MINUTES OF MEETING (MOM)
APG 2020 ONLINE VIRTUAL MEETING
Tuesday, December 1st, 2020
09:00-11:35 A.M. (Tehran Time)

- ATTENDEES

ICOLD: Mr. Michel de Vivo (Secretary General)

ANCOLD: Mr. Andrew Reynolds (President)

CHINCOLD: Prof. Zeping Xu (Member), Dr. Cuiying Zheng (Deputy Secretary General), Ms. Aili (Member)

INCOLD: Mr. Devendra Kumar Sharma (President)

INACOLD: Mr. John Pantoww (President)

IRCOLD: Prof. Ali Noorzad (President), Dr. Babak Ebrahimian (Secretary General), Mr. Eisa Bozorgzadeh (Member), Mr. Amir Farid Mojtahedi (Member), Ms. Fatemeh Farahani (Member)

JCOLD: Hiroyasu Sugiyama (President), Mr. Yoshiaki Morikita (Vice president), Takashi Tada (Vice president). Mr. Masayuki Kashiwayanagi (Director), Goro Yasuda (Director), Mr. Akira Koganezawa (Secretary General), Ms. Tomoko Hoshiba (secretary), Mr. Hamaguchi Tatsuo (Member), Mr. Hiroki Yamamoto (Member)

MYCOLD: Prof. Lariyah Mohd Sidek (Co-President)

NZSOLD: Mr. Trevor Matuschka (President)

PANCOLD: Mr. Ahmed Kamal (President)

PNCOLD: Mr. Raymund Mariano (Secretary General)

KNCOLD: Dr. Dong-hoon Shin (Acting-Chair of International Cooperation Division)

SLNCOLD: Dr. Kamal Laksiri (Vice President), Ms. Sudarshani Widanapathirana (Secretary General)

- ABSENTEEES

Afghanistan, Bhutan, Georgia, Iraq, Lebanon, Myanmar, Nepal, Syria, Tajikistan, Thailand, Uzbekistan, Vietnam
# MINUTES OF MEETING (MOM)
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## MEETING AGENDA & SCHEDULE (09:00-11:35)

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<tr>
<th>Item No.</th>
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| (1)      | 09:00-09:10 | 10:00           | Opening Remarks & Keynote Speech | Prof. Ali Noorzad  
Chairman of APG |
| (2)      | 09:10-09:15 | 05:00           | Congratulatory Remarks          | Mr. Michael Rogers  
President of ICOLD |
| (3)      | 09:15-09:20 | 05:00           | Congratulatory Remarks          | Mr. Michel de Vivo  
Secretary General of ICOLD |
| (4)      | 09:20-09:30 | 10:00           | Reporting of Annual Activities & Speech on Theme  
Australia – ANCOLD Rep. |
| (5)      | 09:30-09:40 | 10:00           | Reporting of Annual Activities & Speech on Theme  
| (6)      | 09:40-09:50 | 10:00           | Reporting of Annual Activities & Speech on Theme  
India – INCOLD Rep. |
| (7)      | 09:50-10:00 | 10:00           | Reporting of Annual Activities & Speech on Theme  
| (8)      | 10:00-10:10 | 10:00           | Reporting of Annual Activities & Speech on Theme  
Iran – IRCOLD Rep. |
| (9)      | 10:10-10:20 | 10:00           | Reporting of Annual Activities & Speech on Theme  
| (10)     | 10:20-10:30 | 10:00           | Reporting of Annual Activities & Speech on Theme  
Malaysia – MYCOLD Rep. |
| (11)     | 10:30-10:40 | 10:00           | Reporting of Annual Activities & Speech on Theme  
| (12)     | 10:40-10:50 | 10:00           | Reporting of Annual Activities & Speech on Theme  
Pakistan – PAKCOLD Rep. |
| (13)     | 10:50-11:00 | 10:00           | Reporting of Annual Activities & Speech on Theme  
| (14)     | 11:00-11:10 | 10:00           | Reporting of Annual Activities & Speech on Theme  
South Korea – KNCOLD Rep. |
| (15)     | 11:10-11:20 | 10:00           | Reporting of Annual Activities & Speech on Theme  
| (16)     | 11:20-11:30 | 10:00           | Discussions and Suggestions      | All Attendees         |
| (17)     | 11:30-11:35 | 05:00           | Concluding Remarks               | Prof. Ali Noorzad  
Chairman of APG |

## SKYPE ADDRESS:

https://join.skype.com/iyL9uBpdGmxw

Please copy the above link in your address bar.
• REMARKS

The first invitation of APG 2020 online virtual meeting was sent to the APG member countries by the IRCOLD on September 27th, 2020. Subsequently, reminder letters were sent on October 11th, October 17th, October 25th, and November 10th, 2020 and the APG member countries were asked to submit their Annual Activities Reports and Presentations on Theme.

• MEETING SUMMARY

The meeting was held on Tuesday, December 1st, 2020 at 09:00-11:35 A.M. (Tehran Time). The time zone of each member country with respect to the local Tehran Time was previously announced to all members.

At the beginning, Prof. Ali Noorzad, APG Chairman, delivered his opening remarks and keynote speech. He talked about the global pandemic of COVID-19 Coronavirus and wished the ICOLD family safety and good health. He expressed his hope that he would meet all the members in person in the near future. Prof. Noorzad welcomed the esteemed ICOLD Secretary General, Mr. Michel de Vivo. He congratulated Mr. de Vivo on the renewal of his responsibility at the ICOLD Secretary General position. In the following, Mr. de Vivo thanked APG chairman and the APG member countries to virtually attend the meeting. Afterwards, Prof. Noorzad followed the agenda and asked Dr. Babak Ebrahimian, IRCOLD Secretary General, to manage the meeting. According to the alphabetic order, Dr. Ebrahimian asked each member country to present his/her speech.

Australia

Mr. Andrew Reynolds, the ANCOLD president, spoke about their activities which were virtually organized during the last year and during the pandemic period. They had a special look at tailings dams. ANCOLD has published a guideline for geotechnical investigations of dams, their foundations and appurtenant structures. He said that they are also planning to finalize a new guideline on retarding basin design and management. In this period of time, a forum was held by ANCOLD on exploring risks in the procurement of dam projects. They are widely studying to identify the active faults in the country. In addition, they want to propose a methodology to estimate the AEP of the probable maximum precipitation (PMP) in the tropical zones.
China

Prof. Cuiying Zheng presented the latest activities of CHINCOLD. Particularly, he talked about their new cloud platform, participation in 87th Annual meeting of ICOLD, organizing 3rd workshop on cemented material dams, APG 2019 in Ottawa, and arranging three TC meetings. Prof. Zheng said that CHINCOLD also held 2019 Annual Meeting & the 8th International Symposium on RCC Dams. They arranged the 12th round table meeting and technical tour for African & Asia countries. Furthermore, the conference of Intelligent Construction and Operation of Hydropower and Dams was organized by CHINCOLD. They attended HYDRO 2020 Virtual conference as well. For next year, CHINCOLD is planning to organize the Online Forum on Sustainable Development and Capacity Building. In this respect, they invite the countries delegates to attend this forum. Eventually, Prof. Zheng discussed some major hydropower and pumped storage projects in China. He described the intelligent technology applied to the dam construction in China.

India

INCOLD president, Mr. Devendra Kumar Sharma, presented his speech about the history of INCOLD and its annual activities. Regularly, INCOLD disseminates information and publications, organizes conferences, workshops, seminars and training programs regarding the issues and challenges regarding dam engineering and construction. In the year 2019-2020, they held the Dam India conference on “Sediment Management for ensuring the Sustainability of Reservoir and Run-of-River Projects”, as well as the Short Course on “Reservoir and Seismicity” and XIII World Aqua Congress. Mr. Sharma talked in details about the “Climate Change and Extreme Events”. Through this, he emphasized on the critical role of water in life, global warming, climate change and trends in water availability. In addition, he discussed the risks and impacts of climate change. Then, he explained the climate change scenarios in India. In this respect, he introduced the extreme flood events in India in recent years.

Indonesia

Mr. John Pantoww from INACOLD proposed his speech by reporting their annual activities including the nomination of INACOLD members to the ICOLD technical committees, and attending the 87th Annual Meeting and APG Meeting in Ottawa.
INACOLD arranged the annual seminar with the topic of “Dam Durability in Various Potential Crisis”. Furthermore, they arranged 5 webinar series on various dam topics during the Covid 19 pandemic. They held the Young Engineer Forum with webinar system as well. Mr. Pantoww said that INACOLD conducts training and certification to the dam professionals, produces regular bulletins, participates in national construction services development board, coordinates with INACID and HATHI (Indonesia Hydraulic Association) for general water resources development. INACOLD is also active in National Commission of Dam Safety. Then, he gave a statistical report on dam constructions in Indonesia. Finally, INACOLD presented the experiences regarding the “Dams, Climate Change and Extreme Events”. In this regard, the impacts of climate change on the hydropower plants, reservoir operations, and sedimentations were described. Mr. Pantoww also presented a summary about their local INCOLD annual meeting.

Iran

Dr. Babak Ebrahimian, IRCOLD Secretary General, reported on the IRCOLD activities in the year of 2019-2020. At first, he introduced IRCOLD establishment history and its local and international scientific level and reputation. Dr. Ebrahimian gave a statistical information on the number of papers which were presented in ICOLD events by IRCOLD members since 1976. Afterwards, he explained the IRCOLD activities during the last year. In particular, 10 IRCOLD Executive Board meetings, 118 technical committee meetings, 90 technical speeches, 2 workshops, and 3 technical tours were held. IRCOLD members contributed to the 3 new ICOLD bulletins. He said that IRCOLD publishes electronic newsletter every three-month. IRCOLD members attended the 87th ICOLD Annual Meeting with 18 scientific papers. In Ottawa, Canada, IRCOLD was appointed as the chair of APG regional club for a period of 2019-2021. Furthermore, IRCOLD has been selected as the host of the 93rd General Assembly of ICOLD (ICOLD 2025) which will be held in Shiraz. Then, Mr. Bozorgzadeh, as an IRCOLD Executive Board Member, delivered a speech on the “Role of Dam in Flood Control”. He presented the recent flood events which occurred in 2019 at the southeast of Iran in the Khuzestan Province along Karkheh and Karoun Basins. In this regard, the volumes of streams entered into the Karoun, Gotvand and Roudbar-Lorestan dams were shown via proper charts and
diagrams. Mr. Bozorgzadeh also mentioned the amount of electricity which was produced in the period of 2016-2019 and emphasized that this amount was tripled in 2019 due to the amount of flood occurrence. Via this comparison, he indicated the importance of hydropower plants and dams chain in Khuzestan Province for controlling the flood and generating the electricity.

**Japan**

First, Mr. Hiroyasu Sugiyama introduced himself as the new JCOLD President, and briefly presented the recent involvements of JCOLD and cooperation with APG members. JCOLD has prepared two documents for the APG meeting. According to the first report “Recent Activities of JCOLD”, JCOLD will actively participate in the virtual ICOLD 2020 Symposium. JCOLD members submitted 15 papers for the symposium and workshop and 2 papers for APG Symposium. Their members attend the TCs via videoconference. JCOLD attended the 8th International Symposium on RCC Dams in China. Various committees have been established in JCOLD to address important engineering challenges such as planning committee, technical committee and dissemination and networking committee. With regard to the theme of “Maximizing the Functions of Existing Dams in Japan”, the issues such as additional spillway (excavating existing dam body, tunnel), advanced operation of dams, and weather prediction technologies were presented. As for the second report “Recent topics on disaster management and dams in Japan”, Mr. Hamaguchi, leader of “International affairs committee of JCOLD”, talked about recent flood and storm disasters, lessons from the disasters and new framework for disaster management. He also introduced dam-related topics, including cooperation of water use dams for flood disaster reduction, completion of Yamba Dam and its effect and new development of Kawabegawa Dam Project.

**Malaysia**

Prof. Lariyah Mohd Sidek, MYCOLD Co-President, was firstly introduced MYCOLD and its role in Malaysia. She said that MYCOLD mainly provides forum for the exchange of knowledge and experience in dam engineering, leads the profession in ensuring that dams are built safely, efficiently, and economically, and aims to encourage advances in the planning, design, construction, operation, and maintenance of large dams by collecting and disseminating relevant information. Then, she described the MYCOLD’s
vision and mission. The Malaysian dams’ statistics were presented in the meeting. Afterwards, MYCOLD portfolio and MYCOLD representatives for ICOLD technical committees were shown. Then, the International Conference on Dam Safety Management and Engineering (ICDSME2019) which was held by MYCOLD in last year was reported in details. MYCOLD publications were demonstrated. Their MOU activities with other organizations such as CDA, INACOLD, and IRCOLD were reported as well. In 2020, MYCOLD proposed a “Certified Dam Safety Inspector Training Course”. Prof. Lariyah Mohd Sidek then gave a speech on “Dams, Climate Change & Extreme Events”. Through this, she comprehensively addressed the topics like dams in Malaysia, status of Malaysia’s water resources, climate change and extreme floods, Malaysia water scenarios, dams at risk, Malaysia extreme flood events, securing dam safety, climate resilience program, climate change Malaysian approach, and projected climate change impacts for Malaysia.

New Zealand

Mr. Trevor Matuschka, the NZSOLD President, discussed their “Dam Safety Guidelines” first. He said that NZSOLD is working with the Government Technical Working Group on proposed Dam Safety Legislation. Then, Mr. Matuschka reported NZSOLD’ technical symposia, workshops and conferences held on the last year including NZSOLD/ANCOLD Conference “Resilient Dams and Levees for Resilient Communities”, Lightning Talk Webinar, NZSOLD Summit webinar “Recent Dam and Levee Incidents and Failures”, and Workshop “Consequence Assessment and Potential Impact Classification”. Mr. Matuschka said that NZSOLD is planning to organize workshop, symposium, webinars, working on updating the Dam Safety Guidelines, contributing to six ICOLD committees, working with Government to advance good dam safety management within the New Zealand regulatory environment, promoting young professionals in all aspects of NZSOLD, running annual photograph and poster competitions, and developing website to communicate with members. Regarding Climate Change, NZSOLD President expressed that the government study shows significant change to NZ climate and this has profound impact on future generations. Finally, he discussed the implications of climate change for dams.
Pakistan

Mr. Ahmed Kamal, the PANCOLD President, gave a presentation on the theme entitled “Dams, Climate Change and Extreme Events”. He explained water resources and large dams in Pakistan, Global Climate Risk Index in Pakistan as top 10 climatically most affected countries, and impacts of climate change. Mr. Kamal reported the historical disasters in Pakistan including earthquakes, floods and landslides. Then, he mentioned the key climate concerns and extremes in Pakistan. Afterwards, the impacts of climate change on large dams were considered. In this regard, the major flood events at Tarbela Dam and Mangla Dam were discussed. In addition, Mr. Kamal presented their local policy guidelines related to dams & climate change. Besides, the future challenges in this area and the measures to tackle them were presented. Eventually, the main activities of PANCOLD were presented. They included 45th Annual Meeting of PANCOLD, updating National Register of Dams and signing MOU with Pakistan Engineering Council (A research based organization).

Philippines

Mr. Raymund Mariano, the PNCOLD Secretary General, first introduced PNCOLD and its role. He explained about PNCOLD members including governmental and private organizations. They are planning to expand it by inviting agencies and companies involved in dam engineering, construction and operation in the Philippines. Mr. Mariano said that the safety review of existing dams in Philippines is ongoing. Concerning the “Dams and Climate Change in the Philippines”, he proposed the PNCOLD results including articles, as well as the information on decreases in rainfall and longer drier periods, water resources, agricultural production, flooding events, energy sufficiency, and danger to human settlements and infrastructure. With respect to the topic of “Dams and Climate Change in the Philippines”, he talked about the strategies and long-term planning, responding effectively, avoiding maladaptation, and rational water management and planning to avoid mismatch between water supply and demand. Finally, Mr. Mariano discussed the actual effect of climate change in the Philippines.

South Korea

Dr. Dong-hoon Shin, the Acting-Chair of International Cooperation Division of KNCOLD, presented the KNCOLD activities during the last year. KNCOLD organized the 2019 International Symposium on Dam Safety. They also attended the International
Conference on Dams Safety Management and Engineering (ICDSME 2019) in Malaysia. In 2021, KNCOLD is planning to organize the 11th EADC (East Asia Dam Conference) in Daejeon, Korea. In 2020, KNCOLD arranged the Technical Committee Meeting, Board Member Meeting, General Assembly Meeting, KNCOLD-KCID Meeting, Appraisal Meeting for 2020 Awards. They also published KNCOLD Magazine and E-Newsletters. Regarding dam safety, Dr. Shin reported the progress including the Basic Plan of Infrastructures Management 2020–2025, and the Revision of Dam Construction Act.

**Sri Lanka**

Dr. Kamal Laksiri, the Vice President of SLNCOLD, gave a speech on “Dams, Climate Change and Extreme Events”. First, he explained the dam owners in Sri Lanka who are totally government & Semi government entities. The, he proposed the history of SLNCOLD. Afterwards, Dr. Laksiri presented that SLNCOLD actions towards the Dam safety Management. Besides, he introduced the some river basins and dams in Sri Lanka. Dr. Laksiri talked about rain fall distribution as well. He mentioned the requirements on Dam safety Management. In addition, the Safety Assessment System in Sri Lanka was clarified. He said that there is an integrated information systems & risk assessment in Sri Lanka. He also explained the required data and tools as well as the hydrology and meteorology analysis. Dr. Laksiri spoke on forecasts related to Climate Change, estimated rainfall distributions, assessment frame work, and flood/drought risk assessment approach.

**Concluding Remarks**

At the end of virtual meeting, Prof. Noorzad thanked all member countries and their representatives for their active participation in the meeting. He appreciated the effective involvement and patience of all members in the meeting with around 4 hour’s duration. Finally, he gave a summary about the content of meeting and emphasized on the importance of issues discussed. He wished all members safety, good health and success. The meeting was closed at 12:50, Tuesday, December 1st, 2020.