

**Second Opinion  
on  
Heritage Impact Assessment Phase 2**

**The potential impact of the Stockholm  
Bypass and Ekerö Road project on the  
World Heritage Property  
Royal Domain of Drottningholm**

**A Report commissioned by the Swedish  
Transport Administration (Trafikverket)**

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## Summary

This report was commissioned by the Swedish Transport Administration (Trafikverket) to provide a Second Opinion on the Heritage Impact Assessment Phase 2 (HIA2). It was agreed that this report should not be another impact assessment of the road scheme. Rather it should assess that the HIA2 has been carried out competently and professionally, and that it has been done in line with the guidance of ICOMOS on Heritage Impact Assessments (ICOMOS 2011). Also, the report assesses the policy and practice of the World Heritage Committee on transport infrastructure development and its use, as well as the influence of the recently agreed Statement of Outstanding Universal Value for the Royal Domain of Drottningholm. A particular aspect of this part of the report is the recently adopted *Policy for the Integration of a Sustainable Development Perspective into the Processes of the World Heritage Convention*.

Chapter 1 introduces the report and its scope. Chapter 2 examines the role of Heritage Impact Assessment and the application of the ICOMOS guidance on carrying it out. Chapter 3 sets out the World Heritage Policy Context while Chapter 4 assesses the effectiveness of the HIA2. In doing so, it reviews its use of the ICOMOS methodology and its understanding of the Outstanding Universal Value of the Royal Domain. This Chapter also assesses the appropriateness and effectiveness of the analysis of impacts of the road scheme and the relevance of the proposed mitigation measures.

Overall HIA2 is a good assessment of the impacts of the proposed road schemes on the Outstanding Universal Value of the Royal Domain of Drottningholm. The use of the ICOMOS methodology is good and the setting out of the various parameters is excellent. The assessment of the harm or benefit caused by a variety of different impacts is assured and very professional. The proposed mitigation measures are appropriate. The HIA2 can be commended to the bodies who will have to take decisions on the road scheme as a guide that should be followed.

## Chapter 1 Introduction

### 1.1 Request for drafting a Second Opinion on the *Heritage Impact Assessment Phase 2 - The potential impact of the Stockholm Bypass and Ekerö Road project on the World Heritage Property Royal Domain of Drottningholm*

This Second Opinion on the Phase 2 Heritage Impact Assessment (HIA2) of the impact of major road improvements and construction on the World Heritage property of the Royal Domain of Drottningholm has been commissioned by Trafikverket, the Swedish Transport Administration. There is no set framework for such a Second Opinion and this may possibly be the first such study.

In discussions of the brief, it was agreed that Trafikverket did not require the work of the HIA2 to be duplicated or for preparation of a second set of comments on the proposals for changes to the road network. Rather, what is required is an assessment that the HIA2 has been carried out to professional standards and in accordance with the guidance of ICOMOS on Heritage Impact Assessments (ICOMOS 2011).

It was agreed also that it would be helpful if the Second Opinion could set out the policy and practice of the World Heritage Convention with regard to transport infrastructure, and consider the recently agreed Statement of Outstanding Universal Value for the Royal Domain of Drottningholm and its attributes as another aspect of World Heritage guidance, since a primary concern of the World Heritage Committee, the World Heritage Centre and the Advisory Bodies will be to protect the agreed significance of the property.

These discussions will then provide the context for assessing the effectiveness and adequacy of HIA2. This needs to cover:

1. Use and adaptation by HIA2 of the ICOMOS methodology for Heritage Impact Assessment
2. Content and conclusions of HIA2
  - a) Understanding in HIA2 of the general requirements of the World Heritage Convention and guidance associated with it.
  - b) Understanding in HIA2 of the Outstanding Universal Value, including its attributes, of the Royal Domain of Drottningholm
  - c) Assessment of the impact of road proposals on the Outstanding Universal Value of the property
3. Appropriateness of the findings of HIA2

## Chapter 2

## The Context for HIA2

### 2.1 The role of Heritage Impact Assessment

The purpose of Heritage Impact Assessment (HIA) is to provide an objective and professional opinion of the impact of a proposed development on the value (for a World Heritage property, the Outstanding Universal Value) of a heritage site. The provision of such an assessment should enable decision-takers to be fully informed when they decide whether or not a development should be permitted and how it should be amended. In the World Heritage context, an effective HIA should provide an objective and professional judgement of the impact of a development which is sufficient to enable the Advisory Bodies and the World Heritage Centre to provide advice to the World Heritage Committee as to how it should respond to specific development proposals affecting World Heritage properties.

Normally an HIA is prepared in response to a specific proposal. Impact assessment is now a requirement in the *Operational Guidelines* for proposed interventions in World Heritage properties (UNESCO 2016a, p.45, para 110). The scope and purpose of HIA is described in ICOMOS guidance on their preparation (ICOMOS 2011):

*7-2 The HIA report should provide the evidence on which decisions can be made in a clear, transparent and practicable way. The level of detail needed will depend on the site and proposed changes. The Statement of OUV will be central to the evaluation of the impacts and risk to the property.*

*7-3 The HIA report will need to show*

- *A comprehensive understanding of the WH property and its OUV, authenticity and integrity, condition, context (including other heritage attributes) and interrelationships;*
- *An understanding of the range of impacts arising from the development or other proposal for change;*
- *An objective evaluation of those impacts (beneficial and adverse) on the heritage elements and in particular on the site's OUV, integrity and authenticity;*
- *An assessment of the risk posed to the retention of OUV and the likelihood that the property may be in potential or actual danger;*
- *A statement of heritage benefits which may arise from proposals including better knowledge and understanding and awareness-raising;*
- *Clear guidelines as to how impact can be mitigated or avoided;*
- *Supporting evidence in the form of a suitably detailed inventory of attributes of OUV and other heritage assets, impacts, survey or scientific studies, illustrations and photographs.*

*7-4 The HIA Report will need to have a non-technical summary clearly setting out all relevant matters, a detailed text description and analysis and a text summary of the results of the evaluation of impact accompanied by tables to assist the reader.*  
(ICOMOS 2011, 11-12)

## 2.2 ICOMOS methodology for Heritage Impact Assessment

Heritage impact assessments could use or adapt a number of published methodologies. The basic methodology used for the Drottningholm HIA2 is that recommended by the ICOMOS *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties* (ICOMOS 2011). This has effectively been endorsed by the UNESCO World Heritage Committee through various decisions and therefore provides a model likely to be acceptable to them.

This assessment concentrates on the extent to which the HIA2 team have achieved the key elements of the ICOMOS Heritage Impact Assessment methodology:

*What is the heritage at risk and why is it important – how does it contribute to Outstanding Universal Value)*

*How will change or a development proposal impact on Outstanding Universal Value?*

*How can these effects be avoided, reduced, rehabilitated or compensated?*

(ICOMOS 2011 para 2.2.1)

It is essential to recognize that the impact assessment evaluates change from the current state of the heritage asset concerned, and not in comparison to the pristine state in which the site may have existed in the past. Dealing with an existing highway through a World Heritage property, therefore, the base line for assessment is the current impact of the road. Changes to that highway, while still keeping it within the property, may be assessed as a positive benefit because they rectify existing damage. Impact assessments normally deal with the impacts of one particular proposal and actions that might mitigate such impacts.

The ICOMOS guidance suggests (Appendix 4) that a HIA report should contain:

- 1 Non Technical Summary
- 2 Introduction
- 3 Description of methodology
- 4 Site history and description, to which the Statement of Outstanding Universal Value, and identification of its attributes, is key
- 5 Description of changes or developments proposed
- 6 Assessment and evaluation of the overall impact of the proposed changes, based on an assessment of specific impacts on the attributes of OUV and other heritage values
- 7 Measures to avoid, to reduce, or to compensate for impacts – Mitigation Measures
- 8 Summary and Conclusions

While this guidance is not mandatory it provides a measure by which to judge the sufficiency an HIA.

Impact should be scored according to the ICOMOS methodology. This postulates a scale of values for different types of heritage including archaeology, buildings and historic landscapes (ICOMOS 2011 Appendix 3A). These range from Very High through High, Medium, Low to Negligible. There is also a category for Unknown Potential.

As the Royal Domain of Drottningholm is a World Heritage property all the attributes contributing to Outstanding Universal Value should be valued as Very High. The following definitions of

value and of impact or change combine ICOMOS guidance for buildings and for historic landscapes:

**Very high:** landscapes, sites and structures of acknowledged international importance inscribed as World Heritage property; individual attributes of the Outstanding Universal Value of the World Heritage property; other buildings or landscapes of recognized international importance; extremely well-preserved historic landscapes with exceptional coherence, time-depth, or other critical factors.

The ICOMOS Guidelines (2011 Appendix 3B) provides guidance for assessing the magnitude of impact within World Heritage properties :

**Major change:** changes to key building and/ or landscape elements, parcels or components that convey Outstanding Universal Value of World Heritage properties; gross change of noise or change to sound quality; fundamental changes to use or access such that the resource is totally altered with loss of OUV;

**Moderate change:** changes to many key historic building elements, or to many key historic landscape elements, parcels or components; changes to the setting of buildings or visual changes to key aspects of the landscape; noticeable differences in noise or sound quality; considerable changes to use or access such that the resource is significantly modified, or with moderate changes to landscape character;

**Minor change:** changes to key historic building elements, such that the resource is slightly different; changes to few key landscape elements, parcels or components; slight visual changes to a few key aspects of historic landscape; limited changes to noise levels or sound quality, slight changes to use or access; resulting in limited changes to historic landscape character;

**Negligible change:** slight changes to historic building elements and/ or very minor changes to key historic landscape elements, parcels or compounds; virtually unchanged visual effects; very slight changes to noise levels or sound quality; very slight changes to use or access; resulting in a very small change to historic landscape character.

**No change:** No change.

Change can be adverse or beneficial. This gives a nine-point scale with 'neutral' as its central point:

- Major beneficial
- Moderate beneficial
- Minor beneficial
- Negligible beneficial
- Neutral
- Negligible adverse
- Minor adverse
- Moderate adverse
- Major adverse



The significance of the impact of the change is scored as a function of the importance of the attribute and the scale of change (see Fig 1). According to the ICOMOS HIA Guidance, therefore, any moderate or major impact on an attribute of Outstanding Universal Value is of large or very large beneficial or adverse significance. A minor change will have moderate/ large significance and a negligible change a slight significance.

VALUE OF HERITAGE ASSET	SCALE & SEVERITY OF CHANGE/IMPACT					
	No change	Negligible change	Minor change	Moderate change	Major change	
Very High: WH property, OUV attributes	SIGNIFICANCE OF EFFECT OR OVERALL IMPACT (EITHER ADVERSE OR BENEFICIAL)					
	Neutral	Slight	Moderate/ Large	Large/very Large	Very Large	
	Very High	Neutral	Slight	Moderate/ Large	Large/ very Large	Large/ very Large
	High	Neutral	Slight	Moderate/ Slight	Moderate/ Large	Large/ very Large
	Medium	Neutral	Neutral/ Slight	Slight	Moderate	Moderate/ Large
	Low	Neutral	Neutral/ Slight	Neutral/ Slight	Slight	Slight/ Moderate
Negligible	Neutral	Neutral	Neutral/ Slight	Neutral/ Slight	Slight	

Fig 1: Assessing the significance of impacts on heritage assets (ICOMOS 2011, 9)

## Chapter 3

## The World Heritage Policy Context

Apart from the methodology for the HIA2, it is also important to understand the policy context within which it will be considered by the various parts of the World Heritage system. This chapter therefore examines the general policy context for the implementation of the World Heritage Convention, particularly moves towards mainstreaming heritage within the push towards sustainable development. It is also helpful to be aware of past experience of dealing with proposals for transport infrastructure within the system. More locally the definition of the Outstanding Universal Value of Drottningholm is crucial in judging the extent of impacts of development proposals.

### 3.1 World Heritage General Policy

The principal intention of the 1972 Convention concerning the Protection of the World Cultural and Natural Heritage (the World Heritage Convention) was to establish an effective system of collective protection of the cultural and natural heritage of Outstanding Universal Value. Article 4 of the Convention defines this as identification, protection, conservation and presentation of such heritage. Each State Party undertakes to do this to the utmost of its own resources (UNESCO 2016, 2, 4).

From the time it became operational, the Convention has been supported by Operational Guidelines which set out practical guidance to achieve these objectives (UNESCO 2016, 17-191). The assumption in both Convention and Operational Guidelines is that Outstanding Universal Value should be protected to the maximum possible extent. Over the decades, the amount of guidance on management has increased, both in the Operational Guidelines and in UNESCO Resource Manuals and elsewhere. Over the last ten years, the boundaries of properties have been clearly defined and almost all properties now have a Statement of Outstanding Universal Value defining their value, integrity and authenticity. Thus the management of all properties to protect their Outstanding Universal Value should now be on firm foundations.

While the Convention is primarily an instrument for conservation, its application has expanded through its lifetime. There are two main connected trends in this expansion. The first is a widening of our understanding of the concept of heritage. This has moved from monumental sites and urban centres and palaces to include a far wider range of properties. A major development was the recognition of cultural landscapes within the application of the Convention in 1992. Another has been the recognition of historic industrial sites as candidates for World Heritage status. It has also been recognized that the context of World Heritage properties and other heritage sites is important to their understanding, leading to the need for buffer zones and for the management of their setting.

This widening of the concept of heritage as well as its actual expansion outside well-fenced enclosures into all aspects of landscape, urban and rural, has meant that heritage has to interact much more with other processes of land management and development within society. Society actually lives and works within a context of heritage. This is the second trend and means that approaches to conservation and management of heritage have to change to reflect

and cope with a wide range of pressures and other interests. Increasingly heritage is recognized as something which needs to be mainstreamed within everyday life and general governance. This means that heritage managers and those dealing with heritage from other perspectives have to deal with a much wider range of issues. Heritage managers have also to respond to, work with, and manage the concerns and interests of many different groups of stakeholders, not least among whom are local residents in and near heritage properties.

Increasingly there has been official recognition of such needs both from within the heritage community and more widely. This has affected the implementation of the World Heritage Convention as much as other heritage bodies. The UNESCO Historic Urban Landscapes Recommendation has a wider remit but can apply to World Heritage properties also. This Recommendation addresses the need to better integrate and frame urban heritage conservation strategies within the larger goals of overall sustainable development. The Recommendation introduces the concept of layering of values which should work in many places, including cultural landscapes. It recommends Integration of heritage conservation, management and planning strategies into local development processes and urban planning, such as, contemporary architecture and infrastructure development. This too is an essential approach to managing cultural landscapes. Many of its tenets therefore work as well outside urban areas as within them.

The need to integrate the management of heritage as part of sustainable development goals is now more widely recognised. Heritage gets a mention in Goal 11 of the UN 2030 Sustainable Development Goals. The link between World Heritage and sustainable development was recognised as far back as the adoption of the Budapest Declaration in 2002. This stressed the need to *ensure an appropriate and equitable balance between conservation, sustainability and development, so that World Heritage properties can be protected through appropriate activities contributing to the social and economic development and the quality of life of our communities*. In 2007 Communities were added as the fifth strategic objective for the World Heritage Convention to enhance their role in the implementation of the Convention.

The World Heritage General Assembly has adopted in 2015 a *Policy for the Integration of a Sustainable Development Perspective into the Processes of the World Heritage Convention* (UNESCO 2015). This is a wide ranging document seeking the recognition of the role of World Heritage properties across the whole range of the sustainability agenda. It says:

- Policies should be based on human rights, equality and sustainability in the long term
- All dimensions of sustainable development should apply to natural and/ or cultural heritage sites
- include full respect and participation of all stakeholders and rights holders, including indigenous peoples and local communities
- setting up of effective inter-institutional coordination mechanisms and provisions for systematic assessment of environmental, social, and economic impacts of all proposed developments
- effective monitoring through continuity in data collection against agreed indicators.

Policies are grouped under four headings:

- Environmental sustainability
- Inclusive Social Development
- Inclusive Economic Development
- Fostering Peace and Security

How this Sustainable Development Perspective may be operationalized within the implementation of the World Heritage Convention has yet to be demonstrated. However it is clear that this places more explicit emphasis on the interests and needs of local communities which is very relevant to the current case.

### 3.2 Transport schemes as a factor in World Heritage management and conservation

In assessing the feasibility of the recommendations of HIA2, it is worth spending a few moments considering how the World Heritage Committee has dealt in the past with cases of ground infrastructure affecting World Heritage properties. This has been a relatively common problem. An analysis of State of Conservation cases (Veillon 2014) brought to the Committee (inevitably very selective) between 1979 and 2013 shows that from 1985 around a quarter of them involved ground transportation, affecting 157 properties across the world. Of the 636 specific reports, 438 related to the development of such infrastructure and 129 to the effects arising from the use of ground transport, both of which are aspects of the Drottningholm proposals. Infrastructure proposals included roads, car parks, railways and bridges. Effects of use include pollution and vibration.

The latest European Periodic Report shows that ground transport infrastructure is seen as an actual or potential issue by many site managers. Out of 424 properties submitting reports in 2013 and 2014, 271 reported issues concerned with ground transport infrastructure, and 180 with the effects of the use of transport infrastructure. 35% saw ground transport infrastructure as a negative impact; the use of transport infrastructure was considered to have negative impacts by 68%. In both cases, a number of properties recognized that ground transport infrastructure and the use of transport infrastructure could have both positive and negative impacts on the same property (UNESCO 2016b, 52-56, 143).

Transport infrastructure is therefore not a new or uncommon issue for the World Heritage Committee, its Advisory Bodies ICOMOS and IUCN, or, indeed, for properties and national authorities. Generally the approach of the World Heritage Committee has been to oppose new road construction within World Heritage properties and, in some cases, in their buffer zones or wider settings. In the most notorious of these cases, the eventual result of the construction of a new four-lane bridge across the Elbe within the Dresden Elbe Valley cultural landscape resulted in 2009 in the deletion of the property from the World Heritage List.

However the modification of an existing route through a World Heritage property which was there before the property was inscribed on the List raises more nuanced issues. In some cases such modifications can actually lessen the existing impacts of traffic, even if it is not removed altogether from the property. An example of this is Stonehenge in the UK, bisected by two major highways, one of which is the main route from London to the south-west of the country. Here the state party eventually managed to close the less important of the two roads and is developing proposals for putting the major route into a tunnel for much of its length through the World Heritage property. The state party has involved UNESCO and ICOMOS early in the process by inviting an Advisory Mission in 2015. The mission report suggests a number of ways in which the State Party and the international community can work together to achieve a result satisfactory to all the main interest groups (Barker et al 2015).

Drottningholm is in many ways a similar situation in that what is proposed is the improvement of a long-existing route to meet the needs of modern society, and particularly of those living comparatively close to the property. Any solution of this issue will need to take into account also the comparatively recent *Policy for the Integration of a Sustainable Development Perspective into the Processes of the World Heritage Convention* (see above).

This emphasises both Environmental Sustainability, covering conservation of heritage assets, but also Inclusive Social Development and Inclusive Economic Development. It recommends that while avoiding, and, if avoidance is not possible, mitigating, all negative impacts on the environment and cultural diversity when conserving and managing World Heritage properties and their wider settings, the State Party should adopt adequate measures to ensure the availability of basic infrastructure and services for communities in and around World Heritage properties. The Policy also states that the management and conservation of World Heritage properties should contribute to fostering inclusive local economic development and enhancing livelihoods, compatibly with the protection of their Outstanding Universal Value (UNESCO 2015).

### 3.3 The World Heritage Context of the Royal Domain of Drottningholm

This section examines previous involvement of the UNESCO World Heritage Committee with Drottningholm. The property was inscribed on the World Heritage List in 1991 under criterion (iv) as an outstanding example of a type of building, or architectural ensemble illustrating a significant stage in human history (landscape was added to the definition of this criterion in 1994). The World Heritage Committee made no comment when it added the property to the World Heritage List. ICOMOS only agreed to support the nomination once it had been confirmed that the nomination was of the whole of the royal domain and not just of the Palace. Their evaluation of the nomination concluded that

*The ensemble of Drottningholm - castle, theatre, Chinese pavilion and gardens - is the best example of a royal residence built in the 18th century in Sweden and is representative of all European architecture of that period, heir to the influences exerted by the Chateau of Versailles on the construction of royal residences in western, central and northern Europe.*

This demonstrates clearly that Outstanding Universal Value was seen to rest in the ensemble as a whole, including its landscape, and not only in the Palace. The retrospective Statement of Outstanding Universal Value, agreed at the 40<sup>th</sup> session of the World Heritage Committee in 2016, follows this line very clearly. As well as identifying as attributes the main individual buildings in the property – the Palace itself, the Palace Theatre, the Chinese Pavilion - it also focuses on the very extensive landscape gardens which are a principal part of the cultural landscape, Canton Village, and the small town of Malmen, and notes the way in which the landscape has been shaped by its use as a Crown Estate. This last aspect of the property carries on beyond its boundaries.

The Statement's account of protection and management of the property covers the possible adverse impact of improvements of both Road 261 through the property and also of the Stockholm Bypass. These issues were also raised in the 2006 and 2013 Periodic Reports on the property. These adverse impacts are reported possibly to include permanent changes in the landscape as well as the effects of the use of Road 261 by increased traffic levels. Thus the

issues are seen both as arising from new or altered infrastructure and from the use of that infrastructure. For some years, these issues have also been the subject of correspondence between the state party, the World Heritage Centre and iCOMOS. The first HIA on the proposed road scheme, completed in 2013, was referred to the World Heritage Centre and a Technical Review was carried out by ICOMOS. This made recommendations which have been discussed in HIA2.

Any solution for these issues at Drottningholm will therefore be of interest to, and have to be accepted by the World Heritage Committee. This is the final factor to be taken into account in assessing the quality of the HIA2, bearing in mind always that an HIA can only respond to a specific proposal and that the starting point for assessment has to be the current condition of the World Heritage property which may be less than ideal.

## **Chapter 4**    **The Effectiveness of HIA2**

This chapter assesses the effectiveness of HIA2. A series of criteria were established in Chapter 1:

1. Use and adaptation by HIA2 of the ICOMOS methodology for Heritage Impact Assessment
2. Content and conclusions of HIA2
  - a) Understanding in HIA2 of the general requirements of the World Heritage Convention and guidance associated with it;
  - b) Understanding in HIA2 of the Outstanding Universal Value, including its attributes, of the Royal Domain of Drottningholm;
  - c) Assessment of the impact of road proposals on the Outstanding Universal Value of the property;
3. Appropriateness of the findings on the HIA2

These are considered in turn in the following sections.

### 4.1 Use and adaptation by HIA2 of the ICOMOS methodology for Heritage Impact Assessment

The HIA2 follows the methodology recommended by ICOMOS with some minor variations required by the particular circumstances of this case. As noted above (p.3), key elements of an HIA should include a description of the methodology used; a description of the site and its history, together with an analysis of the site's heritage values; description of changes or developments which are the subject of the HIA; assessment of the impact of those changes on individual attributes of Outstanding Universal Value and on the property overall; and proposals to mitigate adverse impacts.

An HIA is inevitably focused on assessment of a particular development scheme (s) and does not normally provide the option for wide-ranging comment on other alternatives. It is therefore a response to what is proposed by the developer and its precision will depend on the quality of the information provided in the scheme design. If it is not yet possible to be precise on some aspects of a proposal, then the HIA may not be able to provide a firm assessment of impact. This study deals well with such issues.

The methodology used is adequately described and the point is made that some elements have been added to the HIA in response to recommendation in the ICOMOS Technical Review of the Phase 1 Heritage Impact Assessment. The report is well organized and laid out, with excellent and appropriate illustrations. The description of the property is good and is well-linked to the agreed Statement of Outstanding Universal Value. A comprehensive set of attributes has been identified from that Statement and these are then used as the basis for the assessment of the impact of the road proposals.

Coverage of the impacts is comprehensive and thorough, dealing not just with visual impact but also with noise, vibration, and water pollution. Visual impact has been assessed through the selection of 10 specific viewpoints around the property. These are divided into vistas with high cultural and historical relevance, visual connections playing an important part for the 'every-day perception' of the Royal Domain of Drottningholm, and views of important attributes which demonstrate their historic functional links (HIA2, section 5.5.3). Each of the views is illustrated by one picture of the present position, and two of the proposed changes, one with traffic, and one without.

Throughout HIA2 deals well with the impact of traffic. Traffic flows and speeds are a key element of the eventual impact of this road scheme. The level and speed of traffic has considerable implications for both visual impact and for noise.

Assessment of the scale of impacts is inevitably a matter for professional judgement. The judgements made in HIA2 are objective and professional. While not always set out in the tabular form recommended by ICOMOS, the scale of impact is always clear. The eventual overall assessment of the impact of the Stockholm Bypass and Road 261 on the property is thorough and well set-out (HIA2, Section 6.2). The HIA2 recommends a number of appropriate mitigation measures and the overall conclusions are well set out. The Summary is good and gives a clear idea of the content of the whole report.

#### 4.2 Content and conclusions of HIA2

Understanding in HIA2 of the general requirements of the World Heritage Convention and the guidance associated with it: the understanding of the workings of the World Heritage system is good. Linked to a very good understanding of the property and the issues affecting it, this provides the basis for good professional judgements throughout the report. There is good awareness of the past interactions between the state party and ICOMOS.

Understanding in HIA2 of the Outstanding Universal Value, including the attributes, of the Royal Domain of Drottningholm: Section 3 sets out very clearly the character of the property and its Outstanding Universal Value. This is based firmly on the original ICOMOS evaluation of the nomination back in 1991, and then on the recently agreed Statement of Outstanding Universal Value. Section 3.5 then identifies the attributes of Outstanding Universal Value very comprehensively, making clear that this property is a cultural landscape, not just a collection of important buildings. This understanding is then carried through and used effectively in subsequent sections of the HIA2.

Assessment of the impact of the road proposals on the Outstanding Universal Value of the property: the authors of the report have identified a wide range of impacts as noted above and have dealt with them effectively. In many cases, the impact is nuanced with, potentially, both positive and negative aspects. These are well handled with good descriptions of the factors that will need to be balanced to ensure that impacts are positive when there is the chance that they could also be negative. An excellent example of this is the discussion of the interaction of traffic volumes and speed with regard to noise levels. The authors also clearly state when they have

inadequate information to come to a firm conclusion on impact and spell out possible consequences in these cases (HIA2 Section 6.2).

#### 4.3 Appropriateness of the findings of the HIA2

This is not an easy development proposal to assess. It is for the replacement of an existing road which already causes negative impacts on the Outstanding Universal Value of the World Heritage property. The eventual impact of Road 261 through the Royal Domain to Ekerö depends on the completion of the Stockholm Bypass in 2025. Until then traffic levels will increase, and only after its completion can they be held back to the present level. At that time it is hoped that traffic management measures, particularly speed limits, and possibly road tolls, will lessen the impact of the road. More detailed information is needed on some aspects of the scheme, for example vibration. Despite some evident improvements, there are still going to be areas, for example between Canton and Vilan, where negative impacts will remain.

The professional and objective approach of HIA2 has enabled great advances to be made in sorting out these various issues, and the findings of the report on the impacts of the scheme are appropriate. The HIA2 clearly can only report on the impacts of the scheme it has been asked to assess. This has been done successfully and it is for others to decide what needs to be done next on this road proposal.

A further aspect of the ICOMOS HIA methodology is the need to recommend measures to mitigate negative impacts. Sections 6.3 to 6.6 make four recommendations for further work. The first is to continue monitoring of vibration at least until the completion of the Stockholm Bypass in 2025, thus covering the period at which traffic levels are likely to be at their highest. The second recommendation deals with the management of traffic levels through provision of more sustainable alternatives, and also to keep UNESCO well-informed on traffic levels and measures being taken to manage that. Further work is recommended for decreasing negative impacts between Vilan and Canton.

Finally, HIA2 recommends the creation of a Spatial Development Plan to support integrated management of the whole area of the Royal Domain of Drottningholm. Given that the proposals for the roads result from the needs of the local communities, together with the requirements of the World Heritage Sustainable Development Policy (see pp 7-8 above), the development of such a Plan could be an excellent means of achieving a more integrated approach to the protection and management of the property which would ensure the conservation of the Royal Domain along with a significant contribution to sustainability of local communities.

Overall this is a good assessment of the impacts of the proposed road schemes on the Outstanding Universal Value of the Royal Domain of Drottningholm. The use of the ICOMOS methodology is good and the setting out of the various parameters is excellent. The assessment of the harm or benefit caused by a variety of different impacts is assured and very professional. The proposed mitigation measures are appropriate. The HIA2 can be commended to the bodies who will have to take decisions on the road scheme as a guide that should be followed.



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