



**COORDINATING COMMITTEE FOR GEOSCIENCE PROGRAMMES  
IN EAST AND SOUTHEAST ASIA (CCOP)**

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**54<sup>th</sup> CCOP Annual Session**  
**71<sup>st</sup> CCOP Steering Committee Meeting**  
29 October – 3 November 2018  
Busan, Republic of Korea

# **CCOP PROGRESS REPORT**

## **( 01 January – 30 June 2018)**

**Submitted by**

**CCOP Technical Secretariat**

# CCOP PROGRESS REPORT

This report covers the period **01 January - 30 June 2018**.

## I. ADMINISTRATION AND PERSONNEL

As of 30 June 2018, the CCOP Technical Secretariat (TS) has 9 personnel, comprising three professionals, five supporting staff and one out-sourced staff. From 1 May 2018, **Dr Dhiti Tulyatid** succeeded **Dr Kamaludin Bin Hassan** as the CCOPTS Regional Expert. His term will end on 30 April 2020. The operational organization chart of the Technical Secretariat is shown in **Figure 1**.

At the 69<sup>th</sup> CCOP Steering Committee Meeting held in Bohol, Philippines, October 2017, **Datuk Shahar Effendi bin Abdullah Azizi**, Permanent Representative of Malaysia to CCOP and **Atty. Wilfredo G. Moncano**, Permanent Representative of the Philippines to CCOP have been elected Chairman and Vice-Chairman of the CCOP Steering Committee respectively, for the term 2018-2019. Listed in the table are the PRs of the Member Countries to CCOP as of 30 June 2018.

| <b>Member Countries</b> | <b>Permanent Representatives (PRs)</b>   | <b>Office</b>   |
|-------------------------|--|---|
| 1. Cambodia             | H.E. Mr. Cheap Sour  | Director-General, General Department of Petroleum, Ministry of Mines and Energy   |
| 2. China                | Dr. Li Jinfa   | Vice-President, China Geological Survey   |
| 3. Indonesia            | Mr. Rudy Suhendar  | Head, Geological Agency, Ministry of Energy and Mineral Resources   |
| 4. Japan                | Dr. Yusaku Yano  | Director-General, Geological Survey of Japan, National Institute of Advanced Industrial Science and Technology                          |
| 5. Republic of Korea    | Dr. Joong-Ho Synn<br><i>(Succeeded by Dr. Bok Chul Kim as of 31 Aug 2018)</i>                    | President, Korea Institute of Geoscience and Mineral Resources  |
| 6. Lao PDR              | Mr. Keo Khamphavong  | Acting Director-General, Department of Geology and Minerals, Ministry of Energy and Mines   |
| 7. Malaysia             | Datuk Shahar Effendi bin Abdullah Azizi<br><i>(Chairman, CCOP Steering Committee, 2018-2019)</i> | Director-General, Department of Mineral and Geoscience Malaysia   |
| 8. Myanmar              | Dr. Ye Myint Swe   | Director-General, Department of Geological Survey and Mineral Exploration, Ministry of Natural Resources and Environmental Conservation |
| 9. Papua New Guinea     | Mr John Arumba<br><i>(Deputy PR)</i>   | Deputy Secretary, Department of Mineral Policy and Geohazards Management  |

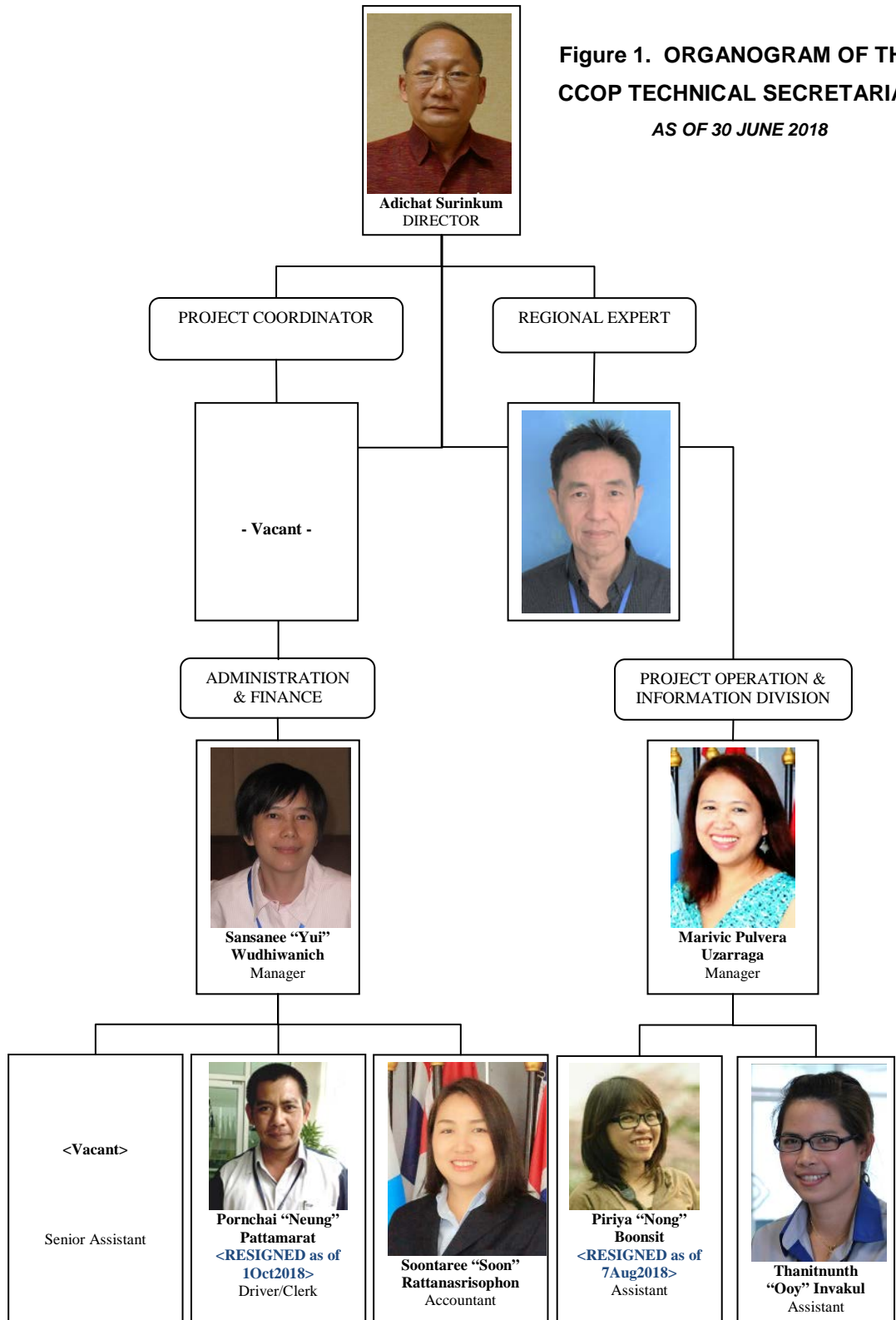
|                 |   |  |
|-----------------|---|--|
| 10. Philippines | Atty. Wilfredo G. Moncano<br><i>(Vice-Chairman, CCOP Steering Committee, 2018-2019)</i> | Acting Director, Mines and Geosciences Bureau  |
| 11. Singapore   | Prof. Kerry Sieh  | Director, Earth Observatory of Singapore and AXA-Nanyang Chair in Natural Hazards, Nanyang Technological University  |
| 12. Thailand    | Dr. Tawsaporn Nuchanong<br><i>(retired as of 1 Oct 2018)</i>                            | Director-General, Department of Mineral Resources  |
| 13. Timor-Leste | Mr. Helio Casimiro Guttereres   | Project Manager Covalima Mapping and Head of Laboratory of Geology, Directorate of Geology and Mineral Resources, Secretary of State for Natural Resources |
| 14. Vietnam     | Mr. Pham Phu Binh   | Director-General, International Cooperation, Ministry of Mineral Resources and Environment   |

The CCOP Advisory Group Meeting held during the 53<sup>rd</sup> CCOP Annual Session in Cebu City, Philippines, October 2017 elected **Mr. Ioannis Abatzis** Representative of Denmark to CCOP and **Dato' Yunus Abdul Razak**, CCOP Honorary Adviser as Chairman and Vice-Chairman of the CCOP Advisory Group respectively for year 2018.

On May 2018, **Dr. Weon Seo KEE**, Vice President, Korean Institute of Geoscience and Mineral Resources (KIGAM) was appointed as Deputy Permanent Representative of the Republic of Korea to CCOP.

Actions taken on the recommendations of the Advisory Group Meeting at the 53<sup>rd</sup> CCOP Annual Session and on the decisions by the 68<sup>th</sup> and 69<sup>th</sup> CCOP Steering Committee Meetings are listed in **Annex I**.

**Figure 1. ORGANOGRAM OF THE  
CCOP TECHNICAL SECRETARIAT  
AS OF 30 JUNE 2018**



## **II. FINANCE**

### **(1 January - 30 June 2018)**

From 1 January to 30 June 2018, Member Countries' total cash contributions amounted to **USD 270,389.80** that consists of China (USD 50,000), Indonesia (USD 40,000), Japan (USD 50,000), Republic of Korea (USD 60,389.80), Malaysia (USD 25,000), Myanmar (USD 5,000) and Thailand (USD 40,000). (**Table 1**)

From 1 July to 30 September 2018, Cambodia, Lao PDR, Philippines, Singapore and Vietnam already forwarded member country cash contribution, and will be reported in the next Steering Committee Meeting.

In addition to Member Countries' contributions, the amount of **USD 18,072.97** was earned from the management of projects during January - June 2018 period (**Table 2**). Other incomes during the period amounted to **USD 778.17 including** interest earned, publication sales, gain/loss on exchange, and miscellaneous income. The total income during the period was **USD 289,240.94**. The expenditure of **USD 206,538.98** was incurred from operations and administrative support. The total cash balance at the end of June 2018 amounted to **USD 955,030.61**.

The Financial Report for the period January - June 2018 of CCOP is being audited by Dhamniti Auditing Co., Ltd. is attached. (**Annex II**)

The Technical Secretariat office premise is continuously being provided by the Royal Thai Government, through the kind arrangement of the Department of Mineral Resources (DMR), Ministry of Environment and Natural Resources, at permanent CCOPTS Building within DMR's complex area.

The Royal Thai Government through the DMR also accorded the privileges and the cooperation to enable the Technical Secretariat to operate efficiently and effectively.

**Member Countries** - Cambodia, China, Indonesia, Japan, Republic of Korea, Lao PDR, Malaysia, Myanmar, Papua New Guinea, Philippines, Singapore, Thailand, and Vietnam; **Cooperating Countries** - Canada, Germany, Norway, United Kingdom; and **Cooperating Organizations** - PETRAD, UNESCO, UKM and World Bank, are gratefully acknowledged for having provided in-kind contributions to CCOP by hosting CCOP activities, organizing workshops/ training courses/ seminars, providing resource persons for CCOP Member Countries and sponsoring printing of publications of CCOP.

**Table 1. Cash Contributions of Member Countries for 2017 - 2018  
(Ending 30 June 2018)**

| Member Countries  | 2016<br>Contribution<br>Received in<br>2017 | 2017<br>Contribution<br>Received in<br>2017 | 2018<br>Contribution<br>Received in<br>2018 | 2016,2017<br>Contribution<br>Expected to<br>Receive in 2018 | 2018<br>Contribution<br>Expected to<br>Received in 2018 |
|-------------------|---|---|---|---|---|
| Cambodia          | *5,000.00                                   | ***10,000.00                                | -   | -   | 10,000.00   |
| China             | -   | 50,000.00                                   | 50,000.00                                   | -   | -   |
| Indonesia         | -   | 40,000.00                                   | 40,000.00                                   | -   | -   |
| Japan             | -   | 50,000.00                                   | 50,000.00                                   | -   | -   |
| Republic of Korea | -   | 60,000.00                                   | 60,389.80                                   | -   | -   |
| Lao PDR           | -   | -   | -   | 10,000 (Y2017)  | 10,000.00   |
| Malaysia          | -   | 50,000.00                                   | 25,000 (1/2)                                | -   | 25,000 (2/2)  |
| Myanmar           | -   | 5,000.00                                    | 5,000 (1/2)                                 | -   | 5,000 (2/2)   |
| Papua New Guinea  | -   | -   | -   | 25,000 (Y2016)<br>25,000 (Y2017)                            | 25,000.00   |
| Philippines       | -   | 40,000.00                                   | -   | -   | 40,000.00   |
| Singapore         | -   | -   | -   | -   | -   |
| Thailand          | -   | -   | 40,000.00                                   | -   | -   |
| Timor-Leste       | -   | -   | -   | 10,000 (Y2017)  | 10,000.00   |
| Vietnam           | **25,000.00                                 | 25,000.00                                   | -   | -   | 25,000.00   |
| <b>Total</b>      | <b>30,000.00</b>                            | <b>330,000.00</b>                           | <b>270,389.80</b>                           | <b>70,000.00</b>  | <b>150,000.00</b>                                       |

*\*\*Cambodia cash contribution for 2016 was received in 2017 (USD 5,000); \*\*Vietnam cash contribution for 2016 was received in 2017 (USD 25,000)  
\*\*\*Cambodia increased cash contribution for 2017 from USD 5,000 to USD 10,000*

**Table 2. Execution of Project and Activity, from their Management and Income  
(January 1 - June 30, 2018)**

| Funding Source   | Activities   | Country  | Period              | Amount (USD) |
|--|--|--|---------------------|--------------|
| KIGAM  | CCOP - KIGAM Unconventional Oil and Gas Project: Assessment of Shale Energy Resources in Asia, (Phase II)  | Bangkok, Thailand<br>1 <sup>st</sup> Installment<br>2018 (1/2)     | March 1,<br>2018    | 2,524.08     |
| GSJ/AIST   | CCOP-GSJ-MME Groundwater Project Phase III Meeting   | Siem Reap,<br>Cambodia   | March 5-7,<br>2018  | 4,206.00     |
| BGR  | BGR Project Conduct of Workshop Mine Closure Legal Framework in ASEAN Member States  | Vientiane,<br>Lao PDR  | May 8-10,<br>2018   | 7,112.00     |
| KIGAM  | KIGAM Groundwater - Surface Water Interaction and Comparative Study of Groundwater Dependent Ecosystems in the Mekong Basin to Transboundary Aquifer Management (Phase II) | Vientiane,<br>Lao PDR<br>1 <sup>st</sup> Installment<br>2018 (1/2) | June 11-12,<br>2018 | 4,230.89     |
| Total Project Management Income                          |  |  |                     | 18,072.97    |
| Net Total Project Management Income for Budget Year 2018 |  |  |                     | 18,072.97    |

Target Project Management income for year 2018, USD 24,500

### III. ACTIVITIES

During January – June 2018, a total of **24 training/workshop** activities were carried out and attended by **480 participants** from the CCOP Member Countries. With strategic focus on capacity building, knowledge sharing and technology transfer; the workshops, training courses, symposiums, working group meetings and expert visits were conducted during the reporting period and Member Countries participation were highly appreciated.

#### Summary of CCOP Member Countries Participations in Technical Activities

| Strategic Goals                         | No. of Activities | No. of Participants |
|---|-------------------|---------------------|
| Outreach                                | 5                 | 125                 |
| Cooperation & Partnership               | 9                 | 124                 |
| Knowledge Enhancement and Sharing (KES) | 9                 | 207                 |
| Data & Information                      | 1                 | 24                  |
| <b>TOTAL</b>                            | <b>24</b>         | <b>480</b>          |

#### List of Activities carried out, co-organized and participated by CCOP in 2018

| DATE / VENUE                                      | ACTIVITY  | STRATEGIC GOAL       | No. of Participants |
|---|---|----------------------|---------------------|
| <b>22 Jan – 9 Feb</b><br>Daejeon, KR              | KIGAM's IS-Geo Regular Training Course on Unconventional Oil & Gas Hydrate                            | KES                  | 18                  |
| <b>31 Jan – 2 Feb</b><br>Yangon, MM               | <i>Third International Congress on Geology, Resources and Geohazards of Myanmar (GEOMYANMAR 2018)</i> | <i>Outreach</i>      | <i>1</i>            |
| <b>9 Feb</b><br>Bangkok, TH                       | CCOP- DMR Special Talk on "World Bank Funded Mineral Exploration Project in Lao PDR"                  | KES                  | 60                  |
| <b>13 - 15 Feb</b><br>Brussels, BE                | <i>INTERMIN Kick Off Meeting</i>  | <i>Cooperation</i>   | <i>1</i>            |
| <b>17-20 Feb</b><br>Bangkok, TH                   | <i>DMR 4.0 on Mineral Exploration</i>   | KES                  | 1                   |
| <b>23 Feb</b><br>Bangkok, TH                      | <i>Petroleum Geoscience Forum</i>   | <i>Cooperation</i>   | 2                   |
| <b>4-8 Mar</b><br>Hanoi, Vietnam                  | <i>Vietnam International Water Week-VACI2018</i>  | <i>Cooperation</i>   | <i>1</i>            |
| <b>5 – 7 Mar</b><br>Siem Reap, KH                 | CCOP-GSJ Groundwater Project Phase III Meeting  | Data and Information | 24                  |
| <b>14 – 16 Mar</b><br>Vientiane, LA               | <b>70<sup>th</sup> CCOP Steering Committee Meeting</b>  | <i>Cooperation</i>   | 65                  |
| <b>20 – 22 March</b><br>ChiangMai/<br>Bangkok, TH | <i>ASEAN NEXT 2018 on Landslide Realtime Monitoring System</i>  | <i>Outreach</i>      | <i>1</i>            |
| <b>2 – 4 Apr</b><br>Khon Kaen, TH                 | Regional Geoheritage Conference 2018: "Geoheritage for People"  | Outreach             | 80                  |

| DATE / VENUE                          | ACTIVITY   | STRATEGIC GOAL     | No. of Participants |
|---------------------------------------|--|--------------------|---------------------|
| <b>9 – 29 Apr</b><br>Daejeon, KR      | KIGAM's IS-Geo Training Course on Exploration, Development and Processing of Mineral Resources   | KES                | 9                   |
| <b>24-26 Apr</b><br>Bangkok, TH       | CCOP – KIGAM - KNOC Unconventional Oil and Gas Resources Project: Assessment of Shale Energy resources in Asia (UnCon Phase II) National Coordinators Meeting & Workshop (UnCon10) | KES                | 27                  |
| <b>25 Apr</b><br>Bangkok, TH          | Meeting on New GSHP Project supported by JICA  | Cooperation        | 16                  |
| <b>8-10 May</b><br>Vientiane, LA      | BGR-CCOP Workshop – “Mine Closure Legal Framework in ASEAN Member States”  | KES                | 41                  |
| <b>8 May</b><br>Vientiane, LA         | Editorial Meeting<br>CCOP Book Project: “Best Practices on Mine Rehabilitation and Decommissioning Plan in CCOP Region”  | Outreach           | 13                  |
| <b>11-16 May</b><br>Bangkok, TH       | <i>74<sup>th</sup> Session of the Commission (ESCAP)</i>   | <i>Cooperation</i> | 2                   |
| <b>8 June</b><br>Manila, PH           | <i>ADB CCS Forum (as part of the Asia Clean Energy Forum, 4 - 8 June 2018)</i>   | Cooperation        | 36                  |
| <b>11-12 June</b><br>Vientiane, LA    | CCOP – KIGAM Groundwater Project Workshop  | KES                | 20                  |
| <b>16 – 21 June</b><br>Vancouver, CA  | <i>RFG 2018<br/>Resources for Future Generations</i>   | <i>Outreach</i>    | 30                  |
| <b>25 Jun – 13 Jul</b><br>Daejeon, KR | KIGAM's IS-Geo Training Course on Urban Geohazards and Landslide   | KES                | 13                  |
| <b>26 Jun –13 Jul</b><br>Tsukuba, JP  | GSJ International Training Course on Practical Geological Survey Techniques 2018 - application to geological disaster mitigation   | KES                | 9                   |
| <b>28-29 June</b><br>Kuala Lumpur, MY | Malaysia Window to Cambridge at UKM (MW2C@UKM), Training Workshop on Disaster Resilient Cities: Advances in Meteorological Forecasting and Hazards Assessment                      | KES                | 10                  |
| <b>9 - 12 July</b><br>Terengganu, MY  | The Meeting and Field Study Visit on Jetty Construction and Management   | <i>Cooperation</i> |                     |
| <b>10 July</b><br>Bangkok, TH         | 8 <sup>th</sup> Liaison Officials' Meeting of China-ASEAN Mining Cooperation Forum & Exhibition, Bangkok, Thailand   | Cooperation        |                     |
| <b>10-12 July</b><br>Chongqing, CH    | UnCon11  | KES                |                     |
| <b>16 – 19 July</b><br>Guangzhou, CH  | The 2 <sup>nd</sup> Workshop of CCOP/ASEAN Integrated Geoscience Data Processing and Geophysical Compilation   | Data & Info        |                     |



| DATE / VENUE   | ACTIVITY   | STRATEGIC GOAL     | No. of Participants |
|--|--|--------------------|---------------------|
| <b>16-20 July</b><br>Guangzhou, CH                           | The 3 <sup>rd</sup> Workshop & Training Courses on Marine Geoscience Capacity Building and Geohazards Reduction and Prevention of China-ASEAN-CCOP | KES                |                     |
| <b>26-30 July</b><br>Lao PDR                                 | CCOP- GST Workshop and on-the-job training course on Geohazards and Geosite  | KES                |                     |
| <b>15 – 18 Aug</b><br>Thailand                               | 15 <sup>th</sup> Malaysia-Thailand Border Joint Geological Survey Committee Meeting  | <i>Cooperation</i> |                     |
| <b>27 Aug – 14 Sept</b><br>Daejeon, KR                       | KIGAM's IS-Geo Training Course on Groundwater  | <i>KES</i>         |                     |
| <b>9 – 14 September</b><br>Daejeon, KR                       | 45 <sup>th</sup> IAH Congress - <i>GROUNDWATER AND LIFE : Science and Technology into Action</i>   | <i>Outreach</i>    |                     |
| <b>29-31 August</b><br>Bangkok, TH                           | GEOTHAI' 2018 -The Conference on “Being Together Preparing for Future Geohazards”  | <i>KES</i>         |                     |
| <b>18-20 September</b><br>Langkawi, MY                       | 3 <sup>rd</sup> CCOP GSi International Workshop  | Data & Info        |                     |
| <b>27-28 September</b><br>Bangkok, TH                        | <i>AAPG Geosciences Technology Workshops Back to the Future — the Past and Future of Oil and Gas Production in the Asia Pacific Region</i>         | <i>Cooperation</i> |                     |
| <b>2-4 October</b><br>Kota Kinabalu, MY                      | UnCon12  | KES                |                     |
| <b>9-12 October</b><br>Jeju, KR                              | 10 <sup>th</sup> Jeju Water World Forum  | <i>KES</i>         |                     |
| <b>10 October</b><br>Bangkok, TH                             | <i>Third Ministerial Conference on Space Applications for Sustainable Development in Asia and the Pacific 2018</i>                                 | <i>Cooperation</i> |                     |
| <b>10 – 12 October</b><br>Shanghai, CN                       | 9 <sup>th</sup> International Conference on Asian Marine Geology (ICAMG-9)   | Cooperation        |                     |
| <b>16-17 October</b><br>Hanoi, Vietnam                       | <i>GEOSEA Conference</i>   | <i>Cooperation</i> |                     |
| <b>17-19 October</b><br><b>18-19 October</b><br>Shanghai, CN | <i>Energy China Forum 2018: 8th Asia-Pacific Shale Gas Summit</i><br><i>Energy China Forum 2018 Asia-Pacific LNG &amp; Gas Utilization Seminar</i> | <i>KES</i>         |                     |
| <b>22-26 October</b><br>Langkawi, MY                         | 3 <sup>rd</sup> Regional Course on UNESCO Global Network   | KES                |                     |
| <b>25 October</b><br>Bangkok, TH                             | Conference on Jurassic   | KES                |                     |
| <b>29 Oct – 3 Nov</b><br>Busan, KR                           | <b>54<sup>th</sup> CCOP Annual Session and 71<sup>st</sup> CCOP Steering Committee Meeting</b>   | Cooperation        |                     |
| <b>30 October</b><br>Busan, KR                               | UNFC Seminar   | KES                |                     |
| <b>30 October</b><br>Busan, KR                               | CCOP-IUGS Task Group on Geohazards (TGG) Joint Seminar   | Cooperation        |                     |

| DATE / VENUE                             | ACTIVITY   | STRATEGIC GOAL     | No. of Participants |
|--|--|--------------------|---------------------|
| <b>30 October</b><br>Busan, KR           | GSi Project Meeting  | KES                |                     |
| <b>30 October</b><br>Busan, KR           | IGDP Phase II Project Meeting  | KES                |                     |
| <b>31 October</b><br>Busan, KR           | Launching of the CCOP Coffee Table Book, “Best Practices on Mine Rehabilitation and Decommissioning Plan in CCOP Region” | Outreach           |                     |
| <b>5-9 November</b><br>Daejeon, KR       | KIGAM’s IS-Geo Training Course on Geopark  | KES                |                     |
| <b>11-15 November</b><br>KonKaen, TH     | IGCP 608   | Cooperation        |                     |
| <b>12-22 November</b><br>Hanoi, Vietnam  | Third BGR-CCOP International Training Course on Risk-Sensitive Spatial Planning for CCOP Member Countries                | KES                |                     |
| <b>13-27 November</b><br>Nanning, CN     | The 2018 IRCK Training Course on Karst Ecological Geology and Landscape Survey in Xiangxi Geopark                        | KES                |                     |
| <b>4-6 December</b><br><i>Manila, PH</i> | <i>ASOMM &amp; ASOMM+3</i>   | <i>Cooperation</i> |                     |

Notes: TBC – To be confirmed; *Text in Italics* – Mission Trips

## **CCOP Projects/Workshops Initiated in 2018**

### **1) CCOP-KIGAM-KNOC Unconventional Oil and Gas Resources Project Phase II: Assessment of Shale Energy Resources in Asia (UnCon Project Phase II)**

The CCOP member countries have carried out an Unconventional Oil and Gas Resources Project (UnCon, phase 1) for three years from 2015 to 2017, which was supported financially and technically by KIGAM. The CCOP-KIGAM UnCon phase 1 project was a mapping project that identified potentially-prospective shale energy resource basins in the CCOP region. Forty six basins were recognized from this project as potentially-prospective shale gas/oil basins. The identified basins were mapped using the GIS software, and finally published by means of USB flashdisk.

Financially supported by KIGAM and KNOC, the second phase of the UnCon project focuses on the calculation and assessment of the shale energy resources for the already identified potentially-prospective shale energy basins. This will enhance the knowledge of the regulatory agencies, energy research organizations and national oil companies in CCOP countries in the exploration of new frontiers of production.

The Goal of the Project is to create the highest possible value for society from oil and gas resources in order to improve the quality of life of the people in the CCOP member countries. This is also consistent with the aspiration of the Member Countries for a sustainable development of energy resources and energy security. The Project implementation is designed to sustain and build on the experience, technology transfer and institutional capacity building carried out in previous capacity building projects in CCOP.

Hence, the results and experiences derived from the previous projects constitute an important basis for the CCOP-KIGAM Unconventional Oil and Gas Resources Project.

With the main objectives of shale resources calculation and assessment of identified shale energy basins, with capacity building on unconventional oil and gas resource exploration, the UnCon Phase II Project's key outcomes include estimation of the total in-place gas/oil resources on the identified shale energy basins; formed consensus on the methodology to be used in the assessment of shale resources and estimation of reserves; enhanced capacity of CCOP member countries in the assessment of potential areas for shale exploration; fostered information sharing and enhanced data exchange on shale resources/reserves; and promotion of potential collaboration on research, development, and demonstration (RD&D) related safe practices in developing shale resources and other unconventional oil and gas resources. The result of the initial calculation and assessment will be described in the final report.

The UnCon Phase II Project was launched at the 10<sup>th</sup> National Coordinators Meeting and Workshop (UnCon10) on 24-26 April 2018 in Bangkok, Thailand.

The UnCon10 was conducted at the Sukosol Hotel, Bangkok, Thailand on 24-26 April 2018. Twenty-seven (27) participants from twelve 12 CCOP member countries, represented by Cambodia, China, Indonesia, Republic of Korea, Lao-PDR, Japan, Malaysia, Myanmar, Philippines, Papua New Guinea, Thailand, Vietnam, and CCOPTS staffs had attended the meeting. At the Opening Ceremony, Dr Adichat Surinkum, Director of CCOPTS delivered the welcoming remarks. Dr. Se Joon Kim, Director of Petroleum & Marine Division, KIGAM officially opened UnCon10. Dr. Young Joo Lee, Director of Global Cooperation Division, KIGAM, presented an introduction and background of UnCon10.

The Meeting agreed to use the BGS Methodology for estimating the in-place shale gas resource. Among the 46 basins identified in the UnCon Phase I as potentially-prospective shale gas/oil basins, each National Coordinator selected target basins to use for calculation of gross volume of the shale formations (subsurface area and thickness). In the next meeting, each National Coordinator is expected to make a presentation on the results of the calculation, stating the source of the data used as well as the techniques used in acquiring the required data for the calculation. China Geological Survey's Oil & Gas Center in Chengdu will host UnCon11 on 10-12 July 2018 in Chongqing, China.

A one-day field work was organized to visit the U-Thong petroleum oil field and the reclaimed Khao Tham Thiem abundant aggregate mine quarry in Suphanburi Province, and the sapphire bearing basalt at Bo Phloi District, Kanchanaburi Province, Western of Thailand. A short stop was made at Kanchanaburi's historical bridge of the River Kwai at the end of the field work.

## **2) BGR-CCOP Workshop – “Mine Closure Legal Framework in ASEAN Member States”, 8 - 10 May 2018 in Vientiane, Lao PDR**

The CCOP Technical Secretariat (CCOPTS), in cooperation with the Federal Institute for Geosciences and Natural Resources of Germany (BGR) and Laotian Department of Mines (DOM) has successfully organized the Workshop on “Mine Closure Legal Framework in ASEAN Member States” on 8 - 10 May 2018 in Vientiane, Lao PDR. There were 41 attendants at senior level officials and managers of state mining management organizations from ASEAN/CCOP member countries (Cambodia, Indonesia, Japan, Lao PDR, Malaysia, Myanmar, Papua New Guinea, Philippines and Thailand); resource persons from DOM, Lao-German TC Project “Support for the Mining Sector”, Earth Systems Australia, INTERGOVERNMENTAL FORUM on Mining,

Minerals, Metals and Sustainable Development (IGF), ASEAN Secretariat, Phu Bia Mining Limited, and MMG LXML SEPON Lao PDR; and CCOPTS staff (Annex I - List of Participants).

Held as a technical seminar for two days in Mercure Hotel in Vientiane and one full-day field trip to Phu Bia gold/copper mine in Phu Kham mountain (Annex II – Workshop Programme), this event’s main objective is capacity building in mine closure legal framework of responsible government agencies from CCOP / ASEAN states. Methods and tools were presented by invited experts for the participants’ understanding on how to achieve and manage sustainable mine closure.

The first day of the workshop started with the opening ceremony. Chaired by Dr. Terzan Atmaca, German Team Leader of Lao-German TC Project "Support for the Mining Sector", it began with welcome addresses delivered by H. E. Chansone Senbouttalath, Vice Minister, Ministry of Energy and Mines (MEM), Lao PDR; H. E. Jens Lütkenherm, Ambassador of the Federal Republic of Germany, Lao PDR, and Dr. Christiane Molt, Project Coordinator, International Cooperation - Asia and Oceania, BGR. The workshop was officially opened by Dr. Adichat Surinkum, CCOPTS Director.

There were two presentations made to set the workshop. First is the introduction to Lao-German Project "Support for a Sustainable Development of the Mining Sector“, SDMS by Mr. Wolfgang Schirmacher, Associate Advisor, Lao-German TC Project "Support for the Mining Sector", BGR, highlighting SDMS contribution and impact to Laos’ mining sector which included capacity building of both government and mining project’s personnel, preparation of 20 legal documents on mining (12 already approved and applied), sector dialog in the mineral sector, awareness raising, etc. Second is the overview of Laos’ mineral sector by Mr. Khamtanh Vongphansipaseuth, Director-General of Laos’ Department of Mines (DOM). Lao PDR has seen phenomenal growth in the mining sector over the past decade. In 2013, the value of mine production was more than US\$1.7 billion, an enormous increase from US\$10 million in 2003. The growth is mainly attributed to the two large scale gold-copper operations in Sepon and Phu Bia, the major contributors of revenues to the Lao Government. The impending end of mine life and closure of Sepon and Phu Bia will have a significant effect on government revenues. Its effect to the mine community and environment is dependent to the success of its closure.

Two presentations on mine closure legal framework where made by invited experts. Mr. Nigel Murphy, Director, Senior Principal Environmental Scientist, Earth Systems, Australia gave a presentation entitled “Planning for Successful Mine Closure - Leaving a Positive Legacy”. It was emphasized that achieving a successful mine closure requires closure planning since the feasibility assessment of a mine project. The Government must make sure that closure is part of the design of the project and part of the permitting requirements. The Government should ensure that there are incentives for ongoing rehabilitation and reduction of closure risks, and that funds are retained for closure costs. In most situations, the development of local infrastructure and local jobs / training must be encouraged.

Mr. Matthew Bliss, of the Intergovernmental Forum (IGF) on Mining, Minerals, Metals and Sustainable Development gave a presentation about “Supporting IGF Members on Post-mining Transition, and APEC Mine Closure Checklist for Governments”. Post-mining transition is one of the six thematic areas of IGF’s Mining Policy Framework (MPF). For post-mining transition, the prioritized MPF implementation gaps include lack of regulatory requirements for post-mining transition plans, and abandoned mines. Capacity building activities and technical support were carried out for the IGF Members to narrow down the identified gaps. One auspicious activity is the publication of APEC Mine Closure Checklist for Governments, [https://www.apec.org/-/media/APEC/Publications/2018/3/Mine-Closure-Checklist-for-Governments/218\\_MTF\\_Mine-Closure\\_Checklist-for-Governments.pdf](https://www.apec.org/-/media/APEC/Publications/2018/3/Mine-Closure-Checklist-for-Governments/218_MTF_Mine-Closure_Checklist-for-Governments.pdf)

The last presentation of day one was delivered by Dr Atmaca, on the development of mine closure regulations in Lao PDR. The draft Mine Closure Decree of Lao PDR ensures a) the development of a mine closure plan at the beginning of a project and the review at periodic intervals; b) the involvement of communities and governments in mine closure planning and implementation; and regulates c) the implementation of the rehabilitation during the operation; d) the tasks of the mining company; e) financial assurance for the mine closure; f) the post-closure monitoring, and relinquishment.

Presentation of ASEAN/CCOP mining authorities on their respective mine closure legal framework according to the provided questionnaire / leading questions were done in the morning of day two. Number of countries who have already closed mines, and will have closed mines in 2 to 10 years was tabulated. There are 7 countries among the 9 present, who have closed mines; 2 countries have mines closing in 2 years, 1 country has mine closing in 5 years, and all 9 countries have mines closing in more than 10 years. On the other hand, 3 countries have already given mining project certificate of relinquishment.

Field trip to Phu Bia Mining was organized on the last day. Participants were shown how Phu Bia Mining had been preparing for their closure.

### **Progress of Ongoing CCOP Projects**

#### **1) CCOP Book Project: “Best Practices on Mine Rehabilitation and Decommissioning Plan in CCOP Region”**

The 59<sup>th</sup> CCOP Steering Committee Meeting held on 9-10 November 2012 in Langkawi, Malaysia accepted the proposal of the Philippines to produce a CCOP book on “Best Practices on Mine Rehabilitation and Decommissioning Plan in CCOP Region”. This project aims to provide a material or platform showcasing different mine rehabilitation success stories throughout East and Southeast Asia. It aims to promote responsible mining. It intends to reach out private (e.g. nongovernmental organizations) and public sector especially the policy-making body to provide them relevant information for policy making and decision as far as mining is concerned.

This Book Project kicked-off with a meeting organized by CCOPTS and the Mines and Geosciences Bureau (MGB) on 22-25 June 2015 in the Philippines, with attendance by 19 national coordinators from CCOP member countries and CCOPTS. This meeting provided a forum for presentations of best success stories and best practices.

In conjunction with the 53<sup>rd</sup> CCOP Annual Session, a project meeting was on 15 October 2017 in Cebu City, Philippines. The meeting agreed to form an editorial team, comprising representatives from Philippines, Japan, Malaysia and the CCOPTS. The financial contributors for the project are China, CCOPTS and the Philippines.

The book will be launched at the 54<sup>th</sup> CCOP Annual Session in Busan, Republic of Korea.

#### **2) Geoinformation Sharing Infrastructure for East and Southeast Asia (GSi) Project**

The Japanese-funded CCOP Geoinformation Sharing Infrastructure for East and Southeast Asia (GSi) Project scheduled for 2015 – 2019, aims to develop new geoinformation integration and sharing system using international standards and free and open-source software among CCOP countries.

In 2017, a project meeting and an international workshop with hands-on training were held.

- GSi Project Meeting, 17 October 2017, Cebu City, Philippines
- 2<sup>nd</sup> GSi International Workshop, 5-7 December 2017, Luang Prabang, Lao PDR, <http://ccop.asia/article/the-2nd-gsi-project-international-workshop-5-7-december-2017-luang-prabang-lao-pdr>

The official launching of the main GSi portal site from CCOP as well as each country institute's portal sites is planned to be held during the 3<sup>rd</sup> GSi Project Workshop in 2018. In preparation for this, each country will have to populate more data to their portals, and check the quality of the data available in the portal. Development of the GSi system will still be ongoing, focusing on the improvement of its user interface, and responding to the requests of the Project members. The Project will also make interactions with other major international projects and disseminate the GSi System to the world through press releases.

### **3) BGR-CCOP International Training Course on Risk-Sensitive Spatial Planning in CCOP Member Countries**

The training course forms a collaborative project between CCOP and the Federal Institute for Geosciences and Natural Resources, Germany (BGR) for the CCOP Member Countries. The project was proposed by BGR and approved at the 66<sup>th</sup> CCOP Steering Committee meeting in Siem Reap, Cambodia in March 2016, with final approval from the Federal Ministry for Economic Cooperation and Development (BMZ), Germany on July 14, 2016. It is agreed that at least three training courses will be carried out in 2017-2018, each 13 days duration, in Thailand, Philippines and Vietnam.

The training course is funded by BMZ and is conducted by the two BGR experts **Dr. Dirk Balzer** and **Dr. Dirk Kuhn**. It is a capacity building measure on Disaster Risk Management (DRM) and Spatial Planning aimed for professionals in authority and related fields. It aims to support the requirements and future challenges of the Sendai Framework for Disaster Risk Reduction (SFDRR), strengthen disaster risk governance to manage Disaster Risk Reduction (DRR) and to promote the dialogue and cooperation among the relevant authorities and thereby support risk-sensitive spatial planning. The participants are given familiarization with the concepts and dimensions of disaster risk and are provided training in the elaboration of pre-disaster risk assessments from the Latin American Countries (El Salvador, Guatemala, Honduras, Nicaragua) and Pakistan, in order to build the knowledge on Disaster Risk Reduction (DRR).

In 2017, there were 2 courses organized in,

(1) Bangkok, Thailand, 20 February to 2 March 2017 in cooperation with the Department of Mineral Resources (DMR) Thailand, <http://www.ccop.or.th/article/the-first-bgr-ccop-international-training-course-on-risk-sensitive-spatial-planning>

(2) Quezon City, Philippines, 18-28 September 2017 in cooperation with the Mines and Geosciences Bureau (MGB), Department of Environment and Natural Resources (DENR) Philippines, <http://ccop.asia/article/2nd-bgr-ccop-international-training-course-on-risk-sensitive-spatial-planning>

The third course is planned to be held in Hanoi, Vietnam on 12-22 November 2018 to be co-hosted by the General Department of Geology and Minerals of Vietnam (GDMGV) and Vietnam Institute of Geosciences and Mineral Resources (VIGMR).

#### 4) CCOP-GSJ Groundwater Project Phase III

The Phase III of the CCOP-GSJ Groundwater Project was kicked-off in 2015, by a meeting on 10-12 February 2015, in Bangkok, Thailand. Since then, annual meetings have been held - Hanoi, Vietnam in 2016; Bali, Indonesia in 2017 and in 2018, it will be in Siem Reap, Cambodia on 5-7 March.

The main objectives of this phase of the project are as follows:

- Each member country considers the possibility of compiling own country's groundwater data.
- Use Open Web GIS System for publishing the data online

Output of the project to this date includes the publication of the annual meeting reports, as follows:

- GW-5: Report of the CCOP-GSJ-DGR Groundwater Phase III Project Kick-Off Meeting 10-12 February 2015, Bangkok, Thailand. <http://ccop.asia/publication-details/78>
- GW-6: Report of the CCOP-GSJ-NAWAPI Groundwater Phase III Project Meeting, 16-18 March 2016, Hanoi, Vietnam. <http://ccop.asia/publication-details/84>
- GW-7: GSJ-CCOP-GA Groundwater Project Phase III Meeting, 21-23 March 2017, Bali, Indonesia. <http://www.ccop.asia/publication-details/88>
- GW-8: GSJ-CCOP-MME Groundwater Project Phase III Meeting, 5-7 March 2018, Siem Reap, Cambodia (in progress).

The Project is using the GSi Web GIS System to publish the groundwater data compiled. Its GSi Portal link is [https://ccop-gsi.org/gsi/ccop\\_water/](https://ccop-gsi.org/gsi/ccop_water/). Countries committed to contribute their groundwater data to the system are China, Indonesia, Japan, Republic of Korea, Malaysia, Philippines, Thailand and Vietnam. To date the following are available at the Project's GSi Portal.

| Country     | No. of GW Wells | Location   |
|-------------|-----------------|--|
| China       |                 |  |
| Indonesia   | 131             | Java Island  |
| Japan       | 445             | Kanto, Yamagata, Ishikari, Kumamoto, Nobi Plains   |
| Korea, RO   | 221             | Whole Korea  |
| Malaysia    | 11              | Langkat Basin                                      |
| Philippines | 735             | Luzon Island                                       |
| Thailand    | 3543            | Upper Chaophraya, Khonkaen Province                |
| Vietnam     | 82              | Thanh Hoa, Ha Tinh, Quang Nam, Quang Nai Provinces |

For countries without groundwater observation system, they will have to produce a report on public policy for groundwater system in their respective countries. These countries are Cambodia, Lao PDR, Myanmar, Papua New Guinea and Timor-Leste.

The next project meeting is scheduled to be held on 13-15 February 2019 in Thailand.

## **5) CCOP-CGS-ASEAN Cooperation on Capacity Building on Integrated Geological Data Processing and Application (IGDP Phase II)**

*Period: 2017-2019*

After the successful completion of the CCOP-IGDP Project, Phase II was kicked-off by a Workshop/Training on IGDP-II and Compilation Technology for the CCOP Member Countries, held on 22-24 May 2017 in Beijing, China. This was hosted and funded by China Geological Survey (CGS) through its Development and Research Center (DRC). For more information on this workshop, see <http://www.ccop.or.th/article/ccop-cgs-workshop-training-on-igdp-ii-and-compilation-technology-for-the-ccop-member-countries-22-24-may-2017-beijing-china>

Activities for this phase of the project include training courses/workshops on geological, geophysical, geochemical and mineral data processing and compilation technology; software presentation to participants and member countries and case studies on IGDP application for mineral exploration and assessment, and CCOP/ASEAN regional geophysical compilation and release.

Expected results of the project are advanced technology transfer from China and other countries/organizations to all the CCOP member countries and ASEAN states; IGDP software upgrade and utilization by CCOP / ASEAN for geological data managing and processing; Successful Case studies, more efficient geo-database integration, utilization and new discoveries in buried geological structures and resource exploration; and successful geophysical compilation of CCOP/ASEAN and web-based map release.

A Joint Meeting with the MAMEA Project: Compilation and Publication of a Revised “Magnetic Anomaly Map of East Asia 1:4,000,000” was held on 18 October 2017 in parallel with the 53<sup>rd</sup> CCOP Annual Session in Cebu City, at Waterfront Cebu Hotel and Casino, Philippines. In this meeting, it was reiterated that the IGDP-II Project will compile the gravity map while the MAMEA Project will compile the magnetic map. It was agreed that all CCOP Member Countries should appoint and update contact persons for both magnetic and gravity data compilation. CCOPTS will send a request letter to all participating Member Countries. The next IGDP-II workshop will be in July 2018 in Guangzhou, China, and MAMEA Project team is also welcome to the workshop.

## **6) Compilation and Publication of a Revised “Magnetic Anomaly Map of East Asia 1:4,000,000” on CD-ROM (MAMEA) Project**

The 67<sup>th</sup> CCOP Steering Committee Meeting held in Bangkok, Thailand on 4-5 November 2016 endorsed the MAMEA Project proposed by the Geological Survey of Japan. This project aims to revise the CCOP Magnetic Anomaly Map of East Asia 1:4,000,000 to fill the gaps with data available from Cambodia, Laos and Myanmar (around Thailand) or newly collected data from year 1990. The revised map would give extremely valuable information with its reliable regional geological interpretation.

Collaborative work planned for this project includes: introduction of information on existing magnetic survey data in member countries and their availability for this project; discussion of the method for collection and compilation of the magnetic data; collection of available data with their data format for digital data and/or the explanation on analogue data, and compilation of the magnetic data.

The MAMEA CD-ROM will contain magnetic data set of two-minute interval grid that covers all of the CCOP member countries (tentatively, 12°S to 46°N and 93°E to 160°E) and magnetic anomaly map image made from the grid data set.



## **7) European Commission “International Network of Raw Materials Training Centres” (Intermin) Project**

CCOPTS was invited by EuroGeoSurveys (EGS), The Geological Surveys of Europe, and had successfully registered itself as one of the 14 partners of the Intermin project. The project, acronym “Intermin”, aims at mapping skills and knowledge in the EU and leading counterparts in third countries, identify key knowledge gaps and emerging needs, develop roadmap for improving skills and knowledge, as well as establish common training programmes in the raw materials sectors. The project coordinator is **Prof. Manuel Regueiro y González-Barros** from the Geological Survey of Spain. The project kicked-off with an official meeting in Brussel, Belgium on 13-14 February 2018, and will run for 3 years. Its estimated budget is about €1.266 million, whereby CCOP is allocated about €30.4k.

Next Intermin meeting is scheduled to be held in January 2019 in Madrin, Spain.

## **8) CCOP-KIGAM Project “Groundwater-surface water interaction and comparative study of groundwater dependent ecosystems in the Mekong basin: application to transboundary aquifer management” (Phase II)**

Since 2013, CCOP in collaboration with KIGAM and UNESCO has initiated “Regional study on groundwater resources and its interaction with Mekong River, with a special focus on the TBA management”, in an attempt to achieve sustainable management of groundwater resources in the CCOP regions by sharing information and discussing common issues between neighboring countries. In 2017, CCOP and KIGAM commenced a pilot study project to initiate the study of groundwater flow and its interaction with Mekong River, targeting a transboundary aquifer between Cambodia and Mekong Delta of Vietnam. One of main activities of the project was to install the groundwater monitoring well in the transboundary aquifer region of Cambodia. The objectives of this monitoring well are (1) to collect hydrogeological logging data of the region (2) to monitor continuous groundwater level fluctuation and its interaction with surface water, and (3) to study potential influence of groundwater-surface water interaction on groundwater dependent ecosystems. The target study area is located in the Leuk Daek District of Cambodia. The town is located in the vicinity of the Mekong River and is also close to the international border between Cambodia and Vietnam.

With the above understanding, CCOP and KIGAM agreed to initiate collaborative study entitled “Groundwater-Surface Water Interaction and Comparative Study of Groundwater Dependent Ecosystems in the Mekong Basin: Application to Transboundary Aquifer Management (Phase II)”, the contract period being 1<sup>st</sup> March 2018 to 30<sup>th</sup> November 2018 with a project costs of 100,000,000 Korean won (approx. 84,000 USD ), was signed. The project aims to provide a basis for investigating groundwater-surface water interaction on international transboundary aquifer of GMS. The major activities of the project will include installation of groundwater monitoring systems in the selected TBA of the GMS, collection of groundwater monitoring data to study groundwater-surface water interaction process and its potential influence on groundwater dependent ecosystem (GDE), and comprehensive analysis of groundwater quantity and quality status in GMS.

Activities carried out until June 2018 include: a) updating inventory of groundwater resources status in GMS (Cambodia, Lao PDR, Myanmar and Vietnam); b) collection of groundwater level data from the Cambodia TBA monitoring wells and its interaction with Mekong Rivers; c) collection of basic geology information of Lao PDR; d) CCOP-KIGAM International Workshop; e) installation of two (2) TBA monitoring wells in Lao PDR.

## **LIST OF ANNEXES**

**Annex I : ACTIONS TAKEN ON THE RECOMMENDATIONS OF  
THE ADVISORY GROUP MEETING AT THE  
53<sup>rd</sup> ANNUAL SESSION AND DECISIONS BY THE  
69<sup>th</sup> & 70<sup>th</sup> CCOP STEERING COMMITTEE  
MEETINGS**

**Annex II : AUDIT REPORT FOR 1 JANUARY – 30 JUNE 2018**

## ANNEX I

### ACTIONS TAKEN ON DECISIONS OF PAST CCOP STEERING COMMITTEE MEETINGS AND RECOMMENDATIONS OF ADVISORY GROUP MEETING AT THE CCOP ANNUAL SESSION

*(as of 10 October 2018)*

| SC#/<br>Agenda # /<br>Decision #  | SC Decisions  | Actions Taken /<br>Status | Follow-up Actions /<br>Remarks  |
|---|---|---------------------------|---|
| <b>DECISIONS OF THE 70<sup>TH</sup> CCOP STEERING COMMITTEE MEETING, VIENTIANE, LAO PDR</b> |   |                           |   |
| <b>70SC/5/01</b>  | On the Member Countries Annual Cash Contribution, the Representative of Singapore commented that he will exert efforts in forwarding Singapore's contribution starting from the amount of USD10,000 as invoiced by CCOPTS.  |                           | CCOPTS received the Annual Cash Contribution from Singapore on 9 Oct 2018             |
| <b>70SC/5/02</b>  | As soon as the Member Countries Annual Cash Contribution increases, CCOPTS Director will revise the CCOP Budget 2018 and will present its plan of using it in the next Steering Committee Meeting, in reference to the implementation of the CCOP Strategic Plan 2016-2020.   | In progress               |   |
| <b>70SC/5/03</b>  | Delegation of Lao PDR expressed their commitment to forward their 2017 and 2018 cash contribution to CCOPTS soon.   |                           | CCOPTS received the 2017 & 2018 Annual Cash Contribution from Lao PDR on 19 Sept 2018 |
| <b>70SC/6/04</b>  | Thailand Delegation informed the Meeting that they will host the 72nd CCOP Steering Committee Meeting in March 2019. They plan to hold it in the Southern Part of Thailand, either in Suratthani or Satun. The exact date and venue will be announced in the next Steering Committee Meeting in Busan, November 2018. | In preparation            |   |
| <b>70SC/6/05</b>  | As to the hosting of the 55 <sup>th</sup> CCOP Annual Session (2019) and the 73 <sup>rd</sup> CCOP Steering Committee Meeting, Vietnam Delegation informed that Vietnam requires more time to confirm hosting in 2019, and added that it may be possible for Vietnam to host Annual Session in 2020 or later.         | In preparation            |   |

| SC#/<br>Agenda # /<br>Decision # | SC Decisions  | Actions Taken /<br>Status | Follow-up Actions /<br>Remarks  |
|----------------------------------|---|---------------------------|---|
| 70SC/6/06                        | Indonesia Delegation informed the Meeting that they will host the 56th CCOP Annual Session and the 74th CCOP Steering Committee Meeting in November 2020.   | In preparation            |   |
| 70SC/7/07                        | <p>Lao Delegation proposed four new projects for the consideration of the Meeting, (1) Groundwater Project, (2) Geoheritage Project, (3) Geohazards Project and (4) Mine Rehabilitation Project. In reply, CCOPTS Director informed that there are already ongoing activities for these projects.</p> <p>Representative of Singapore informed the Meeting that Earth Observatory of Singapore (EOS) would consider responding to the Lao PDR's request for a geohazards project. Perhaps, EOS could offer field training in earthquake science in Northern Laos. This could be like what EOS has already been doing in Northern Thailand, and Central and Eastern Myanmar in the past two years.</p>  | In progress               |   |
| 70SC/7/08                        | Dr Adichat Surinkum reminded the Member Countries on the timetable for the Election of Director, CCOP Technical Secretariat (Term: 1 April 2019 - 31 March 2022)  | In progress               | SC Chairman received 1 nomination of candidate from Republic of Korea and circulation of candidate with details has been sent to all PRs. Votes of PRs to be submitted by 15 Nov 2018 |
| 70SC/7/09                        | <p>Thailand Delegation expressed their view that the CCOP Select Finance Committee (SFC) has basically fulfilled their task in making sure that CCOPTS operate on a balanced budget. Thailand Delegation proposed that SFC tasks be extended to include strategic plan implementation. The Meeting agreed to take this into consideration in the next Steering Committee Meeting.</p> <p>The Vice-Chair of CCOP Advisory Group (AG) shared that the SFC was formed based on the recommendation of the AG. Throughout the time, the SFC has improved its understanding of the financial aspect of the CCOPTS. The primary role of SFC is to provide financial oversight for the organization, typically in the areas of :</p> <ul style="list-style-type: none"> <li>i. budgeting and financial planning</li> <li>ii. financial reporting</li> <li>iii. the creation and monitoring of internal controls and accountability policies.</li> </ul> | In progress               | Will be report at the 20th SFC meeting  |

| <b>SC#/<br/>Agenda # /<br/>Decision #</b>   | <b>SC Decisions</b>  | <b>Actions Taken /<br/>Status</b>   | <b>Follow-up Actions /<br/>Remarks</b> |
|---|--|---|--|
| <b>70SC/7/10</b>  | The Meeting agreed on the proposal of Korea Delegation in changing the date of CCOP Annual Sessions to mid of November.  | Start in 2019   |  |
| <b>70SC/7/11</b>  | On the Philippine Delegation's proposal of increasing the maximum number of member country delegates' participation to Steering Committee Meetings, the Meeting decided to maintain the maximum country delegates participation to three (3) delegates. However, in special cases Member Countries can write a request letter to the SC Chairman stating the reasons of more than 3 country delegates participation.                                 |   | Depends on SC Chairman decision        |
| <b>DECISIONS OF THE 69<sup>TH</sup> CCOP STEERING COMMITTEE MEETING, BOHOL, PHILIPPINES</b> |  |   |  |
| <b>69SC/3/01</b>  | Republic of Korea (ROK) Delegation recommended including in the CCOP Workplan 2018, the 9th International Conference on Asian Marine Geology (ICAMG-9) which will be convened during October-November 2018. The organizing committee of ICAMG-9 has a plan to open a session for CCOP Member Countries (MC).   | Invited MC to participate ICAMG-9 with sponsorship for USD500 for 1 delegate per MC whose paper is accepted for presentation. |  |
| <b>69SC/4/04</b>  | Thailand Delegation informed the Meeting that the Department of Mineral Resources (DMR) and China Geological Survey (CGS) plan to jointly conduct the China-ASEAN Cross-border Geological Map Compilation. They will propose this new initiative at the 70 <sup>th</sup> CCOP Steering Committee Meeting in Vientiane. The project funding support shall be from the core countries of CLMTV and from the invited multilateral cooperation partners. | In progress   |  |
| <b>69SC/4/05</b>  | The Philippines reiterated their request to include in the CCOP 2018 Workplan a Project on Coal Assessment of Mindanao for clean coal technology power generation.   | In progress   |  |
| <b>69SC/6/06</b>  | Thailand Delegation informed the Meeting that Thailand has already submitted to CCOPTS the quantified in-kind contribution to CCOP in addition to the annual cash contribution. They proposed that other Member Countries do the same, and CCOPTS to report at SC Meetings.  | In progress   |  |
| <b>69SC/6/07</b>  | Korea Delegation agreed to the proposal of Thailand, and will provide the data on quantified in-kind contribution to the CCOPTS.   | In progress   |  |

| SC#/<br>Agenda # /<br>Decision # | SC Decisions   | Actions Taken /<br>Status          | Follow-up Actions /<br>Remarks |
|----------------------------------|--|------------------------------------|--------------------------------|
| 69SC/9.2/09                      | Vietnam Delegation suggested for CCOPTS and host country to call for the paper for thematic session one year in advance. Also, to fully sponsor 1 (one) young geoscientist from each CCOP MC to participate at the Thematic Session.   | In progress                        | Using Housing Subsidy          |
| 69SC/9.2/10                      | The Meeting endorsed the CCOPTS proposals that topic for a Thematic Session be more focused on an area of particular current interest to CCOP, and that all papers submitted from a particular Member Country be pre-edited by their own elected editor before submission to CCOPTS for a final pre-publication review.  | Some MCs nominated<br>Chief Editor |                                |
| 69SC/9.5/13                      | Thailand commented on the Member Country's in-kind contributions like vehicles and personnel to CCOP as examples of cooperation as well as capacity-building activities like three training courses on Geoscience subject.   | In progress                        |                                |
| 69SC/9.5/14                      | Korea, as the leader of Group 1 informed the Meeting during the June 2017 GeoSummit Meeting of China-Japan-Korea that they agreed to increase the annual cash contribution. While other group members, Thailand & Malaysia, are still working on the matter.   | In progress                        |                                |
| 69SC/9.5/15                      | Philippines, as the leader of Group 2, reported that all the Member Country representatives of the Group 2 (Philippines, PNG, Indonesia and Vietnam) will discuss the issue on possibility of increasing their respective contributions to their respective higher authorities. In the case of Papua New Guinea, the possibility of increasing the Annual Cash Contribution from USD 25,000 to USD 30,000 will be discussed with the higher authorities. As for Vietnam, the designation of the Permanent Representative of Vietnam to CCOP has been transferred from the Office of PetroVietnam to the Ministry of Natural Resources and Environment, and there is a proposal for the General Department of Geology and Minerals of Vietnam (GDGMV) to be the Permanent Representative of Vietnam to the CCOP. Upon the approval of this proposal, the issue on the possible increase of Vietnam's Cash Contribution will be forwarded to the proper authorities. | In progress                        |                                |
| 69SC/9.7/19                      | The representative from Myanmar informed the Meeting that Australia has an advanced technology and practices in the field of Geosciences as well as exploration & mining experiences in Asia-Pacific Region. The representative from Myanmar further suggested to CCOP to invite Australia for more cooperation and contribution in Geoscience activities and research among the CCOP MCs.   | In progress                        |                                |
| 69SC/9.7/20                      | Japan Delegation recommended that CCOP produces electronic (PDF) files of reports, proceedings, and books that CCOP has published since its establishment in 1966.   | In progress                        |                                |

| SC#/<br>Agenda # /<br>Decision #  | SC Decisions   | Actions Taken /<br>Status                                       | Follow-up Actions /<br>Remarks  |
|---|--|---|---|
| <b>DECISIONS OF THE 68<sup>TH</sup> CCOP STEERING COMMITTEE MEETING, NAY PYI TAW, MYANMAR</b> |  |   |   |
| <b>68SC/3/02</b>  | Ms Franca Schwarz inquired on the plan of CCOPTS in carrying out the CCOP Advisory Group's recommendation to organize a high-level workshop of the Steering Committee to work out on a communication strategy of CCOP.   | In progress   |   |
| <b>68SC/7.1/05</b>  | The Cambodia Delegation informed the Meeting that Cambodia will increase its annual cash contribution to USD 10,000. The Myanmar Delegation informed the Meeting that they are working out on the possibility of increasing their annual cash contribution to CCOP to USD 10,000. They will report back to CCOP TS once approved by their government.  |   | CCOPTS received annual cash contribution for year 2017 from Cambodia USD 10,000 on 7 Aug 2017 |
| <b>68SC/7.2/06</b>  | The China Delegation agreed in principle in increasing China's annual cash contribution, and requested the CCOPTS to send official letter to China on this matter.   | CCOPTS sent a draft letter to China for review on 20 March 2017 |   |
| <b>68SC/7.2/07</b>  | The Japan Delegation requested that CCOPTS provide an annual update of the GDP per capita and healthy life expectancy ranking.   |   | Will be report at the 18 <sup>th</sup> SFC meeting  |
| <b>68SC/7.2/08</b>  | The Thailand Delegation proposed to consider the in-kind contribution in standardizing country contribution to CCOP.   | In progress   |   |
| <b>68SC/7.2/09</b>  | <p>The Meeting further decided that each group will discuss on how much to increase in the annual cash contribution bearing in mind the need of the CCOPTS of at least USD 50,000 by year 2020 in order to achieve the CCOP Strategic Action Plan 2016-2020. The result of discussion will be reported at the next Steering Committee Meeting. The Meeting also agreed to have an increase of target amounts for each group, while noted that each country cannot guarantee of an increase in annual cash contribution, as the following:</p> <p style="padding-left: 40px;">Group I (Japan, Republic of Korea, Malaysia, China, Thailand): USD 20,000 – 25,000</p> <p style="padding-left: 40px;">Group II (Indonesia, Vietnam, Philippines, Papua New Guinea): USD 15,000 – 20,000</p> <p style="padding-left: 40px;">Group III (Lao PDR, Cambodia, Myanmar, Timor-Leste ): USD 10,000</p> <p>The CCOPTS will provide the required information by each Group to facilitate the discussion.</p> | In progress   |   |

| SC#/<br>Agenda # /<br>Decision #   | SC Decisions  | Actions Taken /<br>Status                | Follow-up Actions /<br>Remarks |
|--|---|--|--------------------------------|
| <b>RECOMMENDATIONS OF ADVISORY GROUP MEETING AT THE 53<sup>RD</sup> CCOP ANNUAL SESSION, CEBU, PHILIPPINES</b> |   |  |                                |
| 69SC/7/01  | Ensure sustainability of CCOP<br>Ongoing programs<br>Finding mechanisms for long-term sustainability<br>Re-enforce connections with international organizations, such as EuroGeoSurveys (EGS), SPC, etc | In progress                              |                                |
| 69SC/7/03  | Align CCOP's strategy and workplan to global conventions such as Sustainable Development Goals (SDGs), Sendai Framework for Disaster Risk Reduction, Paris Agreement, etc.                              | Strategy already aligned with SDG/Sendai |                                |
| 69SC/7/05  | Partnering with ASEAN Center for Energy (ACE).  | In progress                              |                                |
| 69SC/7/06  | Better communication with policy makers   | In progress                              |                                |
| 69SC/7/07  | Member Countries Annual Report be concise and structured to better reflect their relation to the implementation of the CCOP Strategic Plan (2016-2020).   | In progress                              |                                |
| 69SC/7/08  | Highlight and disseminate success stories and best practices from CCOP  | In progress                              |                                |
| 69SC/7/09  | The Advisory Group noted and appreciated the existence of the national CCOP committee in some Member Countries, and encourages the continuity and strengthening of their role.                          | In progress                              |                                |
| 69SC/7/11  | The Advisory Group underlines the importance of active participation of each Member Country at the Steering Committee Meetings.   | In progress                              |                                |



ANNEX II  
**AUDIT REPORT FOR JANUARY – JUNE 2018**

COORDINATING COMMITTEE FOR  
GEOSCIENCE PROGRAMMES IN EAST AND SOUTHEAST ASIA (CCOP)

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REPORT AND FINANCIAL STATEMENT  
FOR THE HALF YEAR PERIOD ENDED JUNE 30, 2018

## INDEPENDENT AUDITOR'S REPORT

To THE STEERING COMMITTEE  
COORDINATING COMMITTEE FOR GEOSCIENCE PROGRAMMES IN EAST AND SOUTHEAST  
ASIA (CCOP)

### Opinion

We have audited the financial statement of Coordinating Committee for Geoscience Programmes in East and Southeast Asia for CCOP Technical Secretariat (CCOP), which comprise the statement of assets, liabilities and fund balances as at June 30, 2018 and the statement of revenues and expenditures for the half year period then ended and a summary of significant accounting policies and other explanatory information (together "the financial statement").

In our opinion, the financial statement of the CCOP for the half year period ended June 30, 2018 are prepared in all material respects, in accordance with the cash receipts and disbursements basis of accounting described in Note 2.

### Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the CCOP in accordance with the ethical requirements that are relevant to our audit of the financial statements in jurisdiction, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Basis of Accounting and Restriction on Distribution and Use

We draw attention to Note 2 to the financial statements, which describes the basis of accounting. The financial statements are prepared to provide information to CCOP. As a result, the statements may not be suitable for another purpose. Our report is intended solely for CCOP and should not be distributed to or used by parties other than CCOP. Our opinion is not modified in respect of this matter.

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### **of Management for the Financial Statements**

Management is responsible for the preparation of the financial statement in accordance with the cash receipts and disbursements basis of accounting described in note 2, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the CCOP's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting unless management either intends to liquidate the CCOP or to cease operations, or has no realistic alternative but to do so.

### **Auditor's Responsibilities for the Audit of the Financial Statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the CCOP's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

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• Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

The engagement partner responsible for the audit resulting in this independent auditor's report is Miss Potjanarat Siripipat.

(Miss Potjanarat Siripipat)  
Certified Public Accountant  
Registration No. 9012

Dharmniti Auditing Company Limited  
Bangkok, Thailand  
August 14, 2018

**COORDINATING COMMITTEE FOR  
GEOSCIENCE PROGRAMMES IN EAST AND SOUTHEAST ASIA (CCOP)  
FOR CCOP TECHNICAL SECRETARIAT  
STATEMENT OF ASSETS, LIABILITIES AND FUND BALANCES  
AS AT JUNE 30, 2018**

|  | Note | BAHT A/C                 |                         | USD A/C                  | TOTAL                    |
|--|------|--------------------------|-------------------------|--------------------------|--------------------------|
|  |      | (THB)                    | (USD)                   | (USD)                    | (USD)                    |
| <b>ASSETS</b>                              |      |                          |                         |                          |                          |
| <b>CASH AT BANKS</b>                       |      |                          |                         |                          |                          |
| Cash in hand (petty cash)                  |      | 10,000.00                | 301.47                  | -                        | 301.47                   |
| USD savings account                        |      | -                        | -                       | 638,278.16               | 638,278.16               |
| USD fixed account                          |      | -                        | -                       | 295,938.77               | 295,938.77               |
| Baht current account                       |      | 103,347.80               | 3,115.70                | -                        | 3,115.70                 |
| Baht savings account                       |      | 561,024.43               | 16,913.61               | -                        | 16,913.61                |
| Baht fixed account                         |      | 16,017.66                | 482.90                  | -                        | 482.90                   |
| Total cash at banks                        |      | <u>690,389.89</u>        | <u>20,813.68</u>        | <u>934,216.93</u>        | <u>955,030.61</u>        |
| <b>OTHER CURRENT ASSETS</b>                |      |                          |                         |                          |                          |
| Advance                                    | 3    | 30,200.00                | 910.46                  | 4,980.00                 | 5,890.46                 |
| Other receivable                           |      | 4,369.15                 | 131.72                  | -                        | 131.72                   |
| Total other current assets                 |      | <u>34,569.15</u>         | <u>1,042.18</u>         | <u>4,980.00</u>          | <u>6,022.18</u>          |
| <b>FIXED ASSETS - EQUIPMENT</b>            | 4    | <u>180,136.12</u>        | <u>5,430.70</u>         | -                        | <u>5,430.70</u>          |
| <b>TOTAL ASSETS</b>                        |      | <u><u>905,095.16</u></u> | <u><u>27,286.56</u></u> | <u><u>939,196.93</u></u> | <u><u>966,483.49</u></u> |
| <b>LIABILITIES AND FUND BALANCES</b>       |      |                          |                         |                          |                          |
| <b>CURRENT LIABILITIES</b>                 |      |                          |                         |                          |                          |
| Others                                     |      |                          |                         |                          |                          |
| Withholding tax payable                    |      | 2,385.08                 | 71.90                   | -                        | 71.90                    |
| Personal income tax payable                |      | 48,404.70                | 1,459.29                | -                        | 1,459.29                 |
| <b>TOTAL LIABILITIES</b>                   |      | <u>50,789.78</u>         | <u>1,531.19</u>         | -                        | <u>1,531.19</u>          |
| <b>FUND BALANCES</b>                       |      |                          |                         |                          |                          |
| <b>OPERATING FUND</b>                      |      |                          |                         |                          |                          |
| B/F  |      | 5,513,812.17             | 158,373.70              | 646,802.22               | 805,175.92               |
| Revenues over (under) expenditures         |      | (10,285.22)              | (2,395.49)              | 84,208.71                | 81,813.22                |
| Transfer money from USD A/C to Baht A/C    |      | 1,781,402.95             | 56,690.00               | (56,690.00)              | -                        |
| C/F  |      | <u>7,284,929.90</u>      | <u>212,668.21</u>       | <u>674,320.93</u>        | <u>886,989.14</u>        |
| <b>OTHER FUND</b>                          |      |                          |                         |                          |                          |
| BGR-Geo-risk Workshop                      |      | (1,295,058.12)           | (37,645.29)             | 81,960.96                | 44,315.67                |
| KIGAM-Technical Workshop                   |      | (967,349.80)             | (27,779.20)             | 43,196.27                | 15,417.07                |
| KIGAM-Unconventional Oil & Gas Project     | 5    | (3,929,272.60)           | (114,423.62)            | 112,708.26               | (1,715.36)               |
| TAIWAN                                     |      | (96,344.00)              | (2,765.66)              | 3,621.10                 | 855.44                   |
| INTERMIN Project                           |      | (142,600.00)             | (4,299.07)              | 23,389.41                | 19,090.34                |
| Total other fund                           |      | <u>(6,430,624.52)</u>    | <u>(186,912.84)</u>     | <u>264,876.00</u>        | <u>77,963.16</u>         |
| <b>TOTAL FUND BALANCES</b>                 |      | <u>854,305.38</u>        | <u>25,755.37</u>        | <u>939,196.93</u>        | <u>964,952.30</u>        |
| <b>TOTAL LIABILITIES AND FUND BALANCES</b> |      | <u><u>905,095.16</u></u> | <u><u>27,286.56</u></u> | <u><u>939,196.93</u></u> | <u><u>966,483.49</u></u> |

**COORDINATING COMMITTEE FOR  
GEOSCIENCE PROGRAMMES IN EAST AND SOUTHEAST ASIA (CCOP)  
FOR CCOP TECHNICAL SECRETARIAT  
STATEMENT OF REVENUES AND EXPENDITURES  
FOR THE HALF YEAR PERIOD FROM JANUARY 1, 2018 TO JUNE 30, 2018**

|  | Note | BAHT A/C            |                   | USD A/C           | TOTAL             |
|--|------|---------------------|-------------------|-------------------|-------------------|
|  |      | (THB)               | (USD)             | (USD)             | (USD)             |
| <b>REVENUES</b>                                |      |                     |                   |                   |                   |
| Member countries' contributions                |      | 1,304,800.00        | 40,000.00         | 230,389.80        | 270,389.80        |
| Interest earned                                |      | 1,195.47            | 36.13             | 647.48            | 683.61            |
| Revenue from project management                |      | -                   | -                 | 18,072.97         | 18,072.97         |
| Miscellaneous Income                           |      | 896.09              | 28.49             | -                 | 28.49             |
| Gain on exchange rate                          |      | -                   | 66.07             | -                 | 66.07             |
| <b>TOTAL REVENUES</b>                          |      | <b>1,306,891.56</b> | <b>40,130.69</b>  | <b>249,110.25</b> | <b>289,240.94</b> |
| <b>EXPENDITURES</b>                            |      |                     |                   |                   |                   |
| Personnel expenses                             |      | 313,390.91          | 10,046.91         | 124,841.71        | 134,888.62        |
| Meeting/official travel expenses               |      | 228,676.02          | 7,270.98          | 33,441.31         | 40,712.29         |
| General administration expenses                |      | 549,957.93          | 17,241.76         | 6,618.52          | 23,860.28         |
| Special expenditures                           |      | 64,157.39           | 2,016.97          | -                 | 2,016.97          |
| Publication and information expenses           |      | 95,240.00           | 3,030.88          | -                 | 3,030.88          |
| Technical program expenses                     |      | 65,754.53           | 2,029.94          | -                 | 2,029.94          |
| Unrealized loss on exchange rate               |      | -                   | 3,363.04          | -                 | 3,363.04          |
| <b>TOTAL EXPENDITURES</b>                      |      | <b>1,317,176.78</b> | <b>45,000.48</b>  | <b>164,901.54</b> | <b>209,902.02</b> |
|  |      | <b>(10,285.22)</b>  | <b>(4,869.79)</b> | <b>84,208.71</b>  | <b>79,338.92</b>  |
| <b>GAIN (LOSS) ON CONVERSION OF CURRENCIES</b> |      | <b>-</b>            | <b>2,474.30</b>   | <b>-</b>          | <b>2,474.30</b>   |
| <b>REVENUES OVER (UNDER) EXPENDITURES</b>      |      | <b>(10,285.22)</b>  | <b>(2,395.49)</b> | <b>84,208.71</b>  | <b>81,813.22</b>  |

Notes to the financial statement form an integral part of this statement.

**COORDINATING COMMITTEE FOR  
GEOSCIENCE PROGRAMMES IN EAST AND SOUTHEAST ASIA (CCOP)  
FOR CCOP TECHNICAL SECRETARIAT  
NOTES TO THE FINANCIAL STATEMENT  
JUNE 30, 2018**

1. GENERAL

CCOP is the unit operative as a non-profit making, an intergovernmental organization created by virtue of and under the Memorandum of Understanding of March 25, 1987 entered into among the governments of member countries, assisted by cooperating countries and international organization. The principal activities are to promote and cooperate in the planning and implementation of joint mineral prospecting programmes and research in Asian offshore and geologically related areas of the member countries.

2. BASIS OF ACCOUNTING

2.1 Basis of preparation of financial statement

The financial statement are covered solely for the activities of COOP's Technical Secretariat, which does not include other project activities managed by CCOP's Technical Secretariat. CCOP shall directly charge these technical secretarial services to such projects at the agreed rate by recording as revenue under the account name "revenue from project management".

2.2 The financial statement has been prepared on receipts and disbursements basis.

2.3 Fixed assets - equipment

Equipment are stated at cost. Depreciation is calculated by the straight-line method, based on the estimated useful lives of 5 years.

Fixed assets are recorded accordingly to the Financial Code of CCOP section 22 "property records".

Equipment which their costs are more than THB 30,000 or USD 1,000 and their estimated useful lives are equal or more than 3 years, are recorded as fixed assets. However, equipment which their cost less than THB 30,000 or USD 1,000 are recorded as expenses of respective project at the time of purchase.

Since 2001, equipments of CCOP Technical Secretariat which their costs are more than THB 1,000 are recorded as fixed assets.

**COORDINATING COMMITTEE FOR  
GEOSCIENCE PROGRAMMES IN EAST AND SOUTHEAST ASIA (CCOP)  
FOR CCOP TECHNICAL SECRETARIAT  
NOTES TO THE FINANCIAL STATEMENT (CONT.)  
JUNE 30, 2018**

2.4 Exchange of currencies

Transactions and conversions of currencies are practiced accordingly to the Financial Code of CCOP section 27 “conversion of currencies”.

Balances of assets and liabilities in Thai Baht outstanding at the end of period are converted into US Dollar at CCOP’s rates of exchange which were obtained from United Nation’s operational rates at the rate of Baht 33.17/US Dollar. Gain or loss on conversion of currencies are recorded under other income or other expenses.

Income statement recorded in Thai Baht is converted into US Dollar at the current rates of exchange which are based on monthly basis as following :

| Months of the year 2018 | Baht = 1 USD |
|-------------------------|--------------|
| January                 | 32.62        |
| February                | 31.42        |
| March                   | 31.41        |
| April                   | 31.27        |
| May                     | 31.55        |
| June                    | 33.17        |

3. CASH ADVANCE

Cash advance of CCOP Technical Secretariat as at June 30, 2018, in the amount of USD 5,890.46 are consisted of:

|   | Amount           |                 |
|---|------------------|-----------------|
|   | BAHT             | USD             |
| 1. Bottles drinking water deposit   | 1,200.00         | 36.18           |
| 2. Advanced payment made to Meeting Arrangements for CCOP - KIGAM Unconventional Oil and Gas Project: Assessment of Shale Energy resources in Asia National Coordinators Meeting & Workshop (UC11), 10-12 July 2018 | 9,000.00         | 271.33          |
| 3. Advanced payment made to Meeting Miscellaneous for CCOP-KIGAM-UNESCO-D6M Workshop Transboundary aquifer-surface water management in Mekong basin 11-12 June 2018, Vientiane, Lao PDR                             | 20,000.00        | 5,582.95        |
|   | <u>30,200.00</u> | <u>5,890.46</u> |



**COMMITTEE FOR  
GEOSCIENCE PROGRAMMES IN EAST AND SOUTHEAST ASIA (CCOP)  
FOR CCOP TECHNICAL SECRETARIAT  
NOTES TO THE FINANCIAL STATEMENT (CONT.)  
JUNE 30, 2018**

4. FIXED ASSETS - EQUIPMENT

Equipment consisted of:-

|                                 | BAHT                  |                    |          | USD                   |                     |
|---------------------------------|-----------------------|--------------------|----------|-----------------------|---------------------|
|                                 | As at<br>31 Dec. 17   | Addition           | Disposal | As at<br>30 Jun. 18   | As at<br>30 Jun. 18 |
| <u>Cost</u>                     |                       |                    |          |                       |                     |
| Office equipment                | 4,494,427.26          | 103,949.99         | -        | 4,598,377.25          | 138,630.61          |
| Furniture and Fixture           | 931,100.00            | -                  | -        | 931,100.00            | 28,070.55           |
| Building improvement            | 969,473.80            | -                  | -        | 969,473.80            | 29,227.43           |
| Vehicle                         | 1,555,500.00          | -                  | -        | 1,555,500.00          | 46,894.78           |
| Total                           | <u>7,950,501.06</u>   | <u>103,949.99</u>  | <u>-</u> | <u>8,054,451.05</u>   | <u>242,823.37</u>   |
| <u>Accumulated depreciation</u> |                       |                    |          |                       |                     |
| Office equipment                | (4,354,084.74)        | (64,157.39)        | -        | (4,418,242.13)        | (133,199.94)        |
| Furniture and Fixture           | (931,100.00)          | -                  | -        | (931,100.00)          | (28,070.55)         |
| Building improvement            | (969,473.80)          | -                  | -        | (969,473.80)          | (29,227.43)         |
| Vehicle                         | (1,555,499.00)        | -                  | -        | (1,555,499.00)        | (46,894.75)         |
| Total                           | <u>(7,810,157.54)</u> | <u>(64,157.39)</u> | <u>-</u> | <u>(7,874,314.93)</u> | <u>(237,392.67)</u> |
| Equipment - net                 | <u>140,343.52</u>     |                    |          | <u>180,136.12</u>     | <u>5,430.70</u>     |

5. CCOP-KIGAM UNCONVENTIONAL OIL AND GAS PROJECT

The CCOP-KIGAM Unconventional Oil and Gas Project will enhance the knowledge of the regulatory agencies, energy research organizations and national oil companies in CCOP countries in the exploration of new frontiers of oil and gas resources and new ways to safely make use of the vast domestic gas reserves in the member countries.

The Project implementation is designed to sustain the experience, technology transfer and institution capacity building carried out in previous capacity building projects in CCOP. This is also consistent with the aspiration of the Member Countries for a sustainable development of energy resources and energy security. Hence, the results and experiences derived from the previous projects constitute an important basis for the CCOP-KIGAM Unconventional Oil and Gas Project.

**COORDINATING COMMITTEE FOR  
GEOSCIENCE PROGRAMMES IN EAST AND SOUTHEAST ASIA (CCOP)  
FOR CCOP TECHNICAL SECRETARIAT  
NOTES TO THE FINANCIAL STATEMENT (CONT.)**

**JUNE 30, 2018**

This project is made and entered into as of March 1, 2015 between Korea Institute of Geoscience and Mineral Resources (KIGAM) and The Coordinating Committee for Geoscience Programs in East and Southeast Asia (CCOP).

The total amount of project of Korean Won 920,000,000 for 4 years as follow;

- 1<sup>st</sup> year (2015): Korean Won 230,000,000
- 2<sup>nd</sup> year (2016): Korean Won 230,000,000
- 3<sup>rd</sup> year (2017): Korean Won 230,000,000
- 4<sup>th</sup> year (2018): Korean Won 230,000,000

As at March 1, 2016, there was an amendment to the agreement for the sponsor fund year 2 (2016) from Korean Won 230,000,000 to Korean Won 90,000,000

As at March 1, 2017, there was an amendment to the agreement for the sponsor fund year 3 (2017) from Korean Won 230,000,000 to Korean Won 72,700,000

As at March 1, 2018, there was an amendment to the agreement for the sponsor fund year 4 (2018) from Korean Won 230,000,000 to Korean Won 60,000,000

The project had received the fund transfer from the KIGAM and these amounts were accounted for in US Dollars account base on the Siam Commercial Bank, Thailand's exchange rate as following:

| Installment                 | Transaction date | Amount<br>(WON)       | Amount<br>(USD)   | CCOP's Management<br>fee (10%)<br>(USD) |
|-----------------------------|------------------|-----------------------|-------------------|---|
| <u>Brought forward:</u>     |                  |                       |                   |   |
| 1 <sup>st</sup> Installment | March 26, 2015   | 115,000,000.00        | 103,515.01        | 10,351.50                               |
| 2 <sup>nd</sup> Installment | December 8, 2015 | 115,000,000.00        | 97,049.69         | 9,704.97                                |
| 3 <sup>rd</sup> Installment | March 15, 2016   | 45,000,000.00         | 37,564.80         | 3,756.48                                |
| 4 <sup>th</sup> Installment | August 2, 2016   | 45,000,000.00         | 39,682.54         | 3,968.25                                |
| 5 <sup>th</sup> Installment | March 20, 2017   | 36,350,000.00         | 31,913.40         | 3,191.34                                |
| 6 <sup>th</sup> Installment | April 14, 2017   | 36,350,000.00         | 32,214.04         | 3,221.40                                |
| 7 <sup>th</sup> Installment | March 21, 2018   | 27,272,727.00         | 25,240.84         | 2,524.08                                |
| Grant Total                 |                  | <u>419,972,727.00</u> | <u>367,180.32</u> | <u>36,718.02</u>                        |

The management fee which is charged by CCOP is Calculated based on 10% of the fund received.

**COORDINATING COMMITTEE FOR  
GEOSCIENCE PROGRAMMES IN EAST AND SOUTHEAST ASIA (CCOP)  
FOR CCOP TECHNICAL SECRETARIAT  
NOTES TO THE FINANCIAL STATEMENT (CONT.)  
JUNE 30, 2018**

The statement of revenues and expenditures as follow;

|   | FOR THE           | FOR THE HALF YEAR PERIOD END JUNE 30, 2018 |                    |                  | FOR THE PERIOD    |
|---|-------------------|--|--------------------|------------------|-------------------|
|   | PERIOD FROM       | BAHT A/C                                   |                    | USD A/C          | TOTAL             |
|   | MARCH 1, 2015     |  |                    |                  |                   |
|   | TO DECEMBER       |  |                    |                  |                   |
|   | 31, 2017          |  |                    |                  |                   |
|   | (USD)             | (THB)                                      | (USD)              | (USD)            | (USD)             |
| <b>REVENUES</b>                                     |                   |  |                    |                  |                   |
| 1 <sup>st</sup> installment                         |                   |  |                    |                  |                   |
| (50% of Korean WON 230,000,000)                     | 103,515.01        | -  | -                  | -                | 103,515.01        |
| 2 <sup>nd</sup> installment                         |                   |  |                    |                  |                   |
| (50% of Korean WON 230,000,000)                     | 97,049.69         | -  | -                  | -                | 97,049.69         |
| 3 <sup>rd</sup> installment                         |                   |  |                    |                  |                   |
| (50% of Korean WON 90,000,000)                      | 37,564.80         | -  | -                  | -                | 37,564.80         |
| 4 <sup>th</sup> installment                         |                   |  |                    |                  |                   |
| (50% of Korean WON 90,000,000)                      | 39,682.54         | -  | -                  | -                | 39,682.54         |
| 5 <sup>th</sup> installment                         |                   |  |                    |                  |                   |
| (50% of Korean WON 72,700,000)                      | 31,913.40         | -  | -                  | -                | 31,913.40         |
| 6 <sup>th</sup> installment                         |                   |  |                    |                  |                   |
| (50% of Korean WON 72,700,000)                      | 32,214.04         | -  | -                  | -                | 32,214.04         |
| 7 <sup>th</sup> installment                         |                   |  |                    |                  |                   |
| (50% of Korean WON 60,000,000)                      | -                 | -  | -                  | 25,240.84        | 25,240.84         |
| <b>TOTAL REVENUES</b>                               | <b>341,939.48</b> | <b>-</b>                                   | <b>-</b>           | <b>25,240.84</b> | <b>367,180.32</b> |
| <b>EXPENDITURES</b>                                 |                   |  |                    |                  |                   |
| Technical Activities                                |                   |  |                    |                  |                   |
| 1 <sup>st</sup> National Coordinators Meeting       | 14,215.95         | -  | -                  | -                | 14,215.95         |
| 2 <sup>nd</sup> Project Launching & Training Course | 37,583.78         | -  | -                  | -                | 37,583.78         |
| 3 <sup>rd</sup> Training Course                     | 22,061.14         | -  | -                  | -                | 22,061.14         |
| 4 <sup>th</sup> Training Course                     | 13,685.91         | -  | -                  | -                | 13,685.91         |
| 5 <sup>th</sup> Training Course                     | 21,333.15         | -  | -                  | -                | 21,333.15         |
| 6 <sup>th</sup> Training Course                     | 53,019.81         | -  | -                  | -                | 53,019.81         |
| 7 <sup>th</sup> Training Course                     | 17,820.57         | -  | -                  | -                | 17,820.57         |
| 8 <sup>th</sup> Training Course                     | 29,178.94         | -  | -                  | -                | 29,178.94         |
| 9 <sup>th</sup> Training Course                     | 35,912.85         | -  | -                  | -                | 35,912.85         |
| 10 <sup>th</sup> Training Course                    | -                 | 660,018.00                                 | 20,919.75          | 3,695.71         | 24,615.46         |
| 11 <sup>th</sup> Training Course                    | -                 | 47,427.00                                  | 1,429.82           | -                | 1,429.82          |
| Technical activities                                | 35,096.47         | 22,250.00                                  | 680.49             | -                | 680.49            |
| Office equipment                                    | 20,784.09         | 10,486.00                                  | 332.36             | -                | 332.36            |
| CCOP Management Fee (10%)                           | 34,193.94         | -  | -                  | 2,524.08         | 2,524.08          |
| Audit fee   | 3,476.00          | 30,000.00                                  | 950.87             | -                | 950.87            |
| <b>TOTAL EXPENDITURES</b>                           | <b>338,362.60</b> | <b>770,111.00</b>                          | <b>24,313.29</b>   | <b>6,219.79</b>  | <b>368,895.68</b> |
| <b>REVENUES OVER (UNDER) EXPENDITURES</b>           | <b>3,576.88</b>   | <b>(770,181.00)</b>                        | <b>(24,313.29)</b> | <b>19,021.05</b> | <b>(1,715.36)</b> |

## 6. APPROVAL OF FINANCIAL STATEMENT

The financial statement was authorized for issue by the director on August 14, 2018.