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### International Co-ordinating Council of the Man and the Biosphere (MAB) Programme

Thirty-first session

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17 – 21 June 2019

#### **ITEM 9 OF THE PROVISIONAL AGENDA: Proposals for New Biosphere Reserves and Extensions/ Modifications/ Renaming to Biosphere Reserves that are Part of the World Network of Biosphere Reserves (WNBR)**

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1. Proposals for new biosphere reserves and extensions to biosphere reserves that are already part of the World Network of Biosphere Reserves (WNBR) were considered at the 25<sup>th</sup> meeting of the International Advisory Committee for Biosphere Reserves (IACBR), which met at UNESCO Headquarters from 25 to 28 February 2019.

2. The members of the Advisory Committee examined 20 proposals for new biosphere reserves and 11 requests for expansion/modification and/or renaming of already existing biosphere reserves and formulated their recommendations regarding specific sites in line with the recommendation categories as follows:

- 1) ***Proposals for new biosphere reserves or extensions/modifications/renaming to already existing biosphere reserves recommended for approval***: the proposed site is recommended for approval as a biosphere reserve; no additional information is needed. For already existing sites, the proposed changes are recommended for approval.
- 2) ***Proposals for new biosphere reserves or extensions/modifications/renaming to already existing biosphere reserves recommended for approval pending the submission of specific information***: the proposed site is recommended for approval as a biosphere reserve or the proposed changes for already existing sites are recommended for approval **subject to** receiving the specific information as requested by the Advisory Committee. If the MAB Secretariat receives the information by 15 May 2019, it will be considered by the MAB ICC at its 31<sup>st</sup> session to be held from 17 to 21 June 2019 and the

Council may approve the inclusion of the site in the WNBR. If submitted by 30 September 2019, the information will be assessed by the MAB ICC at its 32<sup>nd</sup> session in 2020.

**3) Proposals for new biosphere reserves or extensions/modifications/renaming to existing biosphere reserves recommended for deferral:** the proposed site is recommended for deferral or the proposed changes for existing biosphere reserves are recommended for deferral as they do not meet the criteria of the Statutory Framework of the World Network of Biosphere Reserves, and/or major clarifications with regard to application of the Statutory Framework to the proposed area are requested by the Advisory Committee. The relevant national authorities are therefore invited to revise the nomination and/or provide the requested clarifications for submission to the MAB Secretariat at their earliest convenience.

3. The MAB Secretariat received two notifications for voluntary withdrawal: one from Denmark (Greenland Biosphere Reserve) and one from the United States of America (San Joaquin Biosphere Reserve).

4. The Bureau of the MAB ICC will consider the attached recommendations of the IACBR as well as the additional information received by the MAB Secretariat particularly with regard to nominations recommended for approval subject to receiving additional information. The Bureau will recommend for the consideration of the MAB ICC final decisions on all sites included in this document.

5. The MAB ICC is invited to decide on the new sites for inclusion in the WNBR and extensions/modifications and/or renaming of biosphere reserves already included in the WNBR that could be approved.

6. The MAB-ICC is invited to take note of the decision of one Denmark site (Greenland Biosphere Reserve) and one United States of America site (San Joaquin Biosphere Reserve) authorities for voluntarily withdrawal.

## **EXAMINATION OF NEW BIOSPHERE RESERVE NOMINATIONS AND PROPOSALS FOR EXTENSION/ MODIFICATION/RENAMING TO DESIGNATED BIOSPHERE RESERVES THAT ARE PART OF WORLD NETWORK OF BIOSPHERE RESERVES**

### **New nominations recommended for approval**

7. **Unteres Murtal / Lower Mura Valley (Austria).** The Advisory Committee welcomed this proposal from Austria, which follows the designations of a transboundary site in Hungary and Croatia, Serbia and Slovenia designations. The Austrian Lower Mura Valley represents the final contribution to achieving a commitment by these five countries to protect the multi-river system of Mura Drava Danube.

8. The proposed biosphere reserve covers 13,180 ha. The area is of natural-historical and cross-border importance due to its location along the border with Slovenia and its participation in the European Green Belt. Next to the Danube floodplains, the area is Austria's second largest alluvial forest on a large river. The river landscapes and the accompanying floodplain forests are not yet represented among the ecosystem types in Austria's biosphere reserves.

9. Existing in close connection with the surrounding agricultural landscape, the area is characterized by an extraordinarily high biodiversity, especially with regard to water-bound fauna and flora. The reserve is home to almost 50 fish species, 14 of which are of European importance, and a large number of amphibians and bird species, many of which are also of European importance and can often be found on the IUCN Red List. This places a great responsibility on the authorities for their conservation. The municipalities of the planned biosphere reserve – Murfeld, Mureck, Halbenrain and Bad Radkersburg – have a combined population of 10,099 (as of 2018, Statistics Austria). The majority of the inhabitants live in the larger settlement areas such as Mureck or Bad Radkersburg. The proposal demonstrates strong social capital, networks of regional actors and comprehensive cross-border development, and provides example of existing cooperation.
10. The Advisory Committee recommended that the proposed biosphere reserve **be approved**.
11. **Saleh-Moyo-Tambora “SAMOTA” (Indonesia)**. The proposed site belongs to the Lesser Sunda Islands. It is located between Rinjani-Lombok Biosphere Reserve (designated in 2018) to the west and Komodo Island Biosphere Reserve (designated in 1977) to the east.
12. The reserve covers 728,484.44 hectares (ha) and consists of a core area of 115,207.10 ha, a buffer zone of 138,731.86 ha and a transition area of 474,545.48 ha. The area encompasses five major ecosystems, namely small islands, a coastal area (mangrove forest and coastal forest), savanna, lowland forest and mountain forest.
13. The people living in the area of the proposed Saleh-Moyo-Tambora (Samota) Biosphere Reserve come from diverse ethnic groups. The total population living in the proposed Samota Biosphere Reserve amounts to 146,660 people.
14. The proposed site, in particular the core area, plays an important role in conserving the biodiversity of the Lesser Sunda Region in Nusa Tenggara Barat (NTB) Province. In the buffer zone and the transition area, the potential exists for the production of horticultural plants (vegetables and fruits), crops (rice, annual crops) and industrial crops (coffee, cacao), as well as animal husbandry (cows, goats, chickens and others). In terms of tourist activity, the area is renowned for the natural beauty of the Tambora Mountains, while the Sumba Island communities are the focus of cultural tourism.
15. The Advisory Committee noted little difference between the activities of people in the buffer zone and the transition area. The Committee therefore encouraged an emphasis on – or permission for – different activities in the buffer zone, as no inhabitants live in this zone. It also recommended educating people on the location of the borderline between the buffer zone and the transition area, and the difference in the roles of these zones.
16. The proposed site has established an integrated management plan (2009-2023). The planned biosphere reserve management is a multi-stakeholder body consisting of the national and provincial government, the local government, the private sector, local communities, research institutions, universities and NGOs. The Advisory Committee encouraged this body to invite local people to participate more in the management and decision-making processes of the biosphere reserve.
17. Key threats to the biosphere reserve include non-timber forest products (NTFP) extraction, poaching, fire, and conversion to plantations (oil palm, industrial plantations, etc.). The Committee recommended that policies be established to reduce these threats, in order to restore degraded ecosystems, and to provide measures to address management problems such as illegal harvesting and over-tourism.

18. The Advisory Committee commended the Indonesian authorities for their strong efforts to integrate conservation and sustainable development in this area, which has a high diversity of species, ecosystems and cultural aspects. It recommended that this site **be approved**.

19. **Togean Tojo Una-Una (Indonesia)**. The proposed Togean Tojo Una-Una Biosphere Reserve is located on an archipelago consisting of 483 islands in Central Sulawesi, and forms part of the Indomalayan realm (Wallacea) as well as the heart of the Coral Triangle. The area contains a marine ecosystem, coral reefs, a coastal area, mangrove forests and small island ecosystems. The Togean Islands are an important part of the coral reef ecosystem of the Coral Triangle, which has the highest coral diversity in the world.

20. The main objective of the proposed Togean Tojo Una-Una Biosphere Reserve is to promote sustainable development in areas such as tourism and fisheries, to support the development of programmes designed to increase tourism facilities and infrastructure, to develop human resources and to support stakeholders in sustainable development.

21. The total area of the proposed site is 2,187,632 ha; it comprises a marine area of 1,622,076 ha marine area and a terrestrial area of 565,556 ha. The core area covers 368,464 ha (28,345 ha terrestrial and 340,119 ha marine), the buffer zone consists of 281,136 ha (52,809 ha terrestrial and 228,327 ha marine) and the transition area covers 1,538,032 ha (1,053,630 ha terrestrial and 484,402 ha marine). The overall population size is 149,214, with 38,404 people inhabiting the buffer zone and 110,810 in the transition area.

22. The core area of the site is composed of the Tanjung Api Natural Reserve (3,289.09 ha) and the Togean Islands National Park (365,241.08 ha), which was designated a National Marine Park in 2004. The buffer zone includes small islands, settlements and a marine area surrounding the mainland. The transition area directly borders the buffer zone and is considered a general utilization area, including for production activities.

23. Cultural diversity is very high across the proposed site. The Togean Island district is inhabited by a variety of local and ethnic immigrants, all of whom adhere to their own customs and culture.

24. The proposed Togean Tojo Una-Una Biosphere Reserve plays an important role in biodiversity conservation. The Togean Islands are home to 363 plant species, including 33 species of mangrove. They also contain several endemic animal species such as tarsiers (*Tarsius spectrum palengensis*) and Togean monkeys (*Macaca togeanus*). Other important mammal species found in the area include Togean babirusa, cuscus, dugong, whale and dolphin. Coral reef fish are very abundant, with 596 species inhabiting the Togean Islands National Park. The area is also an important spawning site for turtles, as well as a spawning aggregation site (SPAG) for fish.

25. A key problem in Togean Islands National Park is illegal fishing with bombs and poison around the coral reefs. Forest ecosystems are also degraded by human activities such as encroachment and illegal logging. The Advisory Committee has encouraged the active participation of local people in the management of the biosphere reserve, with a view to helping resolve conflicts and prevent illegal harvesting.

26. The Advisory Committee noted with satisfaction the submission of an integrated management plan incorporating management policies and structures and detailed action plans.

27. The Advisory Committee further noted the high potential of ecotourism in this proposed biosphere reserve.

28. The Advisory Committee welcomed this submission and commended the Indonesian authorities for their coordinated conservation and sustainable development efforts in this site of high importance to biodiversity conservation. It recommended that Togean Tojo Una-Una **be approved** as a biosphere reserve.

29. **Po Grande (Italy).** The Advisory Committee welcomed this proposal from Italy. It noted that two Italian biosphere reserves were recently established on the River Po: Po Delta (2015) and Collina Po (2016).

30. The Advisory Committee also noted that the document demonstrates how the 'Po Grande' region would greatly benefit from an institution that would tackle conservation, development and security issues related to water management in an integrative way.

31. It also made note of the choice of the name 'Po Grande', which emphasized the intention to connect this new project to the two existing ones.

32. The Advisory Committee observed that the Promoter Group of the proposed biosphere reserve dedicated to the middle section of the Po River is composed of the authority of the River Po Basin District, the environmental association Legambiente, the University of Parma and 63 municipalities close to the Grande Fiume. This group was formalized by an Agreement Protocol. It also noted that the University of Parma played a key role in the process of developing the first draft of the application with the presentation of two Masters' theses as a contribution to the collection and processing of information, data and proposals.

33. The Advisory Committee recommended that this proposal **be approved**.

34. **Kobushi (Japan).** The proposed site is a vast mountainous area that encompasses the majority of the Kanto Mountains. It centres on the main Okuchichibu ridge and stretches from Mt. Kumotori to Mt. Kobushigatake and Mt. Kimpu. The site serves as a watershed for a number of major rivers whose sources are located in the nominated area, including Ara River, Tama River, Fuefuki River (Fuji River) and Chikuma River (Shinano River). The main Okuchichibu ridge is a high mountain range with more than 20 peaks and an elevation of at least 2,000 metres, but no active volcanoes.

35. The total area of the proposed biosphere reserve amounts to 190,603 ha. The core area covers 13,364 ha, the buffer zone covers 70,858 ha and the transition area covers 106,381 ha.

36. The diversity of plant life is enhanced by the abundant variety of geological formations and rock types. The fauna inhabiting this diverse environment are just as abundant, with 126 species of butterfly recorded, accounting for just under 40% of Japan's approximately 320 species, 24 of which are endangered, making the nominated area a treasure trove of rare species.

37. Mountains along the ridges, including Mount Kimpu and Mount Mitsumine, have long been the object of worship. Accordingly, local *Shugendo* practitioners and shrines have prohibited the felling of trees to avoid altering this ancient environment.

38. The buffer zone in Nagano Prefecture is located in the headwater region of the Chikuma River. In the Meiji period, Japanese larch (*Larix kaempferi*) grown in this region was not only sold domestically but expanded its sales in the overseas market from Korea and Manchuria to Europe. In the nominated transition area in Yamanashi Prefecture, grapes, persimmons, peaches and other fruit have been cultivated since the Edo period. Fruits produced in Yamanashi became highly prized delicacies, referred to collectively as the "eight rare fruits of Kosshu". The region thus established itself as a major fruit production area in the country. The nominated transition area in

Nagano Prefecture is used for farming, and is famous for the production of highland vegetables such as lettuce and Chinese cabbage.

39. The proposed site has established well-functioning forms of cooperation and partnership with universities.

40. The total population is 213,321 (core area 14, buffer zone 1,371, transition area 211,936). The depopulation of towns and villages, and the aging of the general population are issues now common to all mountainous regions in Japan. It is therefore necessary to prevent the exodus of young people and encourage population inflows. At the same time, cultivating leaders in local industries such as agriculture and forestry is a matter of urgency. Each local government is implementing measures in this regard, but it is hoped that initiatives centred on the biosphere reserve will help to revitalize the area and serve as effective solutions to these issues.

41. The Management Plan, in addition to outlining the area's characteristics, sets out the basic policies for the conservation of biodiversity, academic research and sustainable use, as well as the biosphere reserve's activity plan and organizational structures for promoting initiatives, to ensure the principles of the MAB Programme are achieved.

42. The Advisory Committee commended the Japanese authorities for their efforts to conserve ecosystems as a water source and to use forest products and other natural resources sustainably. Furthermore, it commended their well-prepared nomination and the quality of the nomination document. The Committee recommended that Kobushi **be approved** as a biosphere reserve.

43. **Gangwon Eco-Peace (Republic of Korea).** The proposed biosphere reserve is a largely mountainous area situated at the watershed of the Taebaek Mountain Range. It is composed of five counties – Cheorwon, Hwacheon, Yanggu, Inje and Goseong –in northern Gangwon Province, and borders the southern limit of the Demilitarized Zone (DMZ) to north and reaches the east coast of the Korean Peninsula to east. The DMZ is not included in the propose biosphere reserve.

44. The total area of the proposed site is 182,815 ha and comprises inland areas. The core area covers 50,671 ha, the buffer zone consists of 53,256 ha and the transition area covers 78,888 ha.

45. The core area of GWBR accommodates a wide range of rare and endangered flora and fauna. The buffer and transition areas inhabited by residents also serve as movement routes for rare and endangered animal species; they are thus consistent with a key value of the biosphere reserve programme – the co-existence of humanity and nature.

46. Among the five municipalities involved in the GWBR nomination bid, the municipal authorities, civic groups and nearby military units have signed Memoranda of Understanding to provide joint professional education on eliminating invasive species and monitoring local ecosystems on a continual basis.

47. As part of the development functions of the proposed biosphere reserve, there is an emphasis on utilizing the ecological, cultural and social resources of the proposed area to pursue projects. These include the development of a tourism model that integrates elements of eco-tourism and the exploration of relics of the Korean War in the area, the establishment of a GWBR eco-tourism belt and the development of specific GWBR brands.

48. The continued outreach efforts of residents, public servants and experts have somewhat alleviated the resentment toward regulations that had previously dominated local communities. These endeavours turned the residents' focus toward utilizing resources in the region to stimulate the local economy. Various tourism programmes are also being developed for the region.

49. The Advisory Committee encouraged the authorities to establish an optimal tourist policy and ensure its successful implementation in order to stimulate the tourism industry and minimize the negative impact on the GWBR. Furthermore, the Committee recommended continuing eco-tourism and education programmes for the residents and promoting efforts to ensure effective management and minimize the use of pesticides and chemical fertilizers in key habitats for endangered animals. The Advisory Committee also encouraged the authorities to designate the southern DMZ as a protected area at the national or provincial level, since the conservation of DMZ will positively influence the biodiversity and natural habitats of the proposed biosphere reserve.

50. The Committee recommended that this site **be approved** as a biosphere reserve.

51. **Yeoncheon Imjin River (Republic of Korea).** The proposed Yeoncheon Imjin River Biosphere Reserve is located in the Chugaryeong Tectonic Valley. It incorporates the entire county of Yeoncheon and centres on the Imjin River basin.

52. The total area of the proposed site covers 58,412 ha, and has a core area of 6,369 ha, a buffer zone of 20,810 ha and a transition area of 31,233 ha.

53. The core area of the proposed site consists of forests and cultural heritage protection zones, with the Imjin River as its centrepiece. An area 100 m wide on both sides of the river was designated a buffer zone. The transition area comprises the area outside the core area and buffer zone, including residential areas and farmlands. Yeoncheon has limited residential areas compared to the total surface area, due to various legal regulations.

54. The major ecosystem in Yeoncheon County is forestland, which covers 60% of the entire county. Yeoncheon County is categorized by a temperate climate and its major vegetation is temperate deciduous broad-leaved forest. Many animals travel to and inhabit the area around the river, including water spiders, red-crowned cranes, eagles, otters and wildcats, since the area is rich in rapids, swamps and wetlands.

55. The Imjin River represents a particularly remarkable example of conservation. Its topographical advantage, coupled with the restrictions on civilian activities resulting from the heavy presence of military facilities in adjacent localities, has left the river mostly untouched by humans. Once home to paleolithic giants like two-horned rhinos, mammoths and hyenas, it is now inhabited by Korean endemic fish species, such as *Acheilognathus gracilis* and *Tanakia signifier*, and mammals, including water deer, otters and leopard cats. It serves as an ecological corridor that prevents the ecological isolation of the DMZ and bridges inland areas with the ocean.

56. For a long time, Yeoncheon County was regarded as a region lagging behind in local development which had faltered due to various legal regulations pertaining to cultural property protection areas and capital region regulations.

57. The Advisory Committee noted that the Biosphere Reserve Community Academy, a programme that educates local residents and discovers and supports social economy organizations, will be implemented as a follow-up project to the DMZ Community Academy. The latter operated for three years after 2012 and encouraged inhabitants to realize that they could conserve natural resources and create income through wise usage.

58. The Advisory Committee commended the authorities of the Republic of Korea for their very well-prepared nomination dossier and noted that the three functions of the biosphere reserve were well-described. It also noted the involvement of all stakeholders in management and encouraged

efforts to continue strengthening coordination between these different parties. The Committee also encouraged the authorities to control human impacts caused by high tourist numbers.

59. The Advisory Committee noted that some of the sections of the rivers are currently protected only by the River Act or the Protection of Military Bases Installations Act. It encourages the authorities to further designate those areas as legal nature protected areas with the purpose of conservation of biodiversity or ecosystems such as wetland protection area, ecosystem and landscape conservation area or natural monuments.

60. The Committee recommended that Yeoncheon Imjin River **be approved** as a biosphere reserve.

61. **Lake Elton (Russian Federation).** The Advisory Committee welcomed the detailed nomination for this area in the Russian Federation which borders Kazakhstan.

62. The proposed area covers 270,340 ha and contains a lake in an otherwise semi-arid and arid area. Due to a history of salt mining and intensive agricultural exploitation, issues arose concerning water availability and water pollution. The number of permanent residents in the proposed biosphere reserve amounts to almost 5,900 people who live in 14 rural settlements and herder posts. The seasonal population is almost double this number. The lake is of importance both to nomadic populations and their livestock herds, which constitute the only remaining agricultural activities, as well as to numerous mammals and birds – including cranes – some of which belong to the Red List of Threatened Species. The spa offers important opportunities for tourism, and the exploitation of therapeutic mud and brine generates income.

63. The objectives of the nomination are to improve water management in a context of climate change, and to develop ways to render agriculture and livestock-keeping more sustainable. Tourism development is another important focus and aims at addressing the dual problems of lack of skilled labourers and unemployment.

64. The Advisory Committee noted that local residents are represented on the Biosphere Reserve Coordination Council, which plays an important role in mitigating conflicts over, for instance, grazing rights in this (semi-)arid area. One of the aims of the nomination is also to revitalize local natural resource management traditions and to create awareness of local intangible and tangible heritage.

65. The Advisory Committee recommended that the site **be approved**. The Advisory Committee urges the authorities to monitor the exploitation of the therapeutic mud, to develop further the research capacity of the site, and to submit the final management and cooperation plan, which is currently being developed, by 30 September 2019.

66. **Alto Turia (Spain).** The Advisory Committee welcomed this new proposal submitted by the Spanish authorities and congratulates them on the well-prepared file. The proposed biosphere reserve is located in the middle course of the Turia River, which passes through the Valencian counties of El Rincón de Ademuz and La Serranía in the central-eastern part of the country. The Turia valley, which runs from northwest to southeast, is the main defining axis of the biosphere reserve. The predominant material in the river valley is limestone and the channel only tends to widen where other materials are present. This alternation creates favourable conditions for reservoirs (such as the Benagéber reservoir) and therefore for hydraulic regulation.

67. The entire proposed biosphere reserve covers an area of 155,717.49 ha and has a core area of 16,169.06 ha (24.10%), a buffer zone of 40,377.91 ha (60.19%) and a transition area of



10,533.52 ha (15.70%). Of the total surface area of the reserve, over 60,000 ha forms part of the Natura 2000 Network.

68. The area is situated within the Mediterranean biogeographic region and is characterized by very diverse soils and vegetation, as well as hot and dry summers, which subject the vegetation to significant levels of water stress.

69. Predominant arboreal species in the area include Aleppo pine (*Pinus halepensis*), maritime pine (*Pinus pinaster*), some holm oaks (*Quercus rotundifolia*) and gall oak (*Quercus faginea*), as well as Spanish juniper (*Juniperus thurifera*). The shrub layer consists of kermes oaks (*Quercus coccifera*), cade (*Juniperus oxycedrus*), common juniper (*Juniperus communis*), phoenicean juniper (*Juniperus phoenicea*), common hawthorn (*Crataegus monogyna*) and strawberry tree (*Arbutus unedo*) among others.

70. The main fauna found in the area are steppe birds, the Granada hare (*Lepus granatensis*) and the European rabbit (*Oryctolagus cuniculus*). The white-throated dipper (*Cinclus cinclus*) and the common midwife toad (*Alytes obstetricans*) can also be found along water courses.

71. Endemic fauna in the proposed reserve include the Catalan barbel (*Barbus haasi*) and the Valencia chub (*Squalius valentinus*).

72. The permanent population of the reserve amounts to almost 4,300 inhabitants and about 6,500 temporary residents. They inhabit the transition zone, which encompasses eight main municipalities and several isolated population centres.

73. Although agriculture shapes the landscape and rhythm of the community, it is not the main source of work. Currently, the secondary sector employs a high percentage of the active population, mainly in civil construction and small-scale industries located in the transition area of the biosphere reserve. The intention is to develop local trade, taking into consideration local products of recognized quality that can provide an example of sustainable development in the territory.

74. The proposed biosphere reserve has already established a governance structure with a management committee, an action plan and a committed budget.

75. The Advisory Committee recognizes the support that this proposal has from different institutions, as well as citizens documented by dozens of support letters.

76. The Advisory Committee welcomed this nomination proposal and recommended that the site **be approved**.

77. **La Siberia (Spain).** The Advisory Committee welcomed this new proposal submitted by the Spanish authorities and congratulates them on the well-prepared file. The proposed biosphere reserve area is located in the northeast of the province of Badajoz in the central-western part of Spain. To the north and northeast it borders the region of Villuercas-Jara-Ibores, which has been designated a Geopark.

78. A number of major freshwater reservoirs are found on the courses of the rivers Guadiana and Zújar, which traverse La Siberia. These play an important role for the wide variety of habitats in the reserve which are home to a highly diverse flora and fauna and include extensive plains and forest formations. The entire reserve covers an area of 155,717.49 ha and has a core area of 16,658.59 ha (10.70%), a buffer zone of 78,549.70 ha (50.44%) and a transition area of

60,509.2 ha (38.86%). The area includes the Embalse de Orellana Ramsar site. Of the total surface area of the reserve, 43.27% forms part of the Natura 2000 Network.

79. The vegetation is characterized by the predominance of *Quercus* formations including: Holm oak (*Quercus ilex* subsp. *ballota*), Cork oak (*Quercus suber* L.) and Portuguese oak (*Quercus faginea* L.). A number of organic products highly prized in national and international markets are obtained from these species including cork, charcoal, firewood and honey. They also support organic livestock. The peat bogs are home to rare species such as *Drosera rotundifolia* and *Pinguicula lusitanica*. Shrub vegetation is also present in this area including Kermes oak (*Quercus coccifera*) and strawberry tree (*Arbutus unedo*).

80. Although there is no local endemic vegetation, Iberian endemics such as *Cytisus striatus*, *Thymus mastichina* and *Narcissus jonquilla*, among others, are present in the reserve.

81. Despite the great diversity and rich fauna, five species are in danger of extinction, 19 are vulnerable and 158 are on the List of Wild Species under a Special Protection Regime.

82. Endangered mammals include the Iberian lynx (*Lynx pardinus*) and horseshoe bats (*Rhinolophus ferrumequinum* and *Rhinolophus serotinum*). The reserve is also notable for the presence of merino black sheep, which are perfectly adapted to the territory and make use of resources in a sustainable manner.

83. A number of emblematic bird species are found in the area including the Iberian imperial eagle (*Aquila adalberti*), the golden kite (*Milvus milvus*), the black vulture (*Aegypius monachus*) and the black stork (*Ciconia nigra*). Noted reptile species include the ocellated lizard (*Lacerta lepida*), the Mediterranean pond turtle (*Mauremys leprosa*) and the Lataste's viper (*Vipera latasti*).

84. From the 1960s onwards, the area began to experience a demographic decline, which led to the loss of 57.12% of the human population. As of 2016, around 11,200 people inhabited the 11 localities that form the proposed biosphere reserve.

85. The proposed biosphere reserve, and the model of social and economic development that it entails, has a high potential to boost social and economic activity, and curb emigration among the young population.

86. The proposed biosphere reserve has already established a governance structure with a management board and an action plan.

87. The Advisory Committee recognizes the important support that this proposal has received from public institutions, productive and social groups, as well citizens documented by hundreds of support letters.

88. The Advisory Committee welcomed this nomination proposal and recommended that the site **be approved**.

89. **Valle del Cabriel (Spain).** The Advisory Committee welcomed this new proposal submitted by the Spanish authorities. The proposed biosphere reserve area is located in the Cabriel river basin in the autonomous communities of Castilla-La Mancha, Valencia and Aragón. The area is characterized by significant landscape diversity including mountainous areas, rock formations formed by the confinement of fluvial channels, agricultural zones of the alluvial plains, salt marshes and lagoons.

90. The entire reserve covers an area of 421,765.93 ha, with a core area of 61,251.58 ha (14.52%), a buffer zone of 90,488.99 ha (21.45%) and a transition area of 270,025.36 ha (64.02%). Of the total proposed area, 48.4% is covered by a protection regime designed to safeguard biodiversity (i.e. Protected Natural Area, Natura 2000 Network or Protected Habitat).

91. The area experiences climatic variability with rainfall varying from 400 mm to 1200 mm and average annual temperatures ranging between 7°C and 17°C. Lithological and pedological variability and altitudinal variance, which ranges from 340 metres above sea level to the south and more than 1,800 metres to the north, have led to a high diversity of ecosystems

92. The majority of the site enjoys a Mediterranean climate, although the northern mountainous area is located in a more temperate region.

93. Fluvial channels cross the proposed area and function as a network of connecting links not only for raw materials, but also for ideas and customs. They also act as an ecological corridor connecting the whole territory and enabling the distribution of vegetation and fauna.

94. The vegetation is characterized by Iberian gypsum vegetation (*Gypsophiletalia*), karstic calcareous grasslands or basophils of the *Alyso-Sedion albi*, Mediterranean pine forests of endemic black pines, endemic forests of *Juniperus* spp., pre-steppe areas of gramineous and annuals of *Thero-Brachypodietea*.

95. In relation to fauna, 249 species of vertebrates have been identified of which 154 correspond to groups of birds, 47 to mammals, 20 to reptiles, 19 to inland fish and 9 to amphibians.

96. The area is populated by 29,772 inhabitants (89 in the core area, 2,930 in the buffer zone and 28,753 in the transition area; however the number of inhabitants in all municipalities has reduced drastically since the 1950s. (Different population numbers have been supplied: 27,282 inhabitants; 27 in the core area, 515 in the buffer zone and 27,282 in the transition area).

97. The inhabitants of the Gabriel Valley have adapted to the conditions of the environment by employing unique, ancient sustainable practises based on agricultural activity, livestock and water use. These have enabled them to conserve their exceptional tangible and intangible cultural heritage.

98. This cultural heritage incorporates archaeological elements (more than 15 important sites) some of which have been designated World Heritage Sites (e.g. the Cave Paintings of Villar del Humo). It also encompasses 3 Historical-Artistic Complexes, 13 Cultural Heritage Sites, and a rich industrial and historical heritage.

99. The Advisory Committee requests that the population numbers be corrected as different numbers are provided.

100. The Advisory Committee recommends that the site **be approved**.

101. **Vindelälven-Juhtatdahka (Sweden).** The Advisory Committee welcomed the well-prepared nomination for this arctic area (the Arctic Circle crosses the northernmost part of the proposed site). It recognized that the area has a rich culture with many cultural and customs. It is characterized above all by two cultures – the Sami and the Swedish. Spirituality in different forms has influenced culture as well as tradition. There are also strong customs related to spending in nature which have strong links to the identity of many people in the area.

102. Of the total area, 34% (1.3 million ha) consists of protected natural environment and includes 3 Ramsar sites, 1 national park and 90 nature reserves. The core area of the proposed biosphere reserve constitutes only 1.6% of the total area. The buffer area notably includes large parts of the Vindelfjällen nature reserve, the largest in northern Europe covering 550,000 ha. Activities in the transition area include forestry, reindeer herding and mining.

103. The Sami Parliament is officially responsible for ensuring that Sami interests are defended in spatial planning, while Samernas Riksförbund (SSR), the National Federation of Swedish Sami people, works more directly to support 'samebys' on planning issues. At the regional level, county administrative boards monitor reindeer husbandry as a public interest. In order to deal with climate change, the Sami Parliament has drawn up an action plan for Sami livelihoods and culture. Knowledge transmission can be used to safeguard Sami knowledge and the Sami view of the environment. Special disaster protection allocations have been proposed for crisis preparedness, as well as a climate fund and increased cooperation and research on reindeer diseases.

104. The Advisory Committee noted that the proposed biosphere reserve would contribute to an understanding of and a pride in the unique activity that is modern reindeer herding. Such a development would have a major positive effect on the everyday lives of reindeer herders, but must be allowed to take its time. Sami culture has its own perception of time and progress when it comes to trust and friendship.

105. The northern part of the proposed biosphere reserve is a mountainous area and includes the majority of the buffer area. The central part of the site is the forest area, while the southern part is the coastal area and the only one with a large proportion of young inhabitants. The marine area is rather small (7,700 ha) compared to the terrestrial area. The Advisory Committee noted with satisfaction that an interim board for the proposed biosphere reserve already exists and includes representatives of 17 identified 'interest areas'.

106. The Advisory Committee recommended this site **be approved**.

107. **Voxnadalen (Sweden)**. The Advisory Committee welcomed this proposal by Sweden. The proposed site is located in central Sweden and encompasses the catchment of the River Voxnan. It involves two provinces: Hälsingland and Dalarna. Extensive boreal woodlands dominate the north-western and less populated parts, while open farmland is more common in the south-easterly more densely populated areas. The whole area is used for forestry, timber processing and farming. In addition, there are many companies and businesses involved in engineering and the development of modern technology. Parts of the area are also used for generating hydro energy.

108. Within the site, 274 nationally red-listed species and 16 internationally red-listed species have been observed. Several species including wolf (*Canis lupus*) and wolverine (*Gulo gulo*), as well as their habitats (e.g. aapa mires, bog woodland and siliceous grassland), have been prioritized. The site also hosts the Decorated Farmhouses of Hälsingland, which were designated a World Heritage Site in 2009.

109. Although no university is located directly on the site, intensive cooperation with the neighbouring universities of Gävle, Mid Sweden and Dalarna is underway.

110. The total area of the proposed biosphere reserve is 342,000 ha of which 22,000 ha consist of lakes and watercourses. There are 27 proposed core areas that coincide with existing protective structures (a national park, nature preserves, World Heritage Sites, etc.) established under Swedish environmental laws, covering approximately 2% of the total area. Another 32% of the area

has been designated as buffer zones. The transition area covers approximately 66% of the total area of the proposed site and hosts the population of about 13,300 inhabitants.

111. The Advisory Committee noted that the proposed area provides an opportunity to explore and demonstrate collaborative approaches to sustainable development on a regional scale. There are opportunities for model projects that test and demonstrate models for sustainable resource use in a range of contexts (e.g. new local forest products and continued development of a bio-based economy, log driving as a reinstatement of ecological values in watercourses and the maintenance of cultural heritage, new types of summer farming activities and local sustainable food production, etc.).

112. The Advisory Committee also noted that the overall coordination structure for the proposed site has been designed in an inclusive and participatory manner with the significant involvement of local communities, stakeholder groups and various work groups.

113. The Advisory Committee commended the Swedish authorities for the quality of the proposal and recommended that the site **be approved**.

114. The Advisory Committee also requests an update on plans related to the expansion of wind or hydro power plants.

115. **Isle of Wight (United Kingdom)**. The Advisory Committee welcomed the well-prepared nomination for the Isle of Wight. The Isle of Wight is situated south of the United Kingdom, and separated from the mainland by the Solent. The total proposed biosphere surface is 914.96 km<sup>2</sup> and the island itself covers 380 km<sup>2</sup>, with a coastline that runs for 92 km. It is England's largest island. The chalk spine crossing from east to west stretches out at the western tip in a series of three chalk stacks, known since medieval times as the Needles.

116. Almost 50% of the Island falls within the Isle of Wight Area of Outstanding Natural Beauty (AONB). The Isle of Wight is the second most populated island in northern Europe with 140,000 inhabitants.

117. The Island has a strong tradition of environmental action. Projects and initiatives promoting environmental education and awareness, increasing community engagement, helping people achieve healthier lifestyles and diets, developing eco-tourism activities, piloting local branding schemes, working with universities and institutions to foster environmental innovation and attract new investment, and testing new measures for climate change mitigation and adaptation.

118. The Advisory Committee noted that the overarching Partnership formed of Local Authority Members, non-governmental organizations, agencies, businesses and the third sector reflect the depth and range of sectors involved with all three objectives of biosphere reserves. Moreover, the Partnership highlights the strong focus of these sectors to deliver conservation and sustainable development.

119. The Advisory Committee noted that some parts of marine core areas are adjacent to terrestrial transition areas.

120. The Advisory Committee recommended that the site **be approved**.

**New nominations recommended for approval pending the submission of specific information**

121. **Julian Alps (Italy)**. The Advisory Committee welcomed this proposal from Italy. The Julian Alps is a region from the Southern Limestone Alps where northeastern Italy joins Slovenia. The

Slovenian Julian Alps biosphere reserve, which includes Triglav National Park, was designated in 2003. The proposition from Italy has a transboundary dimension.

122. Two existing protected areas, the Julian Prealps Regional Nature Park and the Triglav National Park, have already been recognized as cross-border protected areas.

123. The Advisory Committee noted that the core area consists of existing protected areas (the Natural Reserve zones in the Julian Prealps Regional Nature Park and the Alba Valley Nature Reserve). The buffer zones comprise forest, meadows and pastures, and are used for agro-forest purposes. The transition areas include a diversity of settlement contexts ranging from urban centres (Venzone, Gemona) to urbanized foothill conurbations and inhabited basins. The proposed site delimitation connects with the existing Slovenian biosphere reserve. The Advisory Committee regretted that the maps provided in the document do not include the zonation of the Slovenian side.

124. The Advisory Committee requested additional information on how the core areas from the Italian side are connected to the Slovenian ones and an explanation regarding the rationale for including the inhabited basins in the transition area. It also requested the authorities to address the technical questions raised by the Secretariat about the ongoing transboundary cooperation with Slovenia and the name of the proposed biosphere reserve.

125. The Advisory Committee requested the authorities to submit this additional information by 15 May 2019. The Advisory Committee considered that the site **be approved pending** receipt and approval of this additional information.

126. **Lubombo (the Kingdom of Eswatini).** The Advisory Committee welcomed the nomination of the first biosphere reserve for the Kingdom of Eswatini. The site is located in the Lubombo Mountain Range, which straddles Mozambique and South Africa, and forms part of the Maputoland-Phondoland-Albany Biodiversity Hotspot.

127. The proposed biosphere reserve covers a total area of 291,702 ha, with a core area of 53,021 ha consisting of the Mlawula Nature Reserve, Hlane Royal National Park, Jilobi Forest, Shewula, Mambane Community Conservation areas and the Muti Muti Nature Reserve. The buffer zone covers an area of 53,510 ha and incorporates community conservation areas including Lunkhuntu, the Mbuluzi Game Reserve, Mhlumeni, Manzimnyama, Maphungwane, Tikhuba and Lukhetseni. The transition area covers 187,489 ha and is used mainly for economic enterprises, research, monitoring and demonstration projects. The main land uses in the area aside from conservation are crop agriculture, animal husbandry, forestry, extraction and collection, nature protection, settlement and industry. The Advisory Committee noted the creation of a management structure to develop and implement the proposed management plan for the area.

128. The main ecosystems are forest, wetland and savanna. Floral species include the Lubombo Ironwoods (*Androstachys jonsonii*), Lubombo Cycads (*Encephalartos lebomboensis*), the recently discovered Barleria species (*Barleria lubombensis*) and the Jilobi forest. Faunal species include 88 species of mammals of which 20 are found only in the Lubombo region. Notable among these mammals are the White Rhinoceros (*Ceratotherium simum*), Cape Buffalo (*Syncerus caffer*), Roan Antelope (*Hippotragus equines*), Tsessebe (*Damaliscus lunatus*) and the Suni (*Nesotragus moschatus zuluensis*) (Thomas 1898), as well as threatened species such as the Leopard (*Panthera pardus*).

129. The Advisory Committee noted threats to the savanna vegetation including fire, soil erosion and invasive alien species, and encouraged the authorities to continue monitoring land degradation and to integrate these issues into the management plan.

130. The Advisory Committee recommended that the site **be approved pending** the submission of the following information and original endorsements by 15 May 2019:

- a list of all relevant land use plans and applicable management/cooperation plans; (including any listed in the bibliography) and copies of these documents;
- a list of all legal instruments relating to the establishment, use and management of the area and copies of legal instruments;
- a new zonation map clearly indicating the three characteristic biosphere reserve zones without the other local types of protected areas;
- shape files covering the proposed biosphere reserve area.

131. **Nordhordland (Norway).** The Advisory Committee welcomed this first nomination from Norway, which is located in the west of the country. It noted that the nomination form has been prepared in close cooperation with Bergen University, which hosts a UNESCO chair, as well as with local government representatives and businesses.

132. The proposed biosphere reserve covers 669,800 ha, and includes both marine and terrestrial core areas and buffer zones. The landscape is a mosaic of coastal areas, fjords and mountains. The biosphere reserve contains nationally protected salmon fjords, while the coastal areas are home to herring populations, which are the subject of intensive study, as well as important bird species.

133. The permanent population of the biosphere reserve amounts to nearly 54,400 people, about 4,600 of which are immigrants from Europe, Africa and Asia. Livestock keeping – mainly sheep – and crop farming are still important activities in the area, but many farmers combine farming with work in the industrial and energy sectors, which are also well developed and provide significant employment. Fish farming is an equally important economic activity.

134. The objectives of the nomination include the conservation of several cultural landscapes – especially in the mountains – by promoting tourism and local products. Furthermore, the authorities aim to develop ways to render industries in the area more sustainable. Energy transition processes are underway, with oil exploitation becoming less important, and other (renewable) sources of energy generation being developed. The biosphere reserve is also an important site for experiments with innovative CO<sub>2</sub> capture and storage methods.

135. The Advisory Committee commended the Norwegian authorities for the high quality of the nomination. The Advisory Committee noted that some of the marine/lacustrine core areas are not entirely protected by buffer zones and converge in part with transition areas. It is possible that the geography of the area – which is mountainous – ensures de facto buffering, but the Advisory Committee would like to receive more information on this matter. The Advisory Committee recommended therefore that the nomination **be approved pending** more information on the zonation, notably the absence of buffer zones surrounding parts of the marine/lacustrine core areas, to be submitted by 15 May 2019. The Advisory Committee also requested more information on the impacts of offshore oil exploitation on the site. The Advisory Committee furthermore encouraged the authorities to take cultural diversity in the area into account in the community participation processes.

136. **Roztocze (Poland).** The Advisory Committee welcomed this proposal from the Polish authorities. The proposed site is located in southeast Poland in the Roztocze region, next to the Polish-Ukrainian border, and adjacent to Roztochya Biosphere Reserve in Ukraine, designated in 2011. The site will form a counterpart to the Ukrainian site, thereby forming a Polish-Ukrainian transboundary biosphere reserve. This step is in accordance with political agreement between the representatives of the two countries.

137. This area is valuable for its natural values, culture and landscapes. The region is also an important ecological corridor. The site encompasses loess areas, a range of limestone hills covered with forests and ribbon fields, deep river valleys and deposits of mineral waters and fossil wood. The area is acknowledged by all forms of conservation status known to Polish legislation, including Roztocze National Park.

138. The total area of the proposed site exceeds 297,000 ha. The core area covers 9,146 ha, the buffer zones cover 80,392 ha and the transition area covers the remaining 207,473 ha. The core area consists mostly of natural forest. The population of the site is estimated to be about 160,000.

139. This area is becoming a tourist destination visited by approximately 600,000 tourists a year. Roztocze is a region with potential for dynamic development because of its scenic locations and great natural and cultural heritage. Within this area, the main economy sectors are forestry, tourism and agriculture.

140. The Advisory Committee welcomed the proposed site management structure which includes a Steering Committee consisting of stakeholders representing various interest groups. The Advisory Committee encourages the authorities to work further with stakeholders to encourage their interest in creating a joint coordinating institution, rather than participating in ad hoc activities based on stakeholders' planned initiatives.

141. After examination of the proposal, the Advisory Committee recommended that the designation of the site **be approved pending** further clarification of the zonation, including an explanation of the lack of buffering around some sections of the core area in the central part of the site, to be submitted by 15 May 2019. The Advisory Committee also requested additional information on the impact of tourism and agricultural activities taking place in the buffer zones and their influence on the adjacent core areas.

**Extension, re-zoning or renaming of existing biosphere reserves recommended for approval**

142. **Archipiélago Juan Fernández Biosphere Reserve (former Parque Nacional Archipiélago de Juan Fernandez) (Chile), extension and renaming.** The Advisory Committee welcomed this request for the extension and renaming of the existing Parque Nacional Archipiélago de Juan Fernandez Biosphere Reserve submitted by the Chilean authorities.

143. The biosphere reserve is administratively part of the Valparaíso Region and is located 670 km from the coast of mainland Chile. The total surface area of the biosphere reserve covers 9,967 ha and is limited to a core area. The proposed extension would result in a total surface area of 1,219,558 ha (terrestrial 10,376 ha; marine 1,209,182 ha) incorporating a core area of 117,028 ha, a buffer zone of 59,879 ha and a transition area of 1,042,650 ha.



144. The authorities have also requested to change the current name of the reserve to 'Archipiélago Juan Fernández Biosphere Reserve', as the new extension and zonation incorporates the missing biosphere reserve's functions of development and logistical support.

145. The area functions as the habitat for one-third of Chile's endemic birds. It also boasts a high level of endemism in marine resources, at close to 25%.

146. The commune of Juan Fernández has an estimated population of 926 inhabitants (2018), all of whom live either in San Juan Bautista Village on Robinson Crusoe Island or Las Casas on Alejandro Selkirk Island.

147. The local authorities have established a management committee as well as a management plan, as requested by the MAB ICC in 2018. An action plan for the period 2019-2021 elaborates the challenges to endemic species the reserve will face, and also explains how tourism should be managed sustainably with respect to local biodiversity.

148. The Advisory Committee recommends that the requested renaming and extension of the biosphere reserve **be approved**.

149. **Laguna San Rafael y El Guayaneco Biosphere Reserve (former Laguna San Rafael) (Chile), extension and renaming.** The Advisory Committee welcomed this request for the extension and renaming of Laguna San Rafael Biosphere Reserve submitted by the Chilean authorities. Located in the Valdivian Forest/Chilean Nothofagus biogeographical region, Laguna San Rafael is an area of highly varied topography and great scenic beauty. The new proposed name for the biosphere reserve is 'Laguna San Rafael y El Guayaneco'. The extension includes the Continental Patagonian Range with rivers and lakes, the Insular Patagonian Range, the Central Plain and the Patagonian Glaciers. Since the existing reserve lacked a buffer zone and a transition area, the total area will increase from 1,742,000 ha to 5,130,462 ha. Currently, 7,000 people live in the biosphere reserve. Guidelines for the elaboration of a management plan were received as requested by the MAB ICC in 2018.

150. The Advisory Committee recommends that the requested extension and renaming **be approved**.

151. **Malindi Watamu Arabuko Sokoke Biosphere Reserve (Kenya), extension and renaming of former Malindi Watamu Biosphere Reserve.** The site falls under the 'Process of Excellence and Enhancement of the WNBR'.

152. The Advisory Committee welcomed the submission of this application, which is a follow-up to a recommendation from the Periodic Review submitted in 2015, and commended the authorities for the well-prepared dossier.

153. The proposed total area of the biosphere reserve covers 487,278 ha, with an increase in the core area from 1,733.9 ha to 41,895 ha, which now comprises two marine parks and the Arabuko Sokoke Forest. The buffer zone also increases from 20,253.7 ha to 77,951 ha and comprises a marine reserve, a mangrove forest, land under forest management agreements and an exotic forest plantation. The transition area decreases in size, however, from 685,042 ha to 367,432 ha and consists of lands and communities associated with coastal and mangrove habitats. The proposed extension of the biosphere reserve improves the connectivity between various ecosystems, thereby reinforcing the services rendered by them.

154. The diverse ecosystems, which range from coral reefs to mangrove forest and coastal dry forest, function as a cetacean migration area and are home to six taxa of endemic butterflies, 354

fish species from 56 families and 113 species of coral in 45 genera, four species of marine turtles, 9 species of mangroves and 71 species of aquatic birds. The Mida Creek is internationally recognized as an Important Bird Area.

155. With a population of nearly 517,000, the main economic activities are fishing, dairy and cattle production, butterfly farming and tourism. Indigenous communities include the nine tribes of Miji Kenda and the Kayas whose cultural practices are preserved.

156. The Advisory Committee commended the multi-stakeholder governance structure, which supports Community Forest Associations and the Watamu Marine Association in the management and tourism development of Arabuko Sokoke forest and the Malindi Watamu Marine Reserve, thereby serving as a model for emulation in other parts of Kenya. The Advisory Committee appreciated the collaboration established with research institutions, civil society and other international partners, such as Mount Kenya University, the Kenya Forestry Research Institute, Birdlife International and Arocha Kenya, and the provision of an education and learning resource for about 180 primary and secondary schools.

157. The Advisory Committee recommended that the extension and renaming of the site **be approved**. The Advisory Committee further encouraged the authorities to finalize and implement the overall biosphere reserve management strategy.

158. **Jeju Island Biosphere Reserve (Republic of Korea), extension.** Since 2002, when Jeju Island was designated as a biosphere reserve site and MAB-ICC recommended that the biosphere reserve encompass all of Jeju Island including its marine areas, a variety of activities have been undertaken for the conservation and sustainable use of the biosphere reserve.

159. Jeju Island Biosphere Reserve will increase from 83,094 ha to 387,194 ha after extension; it will consist of a terrestrial area (184,615 ha) and a marine area (202,579 ha). With regard to zonation, the core area covers 39,951 ha, the buffer zone covers 72,286 ha and the transition areas cover 274,957 ha.

160. Jeju Island is one of the few sites in the world to have a triple designation as a UNESCO biosphere reserve (2002), a World Heritage site (2007, expanded in 2018) and a UNESCO Global Geopark (2010).

161. The core areas include Mt. Hallasan National Park and the surrounding national forests, the ecosystem conservation area including Gotjawals, four dependent islets and two streams designated as nature reserves, and marine protection areas. The buffer zone is used for environmental education with a focus on natural resources, recreation, eco-tourism and environmentally friendly primary industries such as ranching, the cultivation of medicinal herbs and mushrooms, and fisheries.

162. Only a few residents live in the present transition areas, and community-based development could not be actively promoted. The proposed transition areas are being expanded to further encourage sustainable development activities and to promote sustainable development approaches in the relevant policies of the Jeju Provincial Government. The marine areas extend out to 5 km from Jeju Island itself and include village fishing grounds.

163. The biodiversity on Jeju Island is valuable enough to be protected. The expansion of the Jeju Island Biosphere Reserve will contribute to integrated and effective conservation of this biodiversity and the development of a model for integrated management and the coordination of national protected areas.

164. Tourism, agriculture, fishing and livestock-raising are the main industries on Jeju Island, while key resources include local ecosystems, landscapes and agricultural products.

165. The Advisory Committee commended the national authorities of the Republic of Korea and the Jeju Provincial Government for their efforts to extend Jeju Island Biosphere Reserve in ways to meet global trends, notably the Strategic Plan for Biological Diversity including the Aichi Biodiversity Targets adopted by the 2010 Conference of Parties of the Convention on Biological Diversity (CBD). The Committee further commended the authorities for a well-written dossier and good descriptions of the fulfilment of biosphere reserve functions if extended. The Committee recommended that the extension of the Jeju Island Biosphere reserve **be approved**.

166. **Los Valles de Omaña y Luna Biosphere Reserve (Spain), extension.** The Advisory Committee welcomed this request for the extension of Los Valles de Omaña y Luna Biosphere Reserve, designated in 2006 (last periodic review undertaken in 2016). The proposed extension would increase the core area from 15,754 ha to 17,653 ha. The buffer and transition zones would experience the greatest modifications: the buffer zone would decrease from 60,041 ha to 43,015 ha, and the transition area would increase from 5,363 ha to 20,492 ha.

167. The total population amounts to 2,440 inhabitants located in the transition zone. The main economic activities are agriculture, mining (stone and sand quarry) and forest products.

168. The biosphere reserve has a management committee and management plan, as well as an annual budget of €30,000.

169. The Advisory Committee recommends that this extension **be approved**.

170. **Menorca Biosphere Reserve (Spain), extension.** The Advisory Committee welcomed this request for the extension of the Menorca Biosphere Reserve, designated in 1993. The biosphere reserve submitted a periodic review in 2017 which met the criteria according to the MAB ICC. The proposed extension of Menorca will contribute to the conservation of the marine ecosystems and species, which are currently only partially represented in the biosphere reserve in the marine area of S'Albufera des Grau Natural Park. The addition of this marine area will lead to a significant increase in the territory of the biosphere from 71,219 ha to 514,485 ha. Menorca has a permanent population of 92,000 inhabitants. Detailed maps and information have been provided on the proposed marine areas.

171. The Advisory Committee recommends that this extension **be approved**.

**Extension, re-zoning or renaming of existing biosphere reserves recommended for approval pending the submission of specific information**

172. **Galapagos Biosphere Reserve (former Archipiélago de Colón) (Ecuador), extension and renaming.** The Advisory Committee welcomed this request for the extension and renaming of the Archipiélago de Colón (Galapagos) Biosphere Reserve submitted by the Ecuadorean authorities.

173. The authorities have requested to change the current name of the reserve to the Galapagos Biosphere Reserve.

174. The proposed extension would include the Galápagos Marine Reserve, created in 1998. The total surface would increase to 14,659,887 ha, of which 7,000,000 ha corresponds to inland waters and 1,753 km of coastline, making the reserve one of the largest marine protected areas in

the world. The proposed marine area includes different areas: transition, sustainable use, conservation and strictly protected zones.

175. The area has a management committee and a management plan for the Archipelago (National Park) but not for the biosphere reserve.

176. In 2016, the biosphere reserve submitted a periodic review that met the criteria; however, the council requested the submission of a clearer zonation map. This map has not yet been supplied.

177. In addition, the proposed buffer zone covers less than 1% of the total area. The vast marine core area in the northwestern and eastern part of the biosphere lacks both a buffer zone and a transition area.

178. The Advisory Committee recommends that the requested extension and renaming **be approved pending** the submission of a clear zonation map with MAB terminology, as well as an explanation as to why the marine core area in the northwestern and eastern part of the biosphere is not surrounded by a buffer or transition area. The Advisory Committee also requests the authorities to submit a management plan or policy for the biosphere reserve, not just for the national park, by 15 May 2019.

179. **Tuchola Forest Biosphere Reserve (Poland), extension.** The Advisory Committee welcomed the request from the Polish authorities for an extension of Tuchola Forest Biosphere Reserve, designated in 2010. The extension has been requested due to support from the community councils of adjacent areas seeking to being included within the biosphere reserve. A further reason is the introduction of a new Natura 2000 conservation scheme in the region that could benefit the biosphere reserve.

180. The proposed extension represents an increase in the territory of the Tuchola Forest Biosphere Reserve from 3,201 km<sup>2</sup> to approximately 4,105 km<sup>2</sup>. The 26 core areas which currently cover 78.81 km<sup>2</sup> would expand to 38 nature reserves and include the Tuchola Forest National Park, reaching a total area of 88.48 km<sup>2</sup>. The buffer zones would increase from 1,046 km<sup>2</sup> to 1,137 km<sup>2</sup>, and the transition area would increase from 2,069.88 km<sup>2</sup> to 2,878.77 km<sup>2</sup>. The population size will also increase from 102,660 to 127,800 inhabitants. The biosphere reserve management structure is expected to remain the same with the minor addition of new stakeholders.

181. Following examination of the extension proposal, the Advisory Committee recommended that the extension of the site **be approved pending** further clarification of the zonation including an explanation of the lack of formal buffering around some of core areas in the northern and eastern parts of the site, to be submitted by the authorities by 15 May 2019.

182. **Cuencas Altas de los Ríos Manzanares, Lozoya y Guadarrama Biosphere Reserve (former Cuenca Alta del Río Manzanares) (Spain), extension and renaming.** The Advisory Committee welcomed this request for the extension and renaming of the Cuenca Alta del Río Manzanares Biosphere Reserve, designated in 1992 (last periodic review undertaken in 2006).

183. The proposed extension will increase the total surface area of the reserve from 46,778 ha to 105,654 ha (core area 26,371 ha, buffer zone 54,008 ha and transition zone 25,275 ha). The extension has been proposed mainly on the basis that the biosphere reserve previously lacked a transition area. The proposal has received significant support from local governments.

184. The total population of municipalities inside the biosphere reserve amounts to 99,200 inhabitants. The population of municipalities partially included in the biosphere reserve is 3,626,774

inhabitants. The core area is unpopulated and most of the human settlements are located in the transition zone.

185. The biosphere reserve has a management committee but does not have a management plan.

186. The Spanish authorities have requested to rename the biosphere reserve to 'Cuencas Altas de los Ríos Manzanares, Lozoya y Guadarrama Biosphere Reserve' in order to include the names of all the main core areas.

187. The Advisory Committee recommends that the site **be approved pending** the submission of a management plan by 15 May 2019.

### **New nominations recommended for deferral**

188. **El Pedregal del Sur, Ciudad de México (Mexico).** The Advisory Committee welcomed this new proposal submitted by the Mexican authorities. The proposed biosphere reserve is located southeast of Mexico City in the Las Cruces mountain range situated in the eastern part of the Trans Mexican Volcanic Belt, which constitutes a morphological boundary between the Mexico and Toluca basins. It is made up of eight overlapping stratovolcanoes, which have had alternating periods of effusive and explosive activity from the Pliocene to the Pleistocene era and have been affected by several fault systems. The reserve covers an area of 16,839.77 ha and has a core area of 4,881.26 ha (28.99%), a buffer zone of 6,293.24 ha (37.37%) and a transition area of 5,665.27 ha (33.64%).

189. The eruption of the volcano Xitle caused changes in the ecosystem resulting in the development of micro-environments, which include the following main vegetal communities: *Pinus* forest (pine), *Abies religiosa* (sacred fir), *Alnus* (oak), *Quercus* scrub (oak) and xerophytic scrub high mountain grasslands. These differences in vegetation are associated with climatic variation along the altitudinal gradient of the spill (2,240 to 3,100 metres above sea level). The lower areas located to the north are dry and hot, while the higher areas to the south are more humid and cold.

190. The Mexico Basin is home to 2,300 reported species of phanerogams (angiosperms and gymnosperms) and 913 species of plants in the southern region, of which 128 species are of ecological significance. In addition, 53 species of endemic vertebrates have been reported, including the highest number of recorded reptiles species, followed by amphibians, birds and mammals. Among the latter, the volcano rabbit (*Romerolagus diazi*), the Sierra Madre sparrow (*Xenospiza baileyi*) and the Cross-banded mountain rattlesnake (*Crotalus transversus*) are considered in danger of extinction. Due to similar threats, a number of endemic salamander species such as *Pseudoeurycea altamontana*, *Sceloporus anahuacus*, *Sceloporus anahuacus* and *Sceloporus torquatus* are under special protection.

191. The area includes the Archaeological Zone of Cuicuilco, a region settled by the Tapaneca indigenous group before the eruption of the volcano Xitle.

192. The proposed biosphere reserve has a population of approximately 410,304 (653,609 another number is given) inhabitants of which 159,458 live in the buffer zone and 250,846 inhabit the transition area.

193. The main economic activities are livestock (sheep, cattle, pigs and poultry), agriculture (corn, maguey, oats, barley, wheat and potatoes), lumber and handicrafts.

194. The Advisory Committee welcomed this nomination proposal and recommended that the site **be deferred**. The Advisory Committee encourages the authorities to resubmit a nomination form due to the importance it places on the creation of urban biosphere reserves. The Advisory Committee also encourages the authorities to contact existing urban biosphere reserves within the WNBR. It therefore requests the authorities to submit further details on the following points in the resubmitted nomination:

- Explain the protection status of the core areas;
- Provide more information on the population living in the core areas, and accurate population numbers for each zone;
- Provide evidence of the involvement of local communities and stakeholders in the nomination process;
- Provide prove of support by stakeholders for the nomination;
- Outline a management plan.

195. **Lower Zambezi Escarpment (Zambia)**. The Advisory Committee welcomed the submission of the nomination for the first biosphere reserve in Zambia. The Committee commended the authorities for the well-prepared dossier and for the involvement of traditional and political leaders in the nomination process. The area of the proposed biosphere reserve encompasses the Lower Zambesi Aquatic ecosystem – a water source for eight countries – the Lower Zambesi National Park and the Luangwa/Zambezi River confluence.

196. The proposed reserve has a total area of 2,485,523.71 ha, with a core area that covers 395,586.70 ha and includes the Lower Zambesi National Park and the confluence of the Chongwe-Chindulwe Rivers; the buffer zones cover 1,256,397.85 ha and comprise the Rufunsa Game Management Area and Chiawa Game Management Area; and the transition area covers 833,539.16 ha and comprises Sable Game Ranch, settlements, traditional lands, local forests and the Lusaka National Park. With a total population of nearly 1.8 million encompassing 17 ethnic groups, the main economic activities are subsistence farming of cereals, vegetables and spices, fishing, apiculture and aquaculture.

197. The area hosts several sites of historical and cultural significance including the Royal Linga Fort, which was built by ancient people, and the Mulambe wa Mankalata heritage site where the Baobab tree was used formerly as a post office. The soil and rock formations resulting from volcanic action provide mineral wealth including gold, granite and gemstones such as aquamarine. Floral species include *Acacia albida* and *Combretum* sp., while resident fauna include the elephant (*Loxodonta africana*), wild dog (*Lycaon pictus*), leopard (*Panther pardus*), cheetah (*Acinonyx jubatus*) and Blue monkey (*Samango* sp.).

198. The Advisory Committee noted with deep concern the location of a proposed copper mining site in the core area and remarked on its proximity to the Mana Pools World Heritage Site in Zimbabwe. The Advisory Committee observed – with reference to the IUCN World Heritage Impact Assessment Principles and the recommendations of the Joint World Heritage committee/IUCN mission to Zambia (2011) on the potential negative impacts of mining on the Mana Pools Biosphere Reserve and World Heritage Site – that the proposed mine site is incompatible with Article 4 Sections 5(a) and (b) concerning the requirements of the core area and buffer zones.

199. The Advisory Committee recommended that the area be re-zoned to locate the proposed mine site within the transition area and requested that the following be submitted for re-consideration:

- an updated zonation map;
- appropriate/related management plans including copies incorporating the new zonation;
- any related legislative instruments relating to the new proposed zonation;
- an update on activities in the proposed mine site since 2014.

200. The Advisory Committee recommended that the proposal **be deferred**.

**Extension, re-zoning or renaming of existing biosphere reserves recommended for deferral**

201. **Yasuni Biosphere Reserve (Ecuador), extension.** The Advisory Committee welcomed this request for the extension of the Yasuni Biosphere Reserve submitted by the Ecuadorean authorities. The Yasuni Biosphere Reserve is situated in the Amazonian region in the northeastern part of the country. Indigenous communities such as the Huaorani, Aucas and Quichuas live inside the biosphere reserve.

202. The proposed extension would increase the size of the reserve from 1,676,105.1 ha to 2,609,963 ha, and would incorporate the Napo, Sucumbíos, Orellana and Pastaza Provinces.

203. The limits and the proposed zoning are based on an exercise developed in 2009 within the framework of the Programme for the Conservation and Sustainable Management of the Natural and Cultural Heritage of the Yasuni Biosphere Reserve, implemented by UNESCO.

204. The authorities informed the Committee that certain sectors of the Yasuni National Park are not part of the core area of the biosphere reserve, due to the presence of oil extraction activities in Yasuní.

205. The Advisory Committee recommends to **defer** the proposal for extension and change in zonation. The presence of oil extraction in the buffer zone is not in line with the functions of a buffer zone, as mentioned in the Statutory Framework of the World Network of Biosphere Reserves.

206. The Advisory Committee expresses its concerns about the impacts of oil drilling on the ecosystems and local communities, as well as the severe reduction in the size of the core area. Within the framework of the Process of Excellence, the Advisory Committee encourages the national authorities to revise and resubmit the proposal before 15 May 2019, including the following information:

- A proposal for a new zonation including the possibility to merge both zonation proposals sent in 2017 and 2018, in order to incorporate the transition areas with the oil-drilling zone (zonation proposal sent in 2017) in the buffer zone (zonation proposed in 2018), which is presented as a second option by the national authorities (Figure 4 of the provided document)
- An explanation as to how the conservation functions will be fulfilled within the new zonation
- An executive summary of the environmental and social impact assessment of the oil drilling, including numbers of jobs, infrastructure and environmental impact
- A management plan related to oil exploitation including environmental and social impact
- An explanation as to how the authorities intend to involve the oil companies in the management of the biosphere reserve.

207. Within the framework of the process of excellence and enhancement, the MAB Secretariat offers the national authorities its technical assistance to aid with the production of the requested documents.

208. **Land of the Leopard, extension and renaming of former Kedrovaya Pad Biosphere Reserve (Russian Federation).** The Advisory Committee welcomed the zonation map provided following the submission in 2018 of a request to rename this site to the Land of the Leopard Biosphere Reserve.

209. The Advisory Committee, however, did not have sufficient information to decide whether the site meets the criteria of the World Network of Biosphere Reserves, and advised that the nomination **be deferred**.

210. The Advisory Committee encouraged the authorities to seek cooperation with the authorities in charge of the marine/terrestrial area in the south of this core area, so as to ensure that this core area will not face threats, and to consider the possibility of establishing a buffer zone. The Committee also noted that a zonation map having been provided is not still clear. Therefore, it asked to provide a zonation map that is clear to analyse. It also requested comprehensive information on the issues above when the proposal is resubmitted.