

**UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION
International Co-ordinating Council of the Man and the Biosphere (MAB) Programme**

Thirty-third session

Abuja, Nigeria (Hybrid meeting)
13 – 17 September 2021

FINAL REPORT

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1. Due to the continuing COVID-19 health situation and sanitary measures, and following the decision of the Bureau of the Man and the Biosphere (MAB) Programme, the 33rd Session of the International Co-ordinating Council of the MAB Programme (MAB-ICC) was held as a hybrid event from 13 to 17 September 2021. The MAB-ICC (hereafter 'MAB Council') included three meetings of the Bureau, which were conducted online on 1, 2 and 10 September 2021.
2. A total of 630 participants attended the 33rd session, of which 33 Members of the MAB Council, as elected by the UNESCO General Conference at its 39th and 40th sessions: Argentina, Australia, Austria, Colombia, Côte d'Ivoire, El Salvador, Estonia, France, Germany, Ghana, Haiti, Indonesia, Italy, Kazakhstan, Kenya, Luxembourg, Maldives, Mexico, Republic of Moldova, Morocco, Nigeria, Oman, Peru, Republic of Korea, Russian Federation, South Africa, Spain, Sudan, Sweden, Ukraine, United Arab Emirates, Viet Nam and Zambia. Congo did not attend.
3. Observers from the following Member States registered their attendance: Algeria, Andorra, Angola, Armenia, Bahrain, Bangladesh, Belarus, Belgium, Benin, Bosnia and Herzegovina, Brazil, Burkina Faso, Burundi, Cabo Verde, Cameroun, Canada, Chile, China, Dominica, Costa Rica, Croatia, Cuba, Curaçao, Czech Republic, Democratic People's Republic of Korea, Denmark, Djibouti, Dominican Republic, Ecuador, Egypt, Equatorial Guinea, Eswatini, Finland, Gabon, Georgia, Greece, Guinea, Honduras, Hungary, Iceland, Iran (Islamic Republic of), Jamaica, Japan, Kuwait, Lao People's Democratic Republic, Lesotho, Liberia, Libya, Lithuania, Madagascar, Malaysia, Mauritius, Mongolia, Mozambique, Myanmar, Nauru, Nicaragua, Niger, Pakistan, Palau, Panama, Philippines, Poland, Portugal, Qatar, Romania, Saudi Arabia, Senegal, Serbia, Seychelles, Sierra Leon, Sint Maarten, Slovakia, Slovenia, Sri Lanka, Saint Kitts and Nevis, Switzerland, Thailand, Trinidad and Tobago, Turkey, Uganda, United Kingdom of Great Britain and Northern Ireland, Uruguay, Uzbekistan, Venezuela, Yemen, Zimbabwe.
4. The full list of the participants is presented in Annex 1 to this report.
5. The Director-General of UNESCO, Ms Audrey Azoulay, attended the opening ceremony of the 33rd session of the International Coordinating Council of the Man and the Biosphere (MAB-ICC) in person. Her official visit to Nigeria from September 11–13, 2021 was on the invitation of the Nigerian Government to participate in the 33rd MAB-ICC session. Prior to the session, the Director-General, accompanied by the Chair of the MAB Council, Mr Adepaju Olatunde Adeshola, and the UNESCO and Nigeria teams, visited the Oban Biosphere Reserve in Cross River State, Nigeria. The Director-General inspected a Guard of Honour mounted by the rangers of the biosphere reserve. At the palace of Nsan of Oban, one of the traditional rulers within the Oban Biosphere Reserve, conferred the Director-General with an honorary traditional title, 'Mother of Light'. The Director-General also interacted with the community to learn how the BR had begun to impact on their lives, particularly for women and children. During her trek in the biosphere reserve she observed wild fauna and flora. At the end of the trek, she also met with young trainees from the Forestry Wildlife and Range Management University of Agriculture in Makurdi, and she spoke to them about the MAB Youth Network and the relevance for them of joining.

ITEM I. OPENING CEREMONY

6. The opening ceremony was held in the Banquet Hall at the Presidential Palace in Abuja, Nigeria. It was attended *in presentia* by representatives of Member States and accredited UN agencies in Nigeria, as well as state representatives and dignitaries. The scientific community, Youth and Women associations, as well as various NGOs, were also in attendance. Members of the MAB Council were connected online and the event was broadcast live on Nigerian TV and on YouTube. Speeches were given by five Federal Ministers, the UN Resident Coordinator, the Ambassador, Permanent Delegate of Nigeria to UNESCO, the Director-General of UNESCO, and the Secretary of State representing the President of Nigeria. The MAB ICC Chair delivered a presentation on MAB programme and the vote of thanks.
7. The five Ministers present were as follows: The Federal Minister of Environment, the Federal Minister of Information and Culture, the Federal Minister of Water Resources, the Federal Minister of Women Affairs and Social Development, and the Federal Minister of Science, Technology and Innovation.
8. The Federal ministers of Environment and of Women Affairs highlighted elements of particular importance to the MAB Programme. The Minister of Environment remarked that Nigeria is in the process of creating 10 new protected areas and is preparing four biosphere reserves nomination dossiers. The Minister of Women Affairs requested that 'Man' of the MAB Programme be changed to take into account the key roles that women play in biodiversity conservation.
9. The Permanent Delegate of Nigeria to UNESCO recalled Nigeria's support to UNESCO, noting the high recognition of the MAB Programme. She highlighted the importance of the Federal Research Institute of Nigeria (FRIN) led by its director, Mr Adepoju Olatunde Adeshola, the current Chair of the MAB Council.
10. On behalf of the President of Nigeria, the Secretary of State expressed appreciation and honour in hosting the MAB-ICC on African soil. He spoke of how the current COVID-19 pandemic had made it pressing, now more than ever, for humanity to better understand the critical effects of biodiversity loss, but also to appreciate how biodiversity conservation can contribute significantly to resolving a large number of the problems that the world currently faces globally.
11. He announced that the President of Nigeria had made a pledge at the 74th session of the United Nations General Assembly in 2020 that Nigeria would plant 25 million trees nationwide. This pledge has seen Nigeria planting close to 80 per cent of the total number of trees across the country. When fully implemented and further expanded, these efforts will pave the way for improved socio-economic livelihoods, social equity and development, increased forest cover and, significantly, the creation of a veritable carbon sink for climate change mitigation and adaption, as well as a reduction in greenhouse gas emissions.
12. He concluded by stating that the importance of the work of the MAB Council in creating biosphere reserves cannot be over-emphasized. This work consists of reconciling humanity and Nature, yet the challenge remains to continually demonstrate that

biodiversity conservation can foster human development thanks to its continuous provision of ecological services.

13. Opening Remarks of the President and Commander-in-Chief of the Armed Forces, Federal Republic of Nigeria, and Welcome Remark of the Ambassador, Permanent Delegate of Federal Republic of Nigeria to UNESCO, are attached as Annex 4 and 5.

Opening Remarks of the Director-General of UNESCO, Ms Audrey Azoulay

14. The Director-General of UNESCO, Ms Audrey Azoulay, spoke of how the erosion of biodiversity is no longer an assumption and that this loss can in fact already be felt and measured in our daily lives. With the impending collapse looming, it is not only human survival that is at stake, but also the beauty, the poetry, and the diversity of the planet that risks disappearing.
15. However, this collapse is not inevitable. There is still time to make peace with the planet. To this end, the MAB Programme, which is celebrating its 50th anniversary in 2021, continues to play a pioneering role. The MAB Programme shows that it is possible to reinvent our relationship with the living planet and to combine development and nature protection by relying on local and indigenous populations, who are guardians of 80 per cent of ecosystems, and have much to teach the world.
16. Ms Audrey Azoulay warmly thanked the President of the Federal Republic of Nigeria, Mr Muhammadu Buhari, for hosting the work of the MAB Council.
17. She highlighted the fact that the world has just ten years to reach the target set by the United Nations for 2030, namely, to designate 30 per cent of the planet as protected areas. For this reason, on 3 September 2021, UNESCO made a commitment at the International Union for Conservation of Nature (IUCN) Congress in Marseille to not only double the number of protected areas under the auspices of UNESCO, but also to intensify efforts to manage these areas.
18. The Director-General indicated that this will almost certainly involve the creation of new biosphere reserves around the world and, in particular, in Africa. This presented important challenges as only 12 per cent of biosphere reserves are African. Fortunately, Nigeria is part of a healthy dynamic with the creation of three new biosphere reserves in 2020.
19. She spoke of the relevance of the Biosphere and Heritage of Lake Chad (BIOPALT) project that aims to restore ecosystems, while at the same time establishing social links and drawing on the strengths of the intersection between culture, heritage and science in the Lake Chad region.
20. The Director-General expressed hope that the 50th Anniversary of the MAB Council – the first on African soil – would continue to drive this momentum. It was also an occasion to celebrate the women and men who, over the course of 50 years, have laid the foundation of this programme that goes to the heart of UNESCO's response to this crisis.

21. She contended that the ecological, economic, cultural, social and ethical lessons learned have shaped the world, but they must reach far beyond biosphere reserves to reach the schools. In this regard, UNESCO is fully mobilized to ensure that the environment is placed at the heart of school curricula by 2025.
22. Ms Azoulay concluded that artists, documentary filmmakers, and all those who give us the opportunity to see and feel, to touch and be touched by these fascinating living worlds, so close and yet so unknown, have an essential role to play. It is through knowledge and the wonderment of life that will enable humanity to reconcile nature and the living world.
23. The Nigerian Minister of State for Environment and the Director-General then launched the MAB 50th Exhibition 'It's About Life', which generously received the support of the Abertis Foundation, host of the UNESCO Category 2 Centre on Mediterranean Biosphere Reserves in Spain.

Opening by the Chair of the MAB-ICC

24. The Chair of the MAB Council welcomed the members of the MAB Council, the Observer delegations of Member States, as well as representatives of international organizations, to the 33rd Session of the International Coordinating Council of the Man and the Biosphere (MAB) Programme (MAB-ICC).
25. He was particularly grateful to the Director-General, Ms Audrey Azoulay, for honouring Nigeria with her presence at this MAB Council session in Abuja, Nigeria. This is an historical event as it was the first time that Nigeria, and indeed Africa, was hosting a session of the MAB Council.
26. On behalf of Nigeria and the entire African continent, the Chair offered profound thanks to the Assistant Director-General for Natural Sciences, Ms Shamila Nair-Bedoeulle for her unflinching support and unrelenting efforts that culminated in this historic moment, despite being unable to physically attend the meeting in Abuja.
27. He praised the Ambassador of Nigeria to UNESCO, Dr Hajo Sani, for her unwavering resourcefulness and supportive working relationship in ensuring the successful hosting of this event.
28. He also congratulated Ms Noeline Raondry-Rakotoarisoa on her appointment as the acting Director of the Division of Ecological and Earth Sciences and the Secretary of the MAB Programme. The untiring commitments and dedicated efforts of the UNESCO-MAB programme secretariat cannot be quantified.
29. It was recalled that Nigeria had been scheduled to host this meeting in 2020, but the COVID-19 pandemic meant that the event had to be held virtually, with Nigeria hosting the sessions through a hybrid platform (online and on site presence). Mr Adeshola remarked that although the pandemic continued to transform our daily routines, life goes on, and one cannot continue to dwell on uncertainties. Instead, we must evolve, adapt and be resilient to change.

30. It was recalled that this session of the MAB Council was a unique and historic session as it coincided with the 50th anniversary of the MAB programme. It was also an occasion to make important decisions with regard to the completion of the Exit Strategy and the implementation of the 'Process of Excellence and Enhancement of the WNBR'.
31. He took the opportunity to recognize the work of Ambassador and spokesperson of the 50th anniversary of the MAB programme, Dr Jane Goodall, the world's foremost expert on Chimpanzee. He paid tribute to her representation of the values of the MAB Programme, her groundbreaking scientific research, respect for biodiversity and environmental conservation, as well as her promotion of sustainable development; values that represent the MAB Programme. Other spokespersons and young ambassadors, from each MAB Youth Network region, were also recognized for their advocacy and promotion of the ideals of the MAB Programme.
32. The Chair further highlighted that we are all advocates of the ideals of the MAB Programme and must continue to promote the values of biosphere reserves. Fifty years of the MAB programme had demonstrated how the results-oriented approach led to the successful and harmonious integration of people and nature for sustainable development through participatory dialogue, knowledge-sharing; poverty reduction and improvements in human well-being, respect for cultural values, and society's ability to cope with change.
33. In the same vein, the Global Strategy (2015–2025) for UNESCO's MAB and the Biosphere Programme, with its associated Lima Action Plan (2016–2025), underscored the instrumental role of the MAB Programme in the implementation of the 2030 Agenda and the Sustainable Development Goals (SDGs).
34. Mr Adeshola Olatunde Adepoju reiterated that environmental sustainability and ecosystem conservation, notably, through the peaceful and harmonious existence with nature, calls on collaborative, collective and coordinated action by governments, individuals, businesses, consumers, civil society, and the scientific and technological communities.

ITEM II. REPORT BY THE CHAIR OF THE MAB COUNCIL

35. Mr Adeshola Olatunde Adepoju praised the MAB Secretariat and the MAB Bureau members for their considerable support and efforts that ensured that the 33rd session of the MAB Council had become a reality in Abuja, Nigeria.
36. He recalled that Nigeria was scheduled to host the 32nd session of the MAB Council in 2020, but due to the pandemic, the session was instead held virtually for the very first time in its history. He noted that despite all the difficulties, Nigeria was hosting the world through a hybrid platform (online and on site presence) in Abuja. This is an historic and indelible milestone for Africa.
37. The Chair spoke of how the COVID-19 pandemic has left an indelible mark across the world. It has demonstrated the MAB Programme's level of adaptability, perseverance, evolution and responsiveness to change, which is a continuous process. The emergence and re-emergence of the COVID-19 pandemic has changed our reality. The pandemic

- has revealed to many the value of freedom; the freedom to move, live and associate with our loved ones and each other. Many more would have participated at this session if not for the pandemic. Most importantly, the pandemic has demonstrated to the world the importance of human resilience and interconnectivity in fighting a common enemy, reminding us of the danger of disregarding global cooperation and interdependence.
38. Mr Adeshola Adepoju underlined the need to work together to overcome impossible tasks and challenging hurdles. Significantly, the pandemic has further exposed the impediments and consequences associated with change, disruption and the unsustainable use of natural ecosystems. We need to learn to live in peace and harmony with nature.
 39. The Chair highlighted some key activities since the 32nd session of the MAB Council. The MAB Bureau had held various meetings, notably those relating to the hosting of this session of the MAB Council; the MAB Young Scientist Awards; the selection and endorsement of the Michel Batisse Award; examination of the report of the International Advisory Committee for Biosphere Reserves (IACBR) and additional information sent by countries; and the 50th anniversary of MAB, among other items.
 40. Other activities include the launch of the UN Decade on Ecosystem Restoration (2021–2030) during the 2021 commemoration of World Environment Day on 4 June 2021. It was noted that this is embedded in the three pillars of UNESCO's intersectoral strategy for biodiversity, including, i) restoring the relationship between humans and nature; ii) regenerating ecosystems and conserving the harmony of our ecosystems; and iii) amplifying the power of youth.
 41. Mr Adepoju recalled that Nigeria's National MAB Committee, in collaboration with the UNESCO Multisectoral Regional Office in Abuja, had – in June 2021 – conducted a regional training for experts from Liberia, Guinea and Sierra Leone on the methodology of the project 'Green Economy in Biosphere Reserve Methodology' (GEBR) and on the operations of the MAB Committee. The focus of the workshop was to build and strengthen the capacity of biosphere reserves, MAB experts and park managers in Liberia, Sierra Leone, and Guinea on GEBR methodology, the nomination of biosphere reserves and operations of the MAB Committee.
 42. He further reported of regional training on Green Economy in Biosphere Reserve Methodology (GEBR) and Operations of MAB Committee. In this regard, he highlighted the pertinence of underscoring the fact that the MAB programme is gaining and receiving more attention locally, nationally and globally, especially as it relates to enhancing relationships between people and their environments, improving human livelihoods, safeguarding natural ecosystems, promoting innovative approaches to economic development and environmental sustainability, mitigating and adapting to climate change variability, and promoting the green economy, among other advances. This is particularly evident in the increasing number of national biosphere reserves and transboundary biosphere reserves.
 43. Mr Adepoju recalled that the MAB Programme has over time demonstrated decades of experience and excellence in integrated sustainable development, conservation, improving livelihoods and, ultimately, establishing harmonious relationships between

people and nature. It was therefore time to reflect on the immeasurable and multidimensional benefits of biosphere reserves to humanity, particularly as models for the implementation of the 2030 Agenda for Sustainable Development.

44. He commended the growing youth involvement in MAB programmes, especially in the dissemination, communication and sharing of experiences, and stories of activities in biosphere reserves on social media. This went a long way in promoting the ideals of MAB programmes throughout the world. Nevertheless, there was still a need for meetings, workshops and training of biosphere managers and MAB focal points with regard to exchanging experiences and strengthening and building capacities for the effective management of biosphere reserves.
45. He spoke of his appreciation of the Director-General for accepting the call to physically attend the MAB Council session in Nigeria. He remarked on the honour bestowed on Nigeria and Africa as a whole. He also expressed his gratitude to the permanent delegates, the National Commissions, the MAB National Committees, and the biosphere reserve managers and networks for supporting the MAB Programme. He concluded his report with the motto, 'It's About Life'.

ITEM III. ADOPTION OF THE AGENDA AND TIMETABLE

46. The MAB Council adopted the agenda and timetable of its 33rd session with only a minor change to the order of Item 13 on the Michel Batisse Award and Item 12 on the MAB Young Scientist Award 2021 to enable the Michel Batisse Award winner from Australia to make a live video presentation. It was also indicated that, for the same reason, the announcement of new BRs will be done by timezone.

ITEM IV. BRIEFING ON WORKING METHODS OF THE MAB COUNCIL HYBRID MEETING

47. The MAB Secretariat provided key technical information to participants on aspects related to the conduct of the session, which was held for the first time as a hybrid event with a presential session in Abuja, Nigeria, and a parallel online session connecting the world wide participants of this 33rd session.
48. In order to address the different time zones, the provisional timetable and the agenda had been duly adapted. It was noted that the agenda did not include oral presentations of National Reports. Member States were encouraged to only submit their National Reports in written form in advance of the session. Written National Reports received by 15 August 2021 were compiled in an information document SC-21/CONF.232/INF.5, 'National Reports of Member States'.
49. The Secretariat also presented the modalities of three side events
50. Following the presentation of Item IV, and in the temporary absence of the Chair, who joined the meeting of the President of the Federal Republic of Nigeria with the Director-

General of UNESCO, the chairmanship was temporarily changed. The Rapporteur, Mr Günter-Köck, assumed the duty of Chair for the afternoon session on 13 September.

ITEM V. REPORT OF THE SECRETARIAT OF THE MAB PROGRAMME

51. Ms Noeline Raondry Rakotoarisoa, in her capacity as the acting MAB Secretary, welcomed the participants to the 33rd session, expressing great appreciation to Nigeria for hosting the MAB Council for the first time in Africa.
52. The presentation began with key figures on the MAB Programme, recalling that there were currently 714 Biosphere Reserves (BRs) in 129 countries, including 21 Transboundary Biosphere Reserves (TBRs), of which one is transcontinental and one is transregional. However, these figures changed on 15 September 2021 [during this session] when new sites were approved by the MAB Council.
53. She then presented information related to the statutory duties and procedures of the MAB Programme and World Network of Biosphere Reserves (WNBR). In this regard, she recalled the 32nd session of the MAB Council, which was held online for the first time in October 2020. The session was held in two parts to allow for the election of the new Bureau, which had to be conducted in presential prior to the regular proceedings. In the first part, Mr Adepoju Adeshola of Nigeria was elected as the new Chair of the MAB Council and four new Vice-Chairs were appointed. The second part focused on regular items and took place online on 27 and 28 October 2020.
54. The 32nd MAB Council approved 25 new biosphere reserves, one of which is a transboundary site encompassing two national biosphere reserves and one existing transboundary biosphere reserve. Five new Member States joined the WNBR: Andorra, Cabo Verde, Comoros, Luxembourg, and Trinidad and Tobago. In this regard, the Secretary cited the words of Mr Miguel Clüsener-Godt, former Secretary of the MAB Programme, "I hope that more and more countries will join our network, so we can say we have the entire world community on board."
55. She then recalled the meetings of the Bureau of the MAB Council. In addition to the Bureau meetings held virtually three times during the 32nd session of the MAB Council, two online Bureau meetings were organized in April and June 2021 to discuss the preparations of its 33rd session so as to set the dates and agree on an appropriate format for the session in line with COVID-19 related sanitary measures. Furthermore, she recalled the six meetings of the Process of Excellence ad hoc working group, as well as a number of regional and thematic networks meetings.
56. Ms Raondry Rakotoarisoa then presented the Exit Strategy issues and the 'Process of Excellence and Enhancement of the WNBR as well as Quality Improvement of all Members of the WNBR', which was adopted in 2017 to ensure that biosphere reserves serve as models for the implementation of the 2030 Agenda for Sustainable Development. In this regard, she recalled that the ad hoc working group was established in 2018 and will present its proposal for consideration by the MAB Council with the understanding that the Exit Strategy will be completed at the MAB Council session in 2021 and that the 'Process of Excellence' will prevent any further Exit Strategy.

57. She further recalled that in 2013, 270 sites in 75 Member States were concerned by the Exit Strategy. Significant progress had been made since 2017, with all Member States responding to this request to institute the 'Process of Excellence', with 12 Member States deciding to voluntarily withdraw a total of 41 biosphere reserves from the WNBR. Out of the 16 sites currently undergoing the Exit Strategy and three sites in conflict areas, only six sites in five Member States (which are subject to the Exit Strategy) have been recommended for withdrawal by the 27th meeting of the International Advisory Committee for Biosphere Reserves (IACBR). In this regard, she recalled the meetings of the MAB Bureau held in a conjunction with this session in order to examine the additional information received from sites under the Exit Strategy.
58. She then informed the MAB Council that the 27th meeting of the IACBR was held virtually in March 2021. Among the biosphere reserve proposals received, four Member States aspired to be included in the WNBR for the first time: Lesotho, Libya, Saudi Arabia and Zambia.
59. Ms Raondry Rakotoarisoa presented the Technical Guidelines for Biosphere Reserves (TGBR), noting that they were currently available online in French, English and Spanish, and it was reported that they were being actively use by the MAB community.
60. She then presented key MAB activities since the 32th session of the MAB Council, adding that due to the COVID-19 pandemic, a number of meetings had been held virtually with MAB regional and thematic networks to reconnect and support all members, and redefine work plans.
61. In this regard, she reported on the AfriMAB Network meetings and its extraordinary General Assembly, as well as on SeaBRnet meetings, EABRN Steering Committee meetings, and IberoMAB Youth Network meetings. Regarding the World Network of Island and Coastal Biosphere Reserves (WNICBR), she informed the MAB Council that a call for project proposals had been launched aimed at mitigating the impact of the COVID-19 pandemic in island and coastal biosphere reserves. Four projects were selected from 32 proposals emanating from 17 Member States.
62. She then highlighted a number of MAB activities implemented in Africa and contributing to UNESCO's Global Priorities on Africa and Gender Equality, such as the completed EVAMAB project, 'Economic valuation of ecosystem services in Man and Biosphere Reserves: testing effective rapid assessment methods in selected African MABs (EVAMAB)' (2017–2019), funded by the Belgian Federal Science Policy Office (BELSPO) and implemented in four selected biosphere reserves in Benin, Ethiopia, Tanzania and Uganda. The main outcome of the project is the *Manual for the Valuation of Ecosystem services in African biosphere reserves*, which will be available by the end of 2021.
63. A special highlight was devoted to the extra-budgetary flagship project, 'Applying the transboundary biosphere reserve model to promote peace in the Lake Chad basin through sustainable management of its natural resources', or BIOSphere and Heritage of Lake Chad (BIOPALT), which was implemented in Cameroon, Central African Republic, Chad, Niger and Nigeria. The project was successfully launched at a dedicated international conference in Nigeria in February 2018 and will be completed by the end of 2021. In this

- regard, the Secretary recalled that in 2021, the five beneficiary Member States of BIOPALT had reported several important results.
64. She then reported on the 'Be-Resilient' project implemented by UNESCO Harare Office aimed at strengthening South African biosphere reserves and their communities to address the challenges of climate change and associated water-related hazards. Furthermore, she spoke of the work undertaken by UNESCO in Madagascar by the UNESCO Nairobi office in supporting the Malagasy government in a project aimed at reducing deforestation and forest degradation, and supporting local communities in developing green income-generating activities, effectively applying the MAB Programme model.
 65. Ms Raondry Rakotoarisoa recalled other important projects and partnerships, such as the US\$2 million project approved by Volkswagen AG with the support of the German Commission for UNESCO to support biosphere reserves in Germany, Poland and Spain.
 66. She also mentioned a small-scale activity for US\$50,000 on 'Nature-based solutions for marine and coastal biosphere reserves' implemented in cooperation with the Government of Flanders of the Kingdom of Belgium and the International Oceanographic Commission of UNESCO. Working closely with the local populations, this project seeks to enhance the spatial planning of island and coastal biosphere reserves in Chile, Ecuador and Peru.
 67. Ms Raondry Rakotoarisoa then reported on the celebration of the International Day for Biological Diversity, which took place on 22 May 2021. The UNESCO Forum 'Living Together on Earth' was organized on 27 May 2021 to highlight the multiple aspects of the links between humans and nature, including the perspective of activists, researchers, artists and young people. Five online panels were organized, where experts discussed the COVID-19 pandemic and nature-based solutions. MAB Youth also contributed to this day from around the world.
 68. She further recalled that the MAB Programme took part in celebrations for World Environment Day having marked the launch of the United Nations Decade of Ecosystem Restoration. As part of the official launch of the UN Decade, UNESCO – as UN Decade partner agency – organized and live-streamed a high-level panel and a side event on the reconciliation between humans and nature, particularly at UNESCO designated sites. UNESCO had been tasked by the Board of the UN Decade on Ecosystem Restoration to lead a panel on the 'Human-Nature' link.
 69. Ms Raondry Rakotoarisoa also pointed out that the MAB Programme will also enhance its participation with the Convention on Biological Diversity (CBD) and the Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services (IPBES), including in the second work programme and scoping phase of the new assessments.
 70. She then recalled the five-year partnership of the MAB Programme with Louis Vuitton Moët Hennessy (LVMH) to support the work of the MAB Programme on biodiversity. Collaboration within the UNESCO-LVMH partnership includes a programme addressing the drivers of deforestation and water pollution in eight biosphere reserves of the Amazon

- Basin. The partnership also includes the 'Women for Bees' programme with project partner, Guerlain, aimed at empowering women in biosphere reserves to support sustainable beekeeping and to develop capacity-building on pollination processes, as well as contributing towards raising awareness on the important role of beekeeping in maintaining biodiversity.
71. Ms Raondry Rakotoarisoa then underlined that AfriMAB established a network of 'biosphere reserves home to Great Apes' as a contribution to the United Nations Great Apes Survival Partnership (GRASP) coordinated by UNEP and UNESCO. The MAB Secretariat, with the support of the French National Museum of Natural History (MNHN) and Sebitoli Chimpanzee Project in Uganda, is implementing a project to survey and monitor great apes and their habitats in 21 African biosphere reserves with Unmanned Aerial Vehicles (UAVs), which will reduce human disturbance in these protected areas and prevent the risk of transmitting zoonotic diseases.
 72. She then spoke of the collaboration with the Congo Basin Forest Partnership (CBFP), which has expanded through the BIOPALT project in close collaboration with the UNESCO Yaoundé Office.
 73. She also reported on the Climate, Risk and Resilience Platform of UNESCO sites in Latin America and the Caribbean having been launched by the UNESCO Montevideo Office in September 2020 at the first meeting of the regional Technical and Scientific Advisory Group (TSAG).
 74. Furthermore, Ms Raondry Rakotoarisoa briefed the MAB Council on the official launch of the 50th anniversary of the MAB Programme, which took place during the UNESCO Biodiversity Forum on 24 March 2021, with several activities organized by the MAB Secretariat, the WNBR and its partners.
 75. She concluded by recalling that the current COVID-19 pandemic had created new challenges for the MAB Programme and the WNBR. Some fieldwork had to be delayed, but the MAB Programme has supported its biosphere reserves by both mobilizing funds and through technical support. The MAB Programme had proved its resilience, effectiveness and continued relevance, with a significant number of new nominations received and new people involved in the Programme and the WNBR. She emphasized that the MAB Programme and its WNBR had been working hard in 2021 to commemorate 50 years of the Programme, always keeping in mind the prior work carried out by its pioneers, but also increasingly by involving younger generations.
 76. Ms Raondry Rakotoarisoa emphasized that the MAB Programme and its WNBR expect to sustain this pace by implementing the 'Process of Excellence' strategy once adopted, and to expand the use of the Technical Guidelines for Biosphere Reserves (TGBR).
 77. The MAB Programme is actively seeking new partnerships to provide further support to its stakeholders, particularly among the youth, involving them in the programme. The MAB Programme continues to be a leader in developing new ideas and innovative concepts for the implementation of the SDGs.

78. Following the call by the Director-General of UNESCO, the MAB Programme wished to invite all UNESCO Member States to actively join the Programme by establishing MAB National Committees, and by nominating more and larger biosphere reserves with the aim to achieve biodiversity conservation and integrate sustainable development.
79. All the countries that took the floor congratulated Nigeria for organizing this 33rd session of the MAB Council in Abuja.
80. The delegation of the Republic of Korea informed the MAB Council that the TGBR would soon be available in Korean. It commended the MAB Secretariat for the successful activities implemented and for the results of the Exit Strategy process, thanking the efforts of the former MAB Secretary, Mr Miguel Clüsener-Godt, for his tireless efforts to strengthen the WNBR and for his contribution and support to the network of island and coastal BRs.
81. The delegations of Australia, Austria, France, Germany, Kenya and South Africa emphasized the great work carried out by the Secretariat despite the COVID-19 pandemic.
82. The delegations of Australia and France asked for more information on the involvement of the MAB Programme within the new Global Biodiversity framework, in particular, the key role that BRs should play to achieve related targets with regard to the OECM (Other effective area-based conservation measures) and the Convention on Biological Diversity (CBD). Australia referred to the Director-General's opening remarks that spoke of UNESCO's commitment to expand the UNESCO-designated protected areas, noting that these sites are under the jurisdiction of Member States
83. Australia referred to the statement made by the Nigerian Federal Minister of Women Affairs who suggested a name change for the Man and Biosphere Programme. Recognizing that it is not a new topic, it was requested that this question be introduced as an agenda item at the next MAB Council.
84. France informed the MAB Council that the University Paul Sabatier is collaborating with the École Régionale Postuniversitaire d'Aménagement et de Gestion intégrés des Forêts et Territoires tropicaux (ERAIFT) in the framework of the new Master degree on MAB, which was launched in Kinshasa (Democratic Republic of the Congo) in July 2021 with the support of UNESCO's BIOPALT project. The delegation wished to hear about the source of funding for the projects to mitigate the impacts of COVID-19 in biosphere reserves on islands and coastal areas.
85. South Africa requested the Secretariat to follow up on the recommendations of the side event on extractive industries organized at the Lima Congress. It requested that the group on extractive industries in biosphere reserves be reactivated and that an annual meeting on this issue be held. The delegation also sought information on the possibility of obtaining funds to implement concrete projects in biosphere reserves.
86. Germany invited countries to consult its National Report, which was available on the MAB website.

87. The Republic of Moldova congratulated the Secretariat for its comprehensive report and for implementing the rules to ensure compliance with the Statutory Framework of the MAB Programme. The delegation believed that it is important that TGBRs have wide visibility so that they can be used by biosphere reserves. The delegation also informed the MAB-ICC that the country had adopted a new regulation to ensure the operability of biosphere reserves. The delegation acknowledged the Process of Excellence ad hoc working group and welcomed a timely completion of the Exit Strategy in the year of the 50th anniversary of MAB. The delegation briefed the MAB-ICC on its recently adopted regulations on the operation of the Lower Prut BR to enhance conservation and sustainable development, together with the large area of the Danube delta and Lower Prut of the Republic Moldova and Ukraine.
88. Kenya also underlined the importance of the publication of the TGBRs. It noted a number of sites that had voluntarily withdrawn from the WNBR, adding that this was a challenge to biodiversity loss. The delegation called on the Member States concerned to seek alternative means to conserve biodiversity and avoid its loss in these sites.
89. The Secretary thanked the delegations for their positive comments, concurring that the pandemic had indeed made work difficult, but that the MAB Programme continues its work despite the difficulties. Responding to France's question, the Secretary explained that the source of funding for COVID-19 projects on impact mitigation came from the World Network of Island and Coastal Biosphere Reserves (WNICBR) secretariats. As the network meeting and workshop could not be organized, the funds were instead used for these projects.
90. The Secretary thanked the Republic of Korea for translating the TGBR into Korean, calling on other countries to translate the Guidelines into other languages.
91. The Secretariat took note of Australia's comments, adding that a document will be prepared for the next MAB Council on the Programme's change of name.
92. The need for a working group on extractive industries was also noted.
93. The representative of the Secretariat and the UNESCO Biodiversity focal point responded to the remarks by Australia and France on the involvement of the MAB Programme within the new Global Biodiversity Framework. UNESCO continues to contribute to the post-2020 Framework, and there are ongoing negotiations, notes and comments to draft, and so on. These inputs are available as online documents. The Secretary also spoke of the 30 per cent target for 2030 that was supported by UNESCO. Concerning the point on OECM, it was recalled that UNESCO is an Observer and not a State Party. UNESCO participates in the discussions on 'Other effective area-based conservation measures' (OECMs) and, together with the MAB Secretariat, works to emphasize BRs as OECMs as much as possible, but it is incumbent on Member States to voice their positions in this regard.
94. Concluding, the MAB Secretary shared a photo from Oban Biosphere Reserve featuring the Director-General, Ms Audrey Azoulay, and the Chair, Mr Adepoju Adeshola visiting

the site. The Director-General and the Chair expressed their gratitude for the visit to the biosphere reserve on this very fruitful field trip.

ITEM VI. OVERVIEW ON MAB THEMATIC NETWORKS

95. The MAB Secretariat introduced the document SC-21/CONF.233/5 on the activities of the existing thematic networks, as well as the new thematic networks being launched, and how these networks strengthen biosphere reserves.
96. The Secretariat spoke of how the thematic networks, for the most part, have been created spontaneously following the concerns or needs of the biosphere reserves. These networks bring together biosphere reserves that share environmental, ecosystem, geopolitical and cultural similarities. They also provide valuable insights into sustainable development models and the potential for mitigation and adaptation to global change and biodiversity loss through collaborative research and knowledge transfer.
97. The Secretariat presented seven existing thematic networks.
98. The **World Network of Island and Coastal Biosphere Reserves** (WNICBR) was launched in 2009. The Secretariat noted the excellent work of the secretariats in the biosphere reserves of Jeju (Republic of Korea) and Menorca (Spain) in consolidating this very active network of more than 80 biosphere reserves in 30 countries.
99. The **World Network of Mountain Biosphere Reserves** (WNMBR) is being re-launched by the MAB Secretariat. A consultation process was carried out with experts and managers of mountain biosphere reserves to draft a roadmap for the implementation of the network. It was proposed that the governance model should be similar to the WNICBR, as it had proven to be successful. The Secretariat sent a circular letter to all Member States to seek candidates for the functions of Technical Secretariat of the Network. Several proposals had been received and will be reviewed in the coming weeks. The Secretariat acknowledged the support of Mr Günter Köck (Austria) and Mr Martin Price (UK), who have supported this process to re-launch the network.
100. The **Mediterranean Network of Biosphere Reserves** (MedMAB) is promoted by the International Centre on Mediterranean Biosphere Reserves (UNESCOMED), a Category 2 Centre hosted by the Kingdom of Spain together with the Abertis Foundation since 2015. This network is currently being formalized by UNESCOMED to promote biodiversity conservation and sustainable development by strengthening relationships and exchanges of experiences between biosphere reserves across the Mediterranean.
101. **NordMAB** is a sub-network of EuroMAB that collaborates with biosphere reserves, researchers, experts and government officials in six Nordic countries to address regional sustainable development challenges in a northern context.
102. **CaveMAB** is a new initiative that seeks to enhance the natural and cultural value of caves and karst areas in biosphere reserves. One of the first objectives of this network will be to create a database of caves and karst formations found in the WNBR in order to promote their protection.

103. Another new initiative is the **Lusophone Network of Biosphere Reserves** which brings together 24 biosphere reserves in six countries. It aims to be a platform for dialogue and cooperation based on conservation and the sustainable use of natural resources. It also promotes capacity-building on the MAB Programme and biosphere reserves, especially in Portuguese-speaking Member States that do not have biosphere reserves.
104. The AfriMAB sub-network for Great Ape Habitat Biosphere Reserves aims to share knowledge and best practices related to great apes and their habitats, and to coordinate the work of a diverse audience of stakeholders.
105. The MAB Secretariat recognizes and supports the efforts of Member States to develop thematic networks to provide biosphere reserves with a global perspective on specific issues. The MAB Council was invited to provide guidance on how to strengthen these networks.
106. Spain thanked Nigeria and the Secretariat for organizing the MAB Council in these difficult times. It thanked the MAB Secretariat for its report and stressed the importance of these networks for the country. The UMESCOMED centre has delivered very good results and is a successful example of public–private collaboration between the Kingdom of Spain and the Abertis Foundation. The renewal of the agreement between UNESCO and the Kingdom of Spain on UNESCOMED is due to be signed in the coming months. The director of the UNESCOMED centre described the Centre’s numerous activities, such as debates for managers and the ‘EduBioMed Erasmus+’ project promoted by the Centre, involving biosphere reserves in Lebanon and Morocco. The Centre is committed to this thematic network because of its importance in the exchange of knowledge and experience, and it was hoped that the 3rd meeting of the network will be held at the end of 2021.
107. Australia remarked that it should be ensured that thematic networks give added value to the WNBR. In this regard, it wondered whether there were mechanisms in place to evaluate the networks so as to measure their effectiveness. The delegation asked about the number of biosphere reserve that are part of the WNICBR and when the next meeting of this network would take place.
108. France remarked that the thematic networks will help the process of excellence and quality of the WNBR. It considered that the process to relaunch the Mountain Biosphere Reserve Network did not follow the procedures set out in the MAB statutes and that this initiative should involve consultations with MAB Council members before its relaunch. France will support this network with the many French biosphere reserves located in mountain areas.
109. Germany supported the work of the thematic networks. The Waddensee Lower Saxony Biosphere Reserve had intended to host the WNICBR meeting in 2021 but it had to be postponed due to COVID-19. A new date is potentially planned for May 2022. Germany called for clarification of the procedures for joining thematic networks.
110. Côte d'Ivoire congratulated the MAB Secretariat and sought more information on the launch and work of the AfriMAB sub-network for great apes habitat in biosphere reserves.

111. Mexico thanked the Secretariat and Nigeria for organizing this meeting. It remarked that thematic networks should be linked to the regional networks so that information and knowledge is shared among them. Mexico supported the re-launch of the mountain network, especially given the context of climate change.
112. Austria supported the reactivation of the World Network of Mountain Biosphere Reserves to ensure the sustainability of these ecosystems, adding that Austria has a long experience of working and participating in projects in mountain biosphere reserves.
113. The Secretariat welcomed Australia's remark on the monitoring mechanisms of the thematic networks, adding that it will work on a proposal for a monitoring tool. The Secretariat explained that the WNICBR always invites new biosphere reserves to join the network, but that a more formal mechanism could indeed be discussed with the networks.
114. The Secretariat informed Côte d'Ivoire that the newly established sub-network of biosphere reserves home to great apes is currently involved in a monitoring project. The 22 BRs concerned will undertake training in January 2022 on the monitoring protocol using drones developed in collaboration with the National Museum of Natural History of France.
115. The Secretariat remarked that the presentation sought to provide an overview of the current situation of MAB networks. As mentioned, there were many networks that have spontaneously emerged, and the Secretariat looked forward to receiving guidance from the MAB Council members to ensure their endorsement and the proper functioning of these networks. The Secretariat took note of the comments and suggested the preparation of a document standardizing the establishment and functioning process of these thematic networks for the next MAB Council session.

ITEM VII. PRESENTATION OF THE UNESCO INTERNATIONAL ENVIRONMENTAL EXPERTS NETWORK 'UNESCO NETWORK FOR EARTH'

116. The Secretariat introduced document SC-21/CONF.233/6, informing the Council that a new programme – funded by Italy and open to other donors – will support the restoration of key ecosystems in UNESCO-designated sites in 2021–2024. This programme will be implemented through the UNESCO intersectoral biodiversity strategy and its three pillars (restoration; conservation and amplifying the power of youth), as well as the contribution of UNESCO to the UN Decade on Ecosystem Restoration and the UN Decade of Ocean Sciences for Sustainable Development.
117. The Secretariat recalled the supportive and catalyzing role of the Government of Italy in the framework of its G20 presidency to highlight UNESCO's role and action in favour of biodiversity and to mitigate climate change. The Secretariat informed the MAB Council that the UNESCO Director-General had signed a Multi-Partner Trust Fund with the objective of supporting ecosystem restoration and management in UNESCO-designated sites and 2003 Convention. The Secretariat further highlighted the generous contribution of Italy to this Trust Fund for an amount of more than €3 million for 3 years.

118. The Secretariat provided an update on the constitution of the network and the composition of its Scientific Committee, reflecting not only biosphere reserve experts but also Geoparks, World Heritage sites, Intangible Cultural Heritage and Local and Indigenous Knowledge Systems. The Secretariat highlighted that the network would work on a voluntary basis and that the call for applications would be published and advertised in the coming week. The Secretariat invited applications from experts of the MAB networks and the International Advisory Committee, further highlighting the systematic peering/association of senior experts with young experts and the mobilization of the unique network of dedicated UNESCO Chairs.
119. The Secretariat provided further details on matching expertise to the needs of UNESCO-designated sites and on the opportunity offered by the UNESCO Earth Network for biosphere reserves to benefit from expertise for the Process of Excellence.
120. Several delegations took the floor following the presentation. The delegation of Italy congratulated Nigeria for hosting the session. Italy recalled that this initiative was activated to capitalize on the enormous work carried out by the MAB Secretariat, demonstrating the positive relationships between nature and human activities in UNESCO-designated sites and recognizing the pioneer vision and ongoing efforts of the MAB Programme. Italy also recalled that the initiative was inspired by the need to improve capacities at the territorial level for conservation, ecosystem management and environmental education. Moreover, not only technical support is needed in UNESCO-designated sites, but also training to generate dedicated tools for managers and stakeholders, including the younger generation, thereby placing conservation and the sustainable use of biodiversity at the centre of the agenda of public authorities, NGOs and the private sector. Italy further recalled that the initiative was commended by ministers and representatives of Member States at the G20 Environment Summit in July 2021 held in Naples. In this regard, the delegation thanked the Assistant Director-General for the Natural Sciences, Ms Shamila Nair-Bedouelle, for her participation during an inspiring session. Italy reiterated its commitment to UNESCO in territories of excellence in the framework of the CBD's post-2020 Global Biodiversity Framework negotiations.
121. Germany thanked Italy and welcomed this initiative. It emphasized that experts should be selected according to transparent criteria so that this network of experts can serve the excellence of MAB, not only within each UNESCO-designated site but also to enable learning across UNESCO-designated sites, for example, in the context of the challenges presented by climate change.
122. The Republic of Moldova thanked the Secretariat for the initiative. It thanked the Government of Italy for its funding of the UNESCO Earth Network and for its engaged discussions to support the Multi-Partner Trust Fund.
123. Kenya thanked Italy for the initiative, acknowledging its usefulness and timeliness. It noted the holistic approach and the good investment to support the youth, adding that it looked forward to participating in the network.

124. Australia thanked Italy for its generosity, and supported Germany's remark with regard to transparency in the selection of experts. It sought to hear more about the communication of this initiative at the G20.
125. The Secretariat and the delegation of Italy further clarified that there were several communications about the network, including the Assistant Director-General's presentation during the G20 Environment Summit in Naples in July 2021, with the official G20 Environment Communique mentioning the UNESCO Earth Network. The delegation of Italy thanked UNESCO in its efforts to give reality to this Network, and highlighted the strict selection process for experts that included gender balance. The Secretariat confirmed that there would be criteria for selecting the volunteer experts, as discussed and validated by the Scientific Committee and building on UNESCO's experience in such programmes.
126. <https://www.g20.org/the-g20-environment-ministers-approved-a-joint-communique.html>

ITEM VIII. REPORTS ON ACTIONS UNDERTAKEN BY REGIONAL AND THEMATIC MAB NETWORKS IN THE CONTEXT OF MAB, WITH A FOCUS ON THE LIMA ACTION PLAN (LAP) IMPLEMENTATION AND THE CELEBRATION OF THE 50th ANNIVERSARY OF MAB

127. Regional and thematic MAB Networks were given the opportunity to provide brief reports on their activities since the last MAB Council session with a focus on the implementation of the Lima Action Plan and the celebration of the 50th anniversary of MAB Programme.

African Biosphere Reserves Network (AfrimAB)

128. The President of the AfrimAB network, Ms Martine Touao Kah Gauze, recalled that the 6th General Assembly of the network was held in Abidjan, Côte d'Ivoire, from 30 September to 3 October, 2019. This edition was marked by the renewal of the board, of which Côte d'Ivoire holds the presidency, but also by cultural innovations, including the decoration of network members by the host country and culminating in a cultural ball. It had been proposed that Senegal host the next General Assembly of AfrimAB. Despite the COVID-19 pandemic, the AfrimAB Network was able to keep in touch with the focal points of member countries and biosphere reserve managers through online meetings in order to continue implementing the MAB Programme strategies. A total of six meetings were organized, three of which were particularly noteworthy.
129. The first was an information meeting on the 50th anniversary of the MAB Programme in January 2021. This meeting helped some countries organize activities to celebrate the anniversary. Indeed, Mali produced a short 4-minute video on the history of the Boucle du Baoulé Biosphere Reserve (link: <https://fb.watch/7KaNoV4sF4>). Rwanda organized a 4-day event on the theme, 'Creating Momentum for Biosphere Reserves for Youth by Youth'. In South Africa, the Vhembe Biosphere Reserve hosted a Youth Biodiversity Forum, bringing together nearly 45 young people from three other biosphere reserves. Côte d'Ivoire carried out actions for the benefit of the communities and youth around Taï and Comoé biosphere reserves. This involved the promotion of agroforestry by introducing useful plants that are threatened in agroecosystems, with 219,141 forest

- food plants produced in 2021. In addition, 10 nursery helpers and 36 young people were trained in agroforestry practices.
130. The second meeting was the MAB Youth Mobilization Meeting in March 2021. This resulted in the creation of national youth networks in four countries: Benin, Côte d'Ivoire, Mali and Rwanda.
 131. The third meeting took place in June 2021 on the adoption of the revised version of the AfriMab Charter and Statutes at its Extraordinary General Assembly. These fundamental documents now refer to the new global development agenda, the MAB Strategy and Action Plan, the inclusion of youth groups in governance and the importance of the African Biosphere Reserve Fund (AfriBioFund). The countries agreed to a minimum annual contribution of US\$1,000 per country to the AfriBioFund.
 132. In addition, in the countries, most of the BRs and managers have been raising awareness about natural resource conservation and the prevention of COVID-19.
 133. In Eswatini, a project funded by the German National Commission for UNESCO continues to be implemented. It aims to build the capacity of MAB stakeholders to conduct community needs assessments, and conceptualize and implement community projects in the Lubombo Biosphere Reserve.
 134. In Benin, 1,000 ha of land along the main tributaries of the Pendjari River were restored/reforested with local and exotic forest species. The environmental education sessions were attended by 5,000 schoolchildren, 70 per cent of whom are girls, who were introduced to the use of iNaturalist, with 402 biodiversity observations on the platform
 135. In Togo, two projects are underway: a project to support the monitoring of the core areas of the Mono Delta Transboundary Biosphere Reserve (with WACA funding), and a project to strengthen the capacities of the monitoring brigade of this reserve (European Union funding through the BIOPAMA programme).
 136. In Guinea, environmental education activities were carried out in the country's four biosphere reserves, as well as the collection of biophysical and socio-economic data for the extension of the Upper Niger Biosphere Reserve to the Kouya classified forest.
 137. In Cameroon, activities continued on the preparation of the proposal for the Mbéré Valley Biosphere Reserve within the framework of the BIOPALT project. The proposal form would be submitted by the end of September 2021. Support was also provided for the production of several scientific publications on the Dja Biosphere Reserve.
 138. In Malawi, a national event was organized in the Mount Mulanje BR in August 2021. It included a hike, storytelling, music and awareness sessions.
 139. In South Africa, consultations were held on the preparation of a new biosphere reserve proposal (Amathole Biosphere). The dossier will be examined at the 35th session of the MAB Council.

140. In Burkina Faso, 6,000 seedlings of various species were produced and planted (*Eucalyptus camaldulensis*, *Gmelina arborea*, *Adansonia digitata* and *Acacia nilotica*); three wildlife farms (porcupine) were monitored in three villages (Bala, Sokourani and Sioma) bordering the Mare aux Hippopotames BR; and 26,000 fry were stocked in the Mare aux Hippopotames BR.
141. In Côte d'Ivoire, three individual microprojects and three community microprojects for raising goats and traditional chickens were carried out for the benefit of local residents and women's groups in Taï BR. In Comoé BR, eight multifunctional mills and two shea processing units were financed for the benefit of more than 450 people. Taï BR and Comoé BR participated in the African Days of Ecology and Climate Change (JIFAC), which had as its theme 'ecological transition in the territories and employability of young people'. Three documentary films were also produced: one to promote the tourist attractions of Comoé BR, and two to promote and highlight the exceptional biological diversity of Taï BR.
142. Several activities were carried out within the framework of the Extension Project of the Regional Post-Graduate Training School on Integrated Management of Tropical Forests and Lands (ERAIFT) in West Africa. Indeed, the co-financing of ERAIFT to the IRAIFT Project was confirmed. An agreement between ERAIFT and Côte d'Ivoire is under finalization for validation.
143. The Chair of the AfriMab network concluded her remarks by calling for the AfriMAB sub-network for biosphere reserves with great ape habitats — launched as an initiative at the 2019 AfriMAB General Assembly in Abidjan, Côte d'Ivoire — to become a reality. To this end, she proposed to initiate a meeting under the supervision of the MAB Secretariat to lay the foundations for the organization, functioning and governance of this sub-network.

ArabMAB Network

144. The Chair of the Egyptian MAB Committee and also Member of the ArabMAB Steering Committee, Ms Manal Fawzi, reported on the ArabMAB network.
145. Ms Fawzi noted that all UNESCO-MAB activities are coordinated at the regional level by the ArabMAB Network that was launched through the Amman Declaration in 1997. She recalled the overall objective of ArabMAB network, which aims to promote cooperation between Arab National MAB Committees in all countries in the region and to strengthen the MAB programme at the regional level through the establishment of biosphere reserves and the implementation of joint research agendas and public awareness projects.
146. She reported on the ArabMAB network activities, among which was the undertaking of comparative studies among the ArabMAB Member States; including: i) identifying potential biosphere reserves in the region that can play a core role in sustainable development; ii) designing and implementing pilot-related projects; iii) organizing training activities and capacity-building programmes; iv) establishing an enabling environment for information exchange among all stakeholders; and v) increasing awareness on the value of biodiversity to people. Ms Fawzi tapped on the efforts being mobilized within the ArabMAB network to reach out to society in the Arab region, especially youth, and to step

- beyond BRs to make the ArabMAB network well known, and to raise awareness about the role of biosphere reserves in biodiversity conservation for sustainable development and human welfare.
147. She noted that two nomination dossiers from new countries were submitted to the MAB Advisory Board, and that they succeeded in joining the World Network for Biosphere Reserves, namely, the Ashaafean protected area located in the Tribolitanian region in the north-eastern part of Libya, and Juzur Farasan in Saudi Arabia located in the south-east part of the Red sea.
148. Ms Fawzi presented the ArabMAB network's achievements over the past three years, which was accomplished in close partnership with UNESCO Regional Bureau for Science in the Arab States in Cairo. She spoke of the book, *Biosphere Reserves in the Arab Region: Outreaching to Society*, published in English in 2020 and in Arabic in 2021, which explores the diversity in the biosphere reserves in the Arab Region, highlights the richness in plant and animal diversity and ethnobotany, and sheds light on their diverse socio-cultural identities and on their research initiatives and development programmes. She informed the Council that the ArabMAB website had been revamped to promote the concept of UNESCO BRs in the Arab region, foster research and development through partnerships, and promote ecotourism and nature-based tourism [<http://unesco-arabmab.com/en/home>]. Ms Fawzi noted the activities designed on the occasion of the MAB golden jubilee, including the launch of two initiatives on the International Day for Biological Diversity 2020. Both initiatives addressed women, girls and youth, inviting them to reconnect with nature in their biosphere reserves in times post-COVID-19. Another initiative saw the launch of an Illustration competition in preparation of the development of an ArabMAB Educational Toolkit, and the development of a National Research Portfolio summarizing the research studies undertaken in the 33 biosphere reserves in the Arab Region.
149. She also noted the participation of the ArabMAB network in the development of toolkit – MET-ArabMAB – led by the UNESCO Cairo Office to measure the effective management of biosphere reserves in the Arab region. A pilot evaluation of the BR Management Plan was carried out to align their objectives with the SDGs of the 2030 Agenda, Multilateral Environmental Agreements (MEAs), Biodiversity and Chemical Clusters, the Paris Agreement, and also accounting for natural hazards management. The ArabMAB network was currently setting the path to move forward on the development of the ArabMAB Educational Toolkit made by ArabMab Youth Group, and the ITK–ArabMAB Catalogue, which aims to document indigenous traditional knowledge (ITK) and ethnobotanical references that have been preserved by local communities within and beyond biosphere reserves in the Arab Region.
150. Ms Fawzi presented the series of ArabMAB network virtual meetings that were organized by UNESCO-Cairo (May until October 2020) in preparation for the celebration of the 50th MAB anniversary, and to discuss the plan of work on the Assessment of the socio-economic impacts of COVID-19 on Arab biosphere reserves. In addition, the ArabMAB Youth Group was mobilized to partner in all ArabMAB activities through the organization of several ArabMAB Youth virtual meetings to discuss their involvement in the development of the ArabMAB Educational Toolkit and the ITK–ArabMAB Catalogue, and

also the preparatory meeting of the ArabMAB Youth Forum 2022, which will take place virtually on 11–12 October, 2021.

151. Ms Fawzi concluded by presenting the future plans and activities of the ArabMAB Network, including: i) the organization of a series of webinars and exhibitions on multipurpose plant species in the Arab region and their traditional uses; ii) honouring the founders and mentors of the ArabMAB Network and distinguished BR managers in different countries; iii) promoting cooperation between ArabMAB Network and other MAB Networks, notably, AfriMAB and MedMAB (Mediterranean Biosphere Reserves Network); and iv) the preparation of the upcoming Arab MAB Youth Forum 2022.

Asia and the Pacific Biosphere Reserves Network (APBRN)

152. The representative of Kazakhstan, Vice-Chair of the MAB Bureau and Vice-Chair of the Kazakhstan National MAB Committee, Ms Victoriya Ilina, reported on the Asia and Pacific Biosphere Network, which consists of four sub-regional networks: East Asian Biosphere Reserve Network (EABRN), Pacific Biosphere Reserve Network (PacMAB), South and Central Asia MAB Network (SACAM), and Southeast Asian Biosphere Reserve Network (SeaBRnet).
153. Ms Ilina also spoke of the ecosystem-specific network: the World Network of Island and Coastal Biosphere Reserves, which has two technical headquarters to coordinate the network and that work together at the global level: on the island of Jeju (Republic of Korea and in Menorca (Spain).
154. She further recalled the current Council members from the Asia-Pacific (ASPAC) region and current two regional members of the International Advisory Committee on Biosphere Reserves, who are: Ms Suk-Kyung Shim of the Republic of Korea, Vice-Chair of the ROK MAB; she is also the current Rapporteur of the Advisory Committee, and Mr Roman Jashenko of Kazakhstan, the Chairman of the Kazakhstan National Committee of MAB and the Chairman of the East Asian Network of Biosphere Reserves.
155. Ms Ilina highlighted the good number of new BR proposals, including a TBR proposal to be approved by the MAB Council at the present session. She also noted that the winner of the 2021 Michel Batisse Award comes from Australia.
156. She reported that ASPAC sub-networks meet regularly to discuss local and national achievements and challenges, as well as to provide regional Member States the opportunity to participate in identifying, and sharing with others, their national priorities under the Lima Action Plan. During the restrictions imposed as a result of the pandemic, many virtual meetings had been organized by sub-regional networks in 2020 and early 2021 to enable the ASPAC community to meet and discuss the impacts and responses to COVID-19. These events also served as a platform to discuss how the regional community would celebrate the 50th anniversary of the MAB Programme. In this regard, several initiatives were mentioned, such as the training course jointly organized by Japan and Kazakhstan on MAB theory and practice for young people and students in both countries; and the virtual webinar organized by the UNESCO Bangkok Office within the

project 'Together for Peace' with a keynote speech report, 'Biosphere Reserves: models for sustainable human living', among other events.

157. Furthermore, she informed the Council of the delayed launch of the 'Global Research and Training Centre for Internationally Designated Areas (GCIDA)', a Category 2 Centre on Jeju Island, which was approved by the General Conference at its 40th session in November 2019 and is directly linked to the MAB Programme and the WNBR. This was due to the situation caused by the pandemic, but that it would be launched and operational in 2021.
158. Ms Ilina then recalled several meetings organized by the sub-networks. In November 2020, the SeaBRnet held a Special Online Session to support continued cooperation and exchange among its members during the COVID-19 pandemic. The EABRN Steering Committee held two virtual meetings, in October 2020 and May 2021, in order to re-programme activities to be implemented in Spring 2022, also due to COVID-19. The implementation of alternative activities would be held in the second part of 2021, such as a series of five training webinars and the EABRN contribution to the MAB 50th Anniversary Exhibition in Beijing and Kunming, People's Republic of China. The UNESCO Bangkok Office had organized several meetings on the project, 'Together for Peace (T4P), Building Ethical and Sustainable Relations between Humanity and Nature', which is closely connected to the MAB programme. Together For Peace aims to build a strong platform for UNESCO's work on building peace, mainly through the SDG4 (quality education) and SDG16 (peace, justice and strong institutions). The project, 'Youth and Nature Heritage' was organized by the Kazakhstan Federation of UNESCO Clubs and Kazakhstan National MAB Committee.
159. The Minister of State for Environment, Climate Change and Technology in the Maldives – the country currently chairing the SACAM network – participated on 6 July 2021 at a UNESCO side event at a high-level political forum on 'Coping with environmental challenges: climate and biodiversity action in UNESCO's sites'.
160. Concluding, Ms Ilina briefed the MAB Council on the project activity of the International Training Course, UNESCO programme, 'Man and the Biosphere: opportunities and prospects'. Students and speakers from six countries were involved from Japan, Kazakhstan, Kyrgyzstan, Russia Federation, Tajikistan and Uzbekistan. The project aims to strengthen the capacities of youth interested in sustainable development in order to solve environmental issues, and to introduce economic models to support sustainable development processes. The final conference will be organized in mid-October with the participation of speakers from the six countries, as well as a number of stakeholders.

EuroMAB network

161. The representative of Austria, Vice-Chair of the MAB Bureau and Executive Secretary of the Austrian MAB National, Mr Günter Köck, reported on the activities of EuroMAB on behalf of the EuroMAB Steering Committee.

162. The EuroMAB conference planned for September 2021 in Nockberge BR, Austria, had to be postponed due to the COVID-19 situation. The new date for the EuroMAB meeting was given as 12 to 16 September 2022.
163. Austria reported on three additional activities.
164. A series of webinars was organized in 2021 by the UNESCO Regional Office in Venice and the MAB Secretariat. In this context, about 30 participants from the South-Eastern European and Mediterranean region, representing biosphere reserves, NGOs, youth coalitions and local businesses, had developed a guide entitled, 'Blueprint for Building Resilience'. The guide was developed to support the biosphere reserves' recovery from the disruption caused by the COVID-19 pandemic. This guidebook can be used by all members of the WNBR to build a blueprint for resilience and to create momentum towards 2030.
165. Austria further reported that the EuroMAB Network had contributed to two national biosphere reserve workshops in the United States and in Norway. In addition, EuroMAB, together with the MAB Secretariat, had been intensively involved in presenting the MAB Programme and its WNBR at the IUCN World Conservation Congress in Marseille.

IberoMAB Network

166. The delegate of Mexico, Mr Sergio Guevara, President of IberoMAB, reported on behalf of the IberoMAB Network. He explained that although the work had been difficult, due to sanitary restrictions, the network was able to accomplish its work.
167. A virtual meeting of the IberoMAB Youth Network took place in May [2021], as well as a seminar on governance and a third on gender equality. A publication on branding and one on gender equality had been launched. The network plans to hold its network meeting at the end of 2021 in Costa Rica and to hold an IberoMAB congress in 2022. The network's main concerns are the conservation of biodiversity and how it is affected by misuse. Biosphere reserves are ideal reference sites for adopting policies in line with the objectives of the programme and international conventions. Biosphere reserves should be recognized by the United Nations Conference on Climate Change as one of the best instruments to mitigate against climate change and for the protection of biological and cultural diversity. IberoMAB has two main considerations: i) biosphere reserves must change the concept of conservation as a form of defence of biodiversity with a focus on the protection of human well-being through the diversity of environmental services; and ii) in the short term, the IberoMAB network must be transformed into a continental knowledge network for the management of the biosphere.

World Network of Island and Coastal Biosphere Reserves (WNICBR)

168. The Jeju Secretariat, represented by Mr Kwang Sub Jang, reported on behalf of the WNICBR. The WNICBR promotes sustainable development, as well as actions for climate change mitigation, and to achieve the UN SDGs by developing integrated strategies for biodiversity conservation in island and coastal ecosystems.

169. The annual meeting had been postponed due to the COVID-19 pandemic and it is expected to be held in the Wadden Sea BR Lower Saxony (Germany) in May 2022, pending further confirmation. The first virtual meeting was held in 2020. The funds that were not used for the face-to-face meetings were allocated to four projects to mitigate the impacts of COVID-19 on biosphere reserves in islands and coastal zones.
170. A meeting on the impacts of microplastics and a survey on the impacts of COVID-19 in island and coastal biosphere reserves was held to seek innovative responses from the network. More than 40 biosphere reserves participated in this study, which will soon be shared with the network.
171. Climate change impact mitigation strategies are being sought for these biosphere reserves. The third part of the research on biosphere reserves as carbon sinks has been completed. The latest issue of the newsletter is now available on the web.

ITEM IX. PERIODIC REVIEW REPORTS, FOLLOW-UP AND INFORMATION RECEIVED SINCE THE 31st SESSION OF MAB-ICC

172. The representative of the Secretariat, Ms Meriem Bouamrane, presented document SC-21/CONF.233/8-rev and recalled that the review of the recommendations of the 26th session of the International Advisory Committee for Biosphere reserves (IACBR) on Periodic Review Reports and Follow-Up Information received since the 31st session of the MAB-ICC was to be examined at this 33rd session of the MAB Council.
173. The MAB Council document contains all the recommendations concerning the periodic reviews and follow-up on individual biosphere reserves considered by the IACBR at its 26th meeting in February 2020 (Part I) and 27th meeting in March 2021 (Part II). Whenever relevant, it also refers to MAB-ICC decisions.
174. She further recalled that at its 32nd session in October 2020, the MAB Council took note of the following voluntary withdrawal of 11 sites from 4 countries: Uluru (Ayers Rock-Mount Olga), Australia; Croajingalong, Australia; Riverland (formerly Bookmark), Australia; Kosciuszko, Australia; Unnamed (Mamungari), Australia; Ali Botouch, Bulgaria; Douпки-Djindjiritza, Bulgaria; Mantaritzza, Bulgaria; Parangalitsa, Bulgaria; Lufira, the Democratic Republic of the Congo; and Reserva de la Biosfera Islas del Golfo de California, Mexico.
175. The Secretariat also informed the MAB Council that the request of voluntary withdrawal of Ipassa Makokou BR (Gabon) and Chernye Zemli BR (Russian Federation) had been received from both authorities.
176. The recommendations of both sessions were sent to the countries, which were given the opportunity to reply. In cases where additional information was provided by the countries, it was examined by the MAB Bureau at its meeting prior to this 33rd session of the MAB Council. The Secretariat recalled that this present session marked the end of the Exit Strategy process that started in 2013 and which should have been completed in 2020.

177. Using a colour table, the Secretariat highlighted the cases where recommendations were revised by the Bureau based on the additional information provided, and indicated that all comprehensive recommendations were available in the document for both periodic review reports and follow-ups. The Secretariat noted that during the process of the Exit Strategy, 41 sites in 12 countries self-withdrew.
178. All countries concerned by the Exit Strategy process had the occasion to interact regularly with the Secretariat, with access to technical support. Out of the initial 270 sites concerned by the Exit Strategy, only 3 sites in 2 countries (Bulgaria, Romania) had not met the criteria in due time and did not succeed in providing adequate information on time. The Secretariat had regular contact with the concerned delegations, and they were duly informed that the MAB Council would make a decision based on Article 9 of the Statutory Framework regarding biosphere reserves that still do not meet the criteria of Article 4 within a reasonable period, in which case the area will no longer be referred to as a biosphere reserve that is part of the Network.
179. The Secretariat further noted the concerned countries' commitment to meet the criteria and confirmed that these sites can resubmit a nomination form from 30 September 2021. The MAB Bureau had prepared a specific recommendation for these sites.
180. Following the presentation, a number of delegations took the floor.
181. Romania congratulated Nigeria for its excellent management of the meeting, and the Secretariat for the very clear report, warmly thanking the MAB Council members for maintaining Pietrosul Mare within the WNBR. Romania expressed its disappointment that Retezat Biosphere Reserve can no longer be referred to as a biosphere reserve as it was the country's oldest biosphere reserve, established in 1979. However, Romania recognized that the site was not compliant with the Seville Strategy and Statutory Framework and it highlighted the recent approval of an extension project for the site with the funding support of Germany in order to resubmit a nomination form. Romania thereby expressed hope to soon see this site regain its membership to the WNBR.
182. Colombia thanked the MAB Council for the excellent work of updating the network, taking careful note of the recommendations presented by the MAB Council. The additional information requested by the IACBR was sent on time and efforts will be made to strengthen management mechanisms for all Colombian biosphere reserves. Colombia shared examples of instruments that are being formalized internally with local authorities to ensure the training of people to develop and implement these tools.
183. France remarked on the importance of the work done by the MAB Secretariat, Member States and biosphere reserves to make most sites comply with the criteria, while acknowledging the complexity of the task and the tradeoffs that represented some decisions, all of which participated in making the WNBR an 'excellence' network. France agreed with the proposal for technical support via the MAB Secretariat or the WNBR, including for sites that do not meet the criteria or withdrew. France also requested that a synthetic summary be provided in the colour table presented by the Secretariat.

184. Malaysia requested clarification on the deadline for providing additional information for Tasik Chini BR, which was indeed September 2022 as confirmed by the MAB Secretariat.
185. An Observer from the United Kingdom agreed with France's statement that the WNBR is strengthened by the Exit Strategy process, and it asked for clarification regarding the specific recommendations to be approved by the MAB Council.
186. Australia further clarified the decision in paragraph 10 of the working document SC-21/CONF.233/8-rev and suggested minor modifications to this paragraph to reflect the MAB Council decision to end the Exit Strategy process.
187. The Republic of Korea, Austria and Germany supported Australia to include a short sentence in the concluding paragraph so as to send a clear message to the entire network. Germany further congratulated all the countries and biosphere reserves for their efforts during the Exit Strategy process.

DECISIONS

188. **The MAB Council considered and approved the recommendations made by the 26th and 27th Advisory Committee, including suggested modifications proposed by the MAB Bureau at its 33rd Council session and reflected below for each site concerned, took note of the voluntary withdrawal of existing biosphere reserves, and decided the completion of the Exit Strategy.**
189. **In the framework of the completion of the Exit Strategy of the World Network of Biosphere Reserves, 3 sites in 2 countries: Bistrichko Branichte and Tchouprene BR (Bulgaria), Retezat BR (Romania) were found not to satisfy the criteria as stipulated in the Statutory Framework, (Article 4) and thus, these sites will no longer be referred to as a biosphere reserve which is part of the World Network of Biosphere Reserves. The Council encouraged these sites to submit nomination forms at their earliest convenience.**
190. The MAB Council acknowledged all sites meeting the criteria and congratulated them (see Annex 2 of the Report).
191. For specific sites, the MAB Council made the following decisions based on the Advisory Committee recommendations contained in document SC-21/CONF.233/8.rev, after the Bureau's deliberations and based on additional information received by the MAB Council for the sites and countries below:
192. **Pereyra Iraola Biosphere Reserve (Argentina).** The Advisory Committee welcomes the additional information provided by the Argentinean authorities.
193. However, the proposed zonation still does not protect the core area of the biosphere reserve. The Advisory Committee therefore recommends that the authorities review the boundaries and zonation of the site, and/or analyse the possibility of extending the reserve, in order to meet the functions and criteria of a biosphere reserve. The Advisory Committee also recommends that the authorities discuss the possible extension of the

- biosphere reserve with the municipalities in the vicinity of the site. The authorities have not yet submitted the requested Management Plan for the entire site, the participation of stakeholders is not clear, and the additional information about the Management Committee does not explain clearly how this committee functions.
194. The Advisory Committee concluded that the site **does not meet** the criteria of the Statutory Framework of the World Network of Biosphere Reserve.
 195. The Advisory Committee therefore requests once again that the authorities submit by 30 September 2020: a new zonation that better protects the core area including a proper buffer zone;
 - An overall Management Plan for the entire biosphere reserve;
 - information on how the authorities will secure the participation of stakeholders in the biosphere reserve; and
 - clear information about the functioning of the Management Committee.
 196. The Council welcomed the letter sent by the national authorities demanding an extension due to the health crisis in order to provide the information requested by the Advisory Committee.
 197. Taking into account the difficulties generated by the COVID-19 pandemic, the Council requested that a progress report and work plan be submitted by 15 December 2021 in order to ensure that all the information requested by the Advisory Committee can be submitted by 30 September 2022.
 198. **Nanji Archipelago Biosphere Reserve (China).** The Advisory Committee at its 27th meeting concluded that the site **meets** the criteria of the WNBR, and requested the following information by 30 May 2021: (i) an updated zonation map with coordinates, an indication of scale and all legends in English as specified in the Periodic Review report form; and (ii) responses to all items (questions) on the report form that were not provided.
 199. The Council acknowledged the submission of all the requested information.
 200. **General recommendations for Colombian authorities:**
 201. The Advisory Committee recognized the efforts made by the Colombian authorities to submit periodic reviews for its five biosphere reserves, especially during the pandemic.
 202. Although the Advisory Committee acknowledged that many projects are underway in different areas of their biosphere reserves, with the exception of the Seaflower Biosphere Reserve, the majority of actions focused on national parks or other protected areas, with little interaction evident between the different zones and functions of the biosphere reserves.
 203. While there are management plans for the different territories, no overall strategy exists to coordinate the actions being undertaken in each of the separate plans.

204. With the exception of the Seaflower Biosphere Reserve, the management committees of the biosphere reserves are not active, participative or representative of the different biosphere reserve stakeholders.
205. The Advisory Committee and the MAB Secretariat offer technical support to strengthen the governance of Colombia's biosphere reserves, mainly through the implementation of the MAB National Committee, biosphere reserve management committees and the development of management plans for the country's biosphere reserves to meet the criteria of the Statutory Framework of the WNBR.
206. The Council welcomed the additional information sent by the national authorities that recognized the fundamental role of biosphere reserves in Colombia, as well as the country's commitment to implementing national policies that will contribute significantly to the objectives of the MAB Programme.
207. In view of the extensive information submitted by the national authorities, it will be transferred to the Advisory Committee for further analysis at its 28th meeting.
208. The Secretariat will liaise with the Colombian authorities to support the country in establishing the MAB National Committee, the biosphere reserve management committees, as well as the development of management plans.
209. **Cinturón Andino Biosphere Reserve (Colombia).** The Advisory Committee welcomed the third Periodic Review from the Colombian authorities.
210. The Cinturón Andino Biosphere Reserve is located in the south of Colombia in the departments of Cauca, Valle del Cauca, Tolima and Huila, and was designated in 1979. It has previously submitted periodic reviews in 2001 and 2011. In 2020, the biosphere reserve reported no changes to the total surface area (2,379,564 ha).
211. A Periodic Review process was conducted during the year of 2020. In line with COVID-19 control measures, two virtual meetings were held with the participation of representatives of governmental institutions, but no information is available on the involvement of other actors.
212. From 2010 to 2020, 82 nationally protected areas were added to the core area of the biosphere reserve, but the increase in the area is not reflected in the report.
213. The reported actions and activities have not demonstrated the expected integration of the different zones, in line with the comprehensive management of the biosphere reserve.
214. No significant changes have been noted in the biosphere reserve, except for the intensification of agricultural and forestry activities.
215. The Advisory Committee congratulated the biosphere reserve on its participation in the 'Proud to Share' initiative and for the publication of the book *El Páramo*, which provides strong material about land uses and social realities associated with these strategic ecosystems. Both have proven to be of great value for improving the governance and

- management of the biosphere reserve. The Advisory Committee also welcomed the creation of an environmental education booklet, which functioned as an important communication tool throughout the territory.
216. However, the biosphere reserve has not produced a consolidated management plan nor constituted a management committee. Indeed, the Ministry of Environment and Sustainable Development has yet to pass a resolution formalizing the MAB National Committee and the biosphere reserve committees.
217. The Advisory Committee concluded that this site does not meet the criteria of the Statutory Framework of the WNBR.
218. Therefore, the Advisory Committee requested the Colombian authorities to provide by 30 May 2021 a work plan for the Cinturón Andino Biosphere Reserve, including the following elements: a management plan for the whole biosphere reserve, including the core, buffer and transition areas, with an emphasis on proposed coordination and synergies with existing national plans, policies and strategies, such as community projects, partnerships with NGOs or the private sector and, above all, involving the local communities inhabiting the reserve;
- an official document reflecting the establishment and operation of the biosphere reserve committee, involving all relevant stakeholders (national, regional and local government, local communities, academia and NGOs, among others);
 - a report clearly presenting information on the size of the core area and explaining how the 82 new protected areas were integrated; and
 - a revised zonation covering particularly the buffer and transition zones, in line with the functions set out in the Statutory Framework.
219. The Council took note that the Bureau had received the information sent by the national authorities, but in the view of the extensive information submitted, it will be transferred to the Advisory Committee for its examination at its 28th meeting in early 2022.
220. **El Tuparro Biosphere Reserve (Colombia).** The Advisory Committee welcomed the third Periodic Review from the Tuparro Biosphere Reserve, which was designated in 1979.
221. The biosphere reserve is located in the department of Vichada, in the Eastern Plains of Colombia, near the border with Venezuela. The third Periodic Review in 2020 reported no changes to the total area but the discrepancy in total area was found such as 1,042,000 ha (p. 7) and 1,097,084 ha (p. 149).
222. In 2015, the MAB-ICC recommended the authorities to better define the buffer zone surrounding the core area and to provide relevant information in the next Periodic Review to be submitted in 2021. No changes in the zonation were reported and the zonation map remains identical to the one provided in 2015.
223. The Periodic Review process was conducted by government institutions, namely the Ministry of Environment and Sustainable Development, National Natural Parks of

- Colombia and the Orinoquia Territorial Directorate. They jointly developed the document drawing on projects and results delivered by various institutions and organizations that have carried out activities within the territory.
224. Over the last decade tourism increased following the introduction of the Tourism Development Plan for the Department of Vichada (2012) and implementation of a project on sport fishing tourism, as well as other initiatives including 'Conservation of biodiversity and strengthening of governance in the El Tuparro Biosphere Reserve'. Tourism development in the biosphere reserve is oriented mainly towards sport fishing, while cattle ranching also contributes to the site's economy.
225. However, the reported actions and activities have not demonstrated the expected interaction of different zones, in line with comprehensive management of the site.
226. On the positive side, the Tuparro Biosphere Reserve did introduce social agreements to encourage the sustainable and rational use of natural resources. Progress has been made with agreements on the use of natural resources with indigenous communities located in the buffer zone, mostly in relation to sustainable fishing. In order to promote participatory and active governance, the management team set up educational strategies for the social valuation of protected areas of the biosphere reserve, including radio programmes and awareness-raising campaigns on forest fires and solid waste.
227. The Committee noted, though, that the biosphere reserve has not yet produced a consolidated management plan nor constituted a management committee.
228. The Advisory Committee therefore concluded that this site does not meet the criteria of the Statutory Framework of the WNBR.
229. Therefore, the Advisory Committee requested that the Colombian authorities provide by 30 May 2021 a work plan for the Tuparro Biosphere Reserve, including the following elements:
- a management plan for the whole biosphere reserve, including the core, buffer and transition areas, with an emphasis on proposed coordination and synergies with existing national plans, policies and strategies and, above all, involving the local communities inhabiting the biosphere reserve; and
 - a revised zonation covering particularly the buffer and transition zones, in line with the functions set out in the Statutory Framework.
230. The Council took note that the Bureau had received the information sent by the national authorities, but in the view of the extensive information submitted, it will be transferred to the Advisory Committee for its examination at its 28th meeting in early 2022.
231. **Sierra Nevada de Santa Marta Biosphere Reserve (Colombia).** The Advisory Committee welcomed the third Periodic Review of the Sierra Nevada de Santa Marta Biosphere Reserve, designated in 1979.
232. The Periodic Review process was conducted during the year 2020. In line with COVID-19 control measures, five virtual meetings were held with the participation of

representatives of official entities, but no information was available regarding the involvement of other actors.

233. The Periodic Review reported changes to the size of the core, buffer and transition areas, but provided no further information about the nature of these changes. Furthermore, there was the discrepancy in sizes of each zone (p. 6 and p. 189).
234. In 2015, the MAB-ICC recommended that the site add a 'buffer zone and transition area in the coastal and marine area and report on this in the next Periodic Review to be submitted in 2021'. It is not clear from the submitted map whether or not these areas have been added to the biosphere reserve.
235. Over the last ten years the biosphere reserve has experienced a significant rise in tourism, with associated land use changes related to agriculture, hotel infrastructure and forestry, and a concomitant increase in population of over 430,000 inhabitants. Four private reserves have also been designated within the biosphere reserve. These changes reportedly have harmed the spiritual and cultural integrity of the indigenous peoples of the Sierra Nevada.
236. The biosphere reserve is managed by a multitude of territorial, political-administrative, ethno-cultural and other entities or actors. Each one of them carries out its respective actions within the sole scope of its jurisdiction and competency. It would therefore be advisable to establish a management plan for the entire biosphere reserve that clearly articulates the functions, domains and competencies of each actor forming part of this 'mosaic', and defines how they can collaborate more closely.
237. The Advisory Committee recognized the significant number of projects and programmes carried out in the biosphere reserve over the last decade. However, a more coordinated approach to management for the entire biosphere reserve is needed to deliver the proposed objectives.
238. The biosphere reserve has not yet produced a consolidated management plan nor constituted a management committee.
239. The Advisory Committee concluded that this site does not meet the criteria of the Statutory Framework of the WNBR.
240. The Advisory Committee therefore requested the Colombian authorities to provide by 30 May 2021 a work plan for the Sierra Nevada de Santa Marta Biosphere Reserve, including the following elements:
 - justifications for the extension of the coastal and marine area, detailing their function and zonation (buffer zone or transition area), supported by a clear map of the new zonation;
 - a management plan for the whole biosphere reserve to coordinate all existing plans for the different zones of the biosphere reserve;

- an official document reflecting the establishment and operation of the biosphere reserve committee, involving all relevant stakeholders (national, regional and local government, local communities, academia and NGOs, among others); and
 - strategies to promote cultural and knowledge exchanges within the biosphere reserve and with other sites, particularly regarding the involvement of local indigenous peoples and inhabitants.
241. The Council took note that the Bureau had received the information sent by the national authorities, but in the view of the extensive information submitted, it will be transferred to the Advisory Committee for its examination at its 28th meeting in early 2022.
242. **Ciénaga Grande de Santa Marta Biosphere Reserve (Colombia).** The Advisory Committee welcomed the second Periodic Review of the Ciénaga Grande de Santa Marta Biosphere Reserve, designated in 1979.
243. The Periodic Review process was conducted during the year 2020. In line with COVID-19 control measures, some virtual meetings were held with the participation of representatives of government institutions, but no information is available regarding the involvement of other actors.
244. In 2020, the biosphere reserve presented no changes to the total surface area.
245. The main extractive activity in the area is the capture of crustaceans and molluscs, which is carried out in an artisanal manner by around 5,000 fishermen. Over the last few years, fishing activity has decreased due to the environmental deterioration of the marshes of the Ciénaga Lagoon complex and the overexploitation of species.
246. In recent years, a hydrological imbalance has been generated by the construction of a road to link Ciénaga with Barranquilla, affecting the connectivity of the Caribbean Sea and the estuary. The hydrological imbalance, together with expansion of the agricultural frontier, has increased the hyper-salinization of soils, forest fires, fish mortality, mortality of aquatic mammals and reptiles, loss of vegetation cover, diversion of water flow and drying up of water bodies, decrease in fish productivity, increased sedimentation and coastal erosion.
247. The Advisory Committee recognized the significant number of projects and programmes had carried out in the biosphere reserve over the last decade. However, a more coordinated approach to management for the entire biosphere reserve is needed to deliver the proposed objectives.
248. The biosphere reserve has not yet produced a consolidated management plan and has not formed a management committee.
249. The Advisory Committee concluded that this site does not meet the criteria of the Statutory Framework of the WNBR.

250. Therefore, the Advisory Committee requested the Colombian authorities to provide by 30 May 2021 a work plan for the Ciénaga Grande de Santa Marta Biosphere Reserve, including the following elements:
- a management plan for the whole biosphere reserve to coordinate all existing plans for the different zones of the biosphere reserve; and
 - an official document reflecting the establishment and operation of the biosphere reserve committee, involving all relevant stakeholders (national, regional and local government, local communities, academia and NGOs, among others).
251. The Council took note that the Bureau had received the information sent by the national authorities, but in the view of the extensive information submitted, it will be transferred to the Advisory Committee for its examination at its 28th meeting in early 2022.
252. **Península de Guanahacabibes Biosphere Reserve (Cuba).** This site has already met the criteria, but the MAB Council requested additional information on the revised zonation, including a continuous marine buffer zone.
253. The authorities have presented a zonation map with a continuous marine core area, but without a marine buffer zone that protects the whole marine core area.
254. The Advisory Committee request the national authorities to send before 30 September 2020 a zonation map with a marine buffer zone that will ensure the conservation functions of the marine core area.
255. The Permanent Delegation of Cuba to UNESCO informed the Secretariat that the Cuban National Commission for UNESCO, the Cuban MAB Focal Point and the biosphere reserve manager had met in order to send the additional information. The preparation of this additional information had been delayed due to the travel limitations in the country owing to the sanitary measures in place to contain the spread of COVID-19. Taking into account these difficulties, and the fact that the biosphere reserve is not in the Exit Strategy, the Council requested that the biosphere reserve submit the additional information by 30 September 2022.
256. **Krivoklatsko Biosphere Reserve (Czech Republic).** The site falls under the exit strategy process. The authorities of the Krivoklatsko Biosphere Reserve submitted their first periodic review in 2016. This report was assessed and discussed by the Advisory Committee in early 2017. The Advisory Committee concluded that more information was needed to assess whether the biosphere reserve met the criteria of the Statutory Framework of the World Network of Biosphere Reserves. In particular, the Advisory Committee requested the authorities to provide a zonation map specifying the three zones as per the statutory framework, as well as to provide detailed information on the implementation of the development function, and the involvement of the local communities in both the development function and the management of the biosphere. The Advisory Committee welcomed the letter sent by the authorities in response to the request. The Committee noted that all core areas automatically have a 50-metre buffer zone, while areas that appear to be missing buffer zones are buffered by features in the landscape such as river-banks or forests. However, the requested zonation map was not provided.

257. The Advisory Committee noted that the transition area is divided into two types, as stipulated under Czech legislation, but that no further details are provided about the associated implications for the development function of the reserve. The response received from the authorities states that local municipalities have been consulted about the development of the management plan. The Advisory Committee welcomed this first step in establishing relations with the community, but noted that information on how community members will participate in the management structure or the development of the management plan is still missing. The authorities state that an interpretation plan in relation to tourism is foreseen for 2023. The Advisory Committee therefore concluded that the development function of the biosphere reserve is still not clear.
258. Based on the information provided, the Advisory Committee requested the authorities to provide the updated zonation map and detailed information about how local communities will participate in the management and management structures of the biosphere reserve, as well as more detailed, concrete information about how the development function of the biosphere reserve will be realized. The Advisory Committee requested that the information be provided by 22 May 2020, in order to decide whether the site meets the criteria of the Statutory Framework of the World Network of Biosphere Reserves.
259. Based on the information provided (i.e. updated zonation map, detailed information about how local communities are participating in management and in management structures of the biosphere reserve, as well as more detailed, concrete information on how the development function of the biosphere reserve is implemented) the Council considered that the site meets the criteria.
260. **Mount Paektu Biosphere Reserve (Democratic People's Republic of Korea).** The Advisory Committee welcomed the third Periodic Review of the Mount Paektu Biosphere Reserve, designated in 1989.
261. The Mount Paektu Biosphere Reserve is situated at the border of the People's Republic of China and shares a volcano mountain and mountain forest ecosystem with Changbaishan Biosphere Reserve in China.
262. The first Periodic Review was submitted in 2001 and the second in 2014. The current Periodic Review process occurred in parallel with the nomination process for the Mt Paektu area as a UNESCO Global Geopark, at the national level, in close contact, discussion and cooperation with the working group under the coordination of the DPRK National Commission for UNESCO and the National Geopark Committee.
263. The Advisory Committee commended the efforts of the authorities to address past recommendations from the MAB-ICC, and noted that a number of educational activities have been implemented and scientific cooperation put in place.
264. The State Academy of Science (SAOS) and a number of educational institutions have conducted scientific and educational activities in the biosphere reserve including field surveys and research, and observation and training in relation to animals and plants.

265. The Mt Paektu Biosphere Reserve is characterized by a unique eco-environment and rich biodiversity, and encourages ecotourism and development of the local economy.
266. The Advisory Committee commended the government of DPRK on giving priority to the prevention of destruction and degradation of the forest ecosystem, and the sustainable use and conservation of forest resources, through the selection of Mt Paektu Biosphere Reserve as a demonstration site for conservation and restoration.
267. The Advisory Committee noted, however, that the report provided information on and referred to a management plan, although it was submitted with the Periodic Review.
268. The Advisory Committee also noted that no zonation map was included in the report or submitted separately.
269. The Advisory Committee therefore requested the authorities to confirm that a comprehensive management plan has been elaborated and to submit an extended summary and outline of the plan in English, along with a zonation map, to the MAB Secretariat not later than 30 May 2021, in order **to determine whether the site meets the criteria** of the Statutory Framework of the WNBR.
270. Based on the submitted outline and the 10-page extended summary of the Management Plan of Mt. Paektu Biosphere Reserve, including the zonation map in English, the Council considered that the site **meets** the criteria.
271. **Issyk-Kul Biosphere Reserve (Kyrgyzstan).** The Advisory Committee at its 27th meeting concluded that the site **meets** the criteria of the Statutory Framework of the WNBR and is no longer subject to the Exit Strategy. The Advisory Committee recommended that the national authorities submit by 30 May 2021 updated information concerning finalization of the new management plan for 2021–2025 as well as an information on the adjusted management structure.
272. The Council noted with a satisfaction the submission of the Management Plan for 2021-2025 of the Issyk-Kul Biosphere Reserve, as well as information on the adjusted management structure.
273. **Río San Juan Biosphere Reserve (Nicaragua).** This site has already met the criteria, but the MAB Council requested additional information about the management plan and stakeholder involvement.
274. The Advisory Committee welcomed the additional information provided by the Nicaraguan authorities. However, the document provided describes only certain current activities of government institutions in the area and does not constitute a proper management plan. The additional information about stakeholders still does not explain clearly how all relevant actors are involved in the management of the site.
275. The Advisory Committee again requests the national authorities to send more information about the management plan and stakeholder involvement by 30 September 2020.

276. Based on the additional information provided by the national authorities received by the Secretariat, the Council considered that the site **meets** the criteria.
277. **Vhembe (South Africa).** The Advisory Committee welcomed the submission of the well-organised dossier for the first periodic review of this site designated in 2009 and commended it as a good example of a periodic review. This biosphere reserve has an area of 30701 km² and supports a population of about 1.5 million people, of which 97% are rural residents. The site includes the northern Kruger National Park north of the Shingwedzi River and Mapungubwe National Park (a World Heritage Site), and borders the three neighbouring countries of Botswana, Zimbabwe and Mozambique. Hence, the area is part of the Greater Mapungubwe initiative between South Africa, Botswana and Zimbabwe and Great Limpopo Transfrontier Conservation Areas Initiative involving South Africa, Mozambique and Zimbabwe.
278. The Advisory Committee commended the biosphere reserve on the award by the Department of Science and Innovation and the National Research Foundation (NRF) of a South African Research Chair (SARChi) to the University of Venda (UNIVEN) relating to research and monitoring. The Advisory Committee appreciated the contribution of the biosphere reserve status to tertiary education through support for 20 Honours, 20 MSc and 10 PhD theses in conservation biology between 2014 and 2019 as well as efforts to integrate traditional leaders and indigenous knowledge in the management processes. The efforts enhance awareness of the local and global importance and benefits of biosphere reserves amongst local communities and youth was also appreciated.
279. The Advisory Committee concluded that the site **meets** the criteria of the Statutory framework of the WNBR.
280. The Advisory Committee encouraged the authorities to give more consideration to the following in any future attempts to increase in the coverage of protected areas (in line with the joint policy in Limpopo with a target of an additional 85% of Protected areas in the province):
- the needs of the local population;
 - all the core areas are adequately protected by a buffer, and
 - long term solutions to human-wildlife conflict and continue to ensure that the mining activities done outside protected areas in the transition are sustainably managed to reduce impact on biodiversity.
281. The Advisory Committee observed that the site is the second largest biosphere reserve in South Africa and not the largest one as wrongly stated in the report to stakeholders (Section 1).
282. The Council welcomed the revised report to stakeholders sent by the national authorities in response to the comment confirming that Vhembe BR is the second largest of the 10 biosphere reserves in South Africa.

283. **Kogelberg (South Africa).** The Advisory Committee welcomed the second periodic review of the site (designated in 1998), which was initiated in 2018. The Biosphere Reserve covers a land area of 103,000 ha of which 21,285.5 ha is marine.
284. It comprises a terrestrial core area in the Kogelberg mountains, with the Kogelberg Nature Reserve Complex and the Groenlandberg Nature Reserve with a marine component; a near natural terrestrial buffer zone, under both private and municipal ownership including the Harold Porter Botanical Garden and the Palmiet River Estuary also with a marine component and a terrestrial transition which consists of sophisticated agricultural enterprises and high demand residential and holiday facilities and settlements. The core area forms part of the Cape Floristic Region Protected Areas World Heritage Site, a global biodiversity hotspot including birds, reptiles, amphibians, fish mammals and forest trees such as Acacia.
285. The Advisory Committee lauded the participatory approach used in the periodic review and the significant efforts at fund raising in support of management activities in the biosphere reserve. The Advisory Committee appreciated the combination of interdisciplinary information across all stakeholder groups including the application of the plans for the various protected areas as well as the collaboration with local communities for gardening and food products. The Advisory Committee commended the extensive research conducted over the period, the development of a communication strategy and the implementation of a vibrant schools education programme.
286. The Advisory Committee noted the current management challenges including drought, frequent fires, invasive species and illegal resource utilization, which are linked to water and food insecurity and identified in the dossier as a threat to the core and buffer zones.
287. The Advisory Committee concluded that the site **meets** the criteria of the Statutory framework of the WNBR and requested the authorities to submit by May 30, 2021 a zonation map showing all three (3) zones of the biosphere reserve including the marine section on one consolidated map to complement what was already sent separately. The Advisory Committee also encouraged the authorities to increase research on climate change and invest in mitigation and adaptation programmes for local communities.
288. The Council welcomed the revised zonation map sent by national authorities in response to the Advisory Committee recommendations, which was found to be satisfactory.
289. **Bardenas Reales Biosphere Reserve (Spain).** The Advisory Committee welcomed the second Periodic Review of the Bardenas Reales Biosphere Reserve, designated in 2000.
290. Located in the *Chartered Community of Navarre*, in northern Spain, the biosphere reserve is home to vulnerable species of flora and fauna and endangered bird species such as the Great Bustard (*Otis tarda*) and the Montagu's Harrier (*Circus pygargus*).
291. The review process was led by a member of the Scientific Council of the Spanish MAB Committee, with the support of the biosphere reserve manager. The review was prepared in liaison with the General Board, which represents 22 entities in the biosphere reserve,

- including 19 town councils. Livestock breeders, farmers, hunters, fishermen and other actors were also contacted, and the review was prepared in collaboration with the *Chartered Community of Navarre* and the General Directorate for Rural Development.
292. The biosphere reserve sustains approximately 89,374 people, but they live outside the boundaries of the biosphere reserve. Most of them work in agriculture, livestock transhumance, hunting and tourism.
293. Under the authority of the General Board, the Community of Bardenas Reales de Navarra is responsible for the management of the biosphere reserve. It has also formed an advisory council; however, this body is not representative of the different stakeholders.
294. The biosphere reserve is currently managed under the Natural Resources Management Plan (PORN). At the end of 2020, the 'Strategic Plan of the Bardenas Reales de Navarra Biosphere Reserve 2020/2032' was presented to the General Board as the proposed future management framework.
295. The biosphere reserve has proposed the creation of the Bardenas Reales UNESCO Chair on Science and Heritage, which will combine all actions and knowledge production in relation to the Bardenas Reales area, and in the university academic environment.
296. The Advisory Committee concluded that this site **does not meet** the criteria of the Statutory Framework of the WNBR.
297. Given the importance of having a human population living inside the biosphere reserve, in accordance with the MAB model, the Advisory Committee requested that the national authorities expand the transition area to incorporate the surrounding populations. Accordingly, the Committee requested that a work plan be submitted by 30 May 2021 detailing a methodology and timeline for carrying out this process.
298. The Advisory Committee also recommended the implementation of a participatory process with all relevant stakeholders on land use planning, as a means to build a sustainable development model.
299. The Council acknowledged the additional information sent by the national authorities which explained that – from the biosphere reserve's point of view – there is no non-compliance with the Statutory Framework. Even though there is zero population living in the biosphere reserve, there is a daily relationship with the population who carry out permanent activities in the territory of the biosphere reserve. In view of the complexity of the situation, the Council recommended the transfer of information to the Advisory Committee for further analysis at its 28th meeting in 2022.
300. **Chernomorskiy (Black Sea) Biosphere Reserve (Ukraine).** The Advisory Committee welcomed the submission of this third Periodic Review report of the Chernomorskiy Biosphere Reserve, designated in 1983.

301. The biosphere reserve is situated in the south of Ukraine, and covers an area of 174,000 ha. The site includes five land plots and water areas of the Tendrsvsky and Yagorlitsky bays, including islands, and a 1-km shelf along the coast of Tendrivska Spit.
302. Natural conditions underlie the richness of the flora and fauna and the diversity of protected natural complexes. The site harbours more than 700 species of plants, 3,000 species of invertebrates, 80 species of fish, 5 species of amphibians, 9 species of reptiles, 306 species of birds, and 63 species of terrestrial and aquatic mammals.
303. Over the last ten years, a Coordinating Council of the Biosphere Reserve has been established to coordinate efforts for regional environmental protection and sustainable development. The composition of the Coordinating Council includes representatives of local executive and self-government bodies, public organizations, central and local media, and scientific and educational institutions. In 2019, the Regulations for the Coordination Council of the Biosphere Reserve were adopted and its composition was determined, new cooperation agreements were concluded and the work plan for 2020 was approved.
304. The Advisory Committee welcomed the Periodic Review, which supplements the review submitted in 2018. The Advisory Committee noted with satisfaction that the transition area has been expanded in response to questions concerning the development function, and welcomed the integration of local community representatives and civil society representatives into the Coordinating Council. The Advisory Committee recommended that the Council be more closely involved in future periodic reviews, as well as in designing environmental education, with a view to benefiting from their local knowledge.
305. The Advisory Committee applauded activities related to the promotion of sustainable agriculture, renewable energy and green tourism. The Advisory Committee also recommended that the authorities further develop plans to manage the high number of visitors flocking to the area during the tourist season.
306. The Advisory Committee noted that the new zonation map shows that part of the north-eastern core area borders directly on the transition area and urged the authorities to provide an explanation. Furthermore, the Advisory Committee noted some discrepancies in population numbers: the table on page 7 mentions 4,500 people living in the transition area, while the table on page 19 mentions 10,000 people. The Advisory Committee requested the authorities to provide the most recent updated numbers.
307. The Advisory Committee was not able to determine **whether the site meets** the criteria and requested that the authorities submit the above-mentioned information by 30 May 2021. The Committee further recommended the initiation of cooperation with the Schaalsee Biosphere Reserve within the framework of EuroMAB, and the Lake Botsowme Biosphere Reserve within the framework of AfriMAB, in order to further enhance the development function and participatory approaches. The MAB Secretariat offers its assistance in this regard.
308. Based on the updated periodic review report, which had been updated and corrected with the additional information received by the Secretariat and reviewed by the Bureau, the Council considered that the site **meets** the criteria.

309. **Chatkal Biosphere Reserve (Uzbekistan).** The Advisory Committee at its 27th meeting concluded that the site **meets** the criteria of the Statutory Framework of the WNBR and is no longer subject to the Exit Strategy.
310. The Advisory Committee recommended that the national authorities submit by 30 May 2021 the updated information concerning the finalization of the new management plan for 2021–2024. The Advisory Committee also encouraged the Uzbekistan authorities to continue its work to involve local residents and communities in the management of the biosphere reserve.
311. The Council acknowledged the information by which the administrative bodies approved the Management Plans for the two protected areas that are part of the Chatkal BR.

ITEM X. COMPLETION OF THE EXIT STRATEGY AND IMPLEMENTATION OF THE ‘PROCESS OF EXCELLENCE AND ENHANCEMENT OF THE WNBR AS WELL AS QUALITY IMPROVEMENT OF ALL MEMBERS OF THE WORLD NETWORK’

312. The MAB Secretariat introduced item 10 and the document CONF.SC-21/CONF.233/9. As the Exit Strategy is completed, lessons learned from this process since 2013 enable biosphere reserves to serve as a model of excellence combining conservation and the sustainable use of biodiversity, and reconciling conservation with sustainable development. The Secretariat acknowledged the great success of the Exit Strategy under the umbrella of the MAB Council, with support from the Advisory Committee and the members of the Council, and highlighted that good communication is essential across sites and between sites, and between Member States and the MAB Secretariat. The participation of biosphere reserves in regional networks is also essential to exchange and share good practices. It was recalled that several regional workshops had been put in place to respond to the different questions related to management, governance and the involvement of local communities, thereby demonstrating MAB’s holistic approach that is unique in the WNBR.
313. After completion of the Exit Strategy, all sites of the WNBR currently meet the criteria and are models of excellence, thereby ensuring that the WNBR remains innovative. The Exit Strategy process allowed all sites to provide updated, quality information, such as up-to-date maps and data, that can be used to furnish the database, thereby contributing to positioning biosphere reserves with greater credibility and visibility with regard to the global biodiversity agenda, including the UN Decade on Ecosystem Restoration and the post-2020 Global Biodiversity Framework.
314. The Secretariat emphasized that all the lessons learned in the Exit Strategy process were taken up by the ad hoc working group, which began its work in 2018. Based on these, the ad hoc working group discussed together the modalities of the Process of Excellence so that countries are supported, benefit from experiences of other countries, and make biosphere reserves credible both individually and collectively as a world network. The group was created to control the quality of the process and the implementation of the Statutory Framework (Article 9). The Secretariat expressed thanks to all the ad hoc working group members for their dedication, especially in light of uncertainty and

- challenges brought about by the COVID-19 crisis, thanking the successive Directors of the MAB Secretariat for their dedicated support, as well as Martin Price (UK) who provided reflection on this process. The present document had been revised by UNESCO's legal office and was fully adoptable and in line with the Seville Strategy and the Statutory Framework.
315. Ms Suk-Kyung Shim of the delegation of the Republic of Korea and member of the ad hoc working group presented the characteristics and advantages of the guidelines, as well as the periodic review process of the WNBR.
 316. Ms Barbara Engels of the delegation of Germany and member of the ad hoc working group gave an overview of the different scenarios and associated processes: a) a case where sites meet the criteria; b) a case where the periodic review report is not submitted on time; c) a case where it is unclear whether the biosphere reserve meets the criteria; d) a case where the site does not meet the criteria. She also described the case of transboundary biosphere reserves and the case of biosphere reserves in conflict or disaster areas. All cases are described in working document CONF.SC-21/CONF.233/9. She concluded with clarifications on the voluntary, informal 5-yearly check-up mechanism at national level complementing the formal process to establish a short and easy review mechanism coordinated by the MAB National Committee 5 years after designation or the last periodic review report. The 5-yearly check-up mechanism is designed to help the biosphere reserve and should not be seen as a burden.
 317. The MAB Secretariat recalled that the proposition is to adopt an excellence process for all the biosphere reserves of the WNBR. All sites will benefit from technical support and better communication at all levels and alerted on specific issues. The guidelines do not replace the Statutory Framework but it will help countries to commit human resources and funding to implement it.
 318. Following the presentation, the Chair thanked the members of the ad hoc working group for their presentations and their work.
 319. Australia noted that the ad hoc working group had a difficult task and acknowledged the support received from the MAB Secretariat to this process, as well as colleagues from Germany, Slovakia and the Republic of Korea on transboundary issues. Australia supported the proposed decision and suggested to insert 'succinct yet comprehensive periodic review report' in paragraph 5 of the proposed decision to avoid voluminous reports by biosphere reserves.
 320. Austria fully supported the document and agreed that the guidelines do not replace the procedures described in the Statutory Framework but help ensure the good functioning of a biosphere reserve, thanking the members of the ad hoc working group. Austria further commended the success of the Exit Strategy and highlighted the cooperative support from all biosphere reserves' partners and the MAB Secretariat. Austria congratulated all Member States, members of the WNBR and the MAB Secretariat.
 321. Colombia congratulated the ad hoc working group for the important exercise that will allow improved management of biosphere reserves at the national level and is perfectly aligned

- with SDGs. Colombia agreed with Australia's remark on the need for short and rigorous reports, and thanked the team and the MAB Secretariat for giving an alternative to the Exit Strategy.
322. France recalled that the Process of Excellence of the WNBR concerns all sites of the WNBR and should not be seen a new Exit Strategy but rather a process to further improve biosphere reserves, together and individually, to serve as a model of sustainable development and conservation, including outside biosphere reserves. The proposed mechanism should allow long-term quality standards for biosphere reserves and avoid a new Exit Strategy if biosphere reserves do not meet the criteria. The 5-yearly check-up mechanism was supported by France and is a non-constraining process, contrary to the periodic review process. France highlighted the importance of national networks; several recommendations are already implemented in France, including youth mobilization and virtual meetings. France further noted that the guidelines are clear and precise and should form a basis for the work of the MAB Council and the MAB Secretariat, and guide the Council's decisions to implement the Statutory Framework.
323. Peru congratulated the ad hoc working group for the work done, and requested clarity on the case of transboundary biosphere reserves.
324. Venezuela as an Observer congratulated Nigeria for the organization of the meeting given the COVID-19 crisis. Venezuela supported Australia's comment to ensure that the mechanism is sustainable, that it facilitates the participation of managers, and allows for streamlining the frequency of reports; as reporting requires national resources these should be kept concise for all biosphere reserve managers.
325. Haiti supported Venezuela's remarks and congratulated the members of the ad hoc working group for the excellence of their work. Haiti further commended the proposal for 5-yearly internal evaluations, which will ensure quality and more frequent reporting.
326. The MAB Council then adopted the following decision:
1. The MAB Council encourages biosphere reserves to undertake five-year (mid-term) self-evaluations, and MAB National Committees (aided where necessary and feasible by regional networks) to assess the resulting reports to determine progress in implementation (Annex 5 hereto). The MAB Council also encourages biosphere reserves to seek such guidance and support as is necessary to support completion of the 10-yearly periodic review reports, and, where needed, to request technical support to improve the credibility of the WNBR.
 2. The MAB Council recalls its decision of 2017 (SC-17/CONF.229/15) and the provisions of Article 9 of the Statutory Framework of the WNBR, according to which every 10 years after the designation or the positive evaluation of a biosphere reserve designated by UNESCO, the concerned authority should forward a succinct yet comprehensive periodic review report to the MAB Secretariat.
 3. To complement its decisions of 2017 and 2019 on the Process of Excellence, the MAB Council hereby adopts a set of guidelines to support and ensure the implementation of

the Process of Excellence, thereby assuring the continuous enhancement and quality improvement of the WNBR (hereinafter referred to as the “MAB Excellence Guidelines”), which are in Annex 5 hereto. The MAB Excellence Guidelines set forth a new mechanism to improve implementation of the Process of Excellence which shall be applied together with the provisions of the Seville Strategy for Biosphere Reserves and the Statutory Framework of the WNBR. Their main purpose is to ensure that biosphere reserves, and the WNBR in its entirety, will serve as models for the implementation of the 2030 Agenda and its SDGs and the Convention on Biological Diversity post-2020 framework as well as subsequent multilateral environmental agreements in these fields. The MAB Excellence Guidelines also include, in Annexes 3 and 4 hereto, flow charts that further illustrate this new mechanism.

4. The MAB Council encourages all Member States, MAB National Committees, biosphere reserves and regional networks to continue sharing their experiences with periodic review reporting within the WNBR and to offer, as appropriate, assistance to individual biosphere reserves in order for them to meet or continue meeting the criteria to remain in the WNBR pursuant to the Statutory Framework of the WNBR.

327. The Secretariat further clarified the process for transboundary biosphere reserves to align national reporting and joint transboundary reporting, as the Seville Strategy and the Statutory Framework criteria only concern national sites. The present guidelines detail the different cases in paragraph 10. Peru thanked Secretariat for the clarification.

ITEM XI. PROPOSALS FOR NEW BIOSPHERE RESERVES AND EXTENSIONS/ MODIFICATIONS / RENAMING TO BIOSPHERE RESERVES THAT ARE PART OF THE WORLD NETWORK OF BIOSPHERE RESERVES (WNBR)

328. The representative of the Secretariat presented the item and document SC-21/CONF.233/10-rev. She reported that the International Advisory Committee for Biosphere Reserves (IABCR), at its 27th meeting held online from 8 to 12 March 2021, had examined 23 proposals: 20 for new biosphere reserves, including two transboundary sites, one resubmission and two requests for extensions/modification and/or renaming of already existing biosphere reserves. Three new countries had submitted proposals: Saudi Arabia, Libya and Lesotho.
329. The MAB Bureau met online on 1, 2 and 10 September prior the 33rd session of the MAB ICC. The members decided that for sites recommended for approval, the Advisory Committee would forward its recommendations to the Council without any change.
330. In some cases, the Advisory Committee had recommended that further information be requested from Member States by 31 August 2021. The additional information received by the MAB Secretariat by that date was subsequently reviewed by the MAB Bureau and approved at Bureau’s online meeting on 1, 2 and 10 September, to be submitted to the Council for its final decisions. The MAB Bureau’s recommendations thereon were reported orally online and presented at the 33rd MAB Council on 15 September 2021.

331. Taking into account the recommendations of the Advisory Committee for Biosphere Reserves contained in SC-21/CONF.233/10.rev and the Bureau's further deliberations on 1, 2 and 10 September, the MAB Council took the following decisions.

A. New nominations

332. **Atl'ka7tsem/Howe Sound (Canada).** The MAB Council welcomed this new proposal and endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council **approved** the site.
333. **Martinique (France).** The MAB Council welcomed this new proposal and endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council **approved** the site.
334. The Bureau welcomed the additional information provided by the French authorities, which had previously been absent in the submitted nomination form, on the protected areas management committee (Collège des gestionnaires des aires protégées) and its functioning.
335. **Moselle Sud (France).** The MAB Council welcomed this new proposal and endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council **approved** the site.
336. **Monte Grappa (Italy).** The MAB Council welcomed this new proposal and endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council **approved** the site.
337. **Kolsai Kolderi (Kazakhstan).** The MAB Council welcomed this new proposal and endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council **approved** the site.
338. **Matšeng (Lesotho).** The MAB Council welcomed this new proposal and endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council **approved** the site.
339. **Ashaafean (Libya).** The MAB Council welcomed this first proposal from the country I and endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council **approved** the site.
340. **Penang Hill (Malaysia).** The MAB Council welcomed this new proposal. Based on the recommendations of the 27th meeting of the Advisory Committee (AC), the MAB Bureau examined the additional information sent by the authorities as per Advisory Committee request namely:
- the steps to be taken to enlarge the terrestrial buffer zones and a timeframe;
 - detailed information regarding the legal or managerial basis of the marine buffer and transition areas, and the process to ensure consistency with the fisheries zoning system of the Department of Fisheries of Malaysia, which designates all areas within 5 nautical miles of the shoreline as Zone A for traditional fishing gear operated by

- traditional fishers;
- a plan to integrate settlements in the Teluk Bahang, located between Penang National Park and Teluk Bahang Forest Reserve, where local residents undertake fishing activities, work as tour guides, and operate traditional food stalls and restaurants relying on the natural resources within the proposed site;
 - correct figures for zone sizes which are inconsistent across the nomination dossier; and
 - a corrected electronic version of the nomination form.
341. As the information received was satisfactory, the MAB Council **approved** the site.
342. **Avireri Vraem (Peru)**. The MAB Council welcomed this new proposal and endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council **approved** the site.
343. **Wando Archipelago (Republic of Korea)**. The MAB Council welcomed this new proposal and endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council **approved** the site.
344. **Kuznetsky Alatau (Russian Federation)**. The MAB Council welcomed this new proposal and endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council **approved** the site.
345. **Mountain Great Bogdo (Russian Federation)**. The MAB Council welcomed this new proposal. Based on the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev, the MAB Bureau examined the additional information submitted by the Russian authorities on the draft management plan/policy and how it was designed in a participatory manner, as well as the clarification regarding the exact size of the human population. As the information received was satisfactory, the Council **approved** the site.
346. **Visherskiy Ural (Russian Federation)**. The MAB Council welcomed this proposal and endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council decided that this new nomination is **deferred**.
347. **Farasan Islands/Juzur Farasan (Saudi Arabia)**. The MAB Council welcomed this first proposal from the country and endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council **approved** the site.
348. **Ribeira Sacra e Serras do Oríbio e Courel (Spain)**. The MAB Council welcomed this new proposal and endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council **approved** the site.

349. **Doi Chiang Dao (Thailand).** The MAB Council welcomed this new proposal and endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council **approved** the site.
350. **Lower Amudarya State (Uzbekistan).** The MAB Council welcomed this proposal. Based on the recommendations of the 27th meeting of the Advisory Committee, the MAB Bureau examined the additional information sent by the authorities as per Advisory Committee request namely:
- confirmation that the core areas are surrounded by buffer zones sufficient to ensure protection and a revised zonation map accordingly; and
 - clarification on the comparatively dense population in the buffer zones.
351. The MAB Bureau also acknowledged the important effort of Uzbekistan in its activities of cooperation within the MAB Programme with neighbouring countries.
352. As the information received was satisfactory, the MAB Council **approved** the site.
353. **Kon ha Nung (Viet Nam).** The MAB Council welcomed this new proposal and endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council **approved** the site.
354. **Nui Chua (Viet Nam).** The MAB Council welcomed this new proposal and endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council **approved** the site.
355. **Lower Zambesi Escarpment (Zambia) – resubmission.** The MAB Council welcomed this resubmission. Based on the recommendations of the Advisory committee contained in document SC-21/CONF.233/10.rev, the MAB Bureau reviewed the additional information provided by national authorities. They indicated that the section of the National Park to be mined has not been re-categorized from the IUCN Category II to IUCN Category VI. In this regard, the mining license was granted to the developer in accordance with the current National Wildlife Act No.14 of 2015, which requires the conduct of an environmental impact assessment in accordance with procedures specified by the Environmental Management Act, 2011, and whose procedures shall consider the need to conserve and protect.
356. The authorities also informed the MAB Council that the Zambia National MAB Committee and the Mining Developer undertook a reconnaissance visit to the mining site in preparation to host the Technical Field Visit in collaboration with the MAB Secretariat to meet and engage with key stakeholders. The MAB National Committee is inviting the MAB Secretariat to join the Technical Field Visit at its earliest convenience.
357. As the information received was not satisfactory, the MAB Council decided that the proposal is **deferred**, and requested that the MAB Secretariat liaise with the national authorities to organize a technical field visit to the proposed site to meet key stakeholders, ascertain the critical information, and provide any necessary support prior to the resubmission of the nomination.

358. **Uvs Lake Depression (Mongolia/Russian Federation).** The MAB Council welcomed this new transboundary proposal between Europe and Asia and endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council **approved** the site.
359. **Five-country Biosphere Reserve Mura-Drava-Danube (Republic of Croatia, Hungary, Republic of Serbia, Republic of Slovenia, Republic of Austria).** The MAB Council welcomed this transboundary biosphere reserve proposal, the first to connect five countries and endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council **approved** the site.

B. Resubmission, Extension, Re-zoning or Re-naming of existing biosphere reserves recommended for approval

360. **Lauca Biosphere reserve (Chile).** The Advisory Committee welcomed the proposal for the extension of the Lauca Biosphere Reserve, established in 1981. The site is participating in the 'Process of Excellence and Enhancement of the WNBR'. The MAB Council endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council **approved** the extension of the site.
361. **Appennino Tosco Emiliano Biosphere reserve (Italy) – extension.** The MAB Council welcomed the proposal for extension of the Appennino Tosco Emiliano Biosphere Reserve. The MAB Council endorsed all the recommendations of the Advisory Committee contained in document SC-21/CONF.233/10.rev without any change. The MAB Council **approved** the extension of the site.

C. Voluntary withdrawals

362. The Secretariat had received letters which informed on the voluntary withdrawal of two sites by Member States: Ipassa Makokou BR (Gabon) and Chernye Zemli BR (Russian Federation).
363. Hungary and Croatia informed the Secretariat that Mura Drava Danube Transboundary Biosphere Reserve (Croatia/Hungary) will be no longer exist and had 'merged' into the five-country Mura-Drava-Danube BR (Republic of Croatia, Hungary, Republic of Serbia, Republic of Slovenia, Republic of Austria). This means that the TBR with five countries replaces the previous TBR with the two countries: for Europe, there is no increase in the number of TBRs. At the global level, the number of TBRs will increase only by one site: Uvs Lake Depression (Mongolia/Russian Federation).
364. With:
- 18 new national Biosphere Reserves,
 - 2 new transboundary site with one merging with an existing one
 - *and* the withdrawal of two BRs, resulting in the loss of one country (Gabon) from the WNBR.

- the WNBR now counts: 727 biosphere reserves in 131 countries including 22 transboundary sites.
365. Three new countries (Libya, Lesotho, and Saudi Arabia) joined the WNBR, and one country (Gabon) left the network.
366. After approval of each newly designated or extended biosphere reserve or transboundary sites, their representatives delivered an intervention speech. The MAB Council and participants congratulated the Member States of the concerned sites via chat in addition to online applause.
367. France informed the Council that with the designation of Martinique as a biosphere reserve, the status of the marine part will be strengthened, in accordance with French legislation that concerns all international recognition of marine areas. The French Office of Biodiversity will have to give its opinion during a meeting of its board of directors on 12 October, 2021.

ITEM XII. MAB YOUNG SCIENTISTS AWARDS (YSA) SCHEME

368. The MAB Secretariat introduced the document SC-21/CONF.233/11.rev and presented the winners of the MAB Young Scientists Awards (YSA) 2021 selected by the MAB Bureau. The MAB Council was invited to consider and endorse the proposed winners of the MAB YSA of 2021.
369. The Secretariat through the respective MAB National Committees and National Commissions for UNESCO received forty (41) eligible applications from twenty-six (26) countries; nineteen (19) of the applicants were women. There were a number of countries per region as follows: 11 countries of the Africa region (Benin, Congo, Côte d'Ivoire, DR Congo, Ethiopia, Ghana, Kenya, Mali, São Tomé and Príncipe, South Africa, Tanzania), 2 countries of the Arab region (Lebanon and Oman), 7 countries of the ASPAC region (Bangladesh, DPR Korea, Indonesia, Iran, Thailand, Uzbekistan and Viet Nam), 3 of the ENA region (Italy, Russian Federation Hungary), and 3 countries of the LAC/IberoMAB regions (Argentina, Ecuador, Mexico).
370. In accordance with the revised criteria and conditions for the MAB Young Scientist Awards (MAB YSA) approved by the 29th session of MAB-ICC, the Bureau members reviewed the applications of eligible candidates. Awards are set at a maximum of US\$5,000 each and the UNESCO total available amount assigned is US\$30,000. Therefore, six winners are usually selected each year.
371. The Secretariat recalled the selection procedure as well as details of Bureau meetings in parts related to the selection of MAB YSA 2021 winners.
372. The Secretariat explained that in the follow-up on the selection procedure, the summary table with six top candidates was presented by the Secretariat to the Bureau at its meeting on 2 September 2021. Accordingly, three candidates came from Africa, one candidate came from the Arab region, there was no candidate from the ASPAC region, no candidate

from the ENA region, and two candidates from LAC region. There was a balanced gender ratio of three women and three men.

373. Having noted that the total amount requested for the research studies of the selected candidates was lower than the ceiling of US\$30,000, the Bureau agreed to award a 7th candidate, as per similar cases in the past. As there were two candidates (one from the ASPAC region, one from the ENA region) having reached the same points, and the total amount requested for their studies exceeded an available remaining amount of funds, the Bureau decided to explore whether these *ex aequo* candidates could revise or re-write their proposals in line with the available and remaining budget funds that will be shared among the two candidates. The Bureau also decided to make its final decision at its meeting on 10 September. The MAB Secretariat liaised with these two candidates who promptly responded and provided the requested revised documents.
374. The MAB Bureau then approved unanimously the selection of the eight winners of 2021 MAB YSA to be endorsed by the 33rd Session of the MAB-ICC.
375. The process to enable a selection of two additional winners using available remaining funds assigned to MAB YSA 2021 *inter alia* re-confirmed that MAB YSA is a prestigious award for young scientists and being awarded, as a part of the MAB research family and MAB Programme, prevails over the financial award.
376. With regard to the importance of MAB YSA for a future scientific career, the Secretariat informed the Council that several interviews of former MAB YSA winners had taken place on the occasion of the 50th MAB anniversary and were now available on the MAB 50th anniversary webpage.
377. The Secretariat also highlighted the great achievement this year to have three winners from Africa. It was also underlined that a full gender balance had been reached.
378. The Secretariat also noted the high quality proposals submitted on important topics.
379. The delegation of Austria, as a Bureau member, highlighted the great interest of young scientists and researchers in the MAB YSA. It was noted that not only the quality of proposals this year was high, but also the quality had continuously increased over recent years. The Vice-Chair noted this very promising development and called upon the Council to increase the total budget in the future.
380. The MAB Council endorsed the winners of the 2021 MAB Young Scientists Award. The winners and the title of their research studies are shown below.

GENDER	SURNAME	NAME	COUNTRY	REGION	TITLE OF STUDY
M	VALENCIA	Esteban	Ecuador	LAC	Development of a methodology for monitoring of ecosystem's hotspots in the Biosphere Reserve Choco through Unmanned Aerial Vehicles and satellite imagery.
F	GIORGINI	Micaela	Argentina	LAC	Effects of disturbances associated to climate change and anthropic action on the ecosystem services provided by the Parque Atlantico Mar Chiquito Biosphere Reserve
M	KONE	Loua Serge Patrick	Côte d'Ivoire	AFR	Amélioration des performances des systèmes agroforestiers (SAF) à base de cacaoyer dans la zone de transition de la Réserve de biosphère de Taï
M	EDESA	Dese Yadeta	Ethiopia	AFR	Assessing the socio-economic contributions of Majang Forest Biosphere Reserve to the livelihoods of local communities: Promoting innovative approaches to socio-economic development that are socially and culturally appropriate, and environmentally sustainable
F	ASAAD BOURHANE	Zeina	Lebanon	ARAB	Première étude à l'échelle microbienne de la qualité environnementale de la réserve de biosphère Jabal Moussa, Liban
F	WARIRA	Grace	Kenya	AFR	Land use change and impacts on animal dispersal of Maasai spaces with in Amboseli Biosphere Reserve ecosystem: the linkage between core and kimana conservancy/lenker swamps buffer
M	SZANYI	Szabolcs	Hungary	ENA	Survey on the scientific possibilities of establishing a transboundary biosphere reserve in the Bereg lowland community ecol. research in the Szatmar-Bereg Landscape Protect Region in Hungary and in the Game Reserve Area near Vel'ka Dobron' in Vietnam Transcarpathian region of Ukraine
F	BURHANI	Dian	Indonesia	ASPAC	The potential of local commodity of macroalgae from Karimunjava Jepara Muria Biosphere Reserve as mask filter-based cellulose nanofibre in non-medical cloth mask to promote a green economy for the local community

381. The Chair congratulated the winners. A number of Member States also congratulated the winners.

ITEM XIII. MICHEL BATISSE AWARD

382. The Secretariat recalled that the Michel Batisse Award for Biosphere Reserve management was launched in 2004 and pays tribute to one of the founders of the MAB Programme. This award is presented once every two sessions of the MAB Council. The selection process is highly competitive. This year, thirteen applications from thirteen countries, eight of which met the criteria, were submitted to the MAB Secretariat.
383. Ms Sharon Wright (Australia) is the winner of the Michel Batisse Award 2021 for her case study in the Noosa Biosphere Reserve entitled, 'Keeping it in Kin Kin - Community efforts to manage riparian and river ecosystems'. Ms Sharon Wright's online presentation on the biosphere reserve was well received by the MAB Council.
384. Australia welcomed the decision by the MAB Council and congratulated Ms Sharon Wright for winning the Michel Batisse Award. Australia highlighted the importance of the work in the Noosa Biosphere Reserve on inclusive management to restore resilient natural aquatic ecosystems that could serve as a model for the WNBR. This project is part of the National Land Programme, a Federal government programme, which is a community-based restoration programme, with collaboration with South Africa, Uganda and Philippines. Australia encouraged the MAB programme to explore collaboration with this programme.

ITEM XIV. MAB YOUTH ACTIVITIES AND INVOLVEMENT IN THE GOVERNANCE OF THE MAB PROGRAMME AND ITS WORLD NETWORK OF BIOSPHERE RESERVES

385. The MAB Secretariat introduced the document on the activities of the MAB Youth networks.
386. The Secretariat presented the activities that took place since the 32nd session of the MAB Council and with special emphasis on the activities dedicated to the celebration of the 50th Anniversary. The Secretariat explained that this is a relatively new network and that its consolidation had been especially challenging due to the conditions imposed by the COVID-19 pandemic and the impossibility of gathering, organizing forums and meetings. Despite the difficulties and challenging times, MAB Youth are active in the Programme and are committed and dedicated to their biosphere reserves.
387. The Secretariat presented the activities linked to the 50th Anniversary.
388. In 2021, six youth spokespersons were nominated to represent, to raise the visibility and to engage more youth on the Programme. Ms Alicia Donnellan Barraclough (EuroMAB), Ms Rabecca Yego Laibich (AfriMAB), Ms Amel Mechmech (ArabMAB), Mr Obed Palagot Echavarria (IberoMAB), Ms Xiaoge Ping (AspacMAB) and Mr Emanuel Kilugala (Roots & Shoots) were presented formally. As spokespersons, they have engaged in different activities with their networks and at the global level to represent the Programme.
389. Ms Alicia Donnellan Barraclough was invited to share her experience participating in the IUCN World Conservation Congress and as the EuroMAB spokesperson.

390. Mr Rodrigo López Piquin, member of the IberoMAB Youth Network, was invited to take the floor and share the activities and work of the network since its inception. Most notably, on the draft Action Plan that aimed to be finalized during the next IberoMAB Youth Forum.
391. The MAB Secretariat presented the activities of the AfriMAB Youth Network, highlighting how recent efforts had been dedicated to promoting MAB in the participating countries and in establishing an active operational network.
392. The MAB Secretariat thanked the entire MAB Youth community for their efforts and dedication, and to everyone who contributed to making the activities of the network possible.
393. The Secretariat invited the Member States to share youth-related experiences and to provide its guidance and recommendations regarding the strengthening of youth participation in the MAB Programme and its WNBR.
394. Australia's youth delegate suggested that Member States include youth constituencies in their MAB National Committees and to provide mentoring and training for youth to develop the capacities needed to engage in the Programme in a meaningful way.
395. Kenya expressed support towards the initiative to engage more closely with youth, and shared the experiences and activities that were organized by youth in the country, notably those organized by the AfriMAB youth spokesperson.
396. Germany welcomed this item and spoke of the forum that was currently being planned to gather approximately 50 youth from German biosphere reserves in late September 2021, and that two youth are members of the German MAB Committee.
397. The Republic of Korea expressed interest in organizing a forum together with youth from Geoparks in 2021.
398. Argentina congratulated the youth and invited the Member States of the IberoMAB Network to engage with youth more efficiently and to work more closely with this group in biosphere reserves.
399. South Africa remarked that it is actively working on engaging youth in management committees and that it had hosted a meeting for national MAB Youth members to constitute the national network. Moreover, an event from the 19 to the 23 of October was planned to celebrate the 50th Anniversary, during which the national youth network will be launched.
400. Austria recently held two meetings of the recently created Youth Forum in the Nockberge Biosphere Reserve to discuss ways to better involve and actively engage young people in the implementation of the Biosphere Reserve concept. Moreover, three Austrian youth from this forum will participate in the meeting organized by Germany in September. Additionally, a seminar on the concept of biosphere reserves for the Austrian Study Foundation of the Austrian Academy of Sciences (ÖAW) will be organized during the last week of September 2021 for 20 students from Austria and Switzerland; this meeting will

feature the presentation of international speakers to include the international component of the MAB Programme.

ITEM XV. CELEBRATION OF THE 50th ANNIVERSARY OF MAB

401. The MAB Secretariat introduced the document SC-21/CONF.233/14 on the celebration of the 50th anniversary of MAB and its objectives. The unique visual identity that was shared with the entire community in order to generate a sense of global movement was shown. Information was provided on the online mobilization that took place in February 2021 with the entire MAB community prior to the official launch of the anniversary that occurred at the UNESCO Biodiversity Forum in March 2021.
402. The spokespersons for the 50th anniversary were presented: Dr Jane Goodall and the young representatives accompanying her: AfriMAB: Ms Rebecca Laibich; ASPACMAB: Ms Xiaoge Ping; IberoMAB: Mr Obed Palagot Echavarria; ArabMAB: Ms Amel Mechmech; EuroMAB: Ms Alicia Donnellan Barraclough; Roots & Shoots: Mr Emanuel Anthony Kilugala (Tanzania) from the Gombe Masito Ugalla BR in Tanzania.
403. The young representative of IberoMAB, Mr Obed Palagot took the floor and spoke about his experience as a MAB spokesperson.
404. He reported on the partnership with the renowned Brazilian contemporary artist Vik Muniz, UNESCO Goodwill Ambassador, who will create a work of art made from BR materials.
405. The official 50th anniversary exhibition of the MAB Programme was also presented, which had been created in collaboration with biosphere reserves. Ms Georgina Flamme, Director of the Abertis Foundation, the main donor of this activity, took the floor to explain this activity and the importance of the MAB anniversary for the Foundation.
406. The mini-documentaries and interviews with the winners of the MAB Young Scientists Award were presented. The activities and partnerships to strengthen the scientific base of the programme and the WNBR were also presented.
407. The Secretariat concluded by explaining the status of the construction of the new MAB database, and reported on the new educational material to be launched at the end of 2021.
408. At the end of the report, the MAB Council was invited to provide guidance to the MAB Secretariat on the celebration of the 50th anniversary of the MAB Programme.
409. All the countries that took the floor congratulated the MAB Secretariat for the information presented and for organizing the activities in the framework of the 50th anniversary.
410. The Republic of Korea remarked that this celebration will increase the worldwide visibility of MAB, and invited Member States to join in the celebration.

411. The delegation informed the MAB Council that Korea will participate in the anniversary through national public celebrations, and a photographic initiative is being introduced in Korean biosphere reserves. A national contest had been organized to share experiences in biosphere reserves. The winning initiatives will be shared during a symposium to be held possibly on 3 November, the International Day for Biosphere Reserves.
412. The Republic of Korea thanked the MAB Programme for the publication of educational materials developed in 2021, which will be translated into Korean and used as educational material in Korean biosphere reserves.
413. The Republic of Korea asked the Secretariat to publish the main activities carried out by the MAB Youth Spokesperson on the MAB website, a proposal supported by Australia.
414. Australia reported that the Noosa Biosphere Reserve will organize a commemorative event. The country proposed to have a calendar of organized events to help promote the MAB Programme. This was supported by Italy, who requested that the calendar also include the activities to be held by the biosphere reserves.
415. Australia remarked that the questionnaire sent by the MAB Secretariat to collect information for the MAB database represented a lot of work for the biosphere reserves, and asked that an extension of the deadline be granted for submitting information. In addition, the Council had not sufficiently discussed the future management, administration and maintenance of this database; an issue that should be addressed at the next meeting.
416. Since it had not been possible to celebrate the anniversary in person, Australia proposed to extend the 50th anniversary celebration to 2022 in order to organize an event next year. Germany, Spain and Colombia supported this proposal.
417. Finally, the delegation hoped that UNESCO will participate in the Stockholm+50 events and that the work of MAB will be presented, especially the work involving and by young people.
418. Italy spoke of the several meetings to be held in Italy, as well as school activities. An example is the environmental education week that will be related to biosphere reserves. At the national level, there is also an interest in improving the visibility of the work of biosphere reserves, and a two-year programme to highlight this issue is under consideration.
419. Austria reported that its MAB Committee has been financing cooperation and research projects, as well as other activities aligned with the MAB Programme for several decades. Austria is convinced that science is an essential component of MAB and it is important to focus on research in and for biosphere reserves. On the occasion of the 50th Anniversary of the MAB programme, the Austrian MAB Committee has organized and funded a special issue on the topic of "Biosphere Reserves in Mountain Regions" in the renowned scientific journal "eco.mont". The publication, containing 16 articles in more than 140 pages, will be presented to the MAB community by mid November. Austria confirmed its support to the MAB Programme in the future.

420. Germany supported Austria's approach and announced an event in May 2022 on biosphere reserve research and cooperation in the WNBR as a contribution to the anniversary celebration. More than 100 BR directors and young researchers will attend to exchange experiences.
421. France reported that it had organized an exhibition on intergenerational dialogues and the mobilization of youth in biosphere reserves. It appreciated the financial support of France to UNESCO to support the celebration of the anniversary in the country and in partnership with the WNBR. MAB France will try to organize a meeting of Caribbean MAB youth, particularly with the biosphere reserves in Guadeloupe and Martinique, as well as the MAB Youth Network in the region. This will also encourage the mobilization of young people in preparation for the Stockholm 50+ meeting to try and guide the political, economic and social decisions that will determine the future of the planet and for the generations to come, thereby giving continuity to the MAB Programme.
422. MAB France also organized an exhibition on the implementation and application of the SDGs in French biosphere reserves with some examples from the WNBR. The exhibition is available upon request on the MAB France website, in English and French. It will be presented in French biosphere reserves, as well as in French research sites and Alliance Française sites in different countries.
423. Kenya hoped that MAB will continue to play an important role in ensuring the protection and conservation of wildlife and their ecosystems, and that they can support climate adaptation and mitigation. Kenya's transboundary projects aim to foster peace and understanding between Kenya and Uganda. To celebrate the 50th anniversary, a workshop on economic strategies, best practices, and human-nature relationships in transboundary ecosystems will be organized between Kenya and Uganda.
424. Spain congratulated the Secretariat for the visual identity of the 50th anniversary that will help disseminate the celebration. The delegation spoke of the celebration of the International Day for Biosphere Reserves held on 3 November every year, which will be reviewed in November by the UNESCO General Conference and then validated by the United Nations.
425. Spain had organized various activities within the framework of the 50th anniversary, such as the biosphere week in November, in which 53 Spanish biosphere reserves will participate in order to raise awareness among the inhabitants of biosphere reserves about the importance of living in these areas.
426. Colombia appreciated the fact that this celebration is a milestone that recognizes the MAB Programme as an international reference in sustainable development. The delegation believed that it was a good time to reflect on all MAB's achievements, its impact on ecosystems and human populations, and on the new challenges to be faced.
427. Colombia has developed evaluation plans for the management of biosphere reserves, in line with the Excellence Strategy, that will soon be made available.

428. The Secretariat thanked the delegations for their positive words, congratulating them for their active support in the anniversary celebration. The Secretariat took note of the proposal to continue the celebrations into 2022 and to organize a face-to-face event, if resources permit. Countries were encouraged to mobilize partners to raise support and funds to continue this celebration. The Secretariat hoped that the proposal for approval of the International Day for Biosphere Reserves will be approved and, if so, there will be an opportunity to meet on 3 November to further celebrate.
429. The Secretariat informed the MAB Council that a list of activities organized by the countries was already available online on the MAB Council webpage and as an annex to the item on the 50th anniversary celebration. Countries were encouraged to review this list and to send information on organized or future activities for publication on the website.
430. Regarding the database, the Secretariat explained that this is an important project for the MAB programme and for the WNBR, with updated data required for its launch. The Secretariat thanked all the biosphere reserves that had already sent their information, adding that the deadline for receiving questionnaires will be extended. The Secretariat would offer assistance to biosphere reserves that encounter difficulties in submitting data.

ITEM XVI. DATE AND VENUE OF THE 34th SESSION OF THE MAB-ICC

431. Ms Noeline Raondry Rakotoarisoa recalled the common practice that the 34th session of the MAB-ICC should be held in Paris, UNESCO HQ, around June 2022.
432. Member States voiced no objections, but requested the Secretariat to take into account the dates of other international events to avoid potential clashes with the 34th session.
433. The Chair fully supported this request.
434. Mexico acknowledged the great work of Nigeria in hosting this very successful session for the first time in Africa, as well as the excellent work of the Secretariat in organizing this meeting and ensuring a continuity of the MAB Programme. In this regard, the delegation acknowledged the work of Ms Maria Rosa Cardenas of the Secretariat who is responsible for the IberoMAB network, while highlighting the leadership of the acting Secretary, Ms Noeline Raondry Rakotoarisoa, in achieving a successful meeting. Mexico recalled the former Secretary, Mr Miguel Clüsener-Godt, and his long-term dedication to the MAB Programme and important role in the implementation of the Exit Strategy and the Process of Excellence. On behalf of Mexico and IberoMAB network, the delegation formally acknowledged his work, reiterating the importance of continuity of the MAB Programme.
435. The Chair thanked Mexico for its kind words, inviting the Council to give a round of applause to the Bureau, the Secretariat and the entire technical team.
436. Mr Adepoju Adeshola then took the floor as representative of Nigeria to propose to hold the next Council session in Paris in a hybrid format to enable broader participation. With no comments, the Council agreed to hold the next meeting in a hybrid format.

ITEM XVII. OTHER MATTERS

437. **The first issue discussed under this item was focused on a proposal to rename ‘Man and the Biosphere’ Programme and to change the word ‘reserve’:**
438. The Secretary recalled that during the Opening ceremony, the Nigerian Federal Minister of Women Affairs raised the issue of changing the name of the Man and Biosphere Programme. As a follow-up, the Chair tasked the Secretariat to prepare a draft proposal for discussion during the 33rd session so as to introduce this item on the Agenda, as well as to initiate the process.
439. **The draft proposal:**
- **Bearing in mind** the comments made at the opening of ICC 33 by the Minister for Women’s Affairs that we should consider changing the name of the Programme – a comment that has been made ever more frequently in the last 20 years – and comments from (especially Anglophone countries) that the word ‘reserve’ is no longer appropriate to reflect the role of Biosphere Reserves;
 - **Given that in the 50th year of our programme** we should be preparing for our next 50 years, aiming to reflect current and emerging trends in thinking about people and the rest of nature.
 - **The MAB ICC requests** the MAB Secretariat to consult with UNESCO Member States to (1) collect prior to the 34th session of MAB ICC the various proposal(s) for new names for the MAB programme and biosphere reserves (2) to present to the MAB ICC at its 34th session in 2022 a process for adopting the names for adoption (3) implement the process of adoption and prepare a working document for the adoption of new names at its 35th session in 2023, which will be subsequently submitted to the General Conference in 2023 for final formal adoption.
440. The draft text above was discussed so as to agree on a follow-up process to be implemented by the MAB Secretariat.
441. Australia welcomed this timely proposal. However, as it is an open-ended draft, a more concrete proposal should be considered to avoid receiving a large number of suggestions from Member States. In this regard, Australia wished to present a specific suggestion and comment, adding that renaming the Programme would help avoid misunderstandings, as the English used in 1971 is quite different from English commonly used today. However, the logo should still be retained as it is well established and a well-known heritage icon of the Programme. Australia therefore proposed to rename the Programme, ‘People and the Nature Programme’, adding that it was necessary to keep its links to the past. The delegation further noted the need to very carefully examine the suggestions in terms of language use, both in UN languages and in local translations.
442. Australia also noted the precedence of the IUCN with regard to renaming and logo issues.
443. Concerning the word ‘reserve’, Australia recalled that Canada and other countries had used ‘biosphere regions’ as regions of the biosphere where various activities are carried out in line with conservation and sustainable development principles. Using this word would – at least in English – ensure that the abbreviation WNBR would stay the same.

444. The Chair remarked that it was important to allow other Member States within their regions to undertake consultations and allow the Secretariat to assist in this regard.
445. Argentina spoke of a draft proposal drawn by several countries of the IberoMAB network that had already consulted on this issue, offering to share this with the MAB Secretariat.
446. Following up on Australia's remarks, France agreed that it would be a problem to receive a large number of proposals in undertaking a survey of Member States. The delegation pointed out the need to have a clear idea from the outset what the Programme name should convey, and then to clearly stipulate the objectives of the Programme and in the biosphere reserves.
447. France further remarked that a change in name may incur some difficulties and limitations in some countries and in their languages. In this regard, it concurred that the French language used in 2021 is also different from 1971.
448. Having listened to the various proposals, the delegation of France suggested to consider looking upstream at the issues arising as a result of the current name and consequent impact, and then to identify needed changes. It is important that the new name is easily understood by stakeholders and partners and that it is also distinguishable from other initiatives and programmes. It would perhaps be useful to use a clarifying subtitle to reflect the reality on the ground and to ensure that people know what the programme means and what its mission is.
449. The Chair agreed with France and recalled that this was the reason he had requested the Secretariat to fine-tune all the suggestions discussed and carry out relevant consultations.
450. Germany remarked that renaming the MAB Programme and 'reserve' form an integral part of MAB despite being two different elements. The first name change is an important issue of language, giving the example of Germany in this regard. Germany recalled the 50 years of MAB's history and that the established name should not be lost in this renaming process. Broader consultations with all Member States was therefore extremely important, and the Secretariat should refrain from drafting a proposal of concrete names prior to the consultations.
451. South Africa concurred with Germany, and to avoid a high number of proposed names, it suggested that each region – following regional consultations – could propose one name, based on which the Secretariat could then work.
452. Austria supported the comments made by Australia and Germany, recalling that Austria uses the term 'biosphere park'. Austria also underlined Germany's important point not to sever the link to MAB's history when changing the name.
453. The Chair believed that the whole process might also require the joint work of the Bureau and IACBR to fine-tune the suggestions from MAB Council members.

454. The Republic of Korea welcomed the proposal to rename the MAB Programme and 'reserve', further noting that biosphere reserves in Korea also have to cope with difficulties communicating the term 'reserve'.
455. The delegation noted that it was evident that all MAB Council members agreed with the change in name, but it was nevertheless important to define how to proceed in this process. In this regard, South Africa's proposed procedure could be an acceptable concrete proposal for this renaming process.
456. The Republic of Korea therefore proposed a procedure, taking into account that a new name should be accepted by all countries. Renaming should be discussed first in the regions within regional networks, taking into consideration language issues, cultural backgrounds, and so on. The Secretariat would then collect all the proposals and prepare a comprehensive information document for further work by the IACBR and the Bureau.
457. The Chair welcomed the proposed procedure.
458. Australia appreciated the comments by South Africa and supported the proposal by the Republic of Korea as an effective way forward where the Bureau will play an important role. The delegation emphasized that it would be desirable for the Bureau, upon discussions of the regional proposals, to receive feedback from MAB Council members of the respective regions. Australia also supported the comment made by France regarding the heritage of the MAB Programme. The delegate underlined the excellent summary of the Chair.
459. The Chair emphasized the importance of ensuring that each Bureau member provides not only a joint statement and/or proposal agreed by each of the countries in their region, but also evidence of the proposed names vis-à-vis each individual country and its respective region, including whether a country wishes to keep the existing name.
460. With regard to the renaming, the delegation of France reminded the MAB Council of the need to remain consistent with the International Day for Biosphere Reserves.
461. The Chair requested the Bureau to take note of the issue highlighted by France in its regional consultations.
462. **Based on the draft proposal in para. 432, 3rd bullet point, the Chair requested that Bureau members – taking into account the interventions – coordinate consultations and fine-tune proposals for renaming in their respective regions, liaising proactively with Member States in their regions, while working with the Secretariat who will collect the proposals so as to elaborate a final proposal to be discussed at the next session of the MAB-ICC in 2022.**
463. With no further comments, the Chair concluded this first issue under Item XVII and its relevant decisions.
464. **Another issue of the Item XVII concerned the deadline to submit new nominations.**

465. Peru asked for the possibility to extend the deadline of 30 September 2021 to 15 December 2021 (as occurred in 2020) given the continuous problems related to COVID-19 in some countries, like Costa Rica. The MAB Secretary explained in detail the entire process leading to the IACBR evaluations and recommendations, including initial technical assessments of dossiers by the MAB Secretariat. Ms Noeline Raondry Rakotoarisoa strongly advised that the 30 September 2021 deadline be maintained.
466. With no further comments, the Chair concluded this item.

ITEM XVIII. ADOPTION OF THE REPORT

467. Ms Noeline Raondry Rakotoarisoa, Secretary a.i. of the MAB Council, explained the process regarding the drafting of the final report and adoption by the Council.
468. Mr Günter Köck (Austria), Rapporteur of the Council, remarked that the draft report had been well written. The Rapporteur then presented the draft report of the 33rd session to MAB Council members and Observer delegations by section and by paragraph, where appropriate. A small number of changes, additions and deletions were introduced by the delegations and were duly noted.
469. The draft report was adopted with the changes, additions and deletions proposed during the review of the report on 17 September 2021; the final day of the 33rd session of the MAB Council.
470. It was agreed that the Members of the MAB Council had until 30 September 2021 to send any remaining comments / inputs to the MAB Secretariat so that they could be included in the final version of the report, as appropriate.

ITEM XIX. CLOSURE OF THE SESSION BY THE ASSISTANT DIRECTOR-GENERAL FOR THE NATURAL SCIENCES

471. Ms Noeline Raondry Rakotoarisoa, on behalf of the MAB Secretariat, expressed immense thanks to Nigeria for hosting this excellent meeting. She acknowledged the support of the MAB-ICC Chair, the Ambassador of Nigeria to UNESCO, the cooperation of the Director of the UNESCO Office in Abuja, the work of all the UNESCO colleagues involved – both in the Abuja Office and at the MAB Secretariat, naming them by person. The Secretary thanked the Assistant Director-General for Natural Sciences, Ms Shamila Nair-Bedouelle, for her leadership and coordination, without which this meeting would not have taken place.
472. Ms Shamila Nair-Bedouelle spoke on behalf of UNESCO and the Natural Sciences Sector. She began by thanking Ms Noeline Raondry Rakotoarisoa, adding that she highly appreciated her role and hard work that enabled this event to be so successful.
473. The Assistant Director-General for Natural Sciences expressed her profound gratitude and warm thanks to the Government of Nigeria for hosting this unique 33rd session of the Council and for making it such a success.

474. She noted that in spite of the session having been conducted as a hybrid meeting, owing to COVID-19 sanitary measures and travel restrictions, it had been impressive to see the great endeavour and immense commitment of the Nigerian authorities to prepare and conduct an event that will be marked as an important milestone in the MAB Programme's history as the first time a session of the MAB Council had been organized in Africa.
475. Ms Nair-Bedouelle remarked that the hosting of this session by Nigeria demonstrated its outstanding long-term commitment to UNESCO's objectives and, particularly, to the MAB Programme and its World Network of Biosphere Reserves. In this regard, she mentioned the Nigerian biosphere reserves, highlighting the project Biosphere and Heritage of Lake Chad, known as BIOPALT, which was officially launched during the International Conference on Lake Chad in Abuja, February 2018, and with great results achieved by all the beneficiary countries: Chad, Cameroon, the Central African Republic, Niger and Nigeria. She also greatly acknowledged the transboundary dimension of the Lake Chad Basin.
476. With regard to transboundary cooperation, she congratulated the two new transboundary biosphere reserves, as well as all the Member States that inaugurated new biosphere reserves approved by this MAB Council.
477. Ms Shamila Nair-Bedouelle also acknowledged the completion of the Exit Strategy and the 'Process of Excellence and Enhancement of the WNBR as Well as Quality Improvement of All Members of the World Network', which will ensure that biosphere reserves serve as models for the implementation of the 2030 Agenda and its SDGs.
478. She further encouraged new Member States and new sites to join the WNBR and the MAB Programme, which this year celebrates its 50th anniversary. She recalled that 275 million people are now living in biosphere reserves. She outlined a number of figures and correlated percentages with regard to the figures and targets of the Convention on Biological Diversity (CBD). In this regard, she noted that while the figures of the CBD targets are projected for 2030, the figures for biosphere reserves are a current reality.
479. Ms Nair-Bedouelle also recalled the IUCN World Conservation Congress held in Marseille, France, where UNESCO and the MAB Programme were very well positioned. It was also possible within the framework of the five-year partnership with Louis Vuitton Moët Hennessy (LVMH) to support the work of the MAB Programme on biodiversity conservation.
480. She underlined the upcoming COP 26 where the MAB Programme is expected to present best practices in biosphere reserves as models of climate change mitigation and adaptation, which demonstrate parts of the strategic objectives of the MAB Programme and which also have key implications on Small Island Developing States.
481. Furthermore, Ms Nair-Bedouelle recalled the United Nations Decade on Ecosystem Restoration during which UNESCO will participate with its formidable library of experiences that have been amassed in biosphere reserves.

482. Ms Shamila Nair-Bedouelle reiterated the great work and success of this 33rd session of the MAB Council, greatly acknowledging the work of the host Government of Nigeria, the Ambassador and Permanent Delegate of Nigeria to UNESCO, the Chair of the MAB-ICC and his excellent team, the UNESCO Office in Abuja and its Director, and the whole team as well as the Director of Regional Office in Dakar, and all the colleagues who contributed to this successful event. She underlined the excellent work of the people behind the scenes – all the logistics support services, translators and technical staff. She highlighted in particular the key roles played by the Secretary, Ms Noeline Raondry Rakotoarisoa, and Ms Meriem Bouamrane.
483. She again gave thanks to the Government of Nigeria for hosting this session, to the MAB Council and the Bureau members for their dedicated work that had enabled the decisions. She also acknowledged all the Member States of UNESCO, partners and NGOs.
484. Ms Shamila Nair-Bedouelle concluded by highlighting this outstanding MAB-ICC session in Africa held in a ‘super’ year for biodiversity and on the occasion of the 50th anniversary of the MAB Programme — a pioneering and visionary initiative that reminded us that people are an integral part of the biosphere.
485. She also recalled the 1997 Universal Declaration of Human Responsibilities in its extraordinary decision to continue to preserve life on Earth in order to enable future generations to benefit from the wealth of Earth’s ecosystems. In this regard, UNESCO biosphere reserves demonstrate that living in harmony with nature is possible and that solutions are in nature; we are part of nature and we are solutions.
486. Mr Adepoju Olatunde Adeshola, the Chair of the MAB Council, thanked the Assistant Director-General for her wonderful words.
487. He remarked that wherever participants found themselves across the globe, technologies had gathered everyone together under one roof and, consequently, the decisions made will be enacted in those regions. The Chairperson further highlighted the uniqueness of UNESCO and that the MAB Programme encapsulated all UNESCO’s objectives and priorities.
488. Mr Adeshola thanked all those who had contributed in making this successful event possible. He expressed profound gratitude to the President of Nigeria, the Secretary of State, the Ministers, the Permanent Delegations, the Secretaries-General of the UNESCO National Commissions, MAB National Committees, the Director-General, the Assistant-Director General, the former MAB Secretary and Director of Division of Ecological and Earth Sciences, Mr Miguel Clüsener-Godt, the current acting Secretary, the Director of the UNESCO Regional Office in Dakar and the Director of the UNESCO Office in Abuja for their exceptional support and work. He acknowledged with thanks Ms Hajo Sani-Oon, the Permanent Delegate of Nigeria to UNESCO and all the Permanent Delegations of UNESCO in Paris. The Chair expressed immense gratitude for the outstanding work of the Bureau members, thanking the Observers and expressing thanks for the great involvement of youth promoting the MAB Programme around the world, as well as the excellent work of the interpretation team, Mr Manoel Giffoni Da Silveira Netto, and all the technical staff. The Chair congratulated all the countries that had new biosphere reserves

approved, emphasizing the important efforts that had led to the completion of the Exit Strategy and the successfully implemented Process of Excellence.

489. Mr Adepoju Olatunde Adeshola officially closed the 33rd Session of the MAB-ICC.

Annex 2: Document SC-21/CONF.233/8-rev

ITEM 9: PERIODIC REVIEW REPORTS AND FOLLOW-UP INFORMATION RECEIVED SINCE THE 31st SESSION OF THE MAB-ICC

1. Due to the online format of the 32nd session of MAB ICC, the review of recommendations of the 26th session of the International Advisory Committee for Biosphere reserves (IACBR) on Periodic Review Reports and Follow-Up Information received since the 31st session of the MAB-ICC was postponed to the 33rd session of MAB ICC.
2. The document SC-21/CONF.233/8-rev. contains the recommendations concerning the periodic reviews on individual biosphere reserves considered by the IACBR at its 26th session in February 2020 (Part I) and 27th session in March 2021 (Part II). Whenever relevant, it also refers to MAB-ICC decision.
3. At its 26th meeting held in presentia at UNESCO HQ, from 17 to 20 February 2020 the Advisory Committee examined 27 reports and 29 follow-ups to previous recommendations from 34 countries, including reports and follow-up as implementation of the Exit Strategy/Process of Excellence. The recommendations of the Advisory Committee on each of these sites are included in Annexes 1 and 2 under PART I of this document. These recommendations have been transmitted to the Member States concerned for follow-up. The Advisory Committee took notes on voluntary withdrawals of 11 sites from 4 countries (see below).
4. It is worth recalling that at its 32nd session in October 2020, the MAB ICC took note of the following voluntary withdrawal of 11 sites from 4 countries:
 - Uluru (Ayers Rock-Mount Olga), Australia
 - Croajingalong, Australia
 - Riverland (formerly Bookmark), Australia
 - Kosciuszko, Australia
 - Unnamed (Mamungari), Australia
 - Ali Botouch, Bulgaria
 - Douпки-Djindjiritza, Bulgaria
 - Mantaritzza, Bulgaria
 - Parangalitsa, Bulgaria
 - Lufira, the Democratic Republic of Congo
 - Reserva de la Biosfera Islas del Golfo de California, Mexico
5. Since the last MAB Council held online in October 2020, the Secretariat has received 28 reports and 22 follow-up information and one extension from 28 countries, including 14 reports and follow-up from 9 countries in the framework of the implementation of the Exit strategy.
6. During its meeting held online from 8 to 12 March 2021, the members of the Advisory Committee examined these periodic review reports and the follow-up to previous recommendations of the MAB Council. The recommendations of the Advisory

Committee on each of these sites are included in Annexes 3 and 4 under PART II of this document. These recommendations have been transmitted to the Member States concerned for follow-up. Any additional information provided by 31 August 2021 will be considered by the MAB Council and its Bureau.

7. The Advisory Committee has clearly indicated in its recommendations the deadline for submission of additional information to align with the timeline of this strategy for the relevant sites and inform countries accordingly.
8. On 5 August 2021, the MAB Secretariat received, an official letter from the Government of Gabon informing that they want to voluntary withdraw Ipassa-Makokou biosphere reserve which was under Exit strategy.
9. The Secretariat will prepare a colour chart summarizing the results of these recommendations for the MAB Council decision (green for sites meeting the criteria; red for sites not meeting the criteria; pink for sites recommended for withdrawal; blue for sites for which additional information was requested).
10. The MAB Council is invited to consider and approve the recommendations made by the 26th and 27th Advisory Committee, including suggested modifications to be proposed by the MAB Bureau at its Council session and to take note of the voluntary withdrawal of existing biosphere reserves.

PART I:

ANNEX 1: PERIODIC REVIEW REPORTS EXAMINED BY THE 26th IACBR 2020

Country	Name of the site	26 th IACBR recommendations (2020)	Comments
AUSTRALIA	Great Sandy	Meets the criteria	
CHILE	La Campana-Peñuelas	Meets the criteria	
CHINA	Chebaling	Meets the criteria	
	Maolan	Meets the criteria	
DR CONGO	Luki	Meets the criteria	Exit Strategy / Process of Excellence
	Yangambi	Meets the criteria	Exit Strategy / Process of Excellence
ECUADOR	Yasuni	Meets the criteria	Exit Strategy / Process of Excellence
FRANCE	Fontainebleau Et Gatinais	PR to be submitted by 30 Sept 2021 latest	
GABON	Ipassa Makokou	Does not meet the criteria; recommended for withdrawal	Exit Strategy / Process of Excellence
GERMANY	Bliesgau	Meets the criteria	
	Swabian Alb	Meets the criteria	
GUATEMALA	Maya	Meets the criteria	Exit Strategy / Process of Excellence
KINGDOM OF MOROCCO	Arganeraie	Meets the criteria	
KYRGYZSTAN	Ysyk-Köl	Meets the criteria; additional info requested	Exit Strategy / Process of Excellence
MEXICO	Barranca de Metztitlan	Meets the criteria	
PORTUGAL	Flores Island	Meets the criteria	
PORTUGAL / SPAIN	TBR Geres-Xures	Meets the criteria	
ROMANIA	Rodna Mountain (formerly Pietrosul Mare)	Additional info requested	Exit Strategy / Process of Excellence
	Retezat	Additional info requested	Exit Strategy / Process of Excellence
RUSSIAN FEDERATION	Kavkazskiy	Additional info requested	Exit Strategy / Process of Excellence
SPAIN	Fuerteventura	Meets the criteria	
UNITED KINGDOM	Dyfi	Meets the criteria	

USA	Sonoran Desert (formerly Organ Pipe Cactus)	Additional info requested	Exit Strategy / Process of Excellence
USA	Obtawaing (formerly University of Michigan Biological Station)	Additional info requested	Exit Strategy / Process of Excellence
UZBEKISTAN	Chatkal	Meets the criteria on the condition to submit additional info	Exit Strategy / Process of Excellence
VIET NAM	Mui Ca Mau	Meets the criteria	
	Cu Lao Cham-Hoi Na	Meets the criteria; additional info requested	

1. Great Sandy (Australia). The Advisory Committee welcomed the submission of the first periodic review of the Great Sandy Biosphere Reserve, which was designated in 2009. The biosphere reserve is located on eastern seaboard of Australia, in the south-eastern part of the State of Queensland (encompassing the regions of Bundaberg, Fraser Coast and Gympie), stretching westwards from the Noosa Biosphere Reserve to the Mary River and then north to the Burnett River.
2. The site is home to the most biologically significant nesting site for the loggerhead turtle (*Caretta caretta*) population in the South Pacific region and boasts two nationally recognized and four regionally recognized conservation areas with more than 7,500 recorded species of fauna and flora, including over 100 nationally protected species. It is also a place of significance for the Convention on the Conservation of Migratory Species of Wild Animals (CMS) for both marine turtles and migratory birds, and is a listed site under the East Asian – Australasian Flyway Partnership (EAAFP).
3. The core area consists of the Fraser Island Natural World Heritage site (1992), the Great Sandy Strait Wetlands of International Importance (1999), the Great Sandy Marine Park (2006), and the southern boundary of the Great Barrier Reef Marine Park and Natural World Heritage Area (1981). The permanent human population within the transition area amounts to approximately 31,200 people, having increased by 14% following the official designation.
4. Ecotourism is a key sector of the wider tourism experience in the reserve. Ecotourism ventures include whale-watching tours, turtle laying and hatching experiences, coastal and hinterland exploring, Great Barrier Reef excursions, heritage tourism and trips to Fraser Island.
5. During the periodic review the use of updated and more accurate geospatial technology identified discrepancies in the area of the biosphere reserve as represented on the nomination document. On the basis of current data, the total area amounts to 1,239,854 ha with no change in the biosphere reserve boundaries.
6. One of the primary challenges for the biosphere reserve management is associated with residential development on sand dunes. Increasing coastal erosion and sea-level

- rise have led the Queensland Department of Environment and Science to develop and implement a coastal building line tool in order to regulate building work in the coastal management zones. Coastal erosion and climate change are also having a negative impact on marine turtle species.
7. Another significant change is that traditional owners are now allowed to take responsibility for the maintenance of places of importance to native title-holders under traditional laws, and to protect those places from physical harm according to the historic execution of non-exclusive native title rights in 2014.
 8. The Advisory Committee noted that diverse stakeholders participated in the review process with the aim of obtaining a holistic overview of progress towards sustainability. The Committee also expressed its appreciation for the submitted case studies, including the LowGlow partnership to reduce light pollution along the Woongarra Coast – a home to endangered Loggerhead turtles.
 9. Acknowledging that the biosphere reserve management plan for the upcoming decade was under final development at the time of the periodic report submission, the Advisory Committee requested that the authorities provide the plan by 30 September 2020. The Advisory Committee also recommended that the next periodic report include all sub-chapters of the periodic report form.
 10. The Advisory Committee concluded that the site **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserve (WNBR).
 11. **Campana – Peñuelas (Chile).** The Advisory Committee welcomed the third periodic review of the Campana – Peñuelas Biosphere Reserve, which was designated in 1984. The biosphere reserve includes the Campana National Park and the Lago Peñuelas National Reserve.
 12. The major vegetation type of the reserve is scrubland with Looser (*Cryptocarya alba*), a species of the family Lauraceae, boldea fragran (*Peumus boldus*) and winter's bark (*Drimys winteri*). The reserve also includes various ecosystems, each of which is home to endemic species. A body of water acts as an important wetland for migratory birds and occasional resident ones, with 125 recorded species of aquatic, riparian and terrestrial birds.
 13. The total area of the biosphere reserve covers 238.216 ha. Approximately 155,322 people currently live in the biosphere reserve, representing an increase of 30,000 since the last periodic review. Most economic activities are related to small and medium-sized enterprises in the industrial, agriculture, cattle and forestry sectors.
 14. The majority of the changes in the biosphere reserve since the previous review relate to land use, especially in the housing, industrial, energy and commercial sectors, and have been driven in part by substantial investments in the construction of new highways to the site.
 15. Furthermore, in the past nine years, the biosphere reserve has experienced prolonged and severe droughts, which have prompted the declaration of emergencies due to water scarcity. Forest fires have also affected the site and the reserve is currently implementing prevention programmes to reduce the associated threats.

16. Conflicts with local communities have been generated by the energy projects Cardones-Polpaico and Los Rulos which are located in the transition zone.
17. Over the past decade, the biosphere reserve has boosted international cooperation with other reserves such as Fontainebleau et Gatinais (France) and the La Selle (Haiti), as well as with Honduras, in order to exchange experiences. The reserve has also initiated a programme to implement gender-related good practices, a conservation plan for the endemic species *Jubaea chilensis* and an education programme focused on sustainable development.
18. In 2008, the biosphere reserve became the first in Chile to establish a Management Committee. However, the Committee has faced challenges with implementing the management plan, due to a lack of commitment among some of the stakeholders.
19. The Advisory Committee considers that the site **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserves (WNBR).
20. **Chebaling Biosphere Reserve (China).** The Advisory Committee welcomed the first periodic review of the Chebaling Biosphere Reserve, which was designated in 2007. The site is located in the southeast of Shixing County in Guangdong Province. The site focuses on protecting subtropical evergreen broad-leaved forests and endangered species. The site is also a forest nature reserve that integrates functions such as species and ecological protection, water conservation, scientific research, popular science education and sustainable development of natural resources.
21. During the past decade, the reserve has promoted community development and guided local residents to adopt alternative livelihood measures. It has issued non-commercial forest subsidies, promoted new agricultural technologies to better save energy and reduce pollution, and organized training courses for community members.
22. The Advisory Committee noted that the living environment of local people has improved significantly and residents have become less dependent on natural resources, thanks to projects promoting sustainable development. As a result, forest resources have been effectively recovered.
23. The site contains 195 new species of wild plants, 110 new species of animals and 456 new species of large fungi. Forest coverage has increased from the initial level of 65% to 95%.
24. The Advisory Committee noted that the site has made particular efforts to address wildfires by strengthening prevention services, improving relevant infrastructure and engaging in extensive awareness-raising programmes. As a result, the site has had no wildfires for the last 34 years.
25. The site has developed a master plan for ecotourism, strengthening supervision over tour resources, focusing on education-oriented ecotourism and following the requirements for environmental carrying capacity control. It has carried out pilot studies on carbon sinks in forestry, taken measures against climate change, and continued to enrich and develop its ecological compensation mechanism. It has

- promoted community development through project development and advocated green production and living.
26. The Advisory Committee noted with satisfaction that the Party Committee and People's Government of Shixing County established the Chebaling World Biosphere Reserve Joint Protection Committee in 2009. The Committee called meetings to discuss new ideas and methods for joint community management and to coordinate various stakeholders to resolve emerging issues related to development of the reserve. It also noted that measures to prevent illicit wildlife hunting and trafficking are in place.
 27. The Advisory Committee therefore concluded that the site **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserve (WNBR).
 28. **Maolan Biosphere Reserve (China).** The Advisory Committee commended the Chinese authorities for the submission of the second periodic review.
 29. Established in 1996, the Maolan Biosphere Reserve is located in the south of Libo County, Qiannan Bouyei and Miao Autonomous Prefecture in Guizhou Province, bordering Guangxi Zhuang Autonomous Region in the south and adjacent to the Guangxi Mulun National Nature Reserve.
 30. Over the past decade, the site has proactively explored new models for community-based development to promote resources management with the aim of protecting karst forest ecosystems and biodiversity.
 31. The Advisory Committee noted with satisfaction that the site has strengthened and promoted the development of communities. It has developed projects including planting and breeding of underwood, planting of *Indigo indica* and planting of Chinese herbal medicine. It has also organized community residents to participate in training courses such as 'bamboo weaving and silver decoration processing' and to carry out other training projects. The site has implemented campus education activities on the themes of 'Love My Hometown – I'll be a little forest guard' and 'Green Dream, My Dream' in the reserve and surrounding communities. It has also conducted environmental education in communities by holding forest protection and fire prevention meetings and posting slogans in villages. Ten tourism development projects have been implemented in the Maolan Eco-tourism zone.
 32. Management plans for the biosphere reserve have covered topics such as the regionalization and demarcation of non-commercial Forests in Maolan, compensation for ecological benefits of forests and others. Since 2006, policies and systems such as the national non-commercial forest management system and an Implementation Plan for the Delineation of the Forestry Ecological Red Line in Guizhou Province have been conducted in the core area, buffer zone and transition zone. Overall, there have been three main plans for the reserve in the last decade: the Implementation Plan for the Maolan Demonstrative Reserve, the Ten-year Master Plan for the Maolan Reserve and Planning for the Ecotourism of Maolan Reserve.
 33. The Advisory Committee noticed that the southern border of the core area is not protected by a buffer zone. In order to strengthen the conservation function of the site,

- the Committee encouraged the national authorities to create a partnership with the neighbouring province and its existing nature reserve.
34. The Committee also noticed that some supporting documents, such as Management Plans, were not attached to the Periodic review report and requested the authorities to submit the missing documents by 30 September 2020.
 35. The Advisory Committee concluded that the site **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserve (WNBR).
 36. **Luki Biosphere Reserve (Democratic Republic of Congo)**. This site is participating in the 'Process of Excellence and Enhancement of the WNBR'. The Advisory Committee welcomed the third periodic review for the biosphere reserve, which was established in 1979. The site is located in the province of central Congo and presents a diversity of ecosystems including forests with *Corynanthe paniculata* and *Prioria balsamifer*. Its total surface covers 33,635 ha and is home to 9,736 inhabitants.
 37. The biosphere reserve was affected by a significant conflict over land, with families of former claimants claiming land for agricultural activities. Indeed, population growth has led to land scarcity while arable lands exist in the reserve. The Advisory Committee also noted the initiative for a transboundary biosphere reserve between Angola, Congo Brazzaville and the DRC.
 38. The Advisory Committee acknowledged the updated information on the zonation of the Luki Biosphere Reserve, and noted that the national authorities have added a second core area consisting of an area around Nkula river totalling 176 ha. With this proposed addition, the reserve would extend over a total area of 33,811 ha. However, the Advisory Committee also noted the absence of a legal status to protect this extension.
 39. The Advisory Committee concluded that the Luki biosphere reserve **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserves (WNBR).
 40. The Advisory Committee encouraged the management authority to submit a new proposal for the extension of the current site with all supporting documents, including a new management plan covering the area,
 41. **Yangambi Biosphere Reserve (Democratic Republic Congo)**. This site is participating in the 'Process of Excellence and Enhancement of the WNBR'. The Advisory Committee welcomed the third periodic review for this biosphere reserve, which was established in 1977. The site is located in the north of the country and covers a total area of 243,555.2 ha. The core area represents 26%, the buffer zone 37% and the transition zone 37% of the overall area.
 42. The site hosts significant biodiversity including about 32,000 tree species, as well as threatened species such as the elephant (*Loxodonta africana cyclotis*), river hog (*Potamochoerus porcus*) and monkey (*Cercopithecus spp.*).
 43. The Yangambi Biosphere Reserve is dominated by secondary forests including *Pycnanthus angolensis* and *Fagara macrophylla*, semi-deciduous secondary forest,

rain forests with *Gilbertiodendron dewevrei*, climax forests with *Brachystegia laurentii* and marshland forests.

44. The Advisory Committee acknowledged the involvement of national, regional and local stakeholders in the periodic review process, and the improved zonation in line with the previous recommendation of the MAB ICC.
45. The Advisory Committee noted the efforts required to ensure that the concept and principles of the biosphere reserve are well integrated by local authorities, communities and other relevant stakeholders at national, regional and local levels and, therefore, concluded that the biosphere reserve **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserves (WNBR).
46. The Advisory Committee also noted that there is no recent census of the population living in the buffer and transition zones of the biosphere reserve, and encouraged the national authorities to provide updated data with the next periodic review.
47. **Yasuní Biosphere Reserve (Ecuador). Extension and re-zoning.** The site is participating in the 'Process of Excellence and Enhancement of the WNBR'. The Advisory Committee welcomes this request for the extension and re-zoning of the existing Yasuní Biosphere Reserve submitted by the Ecuadorian authorities. The reserve includes a wetland featured on the Ramsar List.
48. The biosphere reserve is located in the north-western part of Ecuador's portion of the Amazon, and currently covers 1,676,105.1 ha. The proposed extension would result in a total surface area of 2,756,427.53 ha.
49. The biosphere reserve has welcomed the suggestions from the MAB Advisory Committee concerning its zonation. Under these suggestions, the core area would cover the Intangible Tagaeri-Taromenani zone where indigenous population live in voluntary isolation and where all extractive economic activities are completely prohibited by the Ecuadorian State.
50. However, the Ecuadorian authorities prefers that the existing area should continue to be considered as the core zone, with the exception of the parts of Yasuní National Park where oil activities are taking place. They allege that the state of conservation and activities carried out in this area are not consistent with a buffer zone. Ecuador also commits to continue to promote favourable conditions for connectivity among habitats, particularly for species that need large areas, such as the jaguar and giant otter.
51. The biosphere reserve has a current population of 88,293 inhabitants, including members of the Waorani, Kichwa and Shuar indigenous peoples.
52. Most of the threats faced by the biosphere reserve are related to certain economic activities, such as commercial hunting, subsistence hunting and oil and gas enterprises. Pressure on ecosystems from the latter may increase as two new blocs are due to begin operation and may entail new access infrastructure. Extensive coffee production and cattle are also considered threats.

53. The local authorities have established a Management Committee consisting of several institutional and social stakeholders. The manager of the Yasuní National Park is in charge of coordinating the Committee at present.
54. The Advisory Committee welcomed the significant efforts made by the country to fulfil the three functions of the biosphere reserve. The biosphere reserve was able to revise its zonation and vision, and has become a model for addressing sustainable development challenges that can be replicated elsewhere in the WNBR.
55. The Advisory Committee recommends that the requested extension and re-zoning of the biosphere reserve be approved. With this new zonation, the Yasuní Biosphere Reserve **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserves (WNBR).
56. **Fontainebleau et Gâtinais Biosphere Reserve (France).** The Advisory Committee confirmed receipt of a letter dated 6 September 2019, asking for an extension to be granted for the submission of the periodic review report. The Advisory Committee welcomed the progress made led by the new director and coordination team and the ongoing consultation with numerous stakeholders.
57. The Advisory Committee recommended that an extension of the deadline be granted, and urged the authorities to submit the periodic review, if possible, by 30 September 2020, but no later than 30 September 2021.
58. **'Ipassa Makokou Integral Reserve' Biosphere Reserve (Gabon).** The site is participating in the 'Process of Excellence and Enhancement of the WNBR'. The Advisory Committee welcomed the second periodic review for this biosphere reserve, but noted that the report did not include any of the required annexes. The 'Réserve Nationale Intégrale-Ipassa Makokou (RNI-IM)' was established in 1983 for research purposes related to the Ipassa research station. Located in the interior plateau (the eastern centre) of the country, towards the border with the Republic of Congo, the RNI-IM Biosphere Reserve is situated in the dense rainforest of the Congo-Guinean plant geographic region. The site represents a crossroad of influences with coastal zone and Congolese forests, characterized by several semi-deciduous species and the absence of Okoumé *Aukoumea klaineana*. More than 1,200 species of plants, flowering plants and ferns have been inventoried in the region. In terms of wildlife, RNI-IM is rich in large mammals, including the elephant *Loxodonta africana*, western gorilla *Gorilla gorilla*, chimpanzee *Pan troglodytes*, buffalo *Syncerus caffer* and many other species of national and international importance such as *Cercopithecus (Cercopithecus neglectus)*.
59. The forest has remained intact overall in terms of preservation with some disturbance linked to poaching in the far south and exploitation in the eastern end.
60. Following the submission of the first periodic review in 1997, the MAB Council recommended that the national authorities conduct a review of the buffer zone and transition area with a view to its expansion; expand the scope of the management plan with the greater involvement of local populations; and increase the number of personnel, especially to combat poaching.

61. Regarding expansion, the site at present exists within the limits of Ivindo National Park, which was created in 2007. The Advisory Committee acknowledged the proposed change in zonation, which includes a buffer zone and a transition zone outside the limits of the national park. However, it noted a confusion in the zoning on p. 23, which states that: 'these three zones (integral reserve, Park, the two proposed buffer zones) are found in the national park'.
62. In response to the other recommendations of the first periodic review, the Advisory Committee acknowledged the efforts made to involve local populations in activities and increase staff specifically to combat poaching.
63. The Advisory Committee noted that the described objectives and activities of the Ivindo National Park are not fully compliant with those of a biosphere reserve. While the conservation function is well addressed, the development function and the involvement of local communities in the management of the site are still not satisfactory. The Advisory Committee concluded that the biosphere reserve **does not meet** the criteria of the Statutory Framework of the World Network of Biosphere Reserves (WNBR).
64. The Advisory Committee therefore recommends the withdrawal of the 'Ipassa Makokou Integral Reserve' Biosphere Reserve and the submission of a new nomination dossier taking into consideration Ivindo National Park in conformity with the Seville Strategy and the criteria of the Statutory Framework of the World Network of Biosphere Reserves.
65. **Bliesgau Biosphere Reserve (Germany).** The Advisory Committee welcomed the first periodic review of the Bliesgau Biosphere Reserve, which was designated in 2009. The surface covers 36,152 ha and has 101,223 inhabitants.
66. The Advisory Committee welcomed the work of the biosphere reserve as a model for sustainable development, demonstrating how to reconcile the conservation of biodiversity with a cultural landscape, while producing positive economic and social development. The Advisory Committee noted that the site is working in partnership with seven municipalities, one rural district and the state of Saarland, and that it has established the Bliesgau Special Purpose Association as an innovative governance structure.
67. The Advisory Committee also welcomed the Education for Sustainable Development (ESD) programme, which involves a range of education providers in the region and serves as a model of good practices for the whole country. The Committee further welcomed the achievement of the conservation function not only in the core area and buffer zone, but also in the urban space within the transition area through biodiversity projects.
68. The Committee noted with satisfaction the testing of sustainable development strategies through research and projects in the tourism, nature conservation, regional marketing, climate protection and ESD sectors. Climate action has become a key activity in the site with adequate financial support provided.
69. The Committee also noted that the core area and buffer zone have increased in size. The signalization of signs for the biosphere reserve has helped to raise awareness.

The Committee welcomed the growth of the Partners Network, and noted that the Bliesgau Biosphere Reserve has become well established in the region with the involvement of existing institutions and stakeholders.

70. The Committee recognized that the objectives of the Bliesgau Biosphere Reserve are very clearly linked with the implementation of the SDGs.
71. The Advisory Committee therefore considered that the site **meets** the criteria the criteria of the Statutory Framework of the World Network of Biosphere Reserve (WNBR) and commended the authorities for the quality of the work achieved by the Bliesgau Special Purpose Association as well as the quality of the report, and recommended that it be used as a model for the WNBR.
72. **Swabian Alb Biosphere Reserve (Germany)**. The Advisory Committee welcomed the first periodic review of the Swabian Alb Biosphere Reserve, which was designated in 2009. The total area covers 85,269 ha and has a human population of 146,063 (2016).
73. The Advisory Committee noted that the work of the site is based on the Lima Action Plan and the Statutory Framework of the World Network of Biosphere Reserves. In addition, the Advisory Committee welcomed the close cooperation between the Biosphere Reserve Administration and the UNESCO Global Geopark 'Swabian Alb', the UNESCO World Heritage site 'Caves and Ice Age Art in the Swabian Jura' and the UNESCO World Heritage site 'Upper Germanic-Rhetian Limes'.
74. As a model region for sustainable development, the Swabian Alb Biosphere Reserve pursues the overriding goal of uniting environmental, economic and social interests under the guiding principle of nature conservation-oriented and sustainable regional development. The Advisory Committee welcomed the reports on the diversity of projects and measures focusing on nature conservation, sustainable tourism, agriculture and marketing of regional products. It also welcomed the many innovative regional products and the nature conservation-friendly regional brand, as well as the extensive and effective public relations work. The Committee further welcomed the successful ESD activities, including those undertaken by the main information centre and 18 local information centres. In addition, intensive work has been achieved in the areas of mobility, forestry and hunting, climate, research and monitoring.
75. The Advisory Committee welcomed the very high support from stakeholder groups and the local community and their active involvement in the decision-making.
76. The Advisory Committee therefore considered that the site **meets** the criteria the criteria of the Statutory Framework of the World Network of Biosphere Reserve (WNBR) and commended the authorities for the quality of the work achieved as well as the quality of the report, and recommended that it be used as a model for the WNBR.
77. **Maya Biosphere Reserve (Guatemala)**. The site is participating in the 'Process of Excellence and Enhancement of the WNBR'. The Advisory Committee welcomed the third Periodic Review of the Maya Biosphere Reserve, which was designated in 1990.

78. The biosphere reserve is located in the north of Guatemala and encompasses about 20% (2,090,000 ha) of the territory of the country and more than 60% of all declared protected areas. Along with areas in Belize and Mexico, the so-called Sierra Maya is the biggest tropical forest north of the Amazon. According to estimates, there are 792 bird, amphibian, mammal and reptile species in the region, as well as 2,800 vascular plants.
79. The reserve includes a mixed World Heritage site and two wetlands included on the Ramsar List. The site has a management plan with a participatory management committee where the work is interwoven with that of other concerned UNESCO conventions.
80. Approximately 175,084 people currently live in the biosphere reserve.
81. The major threats are mainly located in the north-west of the biosphere reserve. These comprise extensive cattle ranching, overfishing, the presence of invasive species and forest fires. The most important threat is mining and oil concessions, which affect areas of potential conservation, and in some cases the core areas. One such example is oil-drilling activities that may start in the Laguna del Tigre National Park (one of the core areas).
82. The country recognizes that the reserve faces important threats, but the biosphere reserve designation has helped make this no worse.
83. The Advisory Committee recognizes the importance of the area and the efforts made by the country to restore the affected areas.
84. Following the request of the MAB ICC in 2019, the national authorities sent a revised zonation map with the proper MAB terminology.
85. The northern part of the biosphere reserve, which does not have a transition zone, is protected by national parks on the Mexican side.
86. The country created a community concession programme in the transition zone of the biosphere reserve 25 years ago. The area concerned now seems to be in a better state of conservation than the buffer zone.
87. The Advisory Committee therefore considers that the site **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserves (WNBR).
88. **Arganeraie Biosphere Reserve (Kingdom of Morocco)**. The Advisory Committee welcomed the second periodic review for this biosphere reserve, which was established in 1998 and is located in the south-west of the country.
89. The Advisory Committee noted that during the past decade the economic dynamics of the biosphere reserve have changed significantly. Development is closely impacted by a territorial dynamic characterized by the movement of the active population from rural areas to cities offering more income opportunities and remunerative jobs. In addition, development is also influenced by often-difficult living conditions outside the biosphere reserve, particularly in the adjacent desert areas, which have contributed

- to intensified flows of mobile herdsman (ex-nomads) towards more attractive territories within the biosphere reserve. This poses a problem of resource allocation.
90. However, the Committee noted that the functions of biodiversity conservation, development and logistical support are consistently performed in this biosphere reserve. The report noted that important advances have been made in Morocco in the last decades towards the successful propagation of Argan seedlings, making it feasible to replant Argan trees in degraded areas and to envision expansion of the Argan forest. This is an important development as the Argan tree provides vital and unique ecosystem services, locally, regionally and globally, by protecting the region from desertification and providing income opportunities and enhancing the supply of Argan oil, which provides health, gastronomy and cosmetic values and benefits.
 91. The Advisory Committee finally noted that no changes have been made to the zoning, which already correctly defines the core areas, buffer zone and transition area. In short, the Advisory Committee therefore concluded that the site **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserves (WNBR).
 92. **Issyk-Kul Biosphere Reserve (Kyrgyzstan).** The site is participating in the 'Process of Excellence and Enhancement of the WNBR'. The Issyk-Kul Biosphere Reserve is located in northeast Kyrgyzstan, and was designated in 2001. The total surface area of the site is 4,311,588 ha.
 93. The first periodic review was examined at the 25th MAB ICC held in 2013. The recommendations of the 25th MAB ICC stated that the site partially fulfils the criteria of the Statutory Framework of the World Network of Biosphere Reserves and the authorities were asked to develop and submit to the MAB Secretariat a management structure and plan that includes local communities in decision making and resource management as part of the management system of the biosphere reserve. The recommendations made at the 29th MAB ICC in 2017 re-stated that the site is participating in the 'Process of Excellence and Enhancement of the WNBR'.
 94. The Advisory Committee acknowledged that the national authorities made an effort to provide the detailed work plan and timeline with the second periodic review report by 30 September 2019 in compliance with the decision of the 29th MAB ICC.
 95. Since 2013, the Directorate of the Issyk-Kul Biosphere Reserve has been working on gradually transforming its governance structure to enable meaningful and effective participation of local communities in decision-making and resource co-management. During 2014-2015, the Directorate developed a management plan for 2016-2020. In addition, a pilot programme to develop aquaculture in the biosphere reserve and reduce illegal fisheries in the Issyk-Kul Lake has been carried out with the involvement of the community in decision-making and resource management.
 96. Local communities and other stakeholders actively participated in the process to revise the zonation. The main changes to the zonation are the expansion of the territory of the Sarychat-Eertash State Reserve (a core area of the biosphere reserve), and the establishment in 2016 of a new protected area, namely the Khan Tengiri State Nature Park, which covers an area of 275,800.3 ha.

97. Tourism and agriculture remain the main drivers of the local economy. The biosphere reserve hosts festivals aimed promoting bio-cultural diversity and also promotes the export of organic fruits and vegetables to the Eurasian Economic Union. The Issyk-Kul Biosphere Reserve is referred to as a pilot site in the country-wide strategy for transitioning to the Green Economy (adopted by the Parliament on 1 February 2018).
98. The Advisory Committee acknowledged that the biosphere reserve has built a strong partnership with local women's circles known locally as *Shaiyr apalar* (cheerful mothers). Many local NGOs are founded and run by women and almost all local community councils have equal male-female representation.
99. The Advisory Committee recognized the existence of the Management Plan 2016-2020 and the use of a participatory approach to develop the Management Plan 2021-2025. The Committee therefore concluded that the site **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserves (WNBR). As the current Management Plan was not attached to the periodic review, the Committee requested that it be submitted to the MAB Secretariat by 22 May 2020 along with detailed information on the activities of the management body.
100. **Barranca de Metztitlan (Mexico)**. The Advisory Committee welcomed the first periodic review of the Barranca de Metztitlan Biosphere Reserve, which was designated in 2006. The long and irregular-shaped biosphere reserve is located in the Sierra Madre Oriental physiographic province and includes a wetland featured on the Ramsar List.
101. The biosphere reserve transitions from tropical deciduous forest to desert. The region is considered to have one of the highest levels of biodiversity with a variety of endemic species. In terms of cacti, for example, the reserve features 10% of Mexican and 5% of known species globally. The area is also home to 521 species of fauna.
102. There are no changes in the zonation and extension of the biosphere reserve. Approximately 201,598 people currently live on the site including 604 inhabitants in the core areas.
103. The economic activities mostly revolve around small-scale agriculture, aquaculture and small-scale cattle herding. Tourism is also on the rise.
104. Since its nomination, several activities have taken place in the biosphere reserve, including a management programme, biological and environmental monitoring (particularly of key, emblematic and endemic species), an environmental education programme, recycling activities, more than 20 capacity-building workshops, and the posting of signage in different areas of the biosphere reserve, among others.
105. The biosphere reserve has also fostered social participation mostly through the creation in 2015 of an Advisory Committee with members from the public, social, academic, private and third sectors.
106. The Advisory Committee considers that the site **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserves (WNBR).

107. **Flores Island Biosphere Reserve (Portugal).** The Advisory Committee welcomes the first periodic review of the Flores Island Biosphere Reserve, which was designated in 2009. The biosphere reserve covers one entire island of the Azores Archipelago, as well as an oceanic area stretching 3 miles from the coast.
108. The island is one of the richest in the archipelago in terms of endemic taxa, reflected in its great diversity of biotopes. The coastal zone is the nesting location for several marine bird species, notably the Roseate Tern (*Sterna dougallii*), with approximately 40% of its European population inhabiting the island's coastal zone. The oceanic marine area is very rich in terms of habitats and species, both regionally and internationally.
109. Approximately 3,662 people currently live in Flores Island, but this number is rapidly decreasing. Over the past nine years, the island has lost 4.49% of its inhabitants, due to the ageing population and the exodus of young people seeking better opportunities abroad.
110. Traditional agriculture and, to a lesser extent, fishing are the main economic activities; however, tourism has given the island's economy a significant boost over the past decade.
111. More than 50% of the energy sources on Flores Island are renewable.
112. Over the past ten years, its status as a biosphere reserve has helped Flores Island attract a number of researchers seeking to safeguard and quantify protected species, one of whom is monitoring the population of seabirds.
113. Since its nomination, the Flores Island Biosphere Reserve Management Board has held biannual meetings, with the participation of a variety of stakeholders. The board is in charge of overseeing the preparation and execution of the management plan, as well as promoting the biosphere reserve's products and services. Regarding the latter, a brand was created for the biosphere reserve and is currently used by 21 companies.
114. The Advisory Committee therefore considers that the site **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserves (WNBR).
115. **Geres/Xures Transboundary Biosphere Reserve (Portugal/Spain).** The Advisory Committee welcomed the first periodic review of the Geres/Xures Transboundary Biosphere Reserve, which was designated in 2009. Portugal and Spain presented a national periodic review, as well as a joint document.
116. The biosphere reserve encompasses the western-most end of the Iberian Peninsula in Portugal and the Spanish region of Galicia.
117. The site is home to a rich diversity in flora with 807 native and non-native taxa including a large number of Lusitanian and Iberian endemics. Endemic Lusitanian-Galician species include *Armeria sampaioi* and *Ceratocapnos claviculata*, while records of Iberian endemics include 117 taxa, approximately 50% of which are limited to the north-west of the Iberian Peninsula.

118. Over the last 30 years, however, the region has been subject to heavy bushfires, particularly in 2016. Other major threats include the change of land use to pasture and pine forest, as well as the presence of invasive species.
119. Following a regional trend, the population of the Geres/Xures has aged and decreased by up to 10% over the last ten years on both sides of the frontier. In 2018, the reserve was home to almost 70,000 inhabitants. The economic structure has shifted from agriculture to services and, over the past few years, the service and trade sector has been responsible for most of the region's dynamism, notably in relation to tourism. This development has enabled the retention of young people in the region and, in some cases, enabled the return of emigrants. One of the main priorities is to design a monitoring plan for tourism to increase its sustainability.
120. The Peneda-Gerês National Park (Portugal) and the Baixa Limia – Serra do Xurés Natural Park (Spain) – which form part of the core area – have been collaborating on the basis of a cooperation agreement established in 1997.
121. Both countries have implemented several capacity-building and job generation projects in synergy with local stakeholders. In addition, transboundary events and tourism programmes have strengthened ties between Portuguese and Galician inhabitants and created economic opportunities.
122. There are three management structures: the Transboundary Steering Committee, the Transboundary Cooperation Committee and the Cooperation Advisory Committee. The Steering Committee is an executive structure that ensures the management plan is implemented, while the other committees provide technical support.
123. Since its nomination, the biosphere reserve has successfully implemented two action plans, including initiatives such as projects to restore natural habitats, conserve species, reduce pressure on habitats and species, ensure sustainable development, and promote local community research and participation. The new action plan includes the creation of branding for the transboundary biosphere reserve and concentrates on economic development, although conservation projects remain a focus.
124. The Advisory Committee therefore considers that the site **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserves (WNBR).
125. **Rodna Mountain Biosphere Reserve. Renaming (formerly Pietrosul Mare) (Romania).** This site falls under the exit strategy process as no periodic review was submitted during the 40-year period following designation in 1979. The Advisory Committee welcomed this first periodic review and the review process which involved the participation in over 20 meetings of members of the Rodna Mountains National Park administration and Scientific Council, as well as mayors, owners and land administrators.
126. The zonation now formally includes both a buffer zone and a transition area. The Advisory Committee noted that the Environment Ministry of Romania recommended to retain the boundaries of the national park as the limits of the biosphere reserve and proposed to accept the human activity areas as a transition area within the existing limits. The Advisory Committee also noted that the transition area appears to be very

small (less than 200 ha) compared to the core area (4,646 ha) and the buffer zone (42,375 ha). Additionally, the legend of the zonation map does not explain the significance of the blue dots.

127. The Advisory Committee noted that the activities of the 3,000 people working temporarily within the biosphere reserve are considered to fulfil the development function of the biosphere reserve. These workers include transhumant shepherds, forest workers, harvesters of mushrooms and wild fruits, and employees of the weather station from the lezer glacial cirque.
128. The Advisory Committee requested the authorities to send a zonation map with a complete legend, as well as a rationale for the small size of the transition area, in order to ensure that the sustainable development function is effective. It also requested more information on the logistics function, greater detail on the involvement of local communities in the management of the biosphere reserve, and a further explanation regarding the difficulties in extending the biosphere reserve beyond the national park. It also urged the authorities to consolidate and further improve the relations with adjacent communities, and requested the submission of a management plan for the entire biosphere reserve. All missing information is to be sent to the Advisory Committee by 22 May 2020.
129. **Retezat Biosphere Reserve (Romania).** The site falls under the Exit strategy as only a summary report has been submitted (in 2010) since the site was designated in 1979. The Advisory Committee noted that the internal zonation of Retezat National Park was established back in 2003, and that the sustainable conservation zone (SCZ) and the sustainable development zone (SDZ) of the national park were merged to create the transition area of the biosphere reserve.
130. The Advisory Committee took note that the former recommendation to explore the possibility of extending the site beyond national park borders, by expanding the outer transition area, was unsuccessfully documented. A revised version of the Retezat National Park management plan is expected shortly. The Committee also noted that a specific body for administrating the biosphere reserve has not been created and no associated budget has been allocated.
131. The Advisory Committee noted that about 1,000 persons use the transition area each year for temporary seasonal activities, such as sheep breeding in pastures and gathering of forest fruits and mushrooms, and are considered a valuable component of sustainable development.
132. The Advisory Committee requested the authorities to send an explanation detailing how the sustainable development and logistics functions were fulfilled, as this information was not provided in the document. The Advisory Committee also requested more detailed information about the involvement of local communities in the management of the biosphere reserve and further details about the difficulties involved in extending the biosphere reserve beyond the borders of the national park. The Committee further urged the authorities to consolidate and further improve relations with adjacent communities, and to submit a management plan for the entire biosphere reserve clarifying roles and responsibilities. The Advisory Committee requested that the authorities submit all this information by 22 May 2020.

133. **Kavkazskiy Biosphere Reserve (Russian Federation).** This site falls under the exit strategy process. The Advisory Committee welcomed the detailed periodic review, as well as the management plan submitted by the authorities. The Advisory Committee also welcomed the efforts by the authorities to extend the biosphere and incorporate transition areas, to include a development function and to integrate local communities in the management structure.
134. The Advisory Committee noted that the negotiations concerning the inclusion of transition areas began in 2017 but have not yet been finalized. The negotiations involve the authorities of three constituent entities and seven municipalities of the Russian Federation, as well as numerous stakeholders with different economic and institutional interests. The Advisory Committee recognized that such negotiations require considerable time and that the preparation and signing of agreements has not yet been finalized.
135. The Advisory Committee also noted that the development function of the biosphere reserve has not yet been established due to the fact that negotiations are still ongoing. Accordingly, the development function is missing from the management plan.
136. The Advisory Committee requested that the authorities provide detailed information on how local communities will be included in the management structure of the biosphere reserve, as well as endorsements from the local communities. The Advisory Committee also requested detailed information on how the development function of the biosphere reserve will be fulfilled. The Advisory Committee requested that this information be provided by 22 May 2020.
137. **Fuerteventura Biosphere Reserve (Spain).** The Advisory Committee welcomed the first periodic review of the Fuerteventura Biosphere Reserve, which was designated in 2009. The biosphere reserve encompasses the second largest island of the Canary Islands, Spain. The biosphere reserve covers about 354,268 ha, of which 187,835.7 ha is marine and 166,432 ha is terrestrial. The various ecosystems are home to 2,541 species of which 512 are endemic to the Canary Islands and 127 are endemic to the island itself.
138. The reserve features the only wetland in the Canary Islands to be included on the Ramsar List.
139. Approximately 113,275 people currently live in the biosphere reserve, most of whom earn a living in the service sector, in particular tourism. Unlike the rest of the Canary Islands, industry and especially agriculture account for a proportionally smaller share of the economy of Fuerteventura, with the exception of goat and sheep herding. The biosphere reserve has introduced a brand to award sustainable enterprises and promotes low-impact tourism.
140. The main economic activities follow a green and circular economy model, with the revival of traditional agricultural systems such as 'gavia' (irrigation plots that conserve soil and water).
141. The biosphere reserve is in the first phase of implementing the EU initiative Sustainable Transport for Areas with Tourism through Energy Reduction (STARTER).

142. In terms of biodiversity conservation, Fuerteventura has a cetacean sanctuary with 28 species and 771 different marine species included in Red Natura 2000. The site also has 2309 terrestrial native species, 128 of which are endemic to the island.
143. Fuerteventura is also a Starlight reserve, a certification related to stopping light pollution and protecting the night skies, and hosts the Sustainability and Global Observatory, whose main purpose is to stimulate social change towards sustainability, increased quality of life and the conservation of the natural and cultural heritage of the island.
144. The governance of the biosphere reserve is structured around three councils: the Steering Council promotes the main objectives of the biosphere reserve, the Scientific Council fosters research on the island with national and international partner institutions, and the participation council consists of members of civil society who advise on governance.
145. The Advisory Committee congratulates the biosphere reserve for the excellent work it has done in recent years to achieve sustainable development in the marine and terrestrial areas of the island, as well as the protection of its skies.
146. The Advisory Committee therefore considers that the site **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserves (WNBR).
147. **Dyfi Biosphere Reserve (United Kingdom)**. The Advisory Committee welcomed this periodic review from the United Kingdom, which was designated in 2009.
148. The Committee noted that the review of the five-year coordination plan, the three-year tourism plan and the new communication plan represented an important update in the planning process. In 2014, the stakeholders were consulted to gather their assessments of the site and to request their input into future strategies based on perceived opportunities and challenges facing the site. The Committee also noted that a stakeholder analysis was undertaken in 2017 as part of the periodic review process, to identify and engage relevant groups and individuals outside the core group of biosphere partnership members. Two stakeholder engagement workshops employed the Most Significant Change methodology.
149. In terms of socio-economic changes, tourism increased while agricultural activities decreased. At present, the consequences of Brexit on traditional livelihoods are difficult to predict. On the environmental side, a major concern is the vulnerability of Dyfi Biosphere Reserve coastlines to sea-level rise resulting from climate change.
150. During the first period of the site's existence, the majority of activities were carried out by individual partners to fulfil specific institutional objectives. Over the last ten years, the Biosphere Partnership, the governance body of the reserve, has undergone significant changes in its composition. The initial agreement stated that the public bodies in the Biosphere Partnership (i.e. the Welsh Government, NRW, local authorities and the Snowdonia National Park Authority) would rotate the role of Secretariat. Then, in 2013, the three main environmental bodies in Wales were merged into a single one, Natural Resources Wales, which created some turbulence. There was also a perception that the public sector partners did not prioritize the reserve. In 2015, the NGO Ecodyfi assumed the role of Secretariat. The Officer

Support Group was disbanded and thematic groups were established, demonstrating the resilience and flexibility of the governance structure provided by the Biosphere Partnership. In 2017, the 2014-2019 coordination plan was revised.

151. Initially, the extent of the biosphere reserve matched the Dyfi catchment boundaries. On the occasion of the periodic review, the authorities proposed an extension to incorporate five municipalities into the transition area, with a view to strengthening the biosphere reserve both socio-economically and culturally.
152. The Advisory Committee greatly appreciated the excellent periodic review and acknowledged the substantial efforts made by the Biosphere Partnership to overcome the difficulties encountered during the first decade. The Advisory Committee therefore considered that the site **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserves (WNBR). It also recommended that the process used by the site after five years of existence be shared with the excellence working group.
153. **Sonoran Desert Biosphere Reserve. Extension and renaming (formerly Organ Pipe Cactus) (United States of America).** This site falls under the exit strategy process. The Advisory Committee welcomed the revised periodic review of the Organ Pipe Cactus (OPC) site sent in September 2019.
154. The purpose of this site is to promote increased understanding, conservation and celebration of the natural and cultural resources of the Sonoran Desert, and to foster communication and productive collaboration dedicated to this purpose. Designated as a first-generation biosphere reserve in 1976, this is the third periodic review submitted following the first one in 2013 and the second one in 2016. The previous recommendations made by the Advisory Committee were twofold: to revisit the zonation of the site, in order to include buffer zone(s) and transition area(s) that can cater for the sustainable development function; and to submit a revised zonation map and an updated periodic review using the official periodic review form.
155. The Advisory Committee noted the proposed renaming of the site to 'Sonoran Desert Biosphere Reserve' (SDBR). Initially governed by the National Park Service's Organ Pipe Cactus National Monument, the governance body of the site has shifted to the International Sonoran Desert Alliance (ISDA), the vision and mission of which align closely with those promoted by the MAB Programme. ISDA is a non-profit corporation founded in 1993 and governed by a board of directors representing the indigenous and non-indigenous populations of the United States and Mexico. The Advisory Committee welcomed the ongoing cooperation with Mexico including the El Pincate y Gran Desierto de Altar national biosphere reserve, which is also a World Heritage site, and acknowledged the role of ISDA in facilitating this cooperation.
156. Regarding the proposed zonation, the Advisory Committee noted that only a draft concept map was provided. However, the Advisory Committee understands that the process of working with the National Park Service Staff of the OPC National Monument, to engage land management partners and area stakeholders in discussions regarding the expansion of the perimeter and function of the OPC Biosphere Reserve, was initiated in June 2018 and is still ongoing.
157. The Advisory Committee noted that the only detailed maps provided are restricted to the core area, which is delimited by the OPC National Monument. The proposed buffer

zone, which consists mainly of the Cabeza Preta National Wildlife Refuge, is not depicted, and neither is the transition area surrounding the town of Ajo, a former copper mining hub.

158. The Advisory Committee requested the authorities to provide more information, including land use maps on both the buffer zone and the transition area. It also requested more detailed information on the management plan for the entire biosphere reserve.
159. The Advisory Committee requested that the information be submitted by 22 May 2020.
160. **Obtawaing Biosphere Reserve Extension and renaming (formerly University of Michigan Biological Station). (United States of America).** This site falls under the exit strategy process. The Advisory Committee welcomed the detailed periodic review and the proposed name change to Obtawaing Biosphere Reserve.
161. The Advisory Committee appreciated the efforts made by the authorities to redesign and restructure the site in order to fulfil the criteria of the Statutory Framework of the World Network of Biosphere Reserves. The Advisory Committee is aware that such efforts take time, and that negotiations with new and varied stakeholders need to be conducted carefully. The envisaged partnerships appear to be relevant and interesting. The Advisory Committee welcomed the partnership with the eight Michigan tribes as well as with the local conservancies. However, the Advisory Committee noted that the periodic review does not always clearly state which agreements have already been concluded and effectuated, and which are still in the planning or negotiating phase.
162. The Advisory Committee appreciated the many research, education and outreach activities conducted in the biosphere reserve, as well as the effort in terms of diversifying conservation staff. The many research field stations and activities reflect the core institutional mission of the University of Michigan Biological Station. Partnership with the Michigan tribes and other local partners will allow for the inclusion of local and indigenous knowledge, as stated in the report, and multiple evidence-based management practices. The Sleeping Bear Dunes' Citizen Science project can add to this endeavour as well.
163. The Advisory Committee welcomed plans to further strengthen the development function of the biosphere reserve, by looking at possibilities beyond tourism. However, the Committee noted that the development function needs to be further strengthened.
164. The Advisory Committee welcomed the establishment of a Management Council representing local communities and partners, although it is not entirely clear whether this Council is already in operation. The Committee also welcomed the intention to design a new, more inclusive and participatory management structure, but also noted that this design is still in the planning and exploratory phase. At the same time, the Advisory Committee noted that fundraising for the biosphere reserve has been very successful and offers possibilities for redesigning the biosphere reserve, including its management structure.
165. The rationale provided for the new zonation was welcomed by the Advisory Committee. However, the Advisory Committee urged the authorities to provide more

information on whether the zonation presented is the final envisaged one, or whether more areas will be added. It also urged the authorities to explain why some parts of the – relatively small – transition zones border directly onto some of the core areas.

166. The Advisory Committee therefore requested more information on the status (signed/ongoing/planned) of the agreements concluded with the various stakeholders, such as the Eight Michigan Tribes, the Sleeping Bear Dunes Constituencies and others key partners mentioned in the report (using the same structure as the Organ Pipe Cactus Biosphere Reserve). The Advisory Committee also requested information on whether the Management Council representing local communities and partners is already operational or not, as well as more precise information on the planned new management structure. The Advisory Committee urges the authorities to indeed make this structure as inclusive and participatory as possible. The Advisory Committee further requested that the authorities provide a new zonation map that includes the present as well as the envisaged areas and an explanation of the zonation, specifically the rationale underlying the fact that certain parts of the core areas directly border the transition area. It also requested more detailed information about how the reserve is going to fulfil the development function other than through the promotion of existing tourism, as well as more information on agreements regarding new partnerships with local industries.
167. The Advisory Committee requested that this information be provided by 22 May 2020.
168. **Chatkal Biosphere Reserve (Uzbekistan).** The site is participating in the 'Process of Excellence and Enhancement of the WNBR'. The Chatkal Biosphere Reserve, which was designated in 1978, covers the south-western end of the Chatkal'skiy Range in the western Tien-Shan Mountains. The habitats include mountain steppes and forests, rocks, alpine meadows, river valleys and floodplain forests, as well as a high level of species diversity. The site is also renowned archaeologically for its ancient drawings, which date back to 1000-2000 BC.
169. The second periodic review was examined in 2015. However, the site did not meet the criteria of the Statutory Framework of the World Network of Biosphere Reserves. The MAB ICC noted that the reserve has a core area and a buffer zone, but no transition area. The MAB ICC therefore requested the authorities to revise the zonation to include a transition area and to provide a proper zonation map. The authorities were also advised to enhance the development function to enable the site to fully function as a biosphere reserve.
170. In 2017, the MAB ICC commended the Uzbekistan authorities for submitting a detailed work plan including a timeline and a working commitment to submit the periodic review by 30 September 2019 to comply with the decision of the 29th MAB ICC in 2017.
171. In 2016-18, the national authorities established a new protected area incorporating Bashkyzylsay as part of the core area. In 2018, a resolution of the Cabinet of Ministers of the Republic of Uzbekistan established the Ugam-Chatkal State Biosphere Reserve with three zones. At the present time, the Chatkal Biosphere Reserve has two core areas (Bashkyzylsay and Maydantal) with a buffer zone and a transition area within the Ugam-Chatkal State Biosphere Reserve. These buffer and transition areas enabled the biosphere reserve to carry out various economic activities. Currently, the

- process to create a buffer zone around the second core area (Maydantal) to connect the two core areas is ongoing.
172. The Advisory Committee noted that a number of consultative meetings were held among representatives of stakeholders including residents of settlements, representatives of local authorities, law enforcement agencies and others.
 173. The Committee also noted that a new management plan for the period 2020-2024 was being developed with the support of a joint project of the GEF/UNDP/State Committee for Ecology, entitled 'Sustainable natural resource use and forest management in key mountainous areas important for globally significant biodiversity.'
 174. Additionally, the Committee also noted that the two core areas of the Chatkal Biosphere Reserve are components of the transnational 'Western Tien-Shan' World Natural Heritage site, which was listed in 2016.
 175. The Advisory Committee acknowledged the efforts undertaken to comply with the criteria of the Statutory Framework of the World Network of Biosphere Reserves (WNBR). The Committee therefore concluded that the site **meets** the criteria **on the condition** that the official confirmation of the establishment of a buffer zone surrounding a core area of Maydantal is submitted by 22 May 2020, along with a more detailed plan explaining how local residents and communities will be involved in the management of the biosphere reserve.
 176. **Mui Ca Mau (Viet Nam).** The Advisory Committee welcomed the submission of the first periodic review for the Mui Ca Mau Biosphere Reserve, which was designated in 2009 with no recommendations by the MAB ICC. The site is located on the southernmost tip of Viet Nam and covers a coastline of 254 km. It borders the East Sea to the east and the Gulf of Thailand to the south and the west.
 177. The Mui Ca Mau Biosphere Reserve has three major ecosystem types: Melaleuca forest which is seasonally inundated with acidic aluminous water in the U Minh Ha forest area, coastal mudflats and mangrove forest.
 178. The zonation and total area (371,506 ha) have not changed since the biosphere reserve was designated. The population of the site has increased in the buffer zone and transition area, totalling 540,317 in 2017, as a result of economic development and synchronized transportation infrastructure. No inhabitants exist in the core areas.
 179. The core areas consist of the three parts: the strictly protected sub-zone of Mui Ca Mau National Park, the strictly protected sub-zone of U Minh Ha National Park and the West Coast protection forest belt. Mui Ca Mau National Park was recognized as a Ramsar site in 2012.
 180. Major statistical data on biodiversity in the core areas, based on newly implemented surveys, show changes compared to the information in the nomination dossier.
 181. Recognition as a biosphere reserve has resulted in substantial economic value and many new tourist sites, particularly related to eco-tourism development. The number of tourists reached 327,734 in 2015 and almost doubled to 649,732 in 2018.

182. The Advisory Committee noted that the wildfire in 2003 presented a significant conservation challenge to the site. It resulted in serious damage to most of the Melaleuca forest and seasonally inundated grassland, as well as ecosystem change resulting from the saline water used against the wildfire. In recent years, the Melaleuca forest has been undergoing a process of gradual recovery with naturally recreated surface soil and tree planting.
183. The Advisory Committee recommended that the Management Board of the biosphere reserve also include non-governmental stakeholders, and appreciates the leadership and commitment shown by the Ca Mau provincial government. The Advisory Committee also recommended that the authorities continue and expand efforts to establish basic and long-term solutions to address serious coastal erosion occurring along the East Sea and West Sea.
184. The Advisory Committee concluded that the site **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserve (WNBR).
185. **Cu Lao Cham – Hoi An (Viet Nam).** The Advisory Committee welcomed the submission of the first periodic review for the Cu Lao Cham – Hoi An Biosphere Reserve, which was designated in 2009 with no recommendations by the MAB ICC. The biosphere reserve is located in the southern Hai Van region of central Viet Nam, which has a humid tropical monsoon climate.
186. The biosphere reserve comprises the core area, which includes the Cu Lao Cham Marine Protected Area (MPA), established in 2006; the buffer zone consisting of the sea surrounding the core area; and the entire area of rivers, canals, natural lakes and ponds, natural wetlands, beaches belonging to Hoi An City, and the transition area of the remaining natural area of Hoi An City, including the Hoi An Ancient Town World Cultural Heritage site (1999).
187. Typical and important ecosystems are found in estuaries, floating dunes, mudflats, mangrove forests, beaches, seagrass and seaweed beds, coral reefs, rocky tidal areas and the primary forest of the Cu Lao Cham islands.
188. Following the designation of the Cu Lao Cham – Hoi An Biosphere Reserve, a Management Board was established under the Hoi An City People's Committee, with an associated advisory group and expert group.
189. The Advisory Committee noted that the zonation system and the area of the biosphere reserve have changed twice (2015 and 2019) since the designation in 2009. The extension of the core area and the buffer zone resulted in a slight increase (329 ha) in the total area, which now covers 33,475 ha. The core area, which at the time of designation included only the Cu Lao Cham special-use forest and the strictly protected area of Cu Lao Cham MPA, was re-zoned to encompass the entire MPA and the entire Tan Hiep island commune. The buffer zone was extended to incorporate the Thu Bon river mouth and the system of rivers, canals and wetlands surrounding the city.
190. As a result of the zonation change, the core area has a population of 2,244 inhabitants out of a total population of 95,227 (2018). No inhabitants were reported in the core area in the nomination document.

191. The Advisory Committee acknowledged with satisfaction that the periodic review process involved engagement with diverse stakeholders, including civil organizations and local people, through different methods, and that good practices from the site were presented in the periodic report.
192. The Advisory Committee concluded that the site **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserve (WNBR), and requested the authorities to submit by 30 September 2020 a map showing the boundary changes of each zone of the Cu Lao Cham – Hoi An Biosphere Reserve since the nomination dossier, information on development and rational exploitation within the Cu Lao Cham MPA, and potential negative impacts to ecosystems from inhabitants living in the core area and measures to cope with them.

ANNEX 2:

**EXAMINATION OF THE STATUS OF IMPLEMENTATION OF THE
RECOMMENDATIONS OF PERIODIC REVIEWS ENDORSED BY THE MAB-ICC
– 26th IACBR**

COUNTRY	NAME OF THE SITE	26th IACBR RECOMMENDATIONS (2020)	COMMENTS
ARGENTINA	Costero del Sur	Meets the criteria	Exit Strategy / Process of Excellence
ARGENTINA	Pereyra Iraloa	Does not meet the criteria; additional info requested	
BOLIVIA	Beni	Meets the criteria	
BULGARIA	Bistrichko Branichte	PR not submitted	Exit Strategy / Process of Excellence Will submit the new nomination form
BULGARIA	Tchouprene Biosphere Reserve	PR not submitted	Exit Strategy / Process of Excellence Will submit the new nomination form
CAMEROON	Bénoué	Meets the criteria	Exit Strategy / Process of Excellence
CHILE	Lauca	Does not meet the criteria	Exit Strategy / Process of Excellence
CHINA	Dinghushan	Additional info satisfactory	As per 31 st MAB-ICC decisions meets the criteria
	Qomolangma	Additional info satisfactory	As per 31 st MAB-ICC decisions meets the criteria
CONGO	Odzala Kokoua	Meets the criteria	Exit Strategy / Process of Excellence
CUBA	Peninsula de Guanahacabibes	Additional info requested	As per 30 th MAB-ICC decision: meets the criteria
CZECH REPUBLIC	Krivoklatsko	Additional info requested	Exit Strategy / Process of Excellence
GERMANY	Elbe River Landscape	Meets the criteria	
GUINEA (Rep.)	Badiar	Additional info satisfactory	As per 31 st MAB-ICC decision: meets the criteria
	Haut Niger	Meets the criteria	Exit Strategy / Process of Excellence
	Mont Nimba	Additional info satisfactory	As per 31 st MAB-ICC decision: meets the criteria
GUINEA (Rep.)	Ziama	Meets the criteria	Exit Strategy / Process of Excellence

ISRAEL	Mont Carmel	Additional info requested	
NICARAGUA	Rio San Juan	Additional info requested	As per 31 st MAB-ICC decision: meets the criteria
POLAND	Eastern Carpathians	Additional info satisfactory	As per 30 th MAB-ICC decision: meets the criteria
	Tatra	Additional info requested	Exit Strategy / Process of Excellence
RUSSIAN FEDERATION	Lake Elton	Additional info requested	Site approved in 2019
	Okskiy	Additional info requested	Exit Strategy / Process of Excellence
	Chernye Zemli	Additional info requested	Exit Strategy / Process of Excellence
	Sayano-Shushenskiy	Meets the criteria	Exit Strategy / Process of Excellence
SENEGAL	Samba Dia	Meets the criteria on the condition to submit additional info	Exit Strategy / Process of Excellence
SOUTH AFRICA	Vhembe	To submit PR by 30 Sep.2020	
TURKEY	Kogelberg	To submit PR by 30 Sep.2020	
	Camili	Additional info requested	

193. **Costero del Sur Biosphere Reserve (Argentina).** The site is participating in the 'Process of Excellence and Enhancement of the WNBR. The Council welcomes the clear zonation map provided by the Argentinean authorities, which includes three zones and the official MAB terminology.
194. The Advisory Committee considers that the site **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserves (WNBR).
195. **Pereyra Iraola Biosphere Reserve (Argentina).** The Advisory Committee welcomes the additional information provided by the Argentinean authorities.
196. However, the proposed zonation still does not protect the core area of the biosphere reserve. The Advisory Committee therefore recommends that the authorities review the boundaries and zonation of the site, and/or analyse the possibility of extending the reserve, in order to meet the functions and criteria of a biosphere reserve. The Advisory Committee also recommends that the authorities discuss the possible extension of the biosphere reserve with the municipalities in the vicinity of the site. The authorities have not yet submitted the requested Management Plan for the entire site, the participation of stakeholders is not clear, and the additional information about the Management Committee does not explain clearly how this committee functions.

197. The Advisory Committee concluded that the site **does not meet** the criteria of the Statutory Framework of the World Network of Biosphere Reserve.
198. The Advisory Committee therefore requests once again that the authorities submit by 30 September 2020:
- a new zonation that better protects the core area including a proper buffer zone;
 - an overall Management Plan for the entire biosphere reserve;
 - information on how the authorities will secure the participation of stakeholders in the biosphere reserve; and
 - clear information about the functioning of the Management Committee.
199. **Beni Biosphere Reserve (Bolivia).** The Advisory Committee welcomed the information provided by the Bolivian authorities, which explains the developmental functions of the transitional zone.
200. The zone includes communal lands (Territorio Comunitario de Origen – TCO) and peasant communities, as well as Tsimane and Movima indigenous communities that preserve traditional and sustainable activities.
201. These activities include the Chelonian project on turtle egg management, citrus production, cocoa production, livestock breeding, ecotourism and urbanization. Current projects target in particular women and young people.
202. The Advisory Committee concluded that the site **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserve (WNBR).
203. **Bistrichko Branichte Biosphere Reserve (Bulgaria).** The site falls under the exit strategy process. The Secretariat received a letter from the MAB National Committee indicating that the municipalities concerned are willing to remain part of the WNBR, but that the authorities requested more time to complete a new nomination form.
204. The Advisory Committee took note of this request.
205. **Tchouprene Biosphere Reserve (Bulgaria).** The site falls under the exit strategy process. The Secretariat received a letter from the MAB National Committee indicating that the municipalities are willing to remain part of the WNBR, but that the authorities requested more time to complete a new nomination form.
206. The Advisory Committee took note of this request.
207. **General information on Cameroon.** The Advisory Committee acknowledged the communication from the national authorities requesting the MAB Secretariat's indulgence regarding the expected details of transmission of elements and highlighting the government's continued efforts to safeguard the status awarded to the Dja, Benoué and Waza biosphere reserves, subject to the exit strategy process as of 30 September 2019.
208. **Benoué Biosphere Reserve (Cameroon).** The site is participating in the 'Process of Excellence and Enhancement of the WNBR'. The Advisory Committee welcomed the

letter from the national authorities and the revised zoning map, submitted in response to the recommendations of the 31st session of the MAB ICC.

209. The Advisory Committee noted that the zoning map clearly indicates the three zones (the core area, the buffer zone and the transition area) and concluded that the biosphere reserve **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserves.
210. The Advisory Committee encouraged the national authorities to consider an extension of the buffer zone in order to guarantee the long-term protection of the core area, the majority of which remains in contact with the transition area.
211. **Lauca Biosphere Reserve (Chile).** The site is participating in the 'Process of Excellence and Enhancement of the WNBR'. The Advisory Committee welcomed the additional information provided by the Chilean authorities. The country is working on an extension of the biosphere reserve increasing the overall size from 358,000 ha to 814,241 ha, in order to add a buffer and a transition zone.
212. The extension proposal includes an Indigenous Development Area (ADI) in the transition zone to meet the zonation criteria.
213. However, the document sent does not include the required information about the functioning of the Management Committee or the management plan.
214. The Advisory Committee also noted that the authorities provided a work plan to complete the recommendations no later than March 2020.
215. The Advisory Committee consider that this site **does not meet** the criteria of the Statutory Framework of the World Network of Biosphere Reserves (WNBR).
216. The Advisory Committee requests that the national authorities provide by 22 May 2020 the final zonation of the biosphere reserve, the management plan and clear information about the Management Committee.
217. **Dinghushan Biosphere Reserve (China).** As per the decision of the 31st session of the MAB ICC in 2019, the site meets the criteria of the Statutory Framework of the World Network of Biosphere Reserves. The ICC requested an updated management plan by 30 September 2019.
218. The Advisory Committee commended the Chinese authorities for submitting the Management Plan for 2020-2029. The plan is divided into eight chapters: Chapter 1 introduces the basic situation of the reserve, Chapter 2 analyses the management conditions, Chapter 3 introduces selected management actions, Chapter 4 presents the action plan, Chapter 5 and Chapter 6 include a schedule and estimate of the investment needed, Chapter 7 introduces safeguards, and Chapter 8 presents the performance assessment and approach to supervisory improvement.
219. The Committee congratulated the Chinese authorities on the high quality of the document.

220. **Qomolangma Biosphere Reserve (China).** As per the decision of the 31st session of the MAB ICC in 2019, the site meets the criteria of the Statutory Framework of the World Network of Biosphere Reserve. The ICC encouraged the Chinese authorities to use cultural diversity and traditional knowledge for the conservation of biodiversity. It further encouraged them to make greater effort to monitor biodiversity and research the impacts of climate change. It also encouraged the Chinese authorities to utilize ecotourism to improve the livelihoods of local people.
221. The Chinese authorities submitted a progress report on their efforts to implement these recommendations. The Advisory Committee took note of this progress, acknowledged the efforts of the Chinese authorities and encouraged them to continue in this regard.
222. **Odzala-Kokoua Biosphere Reserve (Congo).** The site is participating in the 'Process of Excellence and Enhancement of the WNBR'. The Advisory Committee welcomed the additional information sent by the national authorities in response to the previous request by the MAB ICC for a zonation map with a clear legend, as well as a Management Plan or Policy. The Advisory Committee commended the authorities on the submission of the detailed zonation information, which complies with the biosphere reserve criteria.
223. The development plan for Odzala-Kokoua National Park has been submitted together with the decree of approval. This plan is due to be revised to cover the entire biosphere reserve and is expected to address the ICC recommendations.
224. The Advisory Committee concluded that the site **meets** the criteria of the Statutory Framework of the WNBR.
225. **Península de Guanahacabibes Biosphere Reserve (Cuba).** This site has already met the criteria, but the MAB Council requested additional information on the revised zonation, including a continuous marine buffer zone.
226. The authorities have presented a zonation map with a continuous marine core area, but without a marine buffer zone that protects the whole marine core area.
227. The Advisory Committee request the national authorities to send before 30 September 2020 a zonation map with a marine buffer zone that will ensure the conservation functions of the marine core area.
228. **Krivoklatsko Biosphere Reserve (Czech Republic).** The site falls under the exit strategy process.
229. The authorities of the Krivoklatsko Biosphere Reserve submitted their first periodic review in 2016. This report was assessed and discussed by the Advisory Committee in early 2017. The Advisory Committee concluded that more information was needed to assess whether the biosphere reserve met the criteria of the Statutory Framework of the World Network of Biosphere Reserves. In particular, the Advisory Committee requested the authorities to provide a zonation map specifying the three zones as per the statutory framework, as well as to provide detailed information on the implementation of the development function, and the involvement of the local communities in both the development function and the management of the biosphere.

230. The Advisory Committee welcomed the letter sent by the authorities in response to the request. The Committee noted that all core areas automatically have a 50-metre buffer zone, while areas that appear to be missing buffer zones are buffered by features in the landscape such as river-banks or forests. However, the requested zonation map was not provided.
231. The Advisory Committee noted that the transition area is divided into two types, as stipulated under Czech legislation, but that no further details are provided about the associated implications for the development function of the reserve. The response received from the authorities states that local municipalities have been consulted about the development of the management plan. The Advisory Committee welcomed this first step in establishing relations with the community, but noted that information on how community members will participate in the management structure or the development of the management plan is still missing. The authorities state that an interpretation plan in relation to tourism is foreseen for 2023. The Advisory Committee therefore concluded that the development function of the biosphere reserve is still not clear.
232. Based on the information provided, the Advisory Committee requested the authorities to provide the updated zonation map and detailed information about how local communities will participate in the management and management structures of the biosphere reserve, as well as more detailed, concrete information about how the development function of the biosphere reserve will be realized. The Advisory Committee requested that the information be provided by 22 May 2020, in order to decide whether the site meets the criteria of the Statutory Framework of the World Network of Biosphere Reserves.
233. **Elbe River Landscape Biosphere Reserve (Germany).** The Advisory Committee welcomed the letter sent by the authorities on 13 September 2019, and the additional documentation provided by the five responsible state authorities on the zonation of Elbe River Landscape Biosphere Reserve.
234. The Advisory Committee noted the finalization of the core area in line with the statutory Framework of the WNBR and the effective buffering. The Advisory Committee concluded that the site **meets** the criteria of Statutory Framework of the World Network of Biosphere Reserves.
235. **General information on Guinea.** The Advisory Committee welcomed the official letter from the national authorities in response to the recommendations of the 31st session of the MAB Council on the periodic review reports of the four biosphere reserves.
236. **Badiar Biosphere Reserve (Guinea).** This site meets the criteria of the Statutory Framework of the WNBR.
237. As a follow up to the decision of the 31st MAB ICC, the Advisory Committee took note of consultations undertaken with neighbouring communities and other stakeholders concerning the establishment of the buffer zone around the two core areas in order to guarantee their long-term conservation. The national authorities indicated that a validation workshop was planned before the end of 2019 at the end of which a new zoning map would be produced.

238. **Haut Niger Biosphere Reserve (Guinea).** The site is participating in the 'Process of Excellence and Enhancement of the WNBR'. The national authorities recalled that Haut Niger was previously a national park whose zonation did not conform to the Statutory Framework of the World Network of Biosphere Reserves or the Seville Strategy. The Advisory Committee requested a revision of the zoning map in response to the recommendations of the MAB ICC.
239. The Advisory Committee noted that the zonation of the middle part of the biosphere reserve complies with the criteria, while the core area in the northeast of the reserve is inhabited, bisected by a road and lacks a buffer zone. The Advisory Committee therefore advised the national authorities to convert the northeast core area into a transition zone to be merged with the current transition zone.
240. The Advisory Committee concluded that the middle part of the biosphere reserve **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserves.
241. **Mont Nimba Biosphere Reserve (Guinea).** This site meets the criteria of the Statutory Framework of the WNBR. As a follow up to the decision of the 31st MAB ICC, the Advisory Committee noted that the new zoning map used the same colour for the three core areas in response to a recommendation of the MAB ICC.
242. **Ziama Biosphere Reserve (Guinea).** The site is participating in the 'Process of Excellence and Enhancement of the WNBR'. The Advisory Committee commended the national authorities for the consultations undertaken with local populations and stakeholders in respect of the extension of the buffer zone in the south-eastern part of the biosphere reserve.
243. The Advisory Committee acknowledged the new zonation and concluded that the site **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserves.
244. The Advisory Committee congratulated the authorities of Guinea and Liberia for their ongoing efforts to establish a transboundary biosphere reserve between the two countries.
245. **Mt. Carmel Biosphere Reserve (Israel).** The Advisory Committee welcomed the letter sent by the authorities on 26 September 2019 explaining the present situation regarding the management of the Mt. Carmel Biosphere Reserve.
246. The Advisory Committee appreciated the initiative of the Israel MAB Committee and representatives of the biosphere reserve's Druze communities to work together with all communities of the reserve to develop a new management mechanism incorporating all communities and relevant stakeholders. The Advisory Committee noted the positive improvements made in relation to this joint management mechanism.
247. The Advisory Committee noted that additional time will be required to establish and operationalize the management mechanism. The Israel National MAB Committee has stated that a period of two years will be necessary to report on the development of the management mechanism and its operation.

248. The Advisory Committee therefore requested that the Israel MAB Committee report on the development of the management mechanism and its operation by 30 September 2021.
249. **Río San Juan Biosphere Reserve (Nicaragua).** This site has already met the criteria, but the MAB Council requested additional information about the management plan and stakeholder involvement.
250. The Advisory Committee welcomed the additional information provided by the Nicaraguan authorities. However, the document provided describes only certain current activities of government institutions in the area and does not constitute a proper management plan. The additional information about stakeholders still does not explain clearly how all relevant actors are involved in the management of the site.
251. The Advisory Committee again requests the national authorities to send more information about the management plan and stakeholder involvement by 30 September 2020.
252. **Eastern Carpathians Biosphere Reserve (Poland).** The Advisory Committee welcomed the information sent by national park representatives in response to the 2018 recommendations made by the MAB Council.
253. The Advisory Committee acknowledged the cooperation between biosphere reserve managers from Poland and the other two countries constituting the East Carpathians Transboundary Biosphere Reserve, including the meeting of participants, which took place in Ukraine last year.
254. The Advisory Committee noted with appreciation the creation of a national consultation team, and encouraged the authorities to submit to the MAB Secretariat information about its composition (name, organization), status and competence, noting the importance of an emphasis on participation and multisectorality.
255. **Tatra Biosphere Reserve (Poland).** This site falls under the exit strategy process. The Advisory Committee welcomed the reply from the Polish authorities of 17 September 2019, and expressed its encouragement for the creation of a new multi-stakeholder-based coordination body for the biosphere reserve.
256. It also welcomed the information related to the extension of the biosphere reserve beyond the boundaries of the national park and the planned changes in zonation, and considered these to be a very positive development. The new zonation plan has been developed and includes four municipalities with a total of 60,000 people, 1,000 of which will reside in the buffer zone. The new plan was received positively by the management authorities of the national park.
257. The Advisory Committee appreciated the impressive number of activities organized with and for the local communities to encourage their input and acceptance of the proposed planning and management processes. The activities included a 'Best Practice Festival' organized with the communities, educational activities for local schoolchildren, various activities on social media, and the creation of a group of leaders to promote the biosphere reserve and the envisaged changes.

258. The Advisory Committee also appreciated the efforts undertaken to meet the criteria of the Statutory Framework, as evidenced by the contact with the Secretariat to obtain additional information and assistance, and the sharing and exchanging of information and best practices among biosphere reserve managers during the EuroMAB meeting held in Dublin in 2019.
259. The Advisory Committee recognized that community consultation and involvement are time consuming, and noted that the authorities indicated that the process will last a significant period time. However, the letter dated 13 December 2019 indicated that a meeting to discuss the boundaries of the biosphere reserve was scheduled for 9 January 2020, and that follow-up meetings were scheduled for February 2020.
260. The Advisory Committee therefore requested the authorities to provide details concerning the outcomes of these meetings no later than 22 May 2020, in order to determine whether the site meets the criteria of the Statutory Framework of the World Network of Biosphere Reserves.
261. **Lake Elton Biosphere Reserve (Russian Federation).** The Advisory Committee welcomed the additional information provided by the Russian authorities.
262. The Lake Elton biosphere reserve was designated in 2019. At the time, the Advisory Committee urged the authorities to monitor the impacts of the exploitation of therapeutic mud, and further develop their research capacities. The authorities were also requested to submit a management plan.
263. The Advisory Council therefore welcomed the reception of a detailed management plan, which was drafted in consultation with national and international experts, as well as local government authorities and communities.
264. The management plan contains clear objectives related to the further development of the therapeutic mud sources for economic development, while at the same time monitoring and mitigating the negative impacts of both mud exploitation and increased tourism.
265. The Advisory Committee also welcomed the detailed plans concerning the strengthening of research capacity within the biosphere reserve. The plan contains references to national and international research collaboration.
266. The Advisory Committee appreciated the involvement of local government authorities and representatives of local residents in the management structure, as well as in monitoring the implementation of the management plan. The Advisory Committee urges the authorities to continue to manage the biosphere in an inclusive and participatory manner, and to strengthen the participation of women in the management and monitoring processes.
267. **Okskiy Biosphere Reserve (Russian Federation).** The site falls under the Exit Strategy process. The Advisory Committee welcomed the responses sent by the authorities of the Okskiy Biosphere Reserve.

268. The Advisory Committee appreciated the developmental activities undertaken to increase the size of the transition area to ensure wider cooperation with local communities.
269. The Advisory Committee noted the Agreement of Cooperation and Collaboration to promote activities for sustainable development in the Okskiy Biosphere Reserve.
270. The Advisory Committee thanked the authorities for the information on development at the local economy level:
- *Cultural development:* The number of tourists visiting the biosphere reserve has increased following the development of appropriate infrastructure.
 - *Social development:* Local communities capitalize on their location near the reserve for promotional purposes, with the reserve generating 120-130 jobs at the local level. Administration of the reserve provides employees, pensioners and citizens living within the boundaries a pass to visit hunting and fishing grounds without payment. The reserve also provides wood at discounted prices to local residents.
 - *Environmental development:* The biosphere reserve supports the study of ecological processes and the dynamics of biological diversity. It also provides opportunities for interdisciplinary research, comparative study and exchange of information.
271. Based on the information received, the Advisory Committee requested an explanation as to why a substantial part of the core area (the national park) borders the transition area. It also requested more detailed information about the development function, as the submitted information refers to the co-development of management plans. The Advisory Committee therefore requested the authorities to submit the management plan outline by 22 May 2020.
272. **Chernye Zemli Biosphere Reserve (Russian Federation).** The site falls under the exit strategy process. The MAB Council requested that the following additional information be provided by 30 September 2018: i) a draft of a comprehensive management plan/policy for the entire reserve; ii) actions taken to establish an overall biosphere reserve coordinating body that will involve the authorities, local communities and other stakeholders, with detailed information on the mechanisms implemented for their involvement; and iii) revision of the zonation scheme with a proper buffer for the core areas or a rationale for its absence, and a clear zonation map showing the borders of the reserve.
273. The Advisory Committee welcomed the documents sent by the national authorities. It noted that a Mid-Term Management Plan for the period 2018-2022 was developed by a working group comprising the managing director and chief executive. This plan was examined at sessions of the Science and Technical Council and actively discussed at a special meeting, although information on the participants at this meeting were not provided. The Mid-Term Management Plan consists of four components: i) a landscape and biological diversity conservation programme; ii) a scientific research and environmental monitoring programme; iii) environmental education; and iv) the preservation of historical and cultural heritage. The Advisory Committee recommended that the national authorities consider actions likely to foster the development of areas other than tourism, such as livestock raising, which was

presented as an option in the periodic review form but is not mentioned in the mid-term management plan.

274. Currently, the administration of the core area and buffer zone is carried out by the Chernyje Zemli state reserve. The territory of the transition area is managed by municipal authorities, management organizations and tenants, who coordinate their activities with the Ministry of Natural Resources and Ecology of the Russian Federation. The Advisory Committee acknowledged the reception of agreement letters signed by the heads of the regional municipalities. Nevertheless, it reiterated its request for mechanisms to better integrate the two levels of governance.
275. The Advisory Committee noted that the submitted map is the same as that sent with the periodic review form, which does not include the requested information regarding zonation. Of the three above-mentioned issues raised by the ICC, the Advisory Committee considered that only the first received a satisfactory answer. As the site falls under the exit strategy process, the Advisory Committee requested that the missing information be provided by 22 May 2020.
276. **Sayano-Shushenskiy Biosphere Reserves (Russian Federation).** The site falls under the exit strategy process. The Advisory Committee welcomed the responses sent by the authorities, as well as the updated zonation map and the updated periodic review.
277. The Advisory Committee appreciated the developmental activities undertaken in relation to the extension of the biosphere reserve, notably those related to tourism and timber products. The Advisory Committee noted that one transition area has been added and two public councils have been established to ensure participation in the management of the biosphere reserve. The statutes of one of the public council has been added to the periodic review report.
278. The Advisory Committee appreciated the updated zonation map, as well as the rationale for the zonation. According to the updated zonation map, a second transition area has been demarcated and will be added to the biosphere. The Advisory Committee therefore urged the authorities to provide an update on the status of the second transition area, as well as the total number of residents living in the biosphere reserve.
279. The Advisory Committee concluded that the biosphere reserve now **meets** the criteria of the Statutory Framework of the World Network of Biosphere Reserves.
280. **Samba Dia Biosphere Reserve (Senegal).** The site is participating in the 'Process of Excellence and Enhancement of the WNBR'. The Advisory Committee recalled that following the submission of a periodic review in 2015, the national authorities were requested to submit a revised zonation map with a buffer zone and transition area and management plan. The Advisory Committee acknowledged the recent official letter of the national authorities submitting the provisional zoning of the Samba Dia Biosphere Reserve, which addresses the 2015 recommendations and requests more time to compile and submit additional information.

281. The Advisory Committee concluded that the site **meets** the criteria of the Statutory Framework on the condition that they provide official confirmation of the zonation map and the management plan by 22 May 2020.
282. **Kogelberg Biosphere Reserve (South Africa).** The Advisory Committee welcomed the submission of information on the second periodic review of the site, which was to have been submitted by 30 September 2019. The Advisory Committee noted that the periodic process was yet to be completed because approval was pending from the Western Cape Provincial Government to proceed with certain sections of the procedure.
283. The Advisory Committee therefore accepted the request for an extension of the deadline and encouraged the authorities to submit the periodic review by 30 September 2020.
284. **Vhembe (South Africa).** The Advisory Committee welcomed the submission of information indicating the progress of the periodic review for the area, which was approved in 2009.
285. The committee noted that the periodic review dossier was to have been submitted by 30 September 2019. However, the communication received from the MAB National Committee indicated that the stakeholder engagements were still in progress.
286. The Advisory Committee therefore accepted the request for an extension of the deadline and encouraged the authorities to submit the periodic review by 30 September 2020.
287. **Camili Biosphere Reserve (Turkey).** In July 2018, the Camili Biosphere Reserve was asked to provide a response to the decisions made during the 30th session of the ICC MAB. The MAB secretariat requested an update by 30 September 2019.
288. A management/governance structure mechanism of the biosphere reserve has been officially established by the Ministry of Agriculture and Forestry. The Advisory Committee took note that negotiations for the effective establishment of a management structure, and the process of updating the draft management plan, as well as the examination of zoning decisions, are advancing steadily. One more year is required to achieve the stakeholders' full endorsement of a protocol for their active involvement in the management of the biosphere reserve.
289. The Advisory Committee expects to receive updated and comprehensive information by 30 September 2020.

Sites under the Exit Strategy in conflicts:

290. **Waza Biosphere Reserve (Cameroon). In conflict.** The site is participating in the 'Process of Excellence and Enhancement of the WNBR'. The Advisory Committee noted that consultations were envisaged in October 2019 as part of the implementation of the 'Biosphere and Heritage of Lake Chad' project (BIOPALT) pending the re-zoning of Waza National Park and new information on population numbers living in the buffer zone and the transition area, which together with the Kalamaloué National Park will form the core areas of a transboundary biosphere

reserve. They also recalled that the Waza Biosphere Reserve obeys the provisions of paragraph 4 of annex 2 concerning biosphere reserves located in conflict zones due to the insecurity fuelled by the terrorist group 'Boko Haram'.

291. **Basse Lobaye (Central African Republic). In conflict.** The site is participating in the 'Process of Excellence and Enhancement of the WNBR'. No recent information has been received.
292. **Radom Biosphere Reserve (Sudan). In conflict.** The site is participating in the 'Process of Excellence and Enhancement of the WNBR'. No recent information has been received.

PART II

ANNEX 3: EXAMINATION OF PERIODIC REVIEW REPORTS RECEIVED SINCE THE LAST ADVISORY COMMITTEE MEETING – 27th IACBR

COUNTRY	NAME OF THE SITE	COMMENTS
CHILE	Araucarias	
CHINA	Fenglin	
	Nanji Archipelago	
	Jiuzhaigou	
COLOMBIA	Cinturón Andino	Does not meet criteria
	El Tuparro	Does not meet criteria
	Sierra Nevada de Santa Marta	Does not meet criteria
	Ciénaga Grande de Santa Marta	Does not meet criteria
	Seaflower	
DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA	Mount Paetku	
GERMANY	Schaalsee	
MALAWI	Lake Chilwa	
MALAYSIA	Tasik Chini	Does not meet criteria
PERU	Oxapampa Asháninka – Yánesha	
REPUBLIC OF KOREA	Gwangneung Forest	
RUSSIAN FEDERATION	Altaisky	
SPAIN	Bardenas Reales	Does not meet criteria
	Cabo de Gata	
	El Hierro	
	Somiedo	
	Urdaibai	
SOUTH AFRICA	Vhembe	
	Kogelberg	
SWEDEN	Lac Vänern Archipelago et Mont Kinnekulle	
UKRAINE	Chernomorskiy (Black Sea)	
	Desnianskyi	
VIET NAM	Can Gio Mangrove	

293. **Araucarias Biosphere Reserve (Chile).** The Advisory Committee welcomed the second periodic review from the Araucarias Biosphere Reserve, which was designated in 1983.
294. The biosphere reserve is located in the region of La Araucania in southern Chile. The total area of the biosphere reserve has not changed, but there has been changes in the zonation: a 4.7% decrease in the core area and an 8.2% increase in the buffer zone (30,797 ha). Land from the core and transition areas was absorbed into the buffer zone.
295. For the preparation of the Periodic Review report, a technical committee was formed, convened by the biosphere reserve manager and composed of representatives of

public and private institutions. Since 13 April 2020, the committee has met through weekly tele-meetings. Surveys were sent out to different stakeholders and interviews were conducted.

296. Positive changes over the last ten years include the revaluation of biocultural heritage, the strengthening of strategies for environmental protection and the increase in environmental certification of rural education establishments.
297. Negative changes have been also recognized such as a significant increase in the temporary population in certain areas of the biosphere reserve, the unregulated use of public use zones in the core area, the subdivision of rural property for the construction of second homes which generates fragmentation, the introduction of invasive alien species and the absence of land use planning which allows unsustainable projects to be implemented.
298. Since 2010, the biosphere reserve has operated the following management bodies: an assembly, an executive board, a technical secretariat and working groups. A wide range of institutional and civil society actors participate in governance of the reserve.
299. The biosphere reserve has produced a Management Plan for the period 2013-2022, which is structured around the following themes: (i) social development, culture and knowledge, (ii) productive development, (iii) territorial development and environment, and (iv) politics and administration.
300. The Advisory Committee concluded that the site **meets** the criteria of the Statutory Framework of the WNBR. The Advisory Committee congratulated the biosphere reserve on its excellent report, as well as on the progress made since its designation, mainly in regard to heightened visibility and community participation.
301. **Fenglin Biosphere Reserve (China).** The Advisory Committee welcomed the second Periodic Review report of the Fenglin Biosphere Reserve, which benefited from an on-site investigation organized by the MAB National Committee of China in August 2017. The Fenglin Biosphere Reserve, designated in 1997, submitted its first periodic review report in 2007.
302. The Fenglin Biosphere Reserve has been managed in accordance with the Master Plan of the Fenglin National Nature Reserve (Phase II) for 2014–2023, which was approved by the State Forestry Administration. The functions of the Chinese national nature reserve are consistent with those of the biosphere reserve, covering protection, scientific research monitoring, public education and logistical support.
303. Its main biodiversity conservation values relate to the presence of a representative, complete and primeval temperate coniferous and broad-leaved mixed forest dominated by Korean pines (*Pinus koraiensis*). The original broad-leaved Korean pine forest is well preserved in a stable state. Forest coverage has increased by 0.7% to 96.5% compared with the first Periodic Review in 2007.
304. Conversely, due to the underdeveloped local economy, some residents in the transition area have moved to cities and towns following the renovation of 'rundown areas'. As a consequence, the population has decreased from 1,690 reported in the first Periodic Review report (2007) to 500 in 2015. The location of the site in an

economically underdeveloped region has also become an obstacle to engaging capable people, especially youth, in the management and development activities of the biosphere reserve. The situation is expected to be improved by the planned move of the biosphere reserve administration to Yichun City.

305. The Advisory Committee appreciated the successful follow-up actions in response to the recommendations of the first Periodic Review in 2007. One notable action was a scientific study assessing the impact of Korean pine nut collection on the regeneration of Korean pine forest and the animals that feed off them, followed by the implementation of rules and regulations on collecting nuts and other undergrowth resources in a specified time and area based on the research outcomes. In addition, the biosphere reserve has been completely funded by the local government since 2017, with improvements to funding for staff and infrastructure.
306. The Advisory Committee concluded that the Fenglin Biosphere Reserve **meets** the criteria of the Statutory Framework of the WNBR, and recommended that efforts be made to increase communication and visibility of the biosphere reserve through better use of communication tools (website, social networking for publicity), and to reinforce sustainable development activities by engaging local residents in and around the biosphere reserve.
307. **Nanji Archipelago Biosphere Reserve (China).** The Advisory Committee welcomed the second Periodic Review of the Nanji Archipelago Biosphere Reserve, which benefited from an on-site investigation carried out by the MAB National Committee of China in November 2018.
308. The Nanji Archipelago Biosphere Reserve, located in the southeast marine area of Pingyang County, Wenzhou City, Zhejiang Province, consists of 52 islands with dozens of uncovered and sunken rocks and surrounding sea areas as well as a 74.66 km-long coastline. The total area covers 201.06 km², consisting of islands (11.13 km²) and marine area (189.93 km²). The site was designated as a biosphere reserve in 1990 and the first Periodic Review report was submitted in 2008.
309. The Advisory Committee appreciated the number of vigorous activities implemented over the last ten years in response to recommendations made by the ICC on the first Periodic Review.
310. The site is known as the 'kingdom of algae and shellfish' due to the presence of 427 species of shellfish and 637 species of algae, which make up 15% and 25% of the total marine algae and shellfish species in China, respectively.
311. The biosphere reserve has been managed in accordance with the Master Plan of the Nanji Archipelago National Marine Nature Reserve for 2019–2028. The functions of the Chinese national nature reserve are consistent with those of the biosphere reserve, covering protection, scientific research monitoring, public education and logistical support.
312. Over the past decade, the ecosystems of the site have remained stable, the villages environments have improved significantly and the local community economy has successfully pursued green development. In particular, the site has boosted the sustainable development of communities through ecological compensation, moderate

development of eco-tourism, the construction of livelihood facilities and assistance for community livelihoods.

313. The Advisory Committee welcomed the distinctive management model which was established to coordinate the roles of the Nanji Archipelago National Nature Reserve Administration and the Nanji Town Government-. The management model has made possible unified planning and management and coordinated social and economic development.
314. The Advisory Committee also noted that the site has established long-term cooperation with many domestic research institutes as a scientific research platform, accumulated a wealth of basic data on marine biodiversity and trained young researchers.
315. The Advisory Committee therefore concluded that the site **meets** the criteria of the WNBR, and requested the following information by 30 May 2021:
- an updated zonation map with coordinates, an indication of scale and all legends in English as specified in the Periodic Review report form; and
 - responses to all items (questions) on the report form that were not provided.
316. **Jiuzhaigou Biosphere Reserve (China).** The Advisory Committee welcomed the second Periodic Review report of the Jiuzhaigou Biosphere Reserve, which has benefited from an on-site investigation organized by the MAB National Committee of China in September 2020. The Jiuzhaigou Biosphere Reserve, designated in 1997, submitted its first Periodic Review in 2007. There have been no changes in zonation or size of the biosphere reserve.
317. The biosphere reserve is situated on the southern slopes of the Minshan Mountains in the transition between the Sichuan Basin and the Qinghai-Tibet Plateau, characterized by rich levels of biodiversity. The altitude ranges from about 2,000 to 4,700 m above mean sea level. The natural landscape includes snow-capped peaks, numerous waterfalls, forests, mountain streams and lakes. The site is particularly interesting for its series of *narrow conic karst landforms*. Calc-sinter lakes, calc-sinter waterfalls, and calc-sinter beaches *are very rare in the world*.
318. In order to achieve unified management of the biosphere reserve, the core area (49,782.3 ha), buffer zone (9,027.5 ha) and transition area (5,487.5 ha) correspond to those of the Chinese National Nature Reserve, respectively, that is, the functional zonation of the Jiuzhaigou National Nature Reserve. The core area is located in the middle and upper part of mountains at a higher altitude and has been kept uninhabited in a primitive state. The biosphere reserve is surrounded by other nature reserves: the Gonggaling Nature Reserve in the west, the Huanglong Nature Reserve in the south, the Wanglang Nature Reserve in the southeast, the Wujiao Nature Reserve in the east and the Baihe Nature Reserve in the northeast. These surrounding nature reserves substitute for the buffer zone of the biosphere reserve. The Jiuzhaigou Biosphere Reserve has maintained good relations and engaged in cooperation with the neighbouring nature reserves.
319. The Advisory Committee commended the Chinese authorities on the success of follow-up actions in response to the recommendations of the 23rd session of the MAB-

- ICC in 2011. Some notable results are the amount of surface water in Jiuzhaigou has increased steadily water quality has reached the grade-I standard, and a new operation and management model for the biosphere reserve has been created enabling to manage a balanced distribution of tourists and to launch the tourism festivals with distinctive characteristics by time period.
320. The Committee noted the ongoing cooperation with the World Wide Fund for Nature (WWF) for ecotourism training, workshops and environmental education events, and the production of popular science brochures on its resources, which are freely available in the visitor centre.
 321. The Committee further noted that after the earthquake in 2017, 1.21 million yuan was allocated to build an interpretation system at the Jiuzhaigou World Heritage Site, 15.129 million Yuan was invested in promoting the Jiuzhaigou World Heritage Site, and 5 million Yan was used for the creation of a Jiuzhaigou logo and signage.
 322. At present, some problems persist with management and coordination of the Jiuzhaigou Biosphere Reserve. The site is directly managed by the Jiuzhaigou Administration, which oversees not only protection of the biosphere reserve, but also tourism, community and public security management. These issues simultaneously overlap and differ in multiple ways. The limitations imposed by these responsibilities risk affecting the protection function of the Jiuzhaigou Administration. Therefore, in order to promote the sustainable development of the biosphere reserve, there is a need for further integration and optimization of coordination and management.
 323. The Advisory Committee concluded that the Jiuzhaigou Biosphere Reserve **meets** the criteria of the Statutory Framework of the WNBR, and recommended to make efforts to improve the management and coordination of the site.
 324. **General recommendations for Colombian authorities:**
 325. The Advisory Committee recognized the efforts made by the Colombian authorities to submit periodic reviews for its five biosphere reserves, especially during the pandemic.
 326. Although the Advisory Committee acknowledged that many projects are underway in different areas of their biosphere reserves, with the exception of the Seaflower Biosphere Reserve, the majority of actions focused on national parks or other protected areas, with little interaction evident between the different zones and functions of the biosphere reserves.
 327. While there are management plans for the different territories, no overall strategy exists to coordinate the actions being undertaken in each of the separate plans.
 328. With the exception of the Seaflower Biosphere Reserve, the management committees of the biosphere reserves are not active, participative or representative of the different biosphere reserve stakeholders.
 329. The Advisory Committee and the MAB Secretariat offer technical support to strengthen the governance of Colombia's biosphere reserves, mainly through the implementation of the MAB National Committee, biosphere reserve management

committees and the development of management plans for the country's biosphere reserves to meet the criteria of the Statutory Framework of the WNBR.

330. **Cinturón Andino Biosphere Reserve (Colombia).** The Advisory Committee welcomed the third Periodic Review from the Colombian authorities.
331. The Cinturón Andino Biosphere Reserve is located in the south of Colombia in the departments of Cauca, Valle del Cauca, Tolima and Huila, and was designated in 1979. It has previously submitted periodic reviews in 2001 and 2011. In 2020, the biosphere reserve reported no changes to the total surface area (2,379,564 ha).
332. A Periodic Review process was conducted during the year of 2020. In line with COVID-19 control measures, two virtual meetings were held with the participation of representatives of governmental institutions, but no information is available on the involvement of other actors.
333. From 2010 to 2020, 82 nationally protected areas were added to the core area of the biosphere reserve, but the increase in the area is not reflected in the report.
334. The reported actions and activities have not demonstrated the expected integration of the different zones, in line with the comprehensive management of the biosphere reserve.
335. No significant changes have been noted in the biosphere reserve, except for the intensification of agricultural and forestry activities.
336. The Advisory Committee congratulated the biosphere reserve on its participation in the 'Proud to Share' initiative and for the publication of the book *El Páramo*, which provides strong material about land uses and social realities associated with these strategic ecosystems. Both have proven to be of great value for improving the governance and management of the biosphere reserve. The Advisory Committee also welcomed the creation of an environmental education booklet, which functioned as an important communication tool throughout the territory.
337. However, the biosphere reserve has not produced a consolidated management plan nor constituted a management committee. Indeed, the Ministry of Environment and Sustainable Development has yet to pass a resolution formalizing the MAB National Committee and the biosphere reserve committees.
338. The Advisory Committee concluded that this site **does not meet** the criteria of the Statutory Framework of the WNBR.
339. Therefore, the Advisory Committee requested the Colombian authorities to provide by 30 May 2021 a work plan for the Cinturón Andino Biosphere Reserve, including the following elements:
- a management plan for the whole biosphere reserve, including the core, buffer and transition areas, with an emphasis on proposed coordination and synergies with existing national plans, policies and strategies, such as community projects, partnerships with NGOs or the private sector and, above all, involving the local communities inhabiting the reserve;

- an official document reflecting the establishment and operation of the biosphere reserve committee, involving all relevant stakeholders (national, regional and local government, local communities, academia and NGOs, among others);
 - a report clearly presenting information on the size of the core area and explaining how the 82 new protected areas were integrated; and
 - a revised zonation covering particularly the buffer and transition zones, in line with the functions set out in the Statutory Framework.
340. **El Tuparro Biosphere Reserve (Colombia).** The Advisory Committee welcomed the third Periodic Review from the Tuparro Biosphere Reserve, which was designated in 1979.
341. The biosphere reserve is located in the department of Vichada, in the Eastern Plains of Colombia, near the border with Venezuela. The third Periodic Review in 2020 reported no changes to the total area but the discrepancy in total area was found such as 1,042,000 ha (p. 7) and 1,097,084 ha (p. 149).
342. In 2015, the MAB-ICC recommended the authorities to better define the buffer zone surrounding the core area and to provide relevant information in the next Periodic Review to be submitted in 2021. No changes in the zonation were reported and the zonation map remains identical to the one provided in 2015.
343. The Periodic Review process was conducted by government institutions, namely the Ministry of Environment and Sustainable Development, National Natural Parks of Colombia and the Orinoquia Territorial Directorate. They jointly developed the document drawing on projects and results delivered by various institutions and organizations that have carried out activities within the territory.
344. Over the last decade tourism increased following the introduction of the Tourism Development Plan for the Department of Vichada (2012) and implementation of a project on sport fishing tourism, as well as other initiatives including 'Conservation of biodiversity and strengthening of governance in the El Tuparro Biosphere Reserve'. Tourism development in the biosphere reserve is oriented mainly towards sport fishing, while cattle ranching also contributes to the site's economy.
345. However, the reported actions and activities have not demonstrated the expected interaction of different zones, in line with comprehensive management of the site.
346. On the positive side, the Tuparro Biosphere Reserve did introduce social agreements to encourage the sustainable and rational use of natural resources. Progress has been made with agreements on the use of natural resources with indigenous communities located in the buffer zone, mostly in relation to sustainable fishing. In order to promote participatory and active governance, the management team set up educational strategies for the social valuation of protected areas of the biosphere reserve, including radio programmes and awareness-raising campaigns on forest fires and solid waste.
347. The Committee noted, though, that the biosphere reserve has not yet produced a consolidated management plan nor constituted a management committee.

348. The Advisory Committee therefore concluded that this site **does not meet** the criteria of the Statutory Framework of the WNBR.
349. Therefore, the Advisory Committee requested that the Colombian authorities provide by 30 May 2021 a work plan for the Tuparro Biosphere Reserve, including the following elements:
- a management plan for the whole biosphere reserve, including the core, buffer and transition areas, with an emphasis on proposed coordination and synergies with existing national plans, policies and strategies and, above all, involving the local communities inhabiting the biosphere reserve; and
 - a revised zonation covering particularly the buffer and transition zones, in line with the functions set out in the Statutory Framework.
350. **Sierra Nevada de Santa Marta Biosphere Reserve (Colombia).** The Advisory Committee welcomed the third Periodic Review of the Sierra Nevada de Santa Marta Biosphere Reserve, designated in 1979.
351. The Periodic Review process was conducted during the year 2020. In line with COVID-19 control measures, five virtual meetings were held with the participation of representatives of official entities, but no information was available regarding the involvement of other actors.
352. The Periodic Review reported changes to the size of the core, buffer and transition areas, but provided no further information about the nature of these changes. Furthermore, there was the discrepancy in sizes of each zone (p. 6 and p. 189).
353. In 2015, the MAB-ICC recommended that the site add a 'buffer zone and transition area in the coastal and marine area and report on this in the next Periodic Review to be submitted in 2021'. It is not clear from the submitted map whether or not these areas have been added to the biosphere reserve.
354. Over the last ten years the biosphere reserve has experienced a significant rise in tourism, with associated land use changes related to agriculture, hotel infrastructure and forestry, and a concomitant increase in population of over 430,000 inhabitants. Four private reserves have also been designated within the biosphere reserve. These changes reportedly have harmed the spiritual and cultural integrity of the indigenous peoples of the Sierra Nevada.
355. The biosphere reserve is managed by a multitude of territorial, political-administrative, ethno-cultural and other entities or actors. Each one of them carries out its respective actions within the sole scope of its jurisdiction and competency. It would therefore be advisable to establish a management plan for the entire biosphere reserve that clearly articulates the functions, domains and competencies of each actor forming part of this 'mosaic', and defines how they can collaborate more closely.
356. The Advisory Committee recognized the significant number of projects and programmes carried out in the biosphere reserve over the last decade. However, a more coordinated approach to management for the entire biosphere reserve is needed to deliver the proposed objectives.

357. The biosphere reserve has not yet produced a consolidated management plan nor constituted a management committee.
358. The Advisory Committee concluded that this site **does not meet** the criteria of the Statutory Framework of the WNBR.
359. The Advisory Committee therefore requested the Colombian authorities to provide by 30 May 2021 a work plan for the Sierra Nevada de Santa Marta Biosphere Reserve, including the following elements:
- justifications for the extension of the coastal and marine area, detailing their function and zonation (buffer zone or transition area), supported by a clear map of the new zonation;
 - a management plan for the whole biosphere reserve to coordinate all existing plans for the different zones of the biosphere reserve;
 - an official document reflecting the establishment and operation of the biosphere reserve committee, involving all relevant stakeholders (national, regional and local government, local communities, academia and NGOs, among others); and
 - strategies to promote cultural and knowledge exchanges within the biosphere reserve and with other sites, particularly regarding the involvement of local indigenous peoples and inhabitants.
360. **Ciénaga Grande de Santa Marta Biosphere Reserve (Colombia).** The Advisory Committee welcomed the second Periodic Review of the Ciénaga Grande de Santa Marta Biosphere Reserve, designated in 1979.
361. The Periodic Review process was conducted during the year 2020. In line with COVID-19 control measures, some virtual meetings were held with the participation of representatives of government institutions, but no information is available regarding the involvement of other actors.
362. In 2020, the biosphere reserve presented no changes to the total surface area.
363. The main extractive activity in the area is the capture of crustaceans and molluscs, which is carried out in an artisanal manner by around 5,000 fishermen. Over the last few years, fishing activity has decreased due to the environmental deterioration of the marshes of the Ciénaga Lagoon complex and the overexploitation of species.
364. In recent years, a hydrological imbalance has been generated by the construction of a road to link Ciénaga with Barranquilla, affecting the connectivity of the Caribbean Sea and the estuary. The hydrological imbalance, together with expansion of the agricultural frontier, has increased the hyper-salinization of soils, forest fires, fish mortality, mortality of aquatic mammals and reptiles, loss of vegetation cover, diversion of water flow and drying up of water bodies, decrease in fish productivity, increased sedimentation and coastal erosion.
365. The Advisory Committee recognized the significant number of projects and programmes had carried out in the biosphere reserve over the last decade. However, a more coordinated approach to management for the entire biosphere reserve is needed to deliver the proposed objectives.

366. The biosphere reserve has not yet produced a consolidated management plan and has not formed a management committee.
367. The Advisory Committee concluded that this site **does not meet** the criteria of the Statutory Framework of the WNBR.
368. Therefore, the Advisory Committee requested the Colombian authorities to provide by 30 May 2021 a work plan for the Ciénaga Grande de Santa Marta Biosphere Reserve, including the following elements:
- a management plan for the whole biosphere reserve to coordinate all existing plans for the different zones of the biosphere reserve; and
 - an official document reflecting the establishment and operation of the biosphere reserve committee, involving all relevant stakeholders (national, regional and local government, local communities, academia and NGOs, among others).
369. **Seaflower Biosphere Reserve (Colombia).** The Advisory Committee welcomed the second Periodic Review of the Seaflower Biosphere Reserve, designated in 2000.
370. The Periodic Review process was conducted during the year 2020. In line with COVID-19 control measures, the review was carried out virtually through a participatory process. The different sectors convened four times, and a technical team was set up to review any significant changes and carry out in-depth surveys with local leaders (77 people).
371. Some meaningful findings were recognized. In recent years, the biosphere reserve has registered a huge increase in tourism with more than 500,000 tourists, and measures have been taken to mitigate the anthropogenic impact on ecosystems, notably coral restoration. The Raizal culture has played a central role in the conservation and sustainability of resources and management of biodiversity through ancestral practices of artisanal fishing and agriculture.
372. The biosphere reserve continues to be coordinated and managed by the Corporation for the Sustainable Development of the Archipelago of San Andrés, Providencia and Santa Catalina (CORALINA). CORALINA is an administratively and financially autonomous entity, with an annual budget to fulfil its functions within the National Environmental System. This approach contributes significantly to the appropriate management and continuity of the biosphere reserve.
373. Currently, the coordination of Seaflower Biosphere Reserve falls under CORALINA's 2007–2023 Single Long Term Environmental Plan (PULP). This plan has not modified during the decade-long review of the biosphere reserve and received funding from the main public entities and private companies present in the archipelago.
374. The biosphere reserve has also set up territorial planning tools, such as the Seaflower Biosphere Reserve Management Plan, Watershed Management Plans (POMC), Mangrove Zoning Plans, and Aquifer and Groundwater Management Plans, among others. CORALINA is currently working on the newly Integrated Management Plan for the Coastal Environmental Unit (POMIUC), which should replace PULP after 2023.

375. The most significant challenges over the past ten years have been the intensification of activities related to mass tourism without long-term planning; the advance of urban sprawl, especially in the northern part of San Andrés Island; coastal erosion; and gradual loss of local traditional culture.
376. Although tourism appeared beneficial in the short term, the economic, social and psychological effects of landscape transformation and territorial change caused by mass tourism policies are likely to have a negative impact for inhabitants in the long term.
377. Coastal erosion is being monitored, and climate change mitigation and adaptation strategies have been established.
378. The Advisory Committee concluded that the site **meets** the criteria of the Statutory Framework of the WNBR, and strongly recommended that the Colombian authorities conduct the following: undertake a review of existing land uses on San Andrés Island, with a view to proposing urban planning practices that prioritize the conservation and recovery of strategic ecosystems in line with the sustainable development model;
- carry out a study of the population-carrying capacity on San Andrés Island;
 - establish a sustainable tourism strategy that mitigates pressure on ecosystems and is consistent with the island's capacity; and
 - devise and implement bespoke mechanisms for the recovery of traditional cultural activities, such as artisanal fishing and organic agriculture, with a view to expanding local production, employment and development opportunities within the framework of the biosphere reserve.
379. **Mount Paektu Biosphere Reserve (Democratic People's Republic of Korea).** The Advisory Committee welcomed the third Periodic Review of the Mount Paektu Biosphere Reserve, designated in 1989.
380. The Mount Paektu Biosphere Reserve is situated at the border of the People's Republic of China and shares a volcano mountain and mountain forest ecosystem with Changbaishan Biosphere Reserve in China.
381. The first Periodic Review was submitted in 2001 and the second in 2014. The current Periodic Review process occurred in parallel with the nomination process for the Mt Paektu area as a UNESCO Global Geopark, at the national level, in close contact, discussion and cooperation with the working group under the coordination of the DPRK National Commission for UNESCO and the National Geopark Committee.
382. The Advisory Committee commended the efforts of the authorities to address past recommendations from the MAB-ICC, and noted that a number of educational activities have been implemented and scientific cooperation put in place.
383. The State Academy of Science (SAOS) and a number of educational institutions have conducted scientific and educational activities in the biosphere reserve including field surveys and research, and observation and training in relation to animals and plants.
384. The Mt Paektu Biosphere Reserve is characterized by a unique eco-environment and rich biodiversity, and encourages ecotourism and development of the local economy.

385. The Advisory Committee commended the government of DPRK on giving priority to the prevention of destruction and degradation of the forest ecosystem, and the sustainable use and conservation of forest resources, through the selection of Mt Paektu Biosphere Reserve as a demonstration site for conservation and restoration.
386. The Committee noted, however, that the report provided information on and referred to a management plan, although it was submitted with the Periodic Review.
387. The Committee also noted that no zonation map was included in the report or submitted separately.
388. The Advisory Committee therefore requested the authorities to confirm that a comprehensive management plan has been elaborated and to submit an extended summary and outline of the plan in English, along with a zonation map, to the MAB Secretariat not later than 30 May 2021, in order **to determine whether the site meets the criteria** of the Statutory Framework of the WNBR.
389. **Schaalsee Biosphere Reserve (Germany).** The Advisory Committee welcomed the submission of the second Periodic Review report of the Schaalsee Biosphere Reserve, designated in 2000.
390. The biosphere reserve covers 31,000 ha and is home to 12,206 inhabitants.
391. Agriculture plays a major role in the Schaalsee Biosphere Reserve as the primary economic sector. There are 181 agricultural enterprises including livestock farms, cropping farms and farms that do both. One focus of the site has been the creation and implementation of measures to make agriculture in the transition area more sustainable.
392. Since 2015, the Biosphere Reserve Office has also been responsible for the Elbe River Landscape Biosphere Reserve in Mecklenburg-Western Pomerania. Both sites are located in and adjacent to the 'German Green Belt,' which stretches along the former inter-German border, and in the greater Hamburg area. The Office focuses on linking the two biosphere reserves and creating unitary presentation and messaging touting both biosphere reserves as the 'Schaalsee-Elbe Biosphere Belt', an entry point to the Hamburg metropolitan area. Both biosphere reserves still retain their UNESCO designation, only the office name has changed to the Schaalsee-Elbe Biosphere Reserve Office.
393. The Advisory Committee welcomed the participatory manner in which the review was developed.
394. The Advisory Committee noted that while the total area of the biosphere reserve had not increased, the ownership of some conservation areas had been transferred to the Biosphere Reserve Office and enhanced its conservation function. The Committee noted with satisfaction the popularity and firm establishment of sustainability labels provided to local businesses, and the intentions expressed by the authorities and stakeholders to expand activities and address other sustainability challenges related to mobility, digitalization and energy transitions.

395. The Advisory Committee welcomed the activities directed at further integration of the Schaalsee Biosphere Reserve and the Elbe River Landscape Biosphere Reserve, and the cooperation between the two sites in the field of environmental education.
396. The Advisory Committee noted with approval the overall increase in the budget available for the biosphere reserve, due to third-party funding. The Committee understood that the merger of the two biosphere reserves has been accorded priority, and that this, as well as the additional conservation mandates, has prevented the expansion of monitoring, despite the development of a detailed monitoring plan. The Advisory Committee therefore recommended that efforts continue in order to secure the necessary additional funding to fulfil this function.
397. The Advisory Committee concluded that the site **meets** the criteria of the Statutory Framework of the WNBR.
398. **Lake Chilwa Biosphere Reserve (Malawi).** The Advisory Committee welcomed the first Periodic Review of the site, designated in 2006. The wetland, part of which extends into Mozambique, is a Ramsar site with an area of 230,000 ha lying at an altitude of 627 m above mean sea level. The biosphere reserve has a population of 1,911,612, as of 2018, which engages mainly in fishing, agriculture and hunting. The area is managed under the Lake Chilwa and Mpoto lagoon fisheries management plan.
399. The Advisory Committee commended the participatory methodology used for the Periodic Review and welcomed national efforts to sustain the three functions of the biosphere reserve, such as the enactment of bylaws, the delineation of new fish sanctuaries, the prohibition of fishing in nurseries throughout the year, the establishment of the Lake Chilwa Wetland Trust, the incorporation of traditional concepts into management, the introduction of a closed season from November to March coinciding with the spawning season, the introduction of climate-smart agriculture for farmer groups, the creation of livelihood empowerment and village credit schemes project, and the collaborative research with the University of Malawi Chancellor College.
400. The Advisory Committee noted that the zonation of the biosphere reserve had not changed despite a population increase of nearly 20% since 2008. The Committee also reaffirmed the need for an integrated management plan for the site, as recommended when the site was approved for designation in 2006, in order to guide the initiation of transboundary cooperation with Mozambique.
401. The Advisory Committee concluded that the site **meets** the criteria of the Statutory Framework of the WNBR.
402. In order to address increasing incidence of deforestation and water use conflicts in the biosphere reserve, which are currently managed through fisheries management plans, the Advisory Committee urged the national authorities to develop an integrated framework incorporating fisheries, forestry and other sectors and to submit the framework along with the forestry sector plan once finalized.
403. **Tasik Chini Biosphere Reserve (Malaysia).** The Advisory Committee welcomed the submission of the first Periodic Review of the Tasik Chini Biosphere Reserve,

designated in 2009. The Tasik Chini Biosphere Reserve is the first biosphere reserve of Malaysia, and includes the Tasik Chini natural freshwater lake and its watershed, which cover an area of 6,922.97 ha.

404. The Tasik Chini watershed is categorized as an environmentally sensitive area (Rank 1) under the National Physical Plan and is protected by the Malaysian Forestry Act. The Tasik Chini basin includes a lush tropical secondary rainforest and a Gazetted State Park, from which many rivers and streams feed the Sungai Lake. The basin also connects the lake to the main Sungai Pahang. In 1994, a weir was erected across Sungai Chini to provide easy passage of boating activities involved in tourism, making Tasik Chini a partial natural lake.
405. The Advisory Committee noted with concern that the biosphere reserve had experienced significant change in land use, seriously impeding the conservation of forests and lakes as well as efforts to achieve sustainable development.
406. The past decade has seen a drastic increase in newly cleared forest areas with intensive land conversion. A year after biosphere reserve designation, some former mining sites located at high gradient points (Ketaya Hill and Chini Hill) re-opened and expanded resulting in catastrophic environmental impacts such as sedimentation, water quality deterioration and river bank degradation. Another major cause of environmental damage is land use conversion from rubber plantation and forest area to oil palm plantation. Some of this expansion took place within the main core areas.
407. This rapid expansion has resulted in adverse impacts not only on regional biodiversity but also on the local economy. Traditional subsistence activities of local indigenous people (the Jakun Tribe), which depend on forest resources, have been obstructed, and the rising trend in tourists visiting and fishing in the natural lake has reversed due to deforestation.
408. In order to address the problems and conflicts arising from deforestation, the concerned government agencies have carried out multiple land manual procedures on mitigation, rehabilitation and enforcement, while studies and environmental impact assessments related to the mining activities are ongoing.
409. The State Government of Pahang decided to work on an updated gazette of the area, which will exclude areas to which access has been granted access for mining, in order to prevent further conflicts between the designated parties, including the mining and logging industry, and conservation in the core areas. The process of updating the gazette is still ongoing. A map of the planned new gazette of Tasik Chini as a State Park is provided with the Periodic Review report but is not in English.
410. The Periodic Review report states that the core areas are the only zones to be covered and protected by several national acts and by state law. The situation regarding the other zones is under discussion with the state and local authorities and development agencies.
411. The Advisory Committee noted that the current Periodic Review does not include a proposal for zonation change, although discussions and preparation for a change in the State Park area is underway. However, a table on the area (section i of Part I) includes figures on proposed changes to each zone with no related explanation, which

- has caused confusion. The human population numbers in the biosphere reserve are also unclear and inconsistent across the report (sections j of Part I and 2.2.3 of Part II).
412. The Advisory Committee noted the absence of a management plan for the biosphere reserve as well as a lack of information regarding the manager(s) or staff responsible for the coordination of the management of the biosphere reserve.
413. The Advisory Committee therefore concluded that the biosphere reserve **does not meet** the criteria of the Statutory Framework of the WNBR.
414. With a view to encouraging the authorities to continue and strengthen measures for mitigation and prevention of environmental and social impacts of mining and oil palm plantation, the Advisory Committee requested the authorities to submit by 30 September 2022 a detailed plan with a timeframe providing:
- an updated zonation of the biosphere reserve maintaining the three functions of a biosphere reserve;
 - details of the biosphere reserve management; and
 - confirmation of an office or manager(s) coordinating the activities of the biosphere reserve management plan.
415. **Oxapampa – Asháninka – Yánesha Biosphere Reserve (Peru).** The Advisory Committee welcomed the first Periodic Review for the Oxapampa – Asháninka – Yánesha Biosphere Reserve (BIOAY), designated in 2010.
416. BIOAY, located in central Peru, encompasses the entire province of Oxapampa. Since designation, the surface area of the biosphere reserve has reduced slightly from 1,801,663.58 ha (2010) to 1,774,090.31 ha (2020). The human population has increased over the ten-year period and is now estimated to 99,464 inhabitants.
417. Over the last ten years, BIOAY has set up an inclusive and participative governance structure organized around a Coordination Committee, an Executive Commission and a Technical Secretariat, with support from numerous external actors. As the biosphere reserve coincides with the provincial limits of Oxapampa, its management has decided to link the development goals of the province with the general objectives of BIOAY. In addition, BIOAY has defined an action plan that aligns with the objectives of the Lima Action Plan.
418. In 2020, the budget allocated for both the management of natural protected areas (located in the core and buffer zones) and the management of the biosphere reserve amounted to US\$ 131,564.22, compared with US\$ 39,000 in 2012.
419. The main governance challenges for the biosphere reserve remain sufficient budget allocation and the inter-institutional coordination of eight municipalities. Despite the advantages of an inclusive and participative governance structure, aligning the interests, logistic and financial capacities of all actors remains a complex endeavour and sometimes impact the performance of BIOAY. However, efforts to further include indigenous communities in the governance structure have shown positive results.
420. The biosphere reserve has experienced changes in land use trends, primarily driven by agricultural intensification, in some cases leading to urbanization and illegal

occupations. Additionally, illegal crop cultivation and wood extraction are exerting pressure on lowland areas. However, the central government is aiming to curb these practices with specific programmes. These issues represent a major challenge, as agriculture and forestry remain the primary economic activities in the region. Furthermore, a study evaluating changes in the region from 1985 to 2018 has shown that some forest loss could be linked to the effects of climate change.

421. On a positive note, the biosphere reserve model has gained popularity and traction in the region, serving to channel funds and build partnerships with multiple institutions, notably for research, and to strengthen the logistical function. BIOAY has also taken advantage of the biosphere reserve model to position itself as a destination of high natural and cultural value. Admittedly, this has led to some increase in tourism in recent years, which poses specific challenges to ensuring sustainability.
422. Several indicators show that the biosphere reserve model has proven successful in promoting sustainable development and improving the quality of life of the population within its boundaries. However, challenges remain related to increasing the visibility of the biosphere reserve model and encouraging residents to actively participate in the management of the biosphere reserve.
423. The Advisory Committee recommended that the national authorities integrate the biosphere reserve model into provincial plans in order to further strengthen the role of BIOAY in the region.
424. The Advisory Committee concluded that the site **meets** the criteria of the Statutory Framework for the WNBR. The Advisory Committee congratulated the authorities on their excellent report as well as on the progress made since designation of the site.
425. **Gwangneung Forest Biosphere Reserve (Republic of Korea).** The Advisory Committee welcomed the first Periodic Review report of the Gwangneung Forest Biosphere Reserve (GFBR), designated in 2010.
426. The biosphere reserve contains well-preserved deciduous hardwood forest, farmlands and private forests, as well as one component of the World Heritage site 'Royal Tombs of Joseon Dynasty'. The Korea National Arboretum hosts a forest museum – the largest in Asia – with informative public displays on forestry. Administratively, the GFBR is located in the three cities (Pocheon, Namyangju, Eujeongbu), which all belong to Gyeonggi Province.
427. There was no recommendation made by the MAB-ICC when the GFBR was approved in 2010. The Advisory Committee acknowledged that various measures had been implemented over the last ten years to fulfil the conservation, development and logistical functions of the GFBR.
428. The Committee noted the creation and operation of the system for management and governance of the biosphere reserve mainly consisting of the Biosphere Reserve Management Committee, the Biosphere Reserve Center and the Local Resident Council for the last ten years. The Biosphere Reserve Management Committee is the governing body of the biosphere reserve, which is composed of administrative officials, local residents, experts, NGOs, politicians and etc. The Biosphere Reserve Centre is the central body to coordinate all the activities of the biosphere reserve,

- including education programmes, promotions and marketing of local produces, networking with other biosphere reserves in the country and abroad and administration of the Management Committee. The Local Resident Council deals with the issues such as conservation of local natural and cultural resources, local economy development, , publicity of the GFBR and voluntary conservation activities of local people.
429. The Committee also underlined several achievements following the designation of the biosphere reserve and noted the number and quality of activities that support its operation. These include a database for the sustainable monitoring of the ecological system of the GFBR, restoration, tracking and management of species, forest conservation and fire prevention, festivals and events utilizing local historical-cultural resources, regional income boosting, local infrastructure facilities, a number of promotional activities on the economic value of the GFBR, ecological education, research support, etc.
430. In addition, the Committee acknowledged the establishment of the public-private partnership for conservation of the core area of the GFBR, which belongs to the Korea National Arboretum. This partnership builds up the governance foundation to prevent forest fire disasters and strengthen forecasting activities against tree disease and pests.
431. The Committee also highlighted a number of monitoring and research activities, and made specific mention of the Korea National Arboretum, which has signed Memoranda of Understanding with 89 organizations, including 42 domestic organizations and 47 international organizations from 24 countries.
432. The Advisory Committee concluded that the site **meets** the criteria of the Statutory Framework of the WNBR.
433. The Committee also recommended that the governing bodies, that is, Gyeonggi Provincial Government and Korea National Arboretum, make particular efforts to increase roles and collaboration of local authorities in the GFBR for the activities of the biosphere reserve.
434. **Altaiisky Biosphere Reserve (Russian Federation).** The Advisory Committee welcomed the submission of the first Periodic Review of the Altaiisky Biosphere Reserve, designated in 2009.
435. The Altaiisky Biosphere Reserve is situated in the area of the North-Western and Western Altai and occupies the western part of the Teletskoye Lake basin. The variety of natural and climatic zones gives rise to an exceptionally rich species composition of flora and fauna in the territory of Altaiisky.
436. The Altaiisky Biosphere Reserve encompasses the territories of two municipalities, Turochaksky and Ulagansky, which have seen a positive increase in tourism development over the last ten years. A significant proportion of the local population, especially in settlements in direct proximity to the core zone, is engaged in the tourism sector.

437. Representatives of local communities, Indigenous people, businesses and authorities are actively involved in the management process of the Altaisky Biosphere Reserve. In addition, the site is implementing a project to support the rights and cultural and natural heritage of the local communities and Indigenous peoples of Altai, entitled the 'Preservation of the Heritage of Local and Indigenous Communities of Altai'.
438. The Advisory Committee welcomed the well-prepared Periodic Review report, and noted the positive changes regarding enhanced communication with all stakeholders for development of the biosphere reserve, fundraising, programmes and projects aimed at developing a green economy, sustainable development, and the conservation of natural and cultural heritage.
439. The Advisory Committee therefore concluded that the site **meets** the criteria of the Statutory Framework of the WNBR.
440. **Bardenas Reales Biosphere Reserve (Spain).** The Advisory Committee welcomed the second Periodic Review of the Bardenas Reales Biosphere Reserve, designated in 2000.
441. Located in the *Chartered Community of Navarre*, in northern Spain, the biosphere reserve is home to vulnerable species of flora and fauna and endangered bird species such as the Great Bustard (*Otis tarda*) and the Montagu's Harrier (*Circus pygargus*).
442. The review process was led by a member of the Scientific Council of the Spanish MAB Committee, with the support of the biosphere reserve manager. The review was prepared in liaison with the General Board, which represents 22 entities in the biosphere reserve, including 19 town councils. Livestock breeders, farmers, hunters, fishermen and other actors were also contacted, and the review was prepared in collaboration with the *Chartered Community of Navarre* and the General Directorate for Rural Development.
443. The biosphere reserve sustains approximately 89,374 people, but they live outside the boundaries of the biosphere reserve. Most of them work in agriculture, livestock transhumance, hunting and tourism.
444. Under the authority of the General Board, the Community of Bardenas Reales de Navarra is responsible for the management of the biosphere reserve. It has also formed an advisory council; however, this body is not representative of the different stakeholders.
445. The biosphere reserve is currently managed under the Natural Resources Management Plan (PORN). At the end of 2020, the 'Strategic Plan of the Bardenas Reales de Navarra Biosphere Reserve 2020/2032' was presented to the General Board as the proposed future management framework.
446. The biosphere reserve has proposed the creation of the Bardenas Reales UNESCO Chair on Science and Heritage, which will combine all actions and knowledge production in relation to the Bardenas Reales area, and in the university academic environment.

447. The Advisory Committee concluded that this site **does not meet** the criteria of the Statutory Framework of the WNBR.
448. Given the importance of having a human population living inside the biosphere reserve, in accordance with the MAB model, the Advisory Committee requested that the national authorities expand the transition area to incorporate the surrounding populations. Accordingly, the Committee requested that a work plan be submitted by 30 May 2021 detailing a methodology and timeline for carrying out this process.
449. The Advisory Committee also recommended the implementation of a participatory process with all relevant stakeholders on landuse planning, as a means to build a sustainable development model.
450. **Cabo de Gata Biosphere Reserve (Spain).** The Advisory Committee welcomed the second Periodic Review of the Cabo de Gata Biosphere Reserve, designated in 1997.
451. The Cabo de Gata Biosphere Reserve is located in the autonomous community of Andalusia in southern Spain. The review did not present any changes to the zonation; however, slight adjustments to the cartography indicate that the total area now consists of a terrestrial core area of 6,748.72 ha, a marine core area of 2,395.2 ha, a terrestrial buffer zone of 26,747.32 ha, a marine buffer zone of 9,617.7 ha and a terrestrial transition area of 4,003.26 ha. The permanent population is estimated to consist of 7,341 residents.
452. The Periodic Review report was drafted by a research team from the Regional Development Institute. During preparation, the team consulted primary management plans (PORN, PRUG, SDP I and the draft SDP II), the annual monitoring reports of the Natural Park, the minutes of the Governing Board meetings, the summaries of participatory workshops for the drafting of SDP II, the evaluation reports of the Geopark and Special Area of Conservation of the Mediterranean, and the Management Plan of the Special Area of Conservation of La Serrata de Cabo de Gata. Additionally, the team communicated regularly with the Biosphere Reserve Manager and the responsible representatives from the Directorate General for the Natural Environment, Biodiversity and Protected Spaces. Several interviews were held with different actors and site visits took place during the whole process.
453. Over the last ten years, several improvements have been made to enhance the conservation of ecosystems and to reduce pressures exerted by agricultural activity and massive seasonal tourism, notably through implementation of the Natural Resources Management Plan, the Use and Management Governing Plan, and the designation of additional conservation status, which contributed to the management of the site. However, extensive agriculture, tourism and urbanization continue to be issues of concern for the sustainability of the biosphere reserve model.
454. The biosphere reserve forms part of the Spanish Network of Biosphere Reserves, which has its own National Committee and entertains strong connections with other biosphere reserve members of the Andalusian Committee of Biosphere Reserves. The objectives and lines of action for the upcoming decade have been established in accordance with the Natural Resources Management Plan (PORN), the Use and Management Governing Plan (PRUG) and the 1st and 2nd Sustainable Development Plan of the Cabo de Gata – Níjar Natural Park.

455. The Advisory Committee concluded that this site **meets** the criteria of the Statutory Framework of the WNBR.
456. The Advisory Committee recommended that the biosphere reserve strengthen its co-management strategy by further involving the governing bodies of other existing designations with the joint goal of alleviating the pressures and impacts induced by agriculture, tourism and urbanization.
457. **El Hierro Biosphere Reserve (Spain)**. The Advisory Committee welcomed the second Periodic Review of the El Hierro Biosphere Reserve, designated in 2000.
458. Located on the island of El Hierro in the Canary Island Archipelago, the biosphere reserve has maintained the same total area with a terrestrial core area of 1,069 ha, a marine core area of 150 ha, a terrestrial buffer zone of 15,159 ha, a marine buffer zone of 750 ha, and a transition area of 10,643 ha, amounting to 27,771 ha. The population living within its boundaries is estimated at 10,968 inhabitants.
459. The Periodic Review was prepared by a member of the scientific council of the Spanish MAB Committee. It was carried out virtually and consisted of an initial workshop, surveys and a final workshop.
460. Over the ten-year period, several positive initiatives and events have taken place: (i) a Centre for Interpretation of the Biosphere Reserve was inaugurated in 2012; (ii) the site was designated as a UNESCO Global Geopark in 2014; (iii) a hydroelectric plant became operational in 2014; (iv) a Biosphere Reserve Observatory was created in 2015, signalling social interest in sustainability; (v) legislation on the spatial planning of tourism-related activities was introduced in 2016; (vi) three Natura 2000 sites and other protected areas have been designated; and (vii) several management plans for Special Conservation Areas have been introduced.
461. The management of El Hierro is led by the Island Council, and includes a Governing Council, as well as Advisory, Scientific and Participation Councils. The biosphere reserve is managed under the 2030 Action Plan (PAO2030), which is structured around five objectives and aligned with the MAB Strategy. This plan was approved by the Governing Council in May 2020.
462. In recognition of its island context, the biosphere reserve is working actively to implement a zero waste and fully renewable energy model. It hosts numerous active conservation and research programmes focusing on flora, fauna, marine and terrestrial environments, and promotes the transfer of knowledge, experiences and technology. In addition, local youth groups are actively engaged in youth-related island programmes and policies.
463. The Advisory Committee concluded that this site **meets** the criteria of the Statutory Framework of the WNBR. The Advisory Committee praised the quality of the report as well as the progress made since the first Periodic Review in 2010.
464. The Advisory Committee recommended the extension of the biosphere reserve to include a larger marine territory, in particular a marine transition area. It also invited the site to further showcase and share its experience and know-how in implementing

its sustainability agenda, especially concerning waste management and renewable energy, with the rest of the WNBR.

465. **Somiedo Biosphere Reserve (Spain).** The Advisory Committee welcomed the second Periodic Review from the Somiedo Biosphere Reserve, designated in 2000.
466. Located in the north-west of Spain in the community of Asturias, Somiedo forms a link with the other biosphere reserves of the Cantabrian Mountain Range. Small modifications have been made to the zonation of the biosphere reserve as a result of corrections and adjustments to the cartography, which were recommended in the first Periodic Review in 2010. The biosphere reserve currently has a total area of 29,007 ha with a core area of 10,473 ha, a buffer zone of 17,248 ha and a transition area of 1,286 ha. The population has decreased since the last Periodic Review and is now estimated at 1,153 residents.
467. The Periodic Review was prepared with the participation of the Directorate of the Natural Park and Biosphere Reserve, the Camín Real de la Mesa Rural Development Group and the Agri-food Development Service. Due to the ongoing COVID-19 pandemic, site visits were cancelled and some actors were not consulted. All communication with participating representatives or stakeholders took place via email or phone.
468. The biosphere reserve suffered negative impacts as a result of the 2008 economic crisis, especially a reduction in local tourism. However, positive changes have also occurred including the recovery of important natural resources, which led to the development of a new economic niche linked to wildlife watching, the consolidation of international tourism, the development of public facilities and services, and the return to a more local consumption model by residents. No major changes have been reported at the ecosystem and landscape levels. However, one of the main concerns for the site is the risk of wildfires, which the biosphere reserve has been trying to reduce the risk. Another main concern at the agroecosystem level is the presence of wolves (*Canis lupus signatus*) which interfere with cattle raising in the region.
469. In 2013, the Regional Ministry of Rural Affairs and Territorial Cohesion of Asturias was designated the body responsible for site management. Subsequently, the Social Participation Forum of the Biosphere Reserve and the Directorate of the Biosphere Reserve were created to manage the site at the local level. In 2015, the Council of Somiedo approved an Instrument for Integral Management of the diverse protected areas.
470. The Advisory Committee concluded that this site **meets** the criteria of the Statutory Framework of the WNBR.
471. The Advisory Committee recommended that the site develop a cooperation strategy with neighbouring biosphere reserves of the Cantabrian Mountains to establish a transboundary biosphere reserve.
472. **Urdaibai Biosphere Reserve (Spain).** The Advisory Committee welcomed the third Periodic Review of the Urdaibai Biosphere Reserve, designated in 1984.

473. The biosphere reserve has proposed changes to its zonation, which would increase the total surface area to 22,067.88 ha, consisting of a core area of 2,751.88 ha, a buffer zone of 7,128.78 ha and a transition area of 12,187.22 ha. No changes have been reported regarding the size of the human population in the biosphere reserve. The total annual budget has been raised from EUR 1.5 million in 2008 to EUR 1.8 million in 2020.
474. The Periodic Review draws on primary documents, inputs from the biosphere reserve director and technical office, and consultations with relevant local associations through virtual meetings, phone calls and emails. The main achievement of the last ten-year period was the approval of the Rector Plan for the Use and Management of the Urdaibai Biosphere Reserve, which introduced the Environmental Indicators System to monitor the sustainability of the site. No changes have been made to the management and governing structure. The biosphere reserve's management committee is composed of representatives from the different local administrations, organizations and associations representing economic, social and environmental interests.
475. The approval of the Geodiversity Strategy 2011–2018 and the designation of 43 Sites of Geological Interest within the biosphere reserve represented important milestones in terms of integrating geological heritage into the management of the biosphere reserve.
476. The economy of the biosphere reserve remained stable during this period. Several initiatives to promote local production and consumption were successfully implemented, and the overall trend of GDP increased. Furthermore, the tertiary sector is actively working towards obtaining the European Charter for Sustainable Tourism certification, which could contribute significantly to the economy of the biosphere reserve.
477. The forestry sector suffered an important crisis due to the proliferation of a disease that infected up to 35% of pine plantations. This has been a recurring issue throughout the history of the biosphere reserve.
478. Concerning the conservation function, landscapes have been maintained and, in some cases, improved. Four Natura 2000 sites have been approved (three Special Conservation Areas and one Special Area for the Conservation of Birds) and will reinforce the governance structure of the biosphere reserve by expanding institutional recognition. The biosphere reserve has also been a Ramsar site since 1993 and hosts a UNESCO World Heritage site.
479. Concerning the logistical function, the approval of the 2015–2025 Plan for Interpretation, Research, Training and Education for Sustainable Development represented a major achievement.
480. According to the Partial Territorial Plan, it is expected that housing needs will increase in some parts of the biosphere reserve in the coming years. This is partially in response to increased demand for secondary residences in rural areas driven by the COVID-19 pandemic. This trend could potentially result in the need for additional infrastructure with consideration of the associated impacts on the sociology, economy, ecology and landscape of the biosphere reserve.

481. The Advisory Committee concluded that the site **meets** the criteria of the Statutory Framework of the WNBR. The Advisory Committee congratulated the authorities on their excellent report as well as on the progress made since the submission of the first Periodic Review in 2010.
482. **General Recommendations to South Africa:**
483. The Advisory Committee congratulated the national authorities on their efforts to meet the requirements of the Statutory Framework through the submission of two periodic reviews. The Advisory Committee recognized the efforts to enhance national networking among the various sites and commended the MAB National Committee on these relationships and the opportunities created for knowledge transfer and sharing, such as the Limpopo Biosphere Reserves Forum and the 'Smart Biosphere Reserves' Initiative.
484. The Advisory Committee encouraged the authorities to continue national networking efforts to enhance learning and the sharing of experiences among the various sites, and to update the South Africa Strategy for the Biosphere Reserve Programme, which ended in 2020.
485. **Vhembe Biosphere Reserve (South Africa).** The Advisory Committee welcomed the submission of the first Periodic Review of the Vhembe Biosphere Reserve, designated in 2009.
486. The biosphere reserve covers an area of 30,701 km² and supports a population of about 1.5 million people, of which 97% are rural residents. The site includes the northern Kruger National Park north of the Shingwedzi River and the Mapungubwe National Park (a World Heritage site), and borders the three neighbouring countries of Botswana, Mozambique and Zimbabwe. The area forms part of the Greater Mapungubwe initiative between Botswana, South Africa and Zimbabwe and the Great Limpopo Transfrontier Conservation Areas Initiative involving Mozambique, South Africa and Zimbabwe.
487. The Advisory Committee congratulated the biosphere reserve on the award by the Department of Science and Innovation and the National Research Foundation (NRF) of a South African Research Chair (SARChi) to the University of Venda (UNIVEN) relating to research and monitoring. The Advisory Committee appreciated the contribution of the biosphere reserve status to tertiary education through support for 20 Hons, 20 MSc and 10 PhD theses in conservation biology between 2014 and 2019, as well as efforts to integrate traditional leaders and indigenous knowledge into management processes. The Committee also recognized that these efforts enhanced awareness of the local and global importance and benefits of biosphere reserves among local communities and youth.
488. The Advisory Committee concluded that the site **meets** the criteria of the Statutory framework of the WNBR, and commended the authorities on producing a well-organized example of a Periodic Review.
489. The Advisory Committee encouraged the authorities to give greater consideration to the following in any future attempt to increase the coverage of protected areas (in line

with the joint policy in Limpopo of achieving a target of an additional 85% protected areas in the province):

- the needs of the local population;
- ensuring that all core areas are adequately protected by a buffer zone; and
- long-term solutions to human-wildlife conflict and continued efforts to ensure that mining activities conducted outside protected areas in the transition area are managed sustainably to reduce the impacts on biodiversity.

490. The Advisory Committee pointed out that the site is the second largest biosphere reserve in South Africa, not the largest as wrongly stated in the report to stakeholders (Section 1).
491. **Kogelberg Biosphere Reserve (South Africa).** The Advisory Committee welcomed the second Periodic Review of the Kogelberg Biosphere Reserve, designated in 1998.
492. The site covers a total area of 103,000 ha, of which 21,285.5 ha is marine.
493. The site comprises: a terrestrial core area in the Kogelberg mountains, which incorporates the Kogelberg Nature Reserve Complex and the Groenlandberg Nature Reserve, with a marine component; a near natural terrestrial buffer zone under both private and municipal ownership, including the Harold Porter Botanical Garden and the Palmiet River Estuary, which also has a marine component; and a terrestrial transition area which consists of sophisticated agricultural enterprises and highly sought after residential and holiday facilities and settlements. The core area forms part of the Cape Floristic Region Protected Areas World Heritage Site, a global biodiversity hotspot including birds reptiles, amphibians, fish mammals and forest trees such as Acacia.
494. The Advisory Committee lauded the participatory approach used during the Periodic Review process, which began in 2018, and the significant efforts at fundraising in support of management activities. The Advisory Committee also appreciated the combination of interdisciplinary information across all stakeholder groups including the application of plans for the various protected areas as well as collaboration with local communities on gardening and food products. The Advisory Committee commended the extensive research conducted over the period, the development of a communication strategy and the implementation of a vibrant schools education programme.
495. The Advisory Committee noted the current management challenges, notably drought, frequent fires, invasive species and illegal resource utilization, which are linked to water and food insecurity and identified as threats to the core and buffer zones.
496. The Advisory Committee concluded that the site **meets** the criteria of the Statutory framework of the WNBR.
497. The Committee requested that the authorities submit by 30 May 2021 a zonation map showing all three zones of the biosphere reserve, including the marine section, on one consolidated map. The Advisory Committee also encouraged the authorities to increase research on climate change and to invest in mitigation and adaptation programmes for local communities.

498. **Lake Vänern Archipelago and Mount Kinnekulle Biosphere Reserve (Sweden).** The Advisory Committee welcomed the submission of the first Periodic Review of the Lake Vänern and Mount Kinnekulle Biosphere Reserve, designated in 2010.
499. The biosphere reserve encompasses the south-eastern part of Lake Vänern and its archipelagos, the flat-topped Mount Kinnekulle and Mount Lugnåsberget, part of the ravine systems of the Lidan and Mariedalsån rivers, and the eastern part of Lake Dättern. Lake Vänern is Sweden's largest lake and the third largest in Europe.
500. Nine new nature reserves have been established within the site over the past ten years, in addition to three new Natura 2000 areas and one new biotope protection area. The biosphere reserve has also signed five new nature conservation agreements.
501. Tourism in the Lake Vänern Archipelago and Mount Kinnekulle Biosphere Reserve has increased since the initial application, particularly natural tourism. A number of projects and initiatives have been carried out to identify opportunities and conduct activities to promote sustainable tourism.
502. The Advisory Committee acknowledged that the biosphere reserve management entity has updated its vision and goals as of 2018. The governing structure is an association based on three council organizations that integrate representatives of local associations and companies. The Advisory Committee noted with satisfaction the involvement of additional stakeholders over the years, such as a fishing association, agricultural organizations, academia and the general public. Yearly operative plans are now established by the board and discussed during annual general meetings. The Committee also noted that the plan for 2020, approved at the end of November 2019, included (i) research projects to disseminate knowledge of and promote ecosystem services; (ii) activities and projects to increase opportunities to facilitate more sustainable practices; (iii) and the creation of a sustainable business environment. The Advisory Committee also appreciated that the biosphere reserve has engaged in efforts to promote the Biosphere Challenge, a nationally funded event, in collaboration with other Swedish biosphere reserves.
503. The Advisory Committee recommended that the authorities submit by 30 May 2021 an update regarding the evaluation work and participatory assessment undertaken in 2019.
504. The Advisory Committee concluded that the site **meets** the criteria of the Statutory framework of the WNBR.
505. **Chernomorskiy (Black Sea) Biosphere Reserve (Ukraine).** The Advisory Committee welcomed the submission of this third Periodic Review report of the Chernomorskiy Biosphere Reserve, designated in 1983.
506. The biosphere reserve is situated in the south of Ukraine, and covers an area of 174,000 ha. The site includes five land plots and water areas of the Tendrsvsky and Yagorlitsky bays, including islands, and a 1-km shelf along the coast of Tendrivska Spit.

507. Natural conditions underlie the richness of the flora and fauna and the diversity of protected natural complexes. The site harbours more than 700 species of plants, 3,000 species of invertebrates, 80 species of fish, 5 species of amphibians, 9 species of reptiles, 306 species of birds, and 63 species of terrestrial and aquatic mammals.
508. Over the last ten years, a Coordinating Council of the Biosphere Reserve has been established to coordinate efforts for regional environmental protection and sustainable development. The composition of the Coordinating Council includes representatives of local executive and self-government bodies, public organizations, central and local media, and scientific and educational institutions. In 2019, the Regulations for the Coordination Council of the Biosphere Reserve were adopted and its composition was determined, new cooperation agreements were concluded and the work plan for 2020 was approved.
509. The Advisory Committee welcomed the Periodic Review, which supplements the review submitted in 2018. The Committee noted with satisfaction that the transition area has been expanded in response to questions concerning the development function, and welcomed the integration of local community representatives and civil society representatives into the Coordinating Council. The Advisory Committee recommended that the Council be more closely involved in future periodic reviews, as well as in designing environmental education, with a view to benefiting from their local knowledge.
510. The Advisory Committee applauded activities related to the promotion of sustainable agriculture, renewable energy and green tourism. The Advisory Committee also recommended that the authorities further develop plans to manage the high number of visitors flocking to the area during the tourist season.
511. The Advisory Committee noted that the new zonation map shows that part of the north-eastern core area borders directly on the transition area and urged the authorities to provide an explanation. Furthermore, the Advisory Committee noted some discrepancies in population numbers: the table on page 7 mentions 4,500 people living in the transition area, while the table on page 19 mentions 10,000 people. The Advisory Committee requested the authorities to provide the most recent updated numbers.
512. The Advisory Committee was not able to determine **whether the site meets** the criteria and requested that the authorities submit the above-mentioned information by 30 May 2021. The Committee further recommended the initiation of cooperation with the Schaalsee Biosphere Reserve within the framework of EuroMAB, and the Lake Botsowme Biosphere Reserve within the framework of AfriMAB, in order to further enhance the development function and participatory approaches. The MAB Secretariat offers its assistance in this regard.
513. **Desnianskyi Biosphere Reserve (Ukraine).** The Advisory Committee welcomed the submission of the first Periodic Review of the Desnianskyi Biosphere Reserve, designated in 2009.
514. The site is located in the middle stream of the Desna River (one of the main branches of the Dnipro River) in the Eastern Polesie Region and presents typical landscape types of the east of the Polesie Lowland: rivers, lakes, floodplains, bogs, transition

- mires, fens, peaty and swampy grasslands, and pine, broadleaf and mixed forests, including floodplains.
515. The total surface area (70,748 ha) has not changed. However, internal changes have resulted from the redistribution of territory of the Desna-Starohutskyi National Nature Park by functional zones as ordered by the Ministry of Ecology and Natural Resources. The surface of the core areas has increased by 1,056 ha due to the creation of a 'Muravyivskyi' landscape reserve of national importance (1,096 ha).
 516. The Advisory Committee noted the lack of promotion and visibility of the biosphere reserve and recommended that greater efforts be made in this regard, including through the website.
 517. The Advisory Committee concluded that the site **meets** the criteria of the Statutory framework of the WNBR.
 518. **Can Gio Mangrove Biosphere Reserve (Viet Nam).** The Advisory Committee welcomed the second Periodic Review of the Can Gio Mangrove Biosphere Reserve, designated in 2000.
 519. The first Periodic Review report was submitted in 2010. No change in zonation has occurred during the intervening time.
 520. The Can Gio Mangrove Biosphere Reserve is located within the administrative boundaries of Can Gio District, and covers a total area of 75,740 ha. The core areas and buffer zones form part of the Can Gio Protection Forest, while the transition areas include Can Thanh Town and six communes of Can Gio District.
 521. The biosphere reserve is characterized by a high level of biodiversity value, including many rare and precious species of plants and animals. There are two types of ecosystems: mixed humid tropical broadleaf forest and mangrove, with typical community types for each mosaic according to tidal level and mud structure. The total number of flora and fauna species has increased over the past ten years with the discovery of new species.
 522. The Can Gio District has re-oriented and transformed its economy towards the service, agriculture and construction industries, with the service sector growing from 27% to 47.4% and the construction industry from 9.9% to 14.5%, while agriculture has decreased from 63.1% to 38.1%. Recent years have seen investments in infrastructure for tourism, notably the construction and operation of passenger roads and waterways.
 523. The biosphere reserve has developed different types of tourism, including ecotourism (marine, forest and agriculture) and leisure and convention-based tourism. Over the 2010–19 period, the total number of tourists reached 12.34 million, 4.8 times higher than the number of visitors for the 2000–2009 period (2.54 million).
 524. The Advisory Committee appreciated the remarkable achievements of the past ten years. In particular, planted forest area has improved significantly with some areas of bare land and alluvial land now covered with green trees, which was a direct result of afforestation and aquaculture zoning to promote natural regeneration in protected

forest. The forest area has grown by 1,916.23 ha from 30,530.21 ha in 2010 to 32,446.44 ha in 2019, with the overall proportion of forest cover in the biosphere reserve increasing from 40.31% in 2010 to 42.84% in 2019.

525. The Advisory Committee therefore concluded that the site **meets** the criteria of the Statutory Framework of the WNBR.
526. The Advisory Committee noted that in August 2020 UNESCO received a petition concerning the proposed 'Can Gio Tourist City Project' in southern Viet Nam, which raised the possibility of adverse impacts on the surrounding environment and the adjacent Can Gio Mangrove Biosphere Reserve. The MAB Secretariat requested further information about the proposed development from the Vietnamese government, but has not received a response as of March 2021.
527. The Advisory Committee therefore requested that information relating to the potential environmental impact of the project be submitted by 30 May 2021, and recommended that an independent environmental impact assessment of the project be carried out, including the potential impact on the biosphere reserve's ecosystem.
528. The Advisory Committee also recommended the concerned authorities to reinforce the management systems and measures that monitor and address potential environmental and social impacts of the increasing tour activities and infrastructure and to manage sustainably the tourism activities relying on the valuable ecosystems of the biosphere reserve.

ANNEX 4:

**EXAMINATION OF THE STATUS OF IMPLEMENTATION OF THE
RECOMMENDATIONS OF PERIODIC REVIEWS ENDORSED BY THE MAB-ICC
– 27th IACBR**

COUNTRY	NAME OF THE SITE	COMMENTS
AUSTRALIA	Great Sandy	
BULGARIA	Bristrichko Branichte	Exit Strategy – Withdrawal
	Tchouprene	Exit Strategy – Withdrawal
CAMEROON	Benoué	
CHILE	Bosques Templados Lluviosos de los Andes Australes	
CZECH REPUBLIC	Krivoklatsko	Exit Strategy – Withdrawal
GUINEA	Badiar	Exit strategy
	Haut Niger	Exit strategy
	Ziama	Exit strategy
KYRGYSTAN	Issyk-Kul	
POLAND	Tatra	
ROMANIA	Rodnei	
	Retezat	Withdrawal
RUSSIAN FEDERATION	Cherny Zemli	Withdrawal
	Kavkazsky	
	Okskiy	
SENEGAL	Samba Dia	
VIET NAM	Cu Lao Cham	
	Hoi Na	
UZBEKISTAN	Chatkal	
UNITED KINGDOM	Dyfi	Exit strategy
USA	Sonoran Desert	Former name Organ Pipe Cactus
	Otbawaing	Former name University of

		Michigan Biological Station
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529. **Great Sandy Biosphere Reserve (Australia).** As per the recommendations of the 26th meeting of the IACBR in 2020, this site **meets** the criteria of the Statutory Framework of the WNBR. In its 2020 recommendations, the Committee acknowledged that the biosphere reserve management plan for the upcoming decade was under final development at the time of submission of the Periodic Review and requested that the authorities provide the plan by 30 September 2020.
530. The Advisory Committee commended the Australian authorities on the submission of the management plan for the Great Sandy Biosphere Reserve (GSBR) from 2019 to 2024 and the accompanying maps of the Biosphere Reserve Overview, Biosphere Zonation, Ecology Groups and Vegetation Corridors.
531. The development of this management plan undertook to identify the vision, mission, objectives, strategies and actions for the GSBR Management Group, and to meet Australian Federal regulatory obligation under the Environmental Protection and Biodiversity Conservation Regulations 2000. The management plan has also been developed in conformity with the objectives of the Lima Action Plan, the Sustainable Development Goals (SDGs), the Seville Strategy and the Statutory Framework of the WNBR.
532. The purpose of the planning process has been to identify, acknowledge and support initiatives for sustainable development, land use and social development activities within the GSBR, and to take a holistic approach to further research, monitoring, education and capacity building.
533. The Advisory Committee congratulated the Australian authorities on the high quality of the document.
534. **Bistrichko Branichte Biosphere Reserve and Tchouprene Biosphere Reserve (Bulgaria).** These sites were both designated in 1977 and are the last two biosphere reserves subject to the Exit Strategy.
535. The Secretariat informed the Advisory Committee that it had received a letter from the Bulgarian authorities acknowledging the efforts made by the Mayors of Sofia Municipality and Belogradchik Municipality to update both biosphere reserves.
536. However, the letter indicated that both sites will not be ready to submit nomination forms to comply with the terms of the Statutory Framework.
537. The Advisory Committee acknowledged with appreciation that the Bulgarian authorities had made all the efforts since the implementation of the Exit Strategy, including the updating of five sites since 2013 and the withdrawal of eight sites.
538. To ensure compliance with the decisions made by the MAB-ICC on the Exit Strategy process and to respect the agreed timeline to terminate the Exit Strategy by 2020, the Advisory Committee therefore recommended that the authorities **withdraw both sites** and invited them to submit nomination forms at their earliest convenience if they so

wish. The Advisory Committee also emphasized that the MAB Secretariat and UNESCO Offices remain available to assist the authorities in the nomination process.

539. **Benoué Biosphere Reserve (Cameroon).** As per the conclusion of the 26th meeting of the IACBR in 2020, the site **meets** the criteria of the Statutory Framework of the WNBR. The Advisory Committee encouraged the national authorities to consider an extension of the buffer zone in order to guarantee the long-term protection of the core area, most periphery of which was in contact with the transition area.
540. The Advisory Committee acknowledged the receipt of the new management plan for Benoué National Park and its periphery (2021–2025). It welcomed the additional information provided by the national authorities which clarifies the updated zonation. The site now consists of a core zone of 169,972 ha, a buffer zone of 90,220 ha and a transition zone of 468,154 ha, and conforms to the zonation criteria.
541. The Advisory Committee noted with satisfaction that the recommended expansion of the buffer zone will be addressed during implementation of the new five-year management plan. Regarding mining permits, the national authorities reported that issuance of mining permits has ceased on the site.
542. The Advisory Committee commended the national authorities for submitting this complementary information.
543. **Reserva de Biosfera Bosques Templados Lluviosos de los Andes Australes (Chile).** The Advisory Committee welcomed the information provided by the Chilean authorities.
544. The Advisory Committee took note of the work plan presented for the creation of a bi-regional biosphere reserve management committee and a management plan. The work plan for the period from March 2021 to December 2022 aims to formalize the management of the biosphere reserve.
545. The biosphere reserve will first formalize the management committee with a bi-regional composition consisting of public and private actors. The authorities will then propose to draw up a management plan for the biosphere reserve.
546. During the process of developing the management plan, the Advisory Committee invites them to consider activities or objectives in collaboration with the Andino Nor Patagónica Biosphere Reserve in Argentina, which borders the biosphere reserve to the east.
547. The Advisory Committee concluded that the site **does not meet** the criteria of the Statutory Framework of the WNBR and requested the national authorities to submit the above-mentioned information by 30 September 2022.
548. **Krivoklatsko Biosphere Reserve (Czech Republic).** This site is subject to the Exit Strategy.
549. The Advisory Committee requested the authorities to provide an updated zonation map and detailed information about how local communities will participate in the management and management structures of the biosphere reserve, as well as more

detailed, concrete information about how the development function of the biosphere reserve will be realized.

550. The MAB Secretariat had not received any additional information or explanation before the deadline or the 27th meeting of the Advisory Committee. To ensure compliance with the decisions made by the MAB-ICC on the Exit Strategy process and to respect the agreed timeline to terminate the Exit Strategy by 2020, the Advisory Committee therefore recommended that the authorities **withdraw the site** and invited them to submit a nomination form at their earliest convenience if they so wish. The Advisory Committee also emphasized that the MAB Secretariat and UNESCO Offices remain available to assist the authorities in the nomination process.
551. **General recommendations for Guinea:**
552. The Advisory Committee welcomed the information provided by the Guinean authorities on the **Badiar, Haut Niger** and **Ziama** biosphere reserves. The three sites fall under the 'Process of Excellence and Enhancement of the WNBR'.
553. **Badiar Biosphere Reserve (Guinea).** As per the conclusion of the 25th meeting of the IACBR in 2019, the site **meets** the criteria of the Statutory Framework of the WNBR. However, the Advisory Committee requested the national authorities to provide a new zonation map and a rationale as to why there is no formal buffer zone around two of the core areas and indicate what buffering functions are in place.
554. The MAB Secretariat received the requested information. The Advisory Committee noted that all the core areas are well delineated by a buffer zone to effectively ensure their long-term conservation. The updated zonation consists of three core areas of 101,064 ha, a buffer zone of 89,059 ha and a transition area of 314,877 ha.
555. The Advisory Committee acknowledged the zonation map with satisfaction and commended the national authorities for submitting this critical information.
556. **Haut Niger Biosphere Reserve (Guinea).** The site is subject to the Exit Strategy.
557. The 25th meeting of the Advisory Committee in 2019 requested the national authorities to provide an improved zonation map of the biosphere reserve using the official terminology according to the criteria of the Statutory Framework of the WNBR. The Advisory Committee reviewed the new zonation map received by the MAB Secretariat and noted the map clearly indicates a core area of 55,400 ha, a buffer zone of 364,100 ha and transition area of 227,500 ha, including the highly degraded classified forest of Tamba.
558. The Advisory Committee therefore concluded that the site **meets** the criteria of the Statutory Framework of the WNBR and is no longer subject to the Exit Strategy.
559. **Ziama Biosphere Reserve (Guinea).** The site is subject to the Exit Strategy.
560. The 25th meeting of the Advisory Committee in 2019 requested the national authorities to discuss with stakeholders the possibility of increasing the buffer zone around the south-eastern portion of the core area and to submit an application for an extension of the site as soon as possible.

561. Having reviewed the additional information received, the Advisory Committee commended the national authorities for their efforts to seek arrangements to create an enlarged buffer zone. It encouraged the authorities to submit by the next Periodic Review, a new nomination proposal that includes the enlarged buffer zone.
562. The Advisory Committee concluded that the site **meets** the criteria of the Statutory Framework of the WNBR and is no longer subject to the Exit Strategy.
563. **Issyk-Kul Biosphere Reserve (Kyrgyzstan).** The site is subject to the Exit Strategy.
564. As per the recommendation of the 26th meeting of the IACBR in 2020, the site **meets** the criteria of the Statutory Framework of the WNBR.
565. At the meeting in 2020, the Advisory Committee recognized the existence of a management plan for 2016–2020 and the use of a participatory approach to develop a management plan for 2021–2025. However, as the current management plan was not attached to the Periodic Review, the Committee requested that it be submitted to the MAB Secretariat by 22 May 2020 along with detailed information on the activities of the management body.
566. The Advisory Committee at its 27th meeting in 2021 commended the Kyrgyzstan authorities for submitting the current management plan for 2016–2020.
567. This management plan outlines the overarching objectives of the Issyk-Kul Biosphere Reserve for a five-year period (2016-2020).
568. The management plan aims to guide the efforts of the Biosphere Directorate, local governments, other conservation institutions, NGOs and local communities to generate lessons for sustainable development and bio-cultural conservation.
569. The management plan consists of six sections: (i) Executive summary, (ii) Background information, (iii) Management plan, (iv) Management structure, (v) Concluding remarks, and (vi) Appendices.
570. Section (iv) describes a management structure that will enable shared governance and co-management of the Issyk-Kul Biosphere Reserve. The Biosphere Reserve Directorate will ensure the necessary reforms to adjust the current management structure to match the one presented in the management plan for 2016–2020.
571. Section (v) details the process of developing the next management plan for 2021–2025.
572. The Committee congratulated the Kyrgyzstan authorities on the well-prepared document and concluded that the site **meets** the criteria of the Statutory Framework of the WNBR and is no longer subject to the Exit Strategy. The Advisory Committee recommended that the national authorities submit by 30 May 2021 updated information concerning finalization of the new management plan for 2021–2025 as well as an information on the adjusted management structure.
573. **Tatra Biosphere Reserve (Poland).** This site is subject to the Exit Strategy.

574. The Advisory Committee acknowledged the receipt of communications in response to the IACBR's recommendations made at its 26th meeting in 2020. The Committee acknowledged that the process of community consultation had continued at the beginning of 2021, but was unfortunately interrupted due to the COVID-19 crisis. The Advisory Committee recommended that the authorities reconvene with the communities as soon as the situation improves and keep the MAB Secretariat informed regarding the outcome of the consultations. The Committee also welcomed the new zonation map, which included the transition areas and buffer zones.
575. The Advisory Committee concluded that the site **meets** the criteria of the Statutory Framework of the WNBR and is no longer subject to the Exit Strategy.
576. **Rodnei Mountains Biosphere Reserve (former name: Pietrosu Mare) (Romania).** The Advisory Committee welcomed the additional information from the biosphere reserve.
577. The Committee noted that a Periodic Review report was submitted in 2019 by the Ministry of Environment Waters and Forest and then updated in 2020 by the Rodnei Mountains National Park Administration, which is the actual governing body of the biosphere reserve.
578. Regarding the question raised about the size of the transition area, the Advisory Committee noted that the revised report proposes to reallocate to the transition area just over 29,000 ha that were formerly part of the buffer zone. As a consequence, the activities of 3,000 seasonal workers (foresters, harvesters of medicinal plants, mushrooms, wild fruits, shepherds) will now be located within the transition area. The Advisory Committee also welcomed the suggestion to promote multiple activities such as beekeeping as a way to improve the livelihoods of the farmers.
579. The Advisory Committee noted that the proposal to expand the boundaries of the biosphere reserve beyond the boundaries of the National Park did not receive positive feedback from the concerned communities (especially landowners) during annual meetings of the Advisory Council of the Rodnei Mountains National Park. This failure is linked to the fact that these actors were not satisfactorily consulted during the establishment of the National Park and the biosphere reserve, and felt cheated by the lack of compensation for restrictions imposed on land usage. As a consequence, they do not feel invested in the initiatives put forward by the governing institution. The Advisory Committee encouraged the Rodnei Mountains National Park not to give up the proposal and to continue to seek a way out of this impasse in order to improve the conditions of pastoralism and natural resources harvesting in the region and, therefore, better fulfil the development function of the biosphere reserve.
580. The Advisory Committee also encouraged the authorities to contact the MAB Secretariat in order to organize a workshop with the local communities and other biosphere reserve representatives, share positive outcomes of biosphere reserve designation for local communities, build trust and involve them in the management plan.
581. The Advisory Committee concluded that the site **meets** the criteria and further encouraged the authorities to pursue a dialogue with the local communities.

582. **Retezat Biosphere Reserve (Romania).** The Advisory Committee welcomed the updated report provided by the authorities.
583. The Advisory Committee noted that no entity has yet been established to administrate the biosphere reserve.
584. The Advisory Committee also noted that the management plan for Retezat National Park and the associated natural protected areas is still under development.
585. The Advisory Committee regretted that it has not received the information requested (i.e. an explanatory note detailing how the sustainable development and logistics functions are being carried out). The Committee also requested more detailed information on the participation of local communities in the management of the biosphere reserve, and details regarding the difficulties encountered in extending the biosphere reserve beyond the boundaries of the national park. In addition, the Committee requested the authorities to submit a management plan for the entire biosphere reserve with clearly defined roles and responsibilities.
586. The Advisory Committee concluded that the site **does not meet** the criteria. To ensure compliance with the decisions made by the MAB-ICC on the Exit Strategy process and to respect the agreed timeline to terminate the Exit Strategy by 2020, the Advisory Committee therefore recommended that the authorities **withdraw the site** and invited them to submit a nomination form at their earliest convenience if they so wish. The Advisory Committee also emphasized that the MAB Secretariat and UNESCO Offices remain available to assist the authorities in the nomination process.
587. **Cherny Zemli Biosphere Reserve (Russian Federation).** The site is subject to the Exit Strategy.
588. The Advisory Committee welcomed the publication of a brochure on benefit sharing with local residents and the Adyk project. However, the additional information on mechanisms to integrate the management of the core area and buffer zone (currently carried out by the Chornyje Zemli State Reserve) with the management of the transition area (managed by municipal authorities, management organizations and tenants who coordinate their activities with the Ministry of Natural Resources and Ecology) have not been provided. The management plan for the biosphere reserve submitted by the authorities does not contain details on whether and how communities are involved in the management of the biosphere reserve. The communities are only mentioned under logistical functions as the subjects of awareness campaigns. Paragraph 1.3.1.3 mentions the plans to include residents in technical and scientific councils of the biosphere reserve, but provides no details on whether this has already happened.
589. The Advisory Committee noted that the authorities had resent the previous Periodic Review and not submitted a new zonation map nor the requested information regarding the zonation of the biosphere reserve.
590. To ensure compliance with the decisions made by the MAB-ICC on the Exit Strategy process and to respect the agreed timeline to terminate the Exit Strategy by 2020, the Advisory Committee therefore recommended that the authorities **withdraw the site** and invited them to submit a nomination form at their earliest convenience if they so

wish. The Advisory Committee also emphasized that the MAB Secretariat and UNESCO Offices remain available to assist the authorities in the nomination process.

591. **Kavkazsky Biosphere Reserve (Russian Federation).** The Advisory Committee welcomed the detailed information concerning the new zonation of the biosphere reserve, and the map provided. The Advisory Committee noted with appreciation the description of how residents in the transition area are involved in the management of the biosphere reserve. The Advisory Committee noted the brief discussion on the development function of the biosphere reserve and encouraged the authorities to further develop the development function of the biosphere reserve.
592. The Advisory Committee concluded that the site **meets** the criteria of the Statutory Framework of the WNBR.
593. **Okskiy Biosphere Reserve (Russian Federation).** The Advisory Committee welcomed the additional information provided by the authorities on the development function. The Advisory Committee also appreciated the additional information on the buffer zone and noted that negotiations are underway to allocate land to extend the buffer zone to buffer the entire core area. The new zonation map provided in the management plan meets the criteria on zonation.
594. The Advisory Committee therefore concluded that the site **meets** the criteria of the Statutory Framework of the WNBR.
595. **Samba Dia Biosphere Reserve (Senegal).** The site is subject to the Exit Strategy.
596. At its 26th meeting in 2020, the Advisory Committee concluded that this site would meet the criteria of the Statutory Framework of the WNBR on the condition that the national authorities provided official confirmation of the zonation map and the management plan by 22 May 2020.
597. The Advisory Committee reviewed the validated zoning map, which includes a core area, a buffer zone and a transition area, as well as the management plan.
598. The Advisory Committee commended the national authorities for the submission of this critical information requested and concluded that the site **meets** the criteria of the Statutory Framework of the WNBR and is no longer subject to the Exit Strategy.
599. **Cu Lao Cham – Hoi Na Biosphere Reserve (Viet Nam).** As per the recommendations of the 26th meeting of the IACBR in 2020, this site meets the criteria of the Statutory Framework of the WNBR.
600. However, the Committee requested that the authorities submit by 30 September 2020 a map showing the boundary changes of each zone of the Cu Lao Cham – Hoi An Biosphere Reserve since the nomination approval, the information on development and rational exploitation within the Cu Lao Cham Marine Protected Area, and the potential negative impacts to ecosystems from inhabitants living in the core area and measures to cope with them.
601. The Advisory Committee noted with satisfaction that the national authorities provided detailed feedback on the requested information as follows: (i) changes in the

- functional zoning area compared to the nomination dossier; (ii) development and exploitation within the Cu Lao Cham Marine Protected Area; (iii) potential negative impacts on the ecosystem of people living in the core area; and (iv) measures to address these impacts.
602. The Committee commended the national authorities on submitting the information in a very satisfactory and detailed manner.
603. **Chatkal Biosphere Reserve (Uzbekistan).** This site is subject to the Exit Strategy.
604. As per the recommendation of the 26th meeting of the IACBR in 2020, the Committee concluded that the site would meet the criteria on the condition that an official confirmation of the establishment of a buffer zone surrounding a core area of Maydantal was submitted by 22 May 2020, along with a more detailed plan explaining how local residents and communities would be involved in the management of the biosphere reserve.
605. The Advisory Committee acknowledged the detailed information submitted by the Uzbekistan authorities.
606. Chatkal Biosphere Reserve was established in 1978 on the basis of the Chatkal State Reserve. The Chatkal Biosphere Reserve designated by UNESCO consisted (and still consists) of two cluster sites (Bashkizylsai and Maydantal).
607. The Bashkizylsai and Maydantal areas form part of the transnational serial property 'Western Tien Shan', nominated by Kazakhstan, Kyrgyzstan and Uzbekistan, and declared a World Heritage site in 2016.
608. Each cluster site, according to the environmental legislation of the former USSR, included a core area surrounded by a buffer zone (1-2 km). Following the collapse of the USSR, legislation of the Republic of Uzbekistan also prescribed the existence of a buffer zone around core areas of strict state nature reserves (*Zapovedniks*). Buffer zones are still maintained around both sites and are marked in green (Bashkizylsai) and blue (Maydantal) on the accompanying chart (Map 1).
609. In 2018, the Bashkizylsai site was reorganized into a separate national protected area – the Ugam-Chatkal state biosphere reserve, which includes three zones: a core area, a buffer zone and a transition area in accordance with the requirements of the MAB Programme. However, the Maydantal site remained under the jurisdiction of the Chatkal state strict reserve (*zapovednik*), which has two zones: a core area and a buffer zone.
610. Currently, the Maydantal section of the UNESCO Chatkal Biosphere Reserve is located inside the Ugam-Chatkal National Park, which also plays the role of a buffer zone (Map 2). Work is underway to enlarge a 2-km buffer zone around the Maydantal part of the core area.
611. The Committee noted with satisfaction details of the involvement of local residents and communities in the management of the biosphere reserve. During 2019–2020, about two dozens of meetings were held with a self-government body of citizens, and information was received regarding problems related to the population living in

- settlements inside the transition area. Further activities are also described in the management plan.
612. The Committee also noted that the existing management plan corresponds to IUCN standards. A Coordinating Committee for the biosphere reserve has been established.
613. A new management plan for the period 2021–2024 is being developed with the support of the joint GEF/UNDP/State Committee for an ecology project ‘Sustainable natural resource use and forest management in key mountainous areas important for globally significant biodiversity’.
614. The Committee commended the Uzbekistan authorities for their comprehensive response and concluded that the site **meets** the criteria of the Statutory Framework of the WNBR and is no longer subject to the Exit Strategy.
615. The Advisory Committee recommended that the national authorities submit by 30 May 2021 the updated information concerning the finalization of the new management plan for 2021–2024. The Committee also encouraged the Uzbekistan authorities to continue its work to involve local residents and communities in the management of the biosphere reserve.
616. **Dyfi Biosphere Reserve (United Kingdom).** The Advisory Committee welcomed the additional information provided by the authorities on the extension of the transition area, which has increased by 11,626 ha.
617. The Advisory Committee also welcomed the incorporation of five municipalities into the transition area, which increased the population by about 5.7% and will strengthen the biosphere reserve both socio-economically and culturally.
618. The Advisory Committee concluded that the site **meets** the criteria of the Statutory Framework of the WNBR.
619. **Sonoran Desert Biosphere Reserve (former name: Organ Pipe) (United States).** The Advisory Committee welcomed the additional information provided by the authorities. The Committee noted with satisfaction the progress made in terms of including local residents in the activities and management of the biosphere reserve. The Advisory Committee also appreciated the Plan of Cooperation, which includes proposed activities related to sustainable development and poverty alleviation. The work undertaken to mitigate the negative impacts of the wall constructed along the border is equally appreciated.
620. The Advisory Committee additionally welcomed the detailed maps showing different zones of the biosphere reserve. The Advisory Committee encouraged the authorities to further develop the management plan. The Advisory Committee therefore concluded that the site **meets** the criteria of the Statutory Framework of the WNBR.
621. **Obtawaing Biosphere Reserve (former name: University of Michigan Biological Station) (United States).** The Advisory Committee welcomed the additional information provided and acknowledged the receipt of the letters from eight organizations formalizing their partnership with the Obtawaing Biosphere Reserve,

and also noted that the five organizations representing the Native American Tribes of the region are actively considering joining the biosphere reserve.

622. The Advisory Committee noted that the management structure of the Obtawaing Biosphere Reserve will take the form of an Advisory Committee, whose structure, status and plans moving forward will be stated in the Terms of Reference document that remain in draft form for the time being.
623. The Advisory Committee acknowledged the efforts made to explain why certain parts of the core areas directly border transition areas without a buffer zone. The Advisory Committee also noted that future additional core areas are indicated on the zonation map.
624. The Advisory Committee welcomed the description of the development plan indicating how the Obtawaing Biosphere Reserve intends to fulfil its development function. The anticipated collaboration with the Michigan Economic Development Corporation (MEDC) appears to be a promising avenue.
625. The Advisory Committee requested that the authorities submit the final version of the Biosphere Reserve Terms of Reference once finalized.
626. The Advisory Committee concluded that the site **meets the criteria** of the Statutory Framework of the WNBR.

Annex 3: Document SC-21/CONF.233/10.rev

ITEM 11: EXAMINATION OF NEW BIOSPHERE RESERVES NOMINATIONS AND PROPOSALS FOR EXTENSION/MODIFICATION/RENAMING TO DESIGNATED BIOSPHERE RESERVES THAT ARE PART OF WORLD NETWORK OF BIOSPHERE RESERVES

1. Nominations for new biosphere reserves and proposals for extensions/ modifications/ renaming to biosphere reserves that are already part of the World Network of Biosphere Reserves (WNBR) were considered at the 27th meeting of the International Advisory Committee for Biosphere Reserves (IACBR), which met online from 8 to 12 March 2021.
2. The Advisory Committee examined twenty-three (23) proposals for new biosphere reserves including two (2) transboundary sites, and two (2) requests for extensions and/or renaming of existing biosphere reserves.
3. The Advisory Committee formulated their recommendations regarding specific sites in line with the recommendation categories as follows:
 - ***Proposals for new biosphere reserves or extensions/modifications/ renaming to existing biosphere reserves recommended for approval***: the proposed site is recommended for approval as a biosphere reserve; no additional information is needed. For existing sites, the proposed changes are recommended for approval.
 - ***Proposals for new biosphere reserves or extensions/modifications/ renaming to 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 existing sites are recommended for approval subject to receiving the specific information requested by the Advisory Committee. Initially planned, if the information is received by the MAB Secretariat by 30 May 2021, it will be considered by the MAB-ICC at its 33rd session, scheduled in June 2021, and the Council may approve the inclusion of the site in the WNBR. If submitted by 30 September 2021, the information will be assessed by the MAB-ICC at its 34th session in 2022. **However, due to the COVID-19 outbreak, the MAB Bureau decided to extend until 31st August 2021 the deadline for MAB Secretariat to receive additional information to be considered at the 33rd of MAB ICC. Therefore, the Council will consider additional information received by 31st August 2021 at this 33rd session.**
 - ***Proposals for new biosphere reserves or extensions/modifications/ renaming to existing biosphere reserves were recommended for deferral***: the proposed site is recommended for deferral or the proposed changes for existing biosphere reserves are recommended for deferral as they **do not meet** the criteria of the Statutory Framework of the World Network of Biosphere Reserves, and/or major clarifications with regard to application of the Statutory Framework to the proposed area are requested by the

Advisory Committee. The relevant national authorities are therefore invited to revise the nomination and/or provide the requested clarifications for submission to the MAB Secretariat at their earliest convenience.

4. The Bureau of the MAB ICC will consider the recommendations of the IACBR below as well as the additional information received by the MAB Secretariat particularly with regard to nominations recommended for approval subject to receiving additional information by 31 August 2021. The Bureau will recommend for the consideration of the MAB ICC final decisions on all sites included in this document.
5. The MAB ICC is invited to decide on the new sites for inclusion in the WNBR and extensions/modifications and/or renaming of biosphere reserves already included in the WNBR that could be approved.

New nominations recommended for approval

6. **Átl'ka7tsem/Howe Sound (Canada).** The Advisory Committee welcomed this proposal from Canada.
7. As one of the southern-most fjords in Canada, Átl'ka7tsem/Howe Sound (AHSBR) is located directly adjacent to Vancouver of British Columbia, Canada's third largest city. The total area of AHSBR is 218,723 ha with combined terrestrial and marine components.
8. The mountainous coastal ecosystems of Howe Sound support a high diversity of terrestrial wildlife species, among the highest in Canada, due primarily to the spatial heterogeneity of the Pacific Ranges. Approximately 721 native terrestrial animal species potentially occur in the Howe Sound region.
9. For the past 10,000 years, Átl'ka7tsem/Howe Sound has been settled by First Nations people whose livelihoods and cultural identity have been supported and inspired by the area's lands, waters and contributing watersheds.
10. Átl'ka7tsem/Howe Sound contains a total population of almost 50,000 persons, the vast majority of which are permanent residents. People living in the region enjoy a diverse economy based on forestry, tourism, recreation and service- based businesses.
11. The Howe Sound Biosphere Region Initiative Society (HSBRIS), a registered non-profit organization, will assume responsibility for the management and coordination of the proposed Átl'ka7tsem/Howe Sound Biosphere Reserve (AHSBR). Members of the HSBRIS Board and participants in the AHSBR Roundtable will be a balanced representation of First Nations, federal, provincial and local governments, various commercial sectors and civil society. The area is collectively managed by various levels of government at multiple scales reflecting a diversity of jurisdictions, values, administrative boundaries and plans.
12. The main objectives of the proposed biosphere reserve are to establish and manage an overarching holistic land and marine use plan for the Átl'ka7tsem/Howe Sound region that is mutually recognized and respected by First Nations, civil society, stakeholders and all levels of government, to protect and conserve biodiversity in the

region and to be a model for best practices and a place where people live in harmony with nature by bringing together First Nations, NGOs, academia, industry and civil society.

13. The Advisory Committee welcomed the fact that the designation would help to develop a comprehensive plan/policy for land and marine management/cooperation that would strategically guide the management of all land and waters in the Howe Sound area and create a unified vision and plan for the region and avoid fragmented planning.
14. The Advisory Committee commended the authorities for the quality of the nomination proposal and acknowledged that it represents the culmination of a long process. The Advisory Committee recommended that the site **be approved**.
15. **Martinique (France)**. The Advisory Committee welcomed this proposal from France.
16. Martinique is an island with an area of 1,128 km², 70 km long and 12 to 30 km wide, located in the volcanic arc of the Petites Antilles in the Caribbean. The northern part is mountainous with recent volcanic centres such as Mount Pelée, the only active volcano on the island. The southern part is made up of ancient, partially eroded volcanic centres, known as mornes, mixed with plains. The coasts are formed by numerous bays and coves, and are home to beautiful mangroves.
17. Martinique belongs to the Caribbean hotspot which is one of the world's 35 biodiversity hotspots. Its richness is unique due to the endemism of many species and the rare - but also endangered - heritage character of the habitats that shelter them.
18. The population of Martinique is about 380,000 inhabitants. The urban density is low, despite the fact that Martinique, with a density of 350 inhabitants per km², is the second most densely populated region in France. The economy of the island is essentially based on three sectors: agriculture, agro-food industry and tourism. The usable agricultural area occupies about 20% of the surface of the island and is mainly used for livestock farming (30.7%), banana (22.8%) and sugar cane (17.8%). The 40% of the agro-food activity of the island is represented by the drinks sector including agricultural rum, fruit juices and sodas, etc.
19. A management plan was drawn up following the consultation and co- construction phase in collaboration with the population. Nature and culture are at the heart of the project, as the inhabitants wish to get to know them better, in order to be able to preserve and perpetuate them. A management committee will be set up by the association, so-called the Martinique Biosphere Reserve Association, carrying and coordinating the project.

20. The Advisory Committee welcomed the detailed nomination proposal and congratulated the authorities for the participative approach adopted for its development. The Advisory Committee recommended that the site **be approved**.
21. **Moselle Sud (France)**. The Advisory Committee welcomed this proposal submitted by France. The proposed biosphere reserve encompasses a mosaic of landscapes, ecosystems and species along the Lorraine slopes of the Vosges covering 139 257 ha.
22. The territory is mainly rural and distinguished by two major themes of sustainable development: tourism and agriculture. On the agricultural side, the territory is largely oriented towards extensive cattle and sheep breeding coupled with polyculture. Tourism is focused on themes related to the benefits of natural or cultural resources, and more generally on a 'nature' destination.
23. The overall population is growing slightly but is aging due to the departure of young people to attractive neighbouring cities. The resident population is estimated at 76,609 inhabitants.
24. The PETR Pays de Sarrebourg is the only coordinator of the proposed biosphere reserve. It will be responsible for coordinating governance during the first ten years of the management plan, and will also be in charge of coordinating the steering committee and the management committee of the proposed biosphere reserve.
25. The Advisory Committee took note that the stakeholders involved in the preparation of the management plan are the elected officials, socio- professionals, public institutions, inhabitants, associations, local and regional institutions, and financial backers. The management plan has created a place for young people in governance, potentially involving eco-delegates of the territory. The proposed site is also willing to give voice to young people and to contribute to innovative solutions as part of the national network.
26. The main objectives of the proposed biosphere reserve are to preserve ordinary and extraordinary natural heritage; to accompany and experiment with opportunities for sustainable development, in order to better understand, value and transmit them to future generations; establish a dynamic of scientific research mindful of local problems and as a source of solutions for global issues (e.g. climate change, invasive alien species); and to preserve and better value historical, linguistic and archaeological cultural heritage, so as to create an identity specific to the territory.
27. The Advisory Committee recommended that the site **be approved** and further encouraged the authorities to develop a tourism management plan to ensure that tourism remains sustainable.
28. **Monte Grappa (Italy)**. The Advisory Committee welcomed this proposal from Italy. Monte Grappa covers an area of 66,067.3 ha encompassing the territory of 25 municipalities. It consists of the Monte Grappa Massif and the foothills and high plains that surround it. It symbolizes the ecosystem dynamics of the Italian Pre-Alpine belt and links the Po Valley and the Eastern Dolomites.

29. The Advisory Committee took note that the proposal was introduced to the local communities as ‘a laboratory of concrete and innovative ideas’ that will encourage the local application of the 17 UN Sustainable Development Goals (SDGs). The intention is to pursue a positive future and the overall wellbeing of the community by supporting the green economy, the circular economy and corporate social responsibility in all sectors.
30. The 25 municipalities of the proposed biosphere reserve are home to 174,184 people. In demographic terms, the Monte Grappa shows ‘symptoms’ of gradual depopulation, which began at the end of the nineteenth century as result of the abandonment of settlements in medium-high areas of the Grappa massif, due mainly to a decrease in forestry and pastoral activities.
31. The Advisory Committee acknowledged the establishment of a steering committee for the implementation of the ‘Steering Document for the Management Plan’, which has been approved by the Municipal Council. It also recognized the cultural significance of the site with several strong and uniform elements linked to ancient and medieval archaeological sites and examples of artistic-architectural excellence.
32. The Advisory Committee therefore recommended that the site **be approved**.
33. **Kolsai Kolderi (Kazakhstan)**. The Advisory Committee welcomed this proposal and congratulated Kazakhstan on its 13th nomination following the designation of its first biosphere reserve in 2012.
34. The proposed site is located in the northern Tien Shan mountain system, situated mainly on the northern slopes of the Kungei Alatau Range and partly on the southern side of the Zailiysky Alatau Range. The altitude limits of the proposed site range from 800 to 3800 m above mean sea level. The Shilik River in the territory is the largest river in the Northern Tien Shan, and originates from the glacier.
35. The unique mountain landscapes present contrasting natural conditions ranging from steppe foothills to the ice peaks of the alpine belt, and encompass plains, canyons, mountain ranges, stormy rivers and beautiful lakes framed by coniferous and deciduous forests. The slopes of the ridge are divided by numerous and deep gorges, resulting in a variety of landscapes within relatively small compartments of territory. The proposed site is home to many rare and endangered species, including Tien Shan brown bears, Stone martens, Snow leopards, Turkestan lynx, Pallars’s cats and Argalis.
36. The potential for sustainable development is associated primarily with animal husbandry and crop production as well as ecological and recreational tourism. Tourism, in particular, is one of the most promising activities in the territory of the Almaty region and the proposed site has a great potential for ecotourism development.
37. The core areas are strictly protected areas of the Kolsai Kolderi State National Natural Parks (SNNP), which preserve the most valuable natural mountain ecosystems of the northern Tien Shan. The SNNP corresponds to the highest category of IUCN protected area classification, A1.

38. The buffer zones consist of three sub-zones of the SNNP for environmental stabilization, tourist and recreational activities, and limited economic activities, with a specially designated protected area creating a 2-3 km strip around the perimeter of the SNNP.
39. The transition area is located in the two districts of the Almaty Region: Talgar and Kegen. The land of the transition area is used mainly for growing crops, grazing livestock and haymaking. Settlements with about 8,000 people are located only in the transition area of the Kegen District.
40. On the southern and south-western boundary of the proposed site, which includes the national border with Kyrgyzstan, no transition area is established adjacent to the buffer zone because of the presence of high mountain areas 3,000–4,500 m above mean sea level with no local residents.
41. Currently, the Management Plan for the Kolsai Kolderi SNNP (2019–2023), which is attached to the nomination dossier, covers the management of the core areas and buffer zones, which is also the territory of the SNNP. The plan also details the activities of the local population living and working in the transition area which neighbours the SNNP. In this sense, the management plan will form the main basis of the proposed biosphere reserve management plan.
42. The Advisory Committee took note that work on the integrated management plan commenced with the participation of stakeholders in mid-2020 and that the new management plan for the proposed reserve will be created over the next two years.
43. Noting the ongoing serious decrease of glaciation area in the Shilik River basin by almost 30% (86 km²) from 286.16 km² to 200.42 km² over 49 years (1955– 2004), the Advisory Committee recommended that the nominating authorities continue monitoring and research on deglaciation in the nominated site and seek collaboration with other concerned biosphere reserves on joint activities such as monitoring, research and awareness raising.
44. The Advisory Committee also encouraged the nominating authorities to explore the creation of a transboundary biosphere reserve with Kyrgyzstan, which borders the southern boundary of the proposed site.
45. The Advisory Committee commended the Kazakhstan authorities for this nomination and recommended that the site **be approved**.
46. **Matšeng (Lesotho).** The Advisory Committee welcomed this proposal from Lesotho. The proposed biosphere reserve is located in an area in Lesotho's northern highlands, which forms part of the larger Maloti-Drakensberg Transfrontier Conservation Area (MDTFCA) and covers Lesotho and some parts of South Africa. The area is a representative example of a natural, minimally disturbed ecosystem within a globally significant bio-geographical region, characterized by endemism, distinct forms of genetic diversity and striking natural features.

47. The Maloti Mountains comprise a significant section of the Drakensberg alti- montane grasslands and woodlands eco-region, as described by the Worldwide Fund for Nature. This highland area covers 11,913 km² and stretches from Lesotho to South Africa.
48. The proposed biosphere reserve encompasses two protected areas: the Tšehlanyane National Park and the Bokong Nature Reserve, with a designated core area of 7,570 ha, a buffer zone of 37,886 ha and a transition area of 66,577 ha.
49. The Tšehlanyane National Park (TNP) is home to some of the last indigenous woodlands remaining in Lesotho, with fine examples of Old Wood (*Leucosidea sericea*) (Cheche) conserved at the heart of this area, which provide a habitat for a number of undergrowth plants unique to this area. The highland is also classified as an endemic bird area of high priority, and is home to at least 1,400 species of plants, 250 species of birds, 50 species of mammals and 30 species of amphibians and reptiles. The grand eland (*Tragelaphus oryx*) and the endemic Lesotho fish, the Maloti Minnow Thoboshana (*Pseudobarbus quathlambae*) or the alpine endemic bird species, Drakensberg Siskin (*Crithagra symonsi*) are all found in the area.
50. With regard to land management, the proposed biosphere reserve will foster socio-cultural and ecologically sustainable forms of economic, human and conservation development, and also envisages the adoption of a landscape approach model to promote sustainable development.
51. To ensure a sustainable livelihood system, the proposed biosphere reserve will facilitate the establishment of a thriving biodiversity economy based on ecocultural tourism and climate-smart agriculture which will promote market- driven product development. This will be achieved through the promotion of eco- cultural business enterprises that actively encourage the participation of all sectors.
52. The Advisory Committee commended the national authorities for providing support for research, monitoring, education and information exchange related to local, national and global issues of conservation and development.
53. The Advisory Committee also complimented the authorities on their well- prepared Integrated Management Plan and encouraged them to submit copies of the action plan and business plan as soon as they are available.
54. The Advisory Committee recommended that the proposed biosphere reserve **be approved**.
55. **Ashaafean (Libya)**. The Advisory Committee welcomed the first nomination dossier from Libya.
56. The proposed site is located in the north-eastern end of the Nafusa Mountains. It belongs to the Mediterranean biogeographic region and encompasses a variety of habitat types including mountains, valleys (Wadi), arable land and plains.

57. The site contains dry woodlands and steppic grassland typical of North Africa, forming an ecotone between the Mediterranean climate region to the north and the hyper-arid Sahara Desert eco-region to the south.
58. The total area of the proposed biosphere reserve is 83,060 ha. A forest-related project was established in 1978, and approved as a nature reserve by a governmental decree (no. 394/1998), located within the Shaafean area. At present, this nature reserve constitutes the core area of the proposed biosphere reserve. It covers around 1,213 ha, accounting for 1.46% of the total area, and is characterized by its distinctive topography, with high mountains and deep valleys. The buffer zone extends over 11,888 ha (14.31%) and the transitional areas cover 69,969 ha (84.42%) of the total area.
59. The area is home to around 360 plant species and 48 animal species, and has been recognized for its preservation of rare, threatened and endangered fauna and flora. Some of the fauna are inscribed on the IUCN Red List, while flora such as *Linaria tarhunensis* Pamp. and *Ephedra allissima* Desf are indigenous to the Ashaafean area and Libya. Many of the plant species are also of ecological and economic importance including for medicinal and industrial purposes.
60. The area hosts a variety of local communities, with about 64,263 permanent residents of the city of Msellata and numerous villages. Around 13,550 transitional residents undertake seasonal grazing, wood collection and beekeeping.
61. Among the cultural services offered, the proposed core area is used for several outdoor recreational activities, mainly during spring and summer, while activities in the buffer zone include tourism and recreation, wood collection, grazing, beekeeping, farming and the collection of medicinal and aromatic plants. The buffer zone also hosts a few scattered villages, fragmented farms and small communities. In the transition area, people practise the same activities as in parts of the buffer zone in addition to collecting the edible fruits and seeds of wild plants.
62. Many excursions are organized annually to the proposed biosphere reserve, with students from schools and university as well as researchers visiting Ashaafean for scientific purposes. The area of the proposed biosphere reserve also has significant potential to support environmental education and training, demonstration projects, research and monitoring related to biodiversity conservation, and sustainable development.
63. Farming is the main activity and is sustained by local communities living around the proposed site and on a larger scale across the whole region. Conservation and sustainable management plans aim to improve the awareness of farmers, among others, of ecologically sustainable agricultural among other activities.
64. The establishment of the biosphere reserve would aim to conserve the local biota and natural resources, and promote sustainable development in all activities related to the critical ecological status of the area. It would also aim to promote socio-economic development approaches that involve the local community.

65. The Advisory Committee commended the authorities on the composition of the steering committee, which will be responsible for the future management of the biosphere reserve, highlighting the broad scope of members representing all stakeholders and local communities.
66. The Advisory Committee noted that a management plan was developed in 1998 (in Arabic) for the Msellata Protected Area and National Park, which constitutes now the core area of the reserve.
67. The Advisory Committee recommended that the site **be approved** and encourages the authorities to allocate a budget for the reserve; to develop a management plan for the entire area including a timeframe; to outline the regulations, management structure and coordinating mechanisms in cooperation with local communities; to improve land management schemes in the area; and to provide information on the overall process and timeline.
68. **Avireri Vraem (Peru).** The Advisory Committee welcomed this new proposal submitted by the Peruvian authorities.
69. The proposed biosphere reserve is located in central Peru in the provinces of Satipo and La Convención, east of the capital city of Lima. It covers a total area of 4,110,762.685 ha, including a core area of 878,191.807 ha, a buffer zone of 1,220,256.518 ha and a transition area of 2,122,314.36 ha.
70. The core area of the proposed biosphere reserve is composed of four national natural protected areas located along the Vilcabamba-Amboró Conservation Corridor. The proposal also encompasses the Peruvian part of the Tropical Andes Hotspot for Biodiversity.
71. Avireri Vraem encompasses a wide range of altitudes from 280 m to 6,271 m above mean sea level at its maximum height. Accordingly, the site hosts 13 different ecosystems spread across different climate zones. The area also provides habitats for 257 endemic fauna species, 307 endemic and endangered flora species including plants with medicinal and cultural uses, and 115 endangered fauna species, as categorized by the IUCN Red List of Endangered Species.
72. The proposed biosphere reserve is home to approximately 458,701 inhabitants, whose main economic activities are agriculture, cattle-raising, fishing and subsistence hunting. Recent years have seen the development of ecotourism which is now a source of socio-economic growth. Several -indigenous and native communities live within the proposed biosphere reserve and eight different languages are spoken throughout the region. The resultant local cultural heritage – in both tangible and intangible forms – is a defining element of the diverse identity of Avireri Vraem.
73. The Advisory Committee congratulates the country for having carried out a participatory nomination process that involved local stakeholders and communities.

74. The proposed biosphere reserve would be managed by the Biosphere Reserve Board, which would also be in charge of the administrative authority. A management plan would be adopted once the area has been designated as a biosphere reserve.
75. The designation of the site as a biosphere reserve would serve to reinforce the inclusive and sustainable development of the region by establishing a unique link in the ecological corridor between two existing biosphere reserves in Peru (the Oxapampa Ashaninka Yanasha and Manu biosphere reserves). The reinforcement of the corridor would further improve the quality of ecosystems, providing a habitat for wildlife, settlers and native communities.
76. The Advisory Committee welcomed this nomination proposal and recommends that the site be **approved**.
77. The Advisory Committee also expressed its concern about hydrocarbon and mining exploration in the buffer zone and concessions in the area, and requested that the MAB Secretariat be kept regularly informed about this situation.
78. **Wando Archipelago (Republic of Korea)**. The Advisory Committee commended the Republic of Korea for this well-prepared nomination dossier.
79. The proposed site is located at the southernmost tip of the Korean Peninsula in Northeast Asia. It consists of 55 inhabited islands, including the main Wando Island, Gogeumdo, Cheongsando and Bogildo, 210 uninhabited islands and the surrounding waters.
80. The rich biodiversity is the result mostly of a warm oceanic climate created by the Haenam Peninsula which blocks north-westerly winds.
81. The main objectives of the proposed biosphere reserve are to conserve terrestrial and marine biodiversity up to the northern limit of the warm temperate forests, to promote sustainable development in harmony with nature based on terrestrial and marine ecosystem services, and to establish the basis for participatory ecosystem conservation and wise use through voluntary participation and decision-making of local residents.
82. Wando's ecological environment includes a number of elements of conservation-worthy value, notably 'village forests and groves', or *Maeulsup* in Korean. These have been formed and managed for hundreds of years to protect homes and farmlands from heavy winds and continue to be conserved and managed by local residents until today. Another example is *Gudeuljangnon*, the terraced rice paddy designated as a Nationally Important Agricultural Heritage site in 2013 and as a Globally Important Agricultural Heritage System (GIAHS) site in 2014 by the Food and Agriculture Organization (FAO).
83. Wando's development strategy embraces the clean development concept that maintains a healthy natural environment, minimizes environmental pollution, and thus retains and improves the island's aesthetic and recreational values. Communities and

the government recognize that the image of Wando as an uncontaminated and pure area underpins its tourism and especially the marketability of its seafood products.

84. Many traditional uses of ecosystems highlight their harmonious relationship with the natural environment. Today, ecosystem service benefits derived from the use of traditional methods are generally accorded a higher value. One such example found in a Wando village is *Haenyeo*, the female divers who harvest from the sea. Participatory harvesting methods are also characteristic of the local management of forest and marine ecosystems, with the traditional *Jubae* system forming an integral part of modern village-level fishing cooperatives. New forms of community-led initiatives are also emerging with strong engagement among young people both within their localities and across the region.
85. The proposed biosphere reserve is preparing a joint research system to enhance cooperation with other island biosphere reserves. One initiative has already been launched with the Clayoquot Biosphere Reserve located in Vancouver Island, Canada.
86. The Advisory Committee acknowledged the receipt of additional information on preparation of a management plan including a tentative timeframe for finalization. A participatory and collaborative process for drafting the plan has already been initiated but due to circumstances related to the COVID-19 pandemic, efforts to convene stakeholders in 2020 encountered numerous obstacles and delays. A management plan for the proposed biosphere reserve will be established in alignment with the land development plans of Jeollanam-do Province and Wando-gun County, and will be also linked to the management plan for Dadohaehaesang National Park. Emphasis will be placed on revitalizing cooperative governance with local residents, especially in relation to management of the national park. This approach will permit the creation of a 'one-stop-shop', which will also integrate the management of National Scenic Areas and Natural Monuments, which are currently overseen by the Cultural Heritage Administration.
87. The Advisory Committee noted that consolidation of the management of national parks, cultural heritage and local sustainable development strategies will contribute to a community-based management system for environmental and cultural resources. The Committee encouraged the national authorities to finalize a detailed management plan and to submit the extended summary in English to the MAB Secretariat.
88. The Advisory Committee commended the Republic of Korean authorities for this nomination and recommended that the site **be approved**.
89. **Kuznetsky Alatau (Russian Federation)**. The Advisory Committee welcomed this proposal from the Russian Federation.
90. The Kuznetsky Alatau ridge is one of the major geomorphological regions of Western Siberia. Extending sub-meridionally, the ridge is a relatively low, complex mountain structure that borders the Minusinsk Basin and the Abakan ridge to the east, the Chulym–Yenisei Basin to the north, the Kuznetsk Basin to the west and the Nenyas-

- Chumysh Basin to the southwest. The total area of the proposed biosphere reserve covers 2,698,772 ha and hosts a total population of 138,632 inhabitants.
91. The proposed biosphere reserve is conceived as an environmental, socio- economic, cultural and educational institution, contributing to the development of new sustainable practices and the revival of ethnic culture, and designed to attract investment into the regional economy. The proposed site will not only focus on biodiversity conservation, but also provide environmental services for the population. In order to maintain environmental, recreational and social services for the population, new joint managerial approaches will be designed for the proposed site.
 92. The Advisory Committee noted that the mountains of the Kuznetsky Alatau range and its unique natural sites attract recreational, environmental and educational tourism, with more than 100,000 tourists visiting the buffer and transition areas of the proposed biosphere reserve annually. The Advisory Committee also acknowledged a plan to develop ethno-ecological programmes to preserve the traditional culture and nature management practices of the Shorian people (the local ethnic minority), which include local cuisine, customs, rites, cultural traditions, attractions, historical sites and monuments, in order to promote environmental behaviour by tourists and respect for local customs and traditions. A plan also exists to develop and implement innovative programmes for the sustainable livelihood of local people, such as projects to support and develop environmentally-oriented small businesses, the promotion of local organic products, etc.
 93. The Advisory Committee welcomed the detailed nomination proposal and highlighted the involvement of indigenous peoples among the governing bodies.
 94. The Advisory Committee recommended that the site **be approved**.
 95. **Farasan Islands/Juzur Farasan (Saudi Arabia)**. The Advisory Committee members welcomed the first nomination dossier from Saudi Arabia. They praised the quality of the various sections of the nomination dossier and the comprehensiveness and richness of the information presented.
 96. The nomination dossier concerns the archipelago of Juzur Farasan, a group of islands located at the extreme south-west of the country near the Yemeni border. The area combines both marine and terrestrial areas, accounting for 91% and 9% of the proposed site respectively. However, both landscapes and seascapes constitute a typical complex of important ecosystems, recognized for their outstanding universal value in the South Red Sea. The surface area of the proposed biosphere reserve covers 820,000 ha, and the main biogeographic regions to which the terrestrial vegetation cover belongs are the Tihamah Plain and the Tihamah Hills.
 97. The Farasan Islands were designated a prime protected area in 1996 by Royal Decree, encompassing typical landscapes and seascapes, a variety of ecosystems, and multiple flora and fauna species.

98. As the site was subject to controlled hunting and later designated as a national protected area, the core area and buffer zone fall under legal protection. The main function of the core area, which accounts for around 35% of the total area, is to ensure the long-term protection and conservation of key natural habitats and species in terrestrial and marine areas of the islands. The buffer zone also covers 35% of the proposed biosphere reserve establishing a massive boundary between the dedicated large core area and the transition area (30% of the total area), where the most intensive development and urban expansion is expected to take place over the long term. As a result, the core areas of the proposed biosphere reserve harbour all critical ecosystems and habitats required to ensure the sustainability of viable populations of representative terrestrial and marine flora and fauna.
99. The islands host the largest population of Idmi gazelle in Saudi Arabia, high concentrations of nesting pink-backed pelican, osprey, sooty falcon, crab- plover, white-eyed gull, lesser crested tern, white-cheeked tern, Red Sea (brown) noddy and other seabirds, as well as notable species such as dolphins, whales, dugongs, green turtles, hawksbill sea turtles and manta rays. The terrestrial part of the proposed site is a subtropical desert where annual rainfall does not exceed 70 mm, and is home to *Gazella farasani* and *Acacia ehrenbergiana*. The islands are also embellished with coral reefs and a range of valuable and well-protected coastal wetlands such as red and black mangroves, seagrass beds, saltmarshes and macro-algal reefs of high conservation importance.
100. The Farasan Islands are nationally recognized as an Important Plant Area hosting rare and endemic species such as *Kickxia corallicolais*, *Glossonema sp. aff. boveanum* and *Dipcadi sp.* near the coast north of Farasan town, and *Cucumis sp. aff. prophetarum*. The proposed biosphere reserve also hosts three of 13 recorded stands in Saudi Arabia of the threatened red mangrove, *Rhizophora mucronata*, a relict population of Dugong dugon listed as vulnerable on the IUCN Red List, and three species of dolphins which visit frequently the coastal waters, namely: the long-snouted spinner dolphin (*Stenella longirostris*), the bottlenose dolphin (*Tursiops truncatus/T. aduncus*) and the Indo-Pacific humpback dolphin (*Sousa chinensis*).
101. The remote nature of the islands and their relative inaccessibility have contributed to the preservation of many ancestral traditions related to agriculture. Local people still farm on constructed slope terraces and employ traditional methods of irrigation, while others undertake small-scale fishing. Local communities also use traditional forms of small-scale subsistence agriculture in areas where shallow wells are maintained and used to irrigate local plants varieties such as cereals and vegetables.
102. For millennia, the islands have been used for artisanal fishing and pearl hunting, with some subsistence farming (dates and sorghum) and small-scale grazing (mainly goats). Gazelles were hunted but sustainably managed and preserved by the islanders. Populations of mangroves and animals, including fish, coral, turtles and birds, were naturally protected by isolation, low levels of human use and a system of rotational fishing.

103. Under protection since 1988 as Controlled Hunting Reserve, the Farasan Islands has maintained an extensive research and monitoring programme addressing both terrestrial and marine ecosystems and species, with education and awareness programmes targeting local communities including schools, farmers, fishermen, youth and local leaders.
104. The protected area is also part of the Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA) programme network and has benefited from its research and monitoring programmes for more than 20 years. This has included long-term monitoring of coral reefs and key species of fish and sea mammal in and around the islands, including sharks, dolphins, dugongs, sea turtles and other species. The new management approach adopted for the islands views the proposed biosphere reserve as an opportunity to update and expand research and monitoring programmes on the islands, with the aim of better aligning them with management objectives adopted for the three zones. Such an integrated management approach links conservation of biodiversity with the sustainable development of resources and improvement in their utilization, underpinned by more effective community education and a stakeholder outreach programme.
105. Tourism is a recent development in Juzur Farasan. In order to prevent undesirable impacts, those responsible for the biosphere reserve project are proposing a good model of ecotourism, while also working on crucial issues related to governance and management, with an apparent view to ensuring sustainability.
106. The first management plan for the proposed biosphere reserve was prepared in 2000. This comprehensive document suggested a plethora of objectives and activities to ensure the protection and sustainable use of the unique biodiversity of the islands. In 2019, the Saudi Wildlife Authority (SWA) deployed a regional expert to work with the SWA central team and the local team in the Farasan Islands protected area to develop a management plan for the period 2021–23. The main purpose was to create a transitional management tool to apply the biosphere concept as the main management framework for future planning and management of the protected area.
107. Establishment of the biosphere reserve would serve as a national and potentially regional model for integrated conservation and development, where core natural values and attributes are safeguarded along with their associated cultural values (both tangible and intangible) through a network of effectively managed core areas. The sustainable socio-economic development of local communities is intertwined with the maintenance of ecosystem services in a well-designed buffer zone, and the development of services and facilities is permitted through a well-designed transition area limited to main human settlements and access routes.
108. The overall aim is to strike a balance between the obligation to protect and conserve the important biodiversity of the site, both terrestrial and marine, while at the same time respond to the increasing needs and demands of local and national stakeholders and interest groups. This coincides with the vision of the Kingdom to adopt a new strategy for economic development at national and local levels by adopting a more diversified approach to generating income including through tourism and other sectors.

109. The Advisory Committee recommended that the site **be approved** and noted that the nomination dossier was prepared with a level of high professionalism and dedication, boding well for its future as a biosphere reserve.
110. **Ribeira Sacra e Serras do Oribio e Courel (Spain)**. The Advisory Committee welcomed this new proposal submitted by the Spanish authorities.
111. The proposed biosphere reserve is located in the autonomous community of Galicia, between the provinces of Lugo and Ourense in the northwest of Spain. The proposal covers a total area of 306,534.77 ha, including a core area of 53,237 ha, a buffer zone of 51,250 ha and a transition area of 202,048 ha.
112. An area of great natural beauty and cultural richness, the proposed biosphere reserve extends across the Sil canyons and the River Miño, one of the main rivers in Galicia. Its overall altitude ranges from 105 m to 1,641 m above mean sea level. According to the Köppen-Geiger climate classification, the region is identified as temperate. However, the varying topography of valleys, tertiary depressions and mountain foothills hosts a diversity of microclimates. The dominant ecosystems are scrubland, deciduous forests and agro-ecosystems.
113. The different ecosystems provide habitats to numerous endemic and endangered species, highlighting the relevance of strengthening biodiversity conservation strategies. In addition, several exotic invasive species are present in the area. In this regard, the biosphere reserve designation would constitute an instrumental asset, providing the means to the relevant authorities, institutions and programmes to collaborate on methods to actively control these invasive species. The proposed area is home to 1,214 species of vascular flora, representing 52.7% of the entire floristic diversity of Galicia, as well as 277 species of fauna, most of which are conserved in existing protected areas of varying levels.
114. An estimated population of 75,203 inhabitants lives in the proposed site. The main economic activities are agriculture and livestock farming, with an emphasis on balance and harmony between eco- and agro-systems. Tourism and ecotourism also contribute to economic development of the area. In addition, research and educational activities devoted to conservation and sustainable management of the area have increased recently.
115. The proposal encompasses one UNESCO Global Geopark, six Natura 2000 sites and several other protected natural areas. Beyond its natural attributes, Ribeira Sacra e Serras do Oribio e Courel is also rich in cultural heritage, notably caves and rock shelters, petroglyphs, megaliths, ancient settlements, monasteries, churches and bridges. The Way of St. James, which was inscribed on the UNESCO World Heritage List in 1993, runs through the proposed biosphere reserve, attesting to the high cultural value of the region.
116. At the inter-regional level, the proposed site would expand westward the ecological corridor formed by other biosphere reserves in the Cantabrian Mountains and various protected ecosystems on the European Atlantic Coast.

117. The Advisory Committee congratulates the national and local authorities on the excellent quality of the proposal and recommends the adoption of the committee and management plans to ensure the active participation of all local stakeholders.
118. The Advisory Committee welcomed this proposal and recommended that the site be **approved**.
119. The Advisory Committee also recommended that the authorities seek to establish synergies with the other UNESCO designated sites.
120. **Doi Chiang Dao (Thailand)**. The Advisory Committee welcomed this proposal and congratulated the country on the new nomination, the first since its last biosphere reserve designation in 1997.
121. The proposed Doi Chiang Dao Biosphere Reserve is located in Chiang Dao District of Chiang Mai Province. It is the only region in Thailand covered with sub-alpine vegetation, found also in the Himalayas and down through the southern part of China.
122. Rains infiltrating through limestone formations have created a number of caves. The largest and most important of these is Chiang Dao Cave, located in the core area. The cave is renowned for a Buddhist temple in the Lanna style and a place where the legend of Chao Luang Chiang Dao originated, and is thus revered as a sacred place. Numerous underground creeks converge to form the Ping River to the east of the proposed site.
123. A traditional gravity-based irrigation system called *Maung Fai* is also a notable feature of the area, numerous examples of which have been maintained in accordance with local practices and knowledge over almost 800 years.
124. The proposed site is an ecotourism destination with natural and cultural activities in the Chiang Dao Cave and the Yang Pu Toh Hot Spring, birdwatching along the Mae Kong River (e.g. Crested Kingfishers) and skygazing with dark sky views of the Milky Way.
125. The core areas, which account for 41.92% of the total area, have been strictly protected as the Chiang Dao Wildlife Sanctuary for more than 40 years. The north-western tip of the core area, which is not surrounded by a buffer zone or transition area, borders the Pha Daeng National Park.
126. The buffer zones consist mostly of secondary forest and reforested area, belonging to the Chiang Dao Wildlife Sanctuary, the Chiang Dao National Reserve Forest and areas designated for agricultural land reform. These areas are targeted for ecologically friendly economic activities.
127. One of the two transition areas is located at the eastern end of the site; the other is surrounded by the western section of the buffer zones. Both areas are administrated by regional and local authorities.

128. The Advisory Committee acknowledged that the conceptual framework of the biosphere reserve management is consistent with the existing plans of the districts, sub-districts and the Sanctuary. The outline of expected activities and budget for the ten years after biosphere reserve designation has been formulated as a draft management plan, and includes a timeframe for the development of a detailed integrated management plan.
129. The Advisory Committee took note of a policy of payment for ecosystem services (PES) operating in the southern buffer zone. A forest village, Ban Pang Ma-O (PMO), sells branded forest-shade coffee, the packaging of which informs buyers that their purchase helps maintain the forest which provides water- regulating services for the Ping River.
130. The Advisory Committee also noted that the proposed site presents a good model for visitor impact management, which can be as a reference by other fragile ecosystem destinations. Previously, the summit of Doi Luang Chiang Dao and the opium fields were subject to high visitor numbers. At present, only nature research visits are permitted on the summit and are regulated by strict controls and impact mitigation measures. The summit is also well managed with zero waste.
131. The Advisory Committee commended the national authorities on this nomination and recommended that the site **be approved**. According to the nomination dossier, expansion of the Chiang Dao Wildlife Sanctuary in the western end of the buffer zones is underway. The Advisory Committee therefore recommended that the zonation of the site be adapted accordingly once the expansion is finalized.
132. **Kon ha Nung (Viet Nam)**. The Advisory Committee welcomed this proposal submitted by Viet Nam.
133. Kon ha Nung is located in the highlands of Central Viet Nam, the so- called 'Roof of Indochina', the highest peak of which reaches over 1,700 m. Two nationally protected sites, covering 57,439.83 ha, serve as the core areas of the proposed biosphere reserve: Kon Ka Kinh National Park and Kon Chu Rang Nature Reserve. Both are located in Gia Lai Province.
134. The proposed site is home to rare species and is characterized by a high level of biodiversity. The Kon Ka Kinh National Park (first core area) was established to protect rare and endemic species including the Kon Ka Kinh Laughingthrush (*Garrulax konkakhensis*), rare mammals such as *Megamuntiacus vuquangensis*, *Muntiacus Truongsonensis* and *Pygathrix nemaus*, and other animal species. *Pygathrix cinerea* is a rare and endemic primate species of Viet Nam, classified as critically endangered (CR), with only about 1,000 individuals in the wild. Kon Ka Kinh National Park is also home to the largest population of douc langur in Viet Nam, with about 250 individuals. The Kon Chu Rang Nature Reserve (second core area) forms part of the Kon Tum Plateau Endemic Bird Area and has been recognized as one of the most important bird zones in Viet Nam.
135. The buffer zone covers an area of 152,693.98 ha and is clearly defined consisting of the territory surrounding or adjacent to the core areas where only activities that do not

- contravene conservation objectives can be implemented. A combination of land uses are concentrated in the buffer zone with different forest types protected by local households through individual land and forest allocation contracts (between the National Park and local households).
136. The proposed site has a large transition area covering an area of 203,377.86 ha. Activities have been implemented in this area to create sustainable livelihoods for local people with a view to reducing pressure on the Nature Reserve. Such activities include hi-tech agricultural development, afforestation, ecotourism, cultural tourism and the Central Highlands Gong Culture Festival.
 137. The Advisory Committee found a significant discrepancy in the total size of the proposed area, which was given as 13,511.67 ha instead of 413,511.67 ha. Accordingly, the Committee requested that the dossier be adjusted to reflect the correct size.
 138. Sustainable development of the proposed site is based on the traditional knowledge of local communities including indigenous and folk knowledge about production aspects, social organization and cultural identity, specifically folk knowledge (*Pon đik-pon đing* or *ponđip-ponring*), knowledge about labour and production, and knowledge about society. Policies formulated by the Gia Lai Province People's Committee on land allocation, forest allocation to households, payment for forest ecosystem services and the development of ecotourism combined with nature conservation are considered the correct approaches for Gia Lai Province.
 139. Gia Lai people live mainly on rice cultivation. The main crop harvested is upland rice, although wet rice is grown to a lesser extent. Alongside farming, Gia Lai people also raise livestock and poultry to ensure self-sufficiency and exchange for necessities. Their shifting economy is associated with hunting and gathering. Men hunt, trap animals in the forest, and fish and shrimp in lagoons, lakes, rivers and streams. Women collect vegetables, bamboo shoots, fruits from the forest, crabs, snails and mussels.
 140. The Advisory Committee noted that the organizational arrangements of the proposed site make provision for the participation of a suitable range of public authorities, local communities and private interests, to carry out the biosphere reserve functions.
 141. All activities in the proposed core areas are coordinated by the current Forest Protection Department's Management Board, as the areas in question are owned by the National Park. The Director of the Department of Agriculture and Rural Development is also the Standing Deputy Head of the Biosphere Reserve Management Board. The existing management boards of the National Park and the Nature Reserve will play a key role in the Biosphere Reserve Management Board.
 142. The Committee acknowledged that the national authorities had provided a detailed outline of the management plan and a timeframe for finalization with a date of the end of 2021, if the site is approved.

143. The Advisory Committee commended the Vietnamese authorities for this nomination and recommended that the site to **be approved**.
144. **Nui Chua (Viet Nam)**. The Advisory Committee welcomed this new proposal submitted by Viet Nam.
145. The proposed site encompasses the terrestrial and marine areas of Ninh Thuan Province, Central Viet Nam, and is located at the end of the Truong Son Mountain Range where the climatic conditions are harsh with sunny, hot and arid weather and minimal rainfall. The proposed site is a representative area in terms of biodiversity with a rich and diverse mosaic of ecosystems distinctive to the south-central region of Viet Nam, including unique semi-arid vegetation, sea turtle nesting beaches and coral reefs.
146. The total population amounts to 447,162 including the main ethnic groups of Kinh, Cham, Raglai, Hoa, Tay, Nung and Muong, all of whom have diverse ethnic cultures with artistic and religious forms of architecture, and numerous rituals and large festivals.
147. The core areas and buffer zones have been designed based on the Nui Chua National Park system. The National Park is one of 200 globally important ecological regions identified by WWF as the Annamites. The conservation value of mammal fauna in the National Park is very high with many globally rare and valuable species. Initial statistics show that out of 83 currently known mammals, up to 25 species belong to vulnerable, endangered and critically endangered categories on the IUCN Red List, including Black-shanked doucs (*Pygathrix nigripes*) and Silver-backed chevrotains (*Tragulus versicolor*).
148. The terrestrial and marine core areas are strictly protected sub-zones of the Nui Chua National Park designated for ecological restoration, and are uninhabited.
149. The buffer zones are also sub-zones of the National Park, located adjacent to the core areas, where environmentally friendly economic activities (e.g. agriculture, fishing, tourism, etc.) are carried out in accordance with the management regulations of special use forests and marine protected areas.
150. Numerous, diverse regional economic activities take place in the transition area. However, as the proposed biosphere reserve will be managed in accordance with the master plan of the Ninh Chuan Province and the conservation and development plan of Nui Chua National Park, the transition area is not defined in the northern and north-eastern part of the buffer zone, where are beyond the application range of the plans.
151. The Advisory Committee noted that ecotourism has been carried out by six local ecotourism companies in buffer zones and the transition area. According to the policy of Payment for Forest Ecosystem Services (PFES), some revenue from ecotourism businesses using the forest environment are collected and invested in forest protection and improvement of the living standards of local people.
152. The Advisory Committee also took note that the Ninh Thuan Provincial People's Committee plans to establish the Management Board of the Nui Chua Biosphere

Reserve following designation of the proposed Nui Chua Biosphere Reserve. It acknowledged that a detailed plan for organization arrangements was presented with a timeframe to establish a management board with an associated organizational structure and an advisory board for the proposed biosphere reserve.

153. A draft biosphere reserve management plan for 2021–2025 has been developed through stakeholder meetings. The draft plan was submitted as an annex of the nomination dossier. The biosphere reserve management plan will be consistent and integrated with the conservation and development plan of Nui Chua National Park (2013–2020) and the socio-economic development Masterplan of Ninh Thuan Province (up to 2020). The Advisory Committee noted that the draft biosphere reserve management plan was well structured and produced with the close involvement of stakeholders.
154. The Advisory Committee observed that the Ninh Thuan Province has expressed a keen interest in and plans to develop energy facilities such as wind turbines, solar farms and pumped storage hydroelectric plants. In this regard, the Advisory Committee highly recommends that, if the construction of the energy facilities and plants are planned in or close to the proposed site, steps should be taken by the nominating authorities to prevent or address any possible conflicts with or negative impacts to the ecosystem conservation (e.g. environmental impact assessments).
155. The Committee also recommended an assessment of tourism carrying capacity in the core areas, where the number of visitors has increased significantly, and the development of necessary measures to ensure the operation of sustainable tourism.
156. The Advisory Committee commended the national authorities for this nomination and recommended that the site **be approved**.
157. **Uvs Lake Depression (Mongolia/Russian Federation)**. The Advisory Committee welcomed this joint transboundary proposal from Mongolia and the Russian Federation.
158. The proposed transboundary biosphere reserve (TBR) in Mongolia and Russian Federation links the two existing biosphere reserves designated in 1997, which represent major biomes of eastern Eurasia, and additional neighbouring protected areas as follows:
 - on the Mongolian side, the Uvs Nuur Basin Biosphere Reserve, consisted of four State Protected Areas (SPA) (Uvs Nuur, Altan Els, Tsagaan Shuvuut and Turgen Uul), and the Tesiin Gol Nature Reserve are included in the proposed TBR; and
 - on the Russian side, the proposed TBR includes the Ubsunorskaya Kotlovina Biosphere Reserve, which contains five Zapovedniks (Uvs- Nuur, Mongun Taiga, Oruku-Shynaa, Aryskannyg, Yamaalyg) and two additional Zapovedniks of Ular and Tsugeer Els.
159. The Uvs Lake Depression is a core area of the Altay Sayan Eco-Region and one of the Global 200 Eco-Regions, whose intact natural conditions are relatively well preserved and support over 90% of important ecosystems and biodiversity on the planet. These

- areas are also vital for natural and environmental conservation (according to the description in the Russian legal documents), while the uniqueness of the basin and the diversity of natural zones within a limited small area enhances their rarity.
160. The core areas of the proposed TBR cover 125,893.09 ha. Their purpose is to protect the core habitat or breeding sites of Argali sheep, Snow leopard, Ibex, other mammals and migratory birds from humans and domestic livestock disturbance.
 161. The total size of the buffer zones for the proposed TBR is 1,115,880.41 ha, and incorporates the buffer zones of the Russian side and the protection and limited use zones of the Mongolian protected areas. These zones function as the main distribution areas for Argali sheep and Snow leopards, water sources, and important distribution areas for other endangered fauna and flora.
 162. The transition area covers 1,000,339.2 ha and provides potential habitats and corridors for endangered species.
 163. The coordinating body of the proposed Uvs Lake Depression TBR is the Mongolia-Russian Joint Commission for the Transboundary Protected Area (TBPA), which was established by decrees of the relevant ministries of both countries based on an intergovernmental agreement signed by Mongolia and the Russian Federation on 31 May 2011. The Joint Commission will be responsible for all management issues.
 164. The Advisory Committee noted that the joint management plan for the Uvs Lake Depression TBPA (2018–2022) was developed based on implementation results from the first joint management plan (2010–2015) and research and monitoring conducted in the region. The Committee also noted that communication strategy and activities form part of the joint management plan for the Uvs Lake Depression TBPA.
 165. The Advisory Committee further noted that the management plan of the proposed TBR is based on seven strategic objectives. For each strategic objective, specific goals are formulated linked to a list of activities. However, the Advisory Committee noted the absence of actions contributing directly to the strengthening of nomadic ways of life. Actions related to better integration of pastoralism would help fulfil the development function of the proposed TBR.
 166. The Committee welcomed the vision of the management plan, which states that the proposed TBR is ‘to become a model region for cooperation between the two countries and for sustainable development, where ecosystem biodiversity is protected and historical and cultural heritage is preserved’.
 167. The Committee commended the participatory nature of the joint nomination process, which involved a number of workshops and meetings, and acknowledged the long-term efforts of both countries to promote and foster transboundary nature conservation.
 168. The Committee also noted that due to COVID-19-related limitations stakeholders have interacted mainly through online media since the beginning of 2020.

169. The Advisory Committee commended the national authorities for the high quality of their proposal and recommended that the Uvs Lake Depression Transboundary Biosphere Reserve **be approved**.
170. The Advisory Committee further encouraged the Mongolian and Russian authorities to develop and implement activities to enhance fulfilment of the development function of the proposed TBR.
171. **Five-country Biosphere Reserve Mura-Drava-Danube (Republic of Croatia, Hungary, Republic of Serbia, Republic of Slovenia, Republic of Austria)**. The Advisory Committee welcomed this transboundary biosphere reserve, the first to connect five countries.
172. The proposed five-country Transboundary Biosphere Reserve Mura- Drava-Danube (TBR MDD) comprises five individual biosphere reserves: the Mura-Drava-Danube Transboundary Biosphere Reserve (Republic of Croatia and Hungary), the Bačko Podunavlje Biosphere Reserve (Republic of Serbia), the Mura River Biosphere Reserve (Republic of Slovenia) and the Lower Mura Valley (Republic of Austria). The proposed TBR covers a total surface of 931,820 ha.
173. The area encompasses the largest and best preserved natural river system in Central Europe. Accounting for a substantial share of the European Green Belt, the Mura, Drava and Danube Rivers (MDD) form an approximately 600-km long, dynamic and interconnected lifeline through the Danube Basin. A coherent network of 13 major protected areas, with different protection status along the rivers, highlights the ecological values of the MDD and accounts for around 2.5% of the total Natura 2000 area of the five countries.
174. Comprising nearly 1,000,000 ha and stretching 700 km, the proposed TBR MDD forms Europe's largest coherent and dynamic river ecosystem. The proposed TBR acts as a backbone for the survival of representative habitats and species, while the wise use of its ecosystem services significantly benefit local populations. By 'thinking globally and acting locally', the States Parties jointly strive for harmonized management of the proposed TBR, creating a best practice model for international cooperation for river basin management. The TBR MDD is based on mutual trust and collaboration among all State Parties and the cross-sectoral participation of all relevant stakeholders and local communities. With respect to the historic dimensions of the region, the proposed TBR is also designed to build bridges between people and nature. Multiculturality is also a unique value of the proposed TBR MDD, which as the world's first five-country biosphere reserve, would function as a symbol of unity.
175. The joint mission of the proposed TBR MDD is the conservation, restoration and wise use of the Mura, Drava and Danube Rivers and their ecosystems.
176. The Advisory Committee welcomed the comprehensive proposal for a five-country TBR and recommended that the site **be approved**.

NEW NOMINATIONS RECOMMENDED FOR APPROVAL PENDING THE SUBMISSION OF SPECIFIC INFORMATION

177. **Penang Hill (Malaysia).** The Advisory Committee welcomed this new proposal from Malaysia. The Committee noted that the nomination was first proposed in 2016 by Habitat Penang Hill, a private company that operates an ecotourism business, in close collaboration with the Penang State Government. The State Government subsequently appointed the Penang Hill Corporation (PHC) to take charge of the nomination project on behalf of the State Government.
178. Penang is one of the most popular tourist destinations in Malaysia and the proposed site with its many natural, historical and cultural attractions is one of the favourite spots. Traditional economic activities based around small-scale agriculture and artisanal fishing also take place in the area.
179. The Penang Hill complex (Penang Hill, in short) consists of a series of narrow, branched and steep-sided ridges with several subsidiary tops, comprising several hills, namely Laksamana Hill, Tiger Hill, Government Hill, Flagstaff Hill (the highest peak, 833 m) and Western Hill. The relief ranges from a complex in the high mountainous area in the northern, central and southern parts of Penang Island, to low-lying and flatland areas in the eastern and western parts. Penang Island also presents a mosaic of urban, agricultural and natural landscapes, including terrestrial and marine habitats.
180. The proposed site includes virgin evergreen lowland and hill dipterocarp rainforests surrounded by community farmlands that cultivate vegetables and spices, orchards, and marine areas that permit low-impact artisanal fishing activities.
181. The core areas cover 6,304 ha and consist of four main regions: Penang National Park (terrestrial and marine), six Permanent Forest Reserves, and several water catchment areas and dams. All the core areas are governed and legally protected as national parks and permanent forest reserves.
182. The terrestrial buffer zone takes the form of 50 m-wide strips within the protected areas along the boundary of the terrestrial core area. The marine buffer zone covers 0.5 nautical miles (around 926 m) outside the boundary of the marine core area. The total area of the buffer zones is 2,213 ha, accounting for 526 ha of the terrestrial part and 1,687 ha of the marine part of the area. The legal status of the buffer zones is based on the core areas that lie within. The transition areas occupy mostly the water catchment area and 0.5 nautical miles (around 926 m) outside the marine buffer zone. In 2016, a Special Area Plan for Penang Hill (SAP) was established as a unique tourism destination and sustainable hill settlement in a south-eastern part of the transition area (468.38 ha).
183. The Advisory Committee noted that the proposed buffer zones, especially the terrestrial ones in 50 m-wide strips, are not distinct from the adjacent core areas in terms of

- applied legal and management system and activities, and are not considered sufficiently large to function properly as a buffer zone of the biosphere reserve.
184. The Advisory Committee also pointed out that the iconic Penang Hill (Flagstaff Hill) attracts more than 1.6 million visitors a year, who arrive mostly by funicular train. From 2015 to 2017, on average, Penang Botanic Gardens received about 700,000 visitors per year, while Penang National Park received more than 100,000 visitors annually.
 185. Preparation of the Penang Hill Biosphere Reserve Action Plan is underway and the nomination form and additional information include a detailed outline and description of the process. The plan will be developed within a year following designation of the biosphere reserve and will be reviewed three years after initial implementation and thereafter every five years.
 186. The Advisory Committee acknowledged the long history of diverse and rich ecosystem research and a strong public–private partnership for conservation and development of the proposed site including the biosphere reserve nomination.
 187. The Advisory Committee therefore recommended that the site **be approved pending** the submission of the following information by 30 May 2021:
 - the steps to be taken to enlarge the terrestrial buffer zones and a timeframe;
 - detailed information regarding the legal or managerial basis of the marine buffer and transition areas, and the process to ensure consistency with the fisheries zoning system of the Department of Fisheries of Malaysia, which designates all areas within 5 nautical miles of the shoreline as Zone A for traditional fishing gear operated by traditional fishers;
 - a plan to integrate settlements in the Teluk Bahang, located between Penang National Park and Teluk Bahang Forest Reserve, where local residents undertake fishing activities, work as tour guides, and operate traditional food stalls and restaurants relying on the natural resources within the proposed site;
 - correct figures for zone sizes which are inconsistent across the nomination dossier; and
 - a corrected electronic version of the nomination form.
 188. **Mountain Great Bogdo (Russian Federation).** The Advisory Committee welcomed this proposal submitted by the Russian Federation.
 189. The proposed biosphere reserve is located in the north-east of the Astrakhan region, near the border with Volgograd and the Republic of Kazakhstan, and in the south-east of the East European Plain within the desert- steppe zone, in the Lower Volga provinces. The territory forms part of a semi- desert landscape zone. The proposed biosphere reserve has a total area of about 60,423 ha, comprising a core area of 6,819 ha, a buffer zone of 12,734 ha and a transition area of 40,860 ha, and includes the Bogdinsko-Baskunchasky Strict Nature Reserve, Lake Baskunchak and other unique land forms of archaeological significance. It is crossed by several bird migratory routes which are protected under the Ramsar Convention and is home to 230 species of birds from 51

- families including 96 passerine species, as well as 12 species of reptiles, over 160 taxa of insects and 113 species of arachnids.
190. The population of the transition area with 823 inhabitants is multinational in composition with Russians, Kazakhs, Ukrainians, Chechens, Tatars, Koreans, Azerbaijanis and other peoples. The permanent population traditionally engages in agriculture and animal husbandry. The main economic sectors are agriculture including the traditional and medicinal use of natural resources, recreation, nature conservation, and scientific and educational activities.
 191. The vast territory of the buffer zone and transition area creates a favourable situation for improving the socio-economic living conditions of the local population based on the preservation and development of traditional, environmentally friendly forms of management (horse breeding, agriculture, handicrafts) as well as tourism services. The relevance of Lake Baskunchak as the main salt supplier in the country since 1861 is also notable.
 192. The Advisory Committee noted that although the population table indicates that the buffer zone is uninhabited, the descriptive text accompanying the zonation gives a population of 200. The Advisory Committee appreciated the establishment of the Scientific and Technical Council and noted that the management plan, although not provided, is due to be finalized following approval of the biosphere reserve.
 193. The Advisory Committee recommended that the site be **approved pending the** submission of the following information by 30 May 2021:
 - a draft management plan/policy or detailed framework for the plan and evidence that it has been designed in a participatory manner; and
 - clarification regarding the exact size of the human population in the buffer zone.
 194. **Lower Amudarya State (Uzbekistan).** The Advisory Committee welcomed this proposal and commended the Uzbekistan authorities on their efforts to nominate the second biosphere reserve in the country.
 195. The proposed Lower Amudarya State Biosphere Reserve (LABR) is located in the northern part of the lower reaches of the River Amudarya about 220 km southeast of the former coast of the Aral Sea. The physio-geographical features of the lower reaches of Amudarya differ significantly from the surrounding sandy and stony deserts. Administratively, the site covers the Amudarya and Beruniy districts of the Republic of Karakalpakstan.
 196. The proposed site is one of the largest areas of natural Tugai in Central Asia which, from a global perspective, is a unique and threatened ecosystem. The area provides an important habitat for plant and animal life and contains the highest biodiversity in the desert regions of Central Asia. The core areas also function as a protected environment for Bukhara Deer (*Cervus hanglu bactrianus*), a threatened species whose natural habitat is the riparian forests of Central Asia.

197. The main objectives of the proposed biosphere reserve are to conserve and restore the natural landscapes, animal and plant species of Tugai forests, including those that are rare and endangered, as well as other natural objects and complexes characteristic of the riparian forests of Central Asia; to enhance its environmental status; to ensure the sustainable use of natural resources and the social well-being of people; to study natural processes; and to facilitate the development of ecological education, teaching and training.
198. The total size of the proposed site is 68,717.8 ha. The core areas (11,568.3 ha) have a strict protection regime and their main function is the preservation of Tugai forests and associated natural objects and complexes of the proposed biosphere reserve.
199. The buffer zones (6,731.4 ha) include forest areas and ecological corridors. Sustainable agricultural activities, the collection of medicinal and food/vegetable plants, the construction of certain types of building, recreation and eco-tourism, and other activities that fulfil development and logistical functions, are permitted in these zones.
200. The transition area (50,418.1 ha) is designated for the sustainable use of natural resources and includes agricultural lands, settlements and industry. In addition, experimental sites for testing sustainable technologies, as well as demonstration sites for sustainable land use fulfilling logistical support functions, are permitted.
201. The population of the LABR numbers 107,513. The core areas are uninhabited, and there are 34,950 permanent inhabitants in buffer zones and 72,463 in the transition areas. The Advisory Committee noted that the buffer zones are quite densely inhabited.
202. The LABR management plan (2021–2025), which is legally binding upon approval of the biosphere reserve, has been elaborated based on a review of previous management, as well as recent information including various reports and assessments (e.g. on Ecosystem Services) produced by organizations and projects operating in the area of the LABR.
203. The proposed Lower Amudarya Biosphere Reserve (LABR) is a state property and will be managed by a governmental authority.
204. A Coordinating Council has been established to ensure stakeholder involvement and participation in the design and carrying out of the functions of the biosphere reserve. In addition, a Commission composed of public representatives has been created by the management of the proposed BR and the *Khokims* (local governor/community leaders) of the transition areas in order to ensure public involvement in the activities of the LABR. The commission is equipped with the authority to participate in solving issues related to improvement of protection and development activities in the biosphere reserve. Public commissions, the LABR management and local government authorities (regional and district *Khokims*) developed a programme and monitor its implementation with a view to implementation of Uzbekistan's national Biodiversity Conservation Strategy for the period 2019–2028.

205. The Advisory Committee acknowledged the strong quality of the proposal. However, it noted that certain points concerning zonation remain unclear. According to the zonation map, the core area is not consistently surrounded by a buffer zone for its protection.
206. Therefore, the Advisory Committee recommended that the site **be approved pending** the submission of the following information by 30 May 2021:
- confirmation that the core areas are surrounded by buffer zones sufficient to ensure protection and a revised zonation map accordingly; and
 - clarification on the comparatively dense population in the buffer zones.

New nominations recommended for deferral

207. **Visherskiy Ural (Russian Federation).** The Advisory Committee welcomed this proposal submitted by the Russian Federation.
208. The territory of the proposed biosphere reserve is located in the extreme northeast of the Kama region, in the upper reaches of the River Vishera on the western slope of the northern Urals mountains. In terms of relief, the proposed site is divided into two sections: the western end is hilly, while the eastern end is mountainous. The overall territory occupies a total area of 600 008 ha.
209. The total population amounts to only 150 people, representing the lowest level of population density in the region at less than 0.01 people/ km². The centre of the settlement is Wels village, which was founded more than 100 years ago in connection with the construction of an iron smelter. The national composition of the territory is diverse with more than ten nationalities, including the indigenous small ethnic group of the north, the Mansi, while Russians are dominant (about 90%). Ethnic groups have largely preserved their cultural traditions (including handicrafts, folklore and other forms of creativity), and celebrate national and religious (Orthodox) holidays. The population residing permanently in the transition area engages in agriculture (farming, cattle breeding), seasonal hunting, fishing and gathering (nuts, mushrooms, berries). A large proportion of the population participates in the organization of green (village) tourism.
210. The main purpose of the proposed biosphere reserve is to maintain a stable equilibrium between three important objectives: the conservation of biological diversity, the promotion of economic development, and the safeguarding of local cultural and historic values. The proposed site intends to become an environmental, socio-economic and cultural-educational centre promoting the development of new sustainable activities, restoring the culture of the native inhabitants of the Northern Ural, attracting additional funds to the regional economy, and improving the overall investment climate.
211. The Advisory Committee noted that the zonation does not meet the criteria, specifically with the absence of buffer zones in the north and east and other inconsistent elements as shown in the submitted maps. In addition, the Advisory Committee noted that the number of residents is very small and questioned whether the development function could be fulfilled properly. The Committee also highlighted the age of the management

- plan, which dates from the 1990s, and the lack of information on funding and a participatory approach.
212. The Advisory Committee therefore recommended that the proposal be deferred.
213. **Lower Zambesi Escarpment (Zambia) – resubmission.** The Advisory Committee congratulated the national authorities on their continued efforts to nominate the first biosphere reserve in the country.
214. With a total area of 7,406,383.49 ha, the proposed biosphere reserve has a core area of 281,541.37 ha, a buffer zone of 4,924,253.34 ha and a transition area of 2,200,588.78 ha. The core area, which includes the Lower Zambesi National Park and the confluence of the Chongwe and Chidulwe Rivers, has a unique aquatic ecosystem emanating from drainage of the area by the Chikongwe, Zambesi, Chindulwe, Mwambashi Nyampande and Ckakwenga Rivers.
215. The site includes the Zambia-Zimbabwe international border and a Transfrontier Conservation Area including the Mana Pools World Heritage Site of Zimbabwe, which also forms part of the Middle Zambezi Biosphere Reserve. The buffer zone consists of the Luano, Chiawa, Rufunsa and West Petauke Game Management Areas (GMAs). The area has a total population of nearly 1.8 million, whose main economic activities are the subsistence farming of cereals, vegetables and spices, fishing, apiculture and aquaculture.
216. The Advisory Committee appreciated the cultural diversity (17 ethnic groups) as well as biological diversity of the area and the extensive consultations undertaken by the authorities in response to previous comments on the nomination dossier made by the Advisory Committee in 2019, with particular reference to re-zoning of the proposed site and placement of the proposed copper mining concession in the transition area, the proposal by Mwembeshi Resources Limited to establish an environment fund to support biodiversity conservation in the area, and the provision of infrastructural development to communities.
217. The Advisory Committee noted that the General Management Plan of the National Park acknowledged the high possibility of exploitation of minerals. The Advisory Committee observed that the letter from the Mining Cadastral Department dated September 2020 indicated that the Ministry of Mines cannot deny the renewed intention on the part of Mwembeshi Resources Limited to undertake proposed copper mining for a period of 25 years in accordance with what has been granted by the government in 2011. However, prior approval of an updated environmental impact assessment (EIA) by the Zambia Environmental Management Authority is required before exploitation can start.
218. With due consideration of the need to promote transboundary cooperation between the two countries through the Transfrontier Conservation Area and the potentially significant impact of mine development on the ecological integrity and Outstanding Universal Value of the Mana Pools World Heritage Site, the Advisory Committee reaffirmed the requirement for biosphere reserves to be sites of excellence, upholding

all conservation and development principles to help countries attain sustainable development.

219. The Advisory Committee observed that the proposed copper mine in the National Park impinges on sections of the buffer and transition areas, which are covered by National Park status and regulation, in contravention of provisions of IUCN Category II for Protected Areas. The Advisory Committee therefore requested that official information be sent to the MAB Secretariat, in due course, to confirm that the section of the National Park to be mined has been re- categorized under IUCN Category VI, which allows for resource exploitation.
220. The Advisory Committee recommended that the proposal **be deferred** and requested that the MAB Secretariat liaise with the national authorities in order to organize a technical field visit to the proposed site to meet key stakeholders, ascertain the critical information and provide any necessary support prior to resubmission of the nomination.

EXTENSION, RE-ZONING OR RENAMING OF EXISTING BIOSPHERE RESERVES RECOMMENDED FOR APPROVAL

221. **Lauca Biosphere Reserve (Chile).** The site is participating in the 'Process of Excellence and Enhancement of the WNBR'. The Advisory Committee welcomed the proposal for the extension of the Lauca Biosphere Reserve, established in 1981.
222. The proposal intends to extend the current total area from 358,000 ha to 1,026,567 ha by adding new buffer zones and transition areas, which would cover the communes of General Lagos, Putre and Camarones located to the northeast of Chile on the borders with Bolivia and Peru. After the extension, the biosphere reserve would comprise a core area of 137,883 ha, a buffer zone of 395,045 ha and a transition area of 493,639 ha.
223. The altitudinal range of the territory spans 2,800 m to 6,343 m above mean sea level, and includes three climate zones – arid (BWH), semi-arid (BSH) and ice cap (EF) -, according to the Köppen-Geiger climate classification. The topography is shaped by volcanoes and wetlands with bushlands and mountainous meadows. The Tropical Andes Biodiversity Hotspot extends through the territory designated for the biosphere reserve. This area is the most diverse and ecologically rich region of the biosphere reserve, making it a landmark and priority for conservation.
224. Approximately one-third of Chilean fauna is present in the region. Lauca also provides a habitat for endemic species and priority species for conservation. Due to the high ecological value of the region, a RAMSAR site and three national Wildlife Protected Areas are already located within the existing biosphere reserve.
225. The extended biosphere reserve would be home to a population of 4,734 permanent and 130 seasonal residents. This population includes 50 indigenous families and communities distributed among the three communes. Presently, the main languages spoken in Lauca are traditional Aymara and Chilean Spanish. According to national legislation, the region is classified as an Area for Indigenous Development. This status seeks to protect and strengthen the development and respect of indigenous peoples,

- their cultures, families and communities. The main socio-economic activities are undertaken by indigenous groups in the existing biosphere reserve, and consist mostly of camelid husbandry and agriculture. In addition, mining and renewable energy activities are undertaken in the transition area, while tourism is present throughout the three zones.
226. The extension of the biosphere reserve would provide the region and its communities with an opportunity to expand strong dialogue efforts and further share Indigenous knowledge.
227. The Advisory Committee congratulated the national and local authorities on their efforts to comply with the Statutory Framework of the WNBR, and the administration of the biosphere reserve for the establishment of a public–private management committee. The Advisory Committee welcomed the strong participation of the indigenous community in managing the biosphere reserve, which is fundamental to its successful implementation. The Committee also welcomed the two-year management plan, which, although short-term in conception, respects the worldview of the indigenous population.
228. The Advisory Committee therefore recommended that the requested extension of the biosphere reserve be **approved**.
229. The Advisory Committee also recommended:
- to set a long-term objective beyond the current two-year management plan in order to ensure the future effectiveness of the reserve, especially taking into consideration the mobilization of necessary funds;
 - to explore partnerships with other biosphere reserves involving indigenous peoples in their management system, in order to share best practices and lessons learnt; and
 - to coordinate with Bolivian counterparts to foster synergies and/or joint work agreements, in consideration of the shared border with Bolivia.
230. **Appennino Tosco Emiliano Biosphere reserve (Italy) — extension.** The Advisory Committee welcomed the proposal for extension of the Appennino Tosco Emiliano Biosphere Reserve.
231. The proposal encompasses a total of 498,613 ha, representing an increase of 275,384 ha since the initial designation in 2015, and includes 80 municipalities spread over 6 provinces: Modena, Parma, Reggio Emilia in the Emilian part, Lucca and Massa Carrara in Tuscany, and La Spezia in Liguria.
232. The permanent population amounts to about 378,424 inhabitants, with an increase of 277,124 permanent inhabitants since designation.
233. At least 122 species of birds, amphibians, fish and invertebrates of community conservation interest are found in the proposed site. The site's location on a climatic boundary further provides great floristic biodiversity, with at least 260 species of aquatic and terrestrial plants of community and regional conservation interest.

234. The land is predominantly used for agriculture (fodder, pasture, chestnut groves, olive groves, vineyards, grain), but tree-felling for the production of firewood is also widespread. Traditional practices such as hunting, fishing and mushroom picking, which were once a key part of the livelihoods of the local people, are now relevant predominantly in terms of cultural heritage and recreation and are widespread throughout the territory.
235. The process for extension application aimed to bring about an increase in cultural development and awareness, with a view to encouraging local communities to recognize the value of ecosystem services, of which they are the primary beneficiaries, and therefore to invest in motivating and training people, particularly youth. The aim was not solely to encourage them to remain in the territory, but also to provide opportunities – within broader cultural, educational and economic circuits – that would function as a lever for investments in the conservation and development of ecosystem services arising from the reserve.
236. The Appennino Tosco-Emiliano National Park would perform the functions of Coordination and Secretariat of the biosphere reserve, supporting the Management Committee and the Permanent Consultative Assembly, which are the main decision-making bodies for all matters regarding management of the biosphere reserve.
237. The Advisory Committee welcomed the high-quality proposal and congratulated the authorities on the quality of their work. It noted with satisfaction that the 2015 designation set a new goal to embrace a larger area and involve more local communities in living in harmony with nature. The Advisory Committee concluded that the site meets the criteria and recommended that the extension **be approved**.