

**“FRONTIERS OF THE ROMAN EMPIRE –  
- LOWER GERMAN LINES”**

**MANAGEMENT PLAN**





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# MANAGEMENT PLAN

## PART I

### OVERARCHING FRAMEWORK

# 1 Context, Status and structure of the Management Plan

## 1.1 General introduction

Since 2005, a management plan is a requirement of the World Heritage Committee of UNESCO as part of the nomination file. Management plans are aimed at upholding the Outstanding Universal Value (OUV) of World Heritage sites (WHS) recognised by UNESCO.

This involves:

- the protection, preservation, sustainable maintenance and management of the World Heritage site.
- the appropriate incorporation of new developments.
- the propagation of the World Heritage site to society.

Protection is requisite and ensured by laws and regulations. In addition, the parties need to know how to deal with developments without harming the OUV of the *Frontiers of the Roman Empire – The Lower German Limes*. It is significant to understand that the *Frontiers of the Roman Empire – The Lower German Limes* is an archaeological site, located in a dense populated region of Europe, including properties in the centre of cities like Bonn and Utrecht. Integrating the understanding and protection of the OUV in the development on the long term is essential for the continuity of the OUV of the World Heritage site.

The management plan gives an overview on how the *Frontiers of the Roman Empire – The Lower German Limes* will be managed during the period 2021-2027.

Part I of this management plan focuses on positioning the OUV of the World Heritage site, the *Frontiers of the Roman Empire – The Lower German Limes* on the overarching level of this transnational serial site. The management plan is an integral part of the nomination file (section 5e). In Parts II and III, the Lower German Limes in the Netherlands and the Lower German Limes in Germany are described as separate management units.

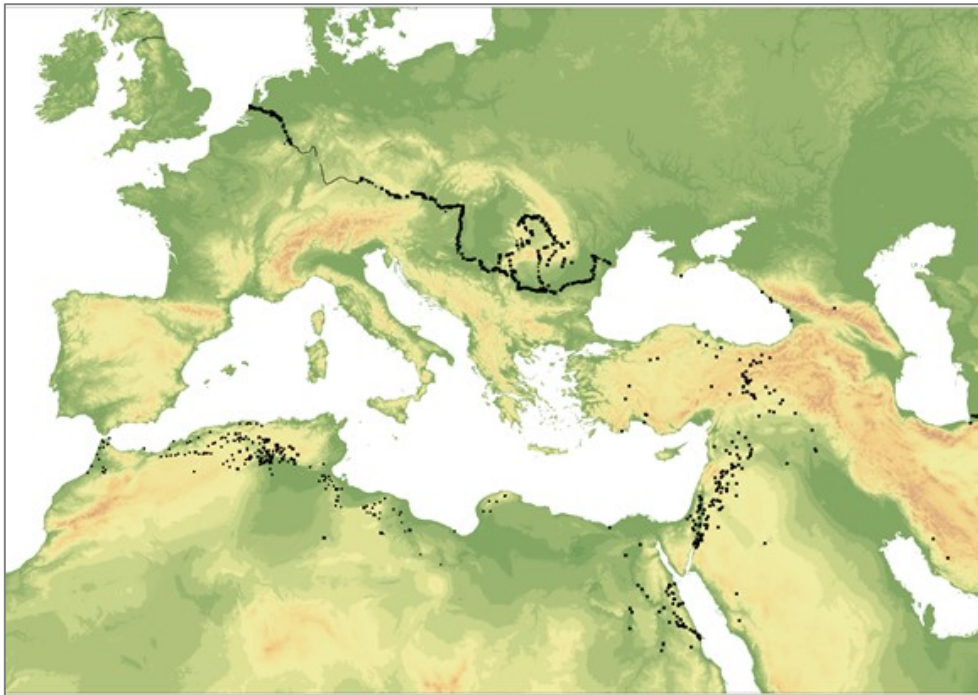
## 1.2 Frontiers of the Roman Empire World Heritage site

The northern border of the Roman Empire, the Limes, is the largest linear archaeological feature in Europe, part of a larger structure encompassing also Northern Africa and the Middle East. Several sections of the Roman Limes currently have World Heritage status. Hadrian's Wall in Great Britain was the first part to be listed as a World Heritage site, in 1987. In 2005 the Upper German -Raetian Limes was also added to the list, followed in 2008 by the Antonine Wall (in Scotland). Together, they form a World Heritage site known as 'Frontiers of the Roman Empire'. When the Upper German-Raetian Limes was nominated, the World Heritage Committee recommended 'that the nomination be seen as the second phase of a possible wider, phased, serial transboundary nomination to encompass remains of the Roman frontiers around the Mediterranean Region'.

In 2017, a thematic study was presented to the World Heritage Committee, developed and adopted by the joined partners of the Frontiers of the Roman Empire. This study provided an overview of the remains of the frontiers of the Roman Empire, extending to the continents of Africa, Asia and Europe. In the thematic study, five groups were distinguished within the Frontiers of the Roman Empire, that displays clear differences in densities, disposition, type and size of military installations, which reflect variations in climatic and

geographical conditions, habitation and land use, external threats and political interests. These five groups are:

- the desert frontiers of the Roman provinces of Africa, Egypt, Arabia and southern Syria.
- the frontiers of northern Syria and Cappadocia (Turkey), constituting the frontier with the powerful Parthian Empire in the East.
- the frontiers along the European rivers Rhine and Danube.
- the artificial linear barriers of Hadrian's Wall, the Antonine Wall and the Upper German-Raetian Limes (the existing World Heritage site).
- the mixed frontiers of the Roman province of Dacia (Romania), summarises the chronological and geographical scope of the frontiers and their functional, chronological, social and cultural links and complexity.



*Map 1: Frontiers of the Roman Empire*

Based on these five sections, a nomination strategy was developed, providing the World Heritage Committee with insight into the intended nominations of the Frontiers of the Roman Empire within Europe. Within this strategy it was agreed that the European frontiers should be divided into four single properties, operating under a common framework 'Frontiers of the Roman Empire'.

- The artificial linear barriers of Hadrian's Wall, the Antonine Wall and the Upper German-Raetian Limes.
- The Lower German (i.e. Lower Rhine) frontier.
- The Danube frontier.
- The frontier of the Roman province of Dacia.

The *Frontiers of the Roman Empire – The Lower German Limes* is presented as a prospective UNESCO World Heritage site in 2011 in the Netherlands (by inscription on the Tentative List of Dutch World Heritage sites) and in 2018 in Germany.

### 1.3 Status of the Management Plan

The Dutch State and the German States North Rhine-Westphalia and Rhineland Palatinate are responsible for the nomination and the adoption of the management plan, which complies with the requirements of the World Heritage Committee of UNESCO. The site manager is responsible for the management. The site manager plays an important role in the implementation of the management plan.

After having been adopted by the steering group of administrators of the state governments and provinces (September 2019), the management plan will be a binding plan for the site manager. The management plan provides the basic principles and guidelines for the policies of all the signatories. It has no legal status itself, but the management measures affect public authorities, private parties, owners and users/ operators. Following adoption by the steering group, the management plan is added to the nomination file to be submitted to the World Heritage Committee of UNESCO.

The management plan is adopted for a period of 6 years. The nomination of the Lower German Limes as World Heritage site is submitted in 2020 for approval in 2021. Therefore this management plan focuses on the period 2021–2027. Included in the management plan are developments (opportunities or threats) which are likely to manifest themselves in those 6 years. The administrative parties have committed themselves to act in accordance with this management plan during the nomination phase (2018–2020). Three years after coming into effect (2023), a mid-term review of this plan will take place.

### 1.4 Involvement of stakeholders

The management plan has been developed by the Dutch Limes Association together with the German States North Rhine- Westphalia and Rhineland-Palatinate. Local governments were involved from the beginning and throughout the process of drawing the management plan, through regular sessions and consultation. The proposed boundaries of the WHS have been approved by the municipalities. Discussions with key stakeholders, such as regional water boards, heritage organisations, museums, universities and (other) NGO's have also contributed to the management plan. Input from the local and wider community with an interest in the site have been gathered and utilized. In those areas where extra protection measures were yet to be put in place, residents and owners have been informed.

An overview of stakeholders involved is given in Annex (2)

The final draft of the management plan, together with the nomination file, was open for consultation from January 15 to March 1 in 2019 in the Netherlands. Local government and key stakeholders were personally approached for their input. To give the wider community possibilities to voice their opinion more attention was drawn to the consultation via several media and networks. All comments received were considered, leading to revision of the management plan where deemed necessary. The handling of the input during the consultation period have been documented in a consultation report.

### 1.5 Terms and abbreviations

**OUV:** Outstanding Universal Value means cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity.

**FRE:** Frontiers of the Roman Empire. The border line of the Roman Empire at its greatest extent in the 2nd century AD. It stretched over 7,500 km from the Atlantic coast of northern Britain, through Europe to the Black Sea, and from there to the Red Sea and across North Africa to the Atlantic coast.

**LGL:** Lower German Limes. Part of the Frontiers of the Roman Empire encompassing the north-eastern border of the Roman province of Germania Inferior (Lower Germany), from Remagen (DE) to Katwijk (NL).

**Frontiers of the Roman Empire – The Lower German Limes:** Full name of the proposed World Heritage Site

**Property.** The area(s) that is inscribed on the World Heritage List. A property can exist of more than one part. In that case it is a serial nomination. In case those areas are located in different states, it is a transnational serial nomination.

**Component part:** an area being a part of the Property, clearly defined, that contributes to the Outstanding Universal Value of the property as a whole.

**Buffer Zone:** an area bordering the nominated property which has complementary legal and/or customary restrictions placed on its use and development to give an added layer of protection to the property.

**Cluster:** group of spatially separated parts of a single archaeological complex.

**World Heritage committee:** a representative board that is composed of 21 members and that decides on the management of the World Heritage List.

**World Heritage Centre:** Secretariat to the World Heritage Committee

**ICOMOS:** the International Council on Monuments and Sites. A non-governmental organization responsible for a.o. the evaluation of properties nominated for inscription on the World Heritage List

## 2 Value and importance of the Lower German Limes

### 2.1 The Lower German Limes

#### OVERVIEW

The Lower German Limes (LGL) forms over 400 km the Limes section from the border of Upper Germany to the North Sea. It runs through the German states of Rhineland-Palatinate and North Rhine-Westphalia and through the Dutch provinces of Gelderland, Utrecht and South-Holland and passes through various landscapes. Below surface, most of the Lower German Limes's facilities have been preserved. In many places, layers with organic material offer very special conditions of preservation. The various elements of the *Frontiers of the Roman Empire – The Lower German Limes*, which line up along the Rhine like a string of pearls, together with the river form a border system that existed for over 400 years and still shapes the city and the countryside in many places.



Map 2: LGL in The Netherlands, North Rhine Westphalia & Rhineland Palatinate

#### HISTORY AND MILITARY DEVELOPMENT

The military infrastructure was established in the last decades BC, for the conquest of Germanic territories across the Rhine. Once this ambition had failed the left river bank was converted into a fortified frontier separating the 'romanised' Gaulish hinterland from the 'barbarian' Germanic foreland. The first military bases on the Lower Rhine represent the very beginning of the linear perimeter defence of the Roman Empire, which would develop



into a coherent frontier system extending over three continents in the 2nd century AD. The entire range of military facilities like legionary fortresses, practice camps, cavalry, infantry and fleet forts, fortlets, watchtowers, streets and waterways are represented, reflecting strategic adaptation and development of military engineering. The legions play a special role in this. Four fortresses along this Limes section secured and organized the border, and vexillations operated various goods-producing workshops.

Having survived a crisis in the late 3rd century AD, the frontier shared the phased disintegration of the Western Roman Empire until the early 5th century.

Some of the latest military settlements became nuclei of the ecclesiastical and administrative infrastructure of the Middle Ages. In post-Roman times too (and at certain places even today), the Lower German Limes had an influence on the lives of people living in its vicinity. In the names of towns, woods, roads and meadows it makes an important contribution to the area's identity.

### WETLAND CONDITIONS

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Situated in an area which – in the delta as well as the Lower Rhine terrace upstream – has always been a wetland, with outstanding preservation conditions, the Lower German Limes exhibits unique testimonies of water management strategies and constructions employed by the military command of the Roman Empire. They are providing unparalleled insights into military architecture, shipbuilding, logistics and supply. These are exemplified by a dug canal, heavy quays and landing platforms, adapted fort designs and road sections protected by timber revetments. Buried riverine rubbish deposits constitute veritable treasure-chests of organic materials and artefacts bearing unique information on frontier life and on vanished traditions such as notably that of river boat building.

### INTEGRITY AND AUTHENTICITY

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The nominated component parts of the *Frontiers of the Roman Empire – The Lower German Limes* clearly bring out the linear character of the frontier along the river Rhine. They cover its entire range of military installations and relevant associated structures, explaining its functioning and development. The adaptation of the military infrastructure to the dynamic river landscape is eminently illustrated by forts with a specific design, a dug canal and protective timber constructions of riverbanks and road sections. Buried riverine deposits with excellently preserved artefacts and organic remains provide unique knowledge on the frontier system and frontier life.

Although several sites have been overbuilt, the general state of conservation is satisfactory. The near absence of aboveground remains is compensated by the outstanding preservation of buried features at many sites. Current legislation warrants a proper protection of the property, enhanced by adequate buffer zones. The preservation of many buried remains in dynamic urban areas demonstrates that with due care sustainable protection and development can be compatible.

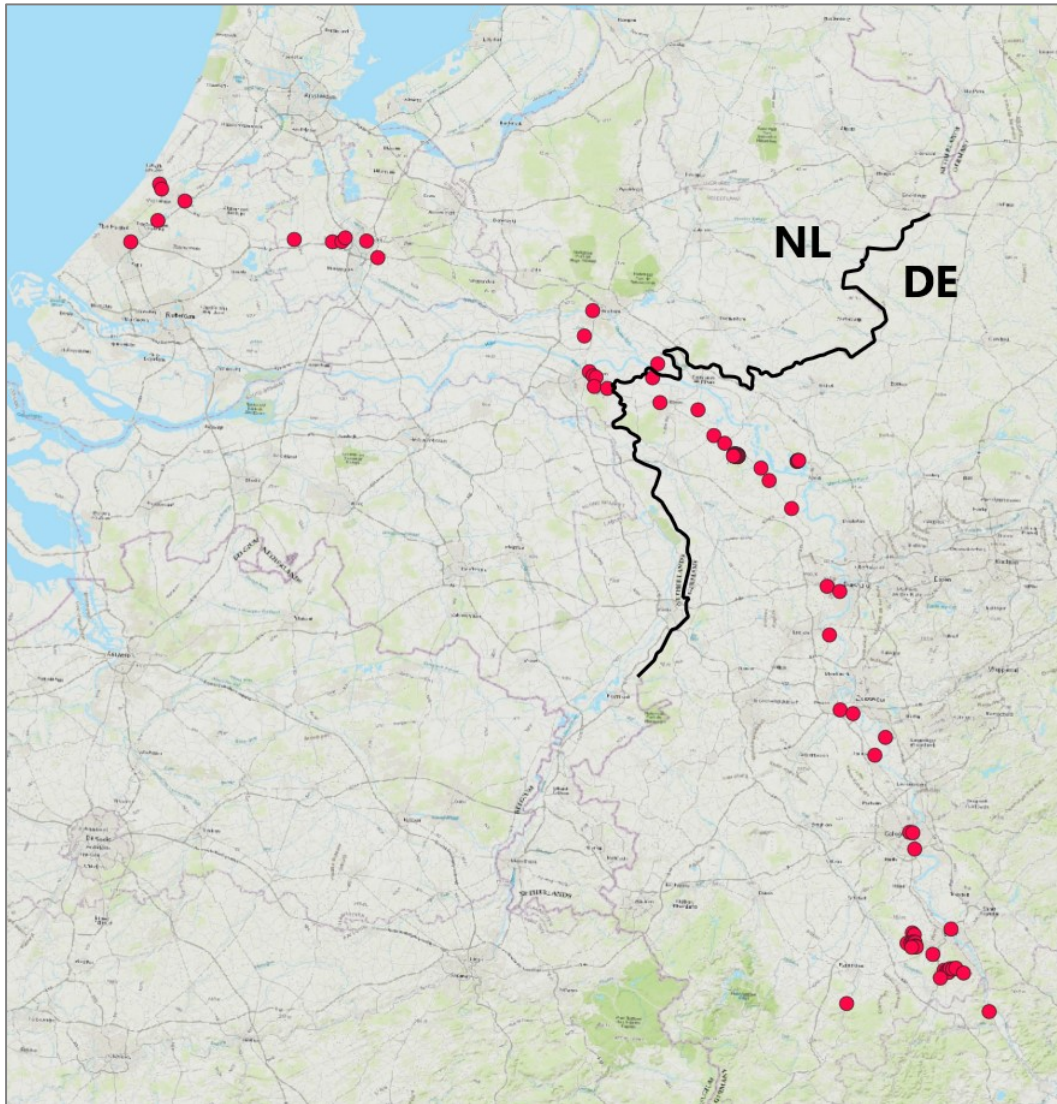
As an archaeological property, the *Frontiers of the Roman Empire – The Lower German Limes* has a very high level of authenticity. Virtually all of the component parts that have been included in the nomination are underground and remain unexcavated. Since the remains of the *Frontiers of the Roman Empire – The Lower German Limes* are almost all below ground, their value needs some form of translation in order to be understandable for the general public. This need has led to a number of innovative projects to visualise the defences of some forts on the ground surface, while protecting the authenticity of the buried remains as well as the setting and integrity of the surroundings. These visualisations



and other post-Roman buildings and features overlying the buried remains are treated as vertical buffer zones.

## 2.2 Statement on boundaries and buffer zones

The selection of component parts and buffer zones is an essential requirement in the establishment of effective protection of the nominated components.



Map 3: Overview of the position of the selected component parts of the LGL.

### COMPONENT PARTS

All Component parts are well protected by monument protection laws. The nominated property *Frontiers of the Roman Empire – The Lower German Limes* consists of 106 component parts, 79 of which are grouped in 17 clusters. An overview of the (clusters of) component parts and the represented elements of the frontier is provided in table 1

The selected component parts and clusters are presented in detail in the catalogue of component parts, where the main characteristics and their contribution to the proposed Outstanding Universal Value may be found under the headings 'Brief description' and 'Attributes and values'.

id	name	country	municipality
1a	Valkenburg-Centrum   Kerkweg	NL	Katwijk
1b	Valkenburg-Centrum   Centrum	NL	Katwijk
1c	Valkenburg-Centrum   Raadhuis	NL	Katwijk
1d	Valkenburg-Centrum   Kerkhof	NL	Katwijk
2a	Valkenburg-De Woerd   North	NL	Katwijk
2b	Valkenburg-De Woerd   South	NL	Katwijk
3	Voorburg-Arentsburg	NL	Leidschendam-Voorburg
4a	Corbulo's canal   Vlietwijk	NL	Voorschoten
4b	Corbulo's canal   Starrenburg	NL	Voorschoten
4c	Corbulo's canal   Knippolder	NL	Voorschoten
4d	Corbulo's canal   Vlietvoorde	NL	Leidschendam-Voorburg
4e	Corbulo's canal   Rozenrust	NL	Leidschendam-Voorburg
4f	Corbulo's canal   Romeinsepada	NL	Leidschendam-Voorburg
5a	Leiden-Roomburg   Park Matilo	NL	Leiden
5b	Leiden-Roomburg   Besjeslaan	NL	Leiden
10	Woerden-Centrum	NL	Woerden
12a	Utrecht-Limes road   Zandweg	NL	Utrecht
12b	Utrecht-Limes road   Veldhuizen	NL	Utrecht
12c	Utrecht-Limes road   De Balije	NL	Utrecht
13a	Utrecht-Hoge Woerd   Castellum	NL	Utrecht
13b	Utrecht-Hoge Woerd   Langerakbaan	NL	Utrecht
14	Utrecht-Groot Zandveld	NL	Utrecht
15	Utrecht-Domplein	NL	Utrecht
16a	Bunnik-Vechten   Marsdijk	NL	Bunnik
16b	Bunnik-Vechten   Provincialeweg	NL	Bunnik
18	Arnhem-Meinerswijk	NL	Arnhem
20	Elst-Grote Kerk	NL	Overbetuwe
22a	Nijmegen-Valkhof area   Valkhofpark	NL	Nijmegen
22b	Nijmegen-Valkhof area   Hunnerpark	NL	Nijmegen
23	Nijmegen-Hunerberg	NL	Nijmegen
24a	Nijmegen-Kops Plateau   West	NL	Nijmegen
24b	Nijmegen-Kops Plateau   North	NL	Berg en Dal
24c	Nijmegen-Kops Plateau   East	NL	Nijmegen
24d	Nijmegen-Kops Plateau   Kopse Hof North	NL	Nijmegen
24e	Nijmegen-Kops Plateau   Kopse Hof South	NL	Nijmegen
25a	Berg en Dal-aqueduct   Mariënboom	NL	Nijmegen
25b	Berg en Dal-aqueduct   Swartendijk	NL	Berg en Dal / Nijmegen
25c	Berg en Dal-aqueduct   Cortendijk	NL	Berg en Dal
25d	Berg en Dal-aqueduct   Louisedal	NL	Berg en Dal
25e	Berg en Dal-aqueduct   Kerstendal	NL	Berg en Dal
26a	Berg en Dal-De Holdeurn   North	NL	Berg en Dal
26b	Berg en Dal-De Holdeurn   South	NL	Berg en Dal
19	Herwen-De Bijland	NL	Zevenaar
27	Kleve-Keeken	DE	Kleve
28a	Kleve-Reichswald   West	DE	Kleve
28b	Kleve-Reichswald   East	DE	Kleve

id	name	country	municipality
29	Till	DE	Bedburg-Hau
30	Kalkar-Kalkarberg	DE	Kalkar
31	Kalkar-Bornsches Feld	DE	Kalkar
32a	Uedem-Hochwald   Hochwald 1	DE	Uedem
32b	Uedem-Hochwald   Hochwald 2	DE	Uedem
32c	Uedem-Hochwald   Hochwald 3	DE	Uedem
32d	Uedem-Hochwald   Hochwald 4	DE	Uedem
32e	Uedem-Hochwald   Hochwald 5	DE	Uedem
32f	Uedem-Hochwald   Hochwald 6	DE	Uedem
32g	Uedem-Hochwald   Hochwald 7.1	DE	Uedem
32h	Uedem-Hochwald   Hochwald 7.2	DE	Uedem
32i	Uedem-Hochwald   Hochwald 8.1	DE	Uedem
32j	Uedem-Hochwald   Hochwald 8.2	DE	Uedem
32k	Uedem-Hochwald   Hochwald 9	DE	Uedem
32l	Uedem-Hochwald   Hochwald10	DE	Uedem
32m	Uedem-Hochwald   Hochwald11	DE	Uedem
32n	Uedem-Hochwald   Hochwald 12	DE	Uedem
32o	Uedem-Hochwald   Hochwald 13	DE	Uedem
33a	Wesel-Flüren   Flürener Feld 1	DE	Wesel
33b	Wesel-Flüren   Flürener Feld 2	DE	Wesel
33c	Wesel-Flüren   Flürener Feld 3	DE	Wesel
33d	Wesel-Flüren   Flürener Feld 4	DE	Wesel
34	Xanten-CUT	DE	Xanten
35	Xanten-Fürstenberg	DE	Xanten
37	Alpen-Drüpt	DE	Alpen
38	Moers-Asberg	DE	Moers
39	Duisburg-Werthausen	DE	Duisburg
40	Krefeld-Gellep	DE	Krefeld
41	Neuss-Koenenlager	DE	Neuss
42a	Neuss-Reckberg   Wachturm	DE	Neuss
42b	Neuss-Reckberg   Kleinkastell	DE	Neuss
43	Monheim-Haus Bürgel	DE	Monheim am Rhein
44	Dormagen	DE	Dormagen
45	Köln-Praetorium	DE	Köln
46	Köln-Deutz	DE	Köln
47	Köln-Alteburg	DE	Köln
48a	Kottenforst Nord   Am Weißen Stein 1	DE	Bornheim
48b	Kottenforst Nord   Am Weißen Stein 2	DE	Alfter
48c	Kottenforst Nord   Domhecken 5	DE	Alfter / Swisttal
48d	Kottenforst Nord   Domhecken 1	DE	Alfter
48e	Kottenforst Nord   Domhecken 2	DE	Alfter
48f	Kottenforst Nord   Domhecken 3	DE	Alfter
48g	Kottenforst Nord   Domhecken 4	DE	Alfter
48h	Kottenforst Nord   Dürrenbruch 3	DE	Alfter
48i	Kottenforst Nord   Dürrenbruch 2	DE	Alfter
48j	Kottenforst Nord   Dürrenbruch 1	DE	Alfter

id	name	country	municipality
48k	Kottenforst Nord   Pfaffenmaar 1 und 2	DE	Alfter
49	Bonn	DE	Bonn
50a	Kottenforst Süd   Oben der Krayermaar	DE	Bonn
50b	Kottenforst Süd   Villiper Bach	DE	Bonn
50c	Kottenforst Süd   Professorenweg	DE	Bonn
50d	Kottenforst Süd   Professorenweg 2	DE	Bonn
50e	Kottenforst Süd   Riesenweg	DE	Bonn
50f	Kottenforst Süd   Wattendorfer Allee 2	DE	Bonn
50g	Kottenforst Süd   Wattendorfer Allee	DE	Bonn
50h	Kottenforst Süd   Bellerbuschallee	DE	Bonn
50i	Kottenforst Süd   Villiprot 1	DE	Bonn
50j	Kottenforst Süd   Heiderhof	DE	Bonn
52	Iversheim	DE	Bad Münstereifel
53	Remagen	DE	Remagen

*Table 1: List of all component parts of Frontiers of the Roman Empire – The Lower German Limes.*

## BUFFER ZONES

Buffer zones give an added layer of protection to a property. An important function is the protection of views and of the setting. For the *Frontiers of the Roman Empire – The Lower German Limes* the buffer zones often have an important additional function, of safeguarding information that is relevant to the understanding of the values and features included in the property.

This additional function applies amongst others when relevant attributes are expected but have not been securely attested. They may for instance have been suggested by surface finds or hinted at by limited observations during small-scale building activities. In such cases there is normally not enough archaeological evidence for protection under the national or state laws, and thus not for nomination as a component part.

The additional function is also applicable when attested attributes cannot be sustainably protected, for instance because they are located near vital infrastructure which is likely to need extension in the future, or in areas where urban development is inevitable. Inclusion in a buffer zone guarantees that the preserved information can be collected by excavations conform the highest scientific standards.

## 2.3 The outstanding universal value of the Lower German Limes

### Proposed Statement of Outstanding Universal Value

*Frontiers of the Roman Empire – The Lower German Limes* ran for 400 km along the Lower Rhine, along the north-eastern boundary of the Roman frontier province of *Germania Inferior* (Lower Germany), from the Rhenish Massif south of Bonn (Germany) to the North Sea coast (the Netherlands). For more than 450 years from the late 1st century BC, it protected the Roman Empire against Germanic tribes which it considered as ‘barbaric’.

The first military bases were built in the last decades BC, for the conquest of Germanic territories across the river Rhine. Once this ambition had failed the left river bank was converted into a fortified frontier separating Roman Gaul from the ‘barbaric’ foreland. Military installations of widely varying types and sizes and associated civil structures were built on the edge of the left river bank and linked by an infrastructural and logistical

network. Having survived a crisis in the late 3rd century AD, the frontier shared the phased disintegration of the Western Roman Empire until the mid-5th century.

*Frontiers of the Roman Empire – The Lower German Limes* eminently illustrates the innovative responses of the Roman military engineers to the challenges posed by the dynamic landscape of a lowland river, as witnessed by the positioning and design of the military installations and by exceptional water management works. The entire range of large early bases to small late strongholds is represented, reflecting strategic adaptation and development of military engineering. The first military bases on the Lower Rhine represent the very beginning of the linear perimeter defence of the Roman Empire, which would develop into a coherent frontier system extending over three continents in the 2nd century AD. The military and civil structures associated with the military fortifications illustrate the formidable impact of the Roman military presence on the landscape and society of the periphery of the Empire.

The wetland conditions have led to an outstanding preservation of timber and other organic remains, providing unparalleled insights into military construction, shipbuilding, logistics and supply.

**Criterion (ii):** The extant remains of *Frontiers of the Roman Empire – The Lower German Limes* constitute significant elements of the Roman Frontiers present in Europe. With its legionary fortresses, forts, fortlets, watchtowers, linked infrastructure and civilian architecture it exhibits an important interchange of human and cultural values at the height of the Roman Empire, through the development of Roman military architecture, extending the technical knowledge of construction and management to the very edges of the Empire. It reflects the imposition of a complex frontier system on the existing societies of the north-western part of the Roman Empire, introducing for the first time military installations and related civilian settlements, linked through an extensive supporting network. The frontier did not constitute an impregnable barrier, but controlled and allowed the movement of peoples: not only the military units, but also civilians and merchants. Hence, it triggered the exchange of cultural values through movement of soldiers and civilians from different nations. This entailed profound changes and developments in terms of settlement patterns, architecture and landscape design and spatial organization.

**Criterion (iii):** As part of the Roman Empire's general system of defence, *Frontiers of the Roman Empire – The Lower German Limes* has an extraordinarily high cultural value. It bears an exceptional testimony to the maximum extension of the power of the Roman Empire through the consolidation of its north-western frontiers and thus constitutes a physical manifestation of Roman imperial policy. It illustrates the Roman Empire's ambition to dominate the world in order to establish its law and way of life there in a long-term perspective. It witnesses Roman colonization in the respective territories, the spread of Roman culture and its different traditions – military, engineering, architecture, religion management and politics – and the large number of human settlements associated with the defences which contribute to an understanding of how soldiers and their families lived in this part of the Roman Empire.

**Criterion (iv):** *Frontiers of the Roman Empire – The Lower German Limes* was the earliest linear frontier of the Roman Empire, created as an answer to Rome's inability to control its northern neighbours by means of diplomacy. Its military installations outstandingly illustrate the development of the large operational bases of a field army to the varied range of smaller installations required by an extended frontier line. Situated in an area which has always been a wetland, with outstanding preservation conditions, *Frontiers of the Roman*

*Empire – The Lower German Limes* exhibits unique testimonies of water management strategies and constructions employed by the military command of the Roman Empire. Buried riverine rubbish deposits constitute veritable treasure-chests of organic materials and artefacts bearing unique information on frontier life and on vanished traditions such as notably that of river boat building.

### **Integrity**

The component parts of *Frontiers of the Roman Empire – The Lower German Limes* have been carefully selected to provide a good representation of the attributes and values of the proposed Outstanding Universal Value. They clearly bring out the early development of perimeter defence. They cover the entire range of military installations and relevant associated structures of a frontier system, explaining its functioning and development. Distinctive aspects which are clearly brought out by the component parts are the responses of the Roman army to the dynamic river landscape and the large impact of the frontier on the landscape and its inhabitants.

The general state of conservation is good to very good. More than three quarters of the component parts/clusters encompass nearly or largely complete elements of the frontier. All were exposed to the normal degradation of archaeological sites, but in most cases their intactness is good or very good, as witnessed by the presence of remains of the latest building phase. The rarity of aboveground remains is amply compensated by the outstanding preservation of the buried features. The sites are not exposed to significant threats, and current legislation warrants a proper protection of the property, enhanced by adequate buffer zones.

### **Authenticity**

As an archaeological property, *Frontiers of the Roman Empire – The Lower German Limes* has a high level of authenticity. Virtually all the remains were buried during or soon after the Roman period and thus protected against later alterations. The authenticity of form and design of nearly all elements is unaffected, because they have not undergone any changes after the Roman period. At half of the sites stone walls or timber and organic remains have been preserved to a level which permits the qualification of their authenticity as unaffected. Elsewhere only the foundations of stone walls remain, or timber and organics have decayed, leading to a rating of the authenticity of materials and substance as fair. The location and setting of the elements of the frontier have in most cases considerably changed, by the embankment or canalization of the Rhine, changes in land use and urbanization. There are only four sites where the present setting still reminds of the Roman landscape, although it can still be explained at half of the sites; at the other half the authenticity of location and setting is clearly compromised. Reconstructions occur at five sites, whereas other types of visualizations – evidently not pretending to be authentic – significantly contribute to the sustained protection of the sites.

### **Protection and management requirements**

The nominated property is legally protected by the national and state laws on heritage protection of Germany (federal states of North Rhine-Westphalia and Rhineland-Palatinate) and the Netherlands. Much of the responsibility rests with the owners and with local and regional authorities. The component parts will be primarily managed at the national (NL) and state (DE) levels, but the management of the nominated property is co-ordinated by a joint Dutch-German Management Group, which is overseen by an Intergovernmental Committee. The joint Management Group sets out the main lines of the management and supervises the implementation of the national management plans and the periodic

reporting to UNESCO. The role of the Management Group and its procedures will be laid down in a Joint Declaration.

The management organisation of *Frontiers of the Roman Empire – The Lower German Limes* will co-operate intensively with their counterparts of the existing World Heritage site *Frontiers of the Roman Empire* (Ref: 430ter) and the nominated property ‘Frontiers of the Roman Empire – the Danube Limes (Western Segment)’ (Ref: 1608, nominated 2018), and with States Parties preparing the nomination of other sections of the Roman frontiers. A framework for this international cooperation is provided by the ‘Frontiers of the Roman Empire World Heritage Cluster’ set up in 2018 to support international collaboration in those fields relevant to the overall management and development of the Frontiers of the Roman Empire in Europe as World Heritage.



### 3 Overarching management structure and decision making structures

#### 3.1 Guiding principles

The *Frontiers of the Roman Empire – The Lower German Limes* is nominated as a transnational serial archaeological site. The Netherlands and Germany are jointly responsible for the nomination, inscription, recognition and for safeguarding the OUV. They are also jointly responsible for a long-term adequate implementation of the management plan for the site and for the timely compliance with procedural requirements, allowing for verification by UNESCO through periodic reports based on monitoring.

Basic principles for the organisation are:

- taking into account the differences between both countries.;
- acting in accordance with each partner's own responsibility.
- decision-making to focus as much as possible on consensus.
- act in compliance with guidelines developed at FRE level.

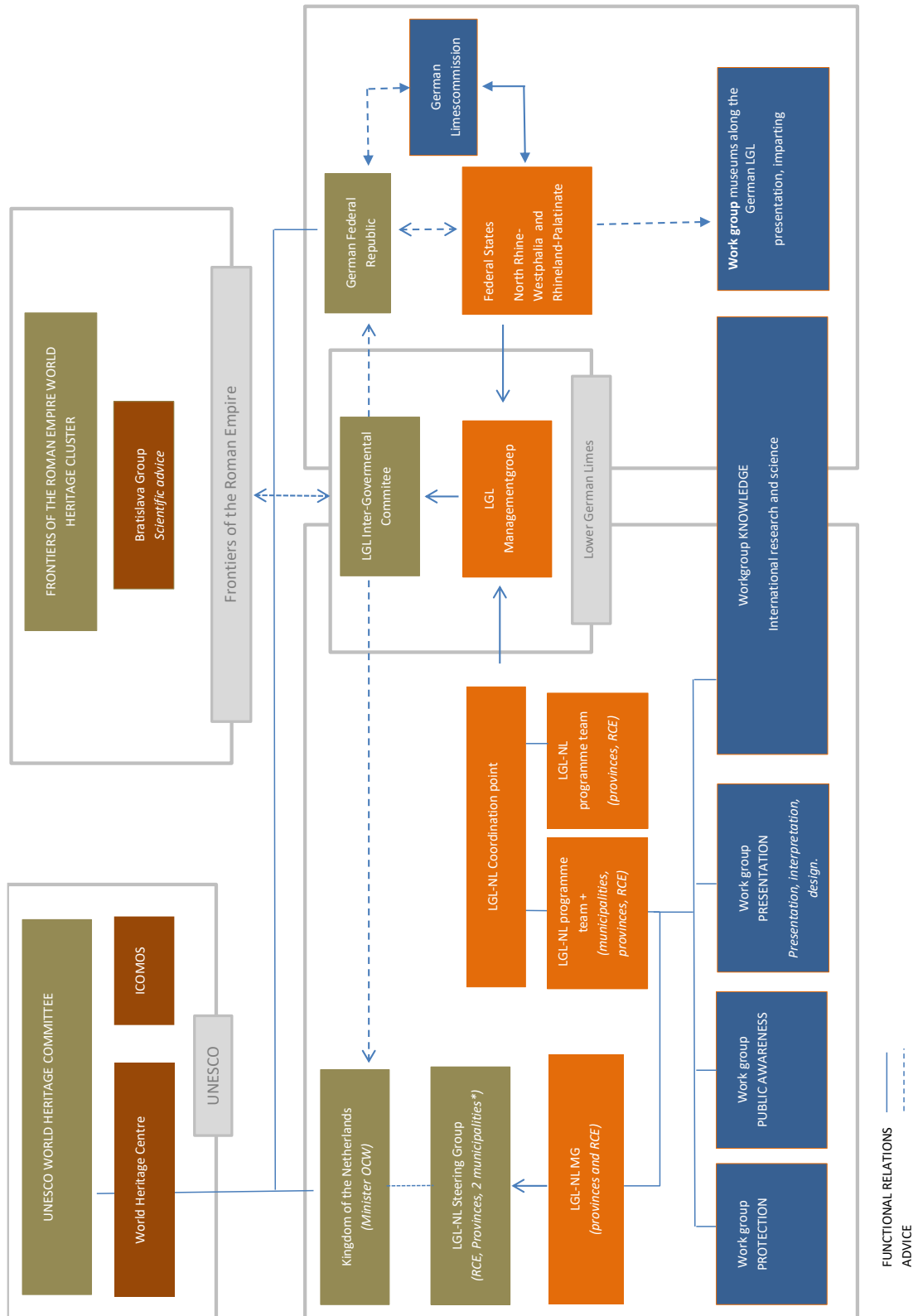
The Netherlands and Germany both have their own legal and planning system with different instruments and different authorities on the various government levels. The characteristics and customs in the practices between national, regional and local level differ in the two countries. Therefore, at the level of implementation on the national scale, both countries have their own management organisation for the implementation of the management plan. The transnational character requires a transnational structure to coordinate and evaluate all activities on a strategic level. Therefore, a multileveled management organisation is established (figure X).

Level	Focus	Paragraph
Frontiers of the Roman Empire	Exchange of best practices.	3.3
Lower German Limes	Strategic management of the Lower German Limes Monitoring and reporting. Exchange of best practices	3.2
National	Implementation of the management plan on a national level Involvement of stakeholders in the management	Part II: The Netherlands Part III: Germany

#### 3.2 Management of the Lower German Limes on a transnational level

On a transnational level a two layered organisation will be formed existing of an Intergovernmental Committee (IGC) and a management group. The IGC is responsible for the long-term commitment and strategic management choices. Also, in the case of emergencies, the IGC will be the platform that will have to give an advice to the responsible governments. The IGC will meet at least once every three years or more often if needed.

The management group will be responsible for the operational cooperation between both counties and day to day management of the sites and is formed by representatives of both national project organisations.



Organisational structure of the 'Frontiers of the Roman Empire - Lower German Limes' World Heritage Site

## THE INTERGOVERNMENTAL COMMITTEE (IGC LGL)

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The IGC LGL is collectively and on the basis of consensus responsible for the long-term protection of the World Heritage site following nomination. The IGC LGL consists of:

- two representatives from the Netherlands.
- one representative from North Rhine-Westphalia.
- one representative from Rhineland-Palatinate.

The IGC LGL is responsible for:

- contributing and ensuring the continuing and further reinforced support and enthusiasm for the World Heritage site among stakeholders and in society.
- safeguarding the harmonisation in the implementation of the management plan. In practical terms, this concerns the harmonisation of the management of all the individual properties of the Frontiers of the Roman Empire – The Lower German Limes, in order to operate on the basis of a common set of objectives for the protection of the OUV;
- timely administrative identification of and reaction to threats and developments that might affect the OUV of the World Heritage site (for example outcomes Heritage Impact Assessments);
- ensuring the raising of the necessary means for the implementation of the management plan, including the functioning of the organisation necessary in this respect, which is charged with the practical implementation of the management measures.
- safeguarding the timely compliance with monitoring and reporting obligations towards UNESCO.

The IGC LGL appoints one of its members as chairman and meets once a year.

## LGL MANAGEMENT GROUP

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The Management Group for the nominated *Frontiers of the Roman Empire – The Lower German Limes* World Heritage Site (MG LGL) is made up of those directly responsible for the site management of the currently inscribed sections of the LGL in both countries (site managers). The MG provides the primary mechanism for sharing best practice in relation to the *Frontiers of the Roman Empire – The Lower German Limes*, in the coordination of transnational projects and in preparing the work of the IGC.

## SITE MANAGER (MANAGEMENT ORGANISATION)

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The site manager is charged with:

- ensuring, on behalf of the steering group, the protection of the World Heritage site as a whole, as well as a long-term adequate protection of the OUV.
- drawing up the management plan.
- ensuring the implementation of the management plan on national/state level in accordance with the cycle: planning, implementation and execution, monitoring, evaluating and adjusting.
- ensuring compliance with the periodic (six-year) reporting obligations towards UNESCO.
- ensuring the required communication, harmonisation, coordination and collaboration between the different parts of the FRE.
- ensuring, together with all the parties concerned, the availability of sufficient resources for the implementation of management measures.
- ensuring timely consultation and agreement with the steering group and, if necessary, with each separate member of the steering group, to achieve the administrative safeguarding of the harmonisation required by UNESCO in the implementation of the management plan.
- timely administrative identification of and reaction to threats and developments that might

affect the OUV of the World Heritage site.

- being the first point of contact for national governments and involving them in the field of knowledge and advice concerning the implementation of management.
- Being the contact to stakeholders on national/state level
- stimulating mutual exchange of knowledge and management expertise at the level of the FRE.

In Germany, the site manager for the *Frontiers of the Roman Empire – The Lower German Limes* is employed in permanent position at the LVR-State Service for Archaeological Heritage since 2015. He also attends the regular meetings of the DLK, which coordinates the management of the FRE WHS in Germany.

#### **LVR-Amt für Bodendenkmalpflege im Rheinland**

Endenicher Str. 133

53115 Bonn

T 0228-9834-184

M [steve.boedecker@lvr.de](mailto:steve.boedecker@lvr.de)

W [www.bodendenkmalpflege.lvr.de](http://www.bodendenkmalpflege.lvr.de)

In the Netherlands, site manager is invested with the province of Utrecht, which acts on behalf of the three Dutch provinces (Utrecht, Zuid-Holland and Gelderland)

#### **Nederlandse Limes Samenwerking**

p/a Provincie Utrecht

Archimedeslaan 6 3584 BA Utrecht

T +31 30 258 91 11

M [info@limesamenwerking.nl](mailto:info@limesamenwerking.nl)

W [www.limeswerelderfgoed.nl](http://www.limeswerelderfgoed.nl)

### **FOCAL POINTS**

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In each member state, a 'Focal Point' is designated, as a basis for compliance with the procedural requirements, particularly in respect of periodic reports. In the Netherlands, this position is fulfilled by the Cultural Heritage Agency of the Netherlands (RCE) and in Germany by the Federal Foreign Office. In both countries, the UNESCO Focal points work in close cooperation with the site manager.

#### **Rijksdienst voor het Cultureel Erfgoed (Cultural Heritage Agency)**

Smallepad 5 3811 MG Amersfoort

T +31 33 421 7 421

M [info@cultureelerfgoed.nl](mailto:info@cultureelerfgoed.nl)

W [www.cultureelerfgoed.nl](http://www.cultureelerfgoed.nl)

#### **National World Heritage Focal Point**

Auswärtiges Amt Referat 603-9 Koordinierungsstelle Welterbe Werderscher

Markt 1 10117 Berlin Germany

Postanschrift: 11013 Berlin

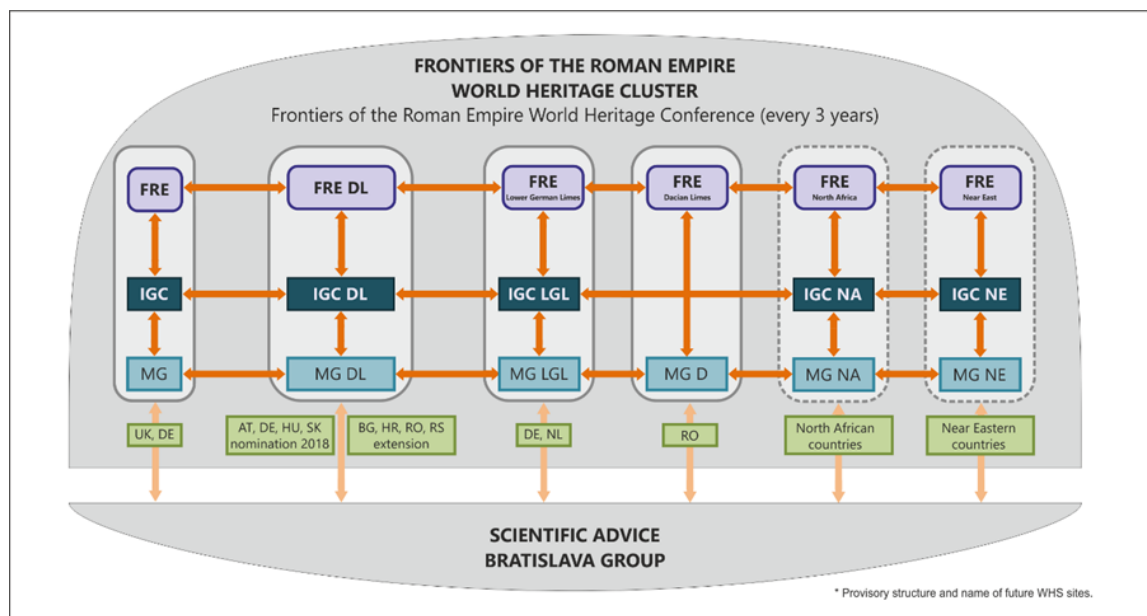
W [www.auswaertiges-amt.de/en](http://www.auswaertiges-amt.de/en)

M [birgitta.ringbeck@diplo.de](mailto:birgitta.ringbeck@diplo.de)

### 3.3 Cooperation with other parts of the Frontiers of the Roman Empire

In order to support international collaboration in those fields relevant to the overall management and development of the Frontiers of the Roman Empire as World Heritage, it was agreed by the European states in 2017 an overarching framework was needed. The primary aims of this overarching framework is the presentation of the Roman frontiers as a single, coherent monument and the furthering of international cooperation to facilitate management and development of the inscribed properties.

In 2018 European State parties developed for this purpose the Frontiers of the Roman Empire World Heritage Cluster. The existing Bratislava Group forms the basis for this cluster. Within the cluster, there is cooperation on management level and on strategic level. It is aimed that all existing and possible future properties will form an intergovernmental committee and a management group. Between both groups exchange of knowledge will take place. Every three years, a formal meeting will be held between representatives of the properties inscribed.



*Organisational structure of the Frontiers of the Roman Empire World Heritage Cluster (From Thematic Study)*

#### BRATISLAVA GROUP

The Bratislava Group is an international scientific advisory body with expert members from States Parties along the frontiers of the Roman Empire. It consists of experts and scientists from the countries that have included their national sections of the Limes on the World Heritage List, countries that have nominated their Limes for the list and delegates from countries that have applied for the UNESCO tentative list. The members of the group meet to discuss how to document the Limes sites, how to build an international and national database and establish a standard for managing the site. The group is trying to set a scientific framework for the whole site and bridge the differences which come from individual research traditions. The first meeting of the group took place in Bratislava in 2003, which is how it got its name. The long-term goal is to include all the appropriately preserved sections of the Limes in Europe, the Middle East and North Africa on the UNESCO list. The Bratislava Group supports States Parties by advising on the significance of the Roman frontiers and on the development of best practice guides for their management and improving their understanding.

## 4 Main management challenges

### 4.1 Long term objectives

The long-term strategy for the *Frontiers of the Roman Empire – The Lower German Limes* is aimed at preserving the OUV and creating a common understanding of the OUV. This long-term strategy is translated in to six long term aims

- *Frontiers of the Roman Empire – The Lower German Limes* is sustainable protected. Researchers and governments work together on preservation and knowledge development.
- *Frontiers of the Roman Empire – The Lower German Limes* is known and acknowledged as a transnational structure within both countries and abroad.
- *Frontiers of the Roman Empire – The Lower German Limes* is part of the Frontiers of the Roman Empire. At FRE level there is alignment with regard to preservation, interpretation, research and public access.
- *Frontiers of the Roman Empire – The Lower German Limes* is used as an educational resource in primary and secondary education.
- *Frontiers of the Roman Empire – The Lower German Limes* is known as a structure that stretches along the Rhine, running through both countries. This structure accompanied by high quality presentations (museums/landscape) and used for leisure and as a tourist destination.
- *Frontiers of the Roman Empire – The Lower German Limes* is a source of inspiration for the local environment/communities. The residents are proud of the presence of the historical frontier.

Actions have been developed to implement these long-term objectives (annex 1). The objectives will be adjusted and updated in the coming management periods.

### 4.2 Management Strategy

The Netherlands and the German states of North Rhine-Westphalia and Rhineland-Palatinate jointly coordinate and control the management of the component parts as a whole. The responsibility for the implementation of management measures is placed and will remain at the lowest possible level, with the organisation that is best equipped in this respect, in line with the legal and planning systems in both countries. Each state is responsible for the preservation and management of its component parts and for managing eventual effects that may arise from a larger area of influence.

On the level of component parts, for each site an individual management plan will be drafted, to further detail the implementation of the management plan and the responsibilities.

On level of the Lower German Limes, the aim is to preserve and further develop the recognisability of the *Frontiers of the Roman Empire – The Lower German Limes* as a whole and as part of the Frontiers of the Roman Empire. For that reason, on the field of interpretation, presentation and communication, common standards will be developed, and projects will be started at the level of the *Frontiers of the Roman Empire – The Lower German Limes* as a whole.

### 4.3 Risk management

[lay-out => remove numbers text]

The preserved archaeological remains are well protected against many threats by their underground location. Elements preserved aboveground have been integrated into later buildings and have thus been handed down. All elements are well protected by the national and state heritage protection laws.

#### (i) Development pressures

Frontiers of the Roman Empire - The Lower German Limes is characterized on the one hand by large areas of intensively used agriculture and on the other hand by partly thousand-year-old urban areas. This is why the main factors affecting the property are agricultural activities and urban and industrial growth.

The German spatial planning law<sup>1</sup> is intended to develop a balanced settlement and open space structure, which at the same time takes into account the functionality of the natural balance. Urban sprawl should be avoided and an effective infrastructure maintained. Rural areas are to be developed and recreational areas promoted.

The State Development Plan of North Rhine-Westphalia<sup>2</sup> and Rhineland-Palatinate<sup>3</sup> aim to achieve sustainable development that meets social and economic spatial requirements with ecological requirements. The archaeological remains are mentioned within the protection of the cultural landscape several times. Within the federal states of North Rhine-Westphalia and Rhineland-Palatinate, regional plans<sup>4</sup> provide the concrete implementation of the objectives formulated in the spatial planning law. The Lower German Limes plays a role within the regional plan by being mentioned in the text and in overview maps.

In the Netherlands an overall policy regarding space and mobility is developed by the Ministry of Infrastructure and Water Management, based on the national planning law.<sup>5</sup> A vision up to 2040 has been laid down in a memorandum on infrastructure and spatial planning<sup>6</sup>. The balancing of landscape and urbanization is the responsibility of the provinces, and their policies have been laid down in provincial memoranda.<sup>7</sup> A detailed planning is laid down in zoning plans by the municipalities.

#### *Residential development*

In all, 20 component parts/clusters are located in city centres or other built-up areas. In most cases the Roman remains are well protected by thick post-Roman settlement layers.

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<sup>1</sup> Raumordnungsgesetz (1997, last revision 2017).

<sup>2</sup> Landesentwicklungsplan Nordrhein-Westfalen (2016).

<sup>3</sup> Landesentwicklungsprogramm Rheinland Pfalz (LEP IV) (2008).

<sup>4</sup> Regionalpläne: Regierungsbezirk Düsseldorf (2018), Regierungsbezirk Köln Teilabschnitt Region Köln (2018), Regierungsbezirk Köln Teilabschnitt Region Bonn/Rhein-Sieg (2009); Regionaler Raumordnungsplan Mittelrhein-Westerwald (2017).

<sup>5</sup> Wet ruimtelijke ordening (2018).

<sup>6</sup> Structuurvisie Infrastructuur en Ruimte (2012). In June 2019 a draft has been presented of the National Environmental Vision [Nationale Omgevingsvisie], a memorandum which will replace the former document once the Environment and Planning Act [Omgevingswet] will enter into force in January 2021.

<sup>7</sup> Gelderland: Omgevingsvisie Gelderland (2018). Utrecht: Provinciale Ruimtelijke Structuurvisie 2013-2028 (revised 2016). Zuid-Holland: Visie Ruimte en Mobiliteit (2014; revised 2018).



At first sight overbuilding of archaeological sites may be seen as a threat to the underground remains, but there are many instances where it has protected the sites against later erosion. At Utrecht-Domplein ► 15, for instance, the Roman fort has survived in a good condition thanks to the accumulation of thick medieval occupation layers. At Nijmegen-Hunerberg ► 23 and Bonn ► 49 studies of the areas occupied by the legionary fortresses have demonstrated that on the whole only the cellars of modern buildings have destroyed the Roman remains, and that more than eighty percent of the overbuilt areas are sufficiently intact. Observations in built-up areas elsewhere point to similar conditions. In some cases, the layout of modern towns still reflects the underlying Roman remains, as at Neuss-Koenenlager ► 41, where the main road through the legionary fortress is still perceptible in the modern street plan.

Small-scale threats caused for example by the installation of power cables do not affect the Outstanding Universal Value, even if they involve some loss of the original substance. These interventions often take place where the archaeological substance has already been destroyed by previous similar interventions. More substantial interventions such as cellars or underground car parks are handled very restrictively, and rescheduling and shallow foundations are the normal implementation. All interventions within the nominated property require permission according to the monument protection laws and can only be carried out after approval by the responsible authorities, in accordance with the state and national heritage laws, and under archaeological supervision.

It is not always necessary to avoid building or rebuilding in protected areas, as long as the attributes of the Outstanding Universal Value are not affected. All underground works in the nominated property require permission according to the state and national laws on heritage protection. Damage to archaeological remains can be prevented or reduced to a minimum by so-called 'archaeology-friendly building'. This encompasses a broad range of measures including preparatory raising of the surface, adapting foundation plans and clustering underground infrastructure.

Many of the elements of Frontiers of the Roman Empire - The Lower German Limes have been scheduled monuments for decades and their protection by the judicial and administrative framework has been very successful. In agreement with the municipalities involved, the protection of the nominated property is also laid down in the management plan (sections B7 and C3).

#### *Industrial development*

Industrial development is largely confined to the periphery of cities. In Germany the planning of industrial areas is prepared for the long term and can be co-designed by the state conservation agencies. All underground works in the nominated property require permission according to the monument protection laws. At Krefeld-Gellep ► 40 the nominated property lies directly next to an industrial area that has been expanded in recent years. During this expansion, restrictive measures were developed for the future in cooperation of the LVR-State Service for Archaeological Heritage and the municipality of Krefeld.

In the Netherlands the planning of industrial areas is primarily a concern of the provinces, but the realization is often carried out at the level of the municipalities. All activities disturbing the soil are subject to the regulations of the national heritage protection law. At Valkenburg-De Woerd ► 2 the area covered by the component parts is foreseen to be developed into a small business park, but the plans will have to comply with the national

law on heritage protection. The component part Herwen-De Bijland ► 19 borders a small industrial area, but is designated for agricultural use in the current municipal zoning plan.

### *Traffic*

The expansion or new construction of roads and railway lines is difficult to forecast and to avoid. Each intervention requires the consent of the heritage protection laws and can only be implemented in accordance with these. In the area of existing infrastructure installations like railway embankments it is quite possible that the remains underneath are still very well preserved and protected.

Streets running through component parts do not harm the underground substance. Traffic passing over military installations and other structures (e.g. via country roads in Till ► 29 or a main road in Neuss ► 41) does not endanger the underlying structures. Exhaust gases do not damage the component parts at any point.

Railway lines that interfere with the substance do not occur within component parts. At Xanten-Fürstenberg ► 35, for example, it is easy to understand that the railway line is not included in the nominated property in the area where it cuts deep into the earth, but belongs to it further south, where, the railway lies above the archaeological findings in a protective manner. At Bunnik-Vechten ► 16 a main railway line has been included in the buffer zone.

### *Wind energy*

So far only two wind turbines occur in the immediate surroundings of the nominated property, in the buffer zone of Till ► 29. The visibility is not disturbed nor is the Outstanding Universal Value otherwise affected. In North Rhine-Westphalia wind turbines will not be allowed closer than 1,5 km to the nearest settlement in the future.

The problem of wind turbines at World Heritage Sites has received special attention in recent years<sup>8</sup>. At the time of writing, a 'Wind Energy Decree' is about to be published in the Ministerial Gazette of the State of North Rhine-Westphalia and thus to enter into force. The decree already makes it difficult to build new turbines within this zone.

There are no conflict zones with wind turbines in Rhineland-Palatinate and the Netherlands.

### *Major linear facilities*

At Bunnik-Vechten ► 16 a pipeline for aviation fuel is running immediately south of and parallel to the A12 motorway. Part of the pipeline was shifted southward during the extension of the motorway c. 1995, but only after excavation of the area to be destroyed. In case of a further southward extension of the motorway – which is not currently foreseen, but may be unavoidable at some point in the future – the pipeline will have to be shifted again. Both works require a permission under the national heritage protection law.

### *Agriculture*

Since Antiquity, the landscape along the Rhine has been well suited and used for agriculture and livestock breeding. Until recently these activities were not very detrimental to buried archaeological remains; the damage caused by ploughing with animal traction was limited. In the course of the 20th century, however, the threats posed by agricultural activities have

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<sup>8</sup> Deutsche Limeskommission (Hrsg.), Regenerative Energien und Welterbestätten. Workshop der Deutschen Limeskommission am 23. November 2011 in Düsseldorf. Beiträge zum Welterbe Limes. Sonderband 2 (Bad Homburg 2013).

increased: mechanical ploughing, intensive manuring, lowering of groundwater levels and artificial drainage have led to deeper disturbance of the soil and to degradation of metal objects and organic remains.

Ploughing can be a threat to buried remains. In very small areas at Kalkarberg ►30 and Xanten-Fürstenberg ►35 erosion through ploughing downhill is occurring. In the last decades more and more strategies have been developed by the farmers to reduce erosion and to improve the structure of the topsoil, especially by greening. Particularly in places where there is a risk of erosion, greening is often used and little ploughing is done. Sustainable land use is financially supported by the European Union. In general, ploughing is being abandoned more and more. A general objective is to convert arable fields into grassland. Ploughed areas are intensively monitored. A policy of providing farmers with detailed information will increase the awareness of the threats and possible solutions.

In the Netherlands, within listed archaeological monuments, grassland cannot be converted into arable fields without a permission under the national heritage law.

Intensive manuring, which contributes to the degradation of metal objects, receives more and more attention, both at a national level and at the level of the European Union, primarily for its adverse effects on drinking-water quality. More stringent directives will gradually reduce this type of threat.

#### *Forestry*

In all, five component parts/clusters are largely or entirely located in forests; these include mainly temporary camps and earthworks of an aqueduct. The remains of these structures are located at or above the present surface and are vulnerable to uprooting of trees and inadequate forest management. On the other hand the root systems of trees protect against erosion of earthworks consisting of sandy soil.

Four clusters of temporary camps lie in forest areas in North Rhine-Westphalia: Uedem ►32, Flüren ►33, Kottenforst-Nord ►50 and Kottenforst-Süd ►48. Explicit agreements have been made with the responsible foresters to avoid the use of heavy harvesting machines. Soil compaction must also be avoided.

#### *Quarrying*

Downstream from Xanten, where the Rhine has deposited sediment during periods of flooding, the extraction of clay for the production of bricks and tiles has been a disturbing factor over the past centuries. The impact on the landscape can be observed in digital elevation models of rural areas in the delta, but it also applies to some areas which were overbuilt after the clay extraction took place. The Limes road to the west of Utrecht-Veldhuizen ►12 was in many areas affected by this type of activity, which explains why these westerly parts were not included in the nomination. Clay extraction within the nominated property is now prevented by the laws for heritage protection.

In the past centuries, sand extraction by digging trenches has led to rather superficial damage and has only been attested at Utrecht-Groot Zandveld ►14. Large-scale industrial extraction of gravel and sand is obviously entirely destructive. It occurs mainly in point bars of former meanders, where settlement remains were already eroded by river activity. Attested cases are those of the successor of the legionary fortress of Xanten-Fürstenberg ►35, where the extraction is stopped and the area distinguished as a natural reserve, and of the – presumably – latest fort at Herwen-De Bijland ►19, at the bifurcation of the Rhine and Waal. In the area of the latter concessions have been granted in the past, and this will lead to extraction in the near future. These will, however, take place in an area where only

washed-out Roman remains are expected and which has been placed in the buffer zone. The works will be carried out under archaeological supervision, to collect relevant information and finds.

## **(ii) Environmental pressures**

### *Groundwater level reduction*

In the low-lying parts of the Netherlands the groundwater level has significantly fallen in the third quarter of the 20th century, by an increased extraction of drinking-water and intensified drainage of agricultural land. A growing awareness of the adverse effects of this development – e.g. drying out of nature reserves, subsidence of land, and subsidence of buildings by decay of timber piles – is currently leading to initiatives to mitigate or reverse earlier measures.

### *Climate change*

The global warming caused by climate change may cause the water level of the Rhine to rise, increasing the risk of flooding of the nominated property in the future (cf. above). A warmer climate or higher water levels do not harm the organic deposits that are part of the Outstanding Universal Value.

### *Air pollution*

No elements within the nominated property are endangered by air pollution. Underground remains in rural or urban areas are not affected. The aboveground wall remains of Haus Bürgel ►43 are also not exposed to any danger as no car traffic passes along. Its location in a nature reserve and its function as an education and information centre for nature conservation offer additional protection. The component parts Utrecht-Domplein ►15 and Köln-Praetorium ►45, located in city centres, are well protected by their integration into underground museums, where they are not exposed to exhaust fumes.

## **(iii) Natural disasters and risk preparedness**

### *Flooding and river erosion*

River erosion has been countered in the past centuries by the construction of dikes and river bank consolidations. These measures cannot provide a full protection against flooding and erosion, however. As any lowland riverine landscape the Rhineland is still exposed to flooding in extreme conditions. On the whole, flooding is not a major threat, as it normally results in sedimentation, providing a protective layer of sand or clay. Bursting of dikes and other bank consolidations is more of a threat, but its erosive impact is only very local.

The Lower German frontier is internationally renowned for its excellent preservation of organic remains, which is an effect of its position in a lowland riverine landscape. However, the dynamics of the river Rhine have also led to erosion in some areas. The river has remained very active in the medieval and early modern periods, in most of its course below Bonn. Areas particularly affected by river migration are those (i) from Dormagen ►44 to Moers-Asberg ►38, (ii) near Xanten-Fürstenberg ►35 and Xanten-CUT ►34, (iii) from Kleve-Keeken ►27 to Arnhem-Meinerswijk ►18 and (iv) approximately halfway between Arnhem-Meinerswijk ►18 and Bunnik-Vechten ►16.

In Germany the current exposure to flooding is expressed by the Jahrhunderthochwasser (one-hundred-year flood) zone, which encompasses all areas at risk of a 1 in 100 year flood (i.e. an annual chance of 1%). Component parts/clusters located inside this zone (i.e.

exposed to flooding) are Kleve-Keeken ► 27, Till ► 29, Kalkar-Bornsches Feld ► 31, the harbour area at Xanten ► 34, Duisburg-Werthausen ► 39, Haus Bürgel ► 43 and Köln-Deutz ► 46. With the exception of Haus Bürgel ► 43, all the mentioned sites are separated from the active river by dikes and other protective constructions.

In the Netherlands the coastal dunes and primary dikes protect against water levels which may occur with chances varying from 1/300 to 1/10,000 per year (i.e. an annual chance of 0.3-0.001%). The areas which are affected if these water levels are exceeded cover approximately sixty percent of the Netherlands. Component parts (or clusters) located outside these risk areas (i.e. not exposed to flooding) are those in Leidschendam-Voorburg-Arentsburg ► 3, Leiden-Roomburg ► 5, Utrecht-Hoge Woerd ► 13, Utrecht-Domplein ► 15 and Nijmegen and Berg en Dal (► 21 - ► 26). The only component part located outside – and thus not protected by – the primary river dikes is Arnhem-Meinerswijk ► 18. Since it has survived centuries of periodic flooding by the Rhine it may be assumed that the risk of degradation by flooding is minimal.

#### *Earthquake*

The sites from Remagen to Neuss in Germany are located in area 1 of the DIN EN 1998-1/NA:2011-01 earthquake zones. In area 1 there is a risk of 10% in 50 years of the occurrence of an earthquake with an intensity of 6.5-7.0 on the European macroseismic scale (EMS-98), characterized as 'slightly damaging'. The expected magnitudes do not pose a substantial risk to the nominated property with its nearly exclusively underground remains. The sites downstream from Neuss, including those in the Netherlands, are all located outside earthquake risk zones.

For some time, a crack in the walls of Köln-Praetorium ► 45 was thought to have been caused by an earthquake, but this supposition is now rejected by seismologists. It was caused by the unstable building ground and subsidence in the soil.

#### **(iv) Other factors**

##### *Metal detecting*

In Germany metal detecting is on the one hand considered as a threat to archaeological sites, on the other hand a responsible use of metal detectors also by amateurs can contribute to our understanding of the past. In North Rhine-Westphalia metal detecting is only possible with a permit in compliance with par. 13 of the monument protection law: the permit only allows metal detecting in the disturbed topsoil, but listed monuments, meadows and forests are excluded beforehand. In order to reduce illegal metal detecting the state authorities have produced an information brochure which has been widely distributed and is available online. In Rhineland-Palatinate metal detecting is only possible with a permit in compliance with par. 21 of the state law for heritage protection.

In the Netherlands metal detecting is increasingly seen as contributing to the general knowledge of archaeological sites, as demonstrated by the academic programme Portable Antiquities of the Netherlands, which records and studies finds of metal objects by private collectors. Metal detecting is permitted, but not on listed monuments – which extends the prohibition to the nominated property – and not deeper than 30 cm below the surface, to mention the most relevant restrictions.

#### **(v) Responsible visitation at World Heritage Sites**

So far, no damage has been caused to the sites by excessive visitor numbers. The intensity of the visit depends strongly on the preservation and representation of the site. The flow of

visitors to places in museums can be easily controlled and none of the existing facilities has reached the limits of their capacity. The numbers of visitors for museums are listed in table 4.7. The well-preserved stone walls of Köln-Praetorium ► 45, Haus Bürgel ► 43, Elst-Grote Kerk ► 20 and Utrecht-Domplein ► 15 have been integrated into museums, through which the flow of visitors is directed and the substance is protected. In all areas solid tour walks enable visitor management without affecting the original layers.

Visitors to the LVR Archaeological Park Xanten (APX) do not pose a high risk to the monument's substance. The registered and enhanced archaeological monument is well protected by remaining in the soil. It will only be partially restored and excavations are carried out only with regard to specific research questions. The majority of visitors to the APX use the modern routes. All exhibition areas, partial and full reconstructions as well as protective buildings with an increased visitor frequency are under surveillance by trained staff during the entire opening hours of the park. In addition to that, the majority of visitors take part in guided tours through the park.

Original structures are only visible in a few places, for example at the large thermal baths, in the craftsman's house B or in the pavilion 'Window into the past'. At all these points, the visitors are guided on modern footbridges along, beside or over the archaeological remains, separated by a railing or handrail; direct contact is therefore not possible. In addition, the findings are protected from the weather by roofs and protective buildings. Some remains of original ancient walls are built up with so-called 'sacrificial layers' (Opferschichten), which are intended to protect the underlying structures with the archaeological substance. These sacrificial layers are partly accessible to visitors, e.g. in the area of the outdoor facilities next to the large thermal baths, or next to the Roman hostel. 'Open' sections of the Roman street canals are secured by railings, thus preventing direct access by visitors. Damage to the original monument substance can in any way only occur with intent, i.e. under vandalism.

## 5 Overall monitoring and reporting to WHC

### 5.1 Monitoring

Permanent monitoring of the nominated property is essential for its preservation. The most important task is to closely monitor the state of conservation as well as possible threats that could harm aspects of the Outstanding Universal Value.

Monitoring is primarily the responsibility of the monument preservation agencies in Germany and the Netherlands, but it is coordinated by the joint management organization (MG-LGL) and supervised by the joint Intergovernmental Committee (IGC-LGL). In the first management period common strategies for monitoring, conservation and protection will be developed.

#### KEY INDICATORS FOR MEASURING STATE OF CONSERVATION

The monitoring indicators and methods which will serve to assess the state of conservation and its development are listed in table XX. A first group of indicators (1) concerns the preservation of the integrity, that is of the physical condition of the component parts. A second group (2-4) is related to the risk factors which have been addressed in section 4.b.

*Table 2: Key indicators for measuring the state of conservation.*

no	indicator	method	periodicity	responsible authorities & location of records
1	integrity			
1a	state of conservation of aboveground remains	visual inspection; hygrometer	annually	responsible monument preservation agencies; museums
1b	state of conservation of buried remains	visual inspection and aerial reconnaissance	annually	responsible monument preservation agencies
1c	state of conservation of buried organic remains	coring (oxidation/reduction, sulphide, calcium)	5 years	responsible monument preservation agencies
1d	erosion, integrity of topsoil sediment cover	visual inspection; airborne laser scan	annually; 5 years	responsible monument preservation agencies
1e	damaging vegetation	visual inspection	annually	responsible monument preservation agencies
1f	illegal metal detecting or excavation	visual inspection	in case of event	responsible monument preservation agencies
1g	ploughing (here, or as 2e?)	visual inspection	continuously	responsible monument preservation agencies



2	development			
2a	urban and industrial develc	spatial planning processes and visual inspection	continuously	responsible monument preservation agencies
2b	infrastructural developmen	spatial planning processes	continuously	responsible monument preservation agencies
2c	expansion of extraction are	spatial planning processes and visual inspection, aerial reconnaissance	continuously	responsible monument preservation agencies
2d	change of land use	spatial planning processes / visual inspection	continuously	responsible monument preservation agencies
3	climate and nature			
3a	flooding, earthquake	visual inspection	in case of event	responsible monument preservation agencies
3b	groundwater level	data check	5 years	responsible monument preservation agencies
4	visitation & facilities			
4a	number of visitors	visitor counting	annually	museums / responsible agencies/associations
4b	condition of protective buil	visual inspection	annually	museums / responsible agencies/associations
4c	condition of reconstruction marked out structures	visual inspection	annually, in advance of events	responsible monument preservation agencies; responsible museum
4d	safety for visitors	visual inspection	annually, in advance of events	responsible museum; owners
4e	condition of panels / signs	visual inspection	annually	responsible monument preservation agencies; museums

## 5.2 Periodic Reporting to the WHC

The monitoring provides input for the periodic reporting, which in principle takes place every six years. On the basis of the measures recorded in the above-mentioned databases, the questionnaires will be completed by the MG-LGL in cooperation with the site managers.

The results of the monitoring and reporting will be used for reflecting on the objectives of this management plan and – where needed – define new or additional objectives.



# **MANAGEMENT PLAN**

## **PART II**

### **LOWER GERMAN LIMES IN THE NETHERLANDS**

# 1 Objectives

Drawing on the longer-term vision (part I) and the management strategy, medium-term objectives have been identified to meet the longer-term aims. These medium-term objectives will form the core management of the Frontiers of the Roman Empire – The Lower German Limes WHS for the six-year period between 2021 and 2027.

## Objectives 2021 -2027

- I. *The Lower German Limes is sustainable protected. Researchers and governments work together on preservation and knowledge development.*
  - The involved governments act in accordance to the management plan. Where needed for sustainable protection, extra protection measures for properties and buffer zones are taken.
  - For the component parts, individual management plans will be developed.
  - The scientific knowledge of the LGL will be enlarged. A joint research strategy will be developed in order to ensure a better understanding of the Limes as a whole and the protection of the Limes, and partners will work together on the dissemination of scientific knowledge.
- II. *The Lower German Limes is known and acknowledged as a transnational structure within both counties and abroad."*
  - Partners will work on a joined communication strategy reflecting the transnational character of the Frontiers of the Lower German Limes, that will be used in international communication and be integrated in the national communication strategies.
  - A common interpretation framework and common standards for guidelines for on site presentation will be developed.
- III. *The Lower German Limes is part of the Frontiers of the Roman Empire. At FRE level there is alignment with regard to preservation, interpretation, research and public access.*
  - International exchange of knowledge between partners of the FRE will be facilitated and strengthened where needed. Partners will explore the possibility to develop joined projects on the field of preservation, research, public access and interpretation.
  - The partners will establish joint monitoring and evaluation standards.
- IV. *The Lower German Limes is used as an educational resource in primary and secondary education.*
  - More attention will be paid to the Dutch-German Limes in primary and secondary education, with a focus on greater awareness of the Lower-German Limes as a valuable historical structure linked to the core values of UNESCO.
  - In cooperation with the German partners an education strategy will be developed, integrating the existing offer into a coherent educational program.

V *Frontiers of the Roman Empire – The Lower German Limes is known as a structure that stretches along the Rhine, running through both countries. This structure accompanied by high quality presentations (museums/landscape) and used for leisure and as a tourist destination.*

- Within the joint communication approach, agreements are made about the marking and signage of the Limes in the outdoor area.
- There is an improved product offer for the different target groups
- High quality presentations accompany the Lower German Limes
- There is a stronger link between the presentations in the museums and the monuments.

VI *Frontiers of the Roman Empire – The Lower German Limes is a source of inspiration for the local environment/communities. The residents are proud of the presence of the historical frontier*

- Develop new and strengthen existing partnerships between regional and local stakeholders (capacity building)
- Third-party initiatives to promote the Limes in their public expressions are encouraged and facilitated.

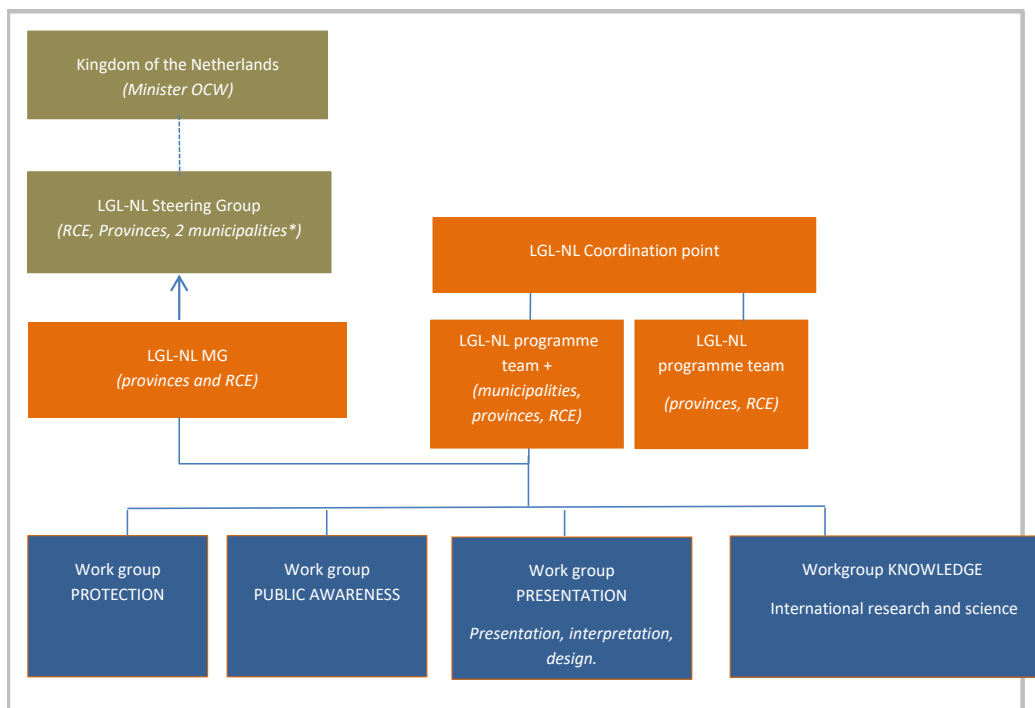
## 2 Management organization in The Netherlands

### 2.1 Management organization

#### Structure

Part I gives an overview of the overarching management structure and explained how the site managers of both countries cooperate on a transnational level and how the decision-making takes place level. This section sets out the roles and responsibilities of those involved in the management of the Lower German Limes WHS within the Netherlands. The core of the site management is the existing cooperation between the three provinces. Together they form the **site manager** and work in close cooperation with the Cultural Heritage Agency, municipalities and other partners who take an active role in day-to-day management and the diverse range of stakeholders who have an interest in the Site.

The management structure for the Dutch Part of the Lower German Limes is based on the following starting point: Organize bottom-up, coordinate top down. In addition, the approach is that site management performs a coordinating, supportive and facilitating role to other partners. In the past period, the number of ambassadors of the Limes has grown. It is desirable to have this shared ownership also reflected in the organisational structure – without losing the strength of a small organisation. The chosen is therefore for a network organisation – where the formal site manager collaborates with various public and private parties to jointly shape the management assignments for the coming period.



*The management structure in the Netherlands*

## Steering Group

The Steering group is ultimately responsible for the management of the World Heritage in the Netherlands. The Steering includes one representative of each of the three provinces, the State and two representatives from municipalities. This includes representation of an urban and rural municipality, which rotate every number of years. Tasks of the steering group are setting out long term objectives, giving direction to the implementation of the management tasks, approving the working plans and budgets of the work groups the coordination point and managing risks. The steering group is also responsible for arranging budget and means needed for the execution of the management plan.

The Steering Group is prepared by the **management group**, that consist of managers of the three provinces and state.

## Coordination point

The scale and complexity of the Lower German Limes WHS, with both national and international involvement, requires there to be a strong degree of co-ordination between the partners. During the period of preparing the nomination, a Lower German Limes Co-ordinator was appointed by the provinces Gelderland, Utrecht and Zuid-Holland to co-ordinate the preparation of the nomination and multiple projects to increase public awareness.

In the management structure for the future world heritage site, this coordination point will be continued. Responsibilities are keeping an overview of management of the Lower German Limes as a whole, ensuring alignment with international developments, managing and facilitating the various meeting for the Steering Group and the programme teams, setting clear outlines for the work of the four work groups. This co-ordination function is an important one: bringing together the work of the International Partners; maintaining and enhancing relationships with other organisations and individuals who have an interest in the management of the WHS; and ensuring that all stakeholders are aware of the importance of the Site and feel they can contribute effectively to its management.

Projects between national partners will to benefit from central co-ordination, ensuring that there is an overall awareness of the achievements and progress being made with Management Plan objectives. The benefit of having a single point of contact for managing the 'front end' of the WHS, such as public enquiries and community engagement; general administrative duties, is central to the effective management of the Site. Dedicated co-ordination supports partner organisations and facilitates a single approach to key matters. Effective co-ordination also enables work of much of the day-to-day requirements as set out by UNESCO: these include producing monitoring reports and further versions of the Management Plan.

## Programme team

The **programme team** consists of official representation of the three provinces and the Cultural Heritage Agency. This team meets four times a year. The programme team is the link between the coordination point and its own organisations. The members of the core team ensure alignment with other disciplines within their own organizations and the Provincial Executive. They advise in the preparation of



decision-making for the steering group. The provincial members are also the first point of contact for relevant partners from their own province. Within the provinces, networks have already been established that serve as a marketplace for bottom-up initiatives. The intention is to continue this. Resources are reserved for this.

The **programme team +** consists of the core team supplemented by official representation of the municipalities concerned. This programme team + meets twice a year and has an important consultative role in the preparation of the decision-making process by the Steering Committee and provides input for the implementation of projects.

#### Four work groups

A key element for the implementation of the management are the four work groups, that responsible for the implementation of the themes Protection, Research, Public Awareness and Presentations. Within these work groups governments and/or other stakeholders cooperate to implement actions within the framework of the management plan. Where needed, the work groups also cooperate with international partners.

The **protection group** will be formed with those government responsible for the day to day protection, being municipalities and the state service. Key tasks are sharing best practices, preparing management plans for individual sites and monitoring the site.

The **knowledge group** will be formed, with representatives from the state service, universities, municipalities and other relevant organisations. This group will be responsible for developing a research strategy to better understand the Lower German Limes, identify gaps in existing knowledge, and identify potential research themes. The Research Strategy will be connected to the NOaA (National Research agenda on archaeology) and other relevant research projects on archaeology. This will give the greatest value and avoid duplication of effort whilst ensuring relevancy.

The work group that deals with **public awareness**, is responsible for the development of products improving public awareness with the wider public and the development of education strategy and including products. At the moment of nomination, a cooperation of three regional heritage agencies and Romeinen.nu is responsible for capacity building and communication {XX}. Through annual network meetings for all partners, excursions and learning session, cooperation's between partners supported, best practices are exchanged, and new projects are initiated. In the management organisation this partnership will be continued and strengthened and will form the baseline for the work group responsible for projects relating to public awareness

The work group **presentation** is an independent advisory board that advises museums, governments and local communities on improving presentation and interpretation on site and formed of independent professions such as archaeology and landscape design.

## 2.2 Partners

In the day to day management of the Lower German Limes in The Netherlands many stakeholders are involved with different responsibilities. Governments, play an important role in the protection, conservation (chapter 3), research and on-site presentations. Non-governmental organisations are often leading in projects relating to interpretation and visitor experiences, such as new exhibitions or local events.

An overview of the partners is given in figure X. In the management organisation and the work groups, it is aimed to involve these partners as much as possible in management of the Lower German Limes and product development.

	<b>Organization</b>	<b>Task / responsibility</b>
<b>Governments</b>	Ministry of Culture Education and Science	Policy Cultural Heritage Protection Monuments
	Cultural Heritage Agency	Protection Monuments UNESCO Focal Point Research and monitoring
	Provinces (Utrecht, Zuid-Holland, Gelderland)	<b>Site manager</b> Policy Cultural Heritage Spatial Planning Tourism & Leisure Regional infrastructure Ground water management
	Municipalities	Policy Cultural Heritage Spatial Planning & permits Education Ground water management Tourism & leisure Enforcement
	Water boards	Ground water management
<b>NGO's</b>	Regional Heritage Organisations	Education Public awareness
	Museums and visitor centres	Product development On site presentations Education Leisure
	Universities	Research Education
<b>Tourism &amp; Leisure</b>	Regional Tourism Agencies	Product development Promotion
	Wandelnet (National Hiking Board)	Long distance hiking trail
	Fietsplatform (National Biking Board)	Long distance biking trail
<b>Volunteer organisations</b>	AWN	Research
	Romeinen.nu	Public awareness Events
<b>Private companies</b>		Product development Research (archaeological companies)
<b>Owners</b>	Governments, NGO's, Private.	Land use

## 3 Protection and conservation

### 3.1 Standards: Principles for planning and conservation

#### Principles

The basic principles for the protection and conservation of the Lower German Limes in the Netherlands are:

- Sufficient protection by the state, provinces, municipalities and water boards.
- Careful consideration process for developments on and in the immediate vicinity of the site (buffer zones)
- Clear procedures and responsibilities
- Clear agreements about how to deal with unforeseen situations and risks(escalations).

#### Protection of component parts

The conservation of the component parts in the Netherlands is in most cases arranged by protection as a national archaeological monument (Heritage Act). The working of this act is explained in paragraph 3.3. For component parts not protected as a national archaeological monument, protection through the planning system is acceptable, but only in those cases where it is attested that disturbing activities can be ruled out by the planning regulations. By setting out regulations that require permits for all activities that could harm the archaeological values, municipalities can protect the Outstanding Universal Value. In case of densely populated areas that have not been protected as an archaeological monument in the past, protection through the planning system is more feasible and can have the same effect. In case of Frontiers of the Roman Empire - The Lower German Limes, Nijmegen-Hunerberg will be protected through the planning system.

#### Buffer zones

The protection of the buffer zones is regulated by the provincial Environmental Ordinances and the municipal land-use plans (to be replaced by environment plans under the new Environment and Planning Act, as of 1-1-2021). The protective regulations pose limits to the horizontal and vertical extent of disturbing activities which may be carried out without a formal permit granted by the competent authorities. The regulations provide an opportunity to promote fewer damaging alternatives or to enforce prior archaeological research conform the highest scientific standards, recording the preserved archaeological information in order to enhance the understanding of the attributes and values included in the neighboring component parts. The land-use plans generally prohibit disturbance of the soil exceeding a surface of 100 m<sup>2</sup> and a depth of 30 cm, but currently the norms differ between municipalities and between different areas within municipalities. It is aimed to review the current regulations in the land-use plans during the first management period, and where needed adjust current regulations to a maximum of 100 m<sup>2</sup> / 30 cm, with less stringent norms only allowed if their applicability has been attested by archaeological research.

### 3.2 Regulations

#### International regulations

For the protection lower German Limes multiple conventions, regulations and charters, that have been adopted by The Netherlands are relevant. An overview of these regulation given in figure XXX. The regulations are integrated in the Dutch national legislations and will be followed in the management of the Frontiers of the Roman Empire-Lower German Limes WHS.

**Conventions, regulations and charters**

The Hague Convention (1954)  
 London Convention (1969)  
 UNESCO Convention (1970)  
 World Heritage Convention (1972)  
 Granada Convention (1985)  
 The Valletta Convention (1992)  
 UNIDROIT Convention (1995)  
 Florence Convention (2000)  
 Faro Convention (2005)  
 New Delhi Recommendation (1956)  
 Venice Charter (1964)  
 Washington Charter (1987)  
 Lausanne Charter (1990)  
 Nara Document (1994)

**National regulations**

At the moment of nomination, a transition is going on from within the protection. Starting January 2021 protection of the Lower German limes will take place through the Environment and Planning act and its relating legal instruments and the Heritage Act, that has already entered into force in 2016.

***Heritage Act [Erfgoodwet]***

<b>Heritage Act arranges:</b>	<b>Environment and Planning Act arranges:</b>
<ul style="list-style-type: none"> <li>▪ Rules regarding depots for archaeological finds</li> <li>▪ Rules regarding archaeological finds</li> <li>▪ Funding for the preservation of built monuments</li> <li>▪ Certification of archaeological contractors</li> <li>▪ Prohibition of excavations without permits</li> <li>▪ Rules and procedures regarding appointing of archaeological monuments</li> </ul>	<ul style="list-style-type: none"> <li>▪ Permitting in case of archaeological monuments (this may also concern refusing a permit)</li> <li>▪ Rules regarding the shutdown of activities in case of accidental archaeological finds</li> <li>▪ The obligation of taking cultural heritage into account in environmental plans</li> </ul>

*Table XX Protection of archaeological monuments in the Heritage Act and the Environmental Planning Act.*

The Heritage Act [Erfgoodwet] regulates the designation and the preservation of archaeological monuments. Specific provisions relating to archaeological conservation that are not directly or not exclusively related to the physical environment are included in the Heritage Act. This concerns the regulations regarding the designation of archaeological national monuments, the provision of subsidies, regulations regarding excavations, a reporting obligation for archaeological finds, the ownership of archaeological finds and archaeological depots.

The Heritage Act provides the legal basis for the designation of national archaeological monuments by the Minister of Education, Culture and Science.

Under the Heritage Act it is prohibited, without a certificate, to carry out actions involving the detection, investigation or acquisition of archaeological monuments, or parts thereof, which result in disturbance of the soil, disruption, total or partial displacement or removal of the archaeological monument (Heritage Act, section 5.1). In an Order of Council an exception to this rule is made for searching with a metal detector, on the provision that the soil is not disturbed for more than 30 cm below the surface; this exception does not, however, apply to

listed monuments (*Besluit Erfgoedwet archeologie, 8 april 2016, art. 2.2*), and thus not to the component parts of *Frontiers of the Roman Empire - The Lower German Limes*.

### **Environment and planning act**

The Environment and Planning Act is the national law that provides a legal framework for the rules relating to land-use planning, environmental protection, nature conservation, construction of buildings, protection of cultural heritage, water management, urban and rural redevelopment, development of major public and private works, mining and quarrying. It defines the tasks and responsibilities of the administrative bodies within the planning system, the use of land and the effect of various sectoral legislations. The Environment and Planning Act has been adopted in 2016 and integrates numerous sectoral laws, including the Water Act and the Spatial Planning Act. The Environment and Planning Act will enter into force in January 2021. A key instrument of the Environment and Planning Act is the National Environment Vision, that sets out the national goals and ambitions, including the goals relation to cultural heritage.

In order to implement the National Environment Vision four instructional rules have been established. For the Lower German Limes, the Living Environment Quality Decree [*Besluit kwaliteit leefomgeving*] and the Living Environment Activities Decree [*Besluit activiteiten leefomgeving*] arrange regulations that safeguard the OUV on a national level.

#### **Regulations regarding the Lower German Limes in the Living Environment Quality Decree:**

##### *Article 7.3*

*The Roman Limes is the location known as a series of archaeological monuments concerning the former Roman frontier, which runs from Katwijk aan Zee to the border with Germany over the territories of the provinces of South Holland, Utrecht and Gelderland, the geometric boundaries of which were laid down by ministerial decree.*

##### *Article 7.4*

*The key attributes of World Heritage and heritage on the Tentative World Heritage List, referred to in Article 7.3, are the essential characteristics of the existing landscape and cultural heritage outlined in Annex XVII in the interest of preserving the outstanding universal values of world heritage.*

#### **Regulation regarding World Heritage in the Living Environment Activities Decree:**

##### *Article 14.9*

*Anyone who carries out an activity relating to World Heritage and knows or may reasonably suspect that this activity may lead to the damage or destruction of World Heritage or a part thereof, is, insofar as it affects the Outstanding Universal Value, obliged to take all measures that could reasonably be expected to prevent this damage or destruction.*

## **Regional regulations**

On the provincial level, an Environmental Vision defines the spatial policy of the provinces. It describes the goals to be achieved, the policy that aims to achieve these goals and the instruments intended for implementation. Protecting the existing landscape and heritage values constitutes a predominant part of the ambition. The structure plan is a self-binding document, meaning it can only bind the province itself; in order to bind other parties regulation needs to be put into place. Hence the environmental vision plan is accompanied by an Environmental Ordinance, that will take into account the instructional rules set out on the national level.

Province	Document	Year (check nodig)
PROVINCE OF SOUTH HOLLAND	Environmental Vision [Omgevingsvisie Zuid-Holland]	2019)
PROVINCE OF SOUTH HOLLAND	Environmental Ordinance [Omgevingsverordening Zuid-Holland]	(2019) Of 2020/21 ??
PROVINCE OF UTRECHT	Environmental Ordinance [Provinciale ruimtelijke verordening 2013] (2016) (PRV)	(2016)
PROVINCE OF UTRECHT	Environmental Vision and Environmental Ordinance	2021
PROVINCE OF GELDERLAND	Environmental Ordinance [Omgevingsverordening Gelderland] (2018)	(2018)

*Overview of the relevant regional regulations (valid from 1/1/2021)*

## Water regulations

Water level maintenance is covered by the Water Act [Waterwet], which places much authority in the hands of the water boards, which are supervised by the provinces. The Dutch component parts are divided over five regional water boards. For those component parts where organic material is part of the Outstanding Universal Value, a sufficient groundwater level is essential for maintaining the quality of the sites. Under Article 5 of the Water Act regional water boards can issue a water level decision [peilbesluit]. This is a legal document in which a water board lays down the water levels that it maintains within a certain area. In managing the ground water level, water boards follow the functions as laid down in the environmental vision.

## Municipal regulations

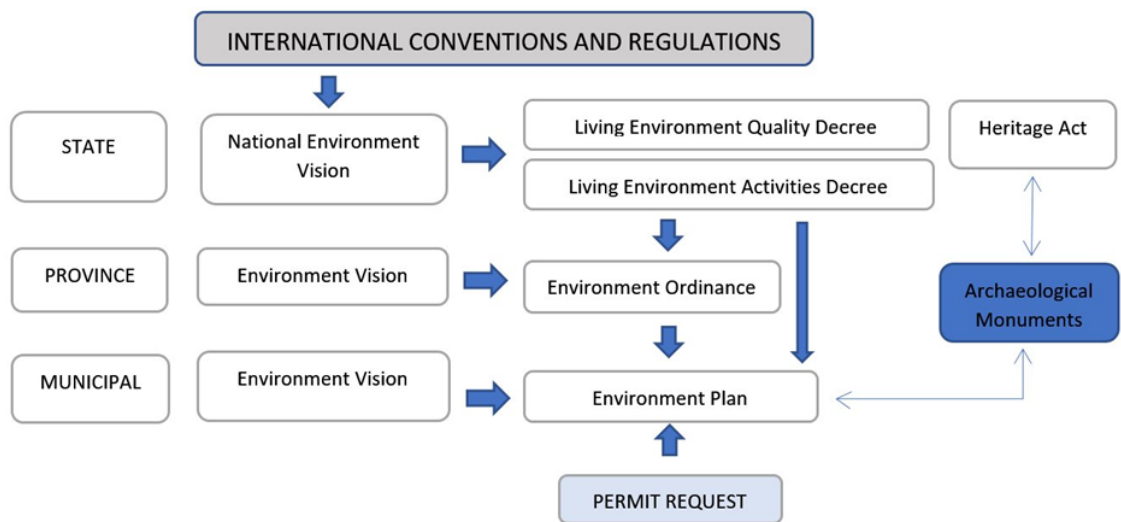
Under the current Spatial Planning Act [Wet op de ruimtelijke ordening] the municipal authorities specify the designated use of sites in land-use plans [bestemmingsplannen]. The municipal land-use plan sets out rules and preconditions for land-use within the municipality and constitutes an important instrument for protecting existing and expected archaeological values. Municipalities are obliged to integrate archaeological policy in their land-use plans. The municipal land-use plan is legally binding. It designates land-use and constitutes the legal basis for granting permits for developments. For this reason, protective measures have to be established in these municipal plans. Rules set out in general Orders in Council at the national level and provincial ordinances have to be integrated in these municipal land-use plans.

Under the new Environment and Planning Act, municipalities have to develop a self-binding environment vision and legally binding environment plan, that integrates spatial planning with sectoral regulations. Where under the existing legislation listed archaeological monuments are not integrated in the land-use plans, the new Environment and Planning act requires that a listed archaeological monument is integrated in these plans. Existing land-use plans will remain in force until the municipalities have replaced it with an environment plan. During the transition phase the protection of the monuments will be safeguarded.

Besides the existing land-use plans and the new environment plan and vision, municipalities can develop self-binding programmes and policies, for instance in the fields of tourism, education, culture, etc. These policy documents often constitute the backbone of the environment vision, plan and local budget planning.

### 3.3 Working of the legal system

Based on the legal system, any activity that changes or disturbs a listed archaeological monument requires a permit from the Minister of Education, Culture and Science. This permit is issued on behalf of the minister by the Cultural Heritage Agency. Under the new Environment and Planning Act the process on permitting is placed under the authority of the municipalities. When a permit for any building or ground working activity on a listed monument is requested, the municipality is the competent authority, but the Minister of Education, Culture and Science does hold an advisory role with the right of consent when granting a permit; a municipality cannot deviate from this advice.



*Overview working of the legal system*

Not all activities require a permit: a limited number of activities listed in the inscription document of the archaeological monument – such as normal maintenance or activities in the disturbed upper layer of the soil and maintenance of underground infrastructure– are excluded. For each monument the depth of known disturbance is determined, based on archaeological knowledge. For the component parts this depth varies from 0-50 cm, with the exception of Herwen-De Bijland, where the Roman remains are positioned deeper thanks to the deposition of a thick layer of post-Roman river sediment. For activities within this depth range, a permit is not needed.

The land-use plan (from 2021 onwards the environment plan), provides the legal basis for the assessment of applications submitted by initiators of developments such as building, disturbing activities or functional changes in land-use. Interventions requiring a permit include the (re)construction of sheds, houses or business premises, the construction of paving, the digging of trenches, (re)excavation or filling-in of ditches and canals, deep ploughing, the construction of drainage pipes, reduction of the groundwater level and conversion of grassland into arable land, (glass) horticulture, bulb-growing or fruit-growing. Superficial soil interventions such as garden work do not require a permit because they do not change or disturb the archaeological values.



For component parts not protected as a national archaeological monument, regulations are set out that require permits for all activities that could harm the archaeological values. In the more elevated areas where there are no peat soils, protection through the planning system is sufficient.

When drawing up and implementing spatial planning policies, municipalities are required to take account of archaeology (Valette Convention, cf. section 5.b.1) and of regulations set out on a higher government level such as the state and the provinces. In case of the Lower German Limes, the State has formulated an extra protection policy for the conservation of World Heritage Sites in general; this is binding at the provincial level. The provinces at their turn translate this policy into regulations for municipalities. In this way, the actual safeguarding of the Outstanding Universal Value of Frontiers of the Roman Empire - The Lower German Limes will eventually be ensured in a municipal land-use plan and environment plan.

### 3.4 Developments in and near the component parts

To safeguard the OUV of the Frontiers of the Roman Empire – The Lower German Limes, all the sites are sufficiently protected as described in paragraph 3.2. The starting point for the conservation is conservation "in situ" within the component parts.

In some exceptional cases, conservation "in situ" in the component parts will not be possible. A framework has been developed when and under what exceptional conditions an excavation could be possible and which procedures will be followed.

In the buffer zones there is an obligation to do research. Based on the outcome, a consideration can take place between conservation and development. The regulations regarding the buffer zones are laid down in the municipal zoning plans and environmental plans.

Development pressures	<p><b>Ambition: Conservation in situ in the component parts.</b></p> <p><i>Excavations are only allowed in those situations where:</i></p> <ul style="list-style-type: none"> <li>• There are no alternatives for the development in a way that the archaeological remains are not attested</li> <li>• There are no options for archaeological friendly development.</li> <li>• The development is of a higher societal importance.</li> </ul> <p><i>Preconditions</i></p> <ul style="list-style-type: none"> <li>• A reasonable effort must be undertaken eliminate or minimize negative effects.</li> <li>• De excavation must take place in alignment with the procedures as laid down in the "Kwaliteitsnorm Nederlandse Archeologie"</li> </ul> <p><i>Procedure</i></p> <ul style="list-style-type: none"> <li>• All excavations are reported in advance to the IGC. In the case that a development could be of influence in the OUV of the FRE-LGL as a whole, ICOMOS can be asked for advice.</li> </ul>
Scientific research	<p><b>Ambition: Non-destructive methods of investigation are applied wherever possible.</b></p> <p><i>Destructive research is possible:</i></p>

	<ul style="list-style-type: none"><li>• When of greater societal importance and when integrated in the international research strategy.</li></ul> <p><i>Preconditions</i></p> <ul style="list-style-type: none"><li>• De excavation must take place in alignment with the procedures as laid down in the “Kwaliteitsnorm Nederlandse Archeologie”.</li></ul> <p><i>Procedure</i></p> <ul style="list-style-type: none"><li>• The working group knowledge will establish a research strategy, including a framework for scientific research strengthening the goals of this MP.</li></ul>
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## 4 Presentation

### 4.1 Public awareness

The World Heritage status means a worldwide recognition of the special archaeological value. It also offers opportunities: it can strengthen the identity of an area or neighbourhood and it offers starting points for tourism and leisure. To validate these opportunities, various initiatives have been supported in the last years.

For the first management period, a number of priorities have been identified, focussing on museums, signing, communication, education and visitor management. It is aimed to develop these priorities in cooperation with the work group public awareness, local governments and other relevant partners.

#### Museums

Museums and visitor points along the Lower German Limes manage and present a large part of the archaeological collections that relate to the Lower German Limes. They have a large audience and thus make an important contribution to the broader understanding of the Limes and its historical significance.

There are several museums along the Limes in the Netherlands. In the Netherlands, these museums are often independent non-governmental organizations.

An overview of the museums along the Lower German Limes is given in table XXX. Museums provided with \* are located within a component part.

Museum	Relevance / focus
Rijksmuseum van Oudheden	Iconic finds & Canon of Dutch History
Openlucht museum Arnhem	Canon of Dutch History
Museum Hoge Woerd *	Iconic finds & Local history
Archeon / Scheepvaartmuseum	Experience & Iconic finds
Archeologiehuis Zuid-Holland	Archaeological backgrounds
Museum het Valkhof *	Iconic finds
Museum Kam	Archaeological backgrounds
DOMunder *	Experience & Archaeological backgrounds
Museum Dorestad	Regional
Centraal Museum	Archaeological backgrounds
Tempel   Kerk Museum Elst *	Local
Stadsmuseum Woerden *	Local
Museum Swaensteyn	Local
Ipse de Bruggen	Local

Waterliniemuseum *	Regional
Allard Pierson Museum	Archaeological backgrounds
Museumpark Orientalis	Experience
Torenmuseum Valkenburg *	Local
Baron van Brakel	Regional
Hof van Hessen	Local
De Bastei *	Local
Liemers Museum	Local
Streekmuseum Reeuwijk	Regional

One of the prime priorities for the first period of the management plan is to establish a formal co-operation between the various museums presenting objects and topics associated with the Lower German Limes and between these museums and the individual archaeological sites. In some cases, when museums are situated directly on site, the co-operation between museum and site is inherent. In fact, nine Dutch museums are housed in buildings located within component parts.

In 2018 a project was started exploring the possibility to develop one or more visitor hubs along the Lower German Limes, providing a gateway for visitors of the Lower German Limes, to introduce these visitors to the Outstanding Universal Value and the different sites. Based on the outcomes, it will be decided on how to further develop these hubs.

### Accessibility

Most of the Dutch component parts are in public areas, which makes them generally well accessible. In recent years, investments have been made by many partners at many of these sites to make the Roman history more visible. Parks have been developed with references to the Roman history, contours of forts are visualized, art works have been placed, etcetera. The underground remains can be seen at two locations: Elst and Utrecht Domplein.

Locations with a leisure or tourism potential, such as Museum Het Valkhof (Nijmegen), DomUnder (Utrecht) and Park Matilo (Leiden) are often provided with parking facilities or are easily accessible by public transport

A long-distance cycling route and a long-distance hiking trail have both been developed in 2018 and provide another way of accessing the Lower German Limes, challenging different visitor groups to visit the Lower German Limes and allowing visitors to take a different perspective and stimulating an environmentally friendly way of visiting the Lower German Lime

A small part of the sites is on private - partly agricultural - land. The grounds are not accessible. At these sites it will be examined whether it is possible to develop an information point about the site in the area. If the owners wish to make the site accessible, the possibilities will be explored in consultation with the authorities and other stakeholders involved, within the preconditions of the World Heritage.

In the first management period, a management plan will be prepared per component part/cluster to give a better insight into the visitor numbers, and whether the existing facilities are sufficient or extra facilities are needed.

## On site information

Most of the component sites are already provided with on-site information through information panels or other forms of presentations. Recognizable and up to date on-site information is essential for awareness and understanding of the Frontiers of the Roman Empire – Lower German Limes.

In cooperation with the German management organisation a guideline for on-site presentation will be developed to support a uniform and coherent signing. It is desirable to develop this signing not only for those archaeological monuments having OUV, but also for other sites that are part of the Lower German Limes, but not belonging to the property itself.

		landscape references	art works	information panels	digital visualiation	visitor centre /museum
1	Valkenburg-Centrum	•		•	•	•
2	Valkenburg-De Woerd					
3	Voorburg-Arentsburg			•	•	
4	Corbulo's canal		•			
5	Leiden-Roomburg	•		•	•	
10	Woerden-Centrum	•		•		•
12	Utrecht-Limes road	•	•	•		
13	Utrecht-Hoge Woerd	•		•	•	•
14	Utrecht-Groot Zandveld		•	•		
15	Utrecht-Domplein	•		•		•
16	Bunnik-Vechten	•		•		•
18	Arnhem-Meinerswijk	•		•		
20	Elst-Grote Kerk	•		•		•
22	Nijmegen-Valkhof		•	•		•
23	Nijmegen-Hunerberg	•		•		
24	Nijmegen-Kops Plateau			•		
25	Berg en Dal- aqueduct			•		•
26	Berg en Dal-De Holdeurn		•	•		•
19	Herwen-De Bijland		•	•		

### *Overview of on site presentations at the component parts*

## Digital resources

Digital technology can increasingly offer an improved visitor experience of cultural heritage. These techniques can have great added value, in particular as part of a broader public experience. The development and management of such products lies primarily with the heritage partners.

At the national level it is desirable to maintain a central point for visitors to gather information about the Lower German Limes. During the first management period, the working group engaged with public awareness will further develop this digital platform as a gateway to digital information about the Limes in the Netherlands.

It is desirable that a strong link will be made with the developed Archaeological map of the Netherlands, developed by the National Museum of Antiquities in cooperation with the Cultural Heritage Agency, that present all archaeological values in the Netherlands throughout the web.

Nationally and internationally, various digital applications have been developed to make the Limes easier to experience. At site level, it is possible to examine whether it is desirable to use

new digital applications, in line with the latest technological developments and specific target groups.

## Education

The Roman period and the Limes is part of the Canon of Dutch History: a list of fifty topics that aims to provide a chronological summary of Dutch history to be taught in primary schools and the first two years of secondary school in the Netherlands. In order to support schools and students, there is an education portal through which school and students are provided with education material for primary and secondary education. This portal is managed by the joint regional heritage agencies [Erfgoedhuizen] together with the organization RomeinenNU. The use of the education portal is monitored. Also, different educational programs about the Roman period and the Limes are offered at various museum.

During the first management period, it is aimed to further develop these products. The work group public will develop an education strategy and define projects to implement this strategy.

The existing offer in adult education is not yet in focus. The existing approach to Limes cicerones has been developed in Germany for this. Within the education strategy it will be explored how adult education can be implemented in the Netherlands (public working group).

## Communication

At the time of writing, the coordination of raising public awareness of the Lower German Limes lies in the hands of the joint regional heritage agencies [Erfgoedhuizen], one for each of the three involved provinces. Together with the organization RomeinenNU they maintain a website (<https://www.romeinen.nl>) which provides a central point for visitors to gather information about the Netherlands during the Roman period, with a focus on the Lower German Limes (including a special education platform), about the individual sites and museums that can be visited and about the World Heritage nomination process.

During the first management period, the working group engaged with public awareness will further develop the digital communication for different target groups, in order to inform the wider public and engage a large audience.

The management organisation strives for a shared responsibility for these activities by governments, public and semi-public institutions, private parties and individuals, who all have an interest in promoting the special values of the Frontiers of the Roman Empire - The Lower German Limes. Through partnerships and network meetings, partners such as local (volunteer) organizations, private parties and individuals are invited and stimulated participate in these activities and are encouraged to take initiatives themselves, in alignment with the communication strategy.

On a transnational level, an international logo has been developed for the Lower German Limes and during the first management period a joint communication strategy will be developed for communication about the Lower German Limes, including guidelines for the use of the Lower German Limes logo.

## Interpretation Framework

In 2016 an Interpretation Framework for the Dutch part of the Lower German Limes has been established. This Interpretation Framework identifies several interpretation lines of the Roman history along the Rhine and gives direction to the presentation of these storylines through spatial planning and through displaying material culture associated with the Lower German Limes at visitor points and museums.

The term 'framework' has been used very deliberately to describe a flexible approach which sets out guidelines to help local organizations to present the frontier through different forms of

presentation, supporting local partners to build or improve their presentations. It presents an overall thematic structure consisting of eight diverse themes relevant for interpreting the values of the Lower German Limes.

In 2017-2018 a pilot project was executed with two expert teams supporting local groups to implement the Interpretation Framework on site: one focusing on spatial planning and landscape design, the other on supporting visitor points and museums in improving their presentation. This approach has been evaluated and based on the outcomes of this evaluation a quality advisory group (work group presentation) will be formed as part of the new management structure to advise governments and institutions on their presentations of the Limes, outside and inside.

Additionally, for the first management period it is aimed to further develop the interpretation framework to an international framework for the entire lower German Limes, including guidelines for on- and off-site presentations.

## 4.2 Visitor management

### Leisure and tourism

At the time of writing there is a diverse range of products - workshops, apps, museums, routes. There is insufficient insight into the extent to which this product range meets the needs of the different target groups, if it is accessible and if it is balanced.

A visitor management plan can provide insight, can clarify the needs and identify opportunities to make the Lower German Limes better accessible for tourists and recreational users. During the first management period, a visitor management plan will be made including a strategy for the implementation of this visitor management plan.

At some international sites, overloading is a concern. This is currently not the case with the Frontiers of the Roman Empire - Lower German Limes.

### Marketing

In 2019, a logo and brand identity has been developed for the Lower German Limes in the Netherlands, aligning with the identity as defined in the interpretation framework. The logo will be used as a transnational logo in communication.

Marketing the Lower German Limes as a tourist destination is particularly promising as part of a wider destination (historic centre / museum), recreational activity (walking / cycling) or larger concept (World Heritage). The first step is to gain better insight in the existing offer and needs of target groups through a visitor management plan. Based on the outcome, it is aimed to carry out at least three geographically spread pilots in the 2020-2023 period to put the Lower German Limes for tourists and recreational users on the market. Based on the results, a more structured marketing approach will be developed.

These pilots will also seek cooperation with existing regional tourism organizations / agencies to see how the Limes can be included in the wider range. Cooperation opportunities with the Dutch national label "World Heritage.nl" will be investigated.

Part of the marketing is making agreements with providers about the use of the logo and the application within promotion and communication. The site manager manages the Roman Limes brand along with the UNESCO World Heritage logo if the status is granted. In 2020, clear frameworks will be established on logo and brand formation, including agreements on the implementation of the intended UNESCO logo.

## 5 Knowledge and research

### 5.1 Limes data

A lot of information is already available on the Lower German Limes. Currently that is spread over different locations. In the coming years, efforts will be made to improve access to this data via a central portal. Initially at the level of the Dutch German Limes and possibly at the FRE level in the long term. This is primarily about unlocking / linking what is already in existing systems and then keeping the portal up to date. This is task of the Work group Knowledge. The study group 'Nederrijnse Limes', consisting of Dutch archaeologists and specialists in the field of Limes, is an essential partner for the Working Group

### 5.2 Research concept

The National Archeology Research Agenda (NOaA) contains the most important research questions with regard to future archaeological research. Research theme 15 of the NOaA "The Limes: design and interaction", in combination with the research agendas at provincial, regional and municipal level, provides the framework for future studies of the Limes.

In recent years, new information has been unlocked through the elaboration of old, unpublished studies. Together with more recent excavations prior to spatial developments, these have yielded important new knowledge.

It is the task of the work group Knowledge to map the most important knowledge gaps and research questions with regard to the Dutch-German Limes and to provide information so that the aforementioned research agendas remain current. The goal is to prepare a research agenda for the entire Dutch-German Limes, all in collaboration. with the scientific partners of the German part of the LGL and the Bratislava group.

On the one hand, the focus will be on elaborating "old research". A number of important sites found in the past are still awaiting analysis and publication. Old data sets can also provide new information through new and better analysis methods. On the other hand, new information about the properties can be collected with non-invasive fieldwork, if necessary, for research, management or presentation. No small-scale excavations will be carried out unless this is of crucial scientific importance or if it can improve the understanding of the exceptional universal value; of course, only on condition that non-invasive methods prove to be unsuitable for this. The Working Group assesses in advance the consequences of the fieldwork for the integrity of the property. Invasive fieldwork is only permitted if a permit has been granted for this.



## 6 Realisation

### 6.1 Implementation

The management organization in the Netherlands will be financed by the three provinces of Gelderland, Utrecht and South Holland. These organizations made an agreement on long-term co-operation and to provide budget for the execution of the overall tasks related to management of Frontiers of the Roman Empire - The Lower German Limes in the Netherlands: general management, knowledge development, public awareness, visitor facilities and education. For the first four-year period a budget is reserved of 2. Million euro for the operation of these tasks. On a project basis, other stakeholders will be approached to participate and co-fund, in order to increase the impact.

The municipalities within the provinces of Gelderland, Utrecht and South Holland will perform their regular tasks needed for the conservation of the component parts on their own expenses. This includes preservation of the monument and law enforcement tasks.

The archaeological monuments are mostly owned by governments and private owners. Only a small number is owned by non-governmental organizations such as Staatsbosbeheer (land owner and manager of natural reserves). In most cases there are no specific costs related to the conservation of the sites, and the existing land-use can be continued. In cases where maintenance would be needed, national funding is available for maintaining the monument

#### *Budget for implementation of the management plan actions*

For the first four-year period, budgets have been reserved for the following projects. In all cases, it is needed to create co-funding by third parties.

- Communication and partnerships
- Education
- Work group presentation – quality board
- Knowledge and research
- Funding small projects
- Marketing: strategy and support of pilot projects

Projects that need third party funding

- Limes congress 2021
- Visitor Hubs

### 6.2 Staffing

Together the provinces South Holland, Utrecht and Gelderland constitute the management organisation of the nominated property within the Netherlands [Nederlandse Limes Samenwerking or Dutch Limes Association - DLA].

The human resources capacity will be available for carrying out the responsibilities of the management organizations tasks will be funded from the available budget. The coordination

point for Frontiers of the Roman Empire - The Lower German Limes includes:

- a programme manager of Frontiers of the Roman Empire - The Lower German

Limes

- An archaeological expert
- A programme staff member

Additionally, the partners provide

- a representative from each of the three provinces
- a representative of the National Heritage Agency

### 6.3 Participation and partners

#### *Work group protection*

The protection working group consists of representation of the authorities involved with the day to day protection of the component parts: the state service, municipalities and provinces. The deployment of this capacity is covered by these partner governments.

#### *Work group Public Awareness*

The work group Public Awareness will manage the development of products in the field of:

- Capacity building
- Communication [publiekscommunicatie]
- Education

The workgroup can be staffed with members of governmental as well as non-governmental organisations, in order to give a good representation of the different partners. Resources are reserved for the deployment of experts relevant for execution of tasks.

#### *Work group presentation*

The work group presentation will consist of independent expert on the field of archaeology, presentation and design. Resources are reserved for the deployment of experts.

#### *Work group knowledge*

Archaeological expertise is deployed from the management organization for the contribution to the Knowledge working group. In addition, resources are reserved for the organization and the development and maintenance of the knowledge portal.

# **MANAGEMENT PLAN**

## **PART III**

### **LOWER GERMAN LIMES IN GERMANY**

#### **RHINELAND-PALATINATE**

#### **NORTH RHINE-WESTPHALIA**

This draft is based on the existing management plans 2019-2025 for the Danube Limes in Bavaria and 2019-2023 for the Upper German-Raetian Limes.

## PART A: MANAGEMENT PLAN

### OVERVIEW

The Lower German Limes (LGL) forms over 400 km the Limes section from the border of Upper Germany to the North Sea. It runs through the German states of Rhineland-Palatinate and North Rhine-Westphalia and through the Dutch provinces of Gelderland, Utrecht and South-Holland and passes through various landscapes.

Below surface, most of the LGL's facilities have been preserved. In many places, layers with organic material offer very special conditions of preservation. The various elements of the LGL, which line up along the Rhine like a string of pearls, together with the river form a border system that existed for over 400 years and still shapes the city and the countryside in many places.

Today the monuments of the LGL have an effect on the very different interests of a great number of people and institutions along the former frontier. Efforts to preserve it as a witness to history and to provide better visitor access can in individual cases conflict with the necessities of modern town planning and the commercial use of our cultural landscape.

This management plan rests firmly on the conviction that an improved exchange of information along the length of the LGL and in its direct vicinity will form the basis for a consensus between the interests of preservation, research and tourism on the one hand, and the needs of those who live and work along the Limes on the other hand. Like a connecting framework, the plan contains precise statements regarding the future management of the LGL, but also perspectives for its future development. The aim of the plan is to identify ways in which the existing protection mechanisms can be improved and developed. The first steps towards achieving this are discussion and liaison as to how the LGL can be sustainably protected, how it should be further researched, how visitor facilities can be improved, and how its landscape setting can be conserved and improved.

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## 1. INTRODUCTION

### 1.1. IMPORTANCE OF THE LGL

1.1.1. The protection of the LGL, an archaeological and cultural monument as defined by the conservation laws of the states in which it lies and an inscribed UNESCO World Heritage Site, is a matter of particular public interest.

1.1.2. The first military presence at the LGL has already be established in Nijmegen and Neuss in the 2nd decade BC. In the course of the 1st century A.D., a chain of different types of fortresses and forts developed between these and other legionary sites, controlling transport and trade as well as all military activities along and beyond the Rhine. For over 400 years, this system secured the province of Germania inferior. A late antique expansion and new construction phase of fortlets led to a continuity of the border until the 5th century AD.

1.1.3. The natural area of the Lower German Limes is divided into three main components, which were already important in antiquity. The steep slopes of the Middle Rhine Valley in the Rhenish Slate Mountains remained

an obstacle for shipping until pre-modern times. Near Bonn, the landscape opens up to the Lower Rhine plain, where the Rhine meanders freely in a wide area. On flood-free shores on Holocene terraces, military installations were often erected. In the Rhine-Waal Delta, the changing course of rivers defines which areas are suitable for settlements and cultivation.

1.1.4. Over a distance of 400 km, the Rhine forms a unique border system as a natural barrier in combination with the military installations. The possibilities offered by the Rhine as a transport route form the basis for the beginning and development of the LGL.

1.1.5. Among the military facilities at the LGL all different elements of military facilities like legionary fortresses, practice camps, cavalry, infantry and fleet forts, fortlets, watchtowers, streets and waterways are represented. The legions play a special role in this. Four fortresses along this Limes section secured and organized the border, and vexillations operated various goods-producing workshops. The Rhine served as a formal border, in times of crisis as a barrier, but for the most part it served as a transport corridor for exchange between the Roman provinces and the Germanic territories outside the Roman Empire.

1.1.6. In post-Roman times too (and at certain places even today), the LGL had an influence on the lives of people living in its vicinity. In the names of towns, woods, roads and meadows it makes an important contribution to the area's identity. Its remains are an economic factor. In addition they can be natural monuments, and at times an increased effort is required to secure their sustainable preservation and use.

1.1.7. Many monuments of the LGL are perceived within the cities and municipalities as important, formative objects in their history. It is a goal to make the LGL with all its components as a holistic boundary system and ground monument the object of identification for residents.

1.1.8. Special features of the NGL are on the one hand the very good preservation conditions of organic materials. Non-organic monuments are well protected underground in city centres by the development. In rural areas there is good preservation in the area due to no development at all.

## 1.2. RESPONSIBILITY AND INVOLVED STATE PARTIES

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1.2.1. All alterations to the archaeological monument are subject to approval by the state conservation agencies in accordance with the conservation laws of the state concerned.

1.2.2. It is the responsibility of the private and public landowners, on whose land the individual parts of the LGL lie, to ensure that the remains of Roman history are handled responsibly, and this has often been the case for many generations. These private owners and users of the land play the most important role.

1.2.3. It is the responsibility of the local authorities along the LGL to make decisions concerning all types of future development of the LGL. This applies not only to questions of preservation, but also to matters concerning public access.

1.2.4. Many institutions are involved in the development of public access to the LGL. In cooperation and coordination with the conservation agencies of the individual federal states, local authorities, civic partnerships, forestry offices and nature parks, but also in many cases local and regional societies build footpaths, put up signs or produce brochures and leaflets.

1.2.5 Research along the LGL and its individual sections has been carried out since the beginnings of scientific archaeology by universities, museums, conservation agencies and other research establishments. The authorisation and supervision of scientific archaeological excavations is the responsibility of the state conservation agencies.

1.2.6. With the foundation in 2003 of the Deutsche Limeskommission (DLK), extended 2005 to the responsibility of the LGL, conservation, research and development of the monument were given a stronger, equal basis. The DLK is intended, as a point of contact for all persons, institutions and local government bodies, to improve the exchange of information and to assist in the coordination of whatever different schemes are planned, whereby the protection of the LGL has the highest priority. Research and development serve the idea of protection.

1.2.7. Responsible for the coordination of the different fields of activity conservation, development and research are the conservation agencies of the federal states in conjunction with the DLK.

### 1.3. CONCEPT: GOALS OF THIS MP

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1.3.1. This management plan was prepared on the basis of the management plans for the World Heritage Sites Frontiers of the Roman Empire and Danube-Limes Western part. It is based on the experiences gathered there.

1.3.2. The aim of the Management Plan is to create the basis for the continued preservation, research and development of the archaeological monument LGL, and to identify ways of implementing these plans. This Management Plan is the basis for future discussions with all parties involved along the length of the LGL.

1.3.3 Specific chapters of this Management Plan describe also objectives for new regulations, in so far as they are seen as being necessary and meaningful for the protection, conservation or development of the LGL.

1.3.4. The Management Plan describes the current legal situation.

1.3.5 The Management Plan will be revised every six years. Within this period it is intended not only to develop its contents on the basis of experience gained in managing the ORL, but also to develop an exchange of experience with those organizations which manage the other sections of the former boundary of the Roman Empire, particularly if they are part of the UNESCO World Heritage Sites "Frontiers of the Roman Empire".

## 2. WORLD HERITAGE PROPERTY (VALIDITY)

### 2.1. BASIS

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2.1.1. The LGL is an extensive archaeological monument which is made up of a number of different elements. The history of its rediscovery and of research on it is long, and the results often reflect the spirit of the particular age. Approaches to its preservation and the development of visitor access are manifold and of different quality. The result has been that the condition of the monument varies greatly from place to place and from site to site.

The LGL has so far been seen as a number of different, separate sites. Awareness of the LGL as a coherent, organic system is to be strengthened.

2.1.2. Conservational considerations, scientific necessities and the interests of landowners, town planning offices, local inhabitants and visitors make it necessary to put in writing and continually revise a precise documentation of the monument's condition. For this reason the state conservation agencies will be required to organize and conduct systematic and comprehensive surveys.

2.1.3. As a complex of mainly military sites, the LGL forms a homogeneous monument in very differing landscapes. The sites are located in forests, agricultural areas, in proximity of industrial estates, residential settlements, close to main roads or in built-up urban areas.

2.1.4. The LGL is an authentic historical site and as such forms a direct link with the past. For this reason strong interest has in research, science and education. Many questions regarding the monument and its historical importance have yet to be answered.

2.1.5. The World Heritage Site LGL still has a strong influence on the cityscape today. But even in rural areas, the Roman sites sometimes have a strong influence on today's cultural landscape.

2.1.6. Strong affiliations to the archaeological site are especially in the cities, which are in close tradition to the Roman site. Here it is therefore particularly important to make connections to the ancient road network perceptible, to maintain, to strengthen or to reactivate it.

2.1.7. Most of the various elements of the LGL are very well preserved underground. It is therefore desirable to make the ground monument more easily recognisable and comprehensible above ground and, in particular, to make its course traceable. This serves to make visitor access easier while still pursuing a preservational concept. All schemes must avoid causing damage to the substance of the monument.

2.1.8. The process of urbanisation which began in the Middle Ages interrupted in many places the relationship between the Roman sites and the countryside surrounding them. In urban areas this often severely impedes the discovery and cataloging of archaeological remains.

2.1.9. It is therefore of particular importance to protect those known and positively located elements of the LGL which lie within urban areas. All sites in which archaeological substance may possibly lie must be scheduled in order to facilitate their protection or research. The basis for this would be a precise definition of the monument's location and a survey of the quality of the substance which survives under the surface.

2.1.10. In urban areas coordination is necessary with town- and land-use planning offices, in order to ensure the survival or possibly even reconstruction of Roman construction-axes which are still recognisable in the contemporary townscape.

## 2.2. BOUNDARIES OF THE LGL

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2.2.1. The plans and policies outlined here apply to all archaeological sites which are recognised as belonging to the LGL. They are to be preserved as archaeological sites and monuments in accordance with the conservation laws of the federal states.

2.2.2. The designation of the protected area of the LGL is based on precise surveying or on a direct relationship to known monuments or to scientifically-indicated extensions of the monuments belonging to the LGL.

2.2.3. The LGL includes legionary fortresses, auxiliary forts, fortlets, manoeuvre camps and watchtowers, which line up along the Rhine like a string of pearls. In addition, there are the connecting limes road and a canal as well as vici, cemeteries, quarries and production facilities.

2.2.4. In addition to the forts and fortresses, the LGL also includes other military facilities. They form part of the strategical concept of the LGL, since there was a functional link between them.

2.2.5. The progress made in archaeological prospection and its methods and the general expansion of scientific knowledge make it necessary to continually review and possibly revise the extent of the monument's boundaries. Alterations in the monument zone can only be made after the application of recognised expert archaeological and conservationally acceptable methods.

2.2.6. Those areas in which the structure of the monument has been lost should also be included for information purposes in all descriptions, in order to preserve the historical context.

### 2.3. BOUNDARIES OF THE BUFFER ZONE

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2.3.1. The buffer zone is intended to preserve and increase the awareness of the LGL.

2.3.2. Buffer zones are defined in order to prevent unsuitable developments close to the monument or in its vicinity. Buffer zones correspond to the protection zones included in the conservation laws of some federal states, in which alterations to the structure or visual setting of a monument must be assessed and approved. For this reason they must be included in town planning and land use regulations.

2.3.3 Buffer zones have been established on the LGL particularly in places where its elements are important components of the cultural landscape.

2.3.4. The Buffer zone may also contain archaeological “expectation or suspicion areas”. It is necessary, particularly in built-up areas, to protect unscheduled and unknown sites. This is an aspect in which research takes on an important role, in order to define the location and size of possible archaeological sites in such areas.

2.3.5. The designated area of the Buffer zone of the LGL was mapped precisely (see 6.1).

2.3.6. It may be necessary at the LGL to take into account interests of archaeological conservation, nature and landscape conservation, science, visual perception or tourism outside the designated Buffer zone.

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## 3. MANAGING THE WHS (VALIDITY OF CONTENT)

### 3.1. MANAGEMENT ORGANIZATION

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3.1.1. The federal states involved have the obligation to preserve the archaeological monument LGL. To ensure its permanent survival it is necessary that as many persons and institutions as possible in the vicinity of the LGL share that interest in its preservation.

3.1.2. Actions which serve the protection of the LGL or the public awareness of it must therefore be continually revised to conform with changing social and technical conditions.

3.1.3. Significant passages had already been agreed with the institutions concerned along the LGL during the composition of the document as application for inscription as a World Heritage Site.

3.1.4. Being directly responsible for the in situ protection and development of the LGL, the local authorities also bear great responsibility for the monument, within a successful monument management. For this reason they will be involved in the continuing development of this plan.

3.1.5. This plan is addressed to those who are responsible for the day-to-day handling and care of the LGL.

3.1.6. This plan is intended to address those in whose hands the daily handling and care of the LGL lies. Through the acceptance and cooperation of all those responsible and interested, an implementation of the conceived goals becomes possible.

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### 3.2. STATUS OF THE MANAGEMENT PLAN

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3.2.1. This Management Plan provides the framework for all activities along the archaeological monument LGL. Its contents and objectives are such that they can be accepted by all concerned.

3.2.2. A number of its contents are based on existing standards of jurisdiction and public administration. For the implementation of other topics it will be necessary to draw up additional agreements. To a great extent, however, the implementation of the objectives named in this plan will depend on the voluntary collaboration and unselfish cooperation of all concerned.

3.2.3. By 2027 the Management Plan should have been revised on the basis of the experience gained between now and then.

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### 3.3. REVIEWING THE PLAN

3.3.1. Since the state of archaeological science develops continually, it is absolutely essential to regularly reassess the boundaries of the monument and the surrounding buffer zones. At the same time it is necessary to take into account changes which take place because of the continued development of landscapes, settlements and transport infrastructure.

3.3.2. In the same way the factual and administrative contents of the Management Plan will be continually reviewed and modified by the DLK.

3.3.3. This will incorporate the results of reports submitted periodically to UNESCO.

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## 4 PROTECTION AND CONSERVATION (REQUIREMENTS)

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### 4.1. STANDARDS

4.1.1. The NGL monument covers an area of 466 ha, to which the area of 700 ha as buffer zone must be added. The diversity of the elements of the LGL, the special properties as river frontier, the division of ownership and the special conservation conditions in the wet soil make agreements necessary for its protection, maintenance and development.

4.1.2. The LGL is a homogeneous monument of international importance and therefore uniform standards which comply with internationally recognised criteria must be applied to all future actions on any section of it.

4.1.3. The main focus of attention must be on the conservation of the fabric of the monument. The protection of the surviving, authentic sites and individual elements of the LGL form the basis for all actions of research and development. This is adequately covered by existing legal and administrative parameters.

4.1.4. Finally it is important to accommodate the wishes and requirements of the scientific debate on the archaeological monuments of the frontier of the Roman Empire. The direct and indirect results of the research done are incorporated into the content of visitor presentation and have an influence on conservation strategies for the LGL.

4.1.5. The second fundamental factor to be considered during all future activities on the LGL is an amicable agreement with all measures and their acceptance by those people who live and work at or close to the monument, particularly in places where in addition to the public interest in the preservation of the monument there are other, conflicting interests.

4.1.6. On some sections of the LGL greater attention should be paid to the importance of tourism. This applies not only to the demands of visitors with regard to their understanding of the monument and its presentation, but also to the role tourism plays as a local economic factor.

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## 4.2. THREATS

4.2.1. Individual sections of the LGL or parts of the fort locations on the LGL are threatened by a number of factors. These factors threaten not only the preservation of the monument itself but also scientific research and utilisation for tourism purposes.

4.2.2. The most enduring damage occurs in places where parts of the LGL are affected by construction projects. The use of land for building new roads or railways, for industrial purposes, for quarrying and the production of energy, as well as for housing, generally leads to a complete loss of the fabric of the monument in the affected area as well as to permanent and extensive damage to the sectors bordering on to it.

4.2.3. Modern land management, in particular the use of ploughs, leads in many sections of the LGL to regular interference with the monument's fabric. The damage is particularly heavy in places where land consolidation has led to a realignment which, in contrast with the old alignment, no longer takes the location and course of the LGL into consideration.

4.2.4. Comparable dangers exist also in woodland areas. The use of heavy machinery and the construction of new forest roads lead to destruction in sections of the LGL which as a result of centuries of respectful use have been impressively preserved as visible above-ground sections.

4.2.5. Experience has shown that facilities for renewable energy can endanger the public's perception of the World Heritage. Wind turbines in particular can compromise the LGL's appearance if they are located within a close view of the monument, or if they appear in a close perspective from the monument.

4.2.6. At present, only minimal danger to the World Heritage is caused directly by visitors' behaviour, as the substance is largely protected underground or is structurally safe. Dangers from vandalism etc. can occur at elements of valorisation such as parking lots and playgrounds.

4.2.7. The presentation of the monument and its subsequent development for tourism purposes must not be allowed to detract permanently from the impression which the monument itself makes. This applies to the number and type of information signs erected and the positioning of these signs in relation to the monument, as well as to the provision of other facilities such as benches, tables and litter bins.

4.2.8. Treasure hunting and metal detecting still pose a real threat to the sections of the archaeological monument which are still unexcavated. In coordination with the conservation agencies of the federal states and with the appropriate legislative bodies, suitable measures should be developed and enforced in order to counter this threat.

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## 5. OBJECTIVES

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### 5.1. THE PROCESS OF INCREASING THE PUBLIC AWARENESS

5.1.1. Many aspects of the historical value of the ancient frontier of the Roman Empire and the role it played in the subsequent historical development of Europe, but also of the possibilities and challenges of a suitable presentation, have not yet been adequately researched.

5.1.2. One of the main goals of the MP is to create a broad awareness of the great importance of the NGL as part of the Roman Empire and as a link between ancient cultures inside and outside the Roman Empire.

## 5.2. PROTECTION AND CARE, RESEARCH AND PRESENTATION

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5.2.1. It is the duty of the Management Plan to establish and strengthen the positive interaction between protection and care, research and presentation.

5.2.2. It is intended to intensify activity in the name of protection, care, research and presentation along the LGL.

As a grouping of the local community interests, the German Limes Road Association (*Deutsche Limes-Straße e.V.*) plays a very important role in the touristic presentation along the LGL. The aim is to extend the responsibility of the association to the Lower German Limes in Rhineland-Palatinate and North Rhine-Westphalia.

5.2.3. Care, research and presentation plans are to be coordinated with the German Limes Commission and determined based on an overriding regional concept. Measures regarding the conservation, restoration, reconstruction, construction of replicas and a conservational covering of archaeological monuments along the LGL are to be carried out in accordance with the guidelines established in Part B.

5.2.4. In an increasingly global world, the coordination with additional international partners, particularly those in the 'Frontiers of the Roman Empire World Heritage Cluster' which unites all sites in the area of the Roman border that are inscribed on the World Heritage List, or where there is interest in a segment's inscription, plays a special role.

## 5.3. THE GUARANTEE OF CONTINUED DEVELOPMENT

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5.3.1. In the future it will have to remain possible to allocate and develop areas of land along the LGL for new housing, settlements, or roads and railways, or for commercial and agricultural use. Land- and forest-management have a particular influence on the appearance of the LGL.

5.3.2. Scientific research on the LGL will continue with selective projects along its length and in its constituent parts. These projects must conform with the highest international standards. Their results form a basis for the sustainable protection, care and development of the LGL. The imparting of the LGL is to be integrated into a supraregional context.

## 5.4. GUIDELINES

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This Management Plan for the LGL is based on the guidelines set out below. The plan intends to:

5.4.1. show ways of managing all future changes to the advantage of the LGL and its surroundings and thus secure its existence for future generations;

5.4.2. contribute towards the preservation of the general character of the remains and to demonstrate the historical context;

5.4.3. to keep authenticity and integrity during all future measures and changings;

- 5.4.4. encourage the preservation of the visual experience produced by the many different landscapes along the LGL by means of forwardlooking and integrative development measures;
- 5.4.5. to help in the use of public and private resources in order to improve the protection and development of the landscapes along the LGL;
- 5.4.6. to encourage the search for ways to protect the World Heritage Site from the effects of construction or other damaging influences;
- 5.4.7. to increase public awareness of the archaeological and historical value of the individual sites as well as of the LGL as a whole;
- 5.4.8. to identify strategies with which the perception of the LGL can be improved;
- 5.4.9. to encourage an improvement in visitor access facilities along the LGL;
- 5.4.10. to support a growth in the economic advantages through tourism to the LGL for local inhabitants;
- 5.4.11. to seek to achieve a spirit of partnership and agreement among those people and institutions, public and private, which concern themselves with the LGL and its surroundings.

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## 6. BASIS

### 6.1. LIMES DATABASE

6.1.1. The basis of the protection and care of every archaeological monument is a comprehensive knowledge of it. Essential for that is the process of inventarisation. Information about the exact location and condition of an object is particularly important.

6.1.2 The setting up of a geographical information system of the state service for archaeological and historical heritage (BODEON – Bodendenkmalpflege.Denkmalpflege.Online) has made it possible to put together different types of information. At the core of this are the detailed maps drawn using knowledge which already exists in each of the federal states. The boundaries of the property and the buffer zones are recorded within this database.

6.1.3. Information from this data base is provided by the LVR-ABR to parties with a justifiable interest for the purpose of future planning and monitoring, in accordance with data privacy laws.

### 6.2. RESEARCH CONCEPT

6.2.1. In order to broaden our knowledge of the World Heritage Site, continuous scientific research of the LGL is necessary. Methods which cause no disturbance are to take priority. As part of future research, for example, comprehensive prospections with the full range of methods are necessary, with the aim of gaining more precise information on the exact location of the LGL and its dimensions (also outside of the areas to be nominated). The documentation of sites that are unknown or not sufficiently examined is another research project with very high priority.

6.2.2. All actions taken in connection with research on the LGL require perfect coordination with the terms of reference of the state conservation agencies.

6.2.3. Excavations on the LGL should only be permitted if it is clear that they are to be carried out in accordance with the principle of permanent conservation and protection of the monument's fabric. The necessity of an excavation is to be weighed against the principle of preserving the monument in its present condition, taking into account all existing sources and knowledge.

6.2.4. Furthermore, increased efforts should be made to tap the full scientific potential provided by a systematic reevaluation of previous archaeological examination ("old excavations").

### 6.3. INTERNATIONAL COOPERATION

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6.3.1. In order to further develop the Management Plan for the LGL it is necessary to improve coordination along the whole of the ancient frontier of the Roman Empire in Europe.

6.3.2. The strategic management of the nominated World Heritage falls to the Intergovernmental Committee for the Frontiers of the Roman Empire. It serves as UNESCO's contact partner for all international questions.

6.3.3. The operative management of the nominated World Heritage Site LGL shall be carried out by the Management Group (Hexham-Group). From the German side, the executive management of the German Limes Commission, the Limes Coordinators in Rhineland-Palatinate and North Rhine-Westfalia and the executive management of the German Limes Road Association (*Verein Deutsche Limesstraße e.V.*) are members.

6.3.4. It is intended to expand the World Heritage Site "Frontiers of the Roman Empire" beyond the sections which are currently inscribed. This process is supported by the Bratislava Group.

6.3.5. International communication on the subject of the care, research and presentation of monuments should be increased.

## 7. PROTECTION AND CONSERVATION

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The World Heritage Site and its buffer zones are defined in such a manner that it is possible for the responsible parties at the locations to further develop processes for the protection, research and accessibility of the monument.

### 7.1. THE MONUMENT IN NON BUILT-UP AREAS

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7.1.1. All component parts of the LGL are legally protected by conservation orders or the inscription as a scheduled monument is in preparation up to 2021. This provides sufficient protection.

7.1.2. A sustainable preservation of the World Heritage Site is dependent on not only the landowners, but also local authorities and the conservation agencies of the federal states. At their disposal they have not only such instruments as conservation laws, but also planning legislation, land use laws and nature conservation laws.

7.1.3. It makes sense, wherever possible, to strive towards building up a network of interests with nature and landscape conservationists, as well as pursuing the notion of an integrated protection scheme of cultural landscapes. Schemes which are intended to serve the protection of archaeological and historical monuments have a better chance of success if they are bundled together with other legally scheduled conservation interests.

7.1.4. Along the length of the LGL and in the buffer zone there exist close relationships between the conservation of the monument and the protection and conservation of the landscape. Protection and

conservation of the landscape saves the vicinity of the LGL from inappropriate construction activities and adverse effects on its visual appearance, and it also serves to preserve its characteristic features. This is particularly true of expansive arable acreage and of wooded areas.

7.1.5 In special cases it is necessary and meaningful to provide additional protection for certain pieces of land by acquiring them, either with public funding or through any other institution which has an interest in the protection and conservation of the LGL. This is particularly to be considered in situations when a compromise between a utilization which would damage the monument and the interest in its preservation is not otherwise possible. In these cases, a transformation of use that is compatible with historical monuments is to be aimed for.

7.1.6. The acquisition and transformation of use of larger areas of land should be accompanied by a plan for the sustainable conservation and development of the acquired monument.

7.1.7 The LGL must be integrated into the developed cultural landscape of which it forms a part. This requires a knowledge of the surrounding cultural landscape and its individual elements, as well as a integral view of the LGL together with river Rhine as a relevant component within this landscape.

## 7.2. THE MONUMENT IN BUILT-UP AREAS

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7.2.1. Sections of the LGL which are located in built-up areas are nevertheless part of the World Heritage site. Even when only very small remains of the LGL are visible in these areas, they can nevertheless be of great archaeological value.

7.2.2. Generally the same conservational regulations apply here as in areas which are not built-up.

7.2.3. The major problem which confronts a successful protection of the LGL in urban areas is the frequently imprecise knowledge of the monument's preserved remains and their covering over with historical or modern structures.

7.2.4. In places too, where a perception of the Roman boundary fortifications seems to be difficult, a long-term attempt must be made to increase the understanding of the LGL.

7.2.5. Therefore it is particularly important to protect the scheduled remains of the LGL in urban areas in accordance with the prevailing criteria. The main aim must in the first place be the conservation of the existing fabric of the monument.

7.2.6. The World Heritage Site and its buffer zones have been designated in order to give those persons locally responsible the opportunity to develop procedures for the protection, research and development of the LGL.

7.2.7. In areas where the remains of the monument are no longer visible due to previous encroachment, the responsible authorities should at least try to restore visual axes and elements of Roman spatial planning through urban planning measures.

7.2.8. One perspective is, for example, the marking of alignment, defensive or building structures by reversible measures, so that the elements of the LGL can be recognized and understood as historical spatial structures. This can also be applied to the representation of well-known Roman building axes and street alignment. Such labelling does not require the presence of monument substance in the areas concerned.

7.2.9. The basis for this could be the systematic purchase of selected plots of land, not only to prevent them being built on, but also to create open areas

7.2.10. In the medium and long term it will thus be possible to make the position of its individual elements and their interacting relation perceptible once more, even in urban areas.

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## 8. IMPARTING

### 8.1. AIMS

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8.1.1. The goal of a regionally structured presentation at the LGL is to provide attractive and target group-oriented offers for the interested public.

8.1.2. To this end, the LGL should be presented in an international, regional and local context.

### 8.2. IMPLEMENTATION

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8.2.1. Part C of this Management Plan outlines the basic parameters of a future strategic presentation plan (Interpretation Framework) for the German part of the LGL.

8.2.2. The entire Framework is an integral part of this Management Plan.

8.2.3. This is a content-related framework with suggestions for museums and other presentation sites.

8.2.4. The implementation of the basic parameters of the LGLIF at the local and regional levels is a duty of the responsible parties of each presentation site.

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## 9. TOURISM

### 9.1. REQUIREMENTS

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9.1.1. As is the case with many other historical sites, tourism plays for the LGL an essential and central role in the presentation of the monument.

9.1.2. The requirements of tourism must take second place behind the conservation of the monument and its surroundings, in accordance with the aims of UNESCO.

9.1.3. Among the requirements of tourists to the LGL are not only an appropriate presentation of the entire monument for German and foreign visitors, but also the provision of adequate access and facilities on site.

9.1.4. It is in the interest of all neighbours of the LGL to exert influence on all measures connected with the development of tourism, in order that these future developments may bring it advantages rather than disadvantages.

### 9.2. AIMS

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9.2.1. All measures taken to develop tourism to the LGL must be made in a way which is reconcilable with the monument itself. They must not harm the fabric or the quality of the monument in any way, or restrict

research schemes, but instead they should be planned in such a way that they improve the visitor's understanding of the LGL and its conservation.

9.2.2. All future measures planned should be coordinated in content and appearance and be carried out to the same high standard.

9.2.3. Further development of tourism to the LGL should meet with the acceptance of the local community. It is intended to plan all measures wherever possible in consultation with the parties concerned.

9.2.4. Tourism schemes on the LGL should aim where possible to generate income for the local population.

### 9.3. INTERESTS

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9.3.1. The DLK (cf. 10.3.) coordinates and advises on the further development of tourism to the LGL in both federal states. It acts as point of contact and cooperation partner for the persons and institutions listed below.

9.3.2. Normative controls in the field of tourism can be meaningful. The state conservation agencies will be given an advisory role in the development of new tourism projects, which will include not only advice on the archaeological monument locally, but also the providing of factual information.

9.3.3. The various museums are an important factor in a successful development of tourism and presentation of the LGL.

9.3.4. In 1995 the Verein Deutsche Limes-Straße e. V. was founded to coordinate the implementation of these aims on behalf of the vast majority of towns and local authorities along the ORL. A future extension of the associations' activities throughout the LGL is planned. Among other activities in the field of tourism, the association is responsible for public relations, the publication of touristic information, press relations, the coordination of advertising measures, general information, lodging information and the regulation of the flow of visitors. Besides museums tourism hinges on the comprehensive work of the German Limes Road Association as a first point of contact for potential visitors and interested guests. Due to its importance it is a permanent member of the German Limes Commission.

9.3.5. An important aspect of the presentation of the LGL is the secured provision of visitor assistance through qualified and trained personnel. For the Upper-German Raetian Limes WHS the "Limes Cicerones" play an important role. They are trained and given regular skill enhancement courses in close cooperation with the state conservation agencies. It is planned to develop the system of "Limes Cicerones" for the LGL too.

9.3.6. Societies, schools, regional or local initiatives may still look after individual sites along the LGL. All activities are to be coordinated with the DLK and the state conservation agencies.

9.3.7. Owners and occupants of property within the World Heritage Site live in close contact with visitors to the site. Their understanding and acceptance should always be sought.

### 9.4. RESOURCES

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9.4.1. The ORL Footpath, which has existed for decades, has in recent years been complemented by a cycle path and a road, so that individual and group visitors now have access to almost every point of the ORL. A strong connection of the ways at the LGL is intended.



Single and group travellers should thus be able reach almost every site along the LGL by following the signs. The state conservation agencies will work together with The German Limes Road Association, other relevant associations and the respective local authorities to plan appropriate routes.

9.4.2. Measures of conservation, restoration, reconstruction, rebuilding or conservational covering of archaeological monuments along the component parts of the LGL are carried out in accordance with the guidelines outlined in Part B. The text is based on the relevant portion of the Management Plan for the Upper German-Raetian Limes. The guidelines in Part B are an integral part of the Management Plan.

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## 10. IMPLEMENTING THE PLAN

### 10.1. INTERESTED PARTIES

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10.1.1. The legislative and administrative responsibilities for the conservation of monuments and therefore for the preservation of the LGL are regulated differently from state to state within the federal system of the German Federal Republic.

10.1.2. There is a fundamental public interest in the protection and conservation of its monuments, as stated in the Monument Protection Laws. Those responsible for the preservation of The LGL are first and foremost the landowners on whose property the World Heritage Site is located.

10.1.3. Regional conservational agencies are as a rule responsible for legal measures concerning conservation. This however does not apply, for instance, to measures which involve cultural monuments owned by the state, or which involve planning laws. In such cases they receive support from the state conservation agencies, the office of the state president or the relevant ministries.

10.1.4. The LVR-State Service for Archaeological Heritage and the head office of Cultural Heritage in the State of Rheinland-Pfalz are expert agencies. They study the LGL and decide what remains of its fabric and what is therefore a cultural monument within the terms of the respective conservation laws. They are responsible for most of the public relations work, they advise owners of monuments and produce a report on all plans and measures which involve the LGL.

10.1.5. In the conservation agencies of the federal states the position of Limes Coordinator should be institutionalised on a permanent basis. These persons are the “site managers” referred to in the UNESCO guidelines.

10.1.6. The responsibility for all measures connected with development and tourism along the LGL is allocated according to the outlined rules.

10.1.7. Not only the land owners are involved during the implementation of all measures, but also as a general rule the local authorities in cooperation with the state conservation agency or the head office of Cultural Heritage. Also involved in infrastructure measures for tourism are forestry offices, the administrators of nature parks or specific public offices. They take up functions within the field of public relations.

10.1.8. For decades there has also been a close and successful cooperation between the state conservation agencies and societies or local interest groups. The important role which these play in the protection and care as well as in the presentation of the LGL is recognised and supported by the state conservation agencies.

## 10.2. CATALOGUE OF ACTIONS AND WAYS OF IMPLEMENTING THEM

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10.2.1. The importance of the LGL and the contents and aims of the Management Plan will be publicised through greater use of suitable means (publications, information events, on-site information signs etc.). This will also involve the display of known archaeological finds from the LGL in suitably modern ways and with the help of modern media.

10.2.2. Every individual measure which serves the direct or indirect preservation of the LGL in its entire length and on the sites of the forts will be discussed and agreed and then authorized by the state conservation agencies and the regional conservation agencies. Overlapping or fundamental measures must be evaluated by the DLK.

10.2.3. Before the beginning of each preservation scheme a complete and detailed scientific documentation must be made of the respective part of the monument, and an evaluation carried out.

10.2.4. The main focus of attention must be on the prevention or limitation of possible damage. It is intended to make significant sections of the monument into public property, either by means of regional or local planning procedures or through acquisition.

10.2.5. In places where the ascertained sites of its forts and other component parts have not yet been entered into, or not completely or even erroneously entered into, the land use and development plans, this should be corrected in the course of their updating.

10.2.6. In the case of reallocation of land rights and use, the perception and understanding of the LGL should be retained or restored. This will require a close cooperation between owners and users on the one hand and the appropriate state agencies and institutions on the other hand.

10.2.7. The question of whether regionally important land use plans could have an effect on the LGL is being examined in cooperation with the conservation agencies.

10.2.8. To ensure sustainable protection and preservation it is imperative that the core and buffer zones be taken into consideration during regional planning proceedings and included in regional development plans.

10.2.9. In order to reduce damage caused by quarrying, agriculture and forestry, contacts to the responsible public offices will be intensified and in cooperation with them a catalogue of measures will be developed within the framework of future land use plans.

10.2.10. During the implementation of regional or local protection or information schemes the understanding and perception of cultivated areas should be increased where possible by marking out known buried structures, and at the same time ways should be found to remodel sections which were previously cultivated.

10.2.11. Particular attention should be paid to topics connected with the economic situation: ecology and nature conservation, green tourism etc. Facilities which are functionally linked with the LGL may be incorporated in the process and wherever possible a cooperation established with other, compatible concepts.

10. 2. 12 Among the important research subjects at the LGL is our knowledge of the topography of the individual sites:

In places where the extent of the substance of the archaeological monument is not precisely known, increased use should be made of nondestructive prospecting methods (surveying, aerial archaeology (especially wide recording spectrum such as heat image, multi-spectral photography, infrared photography), geophysics, etc.).

In addition, active research into organic conservation conditions, where these are to be assumed but are unknown in quality and extent, is to be promoted. In addition, monitoring procedures to monitor the state of conservation in situ must be reinforced.

Future research projects on the LGL should pay increasing attention to aspects and questions of the preservation of archaeological ground monuments, but the reprocessing of archives and collections should also be a central aspect.

In cultivated areas a land register may be of help in the detailed cataloging of the monument's substance.

#### 10.2.13.

The further development of tourism to the LGL should take place in close cooperation between *the state conservation agencies* and the Limes Coordinators on the one side, and the Verein Deutsche Limes-Straße, special authorities, individual local authorities, societies and interest groups on the other side.

#### 10.2.14.

Should anything whatsoever occur which, despite the participation of the state conservation agencies, causes damage to the World Heritage Site or has a negative influence on its buffer zones, this must immediately be communicated to the office of the DLK, which will inform the supreme conservation agency and the German representatives at the IGC.

### 10.3. COORDINATION BY THE DLK

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10.3.1. The coordination of the recommendations and strategies contained in the Management Plan is the responsibility of the DLK, which was founded in 2003 for this purpose. The commission's office is the point of contact for all institutions and persons named above. The states undertake to provide the commission with sufficient funding and manpower.

10.3.2. The DLK takes on an advisory role in the development of the protection concept and, together with other institutions, draws up action catalogues for the actual cooperation.

10.3.3. Among its duties are the strategic development and planning of the research concept, the exertion of influence on and coordination of all research activities, the consolidation and coordination of research topics and the assumption of an advisory role prior to all major excavation projects on the LGL.

10.3.4. The DLK is, in close cooperation with the Limes Coordinators, responsible for the strategic planning and technical monitoring of development plans and well as its advisory role in infrastructure development planning on the LGL.

10.3.5. As a service for the individual federal states the commission takes on the expansion, the administration and the archiving of the Limes Data Base which will gradually be expanded to include not only the current information on the LGL but also older material as well as the results of new excavations and research projects.

10.3.6. The commission represents the German part of the World Heritage Site at national and international level.

## PART B: GUIDELINES FOR THE CONSERVATION, RESTORATION, RECONSTRUCTION, REBUILDING AND CONSERVATIONAL COVERING OF THE ARCHAEOLOGICAL MONUMENTS OF THE LOWER GERMAN LIMES (LGL) IN NORTH RHINE WESTPHALIA AND RHINELAND-PALATINATE

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### DEFINITIONS

These definitions apply in the following text:

**Conservation** is an action taken on the fabric of the monument in order to preserve it, for instance cleaning and measures to secure its substance. Alterations to the fabric do not exceed those actions which are technically necessary.

**Restoration** is the return of an existing structure to a documented former condition by the removal of elements added later or by the reassembly of existing components without using new material, except for the purpose of consolidation and stabilisation.

**Reconstruction** is the building up of an existing structure into what is deduced as having been its earlier condition, adding (in contrast to restoration) comparable new materials and using appropriate working techniques.

**Rebuilding** is the creation of a new building on the basis of existing documentation and conclusions which may be drawn from it.

**Conservational covering** is a reversible covering with soil or other materials. This includes ground modelling and covering over.

**Reversible** is applied to such actions which do not affect the original fabric, or which do no damage to it and which can later be removed without any adverse effects.

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### GENERAL PARAMETERS

Basically it can be argued that the monument's present condition, i.e. as a ruin, is its only authentic condition. That which has been destroyed, is lost. It is our duty to preserve the status quo of the monument's general appearance. Anything else would be detrimental to the authenticity and integrity of the monument, the decay of which must be respected as an integral part of historical "coming and going". Thus it is necessary to consider beforehand whether an action will bring about changes, and in any case the present status must be documented in accordance with current scientific standards. Conservation, restoration and conservational covering are actions which serve to preserve the monument or to save its fabric. They must take preference over actions which involve the substance itself. In exceptional cases it may seem advisable to carry out an action which goes beyond conservation and restoration. This is possible if in a specific place on the monument didactical considerations make it seem necessary to do more in order to present the monument in the spirit of the World Heritage idea. Only in this case can reconstructions or rebuildings be accepted. Such schemes require discussion beforehand which should be as broadly-based as possible and they should be assessed by independent experts. Only then can a valid preservational decision be made. Abstract and modelled solutions and virtual presentations for the purpose of visualization preserve the original fabric and are a valid alternative to antique/historic reconstructions.

**Reconstruction and rebuilding:**

- must take place in accordance with national and international guidelines,
- must preserve the historical importance of the site and its surroundings,
- may not take place until a complete scientific documentation of the area concerned has been carried out and evaluated,
- must be based on sound scientific evidence and be the result of an experimental re-enactment of ancient methods,
- are presentations in model form, and therefore an accumulation of similar forms in any one area should be avoided,
- should in principle be effected using original techniques and with materials comparable to the original, whenever this is possible. Financial considerations do not justify the use of other types of materials,
- are intended to increase understanding. Hypotheses should be clearly distinguishable and necessitate the presentation, documentation and publication of any findings or results gained during their implementation,
- must be so designed that their construction and sustainable maintenance are guaranteed,
- may not be used as a reason for excavation,
- are to be rejected as copies of constructions which already exist.

The basis for each action is the understanding of the monument. This encompasses not only areas above and below ground, but also the area surrounding it in the sense of its being a hereditary and historically evolved cultural landscape. Any evaluation should take into account the archaeological potential and the historical and contemporary importance as well as aesthetic, scenic and nature conservation values. Any action must be preceded by a thorough documentation of the status quo. All measures taken within the area of the World Heritage Site LGL must conform with national and international quality standards. The plan for each project must make absolutely clear in what manner its implementation would affect the integrity and authenticity of the monument. Implementation must take into account all the given guidelines and have a positive influence on the significance of the ORL. Before implementation, all projects must be jointly agreed with the relevant conservation agency of the federal state concerned and require authorization within the terms of that state's conservation

law. The same care which is given to the conception of a scheme must also be exercised with regard to its sustainability. The basis for this should be a maintenance plan jointly agreed with the state conservation agency (Limes Coordinator). Repairs and maintenance work may only be carried out by qualified persons under expert supervision. Sufficient tangible means must be made available for maintenance as well as for the repair of unforeseen damage.

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**GUIDELINES FOR FUTURE ACTIONS**

The following guidelines apply in particular:

- all actions must have a direct regional and historical link with the corresponding section of the World Heritage Site.
- information boards should be presented as uniformly as possible, in accordance with the guidelines for The Lower German Limes that are to be formed in close relation to the existing guidelines for the Upper German Raetian Limes WHS.
- ways should be sought to facilitate visitors' understanding and perception of the LGL.
- any planting done for the purpose of visualization must not damage the fabric of the monument.
- forestry and conservation should work together to combine their objectives.
- conservational covering must not lead to a loss of authenticity by creating new, artificial monuments.

- any new materials used must be clearly distinguishable from the original fabric.
- reconstructions and rebuildings are generally only to be accepted on sites which have already been completely excavated and/or where the in situ findings have been largely destroyed and/or where modern-day use of the surrounding area has made a visualization particularly difficult.
- reconstructions and rebuildings in the property area of the World Heritage Site must be designed to be reversible.
- with the aim of gaining insight through experimental research, copies of existing reconstructions or rebuildings are to be opposed.

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## INTERNATIONAL REGULATIONS

In addition, all actions must conform with international standards as laid down in the following conventions and sets of guidelines:

- Charter of Venice 1964: International charter on the conservation and restoration of monuments and ensembles.
- Charter of Burra 1979: Charter on the conservational handling of objects of cultural importance.
- Charter of Lausanne 1990: Charter for the protection and care of the archaeological heritage.
- Convention of Malta 1992: European convention for the protection of the archaeological heritage.
- The Nara document on authenticity 1994.
- Charter of Riga on authenticity and historical reconstruction in relation to the cultural heritage 2000.
- The Salalah recommendations for archaeological parks 2015.

## PART C: BASIC PARAMETERS OF A FUTURE STRATEGIC PRESENTATION PLAN (“INTERPRETATION FRAMEWORK”)

The Interpretation Framework as an integral part of the management plan is of particular importance for promoting and presenting the Lower German Limes. Just like the MP itself, the Interpretation Framework will be updated, if necessary. The character of the Interpretation Framework and its main function is that of an advisory tool for the interpretation and the access to the monuments and sites. The coherent concept of comparable Interpretation Frameworks like the one to the Danube limes in Austria and Bavaria or the Hadrians Wall Interpretation Framework is the identification of lead themes. These lead themes should guarantee a diversity and improvement of the permanent exhibition of the Museums along the river Rhine.

The Interpretation Framework should also guarantee a well-organized and structured family of our regional and overregional museums, which enhance a fascinating experience of visiting the museums and sites. This includes a better understanding of the World Heritage site-concept in general as in the special case of the *Lower German Limes*, its meaning as well as its conservation for the future. Side-effect of a coordinated and well developed museums concept and communication is the identification with the local monuments and sites, a weakening of social and cultural engagement of the public.

A successful guideline to define the function of museums in this sense are the “Recommendation concerning the protection and promotion of museums and collections, their diversity and their role in society”, adopted by the UNESCO in 2015. Visitors should be able to understand the Lower German Limes as part of the Frontiers of the Roman Empire. The Interpretation Framework contributes to the understanding of the Outstanding Universal Value of the future World Heritage site.

It’s a naturalness that permanent exhibitions should be renewed and adjusted according to the latest scientific results and changed methodological and educational approaches in museums work. Of course temporary exhibitions can support in fulfilling the main goals of the Interpretation Framework.

Individual experience of visitors and the audience stands side by side to shared experience, regarding the anticipation of the museums and sites as places for lifelong learning and education. Therefore the intellectual range of the offer will be based on the analysis of the target groups, on archaeological and educational evaluations of relevant sites of the Lower German Limes and of associated finds in terms of their individual potential to explain the Lower German Limes to all members of the public.

### ACTIVITIES AND PROGRAMS

Various tourism concepts have already been in existence for years to promote single monuments as well as the Lower German Limes in general. These include regular guided tours of the monument, which are offered by various participants like museums, associations or the state service. In addition, public lectures have been held for years to inform interested parties and residents. Also in the newspapers and on the television current topics of the archaeology are reported again and again. Special action days at sites of historical interest and Roman festivals are highlights of the public relations work.

Planned is the development of offers for children and school classes as well as the co-operation with the association German Limes road for a continuation of the hiking and cycle trails along the Lower German Limes.

# MANAGEMENT PLAN

## APPENDICES



## Annex 1 Management plan actions

Frontiers of the Roman Empire - The Lower German Limes						
I	<b>PROTECTION AND KNOWLEDGE</b> <i>The Lower German Limes is sustainable protected. Researchers and governments work together on preservation and knowledge development.</i>					
	<b>MP Objective</b>	<b>Action</b>	<b>Success Measure</b>	<b>NL</b>	<b>GE</b>	<b>Tog</b>
	Sustainable protection	Implement a extra protection measures for properties and buffer zones where needed.	All sites and buffer zones sustainable protected before 2024.	x	x	
	Sustainable protection	Develop individual management plans for component parts	All component parts have individual management plans	x	x	
	Strengthen the knowledge of the LGL	Development of research strategies for improving a detailed mapping of archeological structures within the property and buffer zone with main emphasis on the use of existing data and the use of non-invasive prospection methods	Scientific and public publications and presentations on new results mapping the monuments	x	x	x
	Strengthen the knowledge of the LGL	Development of research strategies for a better understanding of the in situ preservation of archeological layers in the property and buffer zone with main emphasis on organic deposits	Scientific and public publications and presentations on new results for understanding in situ preservation of the monuments	x	x	x
	Strengthen the knowledge of the LGL	Development of an international research strategy together about issues affecting the entire limes	Continuation of the scientific discussion about the LGL as one limes-segment ; shared approach on research along the LGL			x
II	Dissemination of knowledge	Exchange on current research through workings groups, workshops and congresses	Set up a regular congress on the LGL	x	X	x
	<b>COMPREHENSION:</b> <i>The Lower German Limes is known and acknowledged as a transnational structure within both counties and abroad.</i>					
	<b>MP Objective</b>	<b>Action</b>	<b>Success Measure</b>	<b>NL</b>	<b>GE</b>	<b>Tog</b>
	More awareness of the the Frontiers of the Roman Empire - Lower German Limes	Development and implementation of a joined communication strategy.	A joined communication strategy including a joined logo and standards.	x	x	x
	Better understanding of the importance of the Frontiers of the Roman Empire - Lower German Limes.	The development of a common interpretation framework and common standards for guidelines for on site presentation	An interpretation framework for the Dutch and German part of the Limes			x
III	<b>COOPERATION:</b> <i>The Lower German Limes is part of the Frontiers of the Roman Empire. At FRE level there is alignment with regard to preservation, interpretation, research and public access.</i>					
	<b>MP Objective</b>	<b>Action</b>	<b>Success Measure</b>	<b>NL</b>	<b>GE</b>	<b>Tog</b>
	Develop shared standards regarding preservation, research, public access and interpretation on the level of the Frontiers of the Roman Empire as a whole.	Exchange best practices within the framework of the FRE world Heritage Cluster and within the Bratislava Group and facilitate the exchange of knowledge between partners. Explore the possibility to develop joined projects.	.			x
	Comparable monitoring and evaluation systems	Establish joint monitoring and evaluation standards	Monitoring framework ready for submission MP at WHC			x

Frontiers of the Roman Empire - The Lower German Limes						
IV	<b>EDUCATION:</b> <i>The Lower German Limes is used as an educational resource in primary and secondary education.</i>					
	<b>MP Objective</b>	<b>Action</b>	<b>Success Measure</b>	<b>NL</b>	<b>GE</b>	<b>Tog</b>
	Better understanding among the scholars and adults and awareness of the LGL as a valuable historical structure, linked to the core values of UNESCO and the OUV.	Developing an education strategy for the LGL, in which the existing offer is coordinated, and is made accessible to the target groups. Implementation of this strategy on a national level.	Set up an education strategy and connect the existing offer to an integrated education program.			x
V	<b>PRESENTATION:</b> <i>The Lower German Limes is known as a structure that stretches along the Rhine, running through both countries. This structure accompanied by high quality presentations (museums/landscape) and used for leisure and as a tourist destination.</i>					
	<b>MP Objective</b>	<b>Action</b>	<b>Success Measure</b>	<b>NL</b>	<b>GE</b>	<b>Tog</b>
	Strengthen link between museums and monument.	Sharing knowledge between countries on best practices / shared view on how to strengthen cohesion between museums and monument.	Improved link between museums and monument (for example, by signage, support publications, etc.).			x
	Information on site	common standard for signing				x
	High quality presentations	Guidelines are developed for presenting the Limes on site.				x
	High quality presentations	Where needed, new visitor experiences are developed.	New visitor experiences. (Easy to report, for example.PREATORIUM KOLN, ROMAN SHIPS MUSEUM ALPHEN)			x
	Improved product offers for target groups	Develop a visitor strategy for the Lower German Limes.	This could be a simple document with an overview on target groups, existing offers that we want to keep or expand an new products that we want to develop.	x	x	
VI	<b>COMMUNITIES:</b> <i>The Lower German Limes is a source of inspiration for the local environment and communities. The residents are proud of the presence of the historical frontier.</i>					
	<b>MP Objective</b>	<b>Action</b>	<b>Success Measure</b>	<b>NL</b>	<b>GE</b>	<b>Tog</b>
	Partnerships	Develop new and strengthen existing partnerships between regional and local stakeholders involved with the Lower German Limes	Further developed Limes community			x
	Community involvement and ownership	Facilitate and stimulate initiatives from third parties	Realized initiatives.			x

## **Annex 2: List of partners**