



中国自然科学博物馆学会

CHINESE ASSOCIATION OF NATURAL SCIENCE MUSEUMS

CANSM Work Report

(2018-2023)

on the Implementation of the
CANSM-UNESCO Letter of Agreement (Ref.: SC/PCB/2018/59)

02/03/2023

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Prepared and edited by the Secretariat of
the Chinese Association of Natural Science Museums (CANSM)

March 2nd, 2023

With a view to pulling together key stakeholders of society to contribute towards the realization of the UN Sustainable Development Goals, as well as the fulfillment of UNESCO's overarching objectives and priorities; considering CANSM's long-term consistency in supporting such strategic objectives and its sincere intentions to contribute to such priorities; given both organizations' endorsement of the concepts of co-construction and sharing as enshrined in the Belt and Road Initiative (BRI), particularly in terms of science communication and the development of science centers and science museums, CANSM entered into a Letter of Agreement (LOA) with UNESCO on June 24, 2018 at the initiation of the latter.



The signing ceremony of the Letter of Agreement between CANSM and UNESCO

Under the framework of the LOA, CANSM has faithfully fulfilled its obligations over the past five years by actively responding to and widely mobilizing its member institutions to participate in and support those ad hoc events initiated by UNESCO, and vigorously promoting bilateral and multilateral international cooperation and exchanges centering closely on the agreed areas of cooperation.

All these efforts have achieved fruitful and down-to-earth results, thus enhancing the sense of gain of all parties involved and winning their hearts and mind.

By virtue of the International Symposium on the Development of Natural Science Museums under the Belt and Road Initiative (BRISMIS), a multi-dimensional win-win cooperation platform highly recognized by UNESCO and included in the LOA, CANSM has continuously promoted pragmatic cooperation and positive interactions among various natural science museums in UNESCO's member states, especially in the BRI-partnered countries, over the past five years, thus realizing reciprocation and sharing of popular science public services, popular science resources and exhibition & educational resources on an international scale. Through these efforts, greater people-to-people bonds within the natural science museum community along the routes of the BRI have been formed, and the cooperative relationship between CANSM and UNESCO has been consolidated and deepened as well.

Looking back on the past five years, we have, by focusing on "the Four Pillars" as stipulated in the LOA, implemented the following projects and activities:



I. Actively organizing and carrying out ad hoc events to promote natural science museums as platforms to communicate the UN SDGs

i. Mobilizing its member institutions and natural science museums involved in BRI to actively participate in the event of "World Science Day for Peace and Development"

On November 6, 2020, CANSM was invited to participate in the online roundtable conference of UNESCO "World Science Day for Peace and Development 2020". Dr. Cheng Donghong, president of CANSM, was invited to record a video presentation for the official website of UNESCO, which raised the awareness among natural science museums of the pivotal role of science in achieving the UN SDGs.

VIDEO MESSAGES



Dr Fabiola Gianotti, Director-General of CERN



Mathieu Denis, Science Director, International Science Council (ISC)



Dr Fernanda Belgel (CONICET)



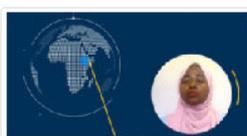
Dr Hayat Sindi, UNESCO Goodwill ambassador



Elena Rovenskaya, International Institute for Applied Systems Analysis (IIASA)



Dr Cheng Donghong, Chinese Association of Natural Science Museums (CANSM)



Dr Habiba Gashaw, Youth and Cultural Development Foundation (YCDF)

Video presentation by Dr. Cheng Donghong published on the official website of UNESCO

In 2022, CANSM mobilized its members and BRI-partnered science museums to participate in the webinar of "World Science Day for Peace and Development", where, by focusing on the theme of "Basic Sciences for Sustainable Development", professionals from natural science museums shared insights into issues related to the key role of science in promoting sustainable development with experts and scholars from different fields of basic sciences throughout the world.



ii. Encouraging its member institutions to conduct international exchanges and cooperation surrounding the UN SDGs

During the period from 2020 to 2022, the National Marine Museum of China and the China-ASEAN Center held consecutively three rounds of "Learning about the Oceans" Student Film Competition in celebration of the World Ocean Day, attracting active participations of young people from China and ASEAN countries, and widely stimulating innovation and creative enthusiasm among participating students. More than 700 students took part in the first two rounds of competition and 428 valid entry films/videos were collected. This event greatly strengthened the awareness of protecting the marine environment and participating in marine development among China-ASEAN young students, improved the scientific literacy of the students, and injected new vitality into the spread of marine culture, promotion of marine exchanges, and advocacy of marine cooperation.



2021 China-ASEAN "Learning about the Oceans" Student Film Competition Award Ceremony



The Opening Ceremony of the exhibition Ocean – Diving into the Unknown at the Dalian Museum of Natural History

CANSM encourages its member institutions to participate in the "Month of Sino-French Environment Protection" organized on annual basis. In collaboration with the French Embassy in Beijing, such exhibitions as Ocean – Diving into the Unknown, Fertile Soil and Secret Lives, Insects to Save the Earth, Swimming in the World of Coral Reefs and Water, the Core of Science have been presented at the Dalian Museum of Natural History, Chongqing Museum of Natural History, Sichuan Science and Technology Museum, Beijing Museum of Natural History, Kunming Natural History Museum of Zoology, the Geological Museum of China, Tianjin Museum of Natural History, China Science and Technology Museum (CSTM) and other CANSM member institutions. Through such collaborations, the relationships between CANSM's member institutions on one side and the French Embassy in Beijing and relevant institutions in France on the other side have been deepened, which helps boost cooperation between China and France in promoting the UN SDGs.



The exhibition Fertile Soil and Secret Lives being staged at the Geological Museum of China



The exhibition Insects to Save the Earth being presented at Beijing Museum of Natural History



The 4D popular science movie Panda Roller-Journey to New Home presented in the National Science Museum, Thailand

CANSM supports its member institutions in conducting exchanges and sharing on related science popularization activities and resources. In September 2018, the Beijing Museum of Natural History held an educational course on the knowledge of giant panda entitled National Treasure Archives at the Carnegie Museum of Natural History (CMNH) in the United States. The director of CMNH, several members of the board of directors, as well as dozens of scientific research and education personnel participated in the observation and exchanges to learn about new approaches to implementing public science education.

The 4D popular science movie Panda Roller-Journey to New Home produced by Shanghai Science and Technology Museum were presented at four international natural science museums, including the National Science Museum, Thailand (NSM), Tech Dome Penang, Malaysia, Children's Science Centre Kenya, and Bibliotheca Alexandrina Planetarium, Egypt. In the form of animation, the film tells the story of the giant panda, the national treasure of China, which has gone through all the hardships to find new bamboo forests. While spreading the concept of ecological civilization and conservation of nature, it also carries forward the cross-cultural positive energy such as "justice, kindness, friendship, and maternal love". During the screening at the National Science and Technology Festival of Thailand, the film became a hit and won the praise of the Thai prime minister. When BRISMIS 2019 was convened in Beijing, major international science centers/museums participating in the symposium spoke highly of the planning and production of this film.



iii. Mobilizing its member institutions to take advantage of their own resources to carry out various forms of quality popular science educational programs highlighting the UN SDGs

Access to high-quality education is fundamental to improving people's lives and achieving sustainable development.

CANSM regards it as an important mission to support inclusive and fair high-quality popular science education and to promote natural science museums as places of lifelong learning for all.

Each year CANSM supports its sub-organizations in mobilizing their member institutions to carry out themed science popularization events to celebrate World Health Day, the International Day for Biological Diversity, World Environment Day, and the International Day for Disaster Risk Reduction, etc., with a view to furthering the public's understanding and awareness of the UN SDGs through quality popular science education.



The Exhibition "I Need You to Recycle" being presented at the National Wetland Museum of China

In April 2019, CANSM supported the Specialized Committee of Wetland Museums and Nature Reserves in planning and launching the Exhibition "I Need You to Recycle" to celebrate the World Earth Day. Joyce Msuya, Assistant Secretary-General of the United Nations and Deputy Executive Director for the United Nations Environment Program (UNEP), led an inspection delegation to visit this exhibition during the World Environment Day in June and participated in the interactive experiences. In the same year, CANSM also supported the Specialized Committee of Geoscience Museums in successfully holding the Popular Science Seminar on Natural Resources and Geoscience, and organized a series of events such as the "Geoscience Knowledge Competition" during the World Earth Day.



In 2021, Shanghai Natural History Museum, together with a total of 26 institutions including government agencies, scientific research institutes, popular science venues, primary & secondary schools and civil society organizations, jointly published the Shanghai Initiatives for Biodiversity Conservation in which an initiative concerning top-level design, systematic conservation, popular science education and talent team building was issued, calling on all sectors of society to jointly promote biodiversity conservation. In the same year, the Thematic Month on Global Biodiversity was launched at the Shanghai Natural History Museum, during which and in connection with the research programs conducted by researchers from the Shanghai Natural History Museum, the public was guided to discover, observe and record the nature like scientists, with the aim to assist scientific research on the urban wildlife diversity.

To celebrate the World Environment Day in 2022, CSTM organized the thematic event of "Low Carbon and Emission Reduction" as one of its 10 signature educational programs. CSTM, relying on its exhibits and other resource advantages, further communicated the concept of energy conservation, strengthened the awareness of ecological environmental protection among the public, and guided the public to actively participate in the development of ecological civilization through online activities, lectures by experts, popular science short videos and activities of other forms. In total, the museum carried out 49 events, serving 4.772 million visitors.



The thematic event of "Low Carbon and Emission Reduction" organized by CSTM



II. Vigorously assisting BRI countries in their development and strengthening of natural science museums

i. Collaborating with UNESCO to implement the project of providing technical assistance to the development of the National Science Center, Sri Lanka

To honor its commitment solemnly made in the LOA to support the development of natural science museums in BRI countries, under the proposal of UNESCO, CANSIM and UNESCO jointly implemented the project of providing technical assistance to the development of the National Science Center (NSC), Sri Lanka during the period from 2018 to 2019. This is the first concrete international cooperation program carried out by both parties after signing the LOA.

In order to facilitate the implementation of the project, CANSIM, by taking advantage of its enormous influence in the field of natural science museums within China and capitalizing on their rich expertise and experiences, actively mobilized Chinese science centers/museums at the national, provincial and municipal levels, of various scales, and with different characteristics and strengths, and organized them into a task force devoted to this project.

For the purpose of obtaining first-hand information about the planned project and at the invitation of the National Science Foundation (NSF) of Sri Lanka, CANSIM and UNESCO sent in the second half of August 2018 a joint fact-finding mission to Colombo where it held numerous talks and discussions with various stakeholders to learn about their needs, requirements and expectations.

While in Colombo, the delegation also visited the site of NSC and a number of science-related institutions in the adjacent area to solicitate their suggestions in connection with the NSC project. During its meetings with officials from several government departments, the delegation went to great lengths to explain to them the NSC's important role in Sri Lanka's nation building and convince them of the fact that the project is "an investment in the country's future". Seeing is believing. Officials of NSF and relevant Sri Lankan government departments were also invited to China to see with their own eyes the actual operation of science museums/centers and sense their contributions to the country's economic and social development.

Through the painstaking efforts of the CANSM-UNESCO joint working group, especially the meticulous and effective work of the task force led by CSTM, the Proposal for the Development Project of National Science Center, Sri Lanka was worked out, and on the basis of which, CANSM finally came up with and submitted to the Sri Lankan government a detailed Content Construction Planning Scheme for the National Science Centre, Sri Lanka.



The CANSM-UNESCO joint fact-finding mission meets with stakeholders of the NSC project

When accepting the Planning Scheme from CANSM President Cheng Donghong on behalf of the Sri Lankan government and under the joint witness of UNESCO's representative in Beijing, the Sri Lankan ambassador to China, and the director-general of CSTM, NSF President Azeez Mubarak said, with great emotion, that since Sri Lanka is the only country in South Asia without a science center or science museum, the technical support from CANSM in consultation with UNESCO as embodied in the Planning Scheme is of milestone significance; and it would contribute, not in a small way, to the development of science and culture in Sri Lanka. In her letter to President Cheng Donghong, Flavia Shlegel, the then UNESCO assistant director-general for natural sciences, while expressing her sincere gratitude to CANSM for its strong support for this project, also expressed the hope that "in the near future, we can provide similar assistance to other countries participating in the Belt and Road Initiative."



UNESCO/CANSM jointly hand over to the Sri Lankan Government the Content Construction Planning Scheme for the National Science Centre, Sri Lanka (Left in the back row: Dr. Karunasena Kodituwakku, Ambassador of Sri Lanka to China; left in the front row: Dr. Philippe Pypeart, Programme Specialist, Office in Beijing, UNESCO; center in the front row: Dr. Cheng Donghong, President of CANSM; right in the back row: Yin Hao, Director-General, CSTM; right in the front row: Dr. Azeez Mubarak, President of NSF of Sri Lanka)

The successful execution of the NSC project has set a good example of cooperation between CANSM and UNESCO in line with the LOA, provided a useful reference for the construction and development of natural science museums in BRI countries, and produced positive international impacts and demonstration effect. Indeed, shortly afterwards other BRI countries such as Pakistan and Azerbaijan approached CANSM and UNESCO for similar support in their development of science centers/museums.



ii. Assisting in the content development of the "Space Exploration" exhibition hall in Tech Dome Penang, Malaysia

With the help of the BRISMIS platform, CSTM and Tech Dome Penang, Malaysia signed a cooperation agreement whereby to support the content development of the "Space Exploration" exhibition hall of the Tech Dome Penang. On August 4, 2018, the "Space Exploration" exhibition hall, featuring six pieces of aerospace-themed exhibits designed and produced by CSTM, was officially opened to the public of Malaysia. The cooperation helped promote the interconnectivity and resource sharing among popular science venues in China and Malaysia, resulting in win-win development of science communication and natural science museums in both countries.



The Exhibits developed by CSTM being presented in the "Space Exploration" exhibition hall of the Tech Dome Penang



iii. Supporting the "go global" endeavor of the "China Mobile Science and Technology Museum" program

Featuring reduced-scale interactive science exhibits, the "China Mobile Science and Technology Museum" program is a brand program of science communication for public good developed by China Association for Science and Technology (CAST) years ago in order to promote equal access to and universal benefits of the nationwide science popularization public service, as well as to improve the scientific literacy among the entire population. In 2018 and by utilizing the BRISMIS platform of CANSM, the exhibition under the banner of "China Mobile Science and Technology Museum" made its debut tour outside China. Since then, it has travelled to Myanmar, Cambodia, Russia and other countries. Through the reciprocal sharing of exhibition resources, mutual learning and trust with BRI countries has been enhanced, and the construction and development of natural science museums in BRI countries promoted.

The program has been well received by the general public, especially teenagers, of the recipient countries. They all agreed that this travelling exhibition program "has opened a window for young people to learn science, helped them understand in a simple way the otherwise obscure scientific knowledge, developed their interest in science, technology, engineering and mathematics (STEM), improved their scientific and technological exploration and innovation capabilities."

The "China Mobile Science and Technology Museum" exhibition in Cambodia



The "China Mobile Science and Technology Museum" exhibition in Myanmar



The "China Mobile Science and Technology Museum" exhibition in Russia



iv. Actively participating in the compilation of UNESCO's Manual for Setting up of Multifunction Science Centre and Science Museum

In June 2021, CANSM as a national organization was invited by UNESCO to participate in the program of developing a "Manual for Setting up of Multifunction Science Centre and Science Museum" (hereinafter referred to as "the Manual") along with six regional networks of science centers/museums, such as ASTC, ASPAC, Ecsite and Red-POP. CANSM President Cheng Donghong was invited to serve as a member of the Program Steering Committee, which fully reflects the importance attached by UNESCO to the development of science popularization venues in China and its acknowledgement of the past cooperation with CANSM. As one of the two global expert consultants of this program, Wang Xiaoming, vice president of CANSM and director-general of Shanghai Science and Technology Museum, presided over the compilation work of the manual.



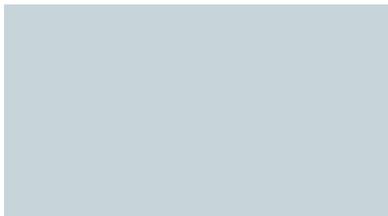
The team of Shanghai Science and Technology Museum working on the Manual

In the 74,000-word Manual, the entire development process regarding the planning, construction and operation of science center and science museum is described, the common and individual problems in the development process expounded and the key factors for the successful establishment of science centers and science museums clarified. It also puts forward guidance and suggestions on policy, finance, function, economy, society and other aspects, hence providing a holistic guidance for setting up science museums and science centers.



III. Promoting the development of non-formal education in science, technology, engineering and mathematics (STEM) through interactive exhibitions, inquiry-based science education and a variety of outreach programs

i. Supporting the work of IAU-OAE Center China-Nanjing and promoting the development of global astronomical education events



In January 2022 and with support from CANSM, the Beijing Planetarium signed a tripartite agreement with the International Astronomical Union (IAU) and the Office of Astronomy for Education (OAE) to formally establish the OAE Center China-Nanjing.

From November 15th to 17th, 2022, CANSM supported the IAU-OAE Center China-Nanjing to host the 4th Shaw-IAU Astronomy Education Workshop which, despite the impact of COVID-19 pandemic, brought together globally 856 participants engaged in astronomy education. With the theme of "Leveraging the Potential of Astronomy in School Education", the workshop highlighted the role of astronomy in primary and secondary education. In the duration of the workshop, IAU-OAE China-Nanjing also organized the "China Astronomy Education Forum" and invited six experts and teachers deeply involved in the field of astronomy education to share their experiences on the international exchange of astronomy education, the development of astronomy curriculum in primary and secondary schools, and the practices of astronomy education in primary and secondary schools and research institutions.

The event has helped build a good communication and learning platform for astronomy educators at home and abroad, and promoted the transmission and exchange of astronomy education information, while having a positive impact on international exchanges and future developments of astronomy education.





The 4th Shaw-IAU Astronomy Education Workshop- China Astronomy Education Forum



ii. Supporting the successful hosting of the Second Session of the Tiangong Class open lectures by CSTM as the main ground-based classroom

Broadcasting live from the orbiting China's Tiangong space station to Chinese students and their peers around the world, the Tiangong Class open lectures feature space science experiments carried out by its crew members which are meant to interest young viewers, spark their curiosity and lead them to a passion for science and technology. With support from CANSM, CSTM (also a designated science and innovation experience base of China's Space Station) as the main ground-based classroom successfully hosted the second session of the Tiangong Class open lectures on March 23, 2022.

Like the previous session, the second session of the open lectures was conducted in an interactive way between space and the Earth. In addition to CSTM as the main ground-based classroom, two ground-based sub-classes were also established at the No. 70 High School in Urumqi, Xinjiang and the Tibetan Museum of Natural Science respectively, with a total of 344 participating representatives of primary and secondary school students. Besides, as many as 150 physical science & technology museums, 512 mobile science & technology museum sites, 408 science wagons sites and 362 rural middle school science & technology museums also took part in this session of Tiangong Class open lectures given by three orbiting Chinese astronauts who not only demonstrated experiments but also introduced and showcased space science facilities inside the space station.



The Chinese astronauts demonstrating experiments from China Space Station

The event greatly inspired the majority of teenagers to continuously pursue their "scientific dreams" and achieve their "space dreams".

iii. Supporting the partnerships between museums and schools in their efforts to develop STEM brand educational programs



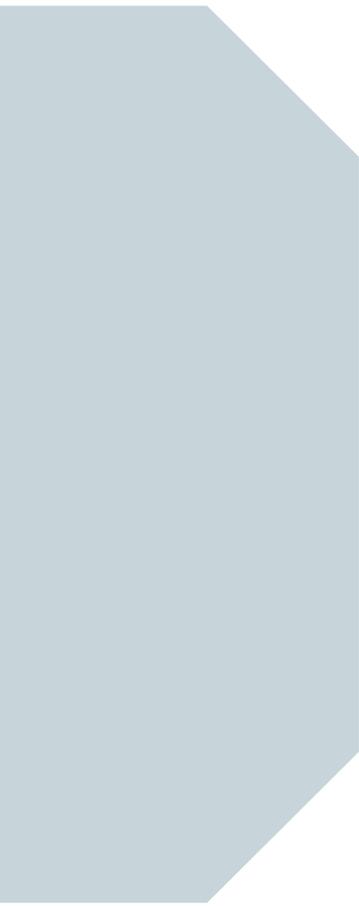
Students participating in “A Wonderful Day of STEM Learning” at Shanghai Science and Technology Museum

In line with the curriculum standards of primary and secondary school students, as well as in combination with the exhibition resources displayed at popular science venues and taking STEM education concept as the core, "A Wonderful Day of STEM Learning" is a series of brand science educational programs developed by Shanghai Science and Technology Museum with the aims to explore the organization of educational programs in the manner of project-based learning, guide students in the process of scientific inquiry, encourage students to observe, discover, explore, verify and experience independently, and cultivate students' interests and enthusiasm in exploring science. The programs encourage students to engage in learning through teamwork and in the form of project implementation, making them highly popular and welcomed among young visitors.

The "Little Postgraduates" scientific inquiry summer class is a brand educational program developed by the Beijing Museum of Natural History for upper-elementary pupils and junior middle school students. By utilizing the relatively complete time of summer vacation, children are allowed to experience the whole process of scientific inquiries in the way master and doctoral students in science & engineering do, and become "Little Postgraduates". During the complete and in-depth inquiry process, children have the opportunity to learn scientific thinking and scientific methods, cultivate their scientific spirit, and improve their ability to carry out independent inquiry and knowledge acquisition, while experiencing the hardship and fun of science research.



Students participate in "BASF Kids' Lab" in CSTM



CANSM supports its member institutions in jointly participating in the organization of brand events under the banner of "BASF Kids' Lab", a free and interactive chemistry laboratory designed for school-aged children. In 2022, CSTM, Shanghai Science and Technology Museum, and Chongqing Science and Technology Museum joined hands with BASF to launch a three-day online chemistry summer camp for the first time. Children in grades 4 to 6 from all over the country could stay at home and participated in safe and interesting chemistry courses and experiments online from August 5 to 7. Children who had successfully signed up would receive a real experiment kit, with which and coupled with daily necessities within easy reach at home, they could explore the chemical knowledge around them. Through the three-day chemistry courses and experiments, the campers accumulated chemical knowledge step by step and cultivated interests and enthusiasm for scientific exploration.





iv. Organizing natural science centers/ museums-related competitions and training courses to improve their capability to advance STEM education

On an annual basis, CANSM holds training courses for education personnel of natural science museums nationwide. Featuring themes and contents closely related to the practical needs of such personnel and the work of natural science museums, these training courses have helped improve the all-round professional level and ability of the trainees. As well, they have played a positive role in promoting the development of STEM informal education by means of interactive exhibits, inquiry-based science learning and different kinds of outreach programs.

CANSM is a strong supporter of the Specialized Committee of Science and Technology Museums and CSTM in their hosting of the National Contest of Science and Technology Museum Exhibits and the National Science Interpreter Competition. Over the years, both events have become favorable facilitators of exhibition development and education of science and technology museums, while providing strong support and guarantee for STEM education in the field.



The themed training course of Museum + School integration in science education based on the concept and practice of "STEM+" integration and innovation

CANSM has been in firm support of the Beijing Science Center and the Beijing Youth Science and Technology Center in their hosting of the themed training course of Museum + School integration in science education based on the concept and practice of "STEM+" integration and innovation, mainly targeting science teachers in Beijing primary and secondary schools. Through their participation in the trainings, these science teachers have possessed a new understanding of the new concept of science education and the Museum + School integration of science education resources, and have remarkably improved their professional skills.



IV. Promoting cooperation and exchanges among natural science museums in BRI countries, and realizing the reciprocal sharing of science popularization resources and exhibition education resources

i. Creating a platform for cooperation and exchanges among natural science museums in BRI countries--BRISMIS

Under the ultimate goal of "building a community with a shared future for mankind", China has been working to align its Belt and Road Initiative (BRI) as an accelerator for the UN 2030 Agenda for Sustainable Development. As such, the "Belt and Road Initiative" is the most frequently mentioned phrase in the LOA; and as a logical consequence, "supporting the biennial International Symposium on the Development of Natural Science Museums under the Belt and Road Initiative (BRISMIS)" becomes a key item agreed upon by UNESCO and CANSM in the LOA.

Over the years and thanks to the invaluable support of UNESCO, CANSM, which is fully committed to sharing its resources, experiences and best practices with the international big family of natural science museums, has gradually built up BRISMIS as a platform for international cooperation among natural science museums in BRI countries, resulting in a long-term mechanism for cooperation and mutual learning.



Building on the success of BRISMIS 2017, to which the headquarter of UNESCO sent its representative Dr. Yoslan Nur as a keynoter, CANSM actively followed up and promoted relevant cooperative projects, and actively promoted the implementation of the 16 bilateral cooperation agreements signed at the conference. With a view to deepening exchanges and cooperation among BRI science-related museums, CANSM successfully held two sessions of BRISMIS in October 2019 and December 2021 respectively, bringing together 561 representatives from such international organizations as UNESCO, the International Council of Museums (ICOM), and the Science Center World Summit (SCWS), as well as 213 popular science venues, government agencies and organizations in 30 countries. In order to overcome the impacts of the COVID-19 pandemic, a combination of online and offline methods was adopted for the first time for BRISMIS 2021, and the number of viewers during the live broadcast of the opening ceremony itself reached 233,000. In total, some 410,000 viewers participated in the live broadcast of the symposium. Media coverage of the event was also unprecedented. As a result, BRISMIS 2021 presented the characteristics of far-reaching influence, diverse forms of organization, and high degree of sharing; and its scope, depth and duration of influence far exceeded the previous two sessions.

The successful holding of the three symposiums has enhanced the service capability of BRISMIS as an international cooperation platform for science popularization venues in BRI countries, making it a new starting point for CANSM to promote international cooperation and shared development among science popularization venues. As one of the important achievements of BRISMIS, the Beijing Declaration formulated after full consultation has become a common consensus which unites BRI science popularization venues to work together towards the realization of the UN SDGs.



Participants of BRISMIS 2017 pose for a group photo in a visit to the Palace Museum



Dr. Yoslan Nur, UNESCO Programme Specialist working at the Division of Science Policy and Capacity Building, Natural Sciences Sector, delivers a keynote speech at BRISMIS2017



Participants attending the BRISMIS Forum during BRISMIS 2019



The opening ceremony of BRISMIS 2021

ii. Implementing the reciprocal sharing program of BRI popular science resources

To consolidate the achievements of the successive sessions of BRISMIS, CANSM, with the support of the Department of International Affairs and Liaison of CAST, spares no effort in implementing the Reciprocal Sharing Program for BRI Popular Science Resources. From its own budget, CANSM has provided funding to subsidize five of its member museums, namely CSTM, Shanghai Science and Technology Museum, the Geological Museum of China, Beijing Museum of Natural History and the Beijing Planetarium in the hope of encouraging and calling on its member institutions to actively participate in the reciprocal sharing of BRI popular science resources and expand the achievements of BRISMIS.



The signing ceremony of bilateral agreements between natural science museums or relevant institutions at the BRISMIS 2019





Poster for the BRISMIS 2021 online exhibition of popular science resources on the BRISMIS official website

Relying on the official website of BRISMIS, CANSM has collected and compiled the latest BRI cooperation policies and science museums developments, focusing on sharing quality popular science resources. Meanwhile, CANSM is also committed to pooling the science popularization strengths of its member institutions, giving full play to the advantages of the resources of its member institutions, and sharing high-quality video resources of China Digital Science and Technology Museum (CDSTM) after sorting them out and translating them into different languages. By so doing, it has, in a proactive way, helped create a reciprocal sharing platform for science popularization resources.

In order to promote mutual learning, exchanges and cooperation in the development of science popularization resources, BRISMIS 2021 launched an online exhibition showcasing high-quality science popularization resources collected and selected from BRI science-related museums. The exhibition received wide and positive response from participating museums and beyond. A total of 94 works from 10 countries and 31 science-related museums had been collected, and 10 works of different forms from different countries were selected from the collected resources for introduction and sharing at the symposium. Relevant science popularization resources have been continuously displayed and shared on the BRISMIS website.

iii. Supporting the holding of the China International Contest of Popular Science Works

In order to encourage the creation of international popular science works and promote international exchanges and cooperation in the creation and R&D of popular science works, CANSM supported the holding of China International Contest of Popular Science Works in 2018 and 2021 respectively. The first contest attracted 1,533 popular science works from 22 countries and regions, including China, the United States, Germany, Australia, Iran and Kenya, and successfully built an international exchange and cooperation platform for the practice and experience of popular science creation. The second contest attracted a total of 747 entries from 20 countries and regions including China, Russia, Germany, South Korea, the Netherlands, the United States, Japan, Thailand, Spain, Singapore, and the United Kingdom.

With a view to deepening the achievements of the contests, CANSM also provided a forum for academic exchanges during BRISMIS 2021 whereby to share creation experiences of excellent works, continue to stimulate the enthusiasm for popular science creation, facilitate closer cooperation among international natural science museums, and, above all, bring new opportunities for interflow and recovery of the science popularization undertaking under the context of the COVID-19 pandemic.



The poster for the second China International Contest of Popular Science Works



iv. Supporting capacity building for professionals of international science centers/museums in the form of training and workshop

In 2018 CANSM supported CSTM in organizing and implementing the First International Training Workshop on Capacity Building for Professionals of Science Centers and Museums (October 29-November 4, 2018) in collaboration with the Foundation for the Development of Science and Technology Museums in China (FDSTMC) and ICOM-CIMUSET, inviting expert teachers from internationally advanced science and technology museums at home and abroad as lecturers for the week-long training course. In 2019 CANSM once again rendered its support to the organization and implementation of the second workshop (November 18-25, 2019).

For the 2018 training workshop, a total of 42 students were enrolled, including 16 foreign students from 14 popular science venues in 11 countries in Asia, Africa and Latin America. This training workshop is not only the first of its kind ever held in the field of science and technology museums in the world, but also the first international exchange training for popular science venues held independently in the field of science and technology museums in China. As such, it has helped set up a platform for in-depth exchanges and cooperation between Chinese science centers/museums and their overseas counterparts. In 2019, the second training workshop brought together 39 students from 15 countries around the world, as well as 15 provinces, autonomous regions and municipalities in China. The training content focused on all aspects of STEM education in science and technology museums, including exchanges and interactions in the development and promotion of educational programs, science interpreter training, museum-school cooperation, etc. The 2019 training workshop, in particular, further promoted resources sharing among science and technology museums worldwide.

The successful conclusion of the 2018 training workshop



Students attend a group discussion session during the 2019 training workshop

Karina Yatien, international instructor of the training course and head of the Exhibition Center of Heureka, the Finnish Science Centre, wrote on the blog of the Finnish National Committee of ICOM after the conclusion of the 2018 training workshop, "Teaching helps learning. I personally learned a lot from this training course. The opportunity to interact with other teachers and students inspired me and gave me a new understanding of the methods of exhibition research and development."

v. Adopting various ways to promote exhibition cooperation and exchanges among BRI natural science museums

Through the BRISMIS platform, BRI natural science museums have signed multiple cooperation and exchange agreements on exhibition resources. CANSM member institutions are encouraged to leverage their excellent exhibition resources to carry out cooperation and exchanges with their BRI partners in line with the "going out" and "bringing in" strategy.

Following its successful debut in the Greek capital Athens which caused a sensation, in September 2018, CSTM's "Ancient Chinese Science and Technology Exhibition" began its tour in Thessaloniki, the second largest city in Greece. In return, the "Ancient Greek Science, Art and Technology Exhibition" from Greece was also opened at CSTM. The two exhibitions welcomed some 147,000 and 132,000 visitors respectively. Dr. Paul Firos, founder of the Museum Herakleidon in Greece, said that through the exchange of exhibitions, the people of the two countries had a better understanding of the past and present achievements of the two ancient civilizations, and the friendship between the two countries had been substantially enhanced.



The debut of the "Ancient Chinese Science and Technology Exhibition" in Greece, visited by the then Greek president with the company of the Chinese ambassador



The "Ancient Greek Science, Art and Technology Exhibition" being staged at CSTM

In 2018, the "Starry Sky Illumination", a travelling exhibition organized by Shanghai Science and Technology Museum went to Chiang Mai, Khon Kaen and Bangkok on a touring show. It coincided with the 150th anniversary celebrating the successful observation of the total solar eclipse by the former King Rama IV of Thailand. The number of visitors to the exhibition reached a total of 109,000. Afterwards, it was staged at the 2018 National Science and Technology Festival in Thailand. Prime Minister Prayut Chan-ocha of Thailand visited the exhibition and spoke highly of it. The exhibition won the honor of "the most popular international exhibition" at the festival. As an exchange exhibition, the "Mother Nature: Innovation Inspiration" exhibition organized by the National Science Museum of Thailand was presented at the Shanghai Natural History Museum in 2019, showcasing Thailand's indigenous wisdom in bionics. The number of visitors to the Thai exhibition reached 149,000. The friendly scientific and cultural exchanges between China and Thailand were thus conveyed to the public through exhibitions, making it a successful attempt to communicate science and culture along the New Silk Road.



The exhibition "Starry Sky Illumination" being staged in the National Science Museum of Thailand



The exhibition "Mother Nature: Innovation Inspiration" being presented at the Shanghai Natural History Museum

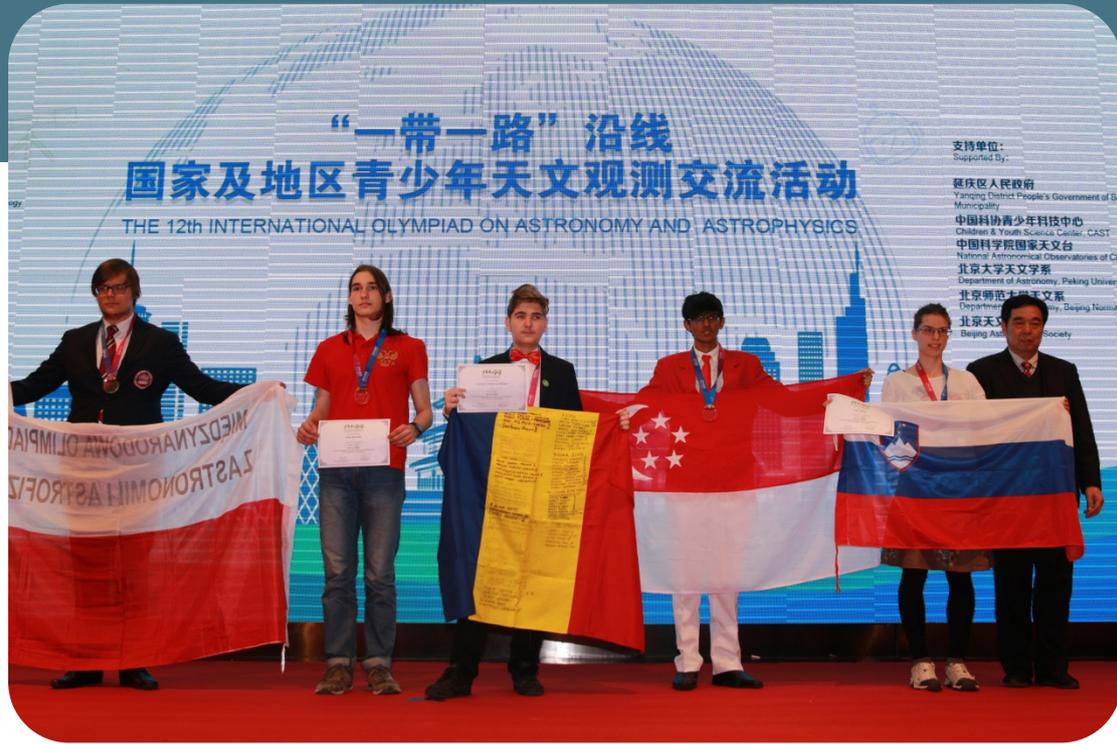
In November 2019, the Beijing Museum of Natural History was invited to participate in the large-scale science popularization event entitled "Petrosains Science Festival" organized by Petrosains, the Discovery Centre of Malaysia. The museum's serial exhibits featuring the theme of dinosaur as well as Beijing's ecological characteristics and species environment were well-received among the audience. Based on the successful cooperation over the years, Petrosains, the Discovery Centre has listed the Beijing Museum of Natural History as a cooperative partner.

vi. Supporting sub-organizations and member institutions to hold or to participate in international seminars, as well as to carry out international exchanges and cooperation

CANSM encourages and guides all its sub-organizations and member institutions to carry out cooperation and exchanges with pairing international and national organizations according to the needs of their specialized fields and business development, while actively organizing and participating in international seminars.

In this spirit, CANSM supported the Specialized Committee of Planetariums in organizing the Astronomical Observation and Exchange Events for Teenagers in BRI Countries and Regions & the International Olympiad on Astronomy & Astrophysics 2018, which was participated by more than 300 teachers and students from 38 countries and regions. CANSM has also supported the Specialized Committee of Geoscience Museums to carry out the China-ASEAN Cooperation Seminar Program on Geoscience; the Beijing Museum of Natural History to host the online Symposium on the Trends and Challenges in Development of International Museums of Natural History, and to undertake such large-scale public welfare science popularization events as "2018 Night at the Museum · China and Africa" and "2019 Night at the Museum · the Green Earth"; the Specialized Committee of Special-Effect Theaters of Popular Science Venues to actively expand communication and exchanges with international organizations such as the International Association of Big Screen Cinemas and the International Planetarium Society, and to strengthen international cooperation by utilizing the science and technology unit platform of the Beijing International Film Festival to help the festival events become a global platform for the collection, exhibition and exchange of global sci-tech films.

As well, CANSM supports the Beijing Science Center to host the annual Science Museum CEO's Dialogue . Through these consistent efforts, CANSM has effectively promoted cooperation and exchanges among science and technology museums in BRI countries.



The Astronomical Observation and Exchange Events for Teenagers in BRI Countries and Regions and the International Olympiad on Astronomy & Astrophysics 2018



The online Symposium on the Trends and Challenges in Development of International Museums of Natural History



"2019 Night at the Museum · the Green Earth" hosted by the Beijing Museum of Natural History

From the very beginning, CANSIM was well aware of the fact that the signing of the Letter of Agreement with UNESCO would entail commitment, hard work, labor and devotion; and that without proper implementation, the LOA, in spite of its sound rationale and reasonable practicality, would stand no chance of success. In other words, all the great visions and well intentions in the LOA require action to be turned into reality.

Looking in retrospect, we are proud to say we have made it! Over the past five years, CANSIM has made tireless efforts in implementing the LOA. Five years on, our endeavors to promote the common development of science-related museums worldwide through cooperation with UNESCO have been deepened with concrete results, as evidenced by the greatly strengthened bonds among people in countries involved in BRI and beyond. At the same time, such endeavors have also ushered in a new vista of cooperation between CANSIM and UNESCO. What is especially worth mentioning here again is the BRISMIS platform. Since its official launch in 2017, it has been delivering benefits to its partners with one tangible project after another, greatly enhancing their sense of gain; and its success in popular science resources integration among its partners, as well as its concept of shared growth for all, combine to indicate the possibilities that could lie ahead for the international community of science centers/museums.

Cooperation is a long march with no end, only new beginnings. The strengthening of the ties between CANSIM and UNESCO through the signing and implementation of the LOA is a great achievement in the recent past. Looking ahead, the future seems even brighter and more promising. As such, our two organizations should focus our mind and set our eyes on the future, not the past. Together, let us work in our joint search for new approaches of collaboration and new areas to cooperate on in order to generate new opportunities.

