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International Coordinating Council of the Man and the Biosphere (MAB) Programme
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ITEM 10 OF THE PROVISIONAL AGENDA: PROPOSALS FOR NEW BIOSPHERE RESERVES AND EXTENSIONS/MODIFICATIONS TO BIOSPHERE RESERVES THAT ARE PART OF THE WORLD NETWORK OF BIOSPHERE RESERVES (WNBR)

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 22nd meeting of the International Advisory Committee for Biosphere Reserves (IACBR), which met at UNESCO Headquarters from 18 to 21 January 2015.

1. 2. The members of the Advisory Committee examined 20 proposals for new biosphere reserves (including 1 transboundary site and 3 re-submissions of proposals for new biosphere reserve) and 11 requests for expansion/modification and/or renaming of already existing biosphere reserve 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 information is received by the MAB Secretariat by 29 February 2016, it will be considered by the MAB ICC at its 28th session to be held from 18 to 19 March 2016 and the Council may approve the inclusion of the site in the WNBR. If submitted by 30 September 2016, it will be assessed by the MAB ICC at its 29th session in 2017.

3) ***Proposals for new biosphere reserves or extensions/modifications/renaming to already existing biosphere reserves recommended for deferral***: the proposed site is recommended for deferral or the proposed changes for already existing biosphere reserves is 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 the application of the Statutory Framework to the proposed area is 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 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 and nominations recommended to be deferred. The Bureau will recommend for the consideration of the MAB ICC final decisions on all sites included in this document.

4. 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.

Recommendations of the International Advisory committee for biosphere reserves

New nominations recommended for approval

2. **Lake Bosomtwe (Ghana)** The Advisory Committee welcomed the well prepared nomination for the only natural lake in Ghana. Situated in the Ashanti region of Ghana, the lake is one of six meteoritic lakes in the world with a radial drainage system of 106 km^2, a maximum depth of 78 m and a diameter of about 11 km and constitutes a unique natural and cultural heritage. The proposed biosphere reserve has a core area of 1,159 ha, a buffer zone of 10,740 ha and a transition zone covering 16,798 ha.

3. The southernmost section overlaps with the northern section of the Bosomtwe Range Forest Reserve creating a combination of forest, wetland and mountain ecosystems. The floral diversity includes 35 tree species including timber species such as *Khaya ivorensis* and *Triplochiton scleroxylon.* The faunal diversity includes over 27 species of insects, 5 species of amphibians, 2 species of reptiles, 29 species of birds including 2 of conservation interest and 29 species of mammals including the bush buck, Lowe's mona monkey, the civet and the brush-tailed porcupine, which is totemic to the Ashanti kingdom. The most distinct species are the two Cichlid fish: *Hemichromis frempongii* and *Tilapia busumana,* which are endemic only to the lake.

4. With a population of over 50,000, the main economic activities are farming, fishing and tourism as the lake is a major national tourist destination. The fishery is characterized by the use of non-motorized wooden planks as canoes linked to the cultural history of the area, which also houses the sacred Abrewa stream. The area is widely used for research especially on climate change as well as environmental education for basic schools and universities. Community capacity building on complimentary livelihoods in bee keeping, snail and grasscutter rearing have also been undertaken.

5. The Advisory Committee commended the introduction of the Community Resource Management Area (CREMA) system supported by law, which devolves responsibility for management to local communities and the participatory approach used for the nomination.

6. The Advisory Committee recommended that the site be **approved** and encouraged the authorities to fully implement the management plan for the CREMA to strengthen sustainable development.

7. **La Hotte (Haiti)** The Advisory Committee welcomed this new proposal submitted by the Haitian authorities for La Hotte, located in the south-east peninsula area. The proposed biosphere reserve covers a total area of 435,193.54 ha comprising 265,279.20 ha of terrestrial area and 169,914.34 ha of marine area (core area: 117,119.06 ha; buffer zone: 185,027.41 ha; transition area: 133,047.07 ha). The buffer zone is larger than the transition area, showing that this is a modern biosphere reserve where sustainable development plays an important role. The region is considered a biodiversity hotspot. It is a very diverse area because of its different climate ranges: from humid to subtropical dry forest.

8. The core area consists of 13 protected areas for the conservation of the ecosystem, the landscape, biodiversity and cultural values, as well as research and education purposes. The proposed biosphere reserve covers six peaks ranging in altitude from 1,992 m (Pic Grand Colline) to 2,347 m (Pic Macaya), as well as a coastal and marine ecosystem in the north (Iles Cayemites) and south (Ile-à-Vache) of the region. The population of the reserve amounts to 854,835 inhabitants, whose main economic activities are farming, agriculture, agroforestry, fisheries, commerce, handcrafts and tourism. This second biosphere reserve would conserve the cultural and natural richness of the region, promote scientific research and synergies, and improve coordination activities in line with the principles of conservation and sustainable development.

9. The Advisory Committee takes note of the large number of actors involved in the development of this proposal, the political engagement and the high level of coordination with different projects being implemented in this area.

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

11. **Balambangan (Indonesia)** The proposed Belambangan Biosphere Reserve is located in East Java province, Indonesia and covers a total 678,647 ha comprising: 127,856 ha as core area, 320,277 ha as buffer zone and 320,518 ha transition area. This proposed site is spread over three National Parks (Alas Purwo, Baluran and Meru Betiri) and one nature reserve (Kawah Ijen).

12. The national parks and nature reserve include both terrestrial and marine ecosystems – karst landscapes, savanna, alpine/subalpine forest, upper, dry and lower montane (mountain) forest, lowland forest (including bamboo forest), coastal forest, mangrove forest, seagrass beds, and coral reefs. Alas Purwo National Park has 10 bamboo spp. (2 endemics); more than 50 coastal forest spp.; 27 mangrove spp.; at least 230 vertebrate spp. including, Javan leopard, Green Peafowl and 4 spp. of sea turtles. Baluran NP has 511 plant species with 7 protected by Indonesian law (including *Antidesma bunius* and *Sterculia foetida*); primates (long-tailed macaque and silver-leafed monkey; other mammals (e.g., *Bos javanicus*) with numbers decreasing due to human interference and habitat perturbation. Meru Betiri has 49 spp. of flora (with medicinal and other local uses), and 325 spp. of fauna (including invertebrates).

13. Aside from biodiversity conservation, watershed protection and ecotourism in the core area the Meru Betiri National Park has potential for global carbon trade (pilot site for REDD Project) and Kawah Ijen National Park has an acidic crater lake (biggest in world) with blue fire phenomenon. The buffer zone and transition area have settlements. Economic activities practiced include agriculture (food/horticultural crops) and agroforestry (plantations of teak, mahogany). Manmade savanna was planted with grass to provide habitat for big mammals.

14. Sustainable uses of the proposed site include conservation, science research and education, tourism and recreation in the Baluran National Park and ecotourism in Alas Purwo National Park. There are forest plantations in the buffer zone and settlements and agriculture in transition area.

15. Protection of the core area is covered by decrees from the Ministry of Forestry and Ministry of Agriculture; whereas the buffer zone and transition areas are under the authority of the four local governments (regencies, e.g., Banyuwangi), with support of local communities and private sector. At present, a Temporary Working Group (National Park directors and local government representatives) is tasked to disseminate and engage with stakeholders. Once the proposed Belambangan Biosphere Reserve is approved, the Temporary Working Group will be replaced by a Belambangan Biosphere Reserve Management Board for policy-making and a Management Coordinating Forum will be constituted as the implementing unit. Both will have representatives from the national and local governments, local communities, scientific (LIPI) and academic groups and private sector.

16. The Advisory Committee is concerned about the use of the mahogany plant as one of the species in the agroforestry practices due to its invasive nature. It therefore advised that the national authorities minimize the planting of the mahogany species in the buffer zone. The national authorities are commended for the interim and proposed management set up and plans. The Advisory Committee encouraged the national authorities to include the marine buffer zone in the management plan and also to establish regulations for the protection of this zone.

17. The Advisory Committee recommended that this site be **approved**.

18. **Hamoun (Iran)** The Advisory Committee welcomed the submission of the Hamoun Biosphere Reserve nomination. This area is located in South East Iran and limited from North and East by the border with Afghanistan. The proposed Hamoun Biosphere Reserve includes mixed natural and cultural properties. It is constituted of terrestrial and wetland ecosystems with a total of seven habitat types, including desert and semi-desert areas, as well as Hamoun Lakes, a Ramsar site, with its marshlands and watersheds. The three wetlands included in the proposed biosphere reserve are the most important of the region. The area is a hot spot for migratory birds (183 species) and home to thirty mammal species, forty-four reptile species, seven amphibian species, twenty-two fish species and fifty-five plant species. From a cultural point of view, the site includes nationally and globally relevant historical monuments and ancient temples such as on Mount Kooh Khajeh and Shahr-e-Soukhteh.

19. The proposed Hamoun Biosphere Reserve covers a total area of 977,158 ha, of which 133,492 ha are split into two core areas belonging to the national protected area network and include a wildlife refuge. The buffer zone is made of 152,361 ha and the remaining area of 691,305 ha are transition areas. The zoning is generally well defined. This said, part of the core area is directly adjacent to the border with Afghanistan. Transboundary cooperation would therefore seem relevant in order to ensure that any eventual negative external impacts on the core area are mitigated. It is mentioned in the nomination form that a transboundary Biosphere Reserve with Afghanistan would be of interest to Iran and that it could help to reinforce the zonation. Such cooperation would be further advisable since the long-term sustainability of the Hamoun Lake (and its biodiversity) depends on the water level of the Hirmand River that is increasingly used on the Afghan side for farmlands and cities.

20. The activities in the buffer zone but also in the core area include some traditional use of ecosystem services, such as fishing and limited grazing of local people's herds. Since the proposed biosphere reserve is partly a desert, the lake is a primary life source, this is why a total access restriction in the core zone would be fatal to local populations. The nomination file actually stresses that depriving the local populations from essential ecosystem resources would not be helpful towards achieving conservation objectives and needed conservation

support. These activities and their necessary monitoring are being considered in the drafting of the proposed Biosphere Reserve management plan.

21. In the advanced drafting process of the management plan, visible efforts to include all stakeholders (local government agencies, local communities, academia, NGOs) in the elaboration of the plan are appreciated. It is further being developed according to the standards and criteria of the ecosystem approach. More generally, there is a commitment to participatory processes, including in the creation of a "Committee for the Integrated Management of Hamoun Biosphere Reserve", as well as in environmental education.

22. The Advisory Committee welcomed this high value submission and recommended the site to be **approved** as a Biosphere reserve. Further dialogue with Afghanistan regarding the opportunity of a transboundary Biosphere Reserve is highly encouraged.

23. **Belo-sur-Mer – Kirindy-Mite (Madagascar)** The Advisory committee welcomed this well prepared proposal for a new biosphere reserve situated in the coastal western part of Madagascar.

24. The proposed biosphere reserve of nearly 514,000 hectares consists of a core area of 45,281 ha (of which 0.3% of mangrove and 7% of coral reefs), a buffer zone of 81,700 ha and a transition area of 387,000 ha. The area falls in the convergence area of the western and southern malagasy phytogeographical zones which explains the high biodiversity at species and genus level. The site includes watershed upstream and marine and coastal ecosystems downstream. This land-sea landscape constitutes an impressive mosaic of rich but fragile diverse ecosystems such as dry forests, thickets, thorn forests, savannas, salty swampy depressions ("tannes"), mangroves and coral reefs. Kirindy-Mite National Park, part of core area, has the largest population of one of the 7 species of Malagasy Baobabs (*Adansonia grandidieri)* with 500,000 trees. The reef is a feeding area of spectacular marine megafauna consisting of whales (humpback), dolphins, dugongs and marine turtles.

25. The population of the area relies totally on these natural resources for their livelihood and income. The marine biodiversity, the islands as well as two sacred salted lakes with the Lesser Flamingo (*Phoenicopterus minor*) are valuable assets for tourism and ecotourism. Aquaculture, pelagic fishing and salt production complement the development potential of the area.

26. To reconcile the conservation of this exceptional nature and the sustainable human economic development of the area, the zoning and the management of the different areas of the proposed biosphere reserve were defined based on national and regional integrated management plan frameworks and uses the Integrated Coastal Management Zone (ICMZ) approach. The Advisory Committee commends the country for the establishment of a legal framework allowing the transfer of natural resource management to local communities which reinforces the principles of decentralized management of biosphere reserves.

27. The Advisory Committee recommends that the site be **approved** and encouraged the country to continue the research activities in the area for a better knowledge and monitoring of this exceptional biodiversity and its sustainable use.

28. **Isla Cozumel (Mexico)** The Advisory Committee welcomed this re-submission proposal by Mexico for Cozumel Island and the surrounding marine areas. The proposed biosphere reserve covers a total area of 134,624.17 ha, with a new zoning system of which 87,736.54 ha constitute marine areas and 46,887.63 ha are terrestrial (core area: 12,487.90 ha; buffer zone: 77,027.90 ha; transition area: 45,107.90 ha). The Advisory Committee noted the inclusion of a new core area in the coastal and marine zone as per a previous Committee recommendation. The island of Cozumel has diverse marine and terrestrial ecosystems, is rich in amphibians and reptile species, and has 31 endemic taxa. It is also home to three endemic species, which the IUCN considers to be critically endangered.

29. The main terrestrial ecosystems are medium semi-deciduous forest and mangroves. Medium semi-deciduous forest is rare in other parts of the state of Quintana Roo, and hosts a substantial proportion of the endemic species of the island. Marine ecosystems constitute a significant portion of the proposed biosphere reserve, which forms part of the second largest reef system in the world, the Mesoamerican Reef, which is home to 1,192 marine species. The area encompasses two Ramsar sites: Parque Nacional Arrecifes de Cozumel (nominated in 2005), and Manglares y Humedales del Norte de Isla Cozumel (nominated in 2009).

30. The permanent population of the proposed biosphere reserve amounts to 79,535 inhabitants (2010 census). Human settlements are located mainly in the city of San Miguel, which comprises most of the tourism and urban infrastructure. Mayan heritage is a quintessential feature of Cozumel: there are more than 36 Mayan archaeological sites in the proposed biosphere reserve, including material remains such as ceremonial and commercial centres and pilgrimage routes. This heritage is the focus of archaeological studies that could be much enhanced by the creation of the reserve.

31. Farming activities take place essentially in small agricultural fields, contributing to the conservation of most of the territory. Only a few people in Cozumel are involved in farming and fishing; the rest of the population is engaged mostly in the tourism sector. Tourism is thus the most important economic activity on the island of Cozumel, which receives a significant number of visitors each year (3,292,452 in 2013). Due to this influx the rate of unemployment is low among the population, which enjoys an income level above the average for Mexico. One of the main objectives of the proposed biosphere reserve of Cozumel Island is to contribute to the development of an Integrated Urban Environmental Management System and to articulate a series of local planning instruments to address issues such as treatment of solid waste, mitigation and adaptation to climate change, energy efficiency, ecological zoning and sustainable tourism management.

32. The Advisory Committee welcomed this nomination proposal and recommended that this site be **approved**. The Advisory Committee recommends implementing a management plan that control the number of tourists and invasive plants.

33. **Atlas Cedar (Cèdre de l'Atlas) (Morocco)** Situated in the central Atlas Mountains, the Advisory Committee welcomed the proposed Atlas Cedar Biosphere Reserve that covers a total area of 1,375,000 ha (130,000 ha core area; 895,000 ha buffer zone; 350,000 ha transition area). As its name indicates, this is the home of the majestic Atlas cedar tree (*Cedrus atlantica* Manetti) covering some 75% of the total global Atlas cedar tree population. The Atlas Cedar Biosphere Reserve is a logical addition to the existing biosphere reserves in Morocco, that together form a coherent network of sites of highest national and international importance. In addition to the Cedar, this part of the Atlas Mountains is generally rich in ecosystems and species diversity, and its peaks reaching up to 3700 m provides the region with critically important water resources.

34. The local economy is pastoral, with some irrigated, more modern agriculture. The local culture is rich, constituting the bastion of the majority of the Amazigh culture with a remarkable preservation of language and traditions. It was for centuries the exclusive world of sound semi-nomadic pastoral tradition, extremely efficient water consumption, leaving nearly 90% of karst water to cover the needs of the entire country. However, fruit plantations, modern agriculture, urban and tourist activities are taking a toll on scarce water resources. The region needs, therefore, to rethink attitudes vis-à-vis natural resources and redefine its activities in a much more sustainable direction. This is the rationale for why it is important to designate the area as a biosphere reserve.

35. Subsequently, the Advisory Committee recommended that the Atlas Cedar be **approved** as a biosphere reserve encouraging the relevant authorities to implement the management plan

for the entire biosphere reserve, including the transition area, and to mobilize the necessary financial resources for this purpose.

36. **Gran Pajatén (Peru)** The Advisory Committee welcomed this new proposal submitted by the Peruvian authorities for Gran Pajatén, located in the Central Cordillera. The area is characterized by high altitudes, ranging from 300 m to 4,670 m (the Nevado de Cajamarquilla), and a pristine ecosystem. The core zone is the National Park del Río Abiseo, inscribed as a Mixed World Heritage site in 1990, with a view to protecting the fauna and flora of rainforests characteristic of this region of the Andes. There is a high level of endemism in the park, and the yellow-tailed woolly monkey, previously thought extinct, is found only in this area.

37. The new proposed biosphere reserve covers a total area of 2,509,698.84 ha (core area: 274,520.00 ha; buffer zone: 762,541.70 ha; transition area: 1,472,637.14 ha). The area includes Peruvian yungas and paramos ecosystem that play an important role in hydrological regulation.

38. Gran Pajatén also lends its name to an archaeological site located in the Andean cloud forests of Peru, on the border of the La Libertad and San Martín regions, between the Marañon and Huallaga rivers. Research undertaken since 1985 has uncovered 36 previously unknown archaeological sites at altitudes of between 2,500 m and 4,000 m, which provide an insight into pre-Inca society.

39. The population is located in small villages in the buffer zone and particularly the transition area (174,632 inhabitants according to the 2007 census). The economic activities are mainly agriculture (cacao, coffee), livestock and mining.

40. The main objective of this proposal is to preserve the ecological and cultural values of the area and to promote the sustainable development of the population by improving their productive systems, restoring the damaged ecosystem and promoting ecotourism, as well as local and environmentally friendly production chains.

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

42. **Fajãs de São Jorge (Portugal)** The Advisory Committee commended the national authorities for the high quality of the proposal for Fajãs de São Jorge Biosphere Reserve. The proposed biosphere reserve integrates the entire Island of São Jorge, which is situated in the Azores archipelago, stretches about 55 km in length, has a maximum width of 7 km (between Fajã das Pontas and Portinho da Calheta), and covers an area of 243.8 km^2 and close to 140 km of coastline. It is the fourth largest island in the archipelago, and its highest elevation is Pico da Esperança at 1,053 m. Its rugged coastal cliffs, which measure 700 m on average, contribute to a unique highland landscape. São Jorge is also noted for its distinct features in terms of elevation, including extensive areas of highland meadows and peat bogs and scrubs on coastal cliffs. Meadows succeed laurel forests [Macaronesian mesophile grasslands (6,180)] and are associated with humid and deep soils, zones highly exposed to wind, low light conditions, heavy rainfall, permanent flooding and low temperatures. Most of the peat bogs are ombotrophic (i.e. fed by rainwater). Acidic and low in nutritive minerals, their vegetation is dominated by sphagnum mosses.

43. The combination of high altitude and coastal ecosystems has resulted in a wealth of endemic terrestrial flora, of which 60 species are native to São Jorge. These ecosystems provide an excellent habitat for a diversity of invertebrate, terrestrial arthropod, mollusc and bird species.

44. With 9,171 inhabitants in 2011, the island of São Jorge represented only 3.7% of the Azorean population. The Fajãs de São Jorge Biosphere Reserve aims to make a contribution towards improving the quality of life and economic development in the local community, based on the

conservation of the island's biodiversity, landscape, and cultural and historical identity. The Biosphere Reserve designation would bolster the efforts and commitment of government bodies and the local population to conserve species and ecosystems, and promote a model of development that both preserves these natural values and uses them to create new opportunities for investment and job creation, thereby encouraging people to remain in the region, especially youth and those who possess qualifications.

45. The proposed biosphere reserve would thus serve as a platform for development and public participation, promoting environmental training and information among economic agents and the general community. This would be supported by the knowledge created by research activities and by national and international cooperation with other biosphere reserves, with whom Fajãs de São Jorge would work to explore new models for sustainable development and to find solutions to common problems.

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

47. **Tejo/Tajo (Portugal and Spain)** The Advisory Committee welcomed this new proposal for a Transboundary Biosphere Reserve submitted by the Portuguese and Spanish authorities. The new proposed reserve covers a total area of 428,176 ha (Core area: 55,927 ha; Buffer zone: 131,413 ha; Transition area: 240,835 ha). It is located in the western region of the Iberian Peninsula shared between Spain and Portugal, and its main axis is the Tajo River.

48. The area is characterized by low altitude and sharp relief. The vegetation consists largely of sclerophyllous and cork oak formations and abundant patches of scrub, as well as cultivated areas, extensive pastures and open stand formations. Among the most significant plant taxa are different species of orchids. The principal occupations of the territory are livestock and forestry, with sheep, cattle and pigs forming the basis of the local economy, along with other traditional farms such as cork extraction, honey collection and the cultivation of cereals.

49. The fauna is typically Mediterranean and includes a large number of threatened or endangered taxa, some of which are endemic to the peninsula. Among the most important species are the European imperial eagle, Bonelli's eagle, the black stork, the black vulture, the Egyptian vulture, the lesser kestrel, the great bustard, the little bustard, the otter, the green lizard, along with the extensive fauna of the Mediterranean rivers.

50. The population is small and concentrated in small and medium areas, which are markedly rural in composition. The overall population is aging with a depopulation trend observed over recent decades, especially on the Spanish side. This demographic weakness is one of the main challenges facing the region.

51. The excellent state of preservation of the fauna, flora and landscape of the region is reflected in the existence of many protected areas (national parks and sites of the Natura 2000 network), which together contribute to its high economic, cultural and ethnographic values. It also functions as a strong site for the development and practice of sustainable development strategies.

52. This transboundary biosphere reserve is symptomatic of the strong level of cooperation and understanding between Spain and Portugal. In general, the zonation schema follows the biosphere reserve model, however in the western part of proposed biosphere reserve, the core zone is not surrounded by a buffer or transition area. Nevertheless, this area is part of an international limit between Portugal and Spain.

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

54. **Isle of Man (United Kingdom of Great Britain and Northern Ireland)** The Advisory Committee welcomed the submission of this proposal. The proposed site is located in the Irish Sea between Ireland and UK. It measures 33 miles long by 13 miles wide. The area covers the 57,200 ha land area and the Manx Territorial Sea comprising a further 399,800 ha. The core area is 15,398 ha (3,008 hectares of terrestrial and 12,390 hectares of marine), the buffer zone is 114,670 ha (46,563 of terrestrial and 68,107 of marine areas) and the transition area is 326,932 ha (7,629 hectares of terrestrial and 319,303 of marine areas). The total population consists of about 84500 residents, concentrated in a few areas, which explains the relative small size of the transition areas. The population is characterized by its own language, its own parliament and legislative body and historical Celtic and Norse influences.

55. The area includes various coastline of cliffs, stacks, islets, and long beaches. The hills hold important peat reserves and are deeply cut by wooded glens in the east. The coastal plain in the north is covered by grasslands, pools and wetlands including the Ballaugh Currah Ramsar site. The sea bed has areas of rich biodiversity, hosting horse mussels, and Sabellaria reefs and maerl and seagrass beds, many of which are protected in the Ramsey Bay Marine Nature Reserve. The proposal contains conservation sites of international importance, including the Ballaugh Curragh Ramsar site, and the Ramsey Bay Marine Nature Reserve, which is classified as an OSPAR Marine Protected Area. The proposed site harbours important populations of European eel, Atlantic cod, curlew and basking sharks, as well as Manx shearwater. The proposal also introduces a breeding project for rare farm breeds.

56. The country side is farmed with sheep, beef and dairy cows as well as arable areas. The sea is harvested for shellfish. Since the late 19th century, the island became a popular tourist destination, hosting 111,911 tourists in 2013. Since the late 1980's the Island has developed services and manufacturing sectors which has resulted in a robust economic growth. A service sector has been developed to provide a future for the youth. Tourism potential has been strengthened, but with attention to mitigating negative impacts from tourism. The proposal also contains information about activities are implemented aimed promote local languages and cultural heritage. Many research and monitoring initiatives occur on several subjects such as: air quality, carbon stores in soil, economic evaluation of ecosystem services, citizen science. They are conducted by the Bangor University School of Ocean Sciences, the Centre for Manx Studies, and other centers and institutes.

57. Stakeholder participation is taking place through civil society organizations and representation in local government. Governance is mainly based on existing governance structures, with an added steering committee, which reports to existing democratic governance structures. In consultation with the stakeholders, a management plan will be developed once the proposal is approved. The Advisory Committee thanked the authorities for the additional information provided on zonation.

58. The Advisory Committee recommended that the site be **approved**. The Advisory Committee recommended that the national authorities develop a comprehensive management plan for the biosphere reserve in the near future.

Extension, rezoning or renaming of already existing biosphere reserves recommended for approval

59. **Trifinio Fraternidad - Extension (Honduras)** The Advisory Committee welcomed this extension submission for the Honduras part of the Tri-national Trifinio Fraternidad Biosphere Reserve between El Salvador, Guatemala and Honduras. The area represents an important water catchment shared by the three countries, with the biosphere reserve providing a framework for cooperation and the establishment of a common management plan to ensure joint sustainable development of the region. The extension project presented by Honduras would cover an area of 278,762.89 ha including six national protected areas.

60. The reserve includes key biodiversity areas, such as Montecristo National Park and different forest ecosystems. The mountain area fulfils an important function in guaranteeing water supply for the communities, while important developments include the promotion of coffee production and conifer forest extraction or agro-tourism. This biosphere reserve has strong political support at a high level (vice-ministers of the three countries) and involves local communities in the promotion of sustainable development.

61. The extension follows the social, environmental and economic plan in line with the conservation area of the Tri-national Trifinio Plan Commission (CTPT). This area was established to preserve and restore the hydrological resources of the bi-national watershed of the Motagua river (Guatemala and Honduras), the Ulúa river (Honduras) and the tri-national watershed of the Lempa River.

62. The Advisory Committee welcomed this extension proposal and recommended it to be **approved**. The Advisory Committee advised that corridors, a common buffer zone protecting small core areas should be included, and this extension included in the Tri-national Trifinio Plan Commission should be included.

63. **Mount Hakusan Biosphere Reserve - Extension (Japan)** The Mount Hakusan Biosphere Reserve was designated in 1980. The area designated as the biosphere reserve surrounds the Mountain Hakusan which is 2,702 meters above sea level.

64. The Mount Hakusan Biosphere Reserve comprises the alpine zone, the subalpine zone, and the montane zone. In the montane zone, in particular, there is an extensive forest of the Siebold's beech (*Fagus crenata*) which provides a habitat not only for various types of plants, but also for animals, such as the Asiatic black bear (*Ursus thibetanus*) and the Japanese serow (*Capricornis crispus*). No endemic species has been found in the Mount Hakusan Biosphere Reserve. However, among plants found in the biosphere reserve 57 species of the orchid family are listed in Annex II of CITES. Meanwhile, the IUCN Red List includes three species, including *Cypripedium japonicum* in the orchid family, as well as Japanese cedar (*Cryptomeria japonica*) and hinoki cypress (*Chamaecyparis obtusa*), which are arboreous plants.

65. This submission proposes the expansion of the core area from 17,857 ha to 22,120 ha; the buffer zone from 29,843 ha to 45,660 ha and a new transition area of 131,549 ha which is set in the mountain villages. The total area will be more than quadrupled, with a significant addition of transition areas. The villages have maintained a livelihood based on the sustainable use of resources in the mountain areas.

66. The expanded biosphere reserve has a UNESCO's World Cultural Heritage site "Historic Villages of Shirakawa-go and Gokayama." In addition, it contains two Japanese Geoparks. The total human population of the biosphere reserve is 17,023, mostly in transition areas. There is a decline in the population of children and increase in the population of the elderly due to changes in lifestyles and outflow of young people to larger cities after the mid-20th century. This has led to a concern for the risk of losing lifestyles using natural resources and traditional cultures.

67. Japanese authorities submitted Mount Hakusan Biosphere Reserve Basic Management Policy together with the new nomination file, mentioning the outline, objectives, functions, zonation, and management and structure of this new expanded biosphere reserve. Currently there is a management body in this new proposed Mount Hakusan Biosphere Reserve Council. It is a non-judicial private organization established as a management body of this Biosphere Reserve. The council has 12 members composed of mayors of 7 municipalities, directors of 4 prefectures, and 1 representative of the concerned body.

68. The designation of Mount Hakusan Biosphere Reserve in 1980 was led by governmental agencies of central government. However, this new nomination for extension was leaded by

local governments and local people. Mount Hakusan Biosphere Reserve Council prepared for this nomination in collaboration with the local governments. Therefore, future management of the extended biosphere reserve will be expected to be driven by local people.

69. The Advisory Committee commended the good quality of the nomination documents and also the efforts of local people in expanding the biosphere reserve through a participatory method. The national authorities are encouraged to develop a new management plan for the biosphere reserve.

70. The Advisory Committee recommended that this extension application be **approved**.

71. **Yakushima and Kuchinoerabu Jima Biosphere Reserve – Extension and renaming of former Yakushima Biosphere Reserve (Japan)** The Yakushima Biosphere Reserve was designated in 1980. Yakushima is located 60 km south of Kyushu Island in Japan. It is famous for the Yaku cedar primeval forest, and it includes Yakushima World Natural Heritage site which was inscribed in 1993. Yakushima demonstrates vertical distribution of plants from subtropical warm-temperate zone near the coast to high moors near the summit (1,936 m). The current size of this biosphere is 18,958 ha in total, with 7,559 ha of core area and 11,339 ha of buffer zone, and it covers 37.6% of the whole area of Yakushima Island (50,429 ha). However, the current zonation does not include any transition area nor any marine area.

72. The new nomination document proposes an extension to cover the whole Yakushima Island and add another island called Kuchinoerabu Jima, and it will include marine areas surrounding the two islands. The new proposed total area will be 78,196 ha (54,066 ha terrestrial and 24,130 ha marine). Marine transition zone is set from the coastline to 2 km off the shore in Yakushima and 1 km in Kuchinoerabu Jima excluding marine core area and buffer zone. Kuchinoerabu Jima is located 12 km west-northwest from Yakushima, and the whole island is part of the Yakushima National Park. The new proposed area will include Nagata-hama beach, a Ramsar site which is a spawning place for internationally endangered loggerhead turtle. The current human population of the biosphere reserve is 13,589.

73. The Japanese authorities submitted Basic Management Policy of Yakushima and Kuchinoerabu Jima Biosphere Reserve, explaining the outline, objectives, functions and zonation of the biosphere reserve, together with a current management system. There is a single coordinating body of the biosphere reserves: Promotion Council of Yakushima and Kuchinoerabu Jima Biosphere Reserve. It consists of local residents, town council, local communities, administrative organization and experts, and it is responsible for the coordination among stakeholders.

74. The Advisory Committee commended the national authorities for their efforts in the expansion of the site and encouraged the authorities to formulate a management plan for this biosphere reserve and submit this to the MAB Secretariat in the near future.

75. The Advisory Committee recommended that the extension proposal and name change of this biosphere reserve be **approved**.

76. **Mount Odaigahara, Mount Omine and Osugidani Biosphere Reserve – Extension and renaming of former Mount Odaigahara and Mount Omine Biosphere Reserve (Japan)** Mount Odaigahara and Mount Omine Biosphere Reserve, which was designated in 1980, is located in the Kii Peninsula of Honshu Island of Japan, and within Mie and Nara Prefectures. It is a mountainous area, and forestry was developed instead of farming. The current size of this biosphere reserve is 36,000 ha, composed of 1,000 ha core area and 35,000 ha buffer zone without any transition area.

77. The new extension document proposes an extension from 36,000 ha to 118,331 ha, comprising 5,398 ha of core area, 32,428 ha of buffer zone and 80,505 ha of transition area, with a significant addition of transition areas. The new core area will include Special

Protection Zone of Yoshin-Kumano National Park, Preservation Zone of Osugidani Forest Ecosystem Reserve, and National Wildlife Protection Area and Special Protection Area of the Mount Odai Range. The new buffer zone will include Special or Ordinary Zone of Yoshino-Kumano National Park, and Conservation and Utilization Zone of Osugidani Forest Ecosystem Reserve. The entire core area and a large part of buffer zone is included in Yoshino-Kumano National park. The new transition areas are designated as a landscape planning area of the Mie or Nara Prefectural Landscape Plan. With a significant increase in size, the Japanese authorities proposed a name change from Mount Odaigahara and Mount Omine Biosphere Reserve to Mount Odaigahara, Mount Omine, and Osugidani Biosphere Reserve.

78. The biosphere reserve is characterized by mountain ranges as in Mount Omine range, gently sloping plateau-like terrains as in Odaigahara, and deep, V-shaped valleys as in Osugidani. The Mount Omine range, which straddles the core area and the buffer zone, has been designated as a World Cultural Heritage “Sacred Sites and Pilgrimage Routes in the Kii Mountain Range” by UNESCO. The total human population of the expanded biosphere reserve is 14,317, with a trend of decrease in the population of children and an increase in the population of elderly people.

79. Ecosystems of this area are diverse. It has subalpine coniferous forest, cool-temperate deciduous broad-leaved natural forest, deciduous broad-leaved secondary forest, plantations of conifers such as *Cryptomeria japonica* and *Chamaecyperis obutsa*, and agricultural land areas.

80. The Japanese authorities submitted Basic Management Policy of Mount Odaigahara, Mount Omine, and Osugidani Biosphere Reserve, explaining the outline, objectives, functions and zonation of the biosphere reserve, together with current management and operation structure. There is a management and operation body of the biosphere reserve: Council for Promotion of Mount Odaigahara, Mount Omine, and Osugidani Biosphere Reserve. It is organized by relevant municipalities, and observers and advisors have been assigned including Ministry of Environment, Forestry Agency, and Japan MAB Planning Committee. Odai Town in Mie Prefecture has its own committee called Odai Town Committee for Promotion of Mount Odaigahara and Mount Omine Biosphere Reserve.

81. In preparation of this application for extension, local resident organization participated in the delineation of the transition area from the planning stage and decisions regarding zoning were made through discussions. This process has improved the awareness of the local residents.
The Advisory Committee commended the effort of the national authorities especially with regard to the involvement of local people in the extension proposal. The national authorities are encouraged to formulate a new management plan and to submit it to the MAB Secretariat in the near future.

82. The Advisory Committee recommended that this proposal for extension and re-naming be **approved.**

83. **Mount Sorak Biosphere Reserve - Extension (Republic of Korea)** The Mount Sorak Biosphere Reserve, designated in 1982, is located in the center of the Baekdudaegan Mountain Range. Mount Sorak is the third highest mountain in the Republic of Korea. Spanning from Sokcho City to the counties of Yangyang, Inje, and Goseong in Gangwon Province, the mountain stands 1,708m tall.

84. Mount Sorak Biosphere Reserve currently occupies a total area of 39,350 ha (core area 16,430 ha, buffer zone 22,385 ha, and transition area 353 ha). The transition area of the Mount Sorak Biosphere Reserve accounts for only 1% of the entire area. The majority of the biosphere reserve falls within the boundary of the Mount Sorak National Park, which creates many limits when it comes to developing Biosphere Reserve linkage programs, attracting

local residents' participation, and managing programs designed to activate the local economy. On these backgrounds, the MAB International Coordinating Council (MAB ICC) in the 25 session recommended the expansion of the transition area for Mount Sorak Biosphere Reserve.

85. The main objective of this proposal consists of the expansion of the transition area to encompass the local residential areas, forests, and agricultural areas surrounding the legally protected Mount Sorak National Park and it accounts for a total area of 76,749 ha (core area 14,992 ha, buffer zone 22,312 ha, and transition area 39,445 ha). Mount Sorak Biosphere Reserve mainly consist of temperate forests, with 22.8% of the entire area situated at an elevation of 1,000 m or higher. Many rivers also originate from the biosphere reserve, as do various natural and geomorphological landscapes. The protected area of Mount Sorak, located at the center of the Baekdudaegan Mountains.

86. With respect to economic activities, some of the local residents are engaged in agricultural activities in orchards, rice paddies and dry fields. However, the majority of residents are engaged in businesses such as accommodations, restaurants, resorts, and other facilities geared towards visitors and tourists in the Mount Sorak area. As such, the revenues from Mount Sorak account for the largest ratio of the regional economy.

87. The Advisory Committee commended the national authorities for taking the appropriate measures to address future challenges which are associated with development and also population increase. The authorities are also commended for involving the local population in the process of expanding this biosphere reserve.

88. The Advisory Committee recommended that the extension proposal for the Mount Sorak Biosphere Reserve be **approved**.

89. **Shinan Dadohae Biosphere Reserve - Extension (Republic of Korea)** The Shinan Dadohae Biosphere Reserve was designated in 2009 with a total area of 75,749 ha. After its designation as a biosphere reserve, several pilot projects have been implemented to conserve and promote sustainable development in the area, with particular focus on the Jeungdo area. The increased tourism that has resulted from these efforts has invigorated the local economy and enhanced the lives of local residents. This has, in turn, raised awareness among residents of other areas in need of similar efforts within the Shinan Dadohae Biosphere Reserve.

90. As a result of the biosphere reserve designation, Shinan County was able to introduce more systematic measures to preserve and manage biodiversity on the five core islands near the coast and in the adjacent seas and deep waters. The results of these efforts provide the basis upon which the county has developed comprehensive and suitable measures to preserve and manage all of the islands within Shinan County in a coherent and consistent manner. The extension of the biosphere reserve to the entire area of Shinan County is necessary for the county to expand the linkage between its ecosystem conservation policy and management of the biosphere reserve. Another objective of this expansion is that it is expected to contribute to the implementation of a unified system for biodiversity conservation on the islands and has proceeded due to the requests made by local residents.

91. The expansion primarily consists of 1,000 islands distributed across the southwestern part of the Korean peninsula. It also contains tidal flats included on the Tentative List of World Heritage Sites and designated as Ramsar Sites, as well as other natural protected areas such as the Dadohae Maritime National Park and Tidal Flat Provincial Park, and Slow City (Cittaslow) site. Moreover, it also contains areas of high cultural diversity due to the uniqueness of indigenous knowledge. The proposed total area will be is 323,874 ha, including a transition area of 177,661 ha.

92. The Advisory Committee commended the authorities for the good quality of this extension proposal. The authorities are also commended for the involvement of the local communities and is pleased to note that this extension application was initiated and supported by the communities.

93. The Advisory Committee recommended that this extension proposal be **approved**.

94. **Noroeste Amotapes - Manglares Biosphere Reserve – Extension and renaming of former Noroeste Biosphere Reserve (Peru)** The Advisory Committee welcomed this extension and renaming submission for the former Noroeste Biosphere Reserve, which was nominated in 1977. The proposed extension expands the reserve to include Cerros de Amotape National Park, Coto El Angolo and Tumbes Mangroves Protected Area (previously 231,402 ha). The extension covers 1,115,947.79 ha (Core: 154,533.27; Buffer: 212,049.47; Transition: 749,365.05 ha).

95. The altitude ranges from 0 to 1,600 metres. The area is located on the northern coast of Peru in the Tumbles and Piura departments. It covers part of the Ecuadorian dry forest situated in the tropical Pacific forest with a high biodiversity of flora and fauna. The reserve also includes the 'Cerros de Amotape' National Park, the 'Coto El Angolo' and the national forest of Tumbes. Its relief is highly varied and covered by matorral formations, very dry forest, dry and tropical sub-montane forest (*Prosopis juliflora*) (*Bombax* sp.), (*Tillandsia* sp.), and Tumbes mangroves. It also contains endangered fauna species such as gryphus, *Sacoramphus papa* and *Burhinus superciliaris*, and mammals including *Odocoileus virginanus, Tayassu tajacu* and *Felis concolor*.

96. The main threats in the area are cattle, lobster and shrimps farming, and wildfire. The total population is 511.244 inhabitants. The economic activities are mainly agriculture, cattle rearing and ecotourism.

97. The Committee recommended that this site be **approved** and encouraged the authorities to include the marine area in the proposal and discuss the possibility to create a future transboundary reserve with the Ecuadorian Biosphere Reserve, Bosque Seco, designated in 2014.

98. **Wester Ross Biosphere Reserve - Extension and renaming of former Beinn Eighe Biosphere Reserve (United Kingdom of Great Britain and Northern Ireland)** The Advisory Committee welcomed the submission of this proposal located in the north west of Scotland in United Kingdom. It is an extension of Beinn Eighe Biosphere Reserve, designated in 1976.

99. The proposed site covers 529,904 ha: a core area of 5,337 ha, a buffer zone of 13,807 ha, and a transition area of 510,760 ha (96% of the total). The proposed area includes Loch Maree, which has been designated as a Ramsar site, and considered of international importance due to its black-throated diver population. The proposal also includes a marine area which is not under the jurisdiction of local authorities, but for which they nevertheless aim to develop plans for a more sustainable use of marine resources.

100. The region is dominated by wild mountains with the highest being the Beinn Eighe. The banks of the lakes and valleys are covered by woodlands while highlands are mostly grassy. Beinn Eighe Natural Reserve hosts the largest of ancient Caledonian forest in Wester Ross. Some of the Scots pines age 400 years old. There are many lakes in all shapes and sizes. The land is crossed by fast-flowing rivers that empty in loch seas which are true fjords. Along the coast, the shores are rocky and sometimes host spongy green seaweed which are endemic species only found on west coast sea lochs.

101. The transition area is hosting a population of 8,000 people, resulting in one of the lowest densely populated areas in Europe. The majority of the population lives in the main

settlements of Ullapool, Gairloch, Lochcarron and Kyle of Lochalsh. Due to its rugged and mountainous topography, much of the land is suitable for grazing by cattle. Private estates are often subsidized by external resources in addition to grants for forestry, agriculture or the development of renewable energy projects. The remarkable nature around attracts more than 70,000 visitors each year, mostly for tourism and recreational purposes. A wide variety of existing research activity takes place in the previously established Biosphere Reserve at Beinn Eighe. Extensive research is being carried out on the physical, living and socio-economic environments principally through the University of the Highlands and Islands, statutory conservation bodies and local groups, including on the impact of tourism. Scottish National Heritage has developed an extensive monitoring programme.

102. In terms of socio-economic development, the proposal aims to contribute to the maintenance of crofts, through supporting initiatives to promote sustainable food production and the development of shorter supply chains. The croft system has a long history, and benefits from European support – supporting the crofters also conserves agro biodiversity. In addition, plans are presented to diversify the local economy to provide a future for the youth, which will in turn contribute to the maintenance of the crofts. Tourism is promoted, and plans have been developed to adapt buildings and gardens to accommodate wildlife. The proposal also introduces a social enterprise initiative with a focus on developing a green economy.

103. The Advisory Committee noted with appreciation that the development of the proposal has been conducted with extensive community consultation and support. Management will be aligned with nation-wide trends towards decentralization. The Advisory Committee thanked the authorities for the additional information provided on the core area and buffer zone which clarified the rationale for the zonation.

104. Therefore, the Advisory Committee recommended that the site be **approved**.

105. The Advisory Committee recommended that the authorities closely monitor the effects and impact of tourism as an alternative strategy and that the national authorities develop a comprehensive management plan for the biosphere reserve in the near future.

New nominations recommended for approval pending the submission of specific information

106. **Beaver Hills (Canada)** The Advisory Committee welcomed this new nomination proposal from Canada. The proposed site is a morainic landscape located in the province of Alberta in western Canada. It comprises an area of 159,560 ha, extending more than 60 km north to south and over 40 km east to west. The core area is 21,725 ha, the buffer zone 21,766 ha, and the transition area 116,069 ha. Around 12,000 years ago the glaciers began to retreat leading to abundant wetlands, shallow lakes and rocky landscapes, characteristic of the Boreal zone. Now the Beaver Hills comprise a mixture of human-modified agricultural lands, mixed wood forest, grasslands and wetlands.

107. The diversity of forest and upland habitats, with small openings of native grassland, provided optimal habitat for bison, deer, elk and moose, as well as diverse and abundant waterfowl. Thirty-six plants and six plant communities observed within the moraine that are considered sensitive due to low distribution of populations within the province. The Beaver Hills lies within the Canadian Prairie Ecozone, and this area is part of the Southern Boreal Plains and Plateaux Natural Region of the Interior Plains. The diverse habitats within the moraine support a broad assemblage of plants and wildlife species (mostly migratory species). The beaver is an abundant keystone species that is widespread in the area and can dramatically affect forest succession and biodiversity. The bison populations within the National Park are part of a national recovery plan designed to sustain genetically pure and disease-free populations of each sub-species to serve as a healthy source for other population restoration efforts.

108. The terrain within the moraine prevented the settlement of big human communities. The only large urban center is Edmonton (1,159,869 inhabitants) lying west of the proposed reserve. Today, the moraine is predominantly a rural community comprising agricultural and rural residential landowners and a few small villages. The Beaver Hills concerns 5 counties totalizing 12,000 permanent inhabitants and 365,000 seasonal visitors. The communities within and near the moraine represent a modern Canadian mosaic of long-term residents of European and aboriginal descent. Ukrainian immigrants were among the first to homestead in the region and this culture is still well-represented across the moraine. Today, agriculture and recreation are the main activities within the moraine, although agriculture has diversified to take advantage of new markets, including organic and local food trends. Several agencies among which University of Alberta and Alberta Parks are currently active in research or monitoring addressing the abiotic, biotic and socio-cultural aspects of the moraine.

109. The Advisory Committee thanked the national authorities for providing additional information on the zonation as well as on indigenous partners' collaboration.

110. The Advisory Committee acknowledged the strategy adopted by the Beaver Hills Initiative (BHI) to identify and use alternative mechanisms for meeting the intended function and conservation role of buffer zone around the two core areas. The Advisory Committee noted that the region is largely under private ownership and it also noted the high potential of sustainable use of surrounding areas of the proposed core areas and suggested to extend the buffer zone to most of the proposed transition area where possible as already a lot of farmers adopted land stewardship practices especially in grazing areas.

111. The Advisory Committee therefore recommended that this site be **approved pending** receipt and approval of the following information by end of February 2016 to be considered by next MAB Council or by 30th September 2016:

- The revision of the zonation to ensure that all core areas are adjacent and/or surrounded by buffer zones, noting that farming activities in these surrounding areas seem compatible with conservation objectives (extensive farming and grazing) in order to meet the statutory framework criteria;

- To clarify funding and how the rural subdivision development will be under control in the proposed area, to avoid forest fragmentation and land cover changes impacting biodiversity, landscape value and the ecological functioning of the moraine area;

- To clarify how the BHI organization is prepared with the Land Management Framework to deal with the Edmonton Capital region that is one of Canada's fastest growing metropolitan areas while the moraine area is very attractive for urban expansion.

112. **Tsá Tué (Canada)** The Advisory Committee welcomed this nomination proposal from Canada. The proposed site is located in Canada's Northwest Territories. The area is the homeland of the Sahtúto'ine (The Bear Lake People) and the concerned region is the watershed of the Great Bear Lake (GBL). This last pristine arctic lake is under pressure from the climate change, but also possible mineral, oil and gas mining exploration. Local community elders and leaders worked for many years to develop environmental stewardships. Different management plans and management bodies were established during the last decade to promote sustainable development of the region, aiming to keep healthy ecosystem and people by maintaining ecological and cultural integrity. A joint agreement between first nation, corporation, local council, Parks Canada and other organizations created the Tsá Tué Biosphere Reserve Stewardship Council to guide activities and to be the coordination unit of the proposed biosphere reserve.

113. The proposed area is located in the Northwestern territories of Canada. It includes Great Bear Lake (GBL) and a portion of its watershed (GBLW) within the District of the Sahtu Settlement Region. GBL has a surface area of 3,112,100 ha while the GBLW within the

District encompasses 6,219,200 ha. The total area is therefore about 9,331,300 ha of which the core area is 2,008,200 ha; the buffer zone is 7,236,500 ha; and the transition area is 79,700 ha. The Great Bear Lake is the largest lake lying entirely within Canada. Three ecozones are represented in the watershed: the Taiga Plains in the west of the watershed, the Taiga Shield to the southeast, including the Camsell River drainage area, and the Southern Arctic ecozone on the northeastern rim of the lake. They are recognized as important wildlife areas for species such as the muskox, the general moose and caribou herds which witnesses a high degree of biological integrity.

114. The only community on GBL is the traditional First Nation Dene community of Déline (meaning "Where the water flows") is located on the western shore of Great Bear Lake near the mouth of the Great Bear River. It has a population of about 600 inhabitants, the majority of whom are Sahtuto'Ine Dene, i.e., the "Bear Lake People". As the Sahtuto'ine culture is intricately tied to the health of the lake and its environment, the community is willing to use and keep the land healthy. Human activities on the proposed site are moderate. There are still harvesting activities remaining, and a moderate tourism activity which tends to be developed through ecotourism. Various research activities are underway in the area, related to water quality and quantity, fish (notably lake trout), wildlife (notably barren-ground caribou), archaeology, social sciences and contaminants from remediated contaminated sites (notably mines).

115. The Advisory Committee thanked the authorities for providing additional information on the zonation and the current and future situation regarding mining industry development and how these companies are involved in the management of the proposed biosphere reserve. The Advisory Committee noted that mining projects are under environmental and regulatory reviews and that they will not proceed if they will harm the ecological and cultural integrity of the proposed site. It also noted that these activities should be consistent with the land stewardship approach and project proponents will have to engage closely with the proposed biosphere reserve stewardship council.

116. The Advisory Committee therefore recommended that this site be **approved pending** the receipt and approval of the following information by end of February 2016 to be considered by next MAB Council or by 30th September 2016:

- Clarification on the conservation zones especially numbers 27, 31 and 66 as well as clarification on the national or international legal status of the conservation zones delineated in the Sahtu Land Use Plan.

117. The Advisory Committee further encouraged the authorities to undertake comparative approach and knowledge sharing, especially with Lake Baikal in Siberia (Russian Federation), Laurentian Great Lakes (USA & Canada), Lake Tahoe (USA), Lake Leman (Switzerland) and Lake Titicaca (Peru & Bolivia). It also encouraged the stewardship council to develop social-ecological research and monitoring in partnership with local, national and international research organizations and networks to promote and implement an efficient adaptive co-management of the proposed site.

118. **Collina Po (Italy)** The Advisory Committee welcomed this nomination file from Italy. The proposed area is located in the north of Italy within the Piedmont Region. The proposed surface is 171,233.85 ha, with a core area of 3,853.05 ha, the buffer zone and transition area 21,161.45 ha and 146,219.46 ha respectively. The site covers the whole Turin stretch of the River Po with its main tributaries and the Collina Torinese hillside. The river Po is the main reservoir of biodiversity on the Turin plain, partly due to the numerous wetlands along its course. The physical and geological characteristics have led to the formation of numerous gravelly shores, oxbows and riparian woods hosting various species. The territory hosts 14 habitats of community interest, three of which are priorities.

119. These resources take a great value in the context of high human density especially in the nearby city Turin with its 900,000 inhabitants and other major cities such as Chivasso, Macalieri and San Mauro. The entire area involves 85 municipal districts with a resident population of approximately 1.5 million inhabitants mostly in the transition zones. Traditionally Turin attracts a lot of visitors for its old-town, and other remarkable historic and cultural elements such as Basilica Superga, Palazzo Madam, National Automobile Museum. Cultural attractions outside Turin include the Residences of the Royal House of Savoy, Vezzolano Abbey, etc. The increasing numbers of tourists choose to spend time on the hillsides and riversides areas to hike, bike, or to practice agritourism. Monitoring and researches on the nominated area are held by the Po Park, University of Turin and several research institutes and private organizations. The proposed biosphere reserve presents an opportunity for sustainable education and contribution to quality of life for urban communities.

120. The Advisory Committee noted that several projects related to research on resources and their sustainable use as well as education were held in the area by a diversity of stakeholders and research institutions. It also noted that the management structure of the proposed site is planned to include local representatives, local communities and authorities.

121. The Advisory Committee recommended that the nomination is **approved pending** the receipt and approval of the following information by end of February 2016 to be considered by next MAB Council or by 30th September 2016:

- The clarification of the status and legal protection of the buffer zones number 5 and 6;
- The endorsement of all municipalities of the nomination form;
- To provide more detailed information on the organization and functioning of the managing body of the proposed biosphere reserve, including as regards the coordination of large number of stakeholders and protected areas;
- To further explain the status of the car industry in the region today, including existence of factories in the proposed area and describe the impacts that these activities could have on the proposed biosphere reserve;
- To explain how the local communities will be represented (i.e. membership) in the future “Steering committee” (page 303 point 17.1.8) and to describe which mechanisms will be created to involve the local communities in the management of the proposed biosphere reserve.

122. **Barsakelmes (Kazakhstan)** The Advisory Committee welcomed the submission of the Barsakelmes Biosphere Reserve nomination. The proposed site is located in the Sahara-Gobi Desert zone of the Aral Sea basin. The total area of the proposed Barsakelmes Biosphere Reserve is 407,132 ha. The core area (160,826 ha) is constituted of two distinct parts, the former islands Barsakelmes and Kaskakulan that are connected through a corridor, and belongs to the territory of Barsakelmes State Nature Reserve.

123. The Aral Sea region is a priority area for wetland conservation – the Ramsar site of Syrdarya Delta is located in the transition area – and several routes of Palaearctic bird migrations converge over the region. The territory of the proposed biosphere reserve is a valuable site to preserve the biodiversity of the Aral Sea. To date, the core area includes approximately 2,000 species of invertebrates, including 3 listed in the IUCN Red list, 30 mammal species or 71.4% of the 42 species inhabiting the desert zone of Kazakhstan, 20 reptile species, which is 46.9% of the total herpetofauna list of Kazakhstan, and 178 bird species, including 23 listed in the “Red Data Book of Kazakhstan”. There are also four medieval permanent settlements of nomadic Kazakhs (Kerderi archeological sites) on the former Silk Way dating back to the 12-14 centuries. The most known site is the Bekmana mausoleum (11th century), which is considered a holy site and visited by local people.

124. Along with local desertification processes, the biodiversity of the Aral region encompassing the proposed biosphere reserve’s area has decreased during the second half of the 20th century because of the sharp drop in regional water supply and intensive

development of economic activity (resulting in half of nesting birds' number, among other negative impacts). In recent times, less water is taken for irrigation, plantations of hygrophilous crops decreased, as well as reduced grazing pressure on the river flood-lands, leading to positive trends in the recovery of the region's ornithofauna. In this context, the short-term purpose of the proposed Biosphere Reserve is to preserve the region's unique ecosystems, prevent the depletion of natural resources and ensure their sustainable use.

125. In the core zone, environmental education takes place through the use of mass media, interaction with teachers and educational institutions, in order to raise ecological awareness of local people, convey an understanding of the key role of the protected territory, and gain public support. Training seminars were also conducted with staff member of Barsakelmes state nature reserve.

126. The Advisory Committee notes, however, that the buffer zones are not entirely satisfactory in the proposed biosphere reserve. Together with the core areas the buffer zones belong to Barsakelmes State Nature Reserve and should therefore be included in the proposed biosphere reserve's core zone. Appropriate buffer zones should be large enough to include different land uses compatible with the integrity of the core areas. Further, the buffer zones should follow functional considerations and the ecological and socio-economic realities on the ground, rather than as in the present proposal, a fixed one kilometer wide zone around the cores.

127. In total, around 19,000 people live in the transition area, with agriculture – fishery, crop and livestock production as main economic activity. In recent years the local population started gaining expertise in market relations and more shops and services were opened in the villages, bus and cargo transportation are organized. While it is important to support local population in their activities, the goal of the proposed Biosphere Reserve would be to help providing stable social-economic conditions in order to decrease negative anthropogenic impacts on nature.

128. A consultation with all land users was undertaken and local communities are involved in the Coordinational Council created in 2014. This council consists of representatives of state agencies, the state nature reserve, Akimat (department of land resources, agriculture, etc.), local NGOs and land users, which have all equal rights in voting and decision-making. A special Management Plan for the proposed Biosphere Reserve territory has not yet been developed and management of the core area and buffer zone is conducted by the administration of Aksu-Zhabagly state nature reserve.

129. The Advisory Committee welcomes this submission and recommended the site to be **approved pending** the submission of an updated zonation map with improved buffer zones together with the underlying conservation and management rationale.

130. **Albay (Philippines)** The proposed biosphere reserve is located at the southern end of the Luzon Island in the Philippines (with latitude 12°59' – 13°31' N and longitude 123°17' - 124°13' E). The whole province of Albay has been proposed for nomination as a biosphere reserve. Elevation ranges from 0 to 2,462 meters in the terrestrial areas, and 0 to - 223 meters below mean sea level in the marine areas.

131. The proposed size of core area is 12,085 ha (10,571 ha terrestrial, and 1,514 ha marine), that of the buffer zone is 44,918 ha (all terrestrial), and that of the transition area is 190,918 ha (all terrestrial), with total area of 247,092 ha (246,406 ha terrestrial and 1,514 ha marine). There are three major terrestrial ecosystem types: forest ecosystems are mostly in the core areas; grassland and agricultural ecosystems are found in the buffer zones which are essential for agro-biodiversity and food productions; and urban ecosystems cover the transition areas. In addition, there are 94 caves in Albay, and they form a special type of ecosystem. Aquatic ecosystems are divided into two types: freshwater ecosystems including

lentic water bodies and lotic water bodies, and marine and coastal ecosystems including mangrove forests, seagrass and soft bottom habitats, and marine coral reefs.

132. Conservation value of this proposed biosphere reserve is very high. There are 182 species of terrestrial plants, out of which 46 are endemic. In the marine and coastal ecosystems, there are 12 species of mangroves, 40 species of seaweed or macro-algae, and 10 species of sea grasses, which represents 62.5% of all known species in the Philippines. Five species of marine turtles among all the seven species in the world are found in Albay. The whale shark, which is the largest fish in the world, frequently visits the marine areas of the proposed site. Two species of reef building marine corals occur in this area too.

133. Population size of the proposed Albay Biosphere Reserve or Albay Province in 2010 was 326,489 in the buffer zone, and 906,943 in the transition area. In terms of development function, agriculture is the main source of income in this area. Irrigated rice paddies are the most practiced form of agriculture in lowland areas. Fruit trees are cultivated at the backyard of residential areas. Fishing is the main livelihood along the shores in Albay. In addition to agriculture and fishing, tourism is a growing industry, centered at the Mount Mayon Natural Park. Mount Mayon (elevation of 2,462m) is a remarkably symmetrical mountain arising from a broad base in eastern Albay, and has been a symbol of direction for sailors coming to Philippines.

134. The Advisory Committee observed that the terrestrial buffer zones are very narrow (500 meters from the protected areas). It recommended the expansion of the buffer zone in order to ensure its function of protecting the core area. The Advisory Committee also noted that there is no buffer zone nor transition area in the marine areas and therefore encouraged the national authorities to consider the delineation of the marine buffer zone and transition area. Noting that Albay is visited by five marine turtle species, the Advisory Committee recommended that the national authorities take appropriate measures to preserve the turtle spawning site at the beach, and to consider using these beaches for ecotourism.

135. The authorities are requested to ensure the protection of the beaches, mangroves and offshore areas that are ecologically connected. The Advisory Committee finally requested that the national authorities find solutions to cope with the threats against the biodiversity and ecosystem stability, by increasing public awareness and by involvement of local people in the management of the site. The Advisory Committee recommended the proposal to be **approved pending** the re-zonation to expand the buffer zone surrounding the terrestrial core areas.

136. **Jozani-Chwaka Bay (Tanzania)** The Advisory Committee welcomed the nomination of this site situated in the Island of Zanzibar and which contains its only national park.

137. The proposed biosphere reserve covers a total area of 21,274 ha comprising of 2,063 ha core area, 4,227 ha buffer zone and 14,984 ha transition zone. It is Ramsar site, World heritage site and Convention on Biological Diversity monitoring site for red colobus and duikers. The landscape consists of mosaics of mangroves, tropical forests and coral rug forests, groundwater, salt marshes and agricultural and residential areas. The area is a biodiversity hotspot area including inter alia reef fish species, two species of dolphins, the Zanzibar leopard (*Panther pardus adersi*), 168 species of birds including 30 of global and regional relevance, 25 species of reptiles, and 19 species of amphibians including *Kassina jozani* which is endemic only to the proposed biosphere reserve. Out of the 291 plant species belonging to 83 families, 21 are known to be threatened or endangered. Several of the plants are important for traditional medicines.

138. With a population of over 16,000 inhabitants, the leading economic contributor in Zanzibar is tourism supported by sustainable livelihoods like fishing, bee keeping, butterfly and marine turtle rearing and crabs fattening providing benefit sharing. Community capacity building is fostered through training on entrepreneurship, conservation and law enforcement. The linkage between three zones and functions is well articulated in the nomination.

139. The Advisory Committee acknowledged the double collaborative management systems in place: i) the Park advisory board of the core area; ii) Community Forest Management Agreements recognized under national legislation in the buffer zone and transition areas. However, the advisory committee noted that a coordination structure for the entire proposed biosphere reserve was not established and the management plan was outdated and did not take into account the existence of the proposed biosphere reserve. The Advisory Committee recommended that this site be **approved pending** receipt of the following information:

- the provision of translated and signed copies of the agreement with the “Shehia” (smallest administrative units in Zanzibar).
- a clear explanation why the area around Charawe is not considered as a buffer zone
- the provision of a road map to establish a coordination structure for the entire biosphere reserve based on the two existing management systems and to revise the outdated management plan

140. The requested information should be submitted to the MAB Secretariat by 29th of February 2016 to be considered by next MAB Council or by 30th September 2016.

Extension, rezoning or renaming of already existing biosphere reserves recommended for approval pending the submission of specific information

141. **Selve Costiere di Toscana Biosphere Reserve - Extension and renaming of former Selve Pisana Biosphere Reserve (Italy)** The Advisory Committee welcomed the nomination file for the proposed Selve Costiere di Toscana Biosphere Reserve, which is an extension and renaming of Selve Pisana Biosphere Reserve designated in 2004.

142. It is located along the Mediterranean coast of Italy to the west of Pisa city. The area is a mosaic of ecosystems related to estuaries, wetlands as an important bird habitat, dunes with *Amophilla arenaria*, dune forests of anthropogenic origin with *Pinus pinea* and *Pinus pinaster*, lagoon, bogs and marshes, rare forests, mountains covered by maritime pine woods and rare oak-trees. The area hosts 10 endemic species of plants and 5 endemic species of animals, among them two species of bats breeding in the buffer zone. The extension is planned for two plain zones, hill region in central eastern part and vast area in Monte Pisani. The proposed area encompasses 43,132.57 ha, of which 8,253.50 ha core areas, the buffer zones covers 15,927.00 ha for the terrestrial part and 947.58 ha for the marine part, and the transition area covers 18.004.40 ha. The core area is composed of a cluster of 18 zones. The objective of the proposed area is to conserve natural values and implement sustainable activities in agriculture, sylviculture and tourism.

143. The 72,600 inhabitants live mostly in the transition zone. Agritourism, sport and cultural tourism are well-developed. The site welcomes more than 1 million tourists every year mostly in the transition area. The main touristic attractions inland are the seaside activities, outdoor activities in Monti Pisani and the cultural sites. The territories host for example the basilica San Piero a Grado or the Calci Carthusian monastery, but also ancient roman ruins near Monti Pisana. Many researches are conducted about various subjects (fauna, flora, intensity of human activities, agronomy, and invasive species) by a range of centers and institutes such as Pisa University, Joint Research Center for the European Commission.

144. The Advisory Committee noted with appreciation that a special bottom-up management scheme was designed, with decision body for communities. This governance system could ensure the participatory implication of local communities, experts and stakeholders. The Advisory Committee commended the authorities for the involvement of young people in the nomination process to ensure intergenerational cooperation. The Advisory Committee noted that the draft management plan would be finalized and adopted after the designation.

145. The Advisory Committee concluded that the proposal be **approved pending** the receipt and approval of the following information by end of February 2016 to be considered by next MAB Council or by 30th September 2016:

- To reconsider the proposed zonation, in order to ensure that all core areas are surrounded by or adjacent to buffer zones and in this process, to consider that some of the proposed transition areas could be considered as buffer zones since they fulfill the criteria for being buffer zones already
- To submit a revised zonation map and provide clarification on the rationale for the size of the marine buffer zone and the absence of a marine transition area;
- To better describe the monitoring and types of tourism in the proposed area;
- To explain why signatures of authorities in charge are the same for all the three zones (pages 24-25-26-27-28);
- To explain why the agreement is only mentioning seven municipalities (annexe 3) while the extension includes nine municipalities, and to explain how would Lucca and Capannori municipalities will work with the other municipalities.

146. **Masurian Lakes Biosphere Reserve - Extension and renaming of former Lake Luknajno Biosphere Reserve (Poland)** The Advisory Committee welcomed the nomination file for Masurian Lake Biosphere Reserve, which is an extension and renaming of the Biosphere Reserve Lake Łuknajno, designated in 1976.

147. The proposed site is a Lakeland area in northeastern Poland within the geographical region of Masuria. The western part is located in the Mrogowa Lakeland and the eastern part belongs to the Land of Great Masurian Lakes. The proposed site covers 57,751.97 ha: a core area of 6,824.58 ha, a buffer zone of 14,674.26 ha, and a transition area of 36,253.13 ha. The area covers the largest lake in Poland, Lake Sniardwy, and one of the largest forest complexes in Poland. The area includes 23 habitats among them 10 priority habitats such as marshy pine coniferous forest and Boreal spruce forest. The considerable diversity of forest ecosystems is reflected in the richness of the animal world, including the grey wolf and the red deer.

148. The area of the proposed Masurian Lakes Biosphere Reserve is distinguished by a relatively low population density due to high contribution of forest areas and major water bodies. The town of Mikolajki in the northern part of the reserve, and numerous villages constitute the main areas of concentration of local communities. The human population amounts to approximately 8,300 inhabitants. The mostly pristine nature attracts around 350,000 visitors annually. The main recreational activities are walking trails, sailing, canoeing on the Krutynia River, horse riding and cycling. The fastest branches of the economy in the area are therefore tourism but also agriculture, forestry and fishery. Many researches are conducted by the Warsaw University, the Polish Academy of sciences in Popielno and the one in Mikolajki, the Masurian Landscape Park thanks to three important research stations located within the proposed area.

149. It is distinguished by traditional stable and reserve breeding of two species: Polish pony, which is recognized as a unique environmental-breeding relic evidencing the contribution of Poland in the global breeding culture since 1949, and Polish Red Cattle. The latter constitutes valuable material for ecological agriculture in biological and ethnographic terms.

150. The area has considerable historical-cultural resources. The mixed character of the population of the area (Masurians, Germans, Russians, Ukrainians, Belarusians) particularly determined a multitude of cultural and religious traditions that presents important intangible heritage.).

151. The Advisory Committee noted with appreciation that the nomination process has been conducted in participatory way. The involvement of stakeholders in the future management of the biosphere reserve will be implemented through the establishment of the Coordination

Board/Steering Committee of the Masurian Lakes Biosphere Reserve. It will engage the representatives of the local authorities, forest districts, non-governmental organizations, representatives of research stations, entrepreneurs, and institutions related to nature protection – Regional Directorate for Environmental Protection in Olsztyn and Masurian Landscape Park. The draft of the management plan will be adopted after the nomination in participatory way.

152. The Advisory Committee acknowledged the very well prepared nomination file presenting clear conservation objectives with involvement of research institutions and local population. It noted that the education programmes are well in place and that research studies include also socio-economic aspects. It also noted that the objective of the proposed site is to increase the quality of life and strengthening the identity of local people through the different activities of the proposed area.

153. The Advisory Committee recommended that the proposal be **approved pending** the receipt and approval of the following information by end of February 2016 to be considered by next MAB Council or by 30th September 2016:

- Further clarify the boundaries of the southern part of the lake, which is not surrounded by the transition area (pages 152, 153 and 241) and provide an updated zonation map;
- Endorsements of all municipalities involved;
- To describe further how will the local communities be involved in the management of the proposed biosphere reserve, in addition to open public discussions during the meetings of the Committee (Page 138 point 17.3.2).

New nominations recommended for deferral

154. **Iron Gates (Romania)** The Advisory Committee welcomed this proposal by Romania. The proposed site is located in south western Romania, in Danube river gorge, along the border with Serbia. It includes 48 municipalities with population exceeding 49,000 people. The total surface of the proposed site is 128,341 ha, divided into 12,998 hectares of core areas, 23,538 hectares of buffer zones and 91,805 hectares of transition area. The area has multiple designations such as Iron Gates Natural Park (designation corresponding to the IUCN category V - Protected landscape), the Iron Gates wetland (Ramsar site) and protected areas within the Natura 2000 network (both SCIs and SPAs).

155. The continental temperate climate with Mediterranean influences (hot and dry summers with mild rainy winters) favors occurrence of many thermophilous plants and animals that adapted to the local conditions. There are 1,668 vegetal taxa (only higher plants) including 28 endemics as well as over 5,200 animal species identified in the area with most of the reptile, amphibians and birds species protected at an international and national level. The Iron Gate area also represents a flyway of world importance.

156. Main economic activity is currently energy production as the Iron Gates facility is the biggest hydro electrical power plant in Romania. Mining was another important activity, but it is gradually declining since 1989. Other economic activities concentrated in urban areas include ship building and productions of automobile components. In rural areas prevail no intensive forms of agriculture, managing small fields, with very low use of mechanization, pesticides and fertilizers, resulting in low but resilient and sustainable production. Tourism is in developing stage, building on natural and cultural properties of the region and will have more important role in the future.

157. The Advisory Committee acknowledged that cross-border cooperation has been initiated between the Iron Gates and Djerdap National Park in Serbia and also noted good possibilities for implementing the logistic function activities.

158. The Advisory Committee also noted with concern that the area of proposed Iron Gates Biosphere Reserve overlaps totally with the existing Iron Gates Natural Park. The Advisory Committee thanked the authorities for the additional information provided but expressed some concerns on the proposed biosphere reserve management and territorial structure, based mainly on the Natural Park which may cause some confusion.

159. The Advisory Committee recommended that Iron Gates be **deferred** and further recommended that national authorities resubmit a proposal including the following elements:

- the submission of a further elaborated governance structure that differs from the Administration of the Iron Gates Natural Park and is inclusive, comprehensive and ensures local stakeholders' equal position in participation in the decision making processes and in biosphere reserve management, including a clear common, shared vision by the local communities for the designation as a biosphere reserve;
- the submission of a proposal of measures to be adopted to distinguish the proposed biosphere reserve from the Natural Park to prevent confusion between the designations and purpose.
- a detailed zonation map showing that all core areas are surrounded by or adjacent to buffer zones, noting that some of the transition areas proposed may be transformed into buffer zones as they meet the criteria for buffer zonation.

160. **Alto Turia (Spain)** The Advisory Committee welcomed this new proposal submitted by the Spanish authorities for Alto Turia, located in the Valencian Province. The proposed biosphere reserve covers a total area of 67,080.00 ha (core area: 6,987.38 ha; buffer zone: 49,513.38 ha; transition area: 10,805.27 ha). It is uniquely positioned in the middle watercourse of the Turia River. The Alto Turia region is characterized by the presence of a diverse, varied and valuable physical environment.

161. The territory is bordered by the south-eastern edge of mountain ranges of the Iberian system. The main peaks of the proposed reserve are Tortajada (1,515 m), Campalvo (1,329 m) and Picarcho (1,305 m) in the northern part of the area lying inside the reserve boundaries; and El Navazo (1,103 m) and El Remedio (1054 m) in the southern part of the area.

162. The region includes small towns located mainly in the transition zone (5,714 inhabitants). These have tried to survive using their own resources, with low levels of agriculture and farming (an underdeveloped industry) and a small tourist sector, but face significant problems of rural population drift.

163. The main aim of the proposed biosphere reserve is the conservation and development of the valuable natural and cultural heritage. The territory has been severely affected by depopulation and a downturn in productive activities. This development project will provide a necessary economic boost emphasizing the self-ownership and use of resources in a sustainable manner. The objective is to demonstrate that it is possible to recover and re-develop Alto Turia, transforming the area from a territory with a high degree of depopulation into a society that makes sustainable development its main activity and way of life. This area will serve as a model approach showing how human beings can live in harmony with the environment.

164. The Advisory Committee, however, found that the zoning of the proposal was not fully functional. Five core areas of the proposal lay mostly at the border of the biosphere reserve, and a large part of the core areas were not surrounded by buffer zones and transition areas. No additional information is given outside of the biosphere reserve.

165. The Advisory Committee welcomed this nomination proposal and recommended that the site to be **deferred** and recommended the revision of the zonation.

Extension, rezoning or renaming of already existing biosphere reserves recommended for deferral

166. **Fitzgerald Biosphere – Extension and renaming of former Fitzgerald River National Park Biosphere Reserve (Australia)** The Fitzgerald River National Park Biosphere Reserve located in the state of Western Australia was originally designated as biosphere reserve in 1978. However, this site being a pre-Seville site has not been fully functioning as a biosphere reserve due to the lack of an appropriate buffer zone and transition area. Hence this expansion and re-nomination. The total area of this proposed biosphere reserve is 1.529 million ha: comprising 296,390 ha as core area; 140,797 ha as buffer zone; 1,092,208 ha terrestrial transition area and 157,286 ha as marine transition area.

167. The range of geological systems (barren coastal range, marine plains, granite upland, limestone ridges) is overlain by complex coastal and subcoastal landforms, drainages, wetlands and soil systems (e.g., deep sands, salt lakes) that give rise to a complex mosaic of vegetation systems. Conservation is attained in all zones, but most significantly in the core area (Fitzgerald River National Park), which is one of the richest places on earth for botanical diversity – 1,665 species of plants including 62 endemics found in eucalypt woodlands, allocasuarina and melaleuca habitats. This area also has one of the most complete sets of vertebrate fauna (e.g., tammar wallaby and other strange-sounding names). Surrounding the core area and interspersing with terrestrial transition area, the buffer zone includes terrestrial and coastal nature and other reserves and public lands which are not subject to mineral exploration and mining. Land uses include conservation, protection of water supplies, recreation and camping, and Aboriginal use.

168. The transition area covers large areas of exploration and mining sites which are ecologically sustainable following strict government legislation within the framework of limiting and managing environmental damage and providing offsets. Providing significant economic benefits (to Ravensthorpe communities), it has led to housing developments and commercial opportunities. The marine component comprises estuaries, streams, coastal ecosystems with significant interaction between oceans and river catchment. It has been assigned to the transition area because of the significant coastal recreation and seasonal tourism (during holidays, school breaks) and major commercial (abalone, purse seine, beach seine and gillnetting) and recreational fishing following ecosystem-based fisheries management. Its pristine waters include calving (southern right whale), migration (humpback whales) and feeding (seals, sealions, seabirds) grounds.

169. Logistic support is provided by Commonwealth legislation and policy and state agencies (e.g., National Park Ranger), local government authorities (e.g., Ravensthorpe and 3 other shires), various community groups, universities and research institutions and international groups.

170. The Advisory Committee commended the Australian national authorities for their tremendous efforts towards improving the functionality of this site according to the Seville Strategy and the Statutory Framework of the World Network of Biosphere Reserves. However, after careful examination of this new extension application, the Advisory Committee noted that the size of the buffer zone which was indicated in the nomination file did not correspond to what is depicted on the zonation map. It also observed that the buffer zone is not contiguous to or surrounding the core area and therefore does not give adequate protection to the core area.

171. The Advisory Committee therefore requested that the national authorities rezone this area such that the buffer would be contiguous with the core area and to submit a new zonation map accordingly. The Advisory Committee therefore recommended that this proposal be **deferred**.

172. **Cuenca Alto del Manzanares Biosphere Reserve - Rezoning (Spain)** The Advisory Committee welcomed the rezoning proposal to include the previous recommendation of the Council in 2006 to include an adequate transition area. This site has a unique character due to its location in the immediate neighbourhood of Madrid, reflected in the zoning proposal that follows the Regional Park Cuenca Alta del Río Manzanares and the Sierra de Guadarrama National Park that guarantee the three functions of this peri-urban biosphere reserve. The new extension covers a total area of 46,787.19 ha (core: 18,683.85 ha; buffer: 24,641.17 ha and transition: 3,462.17 ha).

173. The biosphere reserve is located among medium-altitude and high-altitude mountains with valleys and rocky areas consisting of granite and gneiss. The 'Pedriza de Manzanares' is a particular feature of note, comprising a spectacular geological landscape dominated by strongly eroded granite formations of enormous capriciously shaped blocks known as 'berruecos', with a Mediterranean vegetation of aromatic plants such as thyme, lavender, Spanish lavender, rosemary, and Cistus or Rock roses. Among the tree formations are oak and ash groves, juniper and pine groves and, at higher altitudes, *Cytisusoro mediterraneus* scrubland.

174. The Advisory Committee noted that no change has taken place in the size of the biosphere reserve and some of the buffer zones have been transformed into transition areas. The Advisory Committee also noted that significant human activities are taking place in the core area that contravenes the proposed zonation system. Moreover, the core area is not surrounded by buffer zone and transition areas.

175. The Advisory Committee therefore proposes a total revision of the zonation proposal, and recommends that the re-zoning be **deferred**.