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The editors invite submissions of articles, special reports, and news items, which should be sent to the editorial offices at:

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Given the Journal’s use as a teaching tool, articles most likely to be accepted are those that deal with pragmatic aspects of public sector auditing. These include case studies, ideas on new audit methodologies, or details on audit training programs. Articles that deal primarily with theory would not be appropriate. Submission guidelines are located here.

The Journal is distributed electronically to INTOSAI members and other interested parties at no cost. It is available online at intosaijournal.org and intosai.org, and by contacting the Journal via email at intosaijournal@gao.gov.
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**FEATURE ARTICLE THEME: RESILIENCE & PLANNING FOR THE FUTURE**
by Ms. Ana Arraes, President, Brazilian Federal Court of Accounts

I was Vice President of the Brazilian Federal Court of Accounts (TCU) when COVID-19 broke out worldwide, posing extraordinary challenges to people and organizations. However, this was not the first time I had faced adversity. Having lived through difficult historical periods in Brazilian history, such as the years of military dictatorship, I have been building resilience my whole life by tackling difficult situations and coping with uncertainty.

I knew that there was nothing I could do to change the fact that we were facing a global pandemic. But what could we, as the leaders of TCU, do to ensure we continued to fulfill our mandate?

We very quickly focused on solutions, and in terms of operations, the organization did not miss a beat. In just a few days, TCU adapted its systems for remote work, enabling staff to work full-time from home. In the face of a crisis, quick responses make all the difference to organizational performance and even survival.
But our challenges were not limited to adapting our operations to the new circumstances. As a Supreme Audit Institution (SAI), we had a fundamental role to play in oversight of the government’s emergency planning, budgeting and spending, and overall response to the health emergency. To fulfill that responsibility, TCU carried out hundreds of audits regarding the use of resources in combating the COVID-19 outbreak, with the aim of both ensuring appropriate spending and recovering public funds that had been misspent.

The stakes of this work were high. We must bear in mind that the global health crisis is not only about numbers; it is about people. When I took over as President of TCU in January 2021, the second wave of the pandemic was starting to hit the country, and our entire society was suffering its devastating effects.

In Brazil, we saw more than 600,000 people lose their lives to the illness. Millions of Brazilians lost their livelihood due to the economic consequences of the pandemic, unemployment is still extremely high, and food insecurity haunts many.

This tragedy will leave a mark in our history. The pandemic brought us challenges that we never imagined, and nothing will bring back the loved ones we have lost to this terrible virus. However, our organizational and personal resilience can serve as the basis for positive changes in these difficult times.

By mitigating problems and focusing on solutions, TCU has emerged stronger than ever and more prepared to face any challenges that come our way. One key lesson we learned was the importance of information technology to our continuity of operations. We identified the need to further invest in information security, to enable us to work even more effectively in a virtual environment.

As an organization, TCU took advantage of the opportunity to re-think and re-design many of our practices, to ensure we are resilient when faced with similar crises in the future. On a broader scale, the INTOSAI community has a similar opportunity.

For my part, I hope the pandemic teaches us to be more conscious of the central role of the state in guaranteeing the dignity of all people. And I hope it drives home the critical role that we, as SAIs, play in ensuring governments judiciously use limited resources for the public good and act in a coordinated manner to protect the vulnerable. Social disparities are more evident now than ever before—not only in Brazil, but around the world. We urgently need to address this concern, individually as SAIs and collectively as the INTOSAI community.

Next year, we will host the Congress of INTOSAI (INCOSAI) in Rio de Janeiro, and we will then lead INTOSAI for three years. A key theme of the Congress will be the “Role of SAIs in Emergency Situations.” All SAIs are encouraged to share their experiences in these discussions, which will be led by the U.S. Government Accountability Office (GAO). TCU will then broaden the conversation to a closely connected theme—how INTOSAI can more effectively use its collective knowledge and global voice for the benefit of people around the world.

With its extensive advocacy and support work on behalf of SAIs, and with insights gleaned from audits and other activities, INTOSAI has an opportunity to meaningfully contribute to regional and international efforts related to accountability, transparency, and other key issues. Through cooperation and joint effort, we can amplify our impact and move forward with optimism, solidarity, and greater resilience than ever before.
Fifty years ago, INTOSAI published the first edition of the International Journal of Government Auditing (IJGA) at the 1971 Montreal Congress of INTOSAI (INCOSAI). Shortly thereafter, the INTOSAI Governing Board approved establishing a quarterly publication to facilitate knowledge sharing across our community.

In 1974, the United States General Accounting Office (now the Government Accountability Office) took over from the Supreme Audit Institution (SAI) of Canada as IJGA Chair and has remained in this role since that time. Mr. Gene Dodaro, Comptroller General of the United States, has served as Journal Chair since 2008 and has led continuous improvement and modernization of the Journal during his tenure.

Working collaboratively with its board of editors, associate editors, the Governing Board, and the broader INTOSAI community, the Journal’s leadership has modernized its operations, enhanced its presence online, and increased coverage of key INTOSAI meetings and issues affecting the public sector auditing community.

Much of this progress stems from the vision and leadership of the Journal’s most recent President, Mr. James-Christian Blockwood, who led the transformation of its digital presence with a focus on interactive content, increased use of visuals, and real-time reporting. Mr. Blockwood also enhanced the Journal’s engagement with INTOSAI’s key committees and regional bodies to ensure that its coverage reflected the diverse experiences of all INTOSAI members. I would like to thank Mr. Blockwood for the outstanding example he set as President of the Journal, and wish him success in his new role as Executive Vice President of the Partnership for Public Service.

Ms. Heather Santos deserves special recognition and credit for her role and extraordinary contributions as IJGA Editor for five years. Ms. Santos worked tirelessly to produce the Journal’s quarterly editions, cover INTOSAI events across all INTOSAI regions, and manage its digital presence. Earlier this year, Ms. Santos transitioned to a new role managing Public Affairs within our Office of Strategic Planning and External Liaison. She has also assisted our Interim Editor, Ms. Laurel Voloder, as she seamlessly and effectively took over editorial responsibilities.

I am also grateful for the stewardship and guidance of the UGA Board; Mr. Bill Anderson, GAO’s Controller; and Mr. Chuck Young, GAO’s Managing Director of Public Affairs. I am likewise grateful for the contributions of Mr. Michael Huskey, the Journal’s Secretary, and other GAO staff who contribute to UGA, including Ms. Kristie Conserve, Mr. Juan Garay, Ms. Marlina Moses, Ms. Lisa Motley, Mr. Peter Knopes, and Mr. Stephen Sanford.

Within this context, it is a great honor to assume the role of IJGA President. As GAO’s Director of International Relations and UGA Vice President, I have tried to build and maintain relationships across INTOSAI, find common ground, achieve progress toward the INTOSAI Strategic Plan, enhance communication, and share experiences and knowledge from across our diverse community.

As we look toward the future, my vision for the Journal is threefold. First, I plan to continue the Journal’s modernization through increased real-time reporting on our website and social media, with an emphasis on continuous production of interactive and thematic content. Second, I plan to engage broadly across INTOSAI to ensure that IJGA content helps auditors do their jobs. Third and finally, I plan to work with our board to ensure appropriate stewardship of the Journal’s resources, with an emphasis on transparency and accountability, while also ensuring the maximum return on investment of resources.

I look forward to working with all INTOSAI members in my role as UGA President, and would like to wish all of you, your colleagues, and your loved ones all the very best.

Michael Hix
Director of International Relations, GAO, and President of the International Journal of Government Auditing
SAI NEW ZEALAND PUBLISHES REPORT ON SUSTAINABLE DEVELOPMENT GOALS

During a nationwide lockdown in August 2021, the New Zealand Office of the Auditor-General, the country’s Supreme Audit Institution (SAI), published its report on The Government’s Preparedness to Implement the Sustainable Development Goals. In 2015, all members of the United Nations adopted the 2030 Agenda for Sustainable Development and its 17 sustainable development goals (SDGs), which encompass social, environmental, and economic sustainable development to improve life for current and future generations. The SAI’s report presented the results of its review of how the New Zealand government is demonstrating its commitment to the 2030 Agenda.

In its first report on progress toward the SDGs, published in 2019, the New Zealand government highlighted a range of policies and activities that contributed to the goals. The government’s focus on wellbeing and Living Standards Framework also aligned to some extent with the goals.

However, SAI New Zealand found that the government needs to clarify its commitment to the SDGs, including whether the government will set targets for the goals; the specific actions it will take; how it will measure progress; and the roles, responsibilities, and expectations of agencies. The government also needs to consider how it will engage with stakeholders to increase awareness of New Zealand’s commitment to the goals and work with Māori (the indigenous people of New Zealand) to ensure that plans to achieve the goals uphold and reflect Te Tiriti o Waitangi (the Treaty of Waitangi, New Zealand’s founding document).

The government currently uses two monitoring frameworks to assess wellbeing outcomes, and several indicators show how these outcomes align with the SDGs. SAI New Zealand found that while the government has improved the data available about wellbeing, it needs to address data gaps in a timely manner to help determine New Zealand’s baseline data and subsequent progress toward 2030 targets.

SAI New Zealand’s report has further recommendations for how the government can plan, implement, and monitor the actions needed to achieve the goals by 2030. The full report can be found on SAI New Zealand’s website.
The Assembly of the Republic of Kosovo elected Mrs. Vlora Spanca to a five-year term as Auditor General of the Republic of Kosovo on August 12, 2021.

As Auditor General, Mrs. Spanca is committed to continuing to strengthen the National Audit Office’s (NAO) role in enhancing transparency and accountability in the public sector. Under her leadership, NAO— as a member of INTOSAI and the European Organization of Supreme Audit Institutions (EUROSAI)—will also continue to actively contribute to collaborative efforts to develop professional competence and exchange experiences on implementing audit standards.

Mrs. Spanca has 14 years’ experience in public sector auditing, 12 of which were in managerial positions. Prior to her election to Auditor General, Mrs. Spanca served for four years as NAO’s Assistant Auditor General. During this period, she was responsible for several audit departments, including performance audit, information technology audit, and procurement audit, as well as for overseeing the financial audits of donor-funded projects.

From 2009 to 2016, Mrs. Spanca was the Head of the Regularity Audit Department (financial and compliance), which includes ministries and independent institutions. From 2015 to 2016, she was in charge of the audit of the Annual Financial Statements of the Budget of Kosovo. Mrs. Spanca has also coordinated the implementation of various capacity-building initiatives.

Mrs. Spanca, a Certified Public Sector Auditor, graduated from the Faculty of Economics at the University of Pristina. She has completed many trainings on accounting, auditing, public administration, leadership, and public procurement, and she has participated in numerous international conferences and seminars.
SAI GUATEMALA UPDATES INTERNAL CONTROL STANDARDS

In August 2021, Dr. Edwin Humberto Salazar Jerez, Comptroller General of Accounts of the Republic of Guatemala, launched the National System of Governmental Internal Control (SINACIG), which aims to strengthen and streamline the internal controls of public institutions in accordance with international best practices. This system will strengthen the Supreme Audit Institution (SAI) of Guatemala’s oversight of government entities.

Updating internal controls will help public institutions better meet their objectives, manage their resources efficiently, achieve greater transparency, reduce the likelihood of corruption, and provide high-quality services to citizens in a changing environment.

As part of the launch, SAI Guatemala provided training to its executive and managerial staff, who were among the early participants in this effort. In September, the agency expanded the scope of its training to include public officials and government employees across the country.

STATE AUTHORITIES TO REPORT TO SAI PERU ON POSSIBLE CONFLICTS OF INTEREST

For the first time, state authorities will be required to submit a sworn statement to the Office of the Comptroller General of the Republic of Peru on their personal, family, employment, economic, and financial ties, to identify and avoid possible conflicts of interest. This measure will help ensure the transparency, independence, and objectivity of those who serve in public administration.

According to a new law and its regulations, those required to submit this statement will include the President and Vice President of the Republic; ministers and vice ministers; regional governors and vice governors; mayors and councilors; heads of public entities, agencies, programs, and special projects; and professionals and technicians in charge of contracting. These individuals will also have to report whether their spouses or partners own or have equity interests in companies, partnerships, or other similar entities, as well as other relevant information.

SAI Peru implemented an online system to facilitate the complete and timely virtual registration of the sworn statements of interest by early October 2021. The SAI will publish the statements on its website and use government databases to verify their accuracy. More information is available at www.contraloria.gob.pe.
In 2020, the Office of the Comptroller General of the Republic of Costa Rica, the country's Supreme Audit Institution (SAI), designed a strategic audit approach to assess Bono Proteger, a government program that provides $100-200 USD cash payments, for up to three months, to workers whose working conditions or livelihood were affected by the pandemic. The Ministry of Labor and Social Welfare and the Institute of Social Aid implemented the program, whose budget was $410 million, using digital applications to process aid requests.

Given the considerable public resources invested in the program, SAI Costa Rica developed an integrated approach that involved three audit processes examining the program’s design and management control; the program’s technological platform and information security; and evaluation of the program’s results. For the first two processes, the SAI provided short reports before the final report was issued, and for the third, it conducted a more traditional performance audit. These audits had numerous positive results, including:

- Improved tracking between the program’s design and evaluation of the impact on the target population.
- Issuance of regulations for designing public interventions in emergency contexts using specific methodologies, and for strategic management controls to monitor implementation.
- Adjustments to the algorithms for validating and prioritizing applicants, after SAI Costa Rica found—using a logarithmic regression model—that key variables could impede some eligible applicants from receiving benefits.
- Greater safeguarding of applicants’ information, and more controls for the use of the technological platform.
- Detection of risks, through analysis of databases for anomalies, of having granted benefits to ineligible applicants. Implementing entities are in the process of recovering these funds.
- Demonstration, using an impact evaluation model, of the program’s positive effects, such as providing three meals a day, paying bills, enabling students to stay in school, and supporting efforts to find a job or start a business.

This strategic and integrated audit approach enabled SAI Costa Rica to provide timely feedback to the program’s implementers, informing decision-making and allowing for continuous improvement, while also communicating key information to Parliament for its oversight of the program.

In July 2020, SAI Costa Rica launched the website #MonitoreoCGR as part of its efforts to continuously monitor public finances during the pandemic. The SAI posts short reports offering concise analysis and clear conclusions to the website on a weekly basis. This format gives stakeholders—such as members of parliament, government entities, the media, and citizens—a more comprehensive view of the fiscal and budgetary environment than traditional reports.

The website also provides access to historical databases of the revenues and expenditures of the central government and public sector, and it enables users to enter queries and download data that is updated monthly. For ease of use, the website is divided into four sections, based on the stages of the budgetary cycle—from discussions of the budget bill in the legislature, through implementation, to accountability.

SAI Costa Rica is required by law to report periodically on public finance issues to the Legislative Assembly. Through this website, the SAI aims to achieve greater transparency, provide important information to decision-makers and citizens, and inform conversations on the economic and fiscal recovery in the coming years.
NEWS IN BRIEF

News from the Philippines

SAI PHILIPPINES CONTRIBUTES TO IBP DISCUSSION ON MANAGING COVID-19 FUNDS

Commission on Audit (COA) Chairperson Michael G. Aguinaldo shared the experiences of the Philippines’ Supreme Audit Institution (SAI) at the International Budget Partnership’s (IBP) online discussion, “Managing COVID Funds: A Global Scorecard of Accountability,” held on May 24, 2021. The discussion centered on IBP’s assessment of how countries have maintained transparency, provided oversight, and encouraged public participation in managing COVID funds.

Other panel participants included Carolina Renteria, Chief of the Planning and Finance Management Division of the International Monetary Fund’s Fiscal Affairs Department; and Shumani Luruli, Program Coordinator for Plan Act, a Civil Society Organization (CSO) based in South Africa. Sofia Sprechmann Sineiro, Secretary General of Care International and a board member of IBP, moderated the discussion.

Ms. Sineiro noted that few national audit offices were able to conduct real-time or expedited audits of COVID funds, but COA was one of the exceptions. Chairperson Aguinaldo observed that since the Philippines is accustomed to emergency situations such as typhoons and earthquakes, the SAI was able to anticipate the government’s response and issue guidelines on how to audit COVID fund expenditures. Chairperson Aguinaldo also shared the SAI’s experience working with CSOs in the audits of COVID programs. He said audits do not take place in isolation but as part of the fiscal process, noting that the Philippine Congress has a Public Accounts Committee that carefully considers SAI reports and refers to them when examining the budget submitted by agencies.

The discussion sent a powerful signal that even during times of crisis, open budget practices are not only possible but essential to ensuring assistance to those most in need.

News from Nepal

AUDITOR GENERAL OF NEPAL SUBMITS 58TH ANNUAL REPORT TO PRESIDENT

On August 20, 2021, Mr. Tanka Mani Sharma Dangal, Honorable Auditor General of Nepal, submitted the 58th report of the Auditor General to the Right Honorable President Mrs. Bidya Devi Bhandari, in accordance with the Constitution. President Bhandari thanked the Office of the Auditor General (OAG) for its efforts.

The report presented the findings of OAG’s audits of the expenses of 3,079 federal offices and agencies, 1,019 provincial government offices, and 699 local government entities for fiscal year 2019/20. For the reporting period, OAG found that the government at all levels spent a total of Rs. 2,607 billion (about U.S. $21.8 billion or €18.8 billion) and was Rs. 91.69 billion in arrears. The OAG prepared separate audit reports on the activities carried out by government at the local, provincial, and federal levels. OAG also covered COVID-19 financial management in another report.
CNAO ESTABLISHES MECHANISMS TO ENSURE IMPLEMENTATION OF AUDIT RECOMMENDATIONS

On June 7, 2021, Mr. Hou Kai, Auditor General of the National Audit Office of China (CNAO), presented a report to the legislature during the 29th Session of the Standing Committee of the 13th National People’s Congress (NPC). The report outlined the results of CNAO’s audit of the implementation of the central budget and other 2020 revenues and expenditures.

In his report, Mr. Hou also highlighted the importance of addressing deficiencies identified by audits. To that end, CNAO issues recommendations to auditees and competent authorities, to help them make improvements by drawing on lessons learned.

To ensure its recommendations are implemented, CNAO has established a checklist system that includes a detailed description of every problem discovered, the type of non-compliance, related regulations, and required actions and time frames for rectification. CNAO also regularly monitors the implementation of recommendations to prevent perfunctory corrections or false reports. Through these enhanced efforts, CNAO has played an important role in ensuring the implementation of policy, overcoming the COVID-19 pandemic, and facilitating economic recovery and social development.

According to China’s Audit Law, the Auditor General of CNAO, entrusted by the State Council, reports twice a year to the NPC Standing Committee: in June, on the results of the audit of the implementation of the central budget and other fiscal revenues and expenditures from the previous year, and in December, on how the audit findings issued in June have been addressed. Both reports are released to the public.

CNAO APPOINTS SPECIAL AUDIT ADVISORS

On April 29, 2021, CNAO appointed 13 audit advisors to the 5th Special Audit Advisor Panel in a meeting chaired by Auditor General Hou Kai. The Audit Advisor Panel system was established in 1991, as an important mechanism to enable citizen participation in audits and provide external oversight of audit institutions.

Advisors are usually professionals in public finance and law from different political parties or without party affiliation. Over the years, audit advisors have earnestly fulfilled their duties by conducting research and making recommendations, thereby contributing to more rational, consistent, and law-based audit work.
SAI EGYPT PARTICIPATES IN VARIOUS INTOSAI EVENTS

From June through August 2021, the Accountability State Authority (ASA) of Egypt, the country’s Supreme Audit Institution (SAI), participated virtually in:

- The 25th UN/INTOSAI Symposium held from June 28-30, on “Working during and after the Pandemic,” and presented a research paper on "The Impact of the COVID-19 Pandemic on SAIs’ Organizational Capacities: Work Methods and Processes."

- The 56th African Organization of Supreme Audit Institutions (AFROSAI) Governing Board proceedings on July 7, as well as in the 15th AFROSAI General Assembly on July 8-9, with the attendance of H. E. Counselor Hesham Badawy, ASA’s President. At the Governing Board meeting, the Court of Accounts of Senegal was appointed Chair of AFROSAI for the upcoming three years, and AFROSAI’s Strategic Plan 2021-2026 was adopted. In its capacity as Editor-in-Chief, ASA presented a report on the African Journal for Comprehensive Auditing for 2017-2020 that included the journal’s activities, new regulations, and executive procedures.

- The annual workshop of the INTOSAI Working Group on Audit of Extractive Industries (WGEI) from June 29 to July 1, on “Transparency Data Working for Communities.” ASA was invited to participate by the Arab Organization of Supreme Audit Institutions (ARABOSAI), within the framework of cooperation between ARABOSAI and AFROSAI-E, which organized the event. Participants discussed how to use data to improve transparency and accountability and to assess risks.

- The first meeting of the team responsible for developing ARABOSAI’s Strategic Plan 2023-2028 on August 11. ASA participated as a representative of ARABOSAI’s Institutional Capacity Development Committee as well as Audit on Sustainable Development Goals’ Committee.

- ARABOSAI’s first meeting, on August 17, to discuss establishing think tanks that will innovate new audit techniques and develop procedural guidelines that organizations can use in extraordinary circumstances. SAI Iraq, as Chair of ARABOSAI’s Institutional Capacity Development Committee, led the meeting, which aimed to define the scope and methodology of these think tanks, the timetable for carrying out their work, and the means of communication among their members.

SAI AZERBAIJAN JOINS ASOSAI AUDIT COMMITTEE

At the 15th Assembly of the Asian Organization of Supreme Audit Institutions (ASOSAI), held on September 7, 2021, the Chamber of Accounts of the Republic of Azerbaijan was elected, together with SAI Kazakhstan, as a new member of ASOSAI’s Audit Committee for 2021-2024. This was the first time SAI Azerbaijan was nominated for this role. A delegation from SAI Azerbaijan, under the leadership of Chairman Vugar Gulmammadov, participated in the Assembly, which 43 ASOSAI member SAIs attended. SAI Azerbaijan looks forward to fulfilling its new role as a member of the ASOSAI Audit Committee and to continuing to contribute to ASOSAI activities.
NEWS IN BRIEF

News from Lithuania

SAI LITHUANIA ASSESS THE MITIGATION OF THE PANDEMIC’S IMPACT ON MENTAL HEALTH

In July 2021, the National Audit Office of Lithuania published a report assessing how the government has mitigated the impact of the COVID-19 pandemic on mental health, as well as the availability of mental health services. The report also included a survey of the European Union’s Supreme Audit Institutions (SAIs) to learn about other countries’ efforts and experiences in this area.

The National Audit Office found that access to mental health services during the pandemic has been insufficient. The number of visits to primary mental health professionals increased by about 17 percent in 2020 compared to 2019, but the amount of time patients had to wait to be seen by adult psychiatrists and medical psychologists remained the same, while wait times for child and adolescent psychiatrists increased by 23 percent. Both adults and children often had to wait longer for mental health services than the seven calendar days established by law.

The assessment also found that the government has not done enough to inform the public about the availability of mental health services. According to a survey the National Audit Office commissioned, 65.7 percent of respondents had no knowledge of psychological support available during the pandemic; 55 percent were unaware that free psychological support was available at the State Mental Health Center; and 69 percent were unaware that such services were provided by municipal public health offices.

Lithuania is one of the few countries in the European Union that has adopted an action plan to mitigate the impact of the pandemic on mental health. However, the National Audit Office found that the government could improve the design and implementation of the measures in the plan. Areas of concern included the limited scope of measures for children and young people, lack of precise planning for the use of allocated funds, and lack of criteria to assess the results of specific measures.

As the assessment was not an audit, the National Audit Office did not make any official recommendations to the government. However, in its report, the National Audit Office stated that implementation of recommendations in previous audits on improving accessibility and wait times for services and addressing the shortage of specialists would help the government resolve the identified problems.
GAO HOLDS INTERNATIONAL WEBINAR ON AUDITING FOR FRAUD

With governments around the world spending massive sums to fight the COVID-19 pandemic, Supreme Audit Institutions (SAIs) have a key role to play in detecting and preventing fraud. To share knowledge and best practices, the U.S. Government Accountability Office (GAO) held an international webinar on September 15, 2021, on “Auditing for Fraud: Experiences, Tools and Techniques, and Looking Ahead.”

The virtual event, which attracted approximately 260 attendees, was moderated by Seto Bagdoyan, Director of Audits in GAO’s Forensic Audits and Investigative Service, and featured three expert panelists:

Aysha Mohammed Al Blooshi, Senior Auditor, SAI United Arab Emirates. SAI UAE is working with the United Nations Office on Drugs and Crime (UNODC) to promote greater engagement of SAIs in the implementation of the UN Convention against Corruption.

Zohra Farooq Nooryar, Senior Financial Management Specialist, Governance Global Practice, World Bank. The World Bank has been at the forefront of efforts to address the challenges presented by the pandemic.

Luis Alonso Robas Sanchez, Manager for Control of Megaprojects, Office of the Comptroller General of the Republic of Peru. SAI Peru is a leader in using data-driven approaches in auditing for fraud.

Among the discussion’s key takeaways was that emerging technologies present SAIs with both opportunities for more effective fraud detection and increased risks. Information technology (IT) infrastructure can enable SAIs to conduct real-time remote audits of public sector programs, especially those prone to corruption. And advanced data analytics software, artificial intelligence, and machine-learning algorithms can help SAIs quickly identify anomalies in the data in government systems.

However, Ms. Al Blooshi and Mr. Robas agreed that just having these IT tools is not enough. SAIs need to manage the risks that accompany these technologies through a robust regulatory framework, internal controls, human resources capacity, and audit guidelines.

The panelists emphasized that SAIs can also use new forms of IT not only to detect fraud, but also to help prevent it in the first place, by enhancing engagement with members of parliament, government officials, civil society organizations, and the public. Improving communication with these external stakeholders and giving them the opportunity to provide feedback on the audit process are key elements in ensuring transparency and accountability in the expenditure of COVID-19 funds.

The panelists recognized that not all SAIs have the internal capacity to investigate fraud, and some may need to turn to external experts, especially for IT assistance. Moreover, not all SAIs have a mandate to investigate fraud and corruption.

Ms. Nooryar advised SAIs without such mandates to focus on their countries’ overall public financial management (PFM) system, exercise professional skepticism regarding the risk for fraud, carefully examine the systems agencies have in place to act on potential cases of fraud, and work closely with investigative agencies to ensure follow-up on irregularities.
NEWS IN BRIEF

News from Algeria

COA PARTICIPATES IN INTERNATIONAL EVENTS AND LEARNING SESSIONS

The Algerian Court of Accounts (COA) participated in the following international events from June to September 2021:

- The 25th UN/INTOSAI Symposium from June 28-30.
- A June 29 meeting with the Financial Services Volunteer Corps (FSVC) to plan an 18-month cooperation program aimed at building COA’s capacity. The program, funded by the U.S. Department of State, will train COA staff on international best practices in performance and information systems auditing and on IPSAS (International Public Sector Accounting Standards), and will strengthen COA’s institutional communication.
- A meeting for Supreme Audit Institution (SAI) leaders and stakeholders on July 1 on “Cooperative Audit of Strong and Resilient National Public Health Systems - Target 3.d of the Sustainable Development Goals (SDGs),” organized by the INTOSAI Development Initiative (IDI) and the Arab Organization of SAIs (ARABOSAI).
- The 62nd ARABOSAI Executive Board meeting, July 5-6.
- The 56th African Organization of SAIs (AFROSAI) Steering Committee Meeting on July 7, and the AFROSAI General Assembly on July 8-9, during which AFROSAI Strategic Plan 2022-2026 and technical committee reports were approved.

COA participated in the following learning sessions:

- Two webinars in June organized by IDI in collaboration with the INTOSAI Knowledge Sharing and Knowledge Services Committee and ARABOSAI: “An Overview of the SDG Ecological System: Actors, State of Play and Interrelated Processes for Achieving the 3.d Target of the SDGs” and “The Design Matrix.”
- A workshop held by ARABOSAI in June on “Revenue Assessment and Collection in the Extractive Industries Sector.”
- Trainings organized by IDI and ARABOSAI in June and July on “Transparency, Accountability and Inclusiveness (TAI) Audits - Global Cooperative Compliance Audit on the Use of Emergency Funds for COVID-19.”
- An informational meeting in June on “The Regulation of the Cross-border Cooperation Program,” organized as part of Algeria’s accession to the cross-border cooperation program financed by the European Neighborhood Instrument.
- A course in July on “The Certification of Government Accounts,” led by experts from the French Court of Accounts, and organized as part of a cooperation program with SIGMA (Support for Improvement in Governance and Management).
- The annual meeting in July of the INTOSAI Working Group on Evaluation of Public Policies and Programs, during which COA presented a paper on “The Preliminary Findings and Recommendations of the Evaluation of the National Perinatal Program.”
- A meeting on “The Evaluation of Public Policies” in July, organized by SAI Madagascar and the French Court of Accounts within the framework of a program that also included IDI. COA presented two papers: “The Basic Elements of the COA Guide for the Evaluation of Public Policies” and “The Experience of the COA in the Evaluation of the National Perinatal Program.”
- IDI’s conference in September on “Stakeholder Interaction,” organized as part of the TAI audits initiative.
SAO HUNGARY Publishes Report on Audit of Vaccination System

In July 2021, the State Audit Office (SAO) of Hungary published a report on a compliance and performance audit it conducted on emerging epidemics and vaccination coverage. The challenges posed by the COVID-19 pandemic have made the findings of the audit—which Hungary carried out as part of an international cooperative audit initiated by the Supreme Audit Office of the Slovak Republic—even more critical.

The Fundamental Law of Hungary declares that everyone has the right to physical and mental health. In 2015, Hungary’s Ministry of Human Capacities identified strengthening epidemiological security and modernizing the vaccination system as among its top priorities. As part of that effort, the National Chief Medical Officer issued guidelines in 2018 and 2019 for administering vaccinations. SAO’S audit found that Hungary’s vaccination system was effective in preventing mass outbreaks of disease in those years.

Effective vaccination systems are key to preventing epidemics and also have economic benefits, as fighting a disease is more expensive than preventing it in the first place. Each European country makes important decisions about its own national vaccination program—such as how to fund it and which vaccines to administer—based on local factors like the prevalence of certain diseases and economic conditions.

This cooperative audit has enabled Supreme Audit Institutions (SAIs) to share knowledge, experiences, and best practices related to national vaccination programs during a critical time. The COVID-19 pandemic, along with migration, increased travel, the rise of anti-vaccine movements, and the effects of climate change, have increased epidemiological risk, even for countries like Hungary that have effective vaccination systems.

SAO Hungary uses Technology to Improve Efficiency

The importance of achieving greater efficiency was highlighted in the IX European Organization of SAIs (EUROSAI) – Organization of Latin American and Caribbean SAIs (OLACEFS) Joint Conference, held in September 2020. At this event, SAIs discussed the importance of optimizing the use of resources, prioritizing tasks, and employing the cost-benefit principle in strategic planning and audit activities—especially during the COVID-19 pandemic.

In that spirit, SAO has implemented a number of initiatives that harness technological advancements to enhance the efficiency of its audit work.

**Automated Document Evaluation.** According to surveys, only one-fifth of usable information is “structured,” i.e., organized in databases. Most unstructured data that audit offices access are in text format. SAO uses text-mining software to structure this mass of information into a format suitable for analysis. With this software, auditors can search, filter, and categorize the content of a large number of documents, and automate certain sub-processes and audit tasks.

Automated document evaluation enables auditors to complete tasks using fewer resources; ensures consistency in the processing of data; and improves the audit process by, for example, increasing the reliability of audit findings. It is also easily scalable, which allows for greater flexibility of operations and quick adjustments in response to changes.

**Quality-assured Audit Processes.** For quality assurance, SAO uses another software to apply automatic, preventative controls to audit processes in accordance with the “Lean Methodology,” whose primary tenets are continuous improvement and respect for people. By ensuring tasks are carried out without errors in the first place—and in the least possible amount of time, using minimal resources—the software reduces the need for subsequent reviews and corrections.

**Time-metering Software.** Like a number of other audit offices, SAO monitors the efficiency of its processes. To assist with this endeavor, SAO uses time-metering software that helps identify routine tasks that are repeated during the audit and could potentially be automated.
THE DISASTER RESILIENCE FRAMEWORK: A TOOL TO PROMOTE FORESIGHT AND ACCOUNTABILITY

by Carolyn Blocker, Kathryn Godfrey, and Joe Thompson, U.S. Government Accountability Office

Introduction

Natural disasters, such as hurricanes, flooding, and wildfires, have the potential to devastate people’s everyday lives by causing injuries and death, destroying homes and infrastructure, and wreaking economic havoc. From 2000 through 2019, there were 7,348 major disaster events worldwide, which claimed 1.23 million lives, affected 4.2 billion people (many more than once), and resulted in approximately U.S. $2.97 trillion in global economic losses.

Governments usually lead recovery efforts by providing disaster aid and coordinating the actions of different levels of government and private-sector stakeholders. These efforts can last years or even decades and cost governments billions of dollars. The resulting fiscal exposures are growing, as some natural hazards that cause disasters are increasing in frequency and intensity due to climate change.

However, governments and communities may be able to reduce the impact, risk, and cost of natural disasters—rather than just reacting to them—by undertaking intentional, forward-looking efforts to enhance “disaster resilience,” i.e., the ability
to withstand and recover rapidly from disruptions caused by natural disasters and climate change. These efforts include actions to lessen the impact of disasters (“hazard mitigation”) and to address the actual and anticipated effects of climate change (“climate adaptation”). (See figure 1 for examples of such efforts.)

In 2015, the U.S. Government Accountability Office—the Supreme Audit Institution of the United States—reported that enhancing resilience to climate change could create up-front costs but also reduce potential future damages from climate-related events. Given the stakes, the accountability community can and should exercise its foresight capacity to steer governments toward approaches that make communities and infrastructure more disaster resilient.

To that end, GAO created the Disaster Resilience Framework, a tool designed to promote a forward-looking and whole systems approach to a complex problem set.

The framework helps decision-makers and those in the accountability community identify opportunities to promote disaster resilience, and to reduce overall recovery costs and the impact on people’s lives.
A Long-Term Outcome Requiring Short-Term Investment

Enhancing disaster resilience involves investing time and resources in short- and long-term actions with uncertain outcomes, given that the return on these investments depends on where and how disasters manifest. During disaster recovery, when lessons are fresh and concrete, the political will to address disaster risk can be strong. With the right focus and resources, communities can confront devastation and destruction with actions that strengthen their physical and social resilience. At the same time, risk reduction decisions in the immediate and intermediate aftermath of a disaster—often referred to as “post-disaster mitigation”—are susceptible to insular interests and can result in missed opportunities to reduce overall risk at the community, regional, and national levels.

Conversely, the approach often referred to as “pre-disaster mitigation,” which involves making investments absent a recent disaster, can allow for thoughtful planning and avoid the pitfalls of reactionary decision-making. This approach offers opportunities for long-term, effective strategies to achieve system-wide solutions and partnerships.

However, a challenge of pre-disaster mitigation is that even when citizens and leaders have a rational understanding of the value of risk reduction, they tend to discount low-probability risks and be reluctant to engage in complex trade-offs without the visceral experience of a recent disaster. Moreover, leaders often target investments that pay off during their elected term, rather than those whose payoff is gradual and without guarantee.

National governments are well positioned to help promote forward-looking approaches that blend the urgency of the immediate post-disaster environment with the rationality of strategic, anticipatory action. In a context where decision-making is dispersed across lower-level jurisdictions and nongovernmental entities, national governments can also consider actions that would make investment in disaster risk reduction more attractive in the face of competing priorities.

Shared Responsibility

While governments often lead disaster recovery efforts, disaster resilience is a shared responsibility. In 2005, the World Conference on Disaster Reduction recognized that achieving “substantial reduction of disaster losses, in lives and in the social, economic and environmental assets of communities and countries,” requires “the full commitment and involvement of all actors concerned, including governments, regional and international organizations...the private sector and the scientific community.”

GAO’s Disaster Resilience Framework takes into account a variety of tools the U.S. federal government has to influence decisions and stimulate investment across an enterprise where it has little direct control. The framework is intended for use by a wide audience within the federal government, including people responsible for designing (e.g., policy makers, program managers, and specialists) and assessing (e.g., analysts, evaluators, and auditors) disaster risk reduction efforts. While designed for the U.S. context, other national governments and lower-level jurisdictions may also benefit from applying the principles outlined in the framework. Figure 2 provides examples, in the U.S. context, of tools national governments can use to influence and leverage the actions, responsibilities, and interests of all stakeholders.

High-level Principles to Help Shape and Assess Action

The framework’s three broad, overlapping principles—information, integration, and incentives—can help governments incorporate actions that promote disaster resilience into the routine missions of specific entities, programs, and efforts.
“mainstreamed risk reduction”), as well as define priorities in policy and investment at the highest level (“strategic risk reduction”). The framework also includes a series of questions organized around the three principles that users can apply to their specific context. (See figure 3.)

**Information.** Accessing financial, engineering, environmental, land-use planning, and other types of information that is accurate, comprehensive, and authoritative can help decision-makers identify risks and assess the impact of risk-reduction strategies. For example, national governments can provide technical assistance to help decision-makers in smaller, more poorly resourced jurisdictions interpret available risk information and analyze alternatives for risk reduction.

**Integration.** Integrated analysis and planning can help decision-makers take coherent and coordinated resilience actions. For example, government efforts can leverage the expertise and resources of non-government partners, such as by using building codes and standards developed by the private sector in government efforts to adopt more robust risk-reduction measures.

**Incentives.** Incentives can help to make long-term, forward-looking risk-reduction investments more viable and attractive among competing priorities. Incentives can lower the costs or increase the benefits of risk-reduction measures, which can stimulate investment in disaster resilience by all levels of government, individuals, and the private sector. For example, incentives such as national government regulatory requirements or conditions of financial assistance could encourage local governments and other entities that own infrastructure to invest in disaster risk reduction.

These principles can be applied to any disaster effort—post-disaster, pre-disaster, or outside the traditional preparedness and recovery domain—as long as the goal is to identify forward-looking opportunities to leverage or influence risk-reduction actions, responsibilities, and interests across a whole system of governmental and nongovernmental decision-makers.
**Information**

Accessing information that is authoritative and understandable can help decision makers to identify current and future risk and the impact of risk-reduction strategies.

- **Provide reliable and authoritative information about current and future risk**
  - To what extent could federal efforts:
    - Enhance the validity and reliability of the disaster risk information produced?
    - Generate and share additional information that would help decision makers understand their disaster risk?
    - Reduce the complexity of and translate risk information for non-technical audiences?
    - Help leverage and synthesize disaster risk information from other partners across agencies, governments, and sectors?
    - Promote consensus around the reliability of the sources and methods that produce disaster risk information?

- **Improve the ability to assess alternatives to address risk**
  - To what extent could federal efforts:
    - Help decision makers identify and select among disaster risk-reduction alternatives?
    - Provide technical assistance to help build capacity of nonfederal partners?
    - Contribute to an understanding of approaches for estimating returns on investment?
    - Help decision makers identify and combine available funding sources and innovative methods for meeting disaster risk-reduction needs?

- **Strengthen the ability to assess status and report progress**
  - To what extent could federal efforts:
    - Advance methodologies or processes to measure the current state of nationwide resilience?
    - Promote monitoring of progress toward resilience on a programmatic basis?

**Integration**

Integrated analysis and planning can help decision makers take coherent and coordinated resilience actions.

**Incentives**

Incentives can help to make long-term, forward-looking risk-reduction investments more viable and attractive among competing priorities.

- **Build an overarching strategic vision and goals**
  - To what extent could federal efforts:
    - Help to establish overarching strategies that guide national resilience efforts?
    - Ensure that resilience goals are incorporated into relevant national strategies?
    - Prioritize resilience goals that reflect the most pressing resilience challenges?

- **Promote coordination across missions and sectors**
  - To what extent could federal efforts:
    - Ensure consistent and complementary policies, procedures, and timing across relevant federal funding mechanisms?
    - Convene stakeholders with different perspectives and interests to create whole systems solutions?
    - Encourage governance mechanisms that foster coordination and integrated decision making within and across levels of government?
    - Engage non-government partners in disaster risk reduction?

- **Recognize relationships among infrastructure and ecosystems**
  - To what extent could federal efforts:
    - Promote better understanding and awareness of the interactions among infrastructure components and ecosystems in disaster resilience actions?
    - Assist decision makers in determining what combination of ecosystem and built infrastructure solutions will best suit their needs within their constraints?
    - Assist in ensuring that projects undertaken under different programs and by different actors do not conflict?
    - Facilitate planning across jurisdictions and sectors to avoid or respond to cascading failure?

- **Provide financial and nonfinancial incentives**
  - To what extent could federal efforts:
    - Make risk-reduction measures more viable and attractive?
    - Incorporate disaster risk-reduction measures in infrastructure and ecosystem management financial assistance?
    - Require disaster risk-reduction measures for government-owned or -operated infrastructure and for federally funded projects?
VIRTUAL AUDIT WORKSHOPS FACILITATE LEARNING, COLLABORATION DURING THE PANDEMIC

by Loren Yager, GAO Center for Audit Excellence, and Hannah Maloney, USAID Office of the Inspector General

Among the many drastic changes wrought by the COVID-19 crisis has been the sudden shift to a virtual work environment. At the start of the pandemic, some audit offices had already made significant strides toward enabling remote work, while others conducted work primarily in-person, whether to build a collaborative work culture, ensure safe handling of sensitive documents, or due to limited information technology infrastructure or other reasons. The pandemic has presented many challenges to audit offices but has also offered opportunities—even to those that had a jump start on remote work—to create new and better methods to conduct audits, foster collaboration, and provide professional training.

During the pandemic, the United States Agency for International Development’s Office of Inspector General (USAID OIG)—which assesses the efficiency and effectiveness of agency programs and operations, and investigates allegations of fraud, waste, and abuse—developed a two-hour virtual workshop format to achieve its training and collaboration goals. This format, which has been enthusiastically embraced by participants, may be of interest to Supreme Audit Institutions (SAIs) seeking ways to enhance their resilience and ensure continuity of operations in a virtual work environment.

Early Input from Participants

USAID OIG took a series of steps that led to this successful approach. First, USAID OIG quickly sought out ways to work with the U.S. Government Accountability Office’s (GAO) Center for Audit Excellence (CAE) to translate its training activities from in-person methods to the virtual environment. Second, the organization leveraged its training activities to create opportunities for staff from across audit teams to collaborate. Third, it carefully incorporated participant feedback to make continuous improvements to its training.

It became clear early on that the full-day training that typically occurs when travel is involved was not the best model for virtual activities. Based on polling of participants in the early
sessions, USAID OIG staff determined that two-hour virtual sessions provided sufficient time to delve into the subject matter, while not lasting so long that they disrupted schedules or overly taxed participants.

A second consistent comment in the early sessions was that participants greatly enjoyed collaborating and connecting with their colleagues in the small group exercises. Accordingly, workshop developers modified the format to place greater emphasis on group discussions and breakout room exercises. Developers also learned that the workshops must remain relatively small (10 to 12 participants) to enable each person to have a chance to actively participate.

The virtual workshops allow for different types of networking and collaboration, depending on the participants. Some workshops target new hires, providing them an opportunity to interact with others in their cohort even if they have never set foot in the office. Some workshops are geared toward more experienced staff at the same level, so they can work together to address common challenges. Other workshops are open to all participants, creating a kind of virtual “water cooler” where staff with different levels of experience can connect. And, unlike in-person training, the virtual format can bring together staff in multiple locations and even time zones, which may be especially important in times of crisis.

This model meets not only networking but also learning needs, as there is much evidence in the social science literature that learners retain knowledge more effectively through active recall than through passive reviewing or listening. The workshops encourage active recall both during the presentation and in the breakout rooms.

**A Discussion-Rich Workshop Format**

Over time, the format of the workshop has evolved into

### First Hour

<table>
<thead>
<tr>
<th>Introduction to topic (4 – 6 slides)</th>
<th>In-class discussion (instructor-led)</th>
<th>Application of technique (10 – 15 slides)</th>
</tr>
</thead>
<tbody>
<tr>
<td>~15 Minutes</td>
<td>~15 Minutes</td>
<td>~30 Minutes</td>
</tr>
</tbody>
</table>

### Second Hour

<table>
<thead>
<tr>
<th>Recharge break</th>
<th>Breakout room exercise (groups of 4 - 6)</th>
<th>Discussion on results from breakout rooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Minutes</td>
<td>~30 Minutes</td>
<td>~20 Minutes</td>
</tr>
</tbody>
</table>

*Figure 1: Virtual Workshop Format*
a standard template that includes multiple pedagogical techniques and allows ample time for discussion and interaction (figure 1). The first hour involves instructor-led presentations and discussion. In the second hour, participants are divided into breakout rooms, where they collaborate on an exercise that gives them the chance to apply what they learned in the first hour. The remainder of the time is dedicated to a briefing from each group and discussion of the results.

For example, in a recent series of workshops on evidence collection methods, the first few slides covered the audit conditions in which specific methods such as surveys, semi-structured interviews, and data collection instruments were the best fit. During the in-class discussion, participants explored the advantages and disadvantages of using the three methods in different real-life scenarios. For the remainder of the first hour, the instructor presented on key issues and steps in implementing each method.

The breakout room exercises differed based on the evidence collection method participants were asked to discuss:

- **Surveys.** Groups examined a summary of a proposed survey of advisory committee members and discussed questions about the expected difficulty of various steps, the suggested mode of administration, methods of pre-testing, and anticipated risks.

- **Semi-structured interviews and data collection instruments.** Groups discussed how to use these methods for specific types of oversight and learned how a rigorous planning process can deliver stronger audit findings.

**Key Challenges**

There are significant differences between these virtual workshops and typical in-person training sessions. One is that the time allotted for discussion (represented in green in the figure) represents more than 50 percent of the total duration, based on evidence that participants’ engagement with the material is more important than the amount of material covered in the slides.

This structure creates several key challenges for the developers and instructors of the workshops. Perhaps the most significant is the need to be relentless about limiting the amount of material covered in the slides. Otherwise, the breakout room exercises and group discussions will be rushed and less effective.

Another challenge is that it takes time and practice to create meaningful exercises that can be completed in the time available, yet still encourage groups to grapple with the complexities of the subject matter. The developers have found that pre-tests are essential to striking this balance in the exercises.

Finally, the instructors need to be adept at classroom management in the virtual environment, as there is no time to waste in this workshop format. The goal is for the technology to disappear into the background and allow participants to focus on the material and collaboration with colleagues.

**Conclusion**

The pandemic has caused serious disruptions to work environments, but effective organizations find ways to adapt and even improve in the face of a crisis. USAID OIG did exactly that by maintaining its commitment to training, collaborating with CAE, and listening to suggestions from staff. The result is a workshop format that will play a key role in the organization’s professional development even after the pandemic ends.

Note: The views expressed in this article do not necessarily reflect the views of USAID, USAID OIG, or the United States government.
STRENGTHENING SAI INDEPENDENCE IN THE PACIFIC

by Pacific Association of Supreme Audit Institutions

Pacific Island Supreme Audit Institutions (SAIs), many of which are very small in comparison with SAIs in other regions, face an array of challenges. These range from issues related to serving small populations, like a high risk of perceived conflicts of interest and difficulty recruiting and retaining qualified staff, to grave threats like the COVID-19 pandemic and climate change.

Given these challenges, it can be tempting for SAIs in the Pacific Association of SAIs (PASAI) region to make striving for independence a low priority. However, legislative and financial independence are key to building strong and resilient SAIs that are able to effectively address these complex issues.

The ultimate goal of efforts to strengthen SAI independence is not to secure budgets or increase power. Rather, it is to ensure SAIs are able to provide objective insights into public expenditures and governance by implementing an independent, risk-based audit agenda. All members of a society benefit when its SAI is capable of identifying and addressing problems and providing public assurance in government institutions.

The State of Independence in the Pacific

Of the 20 SAIs included in PASAI programs, none scored a perfect 4 on independence under the SAI Performance Measurement Framework. Only two of these SAIs (10 percent) scored a 3, demonstrating broadly functioning independence. These results indicate an urgent need to strengthen SAI independence in the Pacific region.

Specifically, SAIs in the Pacific lack sufficient autonomy regarding staffing, including having little transparency in the process of appointing the SAI Head, according to the World Bank’s Independence Index. A lack of freedom to appoint staff
is a major impediment to building institutional resilience. In many cases, it is the jurisdiction’s Public Service Commission—not the SAI Head—that has the power to recruit and retain staff.

Pacific Island SAIs also need more financial autonomy. In the recent IDI Global SAI Stocktaking Report, the Pacific region scored very low in terms of its independence from Executive interference in budget execution. Pacific governments have cited COVID-19 as a reason to decrease the budgets and resources of SAIs in the region.

The above reports and assessments do not capture model Pacific jurisdictions like Australia and New Zealand, but it is worth noting they are not necessarily immune from threats to independence either. The Australian National Audit Office is subject to efficiency-related budget measures, and last year the government reduced its annual operating budget by millions of dollars despite a growing number of agencies the SAI must audit.

Chuuk State’s Public Auditor, whose salary is ordinarily funded through the Compact of Free Association between the Federated States of Micronesia and the United States, has not been paid in nearly 12 months. The SAI Head’s income is conditional on his return to Chuuk from the Philippines; however, travel restrictions have prevented him from doing so. Just two staff remain at the SAI to perform critical audit work and manage the operations of the office. This untenable situation will ultimately have negative consequences for the accountability of public funds.

**PASAI’s Recent Work Supporting Independence**

There is no doubt Pacific SAIs would be more resilient if they had greater independence. To help achieve this goal, PASAI uses a two-fold approach: a country-specific approach to working with specific SAIs, and a regional approach to advocating with Pacific leaders and development partners.

PASAI has provided legal expertise to the SAIs of six countries—Fiji, Kiribati, Samoa, the Solomon Islands, Tonga, and Tuvalu—that want to strengthen their independence by changing their legal frameworks.

In addition, since July 2020, PASAI has:

- Helped SAI Chuuk develop and finalize an SAI Independence Strategy.
- Provided advice on an amendment to the Republic of Marshall Islands Audit Act, suggesting it improve monetary incentives to staff who attain certain professional credentials to enable the recruitment and retention of talent within the audit office.
- Completed a review of SAI Solomon Islands’ Code of Ethics and delivered an online workshop on Ethics and Integrity for its staff.
- Presented on SAI independence at the Kiribati Public Accounts Committee induction event.

PASAI also liaised with a consultant and INTOSAI Development Initiative (IDI) to develop a workshop that SAIs can use to advocate for SAI independence and legislative reform with legislatures, governments, and other key stakeholders.

“Legislative and financial independence are key to building strong and resilient SAIs that are able to effectively address complex issues.”

There is often a need to educate SAIs not only on how to improve their independence, but also on how big the gap is between true independence and their current situation. At this time, PASAI has conducted five of an expected 20 SAI independence workshops tailored specifically for SAIs in the Cook Islands, Guam, Kiribati, the Marshall Islands, and the Solomon Islands.

PASAI has also revised its Independence Resource Kit to include an editable SAI independence strategy template, a legislative reform policy paper template, and drafting instructions that a consultant has used with some success in the Solomon Islands.

**The Future of Pacific SAI Independence**

PASAI continues to work with SAIs in the region to advocate for audit independence with parliaments, legislatures, and key stakeholders. The road to SAI independence can be a long one, but as any SAI that has succeeded in improving its independence knows, it is worth the struggle.
EUROSIAI COVID-19 PROJECT GROUP BUILDS RESILIENCE THROUGH COLLABORATION

by Andy Fisher, Head of International Relations, United Kingdom National Audit Office

Introduction

When the COVID-19 pandemic struck, the United Kingdom’s National Audit Office (UK NAO) was able to effectively carry on its work by quickly pivoting to remote auditing and using technology to build relationships within the agency and around the world. Indeed, many auditors continued to conduct audits and publish audit reports without ever meeting their teams or clients in person.

Aspects of UK NAO’s operations were not the only things to change. The Supreme Audit Institution’s (SAI) portfolio of work also shifted significantly. The pandemic has had a devastating effect on many people’s lives, and organizations across the public sector have responded with very high levels of unplanned spending disbursed at speed; according to the national cost tracker, the UK’s estimated lifetime cost of government spending on the pandemic now exceeds £370 billion. UK NAO faced questions from parliament about the effectiveness of this response.

Because the pandemic was a global event, UK NAO quickly realized the vital importance of using existing networks and connections in the INTOSAI community as a means of sharing and comparing knowledge, experiences, and approaches. Accordingly, UK NAO reached out to colleagues within the European Organization of SAIs (EUROSIAI) and around the world, and found many other SAIs asking the same questions.

Setting Up the Project Group

In June 2020, UK NAO joined 33 other EUROSAI members to form the EUROSAI COVID-19 Project Group, with UK NAO as Chair and SAI Finland as Vice Chair. The group’s aim was to share information and create a “safe space” for members to consider the challenges of auditing governments’ responses to the pandemic. After establishing its principles and goals, the group set up 12 workstreams focusing on priorities identified by members. Two key areas of

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‘With governments around the world expected to incur COVID-19-related costs for several years to come, the pandemic will continue to impact audit work, and it will be essential for SAIs to continue to collaborate with one another.”

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interest were measures governments have taken to mitigate the pandemic’s impact on health and social care and to protect the economy.

**Sharing Knowledge and Experiences**

Members have supported each other not only by sharing published work, but also by sharing information, methods, and advice to help teams plan and deliver COVID-19 audits. While the challenges facing the group’s members differ in some ways, there has still been a tangible benefit in learning from one another.

Project group members have connected with one another in a variety of ways. The Benchmarking Information Exchange Project (BIEP), hosted on the EUROSAI website, has been an efficient and effective mechanism for sharing reference materials, presentations, surveys and responses, and reports on a variety of topics. So far, project group members have shared 83 documents in BIEP.

The group has also held 20 online knowledge-sharing events, including roundtables attended by heads of SAIs. In addition, one workstream successfully piloted a “peer assist” format, in which one SAI interviews another SAI about a specific area of its COVID response, with other interested SAIs participating and asking questions via live chat.

The project group is committed to sharing the knowledge gleaned from its members with the broader accountability community. One of its workstreams is dedicated to engaging with external stakeholders, including INTOSAI bodies like the INTOSAI Development Initiative (IDI), INTOSAI Supervisory Committee on Emerging Issues (SCEI), INTOSAI Donor Cooperation, and regional organizations, as well as other groups like the European Union Commission and Organization for Economic Cooperation and Development (OECD).

Individual member SAIs are also sharing the project group’s insights through INTOSAI events and joint efforts. For example, over the last year, UK NAO chaired a well-attended session of the 25th United Nations/INTOSAI Symposium, which focused on lessons SAIs have learned from the pandemic, and participated in the U.S. Comptroller General’s Discussion Group on COVID-19 Lessons Learned.

By working collaboratively, the project group has enhanced the quality of all members’ work and to gather lessons learned from the pandemic. Among other themes, the group is likely to cover the economic recovery; the pressure on public finances; inequalities across populations exposed and exacerbated by COVID-19; and the importance of resilient provision of public services. The group’s ultimate objective is to incorporate members’ knowledge and experiences into a high-level framework that SAIs can use in auditing the response to future emergencies.

The EUROSAI COVID-19 Project Group has achieved quite a bit, but there is more to be done. With governments around the world expected to incur COVID-19-related costs for several years to come, the pandemic will continue to impact audit work, and it will be essential for SAIs to continue to collaborate with one another. Through its ongoing efforts, the group hopes to help strengthen the resilience of public sector entities in responding to the current crisis and to future challenges.
On September 29, 2021, INTOSAI’s Capacity Building Committee (CBC) held its annual Steering Committee meeting, led by South African Auditor General Tsakani Maluleke, CBC Chair, and Swedish Auditor General Helena Lindberg, CBC Vice Chair. The virtual event featured updates from the Supreme Audit Institutions (SAIs) leading CBC’s subcommittees, task forces, and workstreams, whose work demonstrates—as several participants put it—that “sharing is caring.”

In her opening remarks, Ms. Maluleke commended the progress SAIs have made and expressed optimism about the future of capacity development, despite the challenges posed by the pandemic. She emphasized the importance of collaboration among INTOSAI’s bodies and the need for more work in certain areas, such as staff competency, human resources management, and more women in leadership roles.

Participants reported on the progress of a variety of CBC efforts:

- The SAIs of 69 countries have used IntoSAINT, a risk assessment tool that helps improve management of organizational integrity.
- The Task Force on INTOSAI Auditor Professionalization has developed International Standard of SAIs (ISSAI) 150, on auditor competence, and guidance to support it.
- CBC refreshed its website, allowing visitors to easily access content divided into four sections: ideal working environment, professional standards and guidance, competent people, and assessment and ongoing improvement.
- A global survey found that 18 SAIs conducted peer reviews, and a seminar on peer reviews will be held on November 10, 2021.
- The virtual catalogue of cooperative audits has grown, with 247 entries added since 2017.
- Workstreams have gathered best practices and developed guidance related to peer-to-peer support, auditing in complex and challenging contexts, and key capacity development topics like engaging with civil society.

The INTOSAI Development Initiative (IDI) reported on the implementation of the SAI Performance Measurement Framework (PMF), which has helped more than 100 SAIs conduct a holistic and evidence-based evaluation of their performance and demonstrate their relevance to stakeholders. A special highlight of the meeting was the recognition of SAI Bhutan and SAI Kenya for their successful implementation of the framework.

Participants also discussed CBC’s strategy for 2023-28 and ways to ensure no SAI is left behind. CBC welcomed SAI Malaysia as a new member and announced a new workstream on auditing donor funds.
KSC STEERING COMMITTEE MEETING EMPHASIZES VALUE OF COLLABORATION

The 13th Steering Committee meeting of the Knowledge Sharing and Knowledge Services Committee (KSC) was held virtually on September 16, 2021. Representatives from the INTOSAI Chair, Goal Committees, General Secretariat, and INTOSAI Development Initiative (IDI) participated, along with representatives of KSC’s 12 working groups.

In his opening remarks, Mr. Girish Chandra Murmu, Comptroller and Auditor General of India and KSC Chair, underscored the importance of knowledge as a spur to positive action in an increasingly complex and challenging environment. Sharing knowledge enables innovation, effective decision-making, agility, collaboration, and continuous improvement, all of which help Supreme Audit Institutions (SAIs) stay relevant and future-ready, especially in times of crisis.

The meeting marked the culmination of an eventful year. KSC carried out an INTOSAI-wide survey to assess the extent of its outreach, usefulness of its products, and relevance of its work. The survey found broad awareness of KSC but also highlighted the need for working groups to be task-driven and flexible, and the importance of objectively evaluating results. Of particular note was the regional character of specific challenges, like language and relevance. Participants discussed two potential approaches to achieving greater inclusivity: appointing regional ambassadors to the working groups, and creating Global Training Centers across the regions.

A key takeaway from both the KSC survey and INTOSAI Capacity Building Committee’s (CBC) Strategic Brainstorming Document was the importance of increased collaborative activities as a complement to knowledge-sharing. Examples of such activities include the joint effort of the working groups on Environmental Auditing and on Sustainable Development Goals (SDGs) and Key Sustainable Development Indicators (KSDIs) to revise GUID 5202, and an agreement between KSC, the Internal Control Sub-Committee of the INTOSAI Professional Standards Committee (PSC), and the Institute of Internal Auditors to develop a paper on the Three Lines Model.

Director of the INTOSAI General Secretariat Dr. Silke Steiner informed participants about a report summarizing key points from the 25th United Nations/INTOSAI Symposium, whose theme was lessons learned by SAIs during the pandemic. She also commended the INTOSAI community’s cooperation with the UN on implementation of the SDGs and invited SAIs to publish the results of their SDG audits in INTOSAI’s SDG Atlas.

Mr. Timur Makhmutov, representing the INTOSAI Chair, the Accounts Chamber of the Russian Federation, briefed participants on the INTOSAI University (U-INTOSAI) initiative. Mr. Einar Garrissen, Director General of IDI, reported that despite the pandemic, 2020 turned out to be a banner year, with 126 SAIs participating in 19 long-term IDI initiatives. Additional highlights included:

- Approval of the KSC reporting dashboard, which will be presented to the 75th INTOSAI Governing Board.
- Presentations by the SAIs of France and India, respectively, on the status of cross-cutting research projects on “SAI Independence” and “Audit Communication and Reporting of Audit Results.”
- Encouragement for SAIs to participate in the recently launched Community of Practice (CoP) on SDGs, which will serve as a forum for auditors to exchange ideas and information on how to contribute to the UN 2030 Agenda.
- Decision for KSC to organize a series of webinars—the first of which was held on October 7, 2021—on the use of the INTOSAI Community Portal, to encourage greater use of this resource by the audit community.

The next KSC Steering Committee meeting will be hosted by the Accountability State Authority of Egypt in 2022.
On October 19, 2021, the INTOSAI Professional Standards Committee (PSC) held its 18th annual Steering Committee meeting. Minister Bruno Dantas of Brazil’s Federal Court of Accounts (TCU), the Chair of PSC, welcomed participants to the virtual event, which focused on work related to the INTOSAI Framework of Professional Pronouncements (IFPP).

The meeting featured a number of updates on PSC initiatives:

- Paula Hebling of TCU reported that PSC had prepared the text for Goal 1, professional standards, for the new INTOSAI strategic plan, and that the Arab Organization of Supreme Audit Institutions (ARABOSAI) would migrate Arabic documents to issai.org soon.

- Vincent Feller of the French Cour des comptes reported on new guidance for INTOSAI P50 (principles of jurisdictional activities of SAIs).

- Jan van Schalkwyk, of SAI South Africa and the INTOSAI Capacity Building Committee (CBC), announced the exposure period for ISSAI 150 (auditor competence) and related guidance.

- Geoffrey Simpson of the European Court of Auditors, which is PSC’s Vice Chair, reported that ISSAI 140 (quality control of SAIs) would be revised.

The PSC Chair proposed changing the body’s terms of reference to make the Chair and Vice Chair of the INTOSAI Policy, Finance, and Administration Committee (PFAC), as well as the SAIs of the Chair and Vice Chair of the Forum for INTOSAI Professional Pronouncements (FIPP), members of the PSC Steering Committee. The CBC proposed that the CBC Vice Chair also be made a member. PSC members will vote on these suggested changes.

Radek Majer of the European Court of Auditors shared the preliminary results of a survey PSC conducted on how the IFPP is used and could be improved. Among the survey’s findings was that nearly half of the 127 respondents apply the standards directly in their SAIs, and that the majority of respondents believe the standards should be elective rather than mandatory.

A key topic explored by the survey was how to improve the accessibility of the IFPP. Most respondents reported that they were able to access the standards in either their own language or a language they could work in. However, respondents were in favor of improving navigation on the IFPP website and presenting the material in a more flexible manner.

The meeting wrapped up with breakout discussions organized around results of the IFPP survey. A report on the survey’s findings will be issued next year.

PSC is planning two meetings for 2022: one in June, hopefully to take place in person, and one in virtual format in October.
ISLO Network Meets Online

On July 19, 2021, the Professional Standards Committee (PSC) organized the first online meeting of the INTOSAI Standards Liaison Officers (ISLO) network, which aims to enhance communication and dialogue around the standard-setting process. The focus of the meeting was on encouraging Supreme Audit Institutions (SAIs) to participate in PSC’s recent survey on the INTOSAI Framework of Professional Pronouncements (IFPP). Ms. Pranchi Pandeu, project manager of the working group for GUID 5320 (guidance on performance audit on privatization), also presented the exposure draft of the document.

ISLO responds to requests related to standards from the PSC and other INTOSAI working bodies. SAIs or organizations that wish to join this network should send the name, email address, and job title of the person they are nominating to serve as a liaison officer to ECA-ISLO@eca.europa.eu.

Technical Support Function is Up and Running

The INTOSAI Technical Support Function (TSF), which has been operational since March 2020, provides high-quality technical support services for INTOSAI standard-setting activities. Since its inception, the TSF has helped make the standard-setting process more efficient and effective, and enabled better planning and use of resources.

The TSF is currently composed of three members: George Haule and Amnon Mwasakatili, both from SAI Tanzania; and most recently Adrian Gogolan from SAI Romania, who joined in May 2021 following the retirement of Matti Mattila, from SAI Finland.

The TSF arose from one of the strategic objectives for Goal 1 (Professional Standards) in the INTOSAI Strategic Plan 2017-2022 and has three main responsibilities:

- Help implement the Strategic Plan and related projects;
- Conduct research and technical analysis on various issues related to updating or further developing principles, standards, or guidance within the IFPP; and
- Help disseminate information to members of INTOSAI.

PSC Improves Procedures for Collaboration

INTOSAI is increasingly tackling complex standard-setting projects, many of which involve multiple professional and technical disciplines and require expertise from one or more of INTOSAI’s specialized working bodies. To ensure the quality of such projects, it is essential that the PSC, its subcommittees, and other working groups cooperate effectively to plan, implement, and evaluate them.

To that end, PSC and its subcommittees have agreed on a document that aims to:

- Identify the main types of projects and the cooperation needed to implement them; and
- Clarify the responsibilities and processes involved in this cooperation.

This dynamic document is intended to be continually updated as it is put into practice and represents an important step toward strengthening collaboration. It can be accessed here.
During the COVID-19 pandemic, outdated and ineffective crisis and management systems have exacerbated disruptions to the work of many Supreme Audit Institutions (SAIs), potentially undermining their ability to ensure accountability. Often, these systems do not take into account risks that have intensified during the pandemic, like limited human and financial resources, or emerging risks, like those that accompany digitization.

In response to these challenges, INTOSAI Development Initiative (IDI) is rolling out a new initiative—Crisis and Risk Management for SAI Performance (CRISP)—that helps strengthen SAI resilience by establishing, or improving upon, crisis and risk management systems. By having systems in place that reflect both direct risks to SAIs and broader risks to public financial management and accountability, SAIs are better able to fulfill their mandates even in difficult circumstances.

From 2022 onwards, the CRISP initiative will offer support for SAIs that want to improve in these areas through eLearning courses and direct implementation support. To present its initial approach, reflect on experiences from some SAIs, and gather feedback and suggestions, IDI offered sensitization webinars in English and French in October 2021.

The premise behind CRISP is that SAIs need to strengthen both risk and crisis management systems, and to link these systems with their strategic management. The INTOSAI community has extensive experience with risk management, which is a well-developed field with applicable international standards (ISO 31000). SAIs have less experience with crisis management, but INTOSAI organizations have published several resources to help remedy this: a business continuity planning guide developed jointly by the Caribbean Organization of SAIs (CAROSAI) and the Pacific Association of SAIs (PASAI), and guidance developed by the African Organization of English-speaking SAIs (AFROSAI-E) on disaster response and crisis communication.

CRISP aims to build on these efforts by focusing on the two-way link between SAIs’ crisis and risk management. On the one hand, crisis management can be viewed as an element of risk management, because a crisis is the realization of an unlikely yet impactful risk for which the SAI has no simple mitigation tools. Crisis management systems thus function as a risk mitigation measure. On the other hand, most SAIs are currently recovering from the COVID-19 crisis, a process that involves reviewing and updating risk management procedures.

IDI would very much appreciate SAIs’ contributions as it continues to develop this initiative. SAIs that would like to share their experiences with IDI or nominate resource persons can do so by emailing nils.voesgen@idi.no and laurent.grosse-kozlowski@idi.no.
As the world deals with a global health crisis, the immense importance of strong and resilient public health systems to achieving United Nations Sustainable Development Goal 3 (SDG 3)—ensure healthy lives and promote well-being for all at all ages—has never been more evident. Supreme Audit Institutions (SAIs) have a key role to play in addressing the deepening inequalities during such pandemics and in ensuring vulnerable segments of the population are not left behind.

To that end, the INTOSAI Development Initiative (IDI), in collaboration with the regional secretariats and Knowledge Sharing and Knowledge Services Committee (KSC), is supporting a cooperative performance audit linked to SDG target 3.d (strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks). The World Health Organization's (WHO) Health Services Resilience team is providing technical support for this effort. This cooperative audit may have impact at both the country and regional levels, as the audit reports from several SAIs in a region will provide a comprehensive picture of the status of SDG 3.d implementation.

To build SAIs' capacity to conduct these audits, IDI has developed an Integrated Education & Audit Support Platform with four elements: education contents (asynchronous units and synchronous classes), social learning (discussion forums, parking lots, cafes, webinars, and audit question bank), other resources (library, audio and video links, and links to other courses), and audit support (feedback and support for each stage of the audit). In addition to the IDI team, nineteen mentors are engaged to deliver this support.

Thirty-nine SAIs in five regions are participating in the 3.d audits, and most teams are currently at the end of the planning phase. Reports are expected to be completed around the end of the first quarter of 2022.

**What is Public Health System Resilience?**

Resilient public health systems mitigate, prepare for, respond to, and recover from disruptive events while continuing to provide essential health services, and they use their experiences to guide improvements. Achieving resilience requires a multifaceted, whole-of-society approach to public health emergencies at the policy, operational, and service delivery levels, including strengthening essential public health functions. According to WHO, examples of such functions include surveillance, health protection and promotion, and public health preparedness.

Resilient public health systems align “health emergency planning with broader health sector strategy and vice versa, including appropriate budgets and monitoring and evaluation (M&E) frameworks for planned as well as unexpected interventions” (Mustafa et al., 2021).

**How Can SAIs Effectively Conduct SDG 3.d Audits?**

While public health system resilience has many dimensions, the 3.d audits focus on those included under this specific target. In their 3.d audits, SAIs can examine how governments are enhancing their capacity to do the following (depending on their national context and risk):

- Forecast, prevent, and prepare for public health emergencies
- Adapt, absorb, and respond to public health emergencies
- Maintain essential health services during emergencies

SAIS CONTRIBUTE TO BUILDING STRONG AND RESILIENT NATIONAL PUBLIC HEALTH SYSTEMS

by IDI’s Sustainable Development Goals Team
SAIs should focus on policy coherence and integration across the government, as well as on the extent to which the government has involved diverse stakeholders in its efforts. One of the principles of the UN 2030 Agenda is that all processes for implementing the SDGs be participatory and inclusive. Stakeholders include all levels and sectors of government, civil society and the private sector, members of parliament, and national human rights institutions.

Stakeholder engagement is closely linked to another important principle that undergirds 3.d audits: “leave no one behind.” Poverty and inequality can prevent vulnerable groups from participating in and benefiting from progress on the SDGs. To evaluate governments’ efforts to leave no one behind in the implementation of SDG 3.d, SAIs can ask questions such as:

- How is the government identifying vulnerable groups?
- Why are these groups being left behind?
- What disaggregated sources of data are available about these groups, and what are the data gaps?
- What is the government doing to determine the needs of, and to support, these groups?

**How Can SAIs Ensure their Audits Build Public Health System Resilience?**

As outlined in IDI’s SDGs Audit Model (ISAM), SAIs should focus on impact at all stages of their SDG audits, including when designing, conducting, and reporting on the audits. The guide includes practical “Spotlight Questions on Audit Impact” for SAIs to consider throughout the process.

After issuing their audit report, SAIs can take further actions to enhance audit impact:

- Examine the corrective actions taken by responsible parties based on the results of the audit. Depending on mandate, audit practices, and capacity, SAIs could meet with the leadership of audited entities, request progress reports, or conduct follow-up audits.
- Communicate key messages from the audit at the national, regional, and international levels, such as through press releases, participation in events, and social media.
- Create coalitions of stakeholders to foster a strong sense of ownership in the SAI’s work and recommendations.

In recent meetings of SAI leaders and stakeholders in the Arab Organization of SAIs (ARABOSAI), Asian Organization of SAIs (ASOSAI), Pacific Association of SAIs (PASAI), and Caribbean Organization of SAIs (CAROSAI), external stakeholders affirmed the contribution of these audits to making public health systems more resilient and better able to respond to future crises.

By undertaking these audits in the midst of the current global health crisis, SAIs are demonstrating to citizens, decision-makers, and external stakeholders that they can respond effectively to changing environments and emerging risks. More information on auditing SDG 3.d can be found [here](#).
SAI THAILAND HOSTS 15TH ASOSAI ASSEMBLY
by Dr. Sutthi Suntharanurak, Director of International Affairs Office, State Audit Office of the Kingdom of Thailand

On September 6-8, 2021, the State Audit Office of the Kingdom of Thailand hosted the 15th Asian Organization of Supreme Audit Institutions (ASOSAI) Assembly. Highlights include:

The assembly was the first to be held virtually, reflecting ASOSAI’s resilience in responding to emerging challenges. Due to the COVID-19 pandemic, SAI Thailand, together with SAI Vietnam (ASOSAI Chair) and SAI China (ASOSAI Secretariat), decided to hold the event virtually using Zoom and Slido.

The Hanoi Declaration 2018 was successfully implemented. At the 14th ASOSAI Assembly, hosted by SAI Vietnam, members approved the Hanoi Declaration, which focused on Environmental Auditing for Sustainable Development. This declaration guided the activities of ASOSAI working groups, committees, and members from 2018-2021.

SAI Thailand became the new Chair of ASOSAI. Mr. Tran Sy Thanh, Auditor General of Vietnam and Chairman of ASOSAI, virtually handed over the ASOSAI flag to General Chanathap Indamra, President of the State Audit Commission and new Chairman of ASOSAI for 2021-2024.

ASOSAI members approved the Bangkok Declaration 2021. The declaration focuses on preparing the ASOSAI community for “the next normal” in public sector auditing and is based on a review of five key international declarations: Lima 1977, Beijing 2013, Hanoi 2018, Abu Dhabi 2019, and Moscow 2019. The Bangkok Declaration closely aligns with the ASOSAI Strategic Plan 2022-2027.

SAI Thailand circulated a draft of the declaration to ASOSAI members in July 2021 for feedback and incorporated recommendations into the final version. The declaration consists of four chapters: 1) promoting good governance; 2) encouraging achievement of the United Nations’ Sustainable Development Goals (SDGs); 3) leveraging advanced technologies; and 4) responding to disasters and the pandemic.

SAI India was selected to host the 16th ASOSAI Assembly. At the 56th ASOSAI Governing Board Meeting, held on September 6, members elected SAI India as host of the next ASOSAI Assembly and ASOSAI Chair for 2024-2027.

ASOSAI members elected new members of the Governing Board and Audit Committee, and approved new working groups. The Governing Board now consists of SAIs from Malaysia, Pakistan, the Philippines, Russia, Saudi Arabia, South Korea, and Turkey, and the Audit Committee comprises the SAIs of Azerbaijan and Kazakhstan. ASOSAI members approved the establishment of working groups on SDGs and on Crisis Management.

ASOSAI conducted many successful activities over the past three years, despite the pandemic.

- SAI China reported on implementation of the ASOSAI Strategic Plan 2016-2021, ASOSAI grant support, and Working Group on Environmental Auditing activities.
- SAI India shared improvements to the ASOSAI Journal.
- SAI Japan presented on the activities of the ASOSAI Capacity Development Committee.
- SAI UAE discussed the success of the 12th ASOSAI Research Project, on “Audit on Implementation of SDGs: Leveraging Digital or Big Data to Achieve the SDGs.”

The 8th ASOSAI Symposium, whose theme was “ASOSAI and the Next Normal: Resilience amidst Challenges,” was successfully held on September 8. The symposium’s goal was to share the knowledge, experiences, and visions of ASOSAI members related to coping with the pandemic and preparing SAIs for the post-pandemic era. The 38 papers submitted for the symposium and PowerPoint presentations can be found at www.asosaithailand.org. For questions about the 15th ASOSAI Assembly, please contact Dr. Sutthi Suntharanurak at sutthisun@gmail.com.
OLACEFS CAPACITY BUILDING COMMITTEE PUBLISHES PORTFOLIO OF RESOURCES

The Organization of Latin American and Caribbean Supreme Audit Institutions (OLACEFS) Capacity Building Committee (CCC) has published a portfolio with the main products it has developed in recent years. The aim of this effort was to make the CCC’s capacity building tools easily accessible in one location, to facilitate their dissemination and use by all Supreme Audit Institutions (SAIs).

The portfolio has the following products:

- Training Needs Assessment (2016 and 2018)
- Massive Open Online Course (MOOC) on Performance Audit (2020)
- MOOC on the United Nations 2030 Agenda and the role of SAIs in the implementation of the Sustainable Development Goals (SDGs) (2018)
- Instruments to Assess Satisfaction and Measure Results (2020)
- Educational Management System - SGE 2.0 (2018)
- Manual of In-Person Courses (2019)

The CCC will update the portfolio as its task forces deliver new products. The materials are available on the CCC page on the OLACEFS website.

Suggestions or additional information can be sent to ccc@tcu.gov.br.

OLACEFS AND CBC HOLD WEBINAR ON CITIZEN PARTICIPATION

The Comptroller General of the Republic of Peru, Chair of the Organization of Latin American and Caribbean Supreme Audit Institutions (OLACEFS) Citizen Participation Commission, and the Auditor-General of South Africa, Chair of the INTOSAI Capacity Building Committee (CBC), organized a webinar on September 30, 2021, on “Benefits of Citizen Participation in Governmental Control/Audit.” The webinar provided an overview of global practices and challenges related to citizen participation in government oversight. Participants included representatives of Supreme Audit Institutions from Latin America and other regions, as well as experts from international organizations and civil society.
On August 12, 2021, the Latin American and Caribbean Organization of Supreme Audit Institutions (OLACEFS) held the first meeting of the Coordinated Audit of Sustainable Development Goal (SDG) 3.b (support research, development, and affordable access for vaccines and medicines). The main objectives of the audit are to evaluate the implementation of SDG 3.b, with an emphasis on the impact of COVID-19, and to facilitate the sharing of best practices.

The virtual meeting, which aimed to promote dialogue and initiate activities related to the coordinated audit, was led by the Office of the Comptroller General of the Republic of Peru, as part of the Working Group on Disaster Management Auditing in the Framework of the Sustainable Development Goals (GTFD), chaired by the Superior Audit Office of the Federation of Mexico. Comptroller General of the Republic of Peru and President of OLACEFS, Econ. Nelson Shack Yalta, welcomed attendees and stressed OLACEFS’ commitment to establishing mechanisms to help member Supreme Audit Institutions (SAIs) address the impact of the pandemic and improve public health policies. David Colmenares, Superior Auditor of the Federation of Mexico, also expressed his support of the initiative.

The meeting was attended by the Comptroller of the Commonwealth of Puerto Rico, Ms. Yesmín Valdivieso, and nearly 180 officials from OLACEFS member SAIs in Argentina, Brazil, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, Puerto Rico, and Uruguay. Also in attendance were associate members Corte dei Conti of Italy, the Office of the Comptroller General of Bogotá, the Honorable Court of Accounts of the Province of Buenos Aires, and the Court of Accounts of the State of Bahia.
EFSUR PRIORITIZES GENDER EQUALITY

Gender equality is a priority issue and the focus of many activities conducted by the Organization of Supreme Audit Institutions of the Mercosur and Associated Countries (EFSUR). The organization is currently carrying out a coordinated audit on compliance with the United Nations’ (UN) Sustainable Development Goal (SDG) 1 (end poverty), with special attention to how poverty and gender intersect.

This work, led by the Supreme Audit Institution (SAI) of Argentina and conducted by seven South American SAIs, focuses on SDG 1.2 (reduce poverty by at least half) and 1.4 (ensure equal rights to economic resources) and is underpinned by the awareness that women are often more vulnerable than men to the effects of poverty. The audit will shed light on how “the feminization of poverty” is affecting women throughout Latin America.

EFSUR also prepares an annual report on gender policy progress in member countries, an effort coordinated by SAI Ecuador, and since 2018 has been conducting international seminars on “Gender Equality: Advances and Challenges.” These seminars feature experts in the field from international organizations such as the UN, United Nations Development Program (UNDP), and INTOSAI Development Initiative (IDI), as well as government officials and SAI staff from the region.

On August 26, 2021, EFSUR held a meeting on “Women and Leadership: Challenges for Equal Participation,” with 371 participants from all over Latin America, including women leaders from SAIs in the region.

Participants included the Comptroller General of the Republic of Paraguay and EFSUR President, Dr. Camilo Benítez Aldana; Auditor General of Argentina and representative of the Executive Secretariat of EFSUR, Lic. Graciela de la Rosa; the Comptroller General of Peru and President of the Organization of Latin American and Caribbean SAIs (OLACEFS), Econ. Nelson Shack Yalta; Minister Ana Arraes, President of the Brazilian Federal Court of Accounts; CRA Susana Díaz, President of the Court of Auditors of Uruguay; CRA Diana Marcos, Minister of the Court of Auditors of Uruguay; and Ms. Sonia Sierra, Deputy Audit Comptroller of the Comptroller General of Ecuador.

In closing the event, Auditor General de la Rosa emphasized that “gender equality is a fundamental premise for audit institutions” and highlighted the importance of the coordinated audit on SDG 1.

EFSUR also held a meeting on September 30, 2021, that focused on the UN’s 2030 Agenda for Sustainable Development as viewed through a gender lens. At this meeting, officers from SAIs in the region shared their experiences auditing the SDGs and gender issues. Participants were divided into four panels, in which they discussed the coordinated audit on SDG 1, the COVID-19 crisis and its impact on gender equality, the compilation of gender standards in the region’s countries, and the development of policies to promote gender equality within SAI Colombia.

For more information on EFSUR’s activities related to gender equality, please visit efsur.org.
STRATEGIC MANAGEMENT WHEN ALL BETS ARE OFF

by Dafina Dimitrova, Senior Manager of SAI Governance, IDI

When the COVID-19 pandemic hit in March 2020, 22 Supreme Audit Institution (SAI) teams participating in INTOSAI Development Initiative’s (IDI) Strategy, Performance Measurement and Reporting (SPMR) initiative found themselves in a precarious situation. They had spent over a year assessing their performance and crafting a strategic plan, which seemed to be turned upside down in the face of the dramatic events that were unfolding. As teams struggled with access to information, communication, and safety, was there any space to focus on strategic planning and management, or would their efforts prove futile?

The SPMR Premise

SPMR’s global rollout, supported by the Swiss State Secretariat for Economic Affairs (SECO), launched in late 2018 for 22 SAIs from three INTOSAI regional groups: the African Organization of English-speaking SAIs (AFROSAI-E), the Asian Organization of SAIs (ASOSAI), and the European Organization of SAIs (EUROSAI). Three other regional groups—the Arab Organization of SAIs (ARABOSAI), the Regional Council for the Training of SAIs of Sub-Saharan Francophone Africa (CREFIAF), and the Organization of Latin American and Caribbean SAIs (OLACEFS)—joined in 2019, bringing the total number of participating SAIs to over 40.

The initiative’s premise was that SAIs can improve their overall performance in a sustainable manner by holistically strengthening their strategic management processes. To that end, participating SAIs work through key elements of strategic management in a relatively linear, albeit iterative, process: from assessing performance using the SAI Performance Measurement Framework (SAI PMF), through strategic and operational planning, to establishing regular monitoring and reporting procedures. The final step is to conduct another SAI PMF assessment, to measure progress and provide inputs for the next strategic plan.

An Unprecedented Stress Test

COVID-19 acted as an unprecedented stress test to the SPMR approach. The pandemic called into question the content and duration of strategic plans, exacerbated operational planning challenges, and made evident the scarcity of resources available to many SAIs. It also posed fundamental questions...
regarding the relevance and role of SAIs as public sector institutions, and how these are captured in organizational plans and processes.

Originally, SPMR consisted of face-to-face regional workshops, as well as in-country and remote support provided by a dedicated advisor from IDI or a resource person. The pandemic put a stop to planned workshops and in-country activities, and in many cases, it disrupted the IDI team’s contact with participating SAIs. IDI grappled with the question of what kind of strategic management support was needed and how to provide it. When faced with such adverse events, it was fair to wonder if SAIs would and should prioritize finalizing their SAI PMF assessments and crafting strategic plans.

**Leveraging SPMR Participation**

The SAIs from the first three regional groups, which had advanced the furthest within the initiative when the pandemic hit, soon realized that the progress they had made in SPMR could help them emerge stronger from the crisis. After the initial shock, most SPMR participants quickly established remote work routines and restored contact with the IDI team, despite ongoing challenges related to information access, technology, connectivity, and work-life balance. On the IDI side, the team quickly re-arranged workflows and explored the possible short- and longer-term impacts of the pandemic on SAI strategic management.

IDI published guidance materials and rolled out a COVID-19 webinar series in April and May 2020. The SAI Strategic Management Handbook, published at the end of 2020, incorporated material on COVID-19 and reflected on initial experiences responding to it. Subsequent bilateral support and courses on operational planning, monitoring, and implementation shifted to a fully digital mode, enabling a more agile approach.
Three factors supported SAIs in leveraging their participation in SPMR during the pandemic.

**First, SAI PMF results, even at the draft stage, were still to a large extent valid, relevant, and helpful.** SAI PMF provides a holistic assessment of performance across six fundamental domains: independence and legal framework, internal governance and ethics, audit quality and reporting, financial management, human resources, and external communication. These detailed findings provide a solid basis for understanding the strengths and weaknesses of SAI performance.

SAI PMF’s panoramic analysis supported SAIs in making short-term decisions and prioritization to ensure business continuity in the first months of the crisis. While SAIs may have viewed the findings through a different lens during the pandemic, the baseline information remained relevant.

**Second, feedback from internal and external stakeholders—such as members of parliament, the executive branch, and civil society, as well as SAI staff—has helped participants craft a strong SAI strategy.** Participating SAIs were at different stages of gathering stakeholder feedback when the pandemic struck. Nevertheless, the pandemic offered a new opportunity to approach stakeholders and better understand the role SAIs can play in ensuring the transparency and accountability of COVID-19 emergency funding.

**Third, SAIs took a fresh look at their draft strategic plans, defining new outcomes related to tackling the effects of the pandemic.** SAI PMF’s analysis supported SAIs in adjusting their priorities in light of the human and financial resource pressures that many were experiencing. SAIs’ strategic plans had to serve as blueprints for meeting their mandates, remaining relevant in the face of new challenges, and improving performance sustainably in the most critical areas.

More than a year after the onset of the pandemic, how have the SPMR SAIs weathered the pandemic through strategic management?

By mid-2021, participating SAIs from the first three regional groups (AFROSAI-E, ASOSAI, and EUROSAI) had completed the formal methodological aspects of the SPMR initiative. Eighteen of those 22 SAIs have finalized their SAI PMF reports or are at the final stage of IDI’s independent review of their quality.

Eleven of the 22 SAIs have had their new or revised strategic plans approved by management or are in the final draft stage pending management approval. The other eleven SAIs are developing a new strategic plan for 2022. Plans focus on the challenges posed by the pandemic and prioritize, among other things, digitalization, enhanced internal and external communication, the introduction of new audit types and topics, management of human resources, and staff welfare.

The SAIs participating in SPMR have proven in their own unique ways that they have both the capacity and a growing strategic management toolkit to successfully deal with even the harshest and most unexpected of circumstances.

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SAI Success Stories

Each participating SAI has brought its unique context and experience to the SPMR initiative and supported peer learning. IDI has captured some of these experiences in a series of SAI PMF and SPMR success stories. For example:

- The experiences of Bhutan and Costa Rica show how a repeat SAI PMF assessment can help SAIs measure progress and achieve improvements across strategic planning cycles.
- The cases of Azerbaijan and the Maldives illustrate how teams can persevere and achieve great results despite an
array of additional challenges, such as changes in team composition and political turmoil.

- SAI leadership and commitment to excellence have been key to achieving strategic management results in Georgia, Guam (part of the SPMR pilot group in the Pacific region), and Kenya.

These stories reflect the wide range of planned and unexpected changes to which SPMR has contributed. They also demonstrate how SPMR participants can have an amplifying effect as they take on new roles. For example:

- While acting as a regional SPMR resource person for the AFROSAI-E SAIs, Ms. Nancy Gathungu was appointed Auditor-General of Kenya.

- The team leader of the Azerbaijan SPMR team, Ms. Vata Mutallimova, became a member of the Board of the Chamber of the Accounts while in this role.

- In Guam, a small SAI with fewer than 20 staff, Mr. Jerrick Hernandez, who participated in SPMR’s pilot, went on to act as a resource person in the initiative’s global rollout. Mr. Hernandez is now advising the SAI of the Philippines—one of the largest and most complex SAIs in the ASOSAI region—on strategic management.

Strategic management can be a challenging process. It requires an open mind, perseverance, leadership commitment, agility, and collaboration. The SAIs participating in SPMR have proven in their own unique ways that they have both the capacity and a growing strategic management toolkit to successfully deal with even the harshest and most unexpected of circumstances.
SPOTLIGHT ON CAPACITY BUILDING

OBSERVATIONS OF A TECHNICAL ADVISOR TO DEVELOPING SAIS

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Over the past decades—with the support of development partners, INTOSAI Development Initiative (IDI), INTOSAI regional bodies, and external consultants—many developing Supreme Audit Institutions (SAIs) have made considerable progress toward meeting internationally recognized standards. However, there is still a great deal of work to be done.

The following are personal observations of a technical advisor, gleaned from more than 40 years’ experience, on the continuing challenges facing developing SAIs. They do not necessarily represent the views of others.

SAI Legislation. Many developing SAIs face challenges with independence—which is key to their ability to perform effectively—even when it is enshrined in law. For example, when audit acts have come into force, some SAIs have not prepared regulations to help implement the legislation. Doing so can help ensure that provisions of new legislation are effectively implemented.

Another concern is that some audit acts have given SAIs powers beyond those required by INTOSAI standards, such as the ability to fine officials. SAI legislation should be reviewed to ensure it meets INTOSAI requirements and does not provide opportunities for dubious practices.

Appointment of Auditors General. Appointments of Auditors General (AGs) are not always transparent, and at times, heads of state appoint AGs to follow particular agendas. Governments should follow guidance produced by INTOSAI, or existing SAI legislation if it meets those requirements, when appointing AGs.

Strategic Plans. Many SAIs believe that strategic plans are for a fixed period—usually five years—and should not be updated until they expire. Moreover, SAIs often do not have the financial resources to fully implement them.

To address this, strategic plans should include budgets that account for all costs; be reviewed and updated at least annually, taking into account changing circumstances; and be submitted to the legislature, to secure support and the funds necessary to implement them. SAIs would also do well to contact development partners, to secure support.

Top-Down Management. Some AGs are reluctant to delegate responsibility, and managers reluctant to take it, which can slow down business processes and impede staff from developing managerial skills. Shifting the organizational culture from a top-down approach can empower managers to take responsibility for their own departments.

Limited Support. Leadership at the Auditor General level has improved over the past 20 years. However, if AGs do not enjoy strong support from the government and legislature, or if governments interfere in the budget process, then their influence will be limited. AGs will struggle if budgets are insufficient to enhance staff capacity and provide adequate facilities. Enabling budgets to be approved by the legislature, without government interference, can help SAIs receive the funding they need to implement their mandates.

Staff Capacity. The staff of many SAIs do not have the necessary qualifications to audit to international standards. Development partners often provide funding for training, but this is insufficient to professionalize the entire institution. Training and career development plans are essential and should be integrated into a performance management system. In addition, without a formal performance appraisal system, SAIs are unable to determine whether staff are capable of performing their duties to the required standards and are suitable for promotion.

Methodologies and Practices. Moving from outdated to modern auditing methodologies poses considerable challenges for SAIs. By analyzing training needs and developing key competency frameworks, SAIs can help staff acquire the skills they need to make this transition.

SAIs can also encourage staff to adapt to new circumstances by implementing effective change management strategies. Effective quality assurance processes and documentation standards are also key to meeting current INTOSAI standards.
When new legislation has been established to create an independent organization, SAIs may need assistance from development partners in establishing new functions—such as Human Resources; Accounting, including preparation of financial statements; Internal Audit; and Legal Affairs.

**Relationship with Clients.** Many clients believe SAIs seek only to find fault. As a result, audited entities may not provide SAIs with adequate documentation, and SAIs may struggle to find alternative forms of evidence. When SAIs change their approach from apportioning blame to adding value, they build trust and contribute to better government. A client relations improvement program can also help.

**Relationship with Governments.** Many SAIs operate in an environment in which governments do not prepare financial statements, or if they do, the statements fall short of international standards. SAIs are often not proactive in encouraging governments to improve in this area. SAIs should work with governments to agree to national accounting standards and financial statements that meet international standards.

Another concern is that governments can lose respect for SAIs that issue audit reports late. For example, one Minister of Finance did not want to provide more funds to the country’s SAI, because its annual reports on the financial statements were regularly over a year late and therefore of little use in helping secure improvements to systems and procedures.

**Public Awareness.** The public does not fully understand the role and mandate of SAIs. Raising their profiles with the media and civil society—such as through stakeholder workshops and press conferences—helps SAIs promote the benefits of their independence and effectiveness and publicize audit reports.

**Role of Development Partners.** Development partners play an important role in supporting developing SAIs and could do even more to help, such as:

- Exerting greater influence over governments to support SAI independence;
- Making clear how they decide which SAIs to support;
- Empowering SAIs to audit their own programs, rather than bringing in outside experts;
- Making sure they fully understand the roles and needs of developing SAIs, and creating a coordinated strategy for providing support to SAIs;
- Incorporating support for SAIs and Public Accounts Committees into public financial reform programs; and
- Encouraging SAIs to continue implementing reforms even after technical assistance projects end.

Addressing the above challenges through investment and education will better enable SAIs in developing countries to perform their work effectively. This is critical during the pandemic, when there is an even greater need for competent SAIs to provide assurance that governments are spending public funds wisely and managing donated funds effectively.
SPOTLIGHT ON SCIENCE & TECHNOLOGY

IT-BASED AUDITS: A POWERFUL TOOL IN A CHANGING AUDIT ENVIRONMENT

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A Digital Transformation in Auditing

To better serve the needs of citizens and enhance services, many countries have introduced innovative e-government systems using information technology (IT). According to the United Nations Department of Economic and Social Affairs’ (UN DESA) E-Government Survey 2020, most countries and municipalities are pursuing digital government strategies.

In Korea, which the UN DESA survey found to be among the leaders in e-government, many areas of public administration—such as health care, taxation, education, transportation, and land management—are conducted electronically, which has led to the exchange of digitized information among ministries. The government is also in the process of integrating emerging technologies (including artificial intelligence, data analytics, and 5G) into its e-government system to more effectively deliver services.

These changes in public administration in Korea and many other countries have led to a digital transformation in auditing. Auditors are increasingly supplementing, or even replacing, the traditional method of obtaining evidence—checking information in written documents—with one that centers on examining data stored in information systems. These IT-based remote audits can enhance efficiency, as auditors may not need to engage in the time-consuming, labor-intensive process of visiting every site in-person in order to examine auditees’ records. The disruptions caused by the COVID-19 pandemic have only accelerated the shift to remote audits, as Supreme Audit Institutions (SAIs) work to bolster their resilience in challenging conditions.

An Effective System for Analyzing Digital Data

The Board of Audit and Inspection (BAI)—the SAI of Korea—continuously seeks to strengthen its efforts to gauge whether auditees adhere to regulations and operate in accordance with the principles of economy, efficiency, and effectiveness. To that end, BAI established BARON (Best Audit & Inspection System for Rule-based Observation Network) in February 2018 as a tool for collecting, sorting, and analyzing digital data.

Collecting Data. Auditors frequently use public data related to specific areas (such as fiscal expenditures and contracts). BARON collects the data in line with the needs of auditors on
a regular (monthly or quarterly) basis, processes the data into 653 different types for audit purposes, and stores the data. (See figure 1.)

While BARON made different kinds of data from various government entities more accessible, auditors could not initially access all the data they needed. To resolve this issue, BAI linked BARON to the data stored in the government’s metadata management system, which comprises 2,921 information systems and 451,200 databases. This improvement enabled auditors to search the list of digital data by organization, and to request that auditees submit to the SAI any data not retrievable from the system.

**Sorting Data.** Fiscal expenditure data is often classified into three groups based on whether they are related to projects of public institutions, infrastructure and maintenance, or government employment and social services, allowing auditors to locate and retrieve data with ease. Auditors can also use BARON to sort fiscal data by entering different sort keys according to their needs. Auditors can organize fiscal data related to public institutions’ projects by code number (e.g., government project codes for the year concerned, codes for financial institutions, etc.). BARON uses address as a sort key for data on government infrastructure expenditures, and personally identifiable information (PII) as a sort key for information on employment and social services.

**Analyzing Data.** In the early stages of BARON’s implementation, the system automatically identified possible irregularities in state or local finances from its accrued data. Auditors then examined whether any suspicious activities had occurred in the audited entities and provided recommendations for remediation. However, not all data were accessible through the system.

Today, BARON enables auditors to analyze financial data alongside other forms of data (such as vehicle registration details and geospatial data) from various sources. BAI created a spreadsheet tool in BARON that enables auditors to arrange data (such as date, address, and serial number) in a uniform format, analyze it (such as by extracting relevant data based on specific criteria), and compare values within or across datasets.

BARON also allows auditors to conduct spatial analysis—such as buffering (identifying a surrounding area within a specific distance of a geographic feature, such as areas affected by smoke from a building fire), overlay (superimposing information
CASE STUDY: AUDIT OF CRITICAL INFRASTRUCTURE RISK MANAGEMENT (CIRM)

The Korean government launched CIRM in 2015 to identify and address safety risks in critical infrastructure. In accordance with guidelines issued by the Ministry of Interior and Safety (MoIS), which is responsible for CIRM, central agencies and local governments are to implement safety inspections of public facilities (such as public housing and schools) and critical national infrastructure (such as transportation systems), in cooperation with private entities. Inspection results and follow-up activities are entered into the National Disaster and Safety Portal, which MoIS manages. BAI’s audit examined the effectiveness of CIRM measures implemented by MoIS.

Audit Focus

BAI limited the scope of the audit to buildings where fires had broken out between January 2017 and September 2019, and reviewed the results of the building safety inspections conducted less than a year before the fires took place.

BAI compared the results of the MoIS safety inspections with those of safety inspections the National Fire Agency (NFA) and Korea Electrical Safety Corporation (KESCO) had conducted. BAI selected NFA’s inspection based on similarity in target and nature. BAI chose to examine KESCO’s periodic electrical inspection, as electrical fires account for a substantial portion of non-residential building fires.

Data Analysis

The audit team:

- Analyzed the data to determine the proportion of buildings affected by fires between 2017 and 2019 that safety inspectors had found to have defective equipment or to be in violation of relevant laws.

- Inadequate risk assessments. The average proportion of buildings that MoIS judged as requiring improvements between 2017 and 2019 was 9.5 percent. In contrast, the proportion of buildings that NFA determined needed improvements was 56.4 percent.

- Poor performance in preventing accidents. The proportion of buildings that had accidents within a year of NFA’s inspection was 0.28 percent. In contrast, the proportion of structures in which accidents occurred within a year of the MoIS safety inspection was 0.95 percent.

- Extensive overlap in safety inspection of select entities. Of the 90,081 sites inspected in 2017, 63,677, or 71 percent, were inspected for two years in a row, and 30,019, or 33 percent, were inspected for three consecutive years (2017 to 2019). Between 2017 and 2019, the average rate of overlap between infrastructure subject to CIRM and electrical safety inspections was approximately 57 percent.

Data Analysis Process

- Obtained raw data on results of inspections conducted between 2017 and 2019 from the National Disaster and Safety Portal as well as 10 other similar information systems, including the National Fire Data System.

- Uploaded the raw data (an estimated 97 million cases) to BARON and scrubbed the data. The auditors converted facility location information to Parcel Number Unit (PNU) codes and used this as a sort key for data analysis.

- Extracted duplicates using PNU codes as sort keys.

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from multiple data layers, such as identifying areas that cover drinking-water protection zones and greenbelt land), and distance measurement—directly on a map.

BAI plans to continue to enhance the types of data analysis auditors can conduct in BARON. This could lead to more advanced IT-based audits, in which auditors use cutting-edge tools like Artificial Intelligence to analyze data.

**Prospects and Challenges of IT-based Audits**

In addition to developing BARON, BAI has made many efforts to encourage the use of IT-based audits, including establishing a dedicated Division of Data Analysis and Information Management (DDAIM). This division, together with the Audit and Inspection Research Institute (AIRI), provides support to audit divisions in collecting and analyzing digital data and evaluates BARON’s performance in order to improve the system. BAI also promotes IT-based audits by selecting and awarding exemplary IT-based audit cases biannually.

Auditors’ use of the system continues to expand, with an increasing number of teams planning audits after first confirming their feasibility by examining BARON data. From 2018 to 2020, the number of downloads from BARON more than doubled, and the average number of downloads and visits to BARON per user increased (see figures 2 and 3).

Since 2020, when BAI improved the spreadsheet functions, the number of auditors using BARON has increased substantially.

While BAI established BARON to reduce barriers to conducting IT-based audits, auditors are still adjusting to the new system. To further promote BARON’s use, BAI needs to overcome two major challenges.

First, BAI is working with public institutions to ensure they enter accurate information into their databases, which in turn affects the quality of BARON data. Additionally, the Korean government has implemented the Act on Promotion of Data-driven Public Administration, which encourages digital transformation in the public sector. Given these collaborative efforts, BAI is optimistic about the prospects for IT-based audits.

Second, it would behoove BAI to develop a feedback cycle, so that auditors and DDAIM can regularly share their views on how BARON can be most useful and effective.

With the audit environment experiencing significant changes due to both emerging technologies and the outbreak of the pandemic, BAI will continue its efforts to improve BARON and expand its use. By promoting IT-based audits, BAI aims to keep pace with the shift to e-government and ensure it can continue to fulfill its mandate and meet quality standards even in difficult circumstances.