
The Venetian Works of Defence between 15th and 17th Centuries (Italy, Croatia, Montenegro) No 1533

Official name as proposed by the State Party

The Venetian Works of Defence between 15th and 17th Centuries: *Stato da Terra* – western *Stato da Mar*

Location

Italy

Municipality of Bergamo, Lombardia

Municipality of Peschiera del Garda and Municipality of Venezia, Veneto

Municipality of Palmanova, Friuli Venezia Giulia

Croatia

City of Zadar, Zadar County

Šibenik-Knin County

City of Hvar, Split-Dalmatian County

City of Korčula, Dubrovnik-Neretva County

Montenegro

Municipality of Herceg Novi

Municipality of Kotor

Municipality of Ulcinj

Brief description

The expansion and power of the Republic of Venice reached its greatest extent in the 15th century through extensive commercial networks protected by defensive fortifications located throughout the *Stato da Terra* (protecting the Republic from other European powers to the northwest) and the *Stato da Mar* (protecting the sea routes and ports in the Adriatic Sea to the Levant). The introduction of gunpowder led to significant shifts in military techniques and architecture that are reflected in the design of fortifications – termed *alla moderna*. Three States Parties have collaborated to identify 15 components spanning more than 1000 km between the Lombard region of Italy and the eastern Adriatic Coast. Together, these represent the defensive works of the *Serenissima* between the 15th and 17th centuries, the most significant period of the longer history of the Venetian Republic; and demonstrate the transition of *alla moderna* defences, which were to feature throughout Europe.

Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a transnational serial nomination of 15 *sites*.

1 Basic data

Included in the Tentative List

Italy

City of Bergamo: 01/06/2006

Fortress Town of Palmanova: 01/06/2006

The Venetian Works of Defence between 15th and 17th centuries: 09/10/2013

Croatia

Zadar – Episcopal Complex: 01/02/2005

The Historic Town of Korčula: 29/01/2007

The Venetian Works of Defence between 15th and 17th centuries: 25/11/2013

Montenegro

The Venetian Works of Defence between 15th and 17th centuries: 11/02/2014

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

27 January 2016

Background

This is a new nomination.

Several of the components of the transnational serial nominated property are within or adjacent to other World Heritage properties (with diverse justifications of Outstanding Universal Value): Venice and its Lagoon (Italy, 1987, (i), (ii), (iii), (iv), (v) and (vi)) (components 3-6); Stari Grad Plain (Croatia, 2008, (ii), (iii) and (v)) (components 10-11); The Cathedral of St James in Šibenik (Croatia, 2000, (i), (ii) and (iv)) (component 9); Natural and Cultural-Historical Region of Kotor (Montenegro, 1979, (i), (ii), (iii) and (iv)) (components 13-14).

Consultations

ICOMOS consulted its International Scientific Committee on Fortifications and military heritage and several independent experts.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the transnational serial nominated property from 11 to 22 September 2016.

Additional information received by ICOMOS

A letter was sent to the States Parties on 17 October 2016 requesting further information on the rationale for the selection of the 15 components, and in particular, why the full extent of the Venetian trade network and fortifications is not represented by sites in additional States Parties. A comprehensive list of all Venetian defences was requested (within and beyond the three participating States Parties) to allow the context of the selection to be better understood. ICOMOS also requested updated information about the International Coordination Group; and about the basis for including the geomorphological context as a basis for

justifying the specific contributions of selected components in framing the potential Outstanding Universal Value of the serial property.

An Interim Report was provided to the State Parties in January 2017 summarising the issues identified by the ICOMOS World Heritage Panel, focusing on continuing concerns with the selection of the series, insufficient justification for including examples from the 15th century, the need for the scope of the nomination and comparative analysis to include consideration of *alla moderna* fortifications located beyond the territories of the three States Parties, and the desirability of working with the States Parties to develop a nomination strategy for a wider transnational proposal (possibly in several stages). ICOMOS offered to cooperate with the three States Parties to develop this nomination further but acknowledged its difficulty in doing so within the timeframe of the current evaluation cycle.

Consultation meetings occurred between ICOMOS and representatives of the three States Parties to discuss these matters on 24 November 2016 and 15 February 2017.

The States Parties provided Additional Information on 14 November 2016 and 28 February 2017, and the information provided has been incorporated into this report.

Date of ICOMOS approval of this report

10 March 2017

2 The property

Description of the Serial Nomination

The expansion and power of the Republic of Venice reached its greatest extent in the 15th century through extensive commercial networks protected by defensive fortifications located throughout the *Stato da Terra* or *Terraferma* (protecting the Republic from other European powers to the northwest) and the *Stato da Mar* or *Domini da Mar* (protecting the sea routes and ports in the Adriatic Sea to the Levant).

The introduction of gunpowder led to significant shifts in military techniques and architecture that are reflected in the design of fortifications – termed *alla moderna* (bastioned system). The components of this serial nomination have been selected to demonstrate the transition and operations of *alla moderna* defences, laying the foundations of military culture that would spread through Europe in the late 17th century. Firearms dramatically changed military strategies toward siege techniques. Attacks could occur across a greater distance, changing the relationships between cities and countryside. The forts needed defence lines to protect the walls – and used ditches, water barriers and huge clearings, and later, underground tunnels. Military architecture shifted from earlier square/round towers that protected medieval walls of Venetian towns, to lower rounded towers, reinforced at their bases by robust earth

works and bastions, seen as strong characteristic of *Serenissima* expertise in military architecture. Urban structures altered to accommodate new types of buildings and lay-outs, and new uses of urban areas.

In the Additional Information provided by the three States Parties, the entire extent of the Venetian defences is conceptualised in three major parts: the *Stato da Terra*, the western *Stato da Mar* (encompassing the defences of Venice itself); and the Levante *Stato da Mar* which included the coastlines and routes of the Eastern Mediterranean. This nomination covers the first two of these parts, and is comprised of fifteen components in Italy, Croatia and Montenegro located across more than 1000 km between the Lombard region of Italy and the eastern Adriatic Coast. The components have been selected to represent the defensive works of the *Serenissima* between the 15th and 17th centuries, the most significant period of the long history of the Venetian Republic. The nomination has a focus on the significance of the *alla moderna* fortifications, as it was in the Republic of Venice that bastion fortifications emerged.

Along with Venice, the components include the two capitals of the western sections of the *Stato da Mar* in the Adriatic Sea (Zadar and Kotor); and maritime fortresses along the route to the Eastern Mediterranean and the Levant. For the *Stato da Terra* there are three urban fortresses in diverse landscape contexts. There are also two shipyards for the construction and repair of war galleys and fortifications to protect them, including an arsenal with three of its advanced works commanding the pass and channel of the lagoon (Venice), and a boat hangar with wharfs (Hvar). There are also two peninsular walled towns – one dating from the 15th century (Korčula), and the other from the 16th century (Zadar); a walled town with a citadel (Kotor), three citadels each with a *torrione* (dungeon) (Hvar, Herceg Novi, Ulcinj) and finally a sea fort (Šibenik).

Most of the components have multiple elements including arsenals, channels, enclosures, and various forms of fortresses. The components extend from Bergamo, the point of defence on the northwest border of the Republic; to Palmanova which protected the northeast border; to Zadar, the administrative centre and capital of Dalmatia; to the fortified city of Ulcinj in the far south of the *Golfo di Venezia*. The total area of the components is 420.91 ha, and the buffer zones cover a total of 72,005.64 ha.

1. Fortified city of Bergamo (Italy) – 119.61 ha, with a buffer zone of 446.07 ha

This is the westernmost component – the ‘western gate’ of the Republic of Venice and defensive outpost to protect the *Stato da Terra*. Set in a hilly landscape of steep relief, Bergamo is a fortified city with an extremely distinctive ‘near-vertical’ form. Elements include the hill fortification, city walls, four gates, ramparts, St Vigilio Fort and St Domenico Fort, an urban fortress and citadel and associated urban fabric. This component is proposed as representative of the power of the *Serenissima*, and the only hill fortification in the series.

2. Fortified city of Peschiera del Garda (Italy) – 36.67 ha, with a buffer zone of 143.85 ha

This component of the *Stato da Terra* acted as the 'hinge' between the City of Venice and its territories further to the west beyond the Mincio River (such as Bergamo). It is a fortified city, located in relation to the lake and river systems (and termed a 'freshwater' fortification). It consists of the city walls (5 ramparts in a 'pentagon' plan) with two gates, canal and associated urban fabric. Two million tourists visit this component each year.

3. – 6. Defensive System Venice (Italy)

Four components of the defences of Venice have been included to represent the centre of the whole defensive network. The components are distributed along the sensitive accesses to the Venice Lagoon. These include the Arsenale (31.69 ha), the Fort of Sant'Andrea (3.06 ha), the Poveglia Octagon (0.27 ha) and the Alberoni Octagon (0.25 ha). These four components are part of the existing World Heritage property of Venice and its Lagoon; and the very large buffer zone for these four components is the boundary of the existing World Heritage property (70,148.32 ha). Venice was the centre of the Republic's power and the headquarters of the defence system. It was located at the central point between the *Stato da Terra* and the *Stato da Mar*. Its defences were directed toward the sea, and protected the key access points to the ports in order to defend the city.

The Arsenale was the centre of the Republic's military logistics. It is a well conserved ensemble of impressive size and of many buildings, including a shipyard and arms factory that continue to function today. The arsenal, once surrounded by a watertight wall, is subdivided into three separate land areas: the 19 warehouses in the north, now used for research laboratories and services; the old arsenal (west) which includes the most valuable heritage buildings, now the property of the Italian Navy; and the southern part where the foundries, rope factory (370 m in length) and artillery hangars are located. This area is used during the Venice Biennale (500,000 visitors over a period of 6 months).

Fort of Sant'Andrea is located at the mouth of the Lido, the most strategically important place within Venice, and protected the northern entry to the Lagoon. It is an exceptional designed by Michele Sanmicheli in the early 16th century. Today, it is restored and open to occasional group tours. A new public/private partnership project will allow links through the city and improve visitor access.

The Poveglia and Alberoni Octagons mark channels in the Lagoon. These are two of five preserved octagons in Venice, none of which is accessible. From 1571, the Octagons were built along the southern channel of the lagoon. The Octagons are inert structures built of brick and filled with earth, with sloping sides, a diameter of approximately 60 metres and a height of approximately 6 metres. These structures are of contributory interest as part of the larger complexes of defences of Venice's lagoon.

7. City Fortress of Palmanova (Italy) – 193.73 ha, with a buffer zone of 296.27 ha

Located at the eastern border of the *Stato da Terra*, Palmanova is a city fortress with a nine-pointed star plan, set within plains. This city was important for defence from Ottoman attacks from the east and from Austria. This is the only 'new town' included in the serial nomination, widely recognised as the 'ideal fortified city'. Its elements include the three concentric city walls (two Venetian, and one French) with bastions, ravelins and lunettes; and the associated urban elements, barracks and powder magazine. Today, there are many projects for building conservation and adaptive reuse.

8. Defensive System of Zadar (Croatia) – 11.19 ha, with a buffer zone of 240.45 ha

Zadar (Zara) was the administrative centre of the *Stato da Mar*, capital of Venetian Dalmatia, and a hub of the maritime routes in the *Golfo di Venezia* between Venice and Corfu. Zadar allowed Venice to control navigation and protect the Republic from pirates. The city was the military and administrative seat for Dalmatia. It is located on a peninsula, which was fortified. Its elements include the city walls with bastion and an external fort. While many changes have affected the fortifications, they are extremely significant. The peninsula attack front still conserves the extraordinary accumulation of superimposed walls and structures: the trace of the ancient wall with its monumental land gates with niches, the Medieval front, the Renaissance ramparts and two formidable bastions, the Forte hornwork and so on. This component demonstrates *alla moderna* military architecture.

9. Fort of St Nikola, Šibenik-Knin County (Croatia) – 0.85 ha, with a buffer zone of 523.79 ha

Located on a rocky islet, the fort was the first defence and nerve centre for the coastal city of Šibenik in the *Stato da Mar*, rich in resources and raw materials (including its medieval salt pans). Šibenik was a highly prized and safe port which came under Venice's rule from 1412. The Fort has a triangular plan and is an excellent example of a new work (single fort) built to *alla moderna* requirements, and cleverly incorporates the rock of the island into the structure. The buffer zone aligns with the 'Kanal Luka' area which is a category (v) protected area within IUCN's classification scheme. An interpretive trail is proposed that will link the fort with a regional nature park.

10.- 11. Defensive System of Hvar (Croatia)

The island of Hvar was a strategic centre in the *Stato da Mar*. Its bay is protected by a natural barrier of islands. There are two nominated components at Hvar, including the Fortica Fortress (1.44 ha) and the Arsenal with built quay of port with many military buildings (1.37 ha). There is a buffer zone of 36.52 ha. The Fortica complex – with its hairpin access path, four torriones (each bearing a Venetian lion) and with porticullised posterns – stands along a crest to cover the town below demonstrates the period of transition to artillery in the Venetian context.

The citadel is a structure of hybrid appearance, due in part to the explosion of the powder magazine in 1579, Napoleonic and Austrian modernisations and more recent tourism development modifications. Although Hvar was fortified in medieval times, the increasing pressures from the Ottoman fleet created the need for *alla moderna* defences. Currently, there is a conservation project underway, supported by archaeological investigations.

12. Fortified City of Korčula (Croatia) – 3.86 ha, with a buffer zone of 59.24 ha

Capital of the island of the same name, the fortified *Stato da Mar* city of Korčula is famous for its white stone and for the layout of its central street. The States Parties consider that Korčula is one of the most well preserved fortified medieval and renaissance urban complex in the Adriatic. It is included in the serial nomination to represent the early transition period in the 15th century, and is classified as a 'garrison city'. Its location functioned as the 'southern gate' for Venice, the last operational port for the naval trade with the Levant, and defence for the area bordering the Republic of Dubrovnik. Its elements include the city wall, a number of circular, semi-circular and square towers, city gate, port, arsenal and associated urban elements (including a cistern and a bridge).

13. Forte Mare, Herceg Novi (Montenegro) – 0.07 ha, with a buffer zone of 5.68 ha

This fortress allowed control and defence of the entrance to the Boka Bay, one of the Mediterranean's finest natural ports. It is located within a sea cliff on an outcrop of bare rock rising from the water. Reshaped from an earlier fort structure, this single-element component is the best preserved of the defences of Herceg Novi. It is a compact structure, approximately 40 metres by 20 metres overlooking the sea and the town, with four successive steps on the slope and separated from the *intra muros* by a ditch.

It is located within the buffer zone of the World Heritage property of the Natural and Culturo-Historical Region of Kotor. Today, the Island and small town have significant levels of tourism, and the Fortress has 22,000 visitors per year. Like several other components in Montenegro, Herceg Novi was affected by the severe earthquake of 1979.

14. City of Kotor (Montenegro) – 16.32 ha, with a buffer zone of 99.19 ha

The counterpart to Herceg Novi in protecting the Boka Bay, the fortified city of Kotor was protected from the sea and the land. The most protected port of the Adriatic, and former capital of the *Albania veneta*, Kotor occupied an important strategic position within the *Stato da Mar*. It is located within the World Heritage property of the Natural and Culturo-Historical Region of Kotor; and the elements include the perimeter walls with 5 bastions, 11 platforms and 3 gates, and associated buildings and urban elements. Affected by a severe earthquake in 1979, it is today known as the pearl of the Adriatic, and has very heavy levels of

tourism, including large numbers of tourists that visit via cruise ships.

15. Fortified City of Ulcinj (Montenegro) – 0.54 ha, with a buffer zone of 6.26 ha

This fortified city is located at the southernmost tip of Venetian defensive system on Eastern Adriatic coast and was the first naval checkpoint for passage toward Venice. The elements include the perimeter walls and two entrance gates. The town was occupied relatively briefly by Venice (1404-1571) before falling defensively into the hands of the Ottomans. The city was badly affected by the 1979 earthquake, but today there is a conservation program in collaboration with the École de Chaillot in Paris. There are many hotels built in this area, including unsympathetic buildings and a private elevator outside the cliff.

History and development

The cult of St Mark spread throughout the Venetian Lagoon from the 8th century, and the 'Most Serene Republic of Venice' (or *Serenissima*) was established from at least 900. It existed for a millennium until its fall to Napoleon in 1797. The Venetian Republic was centred on its prosperous capital and its lagoon, and included expansive land and sea networks. Venice became a major maritime power from the 10th century, and from that time, its influence and trading networks extended along the Dalmatian Coast, to the Mediterranean Sea and the Levant. By the late 15th century, the Republic of Venice reached its maximum extent. This was made possible by a vast trading network of fortified cities, commercial towns and ports. The maximum expansion of the *Stato da Terra* was achieved by 1484, and the *Serenissima* became the largest, richest and most populated Italian state.

This transnational serial nomination focuses on the defensive innovations of the Venetian Republic from the 15th to the 17th centuries. The States Parties have identified three chronological periods that span the period from the 15th to the 17th centuries. From the 15th century, the Venetian Republic was divided into two states: the *Stato da Terra* (central and north-east Italian regions); and the *Stato da Mar* (including the full extent of the eastern Adriatic Sea and routes in the eastern Mediterranean). The consolidation of the *Stato da Terra* and the *Stato da Mar* was achieved through a series of wars and power shifts that are summarised in the nomination dossier.

The first of the historical periods described by the States Parties was a phase of transition from older defensive works to the *alla moderna* at the end of the 15th century, demonstrated by the selected fortified towns of Korčula and Kotor. Expansion of the Venetian Republic was a response to threatening advances from several directions. The *Stato da Terra* expanded to incorporate new areas, including the Lombard cities and the land of the Valle Camonica; and the defence of coastal settlements and sea routes.

The second was a phase of experimentation in the 16th century, and the spread of technically more advanced military structures, demonstrated by the selected fortified

towns of Bergamo and Ulcinj, the defensive system of Hvar and the Fort of St Nikola. During this century, military planning and architecture became well organised and more scientific. New elements were introduced – bastions, walls and moats – as well as internal geometries. At this time, the defences were organised into an inter-connected system as part of an overall territorial strategy. By the end of the 16th century, the defence network was in place, supported by highly centralised organisation.

The third was a phase of consolidation and completion in the 17th century, demonstrated by the selected fortified cities of Zadar and Peschiera del Garda, and the city fortress of Palmanova.

The history of each component is outlined in the nomination dossier. Although many of the selected components were fortified at earlier historical periods, the Venetian defences were unlike the earlier designs. The effects of the introduction of gunpowder shifted the means of military engagement and defence, stimulating entirely different approaches to the design and operation of defensive structures and complexes.

ICOMOS notes that important sites and sections of the *Stato da Mar* that extend into the Eastern Mediterranean are outside the scope of this transnational serial nomination. The protection of the outposts of the Venetian Republic in the Levant were significant in the development of the trade routes for the *Serenissima*, and are illustrated by a number of notable examples including walled towns, citadels, sea forts, and island strongholds located beyond the territories of the three States Parties.

In the Additional Information received during the evaluation of this nomination, the three States Parties have clarified that the Venetian Defences of the 15th-17th centuries can be conceptualised in three major sections, the *Stato da Terra*, the parts of the *Stato da Mar* that occur in the Adriatic Sea (known historically as the *Golfo di Venezia*), and a third important section in the Eastern Mediterranean. The current nomination consists of sites that can represent the first two of these systems, comprising what the States Parties consider to be the physical, logical and functional ‘heart’ of the overall defensive system. This clarification is reflected in the changes to the title of this nomination proposed by the States Parties in February 2017, that is to say to change the original title “The Venetian Works of Defence Between 15th and 17th centuries” to “Venetian Works of Defence Between 15th and 17th centuries: *Stato da Terra* – Western *Stato da Mar*”.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The comparative analysis for this transnational serial nomination has been further developed through the exchanges and additional information provided to ICOMOS by the States Parties. For a serial nomination,

the comparative analysis must first establish the context in which the proposed justification for Outstanding Universal Value can be considered; and must then clearly justify the inclusion of each selected component.

The States Parties compare the nominated transnational serial property with a wide range of properties on the World Heritage List, including those that focus on fortifications, fortified/walled cities, and some cultural routes. Each of these is compared in relation to the historical period, and a range of other characteristics: unitary planning of the system on three levels (urban, military, civil); permanence of figurative repertoires/Venetian social models; presence of examples of *alla moderna* architecture; typological variety of defence architecture, representation of a cultural/commercial itinerary of international importance; evidence of exchanges between western and eastern cultures; and readability of the system at micro and macro scales.

World Heritage properties noted as relevant comparisons include: the Fortifications of Vauban (France, (i) (ii) (iv), 2008); the Old Town of Corfu (Greece, (iv), 2007); La Fortaleza and San Juan National Historic Site in Puerto Rico (USA, (vi), 1983); Kunta Kinteh Island and Related Sites (Gambia, (iii) (vi), 2003); and the Forts and Castles, Volta, Greater Accra, Central and Western Regions (Ghana, (vi), 1979). The States Parties conclude that there are no other properties that meet the identified conditions as well as the nominated property. While some similarities are recognised, the application of different criteria and justification of Outstanding Universal Value is noted by the States Parties.

The States Parties have also examined potentially similar properties on Tentative Lists, and noted some interesting parallels with properties in Brazil, Spain, Ukraine and Greece. There is also a brief outline of *alla moderna* architecture in Europe, and other fortification systems in other Italian States. ICOMOS considers that this analysis is sufficiently comprehensive.

The next stage of the comparative analysis is to justify the focus of the nomination on the *Stato da Terra* and the *Stato da Mar* within their wider historical context. ICOMOS initially considered that the comparative analysis of the nomination needed to be augmented to include sites outside the territories of the participating States Parties, such as those occurring in Greece (including the Peloponnese, Aegean islands and Crete), Cyprus, Slovenia and Albania.

This gap was partially addressed by the Additional Information provided by the States Parties, by placing the chronological context of the nominated components alongside those from the wider network such as Candia, Heraklion, Negroponte, Morea, Naxos, Methoni, Koroni, Corfu, Zakynthos, Rhodes, Mytilini, Famagusta and Nicosia. Throughout this analysis, the importance of the Adriatic Sea (known also as *Golfo di Venezia*) is

emphasised in the factors that led to the innovations in defensive architecture and strategies.

On the basis of the exchanges with ICOMOS, the States Parties have outlined a possible way forward by clarifying and specifying the scope of the nomination to include two of the three major geographic segments that can express this stage in human history and the characteristics of *alla moderna* defensive design. It is proposed that this nomination should extend from the *Stato da Terra* to the Western *Stato da Mar* (centred on the Adriatic Sea), leaving open the potential for a future nomination of important examples from the Levant *Stato da Mar* (centred on the Eastern Mediterranean). The States Parties suggest the two sections represented by the nominated sites were under the control of the *Serenissima* for a longer period than the eastern *Stato da Mar* (Eastern Mediterranean/Levant).

Given the large and transnational character of such a nomination, and differences in the geo-cultural and historical contexts of these three major segments, ICOMOS considers this to be a viable strategy.

In addition to the scoping of the larger geo-cultural and historical context of this nomination, the final crucial stage of the comparative analysis is required to provide comparative information about all Venetian defensive works of the 15th to the 17th centuries that justifies the selection of them, including the specific and necessary contribution made by each of the 15 components to the proposed Outstanding Universal Value of the serial property. In the Additional Information provided by the States Parties, a summary table shows a total of 31 sites that were analysed in the three States Parties: 18 in Italy; 8 in Croatia; and 5 in Montenegro.

The States Parties argue that the 15 components have been chosen because of their ability to represent a number of important characteristics of Venetian defensive works: typological variety; chronology (according to three identified historical stages from the 15th to 17th centuries); the roles played by individual sites as a part of a commercial network; architectural/design importance; variety of geomorphological contexts; and ability to represent both the land and sea forts. The state of conservation has also been taken into account.

Ratings are given for each of these, but the choices do not seem to have been made to ensure that these 'chronological/typological' variables are not duplicated and there is little clarity about how these characteristics relate to the proposed criteria.

ICOMOS considers that these factors are relevant (depending on which criteria are considered), but overall, the large set of factors used to determine the selection has resulted in a confusing picture of why the components of the series are included.

In addition, the States Parties have classified four types of sites: fortified cities (Bergamo, Peschiera del Garda,

Kotor, Ulcinj); city fortress (Palmanova); defensive systems for the City of Venice, Hvar and Zadar; and single forts (Forte Mare of Herceg Novi, Fort of St Nikola). The States Parties assert that the 15 components are the most significant sites within these classifications, but ICOMOS considers that there is insufficient explanation of why some of these types are represented by one example, while others have several.

Detailed descriptive reasons are given by the States Parties for the inclusion of the fifteen nominated components. Part of the justification for the selection of the components rests on the diversity of geomorphological settings of these different components – from mountains (Bergamo), lakes (Peschiera del Garda), plains (Palmanova), peninsula (Zadar), islands (Korčula, Hvar) and the Lagoon of Venice itself. ICOMOS considers this information to be useful in understanding the challenges of designing and operating the system of defences.

The States Parties have explained that the aim is not to entirely reconstruct the Venetian commercial network, but to portray the defences through a selection of assets which can communicate the operation of a system, and illustrate its complexities. They have sought to represent the two territorial spheres (*Stato da Terra* and *Stato da Mar*), the three historical phases, the different defensive functions, and the plurality of types. The selection has also sought to include sites that demonstrate the extent of the Venetian Republic – from its northwest border (Bergamo), to its northeast border (Palmanova), the centre of Dalmatia (Zadar) and the extent to the far south (Ulcinj).

ICOMOS understands that the approach might have aimed to select the best-preserved examples from each of the three countries. However, this has created a confusing rationale overall.

ICOMOS finds that the rationale for the inclusion of the 15th century in the scope of the nomination is not well-established. ICOMOS does not disagree with the arguments by States Parties that many important historical and geo-political shifts occurred in the 15th century, laying the pre-conditions for the innovations that followed. However, ICOMOS finds that the defensive works of the 15th century cannot themselves demonstrate these shifts, and do not demonstrate the substantial changes and influences of the *alla moderna* defences (for example, Korčula). For this reason, ICOMOS considers that the comparative analysis and other information provided by the States Parties support consideration of Venetian defensive works from the 16th and 17th centuries, but not sites that wholly or mostly reflect the approaches commonly applied in the 15th century (or earlier).

In conclusion, ICOMOS considers that the internal selection of the comparative analysis has not sufficiently justified the specific and necessary inclusion of each component. ICOMOS considers that there are some aspects, which could be considered duplicated, and

others only thinly represented. For example, in the case of Venice (Italy), it is not clear why two out of the five octagons are chosen (rather than one of them or all of them); why the ArsenaIs at Venice and Hvar have been included given the focus of the proposed Outstanding Universal Value; or why the Fort of Sant'Andrea is chosen, but the Fort of San Felice (Chioggia) is omitted, given the importance of its strategic position. In the case of other components, the factors seem to be duplicating other examples (such as the several examples of sea forts and *torrione* citadels), or weakly demonstrating their supposed role in the serial nomination (such as the Octagons in Venice). Venice's Fort of Sant'Andrea typologically overlaps with Fort of St Nikola at Šibenik-Knin County (Croatia) which is superior in conceptual quality; and the Fortified City of Korčula (Croatia) and Fortified City of Ulcinj (Montenegro) duplicate the typological contribution of Zadar and primarily demonstrate historical periods other than the 16th and 17th centuries. Finally, some components have issues with integrity that raise questions about their inclusion (as discussed below).

ICOMOS considers that the comparative analysis and the Additional Information provided justifies consideration of this transnational serial property for the World Heritage List on the basis of the importance of the development of *alla moderna* defensive solutions in the 16th and 17th centuries; but that the comparative analysis does not justify the selection of all of the nominated components.

Justification of Outstanding Universal Value

The nominated property is considered by the States Parties to be of Outstanding Universal Value as a cultural property for the following reasons:

- Located around the former 'Golfo di Venezia' (Adriatic Sea), the epicentre of influence of the Republic of Venice, the selected components trace a 'defensive line' and represent the evolution and extent of Venetian military culture, from the period of experimentation to the expression of *alla moderna* solutions;
- The Venetian 'imprint' reflected by these components demonstrates the construction methods, design and technological solutions of the architects and military engineers engaged by the *Serenissima*;
- While the period of highest development of the *alla moderna* military architecture occurred in the 16th and 17th centuries, the 15th century established the conditions for the later innovations such as the expansion of the *Stato da Terra* and the *Stato da Mar*, and the discovery of gunpowder that established the conditions for the later innovations;
- The selected components demonstrate the role of military technicians, architects and engineers in the making of a well organised and complex defensive machine.

The serial approach is justified by the States Parties on the basis of the ability of the 15 components to mark the 'line' of defences; and to demonstrate the phases and

breadth of Venetian *alla moderna* military architecture. The components also represent different geographic realities in terms of their landscape settings and roles within the larger system (being either close to or distant from the 'centre' for example).

ICOMOS considers that the focus of this nomination on the innovation of the *alla moderna* military architecture is an appropriate basis for the transnational serial nomination; but that the inclusion of the 15th century in the scope of the nomination is not justified. ICOMOS also considers that the focus on the work and careers of particular military individuals is a contributory rather than central basis for the proposed Outstanding Universal Value. ICOMOS stresses that the selection of the components is fundamental to the ability of the proposed Outstanding Universal Value to be demonstrated.

ICOMOS considers that the serial approach is justified given the large expanse of the Venetian defences during this historical period. However, ICOMOS considers that the comparative analysis has not justified the inclusion of all the proposed components (as explained above).

Integrity and authenticity

Integrity

The States Parties argue that the integrity of the nominated property is supported by the legibility of the logic of the defensive system, and that the selected components fully demonstrate the proposed Outstanding Universal Value of the serial property. Also mentioned is the typological variety, the visual integrity, the existence of appropriate boundaries and buffer zones and protective measures.

ICOMOS notes that the three States Parties have clarified the scope of the serial nomination covering the *Stato da Terra* and the sections of the *Stato da Mar* located in the Adriatic Sea. However, ICOMOS considers that the integrity of the serial property is not yet well-established for all fifteen components because the cases made for their inclusion are vary in their strength.

ICOMOS also considers that the integrity of some components is stronger than for others, due to the placement of boundaries, past unsympathetic developments and tourism pressures.

There are some issues regarding integrity for some components of the State Party of Croatia. At Zadar, 20th century conflicts have damaged some elements and there is an intrusively sited carpark (there are discussions to remove this and restore the wet ditch). There are also poorly sited and backfilling of *torriones* to create carparks at Korčula, as well as poor quality improvements and past conservation works that have weakened the authenticity and integrity of this component such as arbitrary restoration of the parapets on three towers, and cement elements to support tourism activities. Hvar has been impacted by concreted gazeboes established on the artillery terraces and

a range of tourism uses of the citadel that are not oriented toward an understanding of its history and heritage.

There are also some issues regarding integrity for some components of the State Party of Montenegro. Herceg Novi features some intrusive commercial facilities such as a closed night club and an open air cinema (with a large permanent screen). Ulcinj has inappropriately sited panoramic hotels and elevator to the ramparts. Kotor is subject to heavy tourism pressure, visually intrusive urban development, and a hydroelectric plant placed in front of the Riva bastion.

While there are ongoing efforts by the States Parties to address a number of these issues and pressures, they indicate the need for strong management and protection at the level of each component.

ICOMOS considers that the integrity of the whole series is justified for some of the nominated components; and that the integrity of the individual sites that comprise the series is variable and vulnerable, due to past and present development and tourism pressures.

Authenticity

Understanding of the history of the nominated components is supported by extensive archival materials, including documents, architectural drawings and maps, and wooden models. The phenomenon of *alla moderna* military architecture is intensively studied, and a number of the components have been studied in exemplary detail (such as the studies of the fortifications at Kotor and Bergamo).

Given the strategic locations of the components, ICOMOS considers that it is not surprising that many changes have occurred to most of them, including damage through different periods of conflict from the Napoleonic, Austrian and Ottoman periods and the conflicts of the 20th century. Impacts are also observed from over-zealous conservation projects, which have removed evidence of other layers of history.

As discussed above, ICOMOS considers that because of various past restorations and intrusive developments, the authenticity of the individual components of the series is variable.

- Hvar Arsenal and Wharf (Croatia): through various transformations, there are few remaining authentic elements associated with the proposed Outstanding Universal Value of this property (such as the décor of the two facades of the Arsenal and the cobblestone surface of the wharfs).
- Fortified City of Korčula (Croatia): the building complex has undergone radical alterations of poor quality such as arbitrary re-building of machiolated battlements on three towers, torriones backfilled with earth, and interior and jointing with cement for tourism-related alterations. Overall, these impacts on the authenticity of this component results in a relatively minor testimony to the Venetian fortifications than other nominated components.

- Forte Mare, Herceg Novi (Montenegro): studies and conservation works are commencing to address the challenging impacts on the authenticity of this component caused by conversion of the casemates into a night club (now disused), and an open-air cinema on its terrace with a permanently illuminated screen that can be seen from many vantage points.
- Ulcinj (Montenegro): in addition to the damages caused by the 1979 earthquake, and redundant and intrusive tourism elements, all of the parapets and powder magazines were altered under the Ottomans, resulting in relatively fewer authentic Venetian fragments than other components. Many of the Venetian elements are located in the buffer zone, rather than inside the property boundary (casemate bastions and powder magazine). ICOMOS notes that it is not possible to link these areas because the urban fortifications are non-continuous to the east and the west, leaving two different zones of interest.

ICOMOS considers that the authenticity of the whole series has been justified; but that the authenticity of the individual sites that comprise the series is variable due in part to past damages and poor restoration interventions.

In conclusion, ICOMOS considers that the integrity and authenticity of the series is justified for a reduced set of the nominated components; and that the integrity and the authenticity of the individual sites that comprise the series are variable due in part to past damages and poor restoration interventions.

Criteria under which inscription is proposed

The property as a whole is nominated on the basis of cultural criteria (ii), (iii) and (iv).

Criterion (ii): *exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;*

This criterion is justified by the States Parties on the grounds that the property demonstrates continuous interchanges between the Republic of Venice and other geo-cultural areas through commercial networks developed by the trading power of Venice between the east and west, from the period of maximum expansion in the 15th century, to its gradual decline in influence at the end of the 17th century.

ICOMOS considers that the linking of different geo-cultural European regions in the 15th to 17th century through the trade power of the Republic of Venice was an experience of intercultural exchange; and that the defensive works through this vast distance demonstrate the transfer of the *Serenissima's* influence and capacities. Furthermore, the defensive works had later and widespread influence. However, ICOMOS observes that the sites of defensive structures and works are not presented as tangibly embodying these intercultural processes. This characteristic is therefore assumed

rather than explicitly demonstrated by the nominated components and in the arguments presented by the States Parties; raising questions about whether the serial property of defensive constructions is itself illustrative of this aspect of the historical significance of the Republic of Venice. The ways in which the individual components can themselves exhibit these historical processes of cultural interchange are not explicitly demonstrated.

In conclusion, ICOMOS considers that this criterion has not been demonstrated.

Criterion (iii): *bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;*

This criterion is justified by the States Parties on the grounds that the selected components provide an exceptional testimony of *alla moderna* military culture which evolved within the Republic of Venice, involving vast territories and interactions. Together the components demonstrate a network or system, which had civil, military, urban dimensions, demonstrating Venice's innovative management models.

The States Parties have delineated three chronological stages spanning the 15th to the 17th centuries; and as discussed previously, ICOMOS does not consider the first of these – the phase of transition from older defensive works to the *alla moderna* in the 15th century – to be relevant to the arguments put forward for criterion (iii). However, the Venetian Works of Defence provide an exceptional testimony of the *alla moderna* military culture, which evolved within the Republic of Venice in the 16th and 17th centuries, involving vast territories and interactions. Together the components demonstrate a defensive network or system for the *Stato da Terra* and the western *Stato da Mar* centred in the Adriatic Sea or *Golfo di Venezia*, which had civil, military, urban dimensions that extended further, traversing the Mediterranean region to the Levant.

ICOMOS therefore considers that this criterion can be demonstrated by focusing on the importance of the 16th and 17th centuries, and selecting the sites, which most clearly exhibit attributes of these historical developments. When combined with arguments for criterion (iv), and taking into account issues of authenticity and integrity at the level of the individual components, ICOMOS has found that this criterion can be demonstrated for six of the nominated components (as listed below, in the conclusion for criterion (iv)).

ICOMOS considers that this criterion has not been demonstrated for the whole nominated series, but is justified through a more focused chronological range and associated selection of components.

Criterion (iv): *be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;*

This criterion is justified by the States Parties on the grounds that the components present an exceptional example of the *alla moderna* fortified system (bastioned system) built by the Republic of Venice following changes that were introduced following the increased use of firearms (artillery). Characteristics of the *alla moderna* system include the technical and logistic abilities, modern fighting strategies and new architectural requirements.

ICOMOS considers that this criterion could be used for the *alla moderna* defences of the Republic of Venice; however, not all of the selected components could be included according to this rationale, since it is the innovations from the 16th and 17th centuries that are of most significant in this regard (rather than all three periods identified in the nomination dossier).

Based on the exchanges with the States Parties and with specialists in this field, ICOMOS considers that a scientifically supportable nomination for the *Stato da Terra* and the western *Stato da Mar* can be sustained based on the following six components:

- City Fortress of Palmanova (Italy): an ideal new city
- Fort of St Nikola at Šibenik-Knin County (Croatia): a sea fort
- Defensive System of Zadar (Croatia): a peninsular fortified city
- Fortified City of Peschiera del Garda (Italy): a fortified city in a lake-river context
- City of Kotor (Montenegro): a fortified complex between sea and mountain over a long historic period
- Fortified City of Bergamo (Italy): a later fortified hill complex

On the basis of these components, the Venetian Works of Defence present the characteristics of the *alla moderna* fortified system (bastioned system) built by the Republic of Venice following changes that were introduced following the increased use of firearms. Together, the six components demonstrate in an exceptional way the characteristics of the *alla moderna* system including its technical and logistic abilities, modern fighting strategies and new architectural requirements within the *Stato da Terra* and the western portions of the *Stato da Mar*.

ICOMOS considers that all the other nominated components should be excluded because they do not contribute to the proposed Outstanding Universal Value in specific and/or necessary ways. The only exception could be the future inclusion of the nominated component of Forte Mare, Herceg Novi (Montenegro) as a counterpoint to Kotor in this series following the completion of current studies and significant adjustments to its boundary to incorporate it into the perimeter of the urban fortifications from which it is detached; and to include it among all the other fortifications of the 'mouths' (together with Kotor). However, this is clearly an ambitious and much longer-term possibility and ICOMOS considers that it cannot be included in the serial property in its current formulation at this stage.

ICOMOS considers that this criterion has not been demonstrated for the whole series, but is justified through a more focused selection of six components occurring in the territories of the three participating States Parties.

ICOMOS considers that the serial approach is justified on the basis that a system cannot be represented by a single site or complex.

ICOMOS considers that criteria (iii) and (iv) are demonstrated for a series comprised of six components; but that the remaining components should be excluded.

Description of the attributes

The attributes of the Outstanding Universal Value of this transnational serial property are the earthworks and structures of fortification and defence from the Venetian Republic in the 16th and 17th centuries. Strongly contributory to these are the landscape settings, and strong the visual qualities of the nominated components; as well as urban and defensive structures from both earlier (Medieval) and more recent periods of history (such as the Napoleonic and Ottoman period modifications and additions) that allow the nominated components to be truthfully presented and for the tactical coherence of each military site in its final state to be recognised.

4 Factors affecting the property

Because the selected components of this serial nomination occur across great expanses of land and water, the factors are variable in their type and severity.

Development pressures arise from the need to adapt urban structures in many of the components, although this is strictly controlled in most cases. Traffic management is a continuing challenge in many of the urban components. ICOMOS is aware of urban development projects near to the component boundary at Zadar; and a proposal for a funicular or tunnel and elevator for Kotor which should be subject to rigorous Heritage Impact Assessments. ICOMOS considers that it would be desirable for the States Parties to further develop the existing framework for Heritage Impact Assessment, so as to ensure that any programme or project regarding the transnational serial property is assessed in relation to its impacts on the Outstanding Universal Value and its supporting attributes.

Visitor pressures vary greatly (as discussed in the Management section of this report), but are very significant in some of the components, particularly in the summer season. This is evident in Peschiera del Garda, Kotor, Hvar and Korčula, and in Venice's Arsenale during the Biennale. Palmanova and Fort San Nikola in Šibenik have much more modest tourism levels that are anticipated to grow; and some elements such as the Octagons in Venice have virtually no visitors.

Large volumes of cruise ships and cargo ships create various pressures for several of the components (particularly for Kotor). Wave action from cargo ships is a factor for a number of the elements located on the sea (Fort of Sant'Andrea in Venice).

The pressures of natural forces, flooding and rising sea levels are significant for some components, most obviously for Venice, but also Kotor, Zadar and Hvar. The risks from earthquakes are significant for the components in Croatia and Montenegro.

ICOMOS considers that the main threats to the property vary across the components, but that visitor pressure, earthquakes and rising sea levels are of particular concern.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

Because the selected components are located in three States Parties, and in some cases, are aligned with existing boundaries of protected areas or World Heritage properties, the rationales for the delineation of boundaries and buffer zones are diverse. In some cases, these could be more clearly explained and justified; and there are some inconsistencies across the full series, such as the exclusion of sea waters and/or features of earlier/later periods of fortifications.

For most of the components, ICOMOS considers that the delineation of boundaries is appropriate, although has identified issues for several components (Ulcinj and Venice's Arsenale).

ICOMOS considers that the logic of the delineation of the buffer zones of several properties could be improved in light of the proposed Outstanding Universal Value.

- For Peschiera del Garda, Hvar and Kotor, it would be desirable to integrate later period fortifications into the buffer zones in order to recognise the tactical coherence of each military site in its final state;
- Furthermore, for Hvar, the buffer zone should be extended to incorporate the high point above the nominated component in order to fully protect the visual integrity;
- For Zadar, the buffer zone should be expanded to the other side of the port in light of the various impacts on its visual integrity, including from nearby real estate projects;
- For Kotor, it would be desirable to include some area of the sea waters adjacent to this component in the buffer zone.

ICOMOS considers that the boundaries and buffer zones are generally adequate, but could be improved/adjusted for several of the components of the nominated serial property.

Ownership

Italy

The State Party has provided detailed overviews of the ownership arrangements for each of the components in Italy. The nominated components occur in four different municipalities, and most of them have a mixture of ownership arrangements that can be broadly understood according to five categories: public domain (national defence purposes); inalienable state property; public property (including various regional or municipal bodies); ecclesiastical property; and private property (particularly in the urban areas).

Croatia

The State Party has provided detailed overviews of the ownership arrangements for each of the components in Croatia. The nominated components occur in four different municipalities, and most of them have a mixture of ownership arrangements. Most elements of public property belong to the respective cities, although there are some elements that are the property of the State (such as the Glass Museum at Zadar). Private property ownership also occurs in each of the components.

Montenegro

The State Party has provided detailed overviews of the ownership arrangements for each of the components in Montenegro. The nominated components occur in three different municipalities. The components exhibit a mixture of public ownership (by the local councils), ecclesiastical ownership of certain components, and private ownership.

Protection

Each of the three States Parties establishes measures for legal protection at national and regional/local levels, as well as through relevant legal texts.

Italy

The seven components in Italy are protected by the 'Cultural and Landscape Heritage Code' (2004) which establishes the national regulation framework; and each is further protected by regional and municipal Territorial Plans and local protection measures that regulate urban transformations. Protection measures within the Cultural and Landscape Heritage Code regulate conservation works, and protection of significant landscape elements. Environmental protection is provided for the Italian components through the Draft Law regarding Protected Areas (1991); and regulation of protected areas occurs through the implementation of the European Ecological Network (Natura 2000) and various Italian Directives for flora and fauna.

Croatia

The five components are protected by the 'Act on the Protection and Preservation of Cultural Property', and inscription in the Register of Cultural properties. Each is

further protected by local protection measures that regulate urban transformations. The Environmental Protection Act and the Nature Protection Act regulate environmental protection; and there is a Strategy and Action Plan for the Protection of Biological and Landscape Diversity.

Montenegro

The three components are protected by the 'Law on the Protection of Cultural Property' and subordinate ordinances. The 'Law on Spatial Planning and Construction' and local protection measures that regulate urban transformations. Environmental protection is achieved through the Environment Law and Nature Protection Act.

ICOMOS considers that the legal protection in place is adequate.

Conservation

The state of conservation is one of the parameters taken into account in selecting the components of this nomination. Due to the impacts of historical processes since the 17th century, and conservation interventions, there are different issues across the fifteen components, and the state of conservation varies. These are detailed site by site in the nomination dossier.

For the most part, the selected components have been the focus of specialist interest and research, although the detailed site documentation could be improved for a number of the components. The fifteen components vary in their state of conservation. Many exhibit an exemplary state of conservation (Peschiera del Garda, Palmanova, Bergamo); and others are current subject to conservation projects and specialist studies. Some specific issues noted by ICOMOS include:

- Fort of Sant'Andrea, Venice (Italy), has been affected by widespread subsidence, sinking by 80cm into the lagoon, which has made it necessary to close most of the firing openings and the raising of the level of the inner courtyard. The fort is currently being restored.
- Zadar (Croatia): while many changes have affected the fortifications, these are extremely significant. The bastions of the port front need to be restored, to remove the structures backing on to the flanks and to rationalise car parking. As noted above, the ditch has been backfilled, and a major real estate project is planned in front of the Forte. ICOMOS notes that the management of the restoration process is of a high standard, with a full stone-by-stone record of the perimeter, and detailed archaeological support for all restorations.
- Fort of St Nikola, Šibenik-Knin County (Croatia): while demonstrating a satisfactory state of conservation, local desires to find an ancient gate on the bastioned front lead to some recent uncontrolled digging behind the underground powder magazine and in the side of the south-west bastion. ICOMOS considers that archaeological studies are needed as

a priority to preserve traces of all periods of the fort's active life.

- Hvar Fortica (Croatia): as noted earlier, the complex changes create challenges for the legibility of this component (eg. the explosion of the powder magazine in 1579, Napoleonic and Austrian modernisations, and tourism adaptations). ICOMOS considers that more intensive study and documentation is needed.
- Hvar Arsenal (Croatia): ICOMOS notes the exemplary archaeological investigation that has shown that there was never a wet dock inside. Restoration is currently underway.
- For many of the components in Croatia and Montenegro, there is remaining damage from the 1979 earthquake (for example, at Kotor the upper parts of the remarkable fortifications have not been restored).
- Forte Mare, Herceg Novi and Ulcinj (Montenegro): although there have been impacts on authenticity arising from poorly sited tourism facilities and conservation works, the Montenegrin Crown Prince has supported initiatives in collaboration with the École de Chaillot (France) that includes support for traditional materials and trades and training.
- In addition, at Forte Mare, Herceg Novi (Montenegro), the state of conservation is impacted by buildings backing onto the structure on the outside and dense concealing vegetation.
- Palmanova (Italy): the successive states of fortification are not well interpreted; for example, 19th century interventions (French and Austrian) are buried under the fortress, but their original forms should be rediscovered and incorporated into the presentation and interpretation.
- Peschiera del Garda (Italy): currently some alterations are being made to the parade ground between the cathedral and the castle, with a partial excavation of the ancient port.

One common issue is that past conservation interventions have had a tendency to return some of the fortifications to a chosen past 'original state' without sufficient value placed on the importance of other historical periods, such as the Napoleonic or Ottoman features or modifications. Recent work has provided strengthened conservation planning at some of the component sites. For example, ICOMOS considers that the transnational cooperation for this nomination could create further opportunities such as those that have commenced at Herceg Novi and Ulcinj to pool expertise in best practice conservation approaches that could benefit all of the selected components (and other historic fortifications in the three States Parties).

The transnational Management Plan details a number of planned conservation projects for the nominated components.

ICOMOS considers that the state of conservation of the nominated components is adequate; although an overall conservation strategy, based on specialist expertise in

Venetian *alla moderna* defensive structures, would be a useful tool for the National and International Coordination Teams.

Management

Management structures and processes, including traditional management processes

Management of the transnational serial property is organised at transnational, national, regional and local levels of responsibility and activity. A transnational Memorandum of Understanding was signed in December 2015, and provides coordination between the three States Parties. It establishes the International Coordination Team, which takes responsibility for coordination activities between the three States Parties; and implementation and regular updating of the Transnational Management Plan. The International Coordination Team is supported by National Coordination Groups in each country, made up of relevant national, region and local authorities.

At the national levels, the management systems are established by relevant legal frameworks; and the States Parties have outlined the financial resources and the sources of expertise and training for the conservation of the selected components. Because management planning for each individual component seems variable, the role of the Transnational Management Plan and the active engagement of the International and National Coordination Groups are critically important.

Policy framework: management plans and arrangements, including visitor management and presentation

An overarching transnational Management Plan has been developed by the three States Parties. It contains a useful analysis of the strengths, weaknesses, opportunities and threats for each of the components, and establishes some shared management objectives including, importantly the need to rebuild and enhance the cultural ties between the assets involved in the network. Strategies for conservation and a framework for heritage impact assessment is outlined, and 33 current projects and actions (7 at the network level) are summarised.

Risk Preparedness is provided by the States Parties for the risks of natural disasters – these vary across the fifteen components, due in part to their diverse geographic contexts. While seismic risk is not high for most of the components, devastating earthquake damage occurred to the components in Montenegro in 1979, and all States Parties have emergency plans in place for seismic impacts. The fire risk is generally not high, although Bergamo is located near forested areas subject to occasional forest fires. The States Parties have Forest Fire Prevention Plans in place, where relevant.

The States Parties have established monitoring and planning actions in relation to the risks of rising sea levels and water damage, landslides and flooding from heavy

rainfall for the components located in coastal areas or on waterways. The States Parties recognise the potential for damage from the docking of large ships (eg. Zadar), or the wave action caused by power boats (eg. Fort of Sant'Andrea in Venice). ICOMOS acknowledges the complexity of developing solutions to these pressures and risks, and stresses the need for adequate Heritage Impact Assessment processes within existing decision making procedures.

Not all of the nominated components have site-level management plans (or, if there are some protected area management plans, land use plans or territorial planning documents, these are not specifically addressed to the Outstanding Universal Value of the selected components). ICOMOS considers this to be needed due to the complex pressures and high levels of tourism pressure that many of them currently experience. For Kotor, there is an existing World Heritage Management Plan that has relevant provisions for the visual and other impacts of the development of nearby urban areas. However, this has not been developed with the specificities of the Outstanding Universal Value of the Venetian defences, and so does not fully address the long-term conservation of the attributes of this nominated property.

Data about tourism flows to the nominated components is not uniformly available, although overall national figures are provided in the Management Plan. According to the States Parties, the current situation with visitor numbers is mixed:

- Some of the nominated components are already experiencing extremely high visitor numbers (Peschiara del Garda, Hvar, Kotor) – as an example, the mission expert was advised that at times, Kotor receives five liners of up to 1000 tourists per day;
- Some of the nominated components have moderate visitor levels (Palmanova, Fort San Nikola in Šibenek), and local authorities are interested in strategies that will increase tourism interest;
- Some of the nominated properties have well-developed tourism, but not to the fortifications (Bergamo); or even almost no visitors at all (such as the components in Venice, despite heavy levels of tourism in other parts of the city).

The States Parties acknowledge that, due to the perceived economic benefits, local authorities aim to increase levels of tourism – especially for the components with relatively modest current visitor numbers. This is not unusual, but ICOMOS is concerned that the needed sustainable visitor management arrangements that could handle these increases (or even the current situation in some instances) is not in place.

The States Parties also acknowledge that tourism planning and promotion varies across the fifteen nominated components, and that long-term strategies are needed for some of them. The nomination dossier identifies objectives for each component for the next 3, 5 and 10 years.

ICOMOS considers that the current and desired future visitor pressures constitute a significant challenge for which the management system is not well equipped. ICOMOS therefore considers that an urgent priority is needed on visitor management issues in a number of components. The States Parties plan to carry out tourism carrying capacity studies. ICOMOS considers this work to be urgently needed.

Involvement of the local communities

The Management Plan for the transnational serial property has increased community participation and awareness as one of its objectives. Support for cultural industries is a related policy response. In 2016, the States Parties funded a project aimed at developing awareness across the network for school-age children; and a network project in the planning phase is focused on Venetian cuisine and wine heritage.

The States Parties have identified numerous examples of active measures to support local community involvement in the conservation, management and presentation of the nominated components. For example, transfer of the Fort of Sant'Andrea to the community has enabled a public/private partnership to establish a large municipal public garden; at Palmanova, citizen groups are very active in supporting conservation and presentation including the dedicated voluntary work of the Regional Civil Security Centre, job creation initiatives, expert voluntary work of speleologists and costume historians, and the involvement of universities and architecture schools; at Bergamo, the process of developing the World Heritage nomination has stimulated citizen activity which includes job creation initiatives, private philanthropy, gardens run by social cooperatives in the ditches, and school projects; and at Herceg Novi, public meetings, workshops and children's programs are planned for community awareness and engagement in the Forte Mare.

ICOMOS has concerns about the existing management of visitor pressures, and about the long-term ability for the nominated components to withstand the desired increases in visitor numbers and for visitors to have an appropriately presented experience of the proposed Outstanding Universal Value of these sites. While ICOMOS considers that the overarching transnational management system is adequate, there is some urgency to develop and implement management plans for each component that are clearly based on the proposed Outstanding Universal Value of the serial property. Research and planning for sustainable tourism management is also an urgent priority.

6 Monitoring

The States Parties propose a monitoring system based on the system of DPSIR (Driving forces, Pressures, States, Impacts and Responses). Key indicators have then been developed for each of the components.

ICOMOS notes that this overarching system covers the most sensitive aspects of the state of conservation of the components of the nominated property; but that the ability to collect data for each of them is not fully established at this stage. ICOMOS considers that the specific factors affecting the conservation of each component could be used to develop these further, particularly for the components that are subjected to high visitation levels, sea erosion and so on.

ICOMOS considers that the monitoring arrangements represent a useful starting point for the transnational serial property, but that these could be deepened through the work of the International Coordinating Team.

7 Conclusions

The extensive and innovative defensive and trade networks established by the Republic of Venice and this period are clearly important in human history and worthy of representation in the World Heritage List. However, the specific challenge is to determine which sites should be selected in order to do this. ICOMOS has had the benefit of useful exchanges with the three States Parties that have clarified some of the issues and questions, and has consulted experts in this field.

The transnational serial approach is justified, since it is the importance of the network, which demonstrates the potential for Outstanding Universal Value and outweighs the specific significance of any of the component sites. That the three States Parties have undertaken this work is commendable.

On the crucial question of the selection of the components, ICOMOS considers that the nomination should focus on the Venetian fortifications that demonstrate the *alla moderna* innovations, acknowledging that the territory of the *Serenissima* was indisputably the near-exclusive setting of the genesis of the bastioned system during the Renaissance. It is this subject alone that should be highlighted in order to demonstrate the Outstanding Universal Value of this transnational nomination. On this basis, ICOMOS considers that a more precise rationale can be related to the criteria presented in order to establish a set of components which is specifically justified and necessary (as required by the *Operational Guidelines*).

There is a rich scholarship and transnational expertise in this aspect of human history. Because the entire extent of the defensive works of the Venetian *Serenissima* during this period and the encoding of the *alla moderna* solutions would involve the consideration of locations beyond the territories of the three States Parties, they have proposed that the scope of the this nomination is focused on two of the three major geographic segments that can express this stage in human history and the characteristics of *alla moderna* defensive design – including the *Stato da Terra* to the Western *Stato da Mar* (centred on the Adriatic Sea). This leaves open the potential for a future nomination of

important examples from the Levant *Stato da Mar* (centred on the Eastern Mediterranean). Given the large and transnational character of such a nomination within the implementation of the World Heritage Convention, ICOMOS considers this to be a viable way forward.

ICOMOS considers that in order for this strategy to be successfully applied, a rigorous analysis of the selected components in relation to the criteria for Outstanding Universal Value is required. This is needed in order for this nomination to meet the *Operational Guidelines* requirements for serial nominations to justify the specific and necessary reason for the inclusion of each component. ICOMOS does not consider that all of the nominated components have met this requirement. ICOMOS therefore considers that the integrity of the series as a whole is not demonstrated for all the components, but that it is demonstrated for a reduced series of components.

Through a more rigorously applied comparative process, ICOMOS considers that criteria (iii) and (iv) are demonstrated; and that the following six components should be inscribed from the *Stato da Terra* and Western/Adriatic Sea *Stato da Mar*:

- City Fortress of Palmanova (Italy): an ideal new city
- Fort of St Nikola at Šibenik-Knin County (Croatia): a sea fort
- Defensive System of Zadar (Croatia): a peninsular fortified city
- Fortified City of Peschiera del Garda (Italy): a fortified city in a lake-river context
- City of Kotor (Montenegro): a fortified complex between sea and mountain over a long historic period
- Fortified City of Bergamo (Italy): a later fortified hill complex

Applying the requirements of the *Operational Guidelines* for serial properties, ICOMOS considers that all the other components of this property should be excluded. The reasons vary and are described throughout this report, but in general, these are considered to because they duplicate the typological contributions made by the six components supported for inscription by ICOMOS. In the longer term, the only exception could be the future inclusion of the nominated component of Forte Mare, Herceg Novi (Montenegro) as a counterpoint to Kotor in this series, following the completion of current studies and significant adjustments to its boundary to incorporate it into the perimeter of the urban fortifications from which it is detached; and to include it among all the other fortifications of the 'mouths' (together with Kotor). However, this is an ambitious and longer-term possibility and ICOMOS considers that it cannot be included in the serial property in its current formulation at this stage.

At the level of the individual components, ICOMOS considers that while the authenticity and integrity is variable across the fifteen nominated components, each of the six listed above are able to satisfy these requirements. ICOMOS also considers that the boundaries and buffer zones to be adequate for these components, some

adjustments have been identified that could be made to further strengthen the protection.

ICOMOS considers that the legal protection of the components that comprise the serial nomination is adequate; and that an effective transnational coordination mechanism is in place. The transnational Management Plan is broadly scoped, providing an overarching collection of works and activities. At the level of the individual components, management plans and policies are urgently needed to provide decision making based on the proposed Outstanding Universal Value of the serial property. ICOMOS considers the role of the transnational Management Plan and the active engagement of the International and National Coordination Groups to be critically important.

ICOMOS has concerns about the existing management of visitor pressures; about the long-term ability for the nominated components to withstand the desired increases in visitor numbers; and for visitors to have an appropriately presented and meaningful experience of the Outstanding Universal Value of these sites. Research and planning for sustainable tourism management are therefore also urgent priorities.

ICOMOS considers that the current levels of tourism pressure are extreme for some of the nominated components, and has major concerns about their future, following potential inscription in the World Heritage List. Each nominated component must have visitor management plans that are effective, sustainable and implemented by all relevant authorities and organisations.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that only six of the fifteen components forming the nominated series of the Venetian Works of Defence between 15th and 17th centuries: *Stato da Terra* – western *Stato da Mar*, Italy, Croatia, Montenegro, namely the Fortified City of Bergamo, the Fortified City of Peschiera del Garda and the City Fortress of Palmanova (Italy), the Defensive System of Zadar and the Fort of St Nikola at Šibenik-Knin County (Croatia), and the City of Kotor (Montenegro), be inscribed on the World Heritage List on the basis of **criteria (iii) and (iv)**.

Recommended Statement of Outstanding Universal Value

Brief Synthesis

The Venetian Works of Defence between 16th and 17th centuries: *Stato da Terra* – Western *Stato da Mar* consists of six components of defensive works located in Italy, Croatia and Montenegro and spanning more than 1000 km between the Lombard region of Italy and the eastern Adriatic Coast. Together, they represent the defensive works of the *Serenissima* between the 16th and 17th centuries, the most significant period of the longer

history of the Venetian Republic; and demonstrate the designs, adaptations and operations of *alla moderna* defences, which were to feature throughout Europe.

The introduction of gunpowder led to significant shifts in military techniques and architecture that are reflected in the design of fortifications – termed *alla moderna*. The organisation and defences of the *Stato da Terra* (protecting the Republic from other European powers to the northwest) and the *Stato da Mar* (protecting the sea routes and ports in the Adriatic Sea to the Levant) were needed to sustain the expansion and power of the Republic of Venice.

The expansive territory of the *Serenissima* was indisputably the near-exclusive setting of the genesis of the *alla moderna* or bastioned system during the Renaissance; and the extensive and innovative defensive networks established by the Republic of Venice are of exceptional historical, architectural and technological significance. The attributes of the Outstanding Universal Value include earthworks and structures of fortification and defence from the Venetian Republic in the 16th and 17th centuries. Strongly contributory to these are the landscape settings, and strong the visual qualities of the six components; as well as urban and defensive structures from both earlier (Medieval) and more recent periods of history (such as the Napoleonic and Ottoman period modifications and additions) that allow the serial components to be truthfully presented and for the tactical coherence of each military site in its final state can be recognised.

Criterion (iii): The Venetian Works of Defence provide an exceptional testimony of the *alla moderna* military culture, which evolved within the Republic of Venice in the 16th and 17th centuries, involving vast territories and interactions. Together the components demonstrate a defensive network or system for the *Stato da Terra* and the western *Stato da Mar* centred in the Adriatic Sea or *Golfo di Venezia*, which had civil, military, urban dimensions that extended further, traversing the Mediterranean region to the Levant.

Criterion (iv): The Venetian Works of Defence present the characteristics of the *alla moderna* fortified system (bastioned system) built by the Republic of Venice following changes that were introduced following the increased use of firearms. Together the six components demonstrate in an exceptional way the characteristics of the *alla moderna* system including its technical and logistic abilities, modern fighting strategies and new architectural requirements within the *Stato da Terra* and the western portions of the *Stato da Mar*.

Integrity

Together, the six components of Venetian Works of Defence within *Stato da Terra* and the western portions of the *Stato da Mar* portray the needed attributes of Outstanding Universal Value of this transnational heritage, including their typological variety, visual integrity and state of conservation. The inscription of this serial property recognises the potential for a future nomination of examples that can represent in an exceptional and

complementary way, the applications of the *alla moderna* technologies through the extent of the Venetian Republic in this period of history in the eastern or Levante *Stato da Mar*. The state of conservation of the individual components is generally good, although their integrity is variable, and in some cases vulnerable, due to past and present development and tourism pressures. Although some further expansions could be made to the buffer zones (particularly for the components in Zadar and Kotor), the boundaries of the six components are appropriate.

Authenticity

The Venetian Works of Defence within *Stato da Terra* and the western portions of the *Stato da Mar* and the phenomenon of *alla moderna* military architecture have been extensively studied, supported by extensive archival materials, documents, architectural drawings, maps and models. Because of their purposes and locations, many changes have occurred to the selected components, including damage through different periods of conflict from the Napoleonic, Austrian and Ottoman periods and the conflicts of the 20th century.

Management and Protection requirements

Legal protection of the components of the Venetian Works of Defence within the *Stato da Terra* and the western portions of the *Stato da Mar* has been established at national and regional/local levels in each of the three States Parties. The frameworks for legal protection include cultural heritage and environmental protection laws. In Italy, the three components are protected by the 'Cultural and Landscape Heritage Code' (2004) which establishes the national regulation framework for conservation works, including the protection of significant landscape elements; and each is further protected by regional and municipal Territorial Plans and local protection measures that regulate urban transformations. In Croatia, the two components are protected by the 'Act on the Protection and Preservation of Cultural Property', and inscription in the Register of Cultural properties; as well as local protection measures that regulate urban transformations. In Montenegro, the selected component is protected by the 'Law on the Protection of Cultural Property' and subordinate ordinances; and the 'Law on Spatial Planning and Construction' and local protection measures that regulate urban transformations.

Management of the transnational serial property is organised at transnational, national and local levels of responsibility and activity. A transnational Memorandum of Understanding (December 2015) provides coordination between the three States Parties and establishes the International Coordination Team responsible for coordination, implementation and regular updating of the Transnational Management Plan. Shared heritage management objectives, a framework for heritage impact assessment, and a summary of current projects are provided by the Transnational Management Plan. Risk Preparedness is established by the States Parties for the risks of relevant natural disasters, including earthquakes,

forest fires and sea level rise. Due to the complex pressures and high levels of tourism at some of the components of this serial property, site-level Conservation and Management Plans are needed, including visitor management plans and tourism carrying capacity studies.

The International Coordination Team is supported by National Coordination Groups in each country, made up of relevant national and local authorities. The financial resources and the sources of expertise and training for the conservation of the components of this serial property have been outlined. An overarching system of monitoring has been established, but could be expanded by the work of the International Coordinating Team, particularly in relation to visitor pressures.

Additional recommendations

ICOMOS further recommends that the States Parties gives consideration to the following:

- a) Agreeing to the proposed changes to the name of the serial property to remove the 15th century from the title to become "The Venetian Works of Defence between 16th and 17th Centuries: *Stato da Terra* – western *Stato da Mar*",
- b) Developing and implementing the framework for 'Heritage Impact Assessment' as a matter of urgency for development proposals (including those related to tourism management and access),
- c) Ensuring that all major projects that could impact on the Outstanding Universal Value of the series are communicated to the World Heritage Committee in line with paragraph 172 of *Operational Guidelines for the Implementation of the World Heritage Convention*,
- d) Ensuring that conservation planning for each component retains evidence of the modifications to the fortifications in all historical periods, rather than removing evidence unrelated to the Venetian Republic,
- e) Reviewing and modifying the buffer zones to integrate later period fortifications in order to recognise the tactical coherence of each military site in its final state (particularly for Peschiera del Garda and Kotor) and to support the future valorisation of a military pedagogy at the serial components,
- f) Expanding the buffer zone protection of the component at Zadar in light of the potential impacts of nearby developments,
- g) Expanding the buffer zone protection for Kotor in order to incorporate an area of sea water,
- h) Developing and implementing management plans for each component based clearly on the Outstanding Universal Value of the transnational serial property,

- i) Continuing efforts to relocate intrusive and redundant elements within the serial components, such as the intrusive car parking Zadar; and visually intrusive urban and industrial developments (Kotor). These objectives should be included into the site management plans, subjected to Heritage Impact Assessments and monitored,
- j) Developing and implementing the proposed Tourism Carrying Capacity study as an urgent priority,
- k) Developing as an urgent priority visitor management plans that allow sustainable tourism and high quality visitor experiences,
- l) Developing a transnational values-based conservation strategy, based on specialist expertise in Venetian *alla moderna* defensive structures as a tool to assist the National and International Coordination Teams,
- m) Continuing to develop monitoring arrangements through the work of the International Coordinating Team;
- n) Submitting to the World Heritage Centre and ICOMOS by 1 December 2019 a report on the implementation of the above-mentioned recommendations, for examination by the World Heritage Committee at its 44th session in 2020;

ICOMOS further recommends that the Forte Mare of Herceg Novi, Montenegro, be considered in the future as an extension of the current property when the studies and conservation works to address the impacts on the authenticity of this component caused by poorly sited tourism facilities would be completed.

ICOMOS would be ready and willing to discuss these recommendations with the States Parties, if requested.



Map showing the location of the nominated properties



Aerial view of the fortified city of Bergamo (Italy)



Aerial view of the city-fortress of Palmanova (Italy)



Aerial view of Peschiera del Garda (Italy)



Aerial view of the peninsula of Zadar (Croatia)



Aerial view of fort St Nikola, Šibenik (Croatia)



Aerial view of Kotor (Montenegro)