SUMMARY REPORT OF THE RESULTS OF THE COOPERATIVE AUDIT OF
The management of water sources in Mekong River Basin in line with the implementation of the SDGs

I. BACKGROUND

With the aim of not only carrying out commitments and solutions as specified in the Hanoi Declaration adopted at the 14th ASOSAI Assembly with the theme "*Environmental Auditing for Sustainable Development*" but also affirming the role, position and efforts of ASOSAI Community in fulfilling the United Nations' 2030 Agenda for Sustainable Development, the State Audit Office of Vietnam (SAV) as the Chairman of ASOSAI during the period 2018 – 2021 proposed and received strong support from many SAIs for the conduct of the cooperative audit of "*the management of water resources in Mekong River Basin in line with the implementation of the Sustainable Development Goals (SDGs)*". Particularly, the audit with the participation of SAIs of 3 out of 6 countries of the Mekong River Basin including Vietnam, Thailand and Myanmar was conducted in the context of the whole basin facing enormous challenges and negative impacts of climate changes, environmental degradation as well as unsustainable management, exploitation and use of water resources which potentially have a significant effect on the daily lives of more than 65 million people. The audit, therefore, is expected to propose recommendations and give voice to the international community for contributing to improving the efficient management of water resources of the Mekong River in a fair and harmonious manner among countries towards the sustainable development of the whole basin.

II. ORGANIZATION OF THE IMPLEMENTATION AND AUDIT RESULTS

With a high sense of responsibility, right after the audit topic was approved at the 55th ASOSAI Governing Board Meeting on July 27, 2020, SAIs of Vietnam, Thailand and Myanmar worked closely together to reach a concensus to sign the Statement of Commitment and Terms of Reference for the cooperative audit on December 12, 2020. Accordingly, the audit will follow INTOSAI's Guidance on Cooperative Audit 9000 (INTOSAI GUID 9000), carry out parallel testing, performance audit and will be conducted concurrently

by 03 SAIs. Each participating SAI may choose the audit period and method suitable for the demands and concerns of its country, however, the agreed common goal should be achieved: "*To assess whether the countries concerned have fulfilled the commitments linked to the implementation of SDGs in the Mekong River Basin*".

The preparation process was also thoroughly facilitated by 03 SAIs. The SAV, as the leading SAI of the audit, actively conducted the field survey in Mekong River Basin and cooperated with professional agencies and domestic environmental experts in consulting and developing an audit plan that is as close to reality as possible and highly feasible to share and reaching agreement with participating SAIs; created a mechanism for information exchange and close cooperation with INTOSAI's Knowledge Sharing Committee (KSC), experts from SAIs of Malaysia, Indonesia, the World Bank (WB) and Canadian Audit and Accountability Foundation (CAAF) in training activities; provided the professional and technical support during the audit process; and improved coordination among relevant parties in order to ensure the progress, effectiveness and quality of the audit. On that basis, the SAIs of Vietnam, Thailand and Myanmar have completed the development of an audit plan including audit objectives, contents and methods suitable for practical conditions and the Action Plan to implement the 2030 Agenda for SDGs of each nation and follow closely the overall objective of the audit, specifically as follows:

1. Objectives and contents of the audit

- The SAV identified two main objectives, including: *To assess the Government's management of water resources in the Mekong River Basin, in line with the realization of specific objective 6.5 under the SDG 6* and *To evaluate Vietnam's compliance with international commitments related to the management, use and protection of water resources in the Mekong River Basin.* Accordingly, in addition to considering the responsibility of the competent management agencies, the SAV also focused on generalizing consequences of the negative impacts on the environment due to the reduction of water sources, biodiversity and people's livelihoods and simultaneously pointing out the difficulties and inadequacies in the implementation of International Agreements and commitments on current management of water resources in Mekong River Basin.

- SAI Thailand focused on assessing the current status of the Mekong River's water resouces and impacts of management, use and exploitation of water resouces of the Mekong River, associated with the implementation of SDGs in Thailand on the basis of 4 main aspects: (a) Water quantity, (b) Sediment discharge, (c) The Ecosystem and Aquatic and (d) Livelihood of

people. Simultaneously, the emphasis is placed on the management activities including the monitoring, reporting, warning and corrective actions and solutions. The evaluation results will be analyzed by the SAI of Thailand based on 07 SDGs including Goals 2, 6, 7, 11, 13, 15 and 17.

- SAI Myanmar aims to evaluate the effectiveness and suitability of the management of water resources of the Mekong River Basin compared with the SDGs of the United Nations and the Myanmar Sustainable Development Plan. The content and scope of the audit mainly focuses on assessing the quality of water resources, the implementation of the plan conducted by Department of Environmental Conservation to reduce the content of chemical and biological substances in water resources during the periods of 2018 - 2019 and 2019 - 2020.

2. Audit Methods

The SAIs of Vietnam, Thailand and Myanmar effectively applied the audit approaches which were modern and suitable with international audit practices such as IDI's SDG Audit Model (ISAM) and Whole-of-Government approach. This helps SAIs to comprehensively assess the system of policies and operating mechanisms associated with the implementation of the SDGs in terms of cohesion and integration; the economy, efficiency and effectiveness during the implementation process and achieved results; the interactions and interrelationships among parties involved; and at the same time point out the existing inadequacies and shortcomings, thereby contributing to improving the audit's impacts and values.

Moreover, during the audit process, in addition to traditional methods such as the conduct of interviews, study of records and documents, preparation of questionnaires, ect, SAIs were also active in reasearching and flexibly applying the new and modern audit methods to collect appropriate audit evidences as a basis for giving valuable audit findings. Specifically: (1) SAI Thailand applied remote sensing technology and used satellite images provided by Geo-Informatics and Space Technology Development Agency (GISDA) in order to assess the impacts of "*Hungry water*" of the Mekong River; organized online surveys for different citizen groups to give opinions on ecosystems and fisheries; (2) the SAV strengthened the application of IT in audit activities by accessing, extracting and analyzing data from software systems and databases on the management and supervision of water quality, current situation of the exploitation, use and discharge of wastewater into the water resources of central and local management agencies, etc.; (3) SAI Myanmar collected, examined, verified and analyzed data from various sources, thereby focusing

on considering the linkage between the United Nations 2030 Agenda for Sustainable Development Goals and the Strategies and Objectives under the Myanmar's Action Plan.

3. Audit results

The summary report of the audit results of the SAIs of Vietnam, Thailand and Myanmar shows that the Governments of 03 countries have paid attention and put forth many efforts and solutions in the management of the Mekong River's water resources in line with the implementation of SDGs such as: Completing the development of an action plan for the implementation of the 2030 Agenda suitable with the situation of each country; Promulgating regulations and legal documents and creating a legal basis for water resouce management; Investing in necessary infrastructure and other resources and organizing the implementation of the monitoring and warning for the quantity and quality of water sources; Strengthening international cooperation activities at all levels on the Mekong River Basin's water source in order to share, exchange and reach mutual consent for collective benefits, etc. However, in addition, the audit report also reflects that the degradation of water resource in the Mekong River, together with the negative impacts on ecosystems, livelihoods and lives of people, has been taking place in all three countries, specifically as follows:

- Water quality: The audit results show that the water quality in certain areas of the Mekong River Basin is showing signs of pollution. In Myanmar, the analysis results of water quality in 05 areas (including 02 areas of the Mekong River's main flow and 03 areas of tributaries) reflect a number of chemical and biological indicators exceeding the allowed standards and unsuitable to serve people's daily life. According to SAI Myanmar, the initial cause was due to the effects of insecticides, chemical wastes from the agricultural and livestock industries, mining projects, hotels, restaurants and residential areas situated by the river. In Vietnam, the quality of surface water and groundwater shows signs of microbiological pollution, alum contamination and high salinity, particularly during the dry season and in urban areas, industrial parks where many processing and production facilities are concentrated or areas adjacent to the sea. The cause identified may be due to the impact from discharge activities in the process of production and daily life as well as the decrease in the quantity of water in the Mekong River, leading to a serious shortage of fresh water, affecting the ability to self-clean and natural saline washing of the river.

- Water volume: Both SAIs Vietnam and Thailand noted that water shortages in these countries have the tendency to increase. On the basis of

analysis of measurement and statistical data on water level, water volume and alluvium in the period of 2011-2020, the SAV estimated the amount of water from the upstream of the Mekong River to the Mekong Delta is on a declining trend, the volume of water in 2020 is 157 billion m^3 lower than that of the same period in 2011; the amount of alluvium and sand from upstream in 2020 also decreased by 14 million tons compared to that of 2017. Meanwhile, in Thailand, the database on the water volume per day in the period from January 1, 2016 to May 31, 2021 at 06 measuring stations along the Mekong River in Thailand, showed that since 2019, the number of days with extremely low water levels had increased significantly compared to the previous period. In addition, based on statistics on the amount of alluvium in the Mekong River in the period of 1992 - 2018 and survey data from 24 areas of the Mekong River network, SAI Thailand also clarified that sediment discharge is the main cause for the waste water build-up and alluvium accumulation, leading to the appearance of the "*Effect of Hungry Water*" - when the river's flow exceeds its capacity to transport alluvium, causing erosion of the existing riverbed and banks to become an increasing trend in the period of 1992 – 2018.

- People's livelihood: SAI Thailand assessed that *the"Effect of Hungry Water"* is the cause of erosion and destruction of many infrastructures and houses of people along the riverbanks. At the same time, SAI Thailand warned that the lack of alluvium will also greatly affect the ecological systems on the river. In addition, SAI Thailand cites a number of research results using the *Social Impact Monitoring and Vulnerability Assessment* (SIMVA) tool of the Mekong River Commission (MRC). Accordingly, 79% of the 602 households engaged in agriculture and fisheries in 8 provinces along the Mekong river showed that the change of the Mekong River reduced their income. According to the survey results, 66.7% of 24 communities living in the Mekong River Basin in Thailand showed that their livelihoods have significantly changed due to fluctuations in the Mekong River, particularly water consumption and fish catching. In Vietnam, the SAV has shown a linkage between the decrease in volume and quality of water and sediment in the water and climate change factors to the ecosystem, biodiversity and people's lives, especially in the Mekong River Delta which is home to more than 17.3 million people, provides over 50% of rice production, 65% of the country's aquatic production and depends largely on the water resources of the Mekong River from the external territory of Vietnam. The serious lack of fresh water in the dry season and salt-water intrusion have made thousands of households living in conditions of lack of water for daily life, hundreds of thousands of workers having to relocate from the locality to look for work, destroying over 500.000 hectares of crops,

1.500.000 hectares of land, showing signs of degradation, over 2.000 cases of landslides and subsidence with estimated losses of up to thousands of billions of Vietnam Dong. In addition, the decline in natural aquatic stock and the number of typical aquatic species of the Mekong River in Vietnam in recent years have also been recorded in the audit report.

- **Other results:** Certain shortcomings and limitations in water resource management in line with the implementation of the SDGs have also been discovered by 03 SAIs, such as: (1) In Myanmar, SAI Myanmar showed that the Environmental Quality Emission Guidelines (EQEGs) promulgated by the Ministry of Natural Resources and Environmental Conservation is currently applying the standards on surface water quality decreed by the US, China, and Thailand which are not suitable in Myanmar's practical conditions; (2) In Thailand, SAI Thailand reported that 16 surveyed communities reflected the lack of a warning system for fluctuations in the Mekong River; (3) In Vietnam, the SAV assessed that the planning of water resources and the work of synthesizing information and reporting on the implementation of specific SDG 6.5 have not been timely. In particular, the SAV also recognized some difficulties and inadequacies in the implementation of the current international agreements and commitments on management of water resources in the Mekong River Basin; lack of legal documents and basis for the activities of regulating the exploitation and use of water resources on the main flow and tributaríe; lack of specific provisions to settle disputes and disagreements among MRC members; lack of indicators and activities related to environmental impact assessment and the implementation of SDGs on integrated management of water resources in the River Basin, etc.

4. Audit recommendations

Based on the audit results, the 03 SAIs have given warnings about the risks and consequences of the degradation of water resources in the Mekong River and also useful recommendations and highly feasible solutions to Governments and relevant authorities. It is believed that the audit results and recommendations will make an important contribution in overcoming the shortcomings, limitations and enhancing the economy, efficiency and effectiveness in water resource management in line with the implementation of the SDGs of each country in particular and the whole Mekong River Basin Community in general.

III. LESSONS LEARNT

In general, the cooperative audit of "*the management of water sources in Mekong River Basin in line with the implementation of the SDGs*" has been prepared, organized and implemented carefully, methodically and

successfully. In addition, this is also an opportunity for the 03 SAIs to re-evaluate their strengths and weaknesses and draw lessons for future cooperative audits, typically as follows:

- *Firstly*, to affirm **the importance of the Hanoi Declaration**: The Hanoi Declaration established in 2018 with the message "*Environmental Auditing for Sustainable Development*" is an important document identifying the strategic vision of ASOSAI for the 2018-2021 period in order to enhance the role and position of SAIs in realizing the UN's 2030 Agenda for SDGs. At the same time, this is also a solid foundation for promoting the implementation of capacity building activities, knowledge sharing and cooperation for mutual development among countries in environmental auditing; affirming the benefits, efforts and contributions of ASOSAI community to the implementation of the SDGs, in which the cooperative audit "*the management of water sources in Mekong River Basin in line with the implementation of the SDGs*" proves to be one of the most obvious examples. The contents of the Hanoi Declaration will continue to be inherited and developed as a priority pillar in ASOSAI's important documents in the next stages such as the ASOSAI Strategic Plan 2022 - 2027 and the Bangkok Declaration.

- *Secondly*, to ***choose an appropriate audit method in the context of the New normal:*** The SAIs of Vietnam, Thailand and Myanmar face certain difficulties due to the Covid-19 epidemic. Some survey and field inspection plans have to be adjusted or canceled. Therefore, in the near future, SAIs need to have appropriate and adaptive audit implementation measures depending on specific circumstances. One of the effective methods applied by 03 SAIs in the cooperative audit is to enhance the application of information technology in audit activities such as remote sensing, satellite imagery, online surveys, online meeting software on the platform of Zoom or Microsoft teams, etc., thereby helping auditors to perform remote audits by exchanging, accessing, extracting and analyzing the necessary data without having to get into physical touch to the audited entities.

- *Thirdly,* to **emphasize the need to apply audit approaches in line with international practices**: The audit closely followed and effectively applied the INTOSAI Guidelines on the implementation of a cooperative audit from preparation, audit planning, audit execution to audit report development. At the same time, the application of IDI's SDG Audit Model (ISAM) and the Whole-of-Government approach is an important factor in orientating and helping auditors to consider and provide comprehensive analysis and assessment for the development and implementation of a policy system on water resource management in line

with the Governments' SDGs, instead of exclusively evaluating the performance of an individual entity or program. This has significantly contributed to improving the value of audit results and recommendations.

- *Fourthly,* to **promote the implementation of cooperative audits and the selection of appropriate audit topics, types and objectives**: The audit confirmed the necessity, effectiveness and created a foundation platform to encourage the organization and implementation of cooperative audits among member SAIs in line with the topic of sustainable development in the upcoming time. It should be noted that it is highly necessary to choose audit topics and objectives that are suitable for the purposes, interests and concerns of the relevant parties. At the same time, the application of financial, compliance or performance audits should also be considered and agreed based on the prescribed authority of each SAI. Therefore, the leading role of the SAV needs to be expressed in facilitating, presiding over the coordination and exchange among the participating SAIs in order for all participants to reach a consensus on the common objective of the audit and ensure that the objective will be achieved at the end of the audit.

- *Fifthly,* to **strengthen the exchange, sharing of knowledge, cooperation and training**: The organization of seminars, trainings or technical meetings among SAIs to exchange and share experiences, audit knowledge and methods before performing an audit will help equip auditors with necessary knowledge and enhance understanding between the parties involved, particularly for bilateral audits. In addition, it is also important to affirm the role and technical and professional support of external experts with knowledge and experience in the field of environmental and SDGs auditing from IDI, WB, CAAF or SAIs that have conducted similar audits in order to contribute to improving the effectiveness of the audit.