

TENTATIVE LIST

STATE PARTY: Republic of Kazakhstan

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Name of Property:	WESTERN TIEN-SHAN <i>(transnational serial nomination)</i>											
State, Province or Region	<p>Kazakhstan's part of the transnational serial nomination includes 3 clusters:</p> <ol style="list-style-type: none"> 1. Karatau State Nature Reserve (KSNR) – Turkestan district of South–Kazakhstan Region (34300 ha); 2. Aksu-Zhabagly State Nature Reserve (AZSNR) – Tulkubas, Tolebi and Baydibek districts of South-Kazakhstan region, Zhualyn district of Zhambyl region (131934 ha); 3. Sayram-Ugam State National Nature Park (SUSNNP) – Kazygurt, Tolebi and Tyulkubas districts of South-Kazakhstan region (149053 ha). <p>Area of the nominated object : 315287 ha Buffer zone: 70290 ha Total area: 385577 ha</p>											
Latitude and Longitude or UTM coordinates	<p>Central coordinates:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">KSNR</td> <td style="text-align: center;">N43°44'00"</td> <td style="text-align: center;">E068°40'44"</td> </tr> <tr> <td style="text-align: center;">AZSNR</td> <td style="text-align: center;">N42°16'34"</td> <td style="text-align: center;">E070°40'27"</td> </tr> <tr> <td style="text-align: center;">SUSNNP</td> <td style="text-align: center;">N41°59'14"</td> <td style="text-align: center;">E070°07'39"</td> </tr> </table>			KSNR	N43°44'00"	E068°40'44"	AZSNR	N42°16'34"	E070°40'27"	SUSNNP	N41°59'14"	E070°07'39"
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DESCRIPTION:

The “**Western Tien-Shan**” is a transnational serial nomination including protected nature areas in this mountainous country in three States: Kazakhstan, Kyrgyzstan and Uzbekistan. It consists of Karatau and Aksu-Zhabagly nature reserves and Sayram-Ugam national nature park (Kazakhstan), Sary-Chelek, Besh-Aral and Padysha-Ata nature reserves (Kyrgyzstan) and Chatkal nature reserve (Uzbekistan). They are the most representative and well-preserved territories of the unique nature complex – Western Tien-Shan. Each of these protected areas has its own specific, but at the same time, they are mutually complementary in regards of biodiversity conservation, distinguished landscapes and paleontological occurrences.

Kazakhstan’s part of the nominated property consists of 3 mountainous sites – Specially Protected Nature Areas: 1. **Karatau State Nature Reserve (KSNR)**, situated in the central part of Karatau mountain ridge, which is a branch of north-western bows of Tien-Shan; 2. **Aksu-Zhabagly State Nature Reserve (AZSNR)**, situated in the western part of extremity of Talass Alatau in Western Tien-Shan; 3. **Sayram-Ugam State National Nature Park (SUSNNP)** borders from the west with AZSNR and includes sites of Talass Alatau ridges (edge western extremities on the joint with Ugam ridge), Ugam Ridge, Karzhantau, Borolday and Kazygurt. AZSNR and SUSNNP merge, forming a single territory, being at the same time separate SPA with in-house administrations.

The territory is situated in the area of harsh continental climate. It is cut in the desert zone, possessing complex geological composition and due to this and evident vertical zonality presents the whole range of mountainous landscapes and ecosystems, as well as transitional, on the attitude of 800-4200 meters above sea level, from xerophytic petrean to low-hill terrain and piedmont steppes to mountainous parkland juniper forest, alpine meadows and nival belt together with rocks, glaciers and moraine lakes. Due to such variety of ecological conditions, the property possesses high biodiversity with high grade of endemism (especially, concerning vegetation).

Karatau relates to the type of arid and subarid mountainous systems in the mid- mountains of Tien-Shan western extremity. Flora of this type is characterized by the presence of foothill deserts, enriched by the mountainous elements. In floristic zoning Karatau is defined as a separate district. There is no forestland here. Flora and plant formation of the territory of **AZSNR and SUSNNP** present here typical site of “southern” mountains of Central Asia. It is situated within the territory of three phytogeographical districts (Karatau, Ugam-Chatkal and Kyrgyz) of Mountainous-Central-Asian province. 34-35% of the territory is occupied by forest lands with savannah-like forest vegetation. There are 15 main vegetation formation types. Wildlife of the territory is specific for Western Tien-Shan and presents a typical mixture of elements of different faunas.

In the past geological time the territory experienced range of transformations and changes. The witnesses of these processes are so-called Karatau “fish slates” that can be found in big amounts on 2 paleontological sites of AZSNR, situated in the adjacent ridge of Karatau in 100 km from the main territory.

JUSTIFICATION FOR OUTSTANDING UNIVERSAL VALUE:

Western Tien-Shan is characterized by a unique variety, mosaic structure and beauty of landscapes, which states about massive geological and evolutionary processes; a unique combination of various ecosystem types; rich in flora and fauna, big part of which is represented by endemic species and communities, as well as a lot of rare and globally threatened species.

Nominated Nature Reserves Aksu-Zhabagly, Karatau and Sayram-Ugam State National Nature Park are the most representative and well-preserved territories of Kazakhstan part of this unique nature complex – Western Tien-Shan. Each of these protected areas has its own specific, but at the same time, they are mutually complementary in regards of biodiversity conservation, distinguished landscapes and paleontological occurrences.

3 specially protected areas, included into Kazakhstan's part of the nomination "Western Tien-Shan" altogether embrace the unique mountainous landscapes and ecosystems of Karatau, Talass Alatau and Ugam ridges, which representatively reflect bio- and landscape diversity of the Western Tien-Shan with its luxuriant flora and fauna. At the altitude of 700 meters up to 4000 meters above the sea level there are upland steppes, picturesque ravines with park-land long-boled juniper, wild nard, almond, wild apple and apricot. Deep canyons of fast-flowing rivers and colossal rocks, alpine meadows and glaciers – have an outstanding aesthetic value. They are all wonderful examples of different types of mountain sustainable ecosystems, from xerophytic rocky lowlands up to nival belt.

Vertical zonality, complex terrain and diversity of lithological composition of soil-forming measures define here a high biodiversity. There are 16 plant types, including almost 2000 species of vascular plants. The percentage of endemism is very high here – up to 9 % on the species level. On the territory of property in Talass Alatau and Ugam ridge there are 42 mammals species, 238 bird species, 9 reptile, 2 amphibian and 2 fish species. More over, there were found the unique localities of upper Jurassic flora and fauna; Karatau paleontological deposit is considered to be one of the most interesting in the world.

Criteria met:

i	ii	iii	iv	v	vi	vii	viii	ix	x
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The property corresponds with the criteria vii, viii, ix, x of the World Nature Heritage, including entire natural ecosystems, transitional landscapes, high biodiversity and the whole range of globally threatened animal and plant species.

Criterion vii:

Nominated territory contains all elements, essential for the support of its aesthetic characteristics. Significant mountainous relief, picturesque nature bodies, wild nut-bearing and coniferous forests, middle-mountain meadows and meadows-steppes, multicolored subalpine tall grass, alpine meadows.

Deep canyons and sloping picturesque ravines with multistage waterfalls (canyons of Aksu and Kshikaindy rivers in Aksu-Zhabagly SNR); plateau-like surfaces and impregnable rocks of fanciful forms (Kyrykkyz in Sayram Ugam SNNP); full-flowing rivers and springs with pure water, waterfalls and high-lands rock-dammed and moranic lakes (Makpal lake in Sayram Ugam SNNP) which borders with snow-covered peaks (Sayram peak, 4236 meters above sea level in SUSNNP) – all these have the particular aesthetic value. Clusters of the nominated territory possesses huge recreational capacity.

Many of the flora and fauna species, such as Greig and Kaufman tulips of fairytale beauty, Himalayan Snowcock, Paradise Flycatcher raise aesthetic value of the landscapes.

Criterion viii:

Nominated territory reflects considerable geological processes in the development of the Earth surface forms as well as important geomorphologic and physiographic features of the landscape. All considerable forms of the relief of the Western Tien-Shan are represented here. On considerably small territory there are combined different geological structures. They reflect successive evolutionary stages of the Earth

crust. There are depositions from lower Proterozoic till modern Cambrian, Ordovician, Devonian and Carboniferous, where there were traces of life of ancient epochs.

Karatau paleontological deposits (parts of Aulie reserve and Karabastau in the mountainous ridge of Syrdarya Karatau), which is considered to be one of the most interesting in the world. Caked silt has perfectly conserved prints of animals and plants that occurred in the basins and shores of the Jurassic sea 150 million years ago. There have been found more than 60 plant species, 100 insect species, as well as mollusks, crustaceans, tortoise and ganoid fish on the territory of these sites. The findings of the skeleton of pterosaur and separate bones of a big dinosaurs are of the biggest interest. Nowhere in the world there is such a rich burying of Mesozoic insects.

Criterion ix:

The sites of the nominated property represent the whole specter of altitude zones of the Western Tien-Shan. In the borders of the mountain sites there are up to seven natural zones (from the steppe zone at the foot of the mountain to the highlands), which provides the area with high biodiversity. Ecosystems are sustainable and represent the full range of transfers, conditioned by vertical zonality.

For the Western Tien-Shan the distinctive combination of northern and southern forms, relict species and autochthonic communities is significant. In this mountainous country, with a high grade of isolation of separate areas the intensive modern speciation is going on with appearance of a number of new species – neo-endemics, appeared here relatively recently. The ongoing evolutionary and speciation processes have an important scientific value not only as an example of natural development, but for regeneration and conservation of similar Eurasian ecosystems.

Criterion x:

Nominated sites are the key sites for the conservation of globally important biodiversity of Western Tien-Shan. Assuming, that every of the sites have the biggest value for the conservation of this or that component of the unique biocoenosis of this mountainous country, only altogether they can effectively provide the long-term sustainable development.

The Western Tien-Shan is one of the world's centers of origination of nut, fruit and many other cultivated plants. A lot of their wild ancestors are spread here, such as: plum (*Prunus*), apricot (*Armeniaca*), walnut (*Juglans regia*), onion (*Allium*), lucern (*Medicago*), apple-tree (*Malus*), pear (*Pyrus*), grapes (*Vitis*), tulip (*Tulipa*), almond (*Amygdalus*). This huge genetic fund is of unique value for the agro-biodiversity of many countries in the world. Thanks to the high concentration of forest biodiversity the Western Tien-Shan is included into the world's key ecoregions.

On the nominated territory there are a lot of preserved combinations of different types of coniferous and deciduous forests, juniper, fir tree, maple, nut, fruit, tugai, as well as more than 10 endemic plant communities. The unique population of Mensbir Marmot (*Marmota menzbieri*) – small-range endemic of Western Tien-Shan, distributed only on the territory of Kazakhstan, Uzbekistan and Kyrgyzstan. Special focus in terms of biodiversity and gene pool conservation is done on the Snow Leopard (*Uncia uncia*), as well as Karatau subspecies of Argali (*Ovis ammon nigrimontana*).

In total there are 25 animal and plant species, included into IUCN Red List (version 2009_1) with different threat status on the territory of the property. 6 bird species from them occur here on migration – such as Pallid Harrier (*Circus macrourus*, NT), Imperial Eagle (*Aquila heliaca*, VU), Great Bustard (*Otis tarda*, VU), Little Bustard (*Tetrax tetrax*, NT), Corncrake (*Crex crex*, NT), Pale-backed Pigeon (*Columba eversmanni*, VU), and the rest species are residents. These are 9 plant species – Common Apricot (*Armeniaca vulgaris*, EN), Talass Birch (*Betula talassica*, EN), Karatau Cotoneaster (*Cotoneaster karatavicus*, DD), Hawthorn (*Crataegus ambigua*, DD), Ash (*Fraxinus sogdiana*, NT), Honeyberry (*Lonicera karataviensis*, CR), Nedzvezky Apple (*Malus niedzwetzkyana*, EN), Siverce apple (*Malus sieversii*, VU), Shrenk Meadowsweet (*Spiraeanthus schrenkianus*, EN); 1 butterfly species – Apollo Butterfly (*Parnassius apollo*, VU); 5 bird species – Black Vulture (*Aegypius monachus*, NT), Roller (*Coracias garrulus*, NT), Saker Falcon (*Falco cherrug*, EN), Lesser Kestrel (*Falco naumanni*, VU), Egyptian Vulture (*Neophron percnopterus*, EN); 4 mammals species – Dhole (*Cuon alpinus*, EN), Mensbir Marmot (*Marmota menzbieri*, VU), Argali (*Ovis ammon*, NT), Snow Leopard (*Panthera uncia*,

EN). Herewith, Karatau Cotoneaster, Karatau Honeyberry, Shrenk Meadowsweet, Menzbir Marmot are presented within the territory of the property in the biggest percentage of their populations, and Argali, being at the level of “Near threatened” (NT) is presented by 2 subspecies – *O.a.karelini* and of small-range subspecies *O.a.nigrimontana*, more than 80% of its population is protected in Karatau reserve.

Statements of authenticity and/or integrity:

Already at the stage of the establishment of the Specially Protected Areas (State Reserves and National Nature Park), which are the sites of the nominated property Western Tien-Shan, all the integrity approaches were met. The property includes holistic natural ecosystems and natural landscapes that didn't undergone in the observable history appreciable anthropogenic transformations, including almost full absence of introduced species, apart from planted fruit trees on small plots. The total area of nominated property is 315287 ha without considering buffer zones – that matches well the objectives of protected areas and is enough for the sustainable functioning of biogeocenose. The territory of Aksu-Zhabagly was excluded from agricultural use from the year 1926, the territory of Karatau reserve – from the year 2004, Sayram-Ugam State National Nature Park – in it's biggest part is excluded from the use from 2006. The only type of use of separate sites of the territory were and remain in some places is cattle grazing and regulated tourism. With the exception of fires none from the properties is subjected to any threats that can destroy the landscape.

Status of State reserves (corresponds to Ia criterion of IUCN) and National Park (II IUCN) that the proposed sites of serial nomination have and 2-3 km protected (buffer) zone ensure conservation and further natural development of the unique ecosystem complex of the Western Tien-Shan. All SPA – sites of the nominated property have available sufficient governmental financial and administrative resources for the long-term conservation of this globally important value. There is ongoing process of establishment of the integrated harmonized system of management of serial transboundary property.

Comparison with other similar properties:

The unique features of the Western Tien-Shan proves that the nominated territory has no analogues among the World Nature Heritage properties. In the mountainous areas of Central Asia there are 3 WNH properties - “Golden Mountains of Altai”, “Lake Baikal”(Russian Federation), “Uvs Nuur Basin” (Mongolia and Russian Federation); one of the properties is also in the mountains of Northern India – “Nanda Devi and Valley of Flowers National Parks”. But Western Tien-Shan significantly differs from all of them in orography, climate and history of development, vegetation and wildlife. Other WNH recently being nominated property is «Tajik National park» (Tajikistan), differs from the Western Tien-Shan in landscapes and arid of highlands, which also causes large differences in vegetation as well as in other features.

Western Tien-Shan represents different types of sustainable mountainous ecosystems, as well as great biodiversity with high level of endemism and presents one of the center of originate of cultivated plants growing from the range of wild progenitors, as well as demonstrates unique sites of upper Jurassic flora and fauna.