Silk Roads: the Routes Network of Tian-shan Corridor (China, Kazakhstan, Kyrgyz Republic) No 1442

Official name as proposed by the State Party

Silk Roads: Initial Section of the Silk Roads, the Routes Network of Tian-shan Corridor

Location

People's Republic of China: (22 sites) Shaanxi Province Henan Province Gansu Province Xinjiang Uyghur Autonomous Region

Republic of Kazakhstan: (8 sites) Almaty Province Zhambyl Province

Kyrgyz Republic: (3 sites) Chuy Province

Brief description

The Tian-shan corridor of the Silk Roads stretches for 5,000km from Chang'an/Luoyang, the central capital of China in the Han and Tang Dynasties, to the Zhetysu Region of Central Asia, linking two of the great power centres that drove the Silk Roads trade.

Between the Mongolian and Qinghai-Tibet Plateaux the route passed westward from the middle reaches of the Yellow River in Central China, through the Hosi Corridor and across the North and South Tian-shan Mountains until it reached the fertile Ili, Chuy and Talas valley of the Zhetysu region.

This major trade corridor, part of the overall Silk Roads that linked China with Europe, took shape between the 2nd century BC and 1st century AD. It flourished between the 6th and 14th century AD and remained in use as a major trade route until the 16th century.

Within the corridor is a complex network of trade routes covering some 8,700km, linking cities and towns. The nominated sites reflect the wealth generated by the Silk Roads trade as well as the infrastructure that facilitated the passage of people and goods, the interchange of numerous nationalities fostered by trade, the ideas that flowed along the routes, and the strong fusion that resulted between the two main cultures of the Eurasian continent: the settled agricultural nations and the nomadic communities of the steppes.

The 33 sites include capital cities/ palace complexes of various empires and Khan Kingdoms, trading

settlements, Buddhist cave temples, ancient paths, posthouses, passes, beacon towers, sections of the Great Wall, fortifications, tombs and religious buildings.

Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a serial nomination of 33 *sites*.

In terms of the Operational Guidelines for the Implementation of the World Heritage Convention (July 2013) annex 3, it is also a heritage route.

1 Basic data

Included in the Tentative List

28 March 2008 (China) 5 March 2012 (Kazakhstan) 19 February 2010 (Kyrgyz Republic)

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

28 January 2013

Background

This is a new nomination.

Consultations

ICOMOS consulted its International Scientific Committee on Cultural Routes and several independent experts.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the sites in Kyrgyzstan and Kazakhstan from 20 September to 2 October 2013 and a further two ICOMOS technical evaluation missions visited the sites in China from 10 to 22 October 2013.

Additional information requested and received from the State Party

On 18 December 2013, the States Parties were requested to provide supplementary information on the specific characteristics of the overall corridor and the attributes of the proposed Outstanding Universal Value, the over-arching management system, improvements to national protection, management and conservation plans, clarification of threats within buffer zones, and the possibility of augmenting the series.

The States Parties responded on 24 February 2014 and the supplementary information provided has been included in this report.

In addition, the three States Parties participated in a virtual meeting with ICOMOS on 15 January 2014 to discuss ways to address ICOMOS's requests.

Date of ICOMOS approval of this report

6 March 2014

2 The property

Note: due to limitations on the length of evaluation reports, not all sites in this large series have been described in this report. In the nomination dossier, each of the sites is clearly described and documented, as is the way each contributes to the overall series.

Description

The Silk Roads

The Silk Roads were an interconnected web of routes linking the ancient societies of Asia, the Subcontinent, Central Asia, Western Asia and the Near East, and contributed to the development of many of the world's great civilizations. They represent one of the world's preeminent long-distance communication networks stretching as the crow flies to around 7,500km but extending to in excess of 35,000km along specific routes. While some of these routes had been in use for millennia, by the 2nd century BCE the volume of exchange had increased substantially, as had the long distance trade between east and west in high value goods, and the political, social and cultural impacts of these movements had far-reaching consequences upon all the societies that encountered them.

The routes served principally to transfer raw materials, foodstuffs, and luxury goods. Some areas had a monopoly on certain materials or goods: notably China, who supplied Central Asia, the Subcontinent, West Asia and the Mediterranean world with silk. Many of the high value trade goods were transported over vast distances by pack animals and river craft – and probably by a string of different merchants.

There were a number of major transformative impacts from this extensive network of interactions:

- The development of cities along these routes, which gained power and wealth from the trade, providing the infrastructure of production and redistribution, and policing its routes. Many became major cultural and artistic centres, where peoples of different ethnic and cultural backgrounds intermingled.
- The development of religious centres, which benefitted from the patronage of political systems and wealthy individuals.
- The movement of technologies, artistic styles, languages, social practices and religious beliefs, transmitted by people moving along the Silk Roads.

The overall Silks Roads from China to the Mediterranean have been the subject of extensive study over the past eight years by a group of 15 countries, mainly from Central and East Asia. The broad synthesis of the results has been published in an ICOMOS Thematic Study of the Silk Roads. This identified 54 'corridors'

along the routes that are distinctive from other sections of the Silk Roads, in terms of the quantity and quality of surviving ensembles of sites that reflect long distance trade and the complex socio-cultural-political systems that supported the trade. Each of these corridors might have the potential to be put forward as a serial nomination.

In time, if such serial corridors are inscribed on the World Heritage list, eventually the overall series of corridors may together be seen to reflect and represent the scope, rise and decline of the settlements and monuments along the 150,000 kilometres of the overall Silk Roads network.

The Silk Roads: the Tian-shan Corridor

The Tian-shan corridor is one section or corridor of this extensive overall Silk roads network. Extending across a distance of around 5,000km, it encompasses a complex of trade routes that developed to link Chang'an in central China with the heartland of Central Asia from the 2nd century BC when long distance trade in high value goods, particularly silk, started to flourish between the Chinese and Roman Empires.

The extremes of geography along the routes graphically illustrate the challenges of this long distance trade. Falling to 154 metres below sea level and rising to 7400 metres above sea level, the routes touch great rivers, alpine lakes, crusty salt flats, vast deserts, snow-capped mountains and 'fecund' prairies. The climate varies from extreme drought to semi-humid; while vegetation covers temperate forests, temperate deserts, temperate steppes, alpine steppes and oases.

This spectacular landscape, with landform shaped by 'divine craftsmanship' and documented over more than a thousand years, is the backdrop to the nominated sites. Given its scale, it is the wider setting in the widest sense of the word.

Starting in Chang'an on the Loess plateau, the routes of the Tian-shan corridor passed westwards through the Hosi Corridor across the Qin and Qilian Mountains to the Yumen Pass of Dunhuang. From Loulan/Hami, they continued along the northern and southern flanks of the Tian-shan Mountain and then through passes to reach the Ili, Chuy and Talas valleys.

This complex of routes within the corridor can be very broadly divided into four sections from east to west to reflect the diverse geographical zones and differing cultural and political regimes that they traversed.

1 Central China

Starting in Chang'an in the middle reaches of the Yellow River, this most easterly section has routes across Luoyang and Guanzhong basins and the fertile lands of the Loess Plateaux of Shaanxi and Gansu Provinces.

2 Hosi Corridor

Running on the edge of the Qilian Mountains, with the Badain Jaran and Tengger deserts to the north, the routes cross the Shiyang, Black and Shule rivers formed by melted snow, until they reach Dunhuang.

These two sections encompassed numerous different nationalities within the Han, Xianbei and Mongolian empires and nation states, including Han, Cao Wei, Western Jin, Western Qin, Northern Wei, Sui, Tang, Song, Yuan, Xianbei and Mongolian peoples.

3 North and South of Tian-shan Mountains

The routes diverge to the north and south Tian-shan Mountains. The southern route developed as a major route after 138 BC, and links oases along the southern rim of the Tian-shan Mountains, north of the Taklimakan desert.

The northern route that came into existence around a century later in the 1st century BC traversed the steppe zones along the northern foot of the Tian-shan Mountains, south of the Gurbantunggut desert, and runs through the Khorgos or Alataw passes into what is now Kazakhstan.

4 The Zhetysu Region

This most westerly section covers the fertile Ili, Chuy, and Talas Valleys, north of the Tian-shan Mountains, south of Lake Balkhash, and east of the Syr Darya River.

In these last two sections, within the Kingdoms of Qocho and Kucha, the Uyghur Khaganate, the Western Turkic Khaganate, the Kara-Khanid Khanate, the Kara-Khoja Kingdom (Western Liao), and the Qarluq Karluk, nationalities included Xiongnu, Han, Jushi, Rouran, Sogdians, Turks, Uighur, Kara-Khitan, Persian, Turgesh and Arab.

Trade was driven to a large extent by the Han people of China and the Sogdians, living in the area between Amu Darya and Syr Darya in Central Asia.

The trading process brought together the two main cultures of the Eurasian continent: the settled agriculturalists focused on markets in towns and cities and the nomadic peoples of the steppes that supplied goods to these markets — a symbiotic relationship that underpinned the trade along these routes. This benefited both societies, the highly organised Han and Sogdian societies, as well as the northern nomads including the Xiongnu, Xianbei and Mongolian peoples, and the Uighurs who expanded into the north and south of Tianshan. In time this relationship also led to the settling of some nomadic peoples in the Zhetysu Region such as the Turgesh, and the peoples of the Kara-Khanid Khanate and the Qarluq Karluk.

The routes facilitated local and regional trade, but it was the high value, long distance trade across the Eurasian Continent that was the crucial engine that kept the routes alive.

China's silk, became almost a currency, and was the most expensive among all the trading goods transported to the west. But as well as silk, trade to the west also included porcelain, lacquer work, iron goods and tea from China. Horses, spices, jewels, coloured glazes and clothes were transported from Central Asia to China, while trade to the east also included grapes, pomegranates, nuts and other foods that were introduced into China from Western Asia. And musical instruments, paintings and many other types of goods moved both ways.

The flourishing trade along the routes for over 1,800 years was a two way conduit not only for people and goods but also for ideas related to city planning, architecture, literature, art, technology and particularly the major religions of Buddhism, Zoroastrianism, Nestorian, Manichaeism, and Islam originating in India, Iran, Syria and Arabian peninsula.

Over time, all of these ideas had a profound impact on the organisation of settlements and societies, and on the lives of millions of people along the routes who, even in the remotest areas, were part of a trade network that spanned a quarter of the globe through which they gained access to knowledge and innovation.

The series as a whole has been selected to reflect how certain areas exerted significant influence on the organisation of the trade, how individual sites became imbued with many layers of significant cultural meaning reflecting the dynamic exchange and dialogue facilitated by the Silk Roads over a period of 1,800 years, and the extent of interchange between sites along the routes.

The nominated property consists of 25 archaeological sites, 3 historic buildings, 1 tomb and 4 cave temples which reflect towns, trading settlements, transportation and defence facilities, religious sites and sections of the routes.

The nomination dossier sets out very clearly the rationale for including each of the sites and how each contribute to the overall proposed Outstanding Universal Value of the series. Shortage of space has not allowed this report to include full details of each of the sites, nor how each relates to the whole.

Groups of sites are considered within the four main geocultural areas:

Central China

Twelve sites are mainly sited in the fertile basin of the middle reaches of the Yellow river, where the benefits of fertile soil, ample water and an equable climate were harnessed to develop a prosperous agricultural society that contributed to the earliest unified empires of China during the Qin and Han dynasties and subsequently supported Chinese prosperity over the following twelve centuries.

The sites reflect the urban culture of this imperial power from the 2nd century BC to the 10th century AD, Buddhist heritage, the culture of nomadic ethnic groups, Zhang Qian's notable diplomatic visit to the Western Regions, and the defence necessary to maintain the safety of the routes. It is thus reflecting the overall merging of political, mercantile, and religious strands that characterised the Silk Roads.

- $\bullet \quad \text{Weiyang Palace, Chang'an City, of the} \\ \text{Western Han Dynasty (2}^{\text{nd}} \text{ century BC} 1^{\text{st}} \text{ century AD)}$
- Daming Palace in Chang'an City of Tang Dynasty (7th -10th century AD)
- · Great Wild Goose Pagoda
- Small Wild Goose Pagoda
- Xingjiaosi Pagodas
- · Bin county cave temple
- · Zhang Qian tomb
- Luoyang City, from the Eastern Han to Northern Wei Dynasty (1st – 6th century AD)
- Dingding Gate, Luoyang City of Sui and Tang Dynasties
- Longmen grottoes (already inscribed on the World Heritage list)
- Han'gu pass
- · Shihao section of Xiaohan route
- · Maijishan cave temple complex

Hosi Corridor

The Hosi corridor is the flat land some 900 kilometres in length, and between few kilometres to several hundred kilometres in width, that caravans had to cross to move from central China to the Tian-shan Mountains.

These five sites are mainly in the Gobi Desert and in oases north of the Qilian Mountains where the Han Dynasty in the 2nd century BC begun to establish military agricultural colonies to support trade within the territory of nomadic groups of people such as Rouzhi, Usun, Xiongnu, Tibetan and Uighur. Gradually many of these people became settled.

The sites consists of extensive richly decorated cave temples that reflect the wealth created by the trade in these remote areas (the most elaborate along the whole of the Silk roads), the essential infrastructure (forts and beacons) to support travellers crossing these thinly populated areas, settlements that developed purely to cater for the caravans, and the complex irrigation-based agricultural systems that were needed in desert areas to feed travellers and communities.

- · Bingling cave temple complex
- Xuanguan posthouse
- Suoyang city
- Mogao caves (already inscribed on the World Heritage List)
- Yumen pass

North and South Tian-shan Mountains

These mountains are the barrier between the Hosi corridor and the ancient Western Regions in present-day Xinjiang. They reflect the interface between settled peoples and nomads. To the north, parts of the Great Wall defend the boundary between the nomads and settled areas; to the south were oasis settlements, and between the North and South Mountain chains agricultural settlements and semi-nomadic peoples.

The five sites in this section are from the area between the mountain chains, on both north and south edges of the Gashun Gobi (desert) and along the northern edge of the Taklimakan Desert.

Bashbaliq City to the north reflects the junction of northsouth routes from the steppes with the east-west Silk Roads. The other towns and cities reflect the states formed by nomads from the north and south of the mountains between the 2nd century BC and the 16th century AD in order to benefit from the Silk roads trade and the influence of Buddhism that spread along the southern edge of the Taklimakan desert on other religions.

- Qocho City
- · Yar City Site of Bashbaliq City
- Kizil cave temple
- Subash Buddhist temple
- Kizilgaha Beacon tower
- Bachbaliq city

Zhetysu region

This fertile area of grassland, steppe, forest and high mountains around (lake) Issyk Kul, with a plentiful water supply stemming from the mountains, provided the clearest land routes from the edges of the Tian-shan Mountains westwards. A combination of agriculture and trade led to the development of prosperous towns and cities that persisted over many centuries and brought together different peoples such as the Saka, Ousun, Turks, Iranian, Khitan, Mongolian and Han Chinese.

The sites were all fortified. Some were large towns or cities: Suyab (Ak-Beshim), city of Balasagun (Burana), city of Nevaket (Krashya Rechka), and Kayalyk. Others were smaller trading settlements: Talgar, Aktobe, Kulan, Ornek, Akyrtas, Kostobe. Karamergen was a fortified border post on an ancient delta of the Ili River, with still standing walls and towers, and was the transit point for what is now Central Kazakhstan and Eastern Europe, through what has now been identified as the Balkhash corridor.

Many of the cities are of considerable size, such as Ak-Beshim (Suyab), Krashya Rechka (Nevaket) with a 100ha citadel and 20km long walls, and Akyrtas with the remains of several large red sandstone palaces and caravanserai. All exemplify the way nomadic people turned to settled agriculture and trade. Several had

complex water gathering and irrigation systems with ceramic pipes and reservoirs.

The sites reflect the seven main powers that held sway over this area between the 2nd century BC and the 16th century AD (Hephthalites, Rouran Khaganate, Western Turkic Khaganate, Turgesh, Karluks, Karakhanids and Kara-Khitan Khanate) and the influence of ideas from both east and west, including Zoroastrianism, Manichaeism, Nestorian Christianity, Buddhism and Islam. There are the remains of a Manichean church at Kayalyk, while the city of Balasagun (Site of Burana), the capital of the Eastern Kaganate of the Islamic Turkic state, is a planned Islamic medieval city of the 10th -14th century with a 24metre high minaret.

- Kayalyk
- Talgar
- Karamergen
- Suyab (Site of Ak-Beshim)
- City of Balasagun (Site of Burana)
- · City of Nevaket (Site of Krasnaya Rechka)
- Aktobe
- Kulan
- Ornek
- Kostobe
- Akyrtas

History and development

Trade routes in various parts of China and Central Asia had existed for centuries before the 2nd century BC when the Chinese Emperor, Shi Huangdi (reigned 221–210 BCE) developed policies that began a new era of more frequent and longer journeys, linking the east and west.

From the 2nd century BCE, China was unified under the Qin and then particularly the western Han rulers. This era coincided with, and was probably in part a response to, the unification of many of the northern nomads in the Xiongnu (Hsiung-nu) confederation.

In 138 BCE, Emperor Wudi dispatched Zhang Qian (?-114 BC), who had been involved in the conquest of Xiongnu on a mission to what were known as the Western Regions in Central Asia, in order to open up further contacts. Zhang Qian undertook two lengthy journeys (to India as well as to the Western Regions) and established for the first time an official relationship between the Chinese Empire and the countries of the Western Regions. He is now renowned for his courage and perseverance and "an outstanding man, the one who unveiled the world history".

The Silk Roads gained momentum in the 1st BCE to 3rd century CE when four contiguous empires - the Roman, Parthian, Kushan, and Han – along with the nomadic confederation of the Xiongnu, developed long-term connections. The relationships between major civilizations, and between these and complex nomadic societies was not static and the trade reflected the varying changes in fortunes and zones of control.

Trade activity peaked in the 8th-9th centuries CE, reflecting the prosperity of the Islamic empires of the Middle East and Central Asia, the Tang Dynasty in China, and the Byzantine Empire in the Mediterranean. From about this time, seaborne trade from ports in Fujian and Guangdong began to flourish and take away some of the land trade. Nevertheless, the Silk Roads experienced another surge in activity under the *Pax Mongolica* in the 13th and 14th centuries CE, but the importance of the land routes declined again after the break-up of the Timurid Empire in the early 16th century CE, with the sea routes becoming dominant.

The history of the Tian-shan corridor reflects this larger history of the overall Silk roads of which it was a crucial part.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The extensive Thematic Study of the Silk Roads undertaken by ICOMOS in collaboration with States Parties participating in the overall Silk Roads project has provided at the macro level a comparative analysis across the whole length of the Silk Roads from China to the Mediterranean

This allowed the identification of 54 'corridors' that could be readily defined in geo-cultural-political terms and which have adequate tangible remains to reflect the way trade and the wealth that it generated supported settlements, defensive arrangements and the overall management of the landscape, particularly in terms of water management.

The corridors were meant to link 'nodal' points along the routes such as cities and towns and to also encompass the complexity of the social and economic arrangements of the routes as well as the defence arrangements and way stations that provided caravans with shelter a day's journey apart.

The current nomination is for parts of five corridors in the East of the Silk Roads.

The comparative study in the nomination dossier starts by comparing the Tian-shan corridor with other cultural routes inscribed on the World Heritage. Although a tabulated analysis is presented no direct conclusion are drawn. However ICOMOS considers that none of the already inscribed routes can be said to reflect the scope and extent of the Silk Roads trade network, its time depth or the diversity and amount of structures that testify to its importance.

The second part of the analysis compares the nominated corridor to others along the wider Silk Roads. This analysis is not that revealing as the particular characteristics of the Tian-shan corridor are not clearly set out as a basis with which to compare it to others.

ICOMOS considers that the Thematic Study has however in effect already undertaken this analysis and clearly defined corridors that each reflect different geocultural-political aspects of the Silk Roads trade.

The third part of the analysis considers the choice of sites in the nominated property in comparison with other sites which were not selected. This analysis is first undertaken on a national basis and under various categories such as towns, trading settlements, transportation and defence facilities, religious sites, and associated sites (such as tombs). For China, the results are tabulated in terms of value, authenticity, integrity and state of conservation; for Kazakhstan, they are tabulated in terms of significance, state of conservation and information, and for Kyrgyzstan there is an analysis in terms of the dates of the evidence. These results are then combined into a single table that justified the final selection.

ICOMOS considers that the comparative analysis has highlighted the difficulties of choosing sites within vast corridors that stretch over thousands of kilometres in an area where there is not uniform data, research or state of conservation. Nevertheless, it considers that the analysis provides a good understanding of why the final selection was made with the categories highlighted.

However it would like to draw attention to the three key components of the Silk Roads, identified in the Thematic Study:

- 1 The sophisticated arrangements for water management that underpinned many of the settlements and their agriculture along the Silk Roads and particularly those within this corridor as highlighted by the failure of some towns when the water supply dried up. This aspect does not feature prominently in the analysis although it is mentioned in the text in connection with the Hosi corridor. It appears that evidence exists at several sites but that the boundaries have not necessarily been drawn to reflect this aspect.
- 2 The productive interchange between settled and nomadic societies. Although this is mentioned in the justification, it is not highlighted in the analysis of choice of sites. For China for instance it is suggested that the category trading settlements is not relevant.
- 3 The provision of way stations and watch towers (particularly in the Chinese section) along the routes that were the essential pre-requisite of safe, regular trade. These are not mentioned in detail and yet existed as is shown on a detailed Tang Dynasty map of stations between Chang'an and Luoyang. Furthermore, although one watch tower has been nominated, no others were featured in the comparisons, although a considerable number have survived. In the case of way stations and watch towers it is the ensemble that is important to demonstrate the enormous extent of the formal support that was provided for the trade.

In order to gain a full understanding of the richness of the interactions along the Silk Roads, the corridors were meant to reflect not only the power and wealth of the palaces and towns, but also their technical infrastructure, the way the trade routes impacted on smaller communities, the interaction between settled and nomadic communities, and the facilities provided for caravans that plied the routes.

The supplementary information provided by the States Parties in February 2014 at the request of ICOMOS greatly adds to an understanding of these further dimensions, particularly the elaborate water management systems, the interface between settled and nomadic communities, and the spread of Buddhism. For way stations and watch towers, the States Parties have signalled their intention to undertake further studies of these and suggest how they might be added to the series in the future.

In conclusion, ICOMOS considers that the comparative analysis justifies consideration of this corridor on the World Heritage list but it does not consider that the sites nominated have been shown to encompass all those that could have been suggested to reflect the full range of attributes of the corridor, particularly in relation to the way stations and watch towers.

ICOMOS considers that the comparative analysis justifies consideration of this property for the World Heritage List.

Justification of Outstanding Universal Value

The Silk Roads: Initial Section of the Silk Roads, the Routes Network of Tian-shan Corridor is considered by the States Parties to be of Outstanding Universal Value as a cultural property for the following reasons:

The Tian-Shan Corridor:

- Is a significant component of the Silk Roads, hold the crucial starting position for the transportation and communication system of the entire cultural route.
- Is a long distance cross regional transportation system that linked up multiple civilizations, and facilitated a lasting and far reaching exchange of activities in trade, religion, science and technology and culture.
- Played an essential role in the cultural interchanges between nomadic and settled peoples, and between East and Central Asian civilizations.
- Witnessed significant stages in the development of human civilization on the Eurasian continent over a period of eighteen centuries between the 2nd century BC and 16th century AD, and the outstanding characteristic of multicultural coexistence during this long span of time.
- Promoted in a significant way dialogues between different civilizations and cultures across continents, that contributed to their common development.

 Is an outstanding example in world history of how mankind established long-distance east-west transportation system and realized the widest interchange among civilizations and cultures across the Asian Continent.

ICOMOS considers that this justification is appropriate in general terms in setting out the extent and scope of this section of the route and its influence and impact. The justification did however need to be augmented to set out more clearly how these influences and impact are related to the attributes of the property and to the way these reflect different geo-cultural areas and changing economic and political fortunes over time. In the nomination dossier, notwithstanding the fact that it was commendably detailed, what did not come out clearly was what distinguishes this corridor from others in terms of defining a set of characteristics that are not present in other corridors.

The supplementary information provided in February 2014 responded to this need and has allowed a much clearer understanding to emerge of the very specific profile of this corridor as well as of the way it reflects certain key attributes of the overall Silk Roads.

It is now clear that the defining attributes of this corridor are:

- Formal system of posthouses and beacon towers provided by the Chinese Empire to facilitate trade, and the system of forts, caravanserai and way stations operated by states in the Zhetysu region;
- Succession of palaces that reflect the power centre
 of the Chinese Empire over 1,200 years; and the
 cities of the Chuy valley that witness the power
 centre of the Zhetysu region from the 9th to the 14th
 centuries and their organisation of the long distance
 trade;
- Series of Buddhist pagodas and large, elaborate cave temples extending from Kucha (now Kuqa County) in the west to Luoyong in the east, that record the eastward transmission of Buddhism from India via Karakorum, that demonstrate an evolution in the design of stupas as local ideas were absorbed, that reflect the sponsorship of local authorities and the central Chinese imperial government as well as donations of wealthy merchants, and that demonstrate the influence of monks that travelled the routes, many of whose journeys were documented from 2 BC onwards;
- The manifestation and co-existence of many religions (as well as many ethnic groups) along the corridor including Zoroastrianism, the main religion of the Sogdians of Zhetysu region, Manichaeism in the Chuy and Talas valleys and in Qocho city and Luoyong, Nestorian Christianity also in Qocho city, around Xinjiang and in Chang'an, and Islam in Burana:
- Prosperous and thriving towns and cities benefiting from massive trading activities that reflect the interface between settled and nomadic communities:

- The mutual inter-dependence of nomads and farmers and different peoples such as between Turks and Sogdians in the Zhetysu region;
- The transformation of nomadic communities to settled communities in the Tian-shan mountains, resulting in highly distinctive construction and planning such as semiunderground buildings;
- In the Hosi corridor the planned agricultural expansion of the 1,000 mile corridor after the 1st century BC as an agricultural garrison and its transformation to settled agricultural communities.
- The diverse and large scale water management systems that were essential to facilitate towns, the growth of trading settlements, forts, and caravanserai and the agriculture necessary to support them; and particularly:
 - The extensive Karez underground water channels of the extremely arid Turpan basin, many of which are still in use, that supplied water to Qocho city, and were supplemented by deep wells inside Yar city;
 - The grand scale of the network of open canals and ditches along the Hosi corridor that drew river water to the settlements, 90km of which survive around Suoyang city;
 - In the Zhetsyu region river water distribution through canals and pipes and collection in reservoirs.

Integrity and authenticity

Integrity

The nomination sets out clearly why the nominated series as a whole should be seen to have integrity and, through a detailed analysis, how each of the individual sites can also be seen to have integrity.

The overall series adequately reflects the significant facets of the Tian-Shan corridor and the attributes of Outstanding Universal Value in terms of adequate representation of towns and cities, smaller trading settlements, transport and defence facilities, religious sites and tombs.

In terms of individual sites, although it is recognised that some are vulnerable in the face of pressure including urban, rural development, infrastructural development, tourism or changes in agricultural practices, in the majority these pressures are adequately contained.

ICOMOS would like to highlight the need to ensure that modern interventions such as screen walls at some sites built in traditional style do not confuse the archaeological record.

Most of the boundaries adequately cover all the planning features of the settlements and allow room for some further research or exploration with the exception of Kayalyk and Kulan where villages have encroached into nominated sites since the 1970s.

However in order to fully understand the relationship between these urban areas and their surrounding desert landscapes, and in particular the trade routes, there is a need for further ground surveys or remote sensing of surrounding areas.

In some sites, the extensive, intact water management systems, necessary for their survival, are currently outside the boundaries and in some cases outside the buffer zones. In one site, Karamergen, the canal has not been surveyed. Consideration needs to be given to assessing the way these water management systems contribute to the integrity of the sites and in places minor adjustments to the boundaries need to be considered.

Authenticity

The nomination also sets out clearly why the nominated series as a whole should be seen to have authenticity and, through a detailed analysis, how each of the individual sites can also be seen to have authenticity.

The overall series includes adequate sites to fully convey the particular strengths and characteristics of this Tian-shan corridor.

The authenticity of individual sites is mostly satisfactory.

However, if the full value of these sites is to be clearly conveyed, then more surveys, research and explanation are needed to show how the sites relate to the routes to which they are linked and, in the case of settlements, to show how they survived in desert areas through the use of sophisticated water management techniques.

In the Zhetysu region, all the eleven archaeological sites are backfilled and covered for protection and to control deterioration, which in the current absence of adequate means to stabilise exposed bricks is essential. This can mean that fully understanding the significance of the remains is difficult. ICOMOS considers that the possibility of international aid to explore innovative ways of highlighting the scope and range of urban functions would be desirable. (This relates to interpretation – see below).

Generally, there is also a need for more archaeological and academic research to clarify the functions particularly of urban sites beyond the often fragmented archaeological studies of the nominated sites and to link them more clearly through interpretation to the ancient routes to which they were associated.

ICOMOS considers that the conditions of integrity and authenticity have been adequately met.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (ii), (iii), (v) and (vi).

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 vastness of the continental routes networks, the ultra-long duration of use, the diversity of heritage remains and their dynamic interlinks, the richness of the cultural exchange they facilitated, the varied geographical environments they connected and crossed, clearly demonstrates the extensive interaction that took place within various cultural regions, especially the nomadic steppe and settled agrarian/oasis/pastoral civilizations, on the Eurasian continent between the 2nd century BC and the 16th century AD.

These interaction and influences were profound in terms of developments in architecture and city planning, religions and beliefs, urban culture and habitation, merchandise trade and interethnic relations in all regions along the routes.

The Tian-shan corridor is an extraordinary example in world history of how a dynamic channel linking civilizations and cultures across the Eurasian continent, realized the broadest and most long-lasting interchange among civilizations and cultures.

ICOMOS considers that this criterion is fully justified for this particular corridor in terms of the combination of attributes of this Silk Roads corridor that convey the range and scope of interchange of ideas related to many different and specific cultural manifestations in technology, architecture and religion, and which thus differentiate it from other corridors.

The justification also mentions the 'Revival of the Historical Function' in terms of new roads and railways that follow the route of the Silk Roads (details below). This cannot be seen as part of the justification for this criterion which is related to the period during which the Silks Roads actively flourished – between the 2nd century BC and the 16th century AD.

ICOMOS considers that this criterion has been justified.

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

This criterion is justified by the States Parties on the grounds that the Tian-shan corridor bears a unique witness to the traditions of communication and exchange in economy and culture, and to social development across the Eurasian continent between the 2nd century BC to the 16th century AD.

This is especially evident in the remains of capital cities, central towns and settlements distributed along the routes that bear exceptional testimony to the numerous

ancient nations and civilizations which once existed or evolved over the 18 centuries, and to the Chinese civilization which has continued down to the present day.

ICOMOS considers that the nominated sites in the Tianshan corridor do as a series bear an exceptional witness to a system of international trade that flourished for 1,800 years from the 2nd century BC to the 16th century AD, particularly in term of the way long distance trade had a profound influence on the settlement structure of the landscape, through the development of towns and cities that brought together nomadic and settled communities, through water management systems that underpinned those settlements through the extensive network of forts, beacon towers, way stations and caravanserai that accommodated travellers and ensured their safety, through the sequence of Buddhist shrines and cave temples and through manifestations of other religions such as Zoroastrianism, Manichaeism, Nestorian Christianity and Islam that resulted from the cosmopolitan, multi-ethnic communities that organised and benefitted from the high value trade.

ICOMOS considers that this criterion has been justified.

Criterion (v): be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change:

This criterion is justified by the States Parties on the grounds that the Tian-shan corridor is an outstanding example of human interaction with the natural environment which reflects the way impetus for long distance trade led to measures to adapt, utilize and remodel the natural environment to allow the successful development of desert lands for agriculture and settlement.

ICOMOS considers that this criterion has been justified in terms of the way the value of long-distance trade prompted the growth of sizeable towns and cities supported by elaborate, sophisticated water management systems that harvested water from rivers, wells and underground springs and channelled it for drinking and for the irrigation of crops that supported residents and travellers.

ICOMOS considers that this criterion has been justified.

Criterion (vi): be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance;

This criterion is justified by the State Party on the grounds that the Tian-shan Corridor, with its many sites and monuments, numerous excavated cultural properties, documents on bamboo strips, and historical records and travelogues, is directly associated with

Zhang Qian's diplomatic mission to the Western Regions, a milestone event in the history of human civilization and cultural interchange in the Eurasian Continent, with the spread of Buddhism into ancient China which had significant impact on cultures of East Asia, with intercontinental silk trade (i.e. barter of silk fabrics and horses), with the Sogdians' unique tradition of trade along the Silk Roads, and with the important written works of historical, geographical and cultural value

ICOMOS considers that Zhang Qian's mission to the Western Regions was an important event that created political alliances under which trade begun to flourish. This significant event is directly and tangibly reflected in the property in a single site, Zhang Qian's tomb, but for the rest of the sites only in the most general way through the whole subsequent history of trade and its impact.

The Silk Roads in general and the Tian-shan corridor in particular were undoubtedly conduits through which many profound ideas, beliefs and technological innovations flowed over an extraordinary long period of time and many of these were of outstanding universal significance. The key issue is which of these significant intangible cultural traits can be directly and tangibly associated with the 33 sites that have been included in the series.

ICOMOS considers that what is outstanding is the tangible impact of religious ideas, and of technologies related to harnessing water power, architecture and town planning, that flowed along the routes and which can be seen in an exceptional way in many of the sites.

The nomination dossier suggests that knowledge of technological advance in areas such as silk production, papermaking, printing, porcelain making, iron casting, well digging, cotton cultivation and working, tapestry weaving, calendrical sciences, wine making, cultivation of grapes, medicago, pomegranate, til and pepino, glazing and metal working techniques, medical and pharmaceutical knowledge all flowed along the routes. In particular, the spread of techniques of silk reeling and silk textile is considered to be one of the most significant accomplishments. ICOMOS considers that although all of these ideas or practices were significant, not all can be understood in terms of the fabric of the nominated sites.

ICOMOS considers that this criterion can be justified within a more limited range of ideas and practices that had a direct bearing on the development of the nominated sites – such as the various religious ideas that flowed along the Silk Roads not just Buddhism but also Nestorian Christianity (which reached China in 500 AD), Manichaeism, Zoroastrianism and early Islam water management, architectural ideas and ideas on town planning.

ICOMOS considers that this criterion has been justified.

ICOMOS considers that the nominated property meets the conditions of authenticity and integrity. ICOMOS also considers that criteria (ii), (iii), (v) and (vi) have been justified as has the serial approach.

4 Factors affecting the property

In relation to threats or potential threats from infrastructural development, one of the main concerns is the proximity of the new Western Europe - Western China trans-continental highway to sites in Kazakhstan. The two most affected sites are Aktobe and Kostobe. These are respectively 3km and 5km from the new road. Although there is no visual disturbance, there is some noise at Aktobe.

As the new highway could increase traffic on feeder roads, ICOMOS considers that it is essential that adequate forward plans are developed to ensure that road widening and upgrading is not applied to routes through and next to the sites and that alternative locations are considered where necessary after full archaeological surveys.

The following transport development projects are also mentioned but without further details being provided: China's major East-West transport line Lianhuo Expressway1, China National Highway No. 3102 and 3143, the construction of China-Kyrgyzstan-Uzbekistan railway.

In terms of specific sites, at Luoyang (China) railways and roads currently pass through the large site. In the short term, to reduce the impact, tree planting has been undertaken, while for the longer term, the relocation of the railways and roads are being discussed amongst related authorities.

At Han'gu (China), the Longhai Railway and 310 National Highway, pass respectively close to the site and through the site. Re-routing of the highway has already been planned. As the railway is located higher than the site, its negative impact is reduced.

Most sites are in remote locations and not currently under threat from development either urban or rural.

The urban exceptions include sites in and near Chang'an and Luoyang (China). ICOMOS considers that in order to allow the two pagodas to retain their dominance of their surroundings, height restriction need to be put in place and respected for the buffer zones.

For the Dingding gate (China), modern facilities such as electric lines, towers and power poles are within the boundary and impact on the overall landscape. However they are planned to be relocated or to be buried. In addition, car factories and golf courses are also planned to be relocated to recover the landscape.

Generally for the sites in China, construction of building in towns is controlled according to established land-use regulations in the buffer zones.

In terms of rural areas, Kulan and Kayalyk (Kazakhstan) are sites where local villages have impinged on the edges of the archaeological remains. If the village houses were to be developed this could provide a threat to the buried archaeology and to the setting of the property.

In China the possible impact of coal particles on the exposed limestone of the ancient surfaces of the Silk Roads at the Shihao Section of Xiaohan road need to be considered as a matter of urgency.

In the sites in Kazakhstan, there is evidence for considerable pressure for grassland resources from breeding farms, grazing, and the extraction of mineral resources. ICOMOS considers that there is a need to develop overall landscape protection plans for the sites and their wider settings that encourage active involvement of local communities in order to put in place appropriate sustainable development of the grasslands. Such plans would need to be linked to ecological as well as archaeological monitoring systems.

Grass fires are potentially a major hazard. There is a need for the installation of fire-prevention measures, including regular patrols, and firefighting equipment for properties in Kazakhstan.

If this corridor is inscribed on the World Heritage List this will provide a high level of recognition of the Silk Roads and the associated sites and could inevitably produce high expectations from tourists in the near future. Thus, tourism pressure could be one of the major threats. Although visitor numbers are comparatively low at the moment, in some sites inscription could raise numbers, especially after the completion of the new transcontinental highway in China and Kazakhstan.

ICOMOS considers that there is thus an urgent need for plans for all sites that set out how an appropriate response can be provided in terms of the provision of active controls, facilities and access to interpretation (see below). Within the sites in China, these are mostly in place but need creating for sites in Kazakhstan and Kyrgyzstan.

At the Kizilgaha Beacon Tower (China), a thermal power plant is located about 6 km southwest of the property. The building, steel towers, and electrical wires are visible from the site. It is essential that the sense of remoteness of the tower is not compromised by further development that is visible from it.

The State Party of China has confirmed that mining activity is prohibited in the buffer zone of the Hangu Pass Gate and the buffer zone of the Shihao Section of Xiaohan road.

ICOMOS considers that the main threats to the property are the possibility of major increases in tourist numbers, the impact of cross-continental roads and associated feeder roads and railways (both in physical terms and for their impact on local traffic) and the possibility of rapid development of villages into towns in a few sites.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

China

The boundaries of the sites and their buffer zones are acceptable. Nonetheless there are a few sites were minor modification could be made.

At Qocho city, the site is limited to the city. To the north of the city are the Astana Tombs, within which many artefacts have been excavated that add to knowledge of how the trade of the city functioned. ICOMOS considers that it would be desirable to include these two tombs in the nominated property in the future.

As mentioned before, there is also a need to assess how boundaries can better reflect water management systems.

Kazakhstan

Although the boundaries of the sites are acceptable, none are clearly marked. At Karamergen the boundary is drawn tightly around the walls and does not encompass the water collection system as these have not yet been studied and this may need to be extended after an archaeological survey has been carried out.

Kyrgyzstan

The boundaries of the individual sites are adequate and encompass areas of future archaeological potential.

ICOMOS considers that the boundaries of the nominated sites and of their buffer zones are generally adequate.

Ownership

China

All the nominated sites are owned by the state; 27,308.30 hectares are defined as state-owned and 2,517.11 hectares as collective-owned.

Kazakhstan

All the nominated sites are owned by the State.

Kyrgyzstan

The excavated ruins within the sites are owned by the State while the agricultural land that surrounds them is privately owned.

Protection

China

All the 22 sites have been designated as National Cultural Heritage. This requires agencies and authorities at national, regional and local level to put in place measures for protection and management of the sites. The necessary cooperative framework among the State Administration of Cultural Heritage, the local Bureaux of Cultural Relics and local governments is established and functional.

Kazakhstan

The sites of Aktobe, Kulan, Talgar and Akyrtas are listed as national monuments of history and culture. The sites of Kayalyk, Karamergen, Ornek and Kostobe were at the time of nomination subject only to local protection.

However, separately, the sites of Aktobe, Kulan, Akyrtas and Kostobe are protected as part of the State Historical and Cultural Reserve-Museum of "The monuments of ancient Taraz". This means that the reserve museum is responsible for the proper protection and management under special regulations. In effect this gives Kostobe national protection which left three sites with only local protection. In February 2014, the additional information confirmed that national protection for these three sites has been confirmed.

Even where there is legal protection at the national level, implementation of protection measures is carried out through local authorities and with local budgets which are limited.

For Kazakhstan, buffer zone is classified into three subcategories. First, zone of strict use and control that is up to 50m from the property boundary in which is only allowed research related activity and conservation and maintenance of ancient structures and monuments. Second, a zone of regulation of development, of 100m in which there are strict controls on construction activities. Third, a zone of protected landscape a further 100m outward with measure designed to protect landscape. These restrictions for land use are supported by legal jurisdictions of the various local authorities.

Kyrgyzstan

All three sites are protected through inclusion on the State List of Monuments of National Importance. Although there is legal protection at the national level, implementation of protection measures is carried out through local authorities and with local budgets and these are limited.

ICOMOS considers that the legal protection in place is satisfactory for all sites.

Conservation

An overall database for all sites in the nominated corridor is being developed at IICC-X, Xi'an (China) (see below). While original copies of documents are stored in archive centres, each site needs access to relevant data

at least in digitised form and this does not at all sites yet appear to be the case.

China

All the sites except the Shihao Section of Xiaohan road have specific, detailed and long-term conservation plans. A plan needs preparing for the sensitive, extensive and currently exposed remains of the Shihao Section of Xiaohan road that date back to the Han dynasty. In February 2014, the additional information confirmed that a conservation plan has been approved and will be implemented in the near future.

In terms of individual sites, most are stable. The two pagodas in Chang'an appear to have rising damp problems associated with the hard landscaping that goes right up to their walls, thus forcing damp upwards.

Kazakhstan

The Kazrestoration Republic State Enterprise under the Ministry of Culture and Information, is the specialized organization in charge of conservation and maintenance for the eight nominated sites.

Conservation of the nominated sites is a major challenge as they are located far (up to 700km) from major towns in deserts and semi-desert areas. Current conservation measures involved backfilling after excavations (except for Talgar), some protective shelters, and, where necessary to prevent collapse, filing of cracks with clay or clay bricks. At Karamergen, due to its remote location in the middle of desert, some six hours over rough roads from the nearest village, no regular maintenance and conservation measure are currently carried out.

Excavated areas still need protection from people and grazing animals and fences are not in place at any of the sites, except Talgar and Akyrtas. And in some sites even where there are fences in place, such as at Talgar, cultivation and grazing is practiced within the boundaries. ICOMOS considers that more active land control measures are needed.

A new gate is under construction in the southern part (north-west corner) of the Talgar site as a traffic control measure. The building would be better constructed outside of the property boundary.

Akyrtas, Kayalyk, Aktobe and Burana have been maintained in fairly good condition thanks to programmed care by the local authority. However, other sites, such as Ornek, Talgar and Kostobe have problems due to lack of financial resources and regular maintenance, while Karamergen, because of its inaccessibility has no active conservation.

In Kazakhstan there are well trained archaeologists for archaeological survey and inventories nationally. At the local level Akyrstas and Aktobe have staff for conservation work which is led by local archaeologist. Other sites are managed by local authorities both in provincial level and local level. There is however no

evidence of training or capacity building to ensure staff are aware of up to date thinking and practices.

Generally, ICOMOS considers that there appears to be insufficient resources devoted to active conservation measure. Such resources as are available are used for excavation instead of conservation.

Furthermore there is no regular patrol program for the nominated sites.

Kyrgyzstan

Three sites, Krasnaya Rechka, Ak-Beshim and Burana, in the Chuy Valley are still part of a thriving agricultural landscape with traditional arable and pastoral systems. All three sites are back filled and generally their conservation is satisfactory. At Ak-Beshim (Suyab) cultivation is allowed but the depth of ploughing is controlled.

Minor repairs on the minaret at Burana were carried out in the 1970s using cement. The local authorities are now working to research appropriate repair materials similar to the originals in order to reverse this work.

Burana has staff members who are well trained and informed. Overall there appears to be a shortage of resources for day to day conservation of the sites.

Kyrgyz sites are equipped with fences and entrance gates to control access as well as horseman who patrol on a daily base.

ICOMOS considers that the state of conservation of sites in all three countries is satisfactory, but in Kazakhstan and Kyrgyzstan there is a lack of adequate physical protection for excavations at some of the sites and overall a lack of day-to-day conservation.

Management

Management structures and processes, including traditional management processes

The great strength of this trans-national serial nomination is the existence of an Intergovernmental Coordinating Committee of the Serial World Heritage Nomination of the Silk Roads formed in 2007. This is a steering committee composed of representatives of all States Parties involved in the nominations of all Silk Roads corridors. The ICOMOS International Conservation Centre – Xi'an (IICC-X) is the Secretariat for the Committee.

The Committee has overseen the development of the first trans-national serial nominations of corridors identified in the ICOMOS Silk Roads Thematic Study. It has stressed the need for nominations that come forward to underpin the international nature of the Silk Roads trade through nominating corridors that include sites in more than one country. In terms of management, this Committee aims to implement a coordinated

management system based on mutual agreement and to provide guidelines on conservation principles, methods, and management.

For the Tian-shan corridor, the formal agreement between all the participating States Parties in the Committee has been augmented with a specific agreement between the three States Parties supporting this nomination.

For the coordinated management of the Tian-shan corridor, an agreement between the three States Parties was signed in May 2012. Subsequently in order to improve coordination and dialogue between the three States Parties and between sites, a further detailed agreement was signed in February 2014. This refined the management mechanisms, and identified principles and rules of conservation management. It also sets out suggestions for exchange and collaboration on conservation, interpretation, presentation and publicity as a means of working towards coordinated approaches throughout the sites along the corridor.

The organisational framework for the coordinated management consists of a Steering Committee of Vice Ministers, a Working Group of two experts and one government official from each State Party, and a Secretariat - the ICOMOS International Conservation Centre in Xi'an (IICC-X).

Since 2011 regular meetings have been held between the three States Parties. Collaboration is supported by the development of an on-line platform at the IICC-X. This is in three languages, English, Russian and Chinese. It collects and promotes information on the conservation initiatives along the Silk Roads.

This international collaboration needs to be supported by national collaboration if the many fragile archaeological sites can share information on the most advanced techniques and conservation measures that are appropriate and beneficial for the sites.

Within China, this management structure is well developed and appears effective. However, ICOMOS considers that within Kazakhstan and Kyrgyzstan this collaboration needs to be reinforced.

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

China

Management Plans are in place for all the individual sites.

Kazakhstan

Management plans including tourism plans have been proposed in the nomination dossier. However the emphasis in the current plans is on archaeological excavation, rather than on-going management, site

surveillance, conservation, environment protection and tourism management.

In February 2014, the additional information confirmed that a timetable for developing detailed management plans that would provide strategies for conservation and visitor management, including interpretation, for all sites had been approved and would be undertaken between 2014 and 2016.

Kyrgyzstan

All three sites in Kyrgyzstan have proposed management plans for 2011 – 2015 that includes proposals for improving the conservation of the sites, visitor facilities, and monitoring. Agreements between local land owners and local authorities were confirmed to ICOMOS.

Although the nomination dossier mentions the need for tourism plans in each of the three countries, and these have been put in place in China and are being implemented, it seems that no actual plans of tourist oriented policies have been put in place for sites in the other two countries.

In Kazakhstan and Kyrgyzstan, most of the sites seem ill-prepared for an increase in visitors. As the sites are archaeological sites, there is a basic need for practical measures to prevent visitor walking on excavated areas and to control their numbers through fences and signs. And if visitors are to appreciate properly the significance of these sites and their relationship to the Silk Roads, ICOMOS considers that there is an urgent need to provide adequate information in the form of panels, or through mobile apps and web based data, and ideally to supplement these with knowledgeable guides.

With the exception of Akyrtas and Burana, such approaches were not identified by ICOMOS in Kazakhstan and Kyrgyzstan. However in February 2014, the additional information confirmed that a Conservation Action Plan and a Tourism Development Plan for the Chuy Valley 2013-2015 had been approved.

As the majority of the 33 nominated sites are archaeological sites, there is a need for good information that allows understanding of their layout, function and history, why they are of significance and particularly their relationship to the Silk Roads routes, to water and its management which was so crucial for survival, to trade and to each other. Many are associated with remarkable finds but these are often in museums some distance from the sites. And these museums do not always provide specific information about the Silk Roads and how they relate to the sites.

Given the scale and scope of the Tian-shan corridor and the remoteness of some sites, ICOMOS considers that innovative measures are needed to provide the necessary information. Boards at sites can provide some details but these are difficult to maintain in remote areas. Web-based data and information through mobile phones would seem to be valuable tools and these are in places being developed.

China

Most of the sites in China have good interpretation that explains their importance and relates them to the Silk Roads. Sites where the interpretation could be improved include Bashbaliq.

Kazakhstan

The 'Archaeological Expertise', a commercial company is working on a mobile app and is developing a Web page related to the nominated sites.

Currently apart from Akyrtas and Burana, which have site museums, most of the nominated sites are not equipped with information boards for interpretation and presentation to the public, even Talgar which is frequently visited by tourists and villagers. Sites such as Karamergen, Ornek and Kostobe are in remote areas but could become known if inscribed as part of the corridor and need to be understood if their value is to be sustained. Making information on boundaries and on the attributes of the sites readily available would help raise awareness of what needs protecting.

Kyrgyzstan

Burana site is well equipped with information boards, tourist shop and site museum. Suyab and Nevaket do not have information boards or any public presentation at the sites.

Involvement of the local communities

This is one area that did not feature strongly in the nomination dossier. Even though it is clear that for some of the smaller sites, local communities have been and still are active custodians.

In Kyrgyzstan, ICOMOS noted the positive involvement of local schools for public interpretation and reporting artefacts found in agricultural fields, and also an education programmes for local students to enhance local and national identity in relation to one of the nominated sites.

Coordinated management needs strengthening at the national level in Kazakhstan and Kyrgyzstan with management plans being prepared for all sites that cover conservation, development controls and visitor management.

6 Monitoring

Given the magnitude of this Silk Roads corridor, the number of sites, the comparative fragility of many of them and the enormous distances between them, monitoring becomes an almost formidable task. Nevertheless if these sites are to be visited in greater numbers in the near future, there is a need to ensure that visitors are not the agents of their destruction.

ICOMOS considers that monitoring (combined with adequate physical protection) thus becomes a crucial tool.

In China all sites have up to date monitoring equipment. How this data is analysed and used will be crucial and more capacity building for these tasks would seem to be required.

In the more remote sites in Kazakhstan, regular monitoring by trained staff is unlikely to be totally adequate (or in places technically feasible) and needs to be augmented by other means.

One mechanism is the involvement of local communities, which needs to be encouraged. It is also recommended that the latest approaches to remote sensing and video links are explored that might be used to support staff on the ground in both Kazakhstan and Kyrgyzstan.

ICOMOS considers that ways to achieve effective monitoring of remote sites need to be urgently developed.

7 Conclusions

The submission of this trans-boundary nomination from three States Parties is a major milestone in the process of recognising the Silk Roads on the World Heritage List. It is the outcome of more than seven years collaborative work and of many more years of survey and research.

ICOMOS commends the States Parties for the impressive nomination dossier which puts forward 33 sites, a number of which are in highly remote and inaccessible areas, and all of which are extremely fragile, in a corridor that spans around 5,000 kilometres.

The challenge of how to capture the extraordinary impact of the Silk Roads trade over 1,800 years has been debated by all the States Parties contributing to the wider Silk Roads project during many seminars and meetings. The way forward that emerged, to define corridors which enclosed a series of linked sites reflecting particular facets of the Silk Roads, allowed a series of serial sites to be nominated that could incrementally over time together convey the full impact and influence of the Silk Roads.

This corridor is one of the first two to be nominated. It is anticipated that many others will follow. It is axiomatic that these first sites will provide the foundations of future Silk Roads nominations.

ICOMOS considers that it is essential that the various corridors that are nominated clearly reflect certain specific geo-cultural-political facets of the Silk Roads, as well as conveying the fundamental characteristics of the overall routes. In this respect it is essential that the defining characteristics of corridors are clearly set out in

order that the attributes of Outstanding Universal Value are easily understood and readily communicated and the key differences between the corridors are highlighted.

The substantial supplementary information provided by the States Parties in February 2014 complements the detailed information in the nomination dossier. Crucially it has also addresses this key issue clearly and simply. It sets out precisely how the characteristics of this corridor can be defined, what distinguishes it from other corridors and why it can be seen as an exceptional testimony to the Silk Roads trade.

It also highlights the dynamic inter-relationship between the various characteristics: trade needed security and infrastructure to flourish, and the wealth generated by the trade prompted the development of towns and cities that involved various types of symbiotic relationship between settled and nomadic communities. In order to survive in often hostile environment the landscape was re-shaped with elaborate and extensive water management systems, allowing the agricultural development to support residents and travellers. Along the corridor Silk Roads flowed ideas and ideals related to many religions - Zoroastrianism, Manichaeism, Nestorian Christianity, Islam and particularly Buddhism, whose progress eastwards is dramatically marked by pagodas reflecting local architecture, and by wealthy cave temples and monasteries.

The nominated sites fully support the key characteristics of the corridor in all but one area and that is the ensemble of way stations, beacons, watch towers and caravanserai that facilitated regular trade and reflects the everyday use of the route. One watch tower has been nominated and one post house. Although these are significant, they do not fully demonstrate the extent of the formal support that was provided for trade and travellers. In the supplementary information provided, the States Parties have acknowledged that numerous sites of beacon towers and forts survive between the Hoxi corridor and the Tian-shan range and these provided protection for the routes along with earthen sections of the Great Wall. The Chinese State Party is committed to undertaking further research of the remains of these mainly Tang dynasty structures in order to identify those that might be added to the series. Likewise formal structures can be found in Zhetvsu region and these too need further identification and research.

Conveying the rich inter-linkage between the various sites of the Tian-shan corridor as a reflection of the cosmopolitan and thriving societies that facilitated trade is one of the challenges of this massive serial property. The support of a formal secretariat that promotes an online platform for information and exchange of ideas on conservation and interpretation in three languages – English, Russian and Chinese – is a model that deserves commendation.

On the ground, although many sites have good information, there appears to be a need to strengthen

knowledge on the relationships between the sites and the trade routes that provided their lifeblood.

In terms of protection, there are a few sites where this needs strengthening. This is also true for conservation and management of sites that have not had the benefit of adequate resources and/or are in areas which present particularly challenging conditions. Management plans need to be prepared that address conservation and tourism management strategies to allow sites to be adequately protected and prepared for increased visitors and ICOMOS notes that there is agreement to this way forward

All sites need adequate monitoring arrangements and for sites in remote areas, there is a need to explore technical solutions where access is difficult and resources are scarce.

Although this nomination is one of the first two to be put forward, ICOMOS considers that signifying this in the name of the property might in the long term cause confusion. It suggests that the name should be shortened to: "Silk Roads: the Routes Network of the Tian-shan Corridor".

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that the Silk Roads: Initial Section of the Silk Roads, the Routes Network of Tianshan Corridor, be inscribed on the World Heritage List on the basis of **criteria** (ii), (iii), (v) and (vi).

Recommended Statement of Outstanding Universal Value

Brief synthesis

The Silk Roads were an interconnected web of routes linking the ancient societies of Asia, the Subcontinent, Central Asia, Western Asia and the Near East, and contributed to the development of many of the world's great civilizations. They represent one of the world's preeminent long-distance communication networks stretching as the crow flies to around 7,500km but extending to in excess of 35,000km along specific routes. While some of these routes had been in use for millennia, by the 2nd century BC the volume of exchange had increased substantially, as had the long distance trade between east and west in high value goods, and the political, social and cultural impacts of these movements had far-reaching consequences upon all the societies that encountered them.

The routes served principally to transfer raw materials, foodstuffs, and luxury goods. Some areas had a monopoly on certain materials or goods: notably China, who supplied Central Asia, the Subcontinent, West Asia and the Mediterranean world with silk. Many of the high value trade goods were transported over vast distances

 by pack animals and river craft – and probably by a string of different merchants.

The Tian-shan corridor is one section or corridor of this extensive overall Silk Roads network. Extending across a distance of around 5,000km, it encompassed a complex network of trade routes extending to some 8,700km that developed to link Chang'an in central China with the heartland of Central Asia between the 2nd century BC and 1st century AD, when long distance trade in high value goods, particularly silk, started to expand between the Chinese and Roman Empires. It flourished between the 6th and 14th century AD and remained in use as a major trade route until the 16th century.

The extremes of geography along the routes graphically illustrate the challenges of this long distance trade. Falling to 154 metres below sea level and rising to 7,400 metres above sea level, the routes touch great rivers, alpine lakes, crusty salt flats, vast deserts, snow-capped mountains and 'fecund' prairies. The climate varies from extreme drought to semi-humid; while vegetation covers temperate forests, temperate deserts, temperate steppes, alpine steppes and oases.

Starting on the Loess plateau at Chang'an, the central capital of China in the Han and Tang Dynasties, the routes of the Tian-shan corridor passed westwards through the Hosi Corridor across the Qin and Qilian Mountains to the Yumen Pass of Dunhuang. From Loulan/Hami, they continued along the northern and southern flanks of the Tian-shan Mountain and then through passes to reach the Ili, Chuy and Talas valleys in the Zhetysu Region of Central Asia, linking two of the great power centres that drove the Silk Roads trade.

Thirty-three sites along the corridor include capital cities/ palace complexes of various empires and Khan Kingdoms, trading settlements, Buddhist cave temples, ancient paths, posthouses, passes, beacon towers, sections of the Great Wall, fortifications, tombs and religious buildings. The formal system of posthouses and beacon towers provided by the Chinese Empire facilitated trade, as did the system of forts, caravanserai and way stations operated by states in the Zhetysu region. In and around Chang'an, a succession of palaces reflect the power centre of the Chinese Empire over 1,200 years; while the cities of the Chuy valley are witness to the power centre of the Zhetysu region from the 9th to the 14th centuries and their organisation of the long distance trade.

The series of Buddhist pagodas and large, elaborate cave temples extending from Kucha (now Kuqa County) in the west to Luoyong in the east, record the eastward transmission of Buddhism from India via Karakorum, and demonstrate an evolution in the design of stupas as local ideas were absorbed. Their elaboration reflects the sponsorship of local authorities and the central Chinese imperial government as well as donations of wealthy merchants, and the influence of monks that travelled the routes, many of whose journeys were documented from

2nd century BC onwards. Other religious buildings reflect the co-existence of many religions (as well as many ethnic groups) along the corridor including Zoroastrianism, the main religion of the Sogdians of Zhetysu region, Manichaeism in the Chuy and Talas valleys and in Qocho city and Luoyong, Nestorian Christianity also in Qocho city, around Xinjiang and in Chang'an, and Islam in Burana.

The massive scale of the trading activities fostered large, prosperous and thriving towns and cities that also reflect the interface between settled and nomadic communities in a variety of ways: the mutual inter-dependence of nomads and farmers and different peoples such as between Turks and Sogdians in the Zhetysu region; the transformation of nomadic communities to settled communities in the Tian-shan mountains, resulting in highly distinctive construction and planning such as semi-underground buildings; and in the Hosi corridor the planned agricultural expansion of the 1,000 mile corridor after the 1st century BC as an agricultural garrison and its transformation to settled agricultural communities. Diverse and large scale water management systems were essential to facilitate the growth of towns, trading settlements, forts, and caravanserai and the agriculture necessary to support them, such as the extensive Karez underground water channels of the extremely arid Turpan basin, many still in use, that supplied water to Qocho city, and were supplemented by deep wells inside Yar city: the grand scale of the network of open canals and ditches along the Hosi corridor that drew river water to the settlements. 90km of which survive around Suovang city: and in the Zhetsyu region, river water distribution through canals and pipes and collection in reservoirs.

As well as conduits for goods and people, the routes allowed the exceptional flow of ideas, beliefs and technological innovations such as those related to architecture and town planning that shaped the urban spaces and peoples' lives in many fundamental ways.

Criterion (ii): The vastness of the continental routes networks, the ultra-long duration of use, the diversity of heritage remains and their dynamic interlinks, the richness of the cultural exchange they facilitated, the varied geographical environments they connected and crossed, clearly demonstrates the extensive interaction that took place within various cultural regions, especially the nomadic steppe and settled agrarian/oasis/pastoral civilizations, on the Eurasian continent between the 2nd century BC and the 16th century AD.

These interaction and influences were profound in terms of developments in architecture and city planning, religions and beliefs, urban culture and habitation, merchandise trade and interethnic relations in all regions along the routes.

The Tian-shan corridor is an extraordinary example in world history of how a dynamic channel linking civilizations and cultures across the Eurasian continent.

realized the broadest and most long-lasting interchange among civilizations and cultures.

Criterion (iii): The Tian-shan corridor bears an exceptional witness to traditions of communication and exchange in economy and culture, and to social development across the Eurasian continent between the 2nd century BC to the 16th century AD.

Trade had a profound influence on the settlement structure of the landscape, through the development of towns and cities that brought together nomadic and settled communities, through water management systems that underpinned those settlements, through the extensive network of forts, beacon towers, way stations and caravanserai that accommodated travellers and ensured their safety, through the sequence of Buddhist shrines and cave temples, and through manifestations of other religions such as Zoroastrianism, Manichaeism, Nestorian Christianity and Islam that resulted from the cosmopolitan, multi-ethnic communities that organised and benefitted from the high value trade.

Criterion (v): The Tian-shan corridor is an outstanding example of the way high value, long-distance trade prompted the growth of sizeable towns and cities, supported by elaborate, sophisticated water management systems that harvested water from rivers, wells and underground springs for residents, travellers and the irrigation of crops.

Criterion (vi): The Tian-shan Corridor is directly associated with Zhang Qian's diplomatic mission to the Western Regions, a milestone event in the history of human civilization and cultural interchange in the Eurasian Continent. It also reflects in a profound way the tangible impact of Buddhism into ancient China which had significant impact on cultures of East Asia, and the spread of Nestorian Christianity (which reached China in 500 AD), Manichaeism, Zoroastrianism and early Islam. Many of the towns and cities along the corridor also reflect in an exceptional way the impact of ideas that flowed along the routes related to harnessing water power, architecture and town planning.

Integrity

The nomination sets out clearly why the nominated series as a whole should be seen to have integrity and, through a detailed analysis, how each of the individual sites can also be seen to have integrity.

The overall series adequately reflects the significant characteristics of the Tian-Shan corridor and the attributes of Outstanding Universal Value in terms the representation of towns and cities, smaller trading settlements, transport and defence facilities, religious sites and tombs and water management. The one area that could be strengthened is the ensemble of way stations, beacons, watch towers and caravanseral that facilitated regular trade and reflects the everyday use of the route. One watch tower has been nominated and

one post house. Although these are significant, they do not fully demonstrate the extent of the formal support that was provided for trade and travellers. The numerous sites of beacon towers and forts that survive between the Hoxi corridor and the Tian-shan range need further survey and research in order to identify those that might be added to the series. Likewise formal structures in Zhetysu region also need further identification and research.

In terms of individual sites, although it is recognised that some are vulnerable in the face of pressure including urban, rural development, infrastructural development, tourism or changes in agricultural practices, for the majority of these the pressures are adequately contained. There is a need to ensure that new interventions such as screen walls at some sites built in traditional style do not confuse the archaeological

For some sites, in order to fully understand the relationship between urban areas and their surrounding desert landscapes, and in particular the trade routes, there is a need for further ground surveys or remote sensing of surrounding areas.

The extensive, intact water management systems, necessary for their survival, are currently outside the boundaries of some sites and in some cases outside the buffer zones. Consideration needs to be given to assessing the way these water management systems contribute to the integrity of the sites and in places minor adjustments to the boundaries need to be considered.

Authenticity

The overall series includes adequate sites to fully convey the particular strengths and characteristics of this Tian-shan corridor. The authenticity of individual sites is mostly satisfactory.

If the full value of these sites is to be clearly conveyed, then more surveys, research and explanation are needed to show how the sites relate to the routes to which they are linked and, in the case of settlements, to show how they survived in desert areas through the use of sophisticated water management techniques.

In the Zhetysu region, all the eleven archaeological sites are backfilled and covered for protection and to control deterioration, which in the current absence of adequate means to stabilise exposed bricks is essential. Fully understanding the significance of the remains is difficult. There is a need to explore innovative ways of highlighting the scope and range of urban functions.

There is also a need for more archaeological and academic research to clarify the functions particularly of urban sites and to link them more clearly through interpretation to the ancient routes to which they were associated.

Management and protection requirements

An Intergovernmental Coordinating Committee for the overall Silk Roads was formed in 2007. This is a steering committee composed of representatives of all States Parties involved in the nominations of all Silk Roads corridors. The ICOMOS International Conservation Centre – Xi'an (IICC-X) is the Secretariat for Committee. The Committee oversees the development of transnational serial nominations of corridors identified in the ICOMOS Silk Roads Thematic Study. In terms of management, this Committee aims to implement a coordinated management system based on mutual agreement and to provide guidelines on conservation principles, methods, and management.

For the Tian-shan corridor, the formal agreement between all the participating States Parties in the Committee has been augmented with a specific agreement between the three States Parties, particular for the coordinated management of the sites in the corridor. A first agreement between the three States Parties was signed in May 2012 and a further detailed agreement was signed in February 2014. These agreements set out the management mechanisms, and principles and rules of conservation management. They also set out suggestions for exchange and collaboration on conservation. interpretation, presentation and publicity. The Steering Committee for the corridor consists of Vice Ministers. There is also a Working Group consisting of two experts and one government official from each State Party, and a Secretariat - the ICOMOS International Conservation Centre in Xi'an (IICC-X). Regular meetings are held between the three States Parties. Collaboration is supported by the development of an on-line platform at the IICC-X. This is in three languages, English, Russian and Chinese. It collects and promotes information on the conservation initiatives along the Silk Roads.

This international collaboration needs to be supported by national collaboration, particularly in Kazakhstan and Kyrgyzstan, if the many fragile archaeological sites are to share information on the most advanced techniques and conservation measures that are appropriate and beneficial for the sites. Within China, this management structure is well developed and appears effective. Within Kazakhstan and Kyrgyzstan this collaboration needs to be reinforced.

Management Plans are in place for all the individual sites in China. For Kazakhstan a timetable for developing detailed management plans that would provide strategies for conservation and visitor management, including interpretation, for all sites had been approved and the work will be undertaken between 2014 and 2016. It is essential that these plans go beyond archaeological excavation to encompass ongoing management, site surveillance, conservation, environment protection and tourism management. In Kyrgyzstan, all three sites have management plans for 2011 – 2015 that include proposals for improving the

conservation of the sites, visitor facilities, and monitoring.

Although the need for tourism plans is acknowledged in each of the three countries, and these have been put in place in China and are being implemented, and a plan has been approved for the Chuy Valley, there is an urgent need to tourism plans to be put in place for the remaining sites and implemented to ensure they are well prepared for an increase in visitors, who do not become the agents of their destruction.

As the majority of the thirty-three nominated sites are archaeological sites, there is also need for good information that allows understanding of their layout, function and history, why they are of significance and particularly their relationship to the Silk Roads routes, to water and its management which was so crucial for survival, to trade and to each other. Many are associated with remarkable finds but these are often in museums some distance from the sites. And these museums do not always provide specific information about the Silk Roads and how they relate to the sites. Given the scale and scope of the Tian-shan corridor and the remoteness of some sites, there is a need for innovative techniques to provide the necessary information and interpretation.

The magnitude of this Silk Roads corridor, the number of sites, the comparative fragility of many of them and the enormous distances between them, makes monitoring a formidable task. Nevertheless monitoring (combined with adequate physical protection) is a crucial tool. In China all sites have up to date monitoring equipment. How this data is analysed and used will be crucial and more capacity building for these tasks would seem to be required. In the more remote sites in Kazakhstan, regular monitoring by trained staff is unlikely to be totally adequate (or in places technically feasible) and needs to be augmented by other means. In this context, the involvement of local communities needs to be encouraged.

As with It is also recommended that the latest approaches to remote sensing and video links are explored that might be used to support staff on the ground in both Kazakhstan and Kyrgyzstan.

Additional recommendations

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

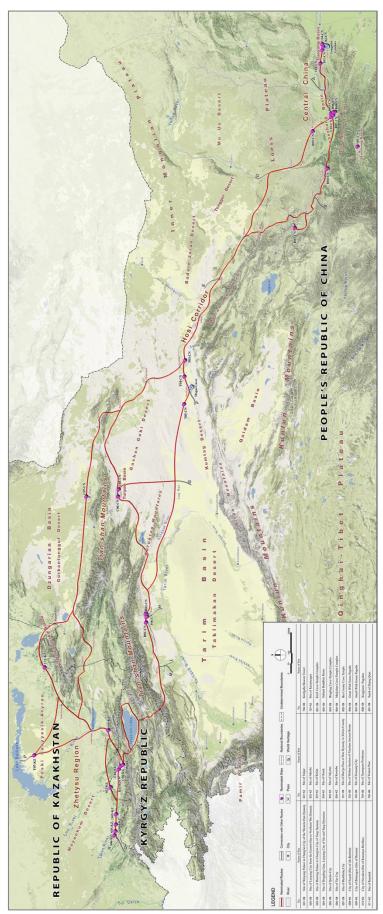
- Undertaking further studies of sites that reflect the many planned way stations and watch towers and consider how they might be added to the series in the future;
- Considering extending boundaries of sites to include the sophisticated arrangements for water management that underpinned many of the settlements and their agriculture along the Silk Roads:

- Implementing the timetables for developing detailed management plans that would provide strategies for conservation and visitor management, including interpretation;
- Suggesting how international resources might contribute to the technical monitoring of remote sites.

ICOMOS also suggests that the States Parties be requested to submit, by 1 February 2016, a report to the World Heritage Centre outlining progress made in the implementation of the above mentioned recommendations, to be examined by the World Heritage Committee at its 40th session in 2016.

ICOMOS further suggests that the name of the property should be shortened to: "Silk Roads: the Routes Network of the Tian-shan Corridor".

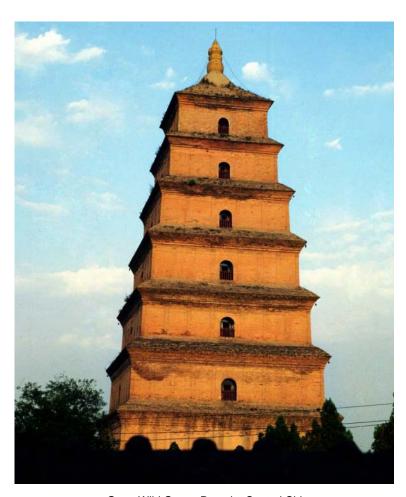
ICOMOS is at the disposal of the States Parties to provide further detailed advice on these recommendations or in relation to conservation and management of specific sites.



Map showing the nominated routes



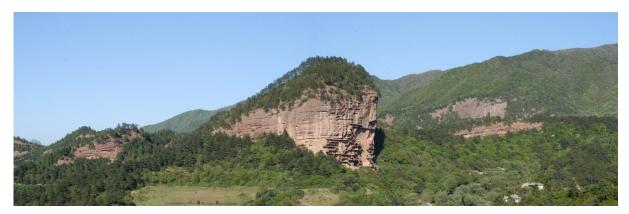
Luoyang City, from the Eastern Han to Northern Wei Dynasty (1st - 6th century AD), Central China



Great Wild Goose Pagoda, Central China



Bin county cave temple, Central China



Maijishan cave temple complex, Central China



Yumen Pass, Hosi Corridor



City of Nevaket (Site of Krasnaya Rechka), Zhetysu region



Talgar, Zhetysu region