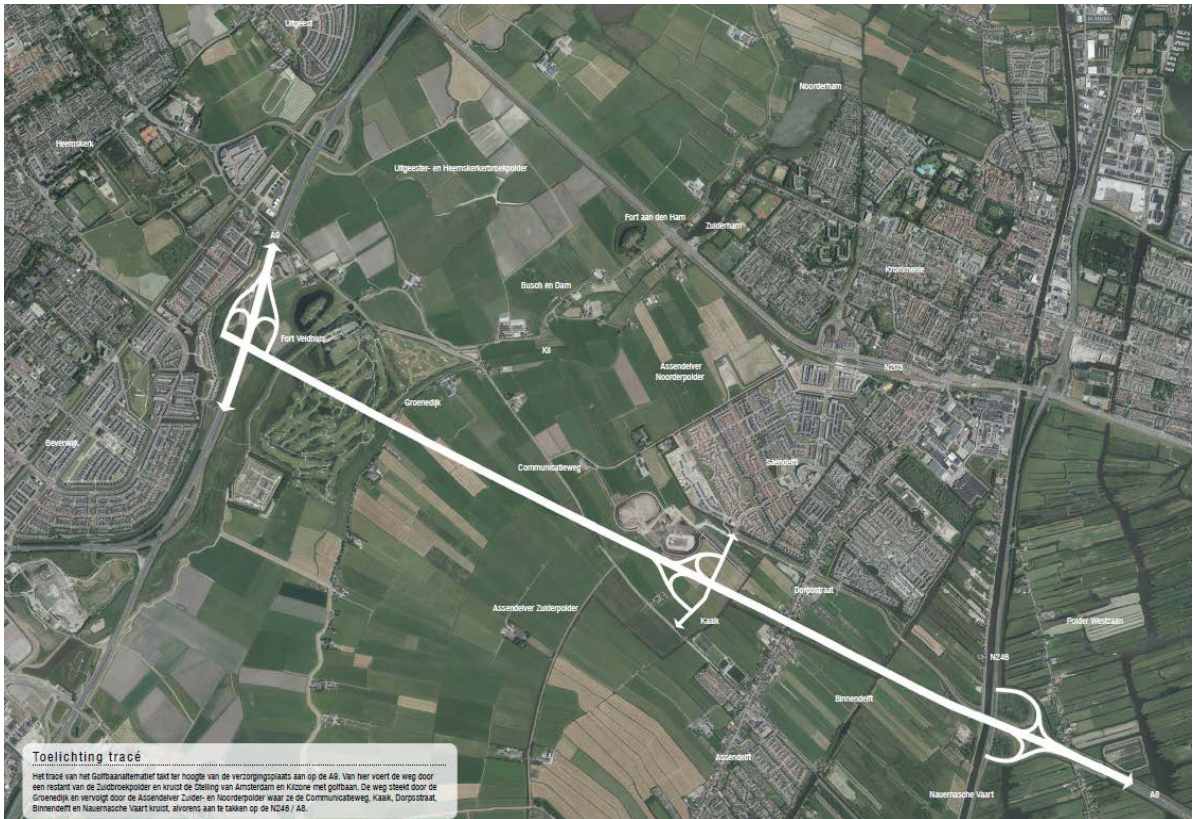


Image 8: Golf Course alternative, showing the planned layout, with the three nodes, as well as mitigation



Image 9: Golf course alternative, with the ramp of the viaduct crossing across the property's area.



Image 10: Golf course alternative, with the viaduct crossing across the property's area.

As regards the attributes of the OUV, the following extract from the HIA submitted by the State Party adequately describes the changes on the property's integrity and authenticity (pp.55-57):

Planning area Integrity:

Main defence line

Alternative 3 would lead to a change in some important historic landscape structures of the World Heritage Site. The road would pass the main defence line in two places: as a fly-over over the main defence line (St. Aagtendijk) and in a cutting through the second line rampart (Groenedijk). This double rampart located here is unique anywhere in the DLA. Constructing a fly-over would allow the St. Aagtendijk to remain intact as an element. However, the cutting through the second line rampart (Groenedijk) would mean that part of this dike would no longer be intact. There would therefore be a moderate adverse effect (2).

Water management system

Construction of the road would lead to a change in the current golf course landscape. That landscape is green and the intervention is to a certain extent irreversible. With the road, a permanent infrastructural function would be assigned to the area. That means a slight change in the attributes of the DLA. The presence of the golf course means that the characteristic open polder landscape of the inundation area has already been transformed into a more enclosed landscape without the characteristic polder ditches. Construction of the road would therefore have a slight adverse effect (1).

Military system

The physical structures of the military system would remain unaffected, but the originally open field of fire of Fort Veldhuis would be affected by the fly-over and the Link Road. The view from the fort, which is currently still partly open, would be obstructed by the intervention because of the new fly-over. Part of the open field of fire would be lost. There would be a moderate adverse effect (-2).

Planning area Authenticity:

Main defence line

The St. Aagtendijk would be passed by means of a fly-over (with the motorway running on columns). The St. Aagtendijk would therefore remain intact as an element, but the physical passage would disappear because of the restricted height of the fly-over where it crosses the St. Aagtendijk. The sense of place, in particular, would be affected by the construction of the fly-over, which would further urbanise the landscape. The continuous line of the main defence line would be less perceptible. The main defence line would become less distinguishable. The second line rampart, which is currently continuous, would be divided up. The fact that the second line rampart would be transected would also affect the sense of place, distinguishability, and accessibility. There would be a large adverse effect (-3) on the main defence line.

Water management system

Construction of the road would lead to a negligible change in the water management system. The presence of the golf course means that the characteristic open polder landscape of the inundation area has already been transformed. However, construction of the road would lead to the green character of the site being lost. The area would be further urbanised. Specifically, there would be a further impairment in the experiential dimension of the open polder landscape belonging to the inundation area. There would be a slight adverse effect (-1).

Military system

Construction of the road would lead to a minor change. Openness and lines of sight were important aspects in the design of the military system and the function of the forts: defence required a free field of fire. Construction of the Link Road and the fly-over would lead to the openness and visibility (open field of fire) being lost. However, the sense of place and understanding of the relationship between the St. Aagtendijk, Fort Veldhuis, the associated secondary battery, and the free field of fire would also be affected.

Both the design and the function would be affected by the Link Road and the fly-over, which would be clearly visible from the fort. There would be a moderate adverse effect (-2).

Conclusion

Construction of golf course alternative would have a moderate adverse effect (-2) on the universal values within the planning area.

Study area Integrity:

The main defence line, the water management system, and the military system would be transected. The existing golf course together with alternative 3 means a further relative urbanisation of this location in the system. This means that the virtually complete DLA zone would be less distinguishable. The Link Road itself would have a slight adverse effect on the water management system due to the presence of the golf course, which has already led to the original open polder landscape being lost. This part of the DLA is special because of the double line here. This intervention would impair that double line. Transection of the double defence line (main line of defence) and the prohibited area around Fort Veldhuis (military system) would have a moderate adverse effect on the entire DLA.

Study area Authenticity:

This variant would mean a slight to moderate adverse effect on the entire DLA because the double defence line would be transected (main line of defence and second line rampart). This double rampart is unique in the DLA. In this variant, both line ramparts would be affected. The ability to experience the field of fire from Fort Veldhuis would also be impaired because of the fly-over, which would obstruct the open view.

Possible mitigation measures:

As this alternative would have a high adverse effect in the area, mitigation measures are provided by the State Party, including:

- The removal of facilities that have disturbed the readability of the DLA and its features
- Removing the rest areas, service stations and associated structures offers an opportunity to clean up the field of fire, hereby partially restoring openness around the fort;

- Restoring the inundation barrier (original access to the Fort) in order to be visible again on both sides of the A9;
- Restoring of the lost section of the Groenedijk (north of the Communicatieweg) and adding a recreational path on top;
- Restoring the readability of the Liniewall by creating a clear coupure through the wall near the Communicatieweg and restoring the route and view along the wall towards Fort Veldhuis.
- Enhancement of the readability and ecological qualities of the landscape by increasing the water levels for a more diverse vegetation, and agricultural nature management;
- Increasing the readability of the Kil, a former sea inlet, by broadening the watercourse and developing the surrounding Kilzone into a form of ecologically managed agriculture with higher ground water tables and more species diversity;
- Improving the quality of the inundation zone / open firing range by planting a line of (Ash) trees parallel to the A9 along De Trompet business area;
- Improving the local recreational network by connecting the Zuidermaatweg acces to the Communicatieweg / Vogelmeerweg;
- (Re)planting the boundaries of the farmyards for less visual impact of the large barn structures.

5.1. Considerations for the assessment of changes proposed

5.1.2. Reasons for the A8-A9 link

Since as far back as the 1960s, the Central government and the Province of Noord-Holland have been discussing the necessity and benefit of filling in a missing link in the national road network (A7, A8, and A9) in the area to the north of Amsterdam. This North-Western and Western part of the Defence Line of Amsterdam was historically an important zone for urban settlements and for transportation growth (e.g. the historical railway line, the existing roads and highways, the close urban settlements, port development, etc.).

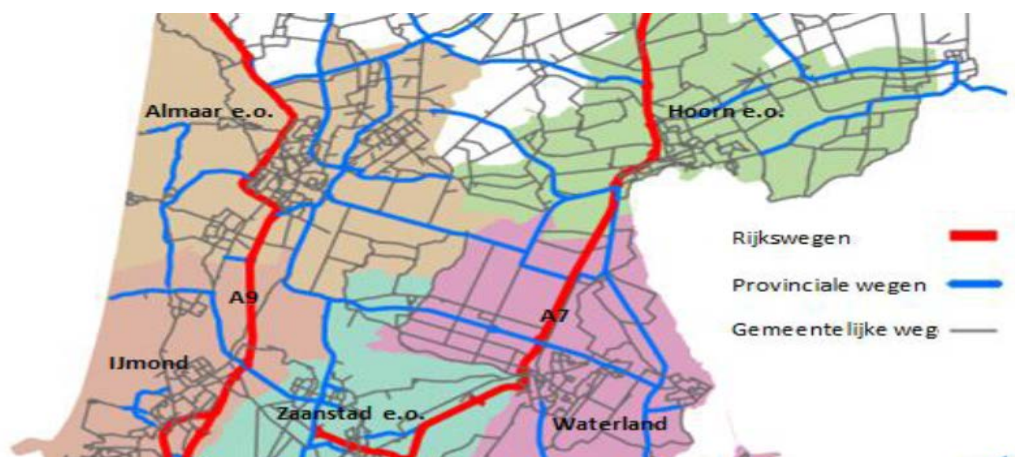
As regards the transport infrastructure, there are several problems to be addressed:

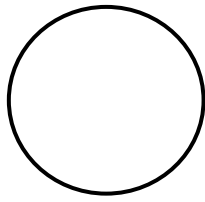
Missing infrastructure: no suitable east-west connection

The existing main roads within the northern part of the Amsterdam region are to a very large extent oriented north-south. East-west traffic has to make use of the subordinate network of local and regional roads. The existing link between the A8 and A9 motorways –which consists of a stretch of the N246 and a stretch of the N203 – is unable to cope effectively with the (through) traffic.

Poor traffic flow leads to poor accessibility in the region

Various provincial, regional, and national traffic studies have established that accessibility within the area to the north of the Amsterdam region is unsatisfactory. If no supplementary measures are put in place, there will be an accessibility problem in the area to the east of the A9 and to the west of the A7-A8. It is not only regional/supra-regional through traffic that is confronted by delays; towns and villages in the immediate vicinity of the road are also less accessible. The accessibility problems lead to unnecessarily long travel times and high costs - for both individual motorists and businesses - and they hamper spatial and economic development in the region.





Quality of life

It has also been established that the heavy traffic pressure on the N203 and the N246 - which runs directly along the residential areas of Krommenie, Wormerveer, and Assendelft - seriously impairs people's quality of life there. These areas take in their internal traffic as well as a relatively large volume of supra-regional traffic estimated at 40% of the overall traffic on the N203. The presence of a railway line adds up to the congestion problem.

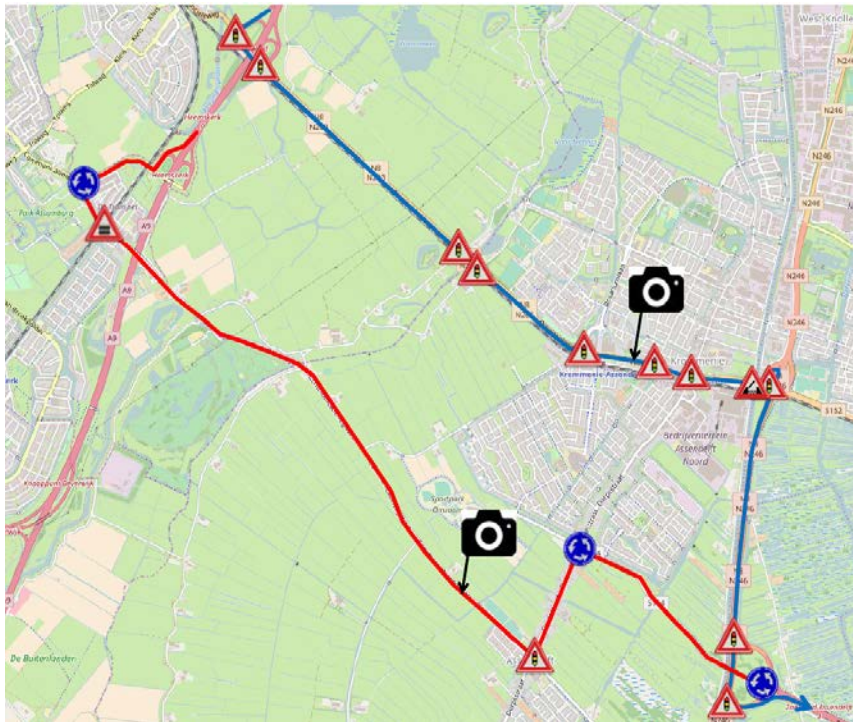


Image 12: Congestion problems around the cities of Krommenie, Wormerveer, and Assendelft.

To conclude, social needs for improving the network of transportation in the immediate surroundings of the North-Western part of the Defence Line of Amsterdam are important, even more so as the ongoing global economic and urban growth around the large city of Amsterdam are undoubtable.

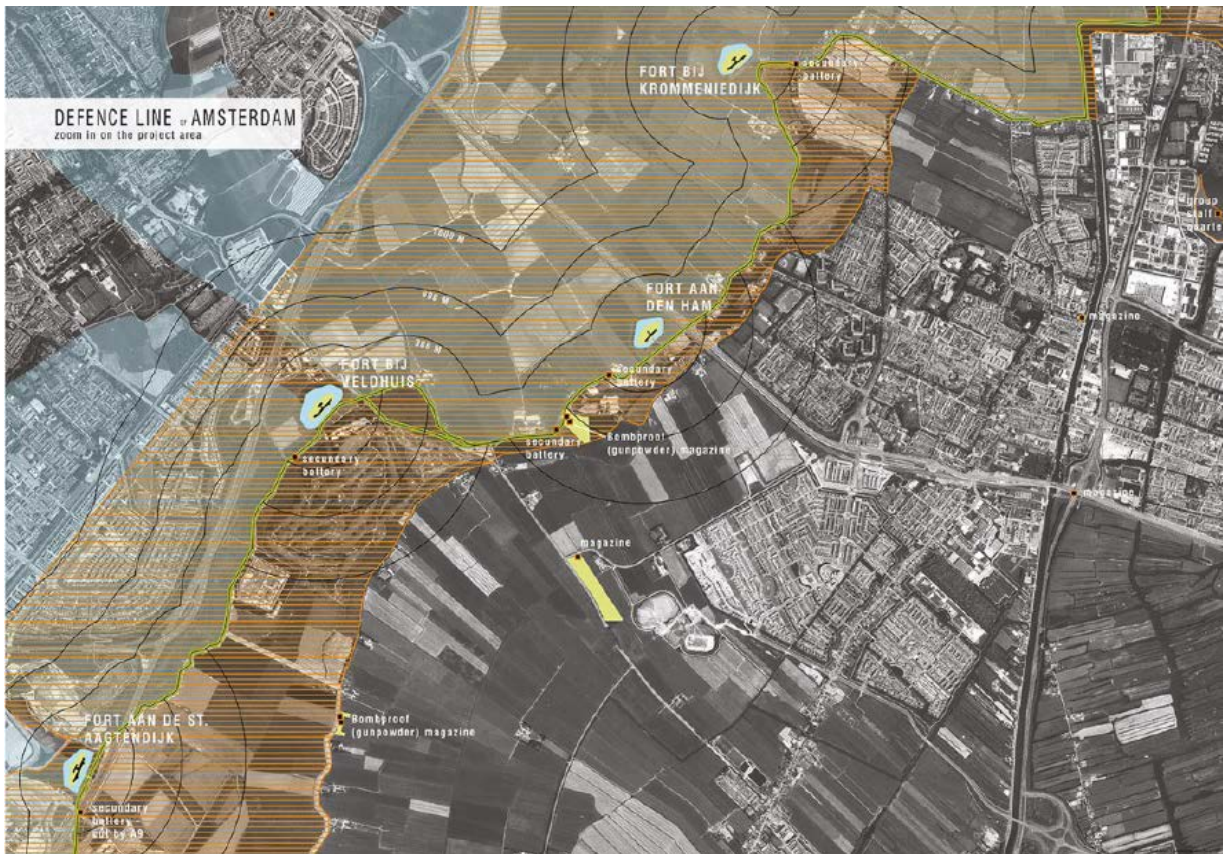
This has had numerous effects throughout the past years all around the Defence Line of Amsterdam and sometimes inside the World Heritage property itself, as is the case with this project. ICOMOS

must also note that the Defence Line of Amsterdam is a large, protected territory around Amsterdam city offering both a “greenbelt” and an open space, which is very attractive for some projects, especially transportation infrastructure (roads, trains, canals, ports and airport). The area of the whole World Heritage property is comparable to Amsterdam city itself.

5.1.3. State of conservation in the area of proposed changes.

The area in which the proposed changes are going to take place, located inside the protected property, has suffered many changes since the inscription of the DLA. The 1990s development works in this section of the Defence Line of Amsterdam followed Dutch zoning decisions taken before the time of nomination and, even though there was some overlapping agenda, they did not affect the property’s inscription on the World Heritage List and the global recognition of Outstanding Universal Value at that time. Thus, 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, were undertaken at that time inside the World Heritage property.

The following map shows the area where the proposed changes have been and will be located, around Forts bij Krommeniedijk, aan den Ham, and bij Veldhuis. It shows (in blue) the original flooding areas, as well as the military system around the forts (in black lines), with the various firing ranges (300, 600 & 1 000 metres). Declared property appears in brown (Image 13).



Making use of policy information and a comparison of topographical maps between 1996 and 2016, the following spatial developments have been defined (partly) within the UNESCO boundaries of the DLA since its listing as World Heritage property:

A9 highway (1996)

Construction of the A9 highway and tunnel under the Noordzeekanaal eastward, including junction Heemskerk and service areas. This development had started before World Heritage listing in December 1996;

Golf Course (1996, 2011)

Construction of the Heemskerk golf course in between the double dike system of the DLA, to the east of the main defence line at Fort Veldhuis. This development also started before World Heritage listing in December 1996. It was not, however, included on the topographical base map (1994) accompanying the Nomination Dossier, but it was already present when the DLA was designated as a UNESCO World Heritage property in 1996. In 2011, a 9-hole extension was added to the Heemskerk golf course. Due to its location within the inundation area, the original openness of the landscape has been lost.

Gas station (1996)

Construction of a gas station within close proximity of Fort aan den Ham;

Commercial area (2002-2012)

Construction of commercial area De Trompet west of the A9 highway. Initial development plans were accredited before World Heritage listing in December 1996. The development is partly within and partly outside the UNESCO boundaries;

Broekpolder residential area (2006-2011)

Construction of Broekpolder residential area, consisting mainly of low-rise housing developments, but including a few apartment buildings up to 46 m. Initial development plans were accredited before World Heritage listing in December 1996, although this reservation for planning purposes was not referenced in the Nomination Dossier. The development is partly within and partly outside the UNESCO boundaries. Due to the development of Broekpolder, the open nature of the property has been lost and it no longer has any special significance or any characteristic attributes of the DLA. (Image 14)



Wind turbine (2011)

Construction of a wind turbine along the A9 highway near Heemskerk. The turbine is located in the boundary of the UNESCO property. After construction, policies have changed, now banning the construction of new wind turbines within the proximity of the DLA. Therefore, the turbine cannot be replaced after its lifespan has run out.

Farm enlargements (1996-present)

Scattered within the study area, barns have been replaced or added to farm yards; their size is indeed detrimental to the reading of the property's attributes.

Industrial State Wijkermeerpolder (1996-present)

An industrial estate has been built in the area between Fort Veldhuis and Fort St. Aagtendijk to the west of the A9 in the Wijkermeerpolder. It was developed on the basis of the "Industrial Plan for Pijp" [Industrieplan de Pijp] of 1964. It was adopted in the development plans in 1996 and constructed after 1996.

Besides these interventions, there are others yet to come:

Train depot

This will be located in the proximity of the junction of the N8 and the A9. As far as the ICOMOS advice on this goes : *“For the train depot, if there is absolutely no other location to construct it out of the WH property, the visual impact must be the least possible, taking into account the very visual aspect of moving stocks at the depot: a depot of short or medium length along the existing line is preferable with the addition of visual fences (dikes, line of trees); this may be negatively qualified as “camouflage” but it seems not possible to carry out the project in other way, and Uitgeest train transportation is part of the property’s Outstanding Universal Value”.*

Extension of urban tissue: Krommenie and Saendelft housing

Both the Krommenie and the Saendelft residential districts will be completed in the near future on the east side of the main defence line, close to the already existing urban tissue, reducing the perception of the openness of the landscape.

Conclusion

One can conclude that there have been developments within the boundaries of the World Heritage property which have had severe impacts on its value. The inundation areas and fields of fire of the DLA in the planning area are no longer as extensive as when they were included in the Nomination Dossier at the time of designation.

As stated in the ICOMOS report of 2017, *“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”.*

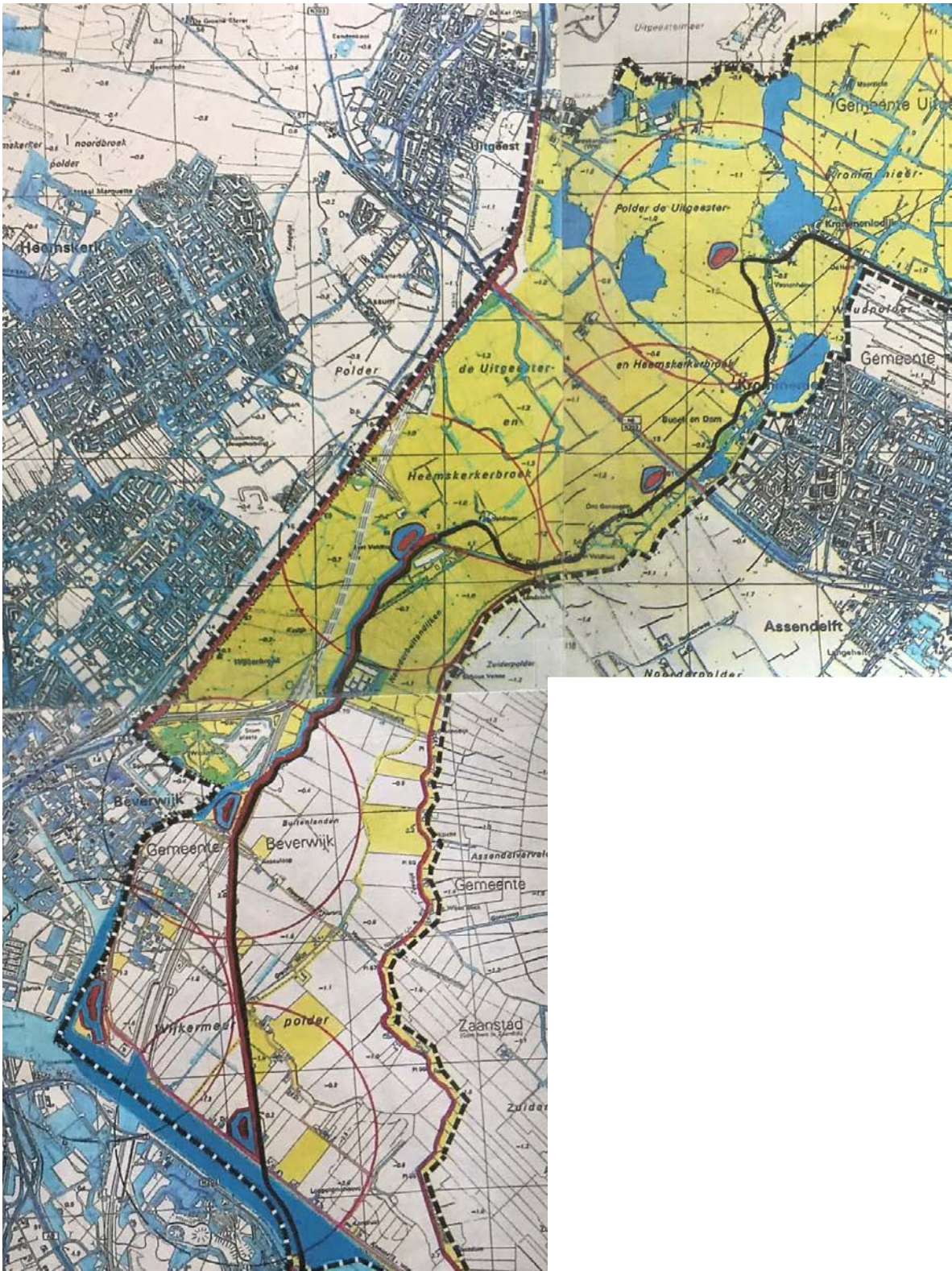


Image 15: Plan of the area as documented in the nomination dossier (1996), with no inclusion of these later transformations.



Image 16: Alongside the changes already undertaken and other ones to be implemented, we can appreciate the scale of the farm extensions scattered in the area, as well as:

1. Train Depot,
2. Extension of urban tissue: Krommenie and Saendelft housing,
3. Broekpolder residential area,
4. Golf Course,
5. A9,
6. Industrial State Wijkermeerpolder,
7. Wind turbine,
8. Gas station,
9. Commercial area De Trompet.
10. Petrol station and resting area.

(Map produced by the mission expert).

5.2. Criteria for assessment of changes proposed.

The proposed highway link between the A8/A9 routes involves potential impact on the Outstanding Universal Value of the property as well as on the social and economic dynamics which can affect the DLA. The following are listed so as to establish adequate criteria in order to assess the proposed changes.

5.2.1. Impact of the proposed changes on OUV.

ICOMOS wishes to commend the State Party for the quality of the analysis and assessments undertaken as regards the proposed changes. The HIA is undoubtedly well done in technical terms and it offers a good example of the implementation of the ICOMOS recommendations for studying the potential impacts on Outstanding Universal Value and integrity-authenticity, and reflect a real effort to propose a large number of possible solutions.

This, together with the Spatial Impact Assessment handbooks of the three solutions, provides accurate information as to how the proposed changes might impact on the inscribed property's attributes which convey its OUV.

In this sense, the site mission was also able to clarify the subtlety of some of the landscape's qualities that are difficult to appreciate by plans or even from accurate 3D renderings. In fact, the DLA is clearly characterised by "openness" which is dramatically marked by control of topography. The need for the control of water levels implied a mastering and creation of a unique geomorphology with accentuated horizontal lines. Its flatness and spatial depth is therefore essential for the understanding of the property. This is difficult to convey in maps or renders, as is shown clearly the example of the golf course. Though this facility might camouflage itself in satellite views and seem unobtrusive in the photos taken in place, its characteristic topography of minute curved hills and bunkers contrasts sharply with the surroundings, affecting dramatically the perception of the property.

Zero-plus alternative:

As regards the impact on the property's OUV, ICOMOS concurs with the State Party that the Zero-plus Alternative would not impact adversely on OUV.

Heemskerke option and Golf Course options

ICOMOS considers that the other two alternatives involve infrastructural works that would have substantial negative visual impacts on the tangible attributes of the World Heritage property, including its landscape dimension, which is very important for the understanding and appreciation of the significance of the Defence Line of Amsterdam. They also cannot be implemented without localized destruction of significant heritage features which are key attributes of OUV. These are set out in detail above.

In summary, for the Heemskerke option, the proposals, if implemented, would result in the destruction of the sheltered road and its surrounding topography, as this would be relocated from the foot of the dike to the crown of the dike at the location of the Link Road. The original function as a sheltered road would therefore be lost. The same applies to the flood defence function: the fact that the dike would no longer be intact means that this would be lost.

Thus, a portion of the main defence line and the inundation area would be transected and these would consequently no longer be intact, as the motorway link cuts through the main defence line at a unique and crucial place in the DLA, namely where the single line forks into a double line.

As regards the integrity of the property, the Link Road runs in between two fields of fire, meaning that the view between the forts would be strongly impaired visually. Furthermore, the visual intrusion of the double flyover would have a strong visual impact on the whole area.

For the Golf Course option, the proposals, if implemented, would result in the destruction of the main line of defence and the second line rampart and its surrounding topography, which is unique in the DLA; the dike close to this rampart would also be destroyed; the prohibited area around Fort Veldhuis would be also destroyed as the pilotis for the flyover need to be established on the ground. The ability to experience the field of fire from Fort Veldhuis would also be impaired because of the fly-over at the junction, which would obstruct the open view in an area where the Broekpolder urban complex has already left the fort with practically no open fields in front.

Both these options would have high adverse impacts of OUV.

5.2.2. Impact of the proposed changes on life quality.

The Zero-plus Alternative

As regards the impact on life quality, the Zero-plus Alternative -the only one which does not impact adversely on OUV- will represent significant loss of life quality to the citizens of the area as a result of increased traffic and noise levels.

This proposed solution, although envisaging various ways of dealing with the increase in traffic if implemented, will lead to serious quality of life problems in Krommenie, Assendelft, and Wormerveer, as stated in the EIA submitted by the State Party.

This concerns above-average noise nuisance: a noise level of more than 48 dB is classed as constituting a nuisance, and a level higher than 58 dB is classed as a serious nuisance. In both the current and future situations, there is/will be a high proportion of noise-sensitive destinations with a noise level exceeding 48 dB. Along the N203 and A8-A9 Link Road 12 Communicatieweg, there are a total of more than 250 noise-sensitive destinations where there is/will be serious noise nuisance.

Regarding air quality, it is unlikely that any of the proposed solutions will enhance local air quality. Nitrogen dioxide particulates are present in numerous places in the Netherlands in such high concentrations that they can have a harmful effect on the health of people in the vicinity. The monitoring tool used by the Dutch Ministry of Infrastructure and the Environment indicates that the concentrations of particulates and nitrogen dioxide in the areas around the provincial roads are classed as "moderate", but are still below the statutory limits. This will be the case if the Zero-plus alternative is put into action, as the new link will become an important provincial road.

Traffic safety will also be a problem on both roads, as possible traffic congestions on the N203 and the N246 may also lead to drivers cutting through places such as Assendelft. High traffic pressure means that the N246 and the N203 are/will be locations with a major risk of accidents, especially when taking into account that the highway link will cut through a dense urban tissue, punctuated by schools, housing, etc. This risk will be intensified by the increase in trains moving from the new train depot towards Amsterdam via the railway line, which itself also segments the urban tissue, increasing the barrier effect and the possibility of accidents.

Taking into account the present day village configuration, with its transport network – including railway, boat, public and private transport-, housing, facilities, etc., ICOMOS considers that the Zero-plus alternative – the various options submitted or even further ones - will have a detrimental effect on the quality of life of the inhabitants in the vicinity of the road.

Heemskerke option and Golf Course options

Both the other proposed alternatives could be beneficial for the quality of life of the inhabitants of the area, as through traffic would be diverted from the centre of the urban nuclei.

Nevertheless, although the villages of Krommenie and Assendelft lie outside the World Heritage property, and especially taking into account that the property does not have a buffer zone, ICOMOS wishes to point out that even if one of the other two alternatives –the Heemskerk alternative and the Golf course alternative- is undertaken there are still substantial traffic problems at this node which would need to be addressed to ameliorate the inhabitants' quality of life.

5.2.3. Impact of the proposed changes on transport

Zero-plus Alternative

For the A8-A9 link road, the Zero-plus alternative does not provide an alternative route as the other two alternatives do, which means that with the Zero-plus alternative, any disruption in the network may cause heavy congestion, particularly during peak hours. This would in turn lead to drivers cutting through the urban tissue, enhancing the possibility of accidents and reducing quality of life.

ICOMOS doubts that the Zero-plus alternative - the various options submitted or even further ones - will provide a sustainable transportation solution, considering the use of a segment of national road.

Heemskerke option and Golf Course option

Both the Heemskerk alternative and the Golf Course alternative present plausible traffic solutions as they provide a more direct link with the A9 highway, via an alternative route between this highway and the A8, which makes that part of the road network less sensitive to disruption. Nevertheless, there is the possibility that the Golf course option might be under-used.

5.3. Assessment of options

Ideally, a solution is needed that does not impact on OUV, does not impact detrimentally on the quality of life of residents in the vicinity of the property, and does provide a reasonably sustainable transport solution.

None of the three options currently provide that solution.

Zero-plus option

As derived from the above, the Zero-plus option is the only option which does not imply adverse impact on OUV but it will have a detrimental impact on the quality of life of inhabitants in the vicinity of the property, as well as not providing a sustainable transportation solution.

The Heemskerk option

This would impact adversely on OUV in terms of damaging fabric and in visual terms. Noise levels would very much increase creating intense disturbance in the overall area. It is likely to reduce traffic on N8, and therefore this alternative may reduce noise and air pollution from the towns of Assendelft and Krommenie.

In traffic terms, its impact could be beneficial.

The Golf Course option

This would also impact adversely on OUV, in terms of damaging fabric and in visual terms. Although traffic levels in Assendelft and Krommenie may be lowered, reducing air and noise pollution, noise levels would very much increase creating intense disturbance in the overall area.

In traffic terms, its impact could be beneficial although there is concern it might be underused.

5.4.1 Recommendations

The mission considers that none of the three solutions can be recommended as they stand, as the Zero-plus option, while not impacting adversely on OUV, cannot be seen as acceptable in social or traffic/mobility terms.

The mission recommends that further work is needed to find an option that is able to address the three issues stated above, namely: OUV conservation, population health, and mobility.

In undertaking such further work, the mission would like to underline that the perception of openness and depth of the property, which relies on a controlled, linear and horizontal configuration of the area's geomorphology, must be stressed and enforced. Noise must be also kept to a minimum, as this is also one of the site's characteristics.

The mission notes that, though some tangible attributes such as the forts are clearly strong and well-preserved in the area, as is their continuity as evidence of the defence line; the landscape expression of the area itself as a cultural landscape, by means of other features such as the landscape's geomorphology and water system, as the expression of its Outstanding Universal Value is already partially compromised.

Although the State Party must be commended for the conservation of the monumental attributes of the DLA, such as the forts, what is at stake is the landscape dimension as an expression of its Outstanding Universal Value. In this sense, the State Party's efforts to restore and preserve these components will be crucial for the conservation of the property in the future.

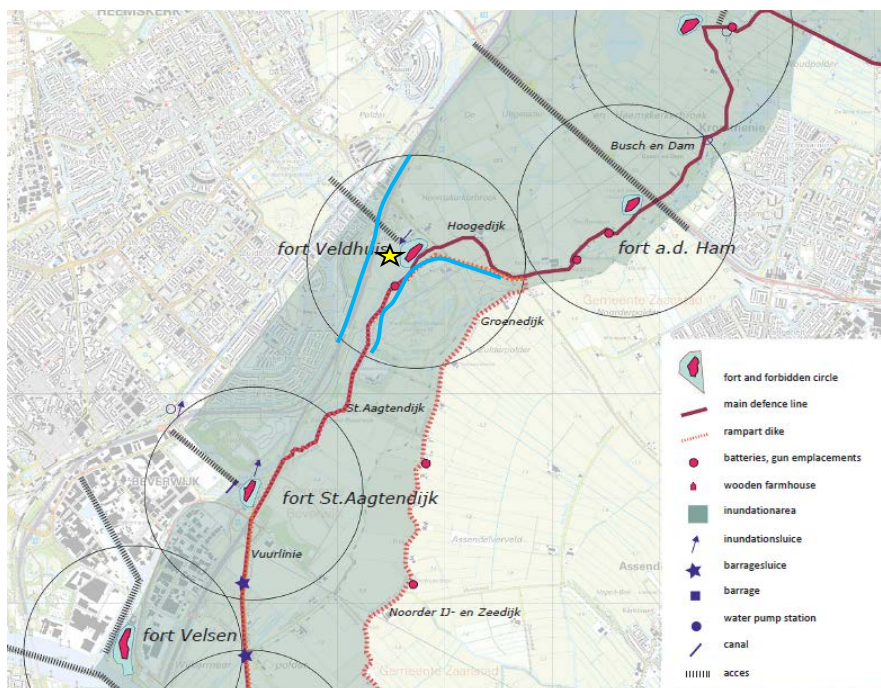


Image 17: Elements of the DLA as described in the HIA.

In blue, the limits of the Broekpolder settlement and the golf course.

The petrol station appears as a yellow star to the east of the Fort.

In this regard, the mission considers that the proposed enhancement measures suggested in relation to the Golf Course alternative, including the removal of facilities that have disturbed the readability of the DLA and its features, the enhancement of the ecological and landscape qualities and the restoration of the inundation barrier and other features of the DLA, should be undertaken even though the Golf Course route overall is not acceptable. These measures include:

- Removing the rest areas, service stations and associated structures offers an opportunity to clean up the field of fire, hereby partially restoring openness around the fort, as already stated above;
- Enhancement of the readability and ecological qualities of the landscape by increasing the water levels for a more diverse vegetation, and agricultural nature management;
- Restoring the inundation barrier (original access to the Fort) in order to be visible again on both sides of the A9;
- Restoring of the lost section of the Groenedijk (north of the Communicatieweg) and adding a recreational path on top;
- Increasing the readability of the Kil, a former sea inlet, by broadening the watercourse and developing the surrounding Kilzone into a form of ecologically managed agriculture with higher ground water tables and more species diversity;

- Improving the quality of the inundation zone / open firing range by planting a line of (Ash) trees parallel to the A9 along De Trompet business area;
- Improving the local recreational network by connecting the Zuidermaatweg access to the Communicatieweg / Vogelmeerweg;
- Restoring the readability of the Liniewall by creating a clear coupure through the wall near the Communicatieweg and restoring the route and view along the wall towards Fort Veldhuis.

The mission also recommends that the State Party supervise the enlargement of farms as well as their architectural quality, which currently seriously impairs the spatial attributes of the World Heritage property.

The mission is aware that the vulnerabilities of the DLA are to be found similarly in other locations, as acknowledged in the submission for a Minor Boundary Modification in 2016, and development pressures, particularly from infrastructure requirements, are considerable in several parts of the property. In order to address these, it recommends the following:

First, the mission considers that the possibility of a buffer zone needs to be examined, at least for the most sensitive parts of the property's components based on a clear definition of the setting of the property.

Secondly, remedial work is needed for some areas of landscape as touched on in this report.

Thirdly, the mission suggests that in response to these issues, more detailed strategic approaches need to be developed for the property as a whole and its wider setting, particularly in relation to infrastructure, as considering infrastructural projects on a one-by-one basis within the narrow confines of segments of the property is particularly difficult, as this report has shown.

The mission 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 the additional documentation needed for this assessment, not only the HIA and the EIA on the A8-A9 link road, but also the in-depth spatial analysis, as well as complimentary reports. The quality and transparency of the work has greatly contributed to the fulfilment of this report.

6. ASSESSMENT OF THE STATE OF CONSERVATION OF THE PROPERTY

The mission was unable to assess the policies put in place by the State Party for the conservation of the property. The site visit only dealt with the specific area where the proposed Highway link might be executed, whose state of conservation has been analysed earlier in this report. It only visited Fort Veldhuis, for which the State Party has submitted a report of the state of conservation and maintenance, which is presently used as a visitors' centre.

7. CONCLUSIONS AND RECOMMENDATIONS

For the assessment of this project, seven alternatives were previously weighed up, taking into account the situation of the Defence Line of Amsterdam's forts, and other attributes (canals, dikes, flooding zones and etc.) which express the Outstanding Universal Value of the property. Out of these seven alternatives, three have been selected during an evaluation process which has been going on since 2015, with the consultation of ICOMOS. This mission has therefore focused on the three alternatives selected, although it has also reviewed the preliminary options and agrees with the previous selection process.

From a broad point of view, it seems that this part of the landscape of the Defence Line of Amsterdam was already compromised at the time of inscription, with a notable risk of increased negative effects with the current proposed projects. Thus, the 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 readability of this 'defensive' landscape. The

maintenance of the integrity and authenticity of tangible attributes has therefore been a central issue for the assessment of the alternatives and the final recommendation.

From the assessment of the Zero-plus alternative, the Heemskerk alternative and the Golf Course alternative, the mission concludes that the only possible solution which does not imply heritage loss and unacceptable impact on OUV is the Zero-plus alternative, but this will have a detrimental effect on the quality of life of the inhabitants in the vicinity of the property, and will also not provide a sustainable transportation solution.

The mission therefore concludes that at the current time, there is no alternative that can be supported. In this context, it is recommended that further work is pursued so as to identify other options that might be able to satisfy the three main parameters stated above, namely: protection of OUV, population health, and mobility.

Such further options need to be explored, following the above recommendations that visual studies and virtual images of the global landscape taking into account the existing attributes which compromise heritage values are clearly shown. Maps, HIA and an equal procedure to that established for the assessment of the previous alternatives should be followed. Equally, both a modelling exercise to test traffic impacts and show the acceptable network performance as well as noise assessments could also be helpful.

The mission notes that, though some tangible attributes such as the forts are clearly strong and well-preserved in the area, as is their continuity as evidence of the defence line; the landscape expression of the area itself as a cultural landscape, by means of other features such as the landscape's geomorphology, and water system, as the expression of its Outstanding Universal Value is already partially compromised.

Although the State Party must be commended for the conservation of the monumental attributes of the DLA, such as the forts, what is at stake is the landscape dimension as an expression of its Outstanding Universal Value. In this sense, the State Party's efforts to restore and preserve these components will be crucial for the conservation of the property in the future.

The mission is also aware that the vulnerabilities of this segment of the DLA are to be found similarly in other locations, as acknowledged in the submission for a Minor Boundary Modification in 2016, and development pressures, particularly from infrastructure requirements, are considerable in several parts of the property.

First, the mission considers that the possibility of a buffer zone needs to be examined, at least for the most sensitive parts of the property's components, based on a clear definition of the setting of the property.

Secondly, remedial work is needed for some areas of landscape as touched on in this report.

Thirdly, the mission suggests that in response to these issues, more detailed strategic approaches need to be developed for the property as a whole and its wider setting, particularly in relation to infrastructure, as considering infrastructural projects on a one-by-one basis within the narrow confines of segments of the property is particularly difficult, as this report has shown.

The mission 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 the additional documentation needed for this assessment, not only the HIA and the EIA on the A8-A9 link road, but also the in-depth spatial analysis, as well as complimentary reports. The quality and transparency of the work has greatly contributed to the fulfilment of this report.

8. ANNEXES

- 8.1. Terms of reference
- 8.2. Itinerary and programme
- 8.3. Composition of mission team.
- 8.4. Name of individuals and associations met during the mission.
- 8.5. Documentation consulted.
- 8.6. Maps
- 8.7. Photographs

8.1. Terms of reference

The State Party of The Netherlands has invited an ICOMOS advisory mission to assess an infrastructure project proposed for development within the World Heritage property.

The objectives of the mission are to:

- 8. Examine the proposed preferred option for a highway link road (A8/A9) in relation to the full transport strategy that underpins the proposal as well as other relevant environmental aspects, and the assessment of other options;
- 9. Assess the potential positive and negative impacts of the proposed option and other options on the Outstanding Universal Value of the property;
- 10. Consider whether the negative impacts of the proposed option might be mitigated to remove or reduce potential negative impacts;
- 11. If the negative impacts of the proposed option cannot be satisfactorily mitigated, consider possible other approaches for improved traffic management and/or highway improvements;
- 12. Assess the adequacy of the planning provisions, regulations and strategies in dealing with the link road project A8/A9 and, in particular the use of HIA;

In order to achieve these objectives, the advisory mission expert shall review all necessary technical documents, undertake site visits and participate in technical on-site meetings with responsible authorities in order to gain insights into the context and justification for the proposed alternatives. The mission expert may also meet with other stakeholders, including members of civil society in order to understand any community concerns about proposed options.

The Advisory Mission takes two days and will take place in October 2017.

In preparation for the advisory mission, the State Party shall provide ICOMOS, in advance of the mission, with all necessary background technical material on the link road project, including impact assessments. In advance of the mission, ICOMOS shall consult with specialists on road traffic and fortifications.

On the basis of site visits and meetings with representative of the State Party, the advisory mission shall prepare for the State Party a report including analysis of the abovementioned points and recommendations. ICOMOS shall deliver this report on 31st of October 2017 at the latest.

8.2. Itinerary and programme

Thursday, October 5th 2017, afternoon:

Ms. Luengo arrives by train at Schiphol International Airport train station. She will meet Nanette van Goor at the station, who will accompany Ms. Luengo to her hotel in Haarlem (location: Carlton Square Hotel, Baan 23 Haarlem).

No evening programme.

Friday, October 6th 2017:

09.45 : Ms. Luengo will be picked up by Nanette van Goor at the hotel. Together they walk (5 minutes) to the Provincial Government building. Location: Dreef 3, Haarlem.

10.00 : Meet and greet at the Provincial Government building with the participants of the site visit.

10.15 : Welcome and introduction to the Advisory Mission's programme.

10.30 -11.00 : Presentation of the World Heritage property of the Defence Line of Amsterdam and its management.

11.00-14.30 : Bus tour and visit of the locations of the proposed A8-A9 Link Road alternatives, including lunch.

15.00 -18.00 : Two presentations on the A8-A9 Link Road project and the design studies of road alternatives, followed by clarifying questions and discussion.

18.00 : Drinks with fingerfood.

No evening programme.

Overnight at the Carlton Square Hotel in Haarlem.

Saturday the 7th of October 2017

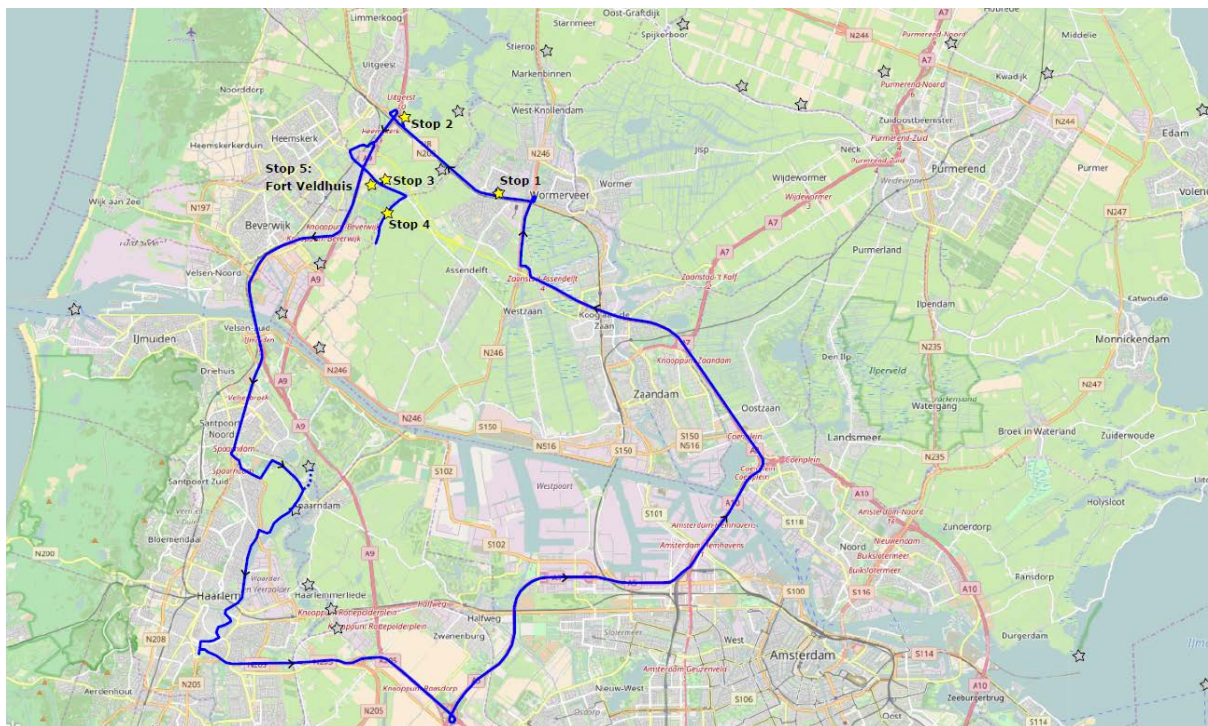
10.00-11.30 : Talks with five stakeholders, representatives of civil society and involved in the process of the A8-A9 Link Road project. Location: Provincial Government Building, Dreef 3, Haarlem.

11.30 -12.30 : Wrap-up of the Advisory Mission: conclusions, remaining questions, further information to be provided, other agreements.

12.30 -14.00 : lunch

14.00 : End of the Advisory Mission.

Late afternoon: a taxi will bring Ms. Luengo to Schiphol International Airport for her flight back to Madrid.



8.3. Composition of mission team

- Ms. Ana Luengo (ICOMOS International; 6 and 7 October);
- Ms. Elisabeth Post, Provincial Executive for Traffic, Transport and Finance, Province of Noord-Holland (6 October);
- Ms. Johanna Geldhof, Provincial Executive for Spatial Planning, Housing and the Defence Line of Amsterdam, Province of Noord-Holland (6 and 7 October);

- Mr. Pieter-Jan Labrijn, project manager A8-A9 Link Road, Province of Noord-Holland (6 and 7 October);
- Ms. Nanette van Goor, site manager Defence Line of Amsterdam, Province of Noord-Holland (6 and 7 October);
- Mr. Vincent Evers (member of the project team A8-A9 Link Road, Province of Noord-Holland (6 and 7 October);
- Mr. Hans van Helden, landscape architect, Province of Noord-Holland (6 October afternoon);
- Mr. Stijn Koole, landscape architect, Bosch Slabbers landscape architects (6 October);
- Mr. Daan Zandbelt, State Advisor for the Environment (6 October afternoon);
- Mr. Dré van Marrewijk, national focal point for World Heritage, Cultural Heritage Agency of the Netherlands (6 and 7 October);
- Mr. Leonard de Wit, head Advisory Department, Cultural Heritage Agency of the Netherlands (chair; 6 and 7 October).

8.4. Name of individuals and associations met during the mission

LTO Noord, Mr. Gerland Glijnis and Mr. Jerry Kager

LTO Noord is the agricultural trade association in the nine provinces over the Meuse. The organisation is working to strengthen the economic and social positions of its members, farmers and horticulturists. It does this by creating or maintaining room for agricultural entrepreneurs. The space to do business, strengthening entrepreneurship and market positions and working on the image require a strong representation of collective interests.

Busch en Dam neighbourhood unit, Mr. Willem Röling, Mr. Roelof de Haan

Busch en Dam neighbourhood unit is an interest group of residents living in the open part of the plan area. This concerns scattered homes outside the built-up area along some polder roads in the area.

VNO-NCW West, Ms. Petra Tiel

VNO-NCW West is the regional association of employers' organisation VNO-NCW (Confederation of Netherlands Industry and Employers) and represents the interests of the business community on behalf of and in cooperation with the affiliated companies and industry associations.

Platform Krommenie/Working Group Traffic Krommenie, Mr. Raymond Kolman, Daniël van Rouwendaal

This interest group of residents and stakeholders, living in Krommenie, has for a long time been calling attention to the negative effects the daily traffic flows through the built-up area of Krommenie have on the residential centre of Krommenie.

ICOMOS Netherlands, Mr. Drs. Hildebrand P.G. de Boer.

Mr. De Boer has studied History of Art (architecture) in Groningen (The Netherlands) and is member of ICOMOS The Netherlands. Mr. De Boer was in the past involved with the nomination of the Defence Line of Amsterdam as a world heritage site. In the years 1992 till 1996 he worked on the nomination file for this world heritage site.

8.5 Documentation consulted

ICOMOS thanks the State Party for the work undertaken in developing the documentation needed for this assessment, not only the HIA and the EIA on the A8- A9 link road, but also the in-depth spatial analysis, as well as complimentary reports. The quality and transparency of the work has greatly contributed to the fulfilment of this mission.

The mission expert has consulted the following documentation for the present review:

- Original nomination dossier for the DLA (1995);
- World Heritage Committee Decisions since listing of the DLA (1996);

- Previous ICOMOS technical reviews regarding the A8/A9 link road (November 2015, April 2017, September 2017);
- Correspondence between the World Heritage Centre and the State Party of the Netherlands regarding the A8/A9 link road;
- Periodic reporting reviews by the State Party;
- State of conservation report provided by the State Party regarding the planned A8/A9 link road;
- A8-A9 HIGHWAY LINK: Spatial impact of the three route alternatives on the Defence line of Amsterdam (February 2017), as well as the individual booklets for each one of the alternatives;
- HIA for the A8/A9 Link road, submitted by the State Party (October 2015);
- Environmental Impact Assessment on the A8/A9 Highway link, submitted by the State Party (July 2017);
- Other State Party documents regarding their transportation strategy like the Planstudie Verbinding A8/A9, Investeringsstrategie Noord-Holland Infrastructuur, Strategische Visie Mobiliteit (2016), etc.;
- As regards the proposals for a minor modification to the boundary of the DLA, the proposal of the State Party has been consulted as well as the ICOMOS report on it;
- As regards the New Dutch Waterline proposal, the Report on the International Expert meeting on World heritage Nominations (June 2015) and the ICOMOS report on this potential extension of the DLA;
- As regards the construction of a new train depot, the HIA submitted by the State Party, and the ICOMOS report on it;
- English Summary of the Management Plan for the DLA (2015);

ICOMOS has also consulted the information handed in by a third-party letter 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 as well as other information received during the meetings with other stakeholders has also been considered for this review.

Furthermore, during the Mission, the following information was requested to the State Party and has been additionally consulted:

- 1a: Presentation DLA by Joanna Geldhof.pdf
- 1b: presentation A8-A9 ICOMOS.pdf
- 1c: 20171006 ICOMOS by Bosch Slabbers.pdf
- 2a: DESIGNBOOK 3 DEF MARCH 2017 Zero-plusalternative (dutch version).pdf.
- 2b: DESIGNBOOK 3 DEF MARCH 2017 Heemskerkalternative (Dutch version).pdf.
- 2c: DESIGNBOOK 3 DEF MARCH 2017 Golfcourse alternative (Dutch version).pdf.
- 3. Arguments choice junction with A9.pdf. An explanation of why the junction of the Golf Course alternative with the motorway A9 on groundlevel is not possible;
- 4. Spatial policy on agricultural farms.pdf. An explanation of our spatial policy on agricultural buildings/extensions and the system of supervision on the quality of building within the province of North Holland;
- 5. Zoning-plan area DLA A8-A9 with explanation.pdf. A map with all the zoning-plans within the area of the Defence Line of Amsterdam/ A8-A9 link road, with an explanation in English;

6. Area DLA A8-A9 and restriction areas.pdf. Some screenshots of the map with the spatial regulations in the area Defence Line of Amsterdam/A8-A9 link road, with a brief explanation in English;
7. Historical map 1900 area DLA A8-A9.pdf. A screenshot of the historical map (1900) of the Defence Line of Amsterdam for the examined area;
8. Explanation Minor Boundary Modification.pdf. A map with the boundaries of the Defence Line of Amsterdam in the examined area and indicated which parts of the Defence Line in this area where a part of the Minor Boundary Modification;
9. Transformations and future transformations area DLA A8-A9.pdf. A map with all the transformations (or planned transformations) in the examined area between 1996 (year of inscription world heritage site) and today;
10. Map roadstructure.pdf. A map with the broader mobility-structure around Amsterdam;
11. Advice Board of Government Advisers sept. 17.pdf. The English translation of the advice of the Board of Government Advisers on Landscape and Environment, on the issue of the Defence Line and the A8-A9;
12. Landscape Analysis Defence Line of Amsterdam and New Dutch Waterline (Dutch Version).pdf. This Landscape Analysis will be part of the Significant Boundary Modification for the Defence Line of Amsterdam;
13. Background information stakeholders.pdf. A list with the names and backgrounds of the stakeholders Ms Luengo spoke with;
14. Costs overview.pdf. An overview of the costs of the three road alternatives.

The information was handed in on October 13th, thus enabling the assessment of the issues addressed in the "Terms of reference" proposed by the State Party.

8.6. Maps

All maps relevant to the report have been included in the appropriate sections.

8.7. **Photographs**



Photograph 1: Crossing at Krommenie.



Photograph 2: N203 traversing the World Heritage property between Fort bij Krommeniedijk and Fort aan den Ham.



Photograph 3: The landscape from Fort Veidhuis. The landscape's openness is inhibited by various disturbances: the motorway and its facilities (stations, resting areas), wind mill, and farm buildings nearby.



Photograph 4: The Golf Course with heavy plantations that enclose the views.



Photograph 5: The Golf Course, with its rounded geomorphology and associated plantations.



Photograph 6: The landscape between Forts bij Krommeniedijk and Fort aan den Ham, with its impressive geomorphology and openness.



Photograph 7: Visual intrusions of the enlarged farms from Fort Veldhuis.



Photograph 8: The importance of the water as a linear structure that reinforces the character of openness and flatness.



Photograph 9: Two views of the Delft – Rotterdam motorway.