



**Message  
from the  
Chair of  
WGEA**

It has been some time now since the 12th meeting of the INTOSAI WGEA in Doha. When looking back on the largest gathering in the history of INTOSAI Working Groups, it reassures me that we are on the right track—environment is receiving its proper attention and, within the INTOSAI community, environmental auditing its proper emphasis. All told, 192 representatives from 66 countries attended the meeting, including 20 Heads of SAIs.

I hope all the project leaders developing guidance materials had a chance to gather lots of good ideas from the discussions and workshops held to develop guidance drafts. The feedback questionnaire showed that these interactive sessions were also much appreciated by the participants as well.

Oftentimes, the question arises, “How green are we ourselves?” Active discussions concerning the topic of how environmentally friendly our own audit offices are showed this to be an important issue that touches everyone. To focus even more attention on it, we might consider it as a candidate for a project in our next work plan.

I do encourage the regional coordinators to take steps to bring the excellent biodiversity training course, held prior to the main meeting in Doha, into their region. This valuable material should be shared with every audit office.

I want to thank all the participants for making the meeting a success, the keynote speakers for sharing their valuable experiences, and the SAI of Qatar for its excellent organisation and warm hospitality. I wish for the same success at our next working group meeting in China in spite of any complications arising from the world’s financial crises!

This edition of Greenlines includes important news about upcoming meetings and other key issues; highlights as its Feature Story a fascinating and unusual environmental audit first presented by the SAI of Thailand at the Doha meeting; recaps the success of the biodiversity training course conducted by the SAIs of Brazil and Canada; and contains “news briefs” from 19 other SAIs that convey the growing richness and diversity of our Working Group.

**Mihkel Oviir**  
**Auditor General of Estonia**

**Feature Story**

Environmental Impacts of Government Policy: Lessons Learned from Thailand's New International Airport

This story touches on an issue that has only rarely appeared on the WGEA’s agenda of environmental and sustainability issues, but which has come to affect a growing number of urban areas worldwide—noise pollution, particularly as it relates to aviation. The audit findings discussed below were presented by Thailand's Office of the Auditor General at the WGEA's January 2009 meeting in Doha, Qatar. The very positive response to that presentation led Greenlines to request that the OAG prepare this article, which it graciously agreed to do. (*read more on page 2...*)

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Endangered species, protected areas, invasive species, the International Convention on Biological Diversity—all these different topics were discussed during the pilot training course on auditing biodiversity delivered by the SAIs of Brazil and Canada in Qatar in January 2009. This training course builds on the guidance document that was developed by WGEA in 2007, “Auditing Biodiversity: Guidance for Supreme Audit Institutions,” and is in line with the 3rd goal of the WGEA work plan 2008-10 to “enhance information dissemination, exchange and training.” (*read more on page 7...*)

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## Feature Story



### Environmental Impacts of Government Policy: Lessons Learned from Thailand's New International Airport

*This story touches on an issue that has only rarely appeared on the WGEA's agenda of environmental and sustainability issues, but which has come to affect a growing number of urban areas worldwide—noise pollution, particularly as it relates to aviation. The audit findings discussed below were presented by Thailand's Office of the Auditor General at the WGEA's January 2009 meeting in Doha, Qatar. The very positive response to that presentation led Greenlines to request that the OAG prepare this article, which it graciously agreed to do.*



*Airplane taking-off from Suvarnabhumi Airport*

Suvarnabhumi Airport is Thailand's new International Airport. Its name, given by His Majesty King Bhumibol Adulyadej, means "the Golden Land."

Since its first day of operation on 29 September 2006, Suvarnabhumi Airport has had serious impacts on communities near the airport. Noise from airline activities has disturbed the daily lives of people living along the take-off and landing routes of aircraft, affecting their ability to work, engage in conversation, listen to music, watch television, and especially to sleep at night. Over an extended period of time, constant exposure to loud noises may also impact peoples' hearing capacity. In addition, houses and buildings have also been affected by the shaking from aircraft noise. Some houses have cracks in their walls, and in some cases tiles have fallen from roofs.

As a consequence, people living in these areas have gathered to protest and demand that the government solve the noise problem and pay compensation for damages. That compensation, which may cost up to 12 billion baht (US\$ 333 million) in government funds, would pay for modifications to houses of people living in the "moderate" impact area, and for the purchase of houses

or buildings in the "high" impact area. Failure to solve the problem could result in continued protests, which could in turn cause incalculable damage to the 114 billion baht (US\$ 3.166 billion) airport and to the country's image.



*Impacts on cement walls due to the vibrations from take-offs and landings*

#### The Dangers Caused by Loud Noises

According to the World Health Organization (WHO), working in an area with a noise level exceeding 85 Decibel A (dB(A)) in frequency, continuously for more than eight hours, can be harmful to human mental and physical health and lead to other problems:

Physical health effects include damage to the ear's neuron, which can cause a temporary or even permanent loss of hearing.

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Mental health effects from loud noises can include stress, mental illness, and mood swings, which may lead to other problems like ulcers and high blood pressure.

These health effects can, in turn, cause workers to lose their concentration, potentially leading to accidents and reduced productivity.

## How to solve an airport's noise problem

The International Civil Aviation Organization (ICAO) indicates that solving an airport's noise problem first requires identifying the specific problem, and then analyzing alternative measures to reduce noise in a cost-effective manner. Alternative measures include (1) reduction of noise at the source (quieter aircraft), (2) land-use planning and management, (3) noise abatement, and (4) revised operational procedures and operating restrictions. ICAO has developed policies on each of these elements, as well as a system for collecting fees from those causing the problems to help fund remedies.



*The close proximity of the airport to affected communities results in a stream of air traffic flying over nearby residences*

## The role of the Office of the Auditor General of Thailand

Under its mandate, one of the OAG's most important roles is to evaluate government operations. In this case, we evaluated efforts to resolve problems associated with the noise-related impacts on nearby communities caused by the Suvarnabhumi airport's operations, from its opening on 29 September 2006 up to 30 June 2008. The audit objectives included:

- Assessing the appropriate measures to mitigate the problems of the people living in the communities near the Suvarnabhumi airport who have been affected by its elevated noise levels.
- Identifying problems and barriers in dealing with these noise impacts.
- Providing beneficial recommendations to solve the problems.

## Audit Findings

First Finding: Compensation payments were delayed for the people affected by noise impacts arising from the airport.

As at 30 June 2008, only 185 out of 640 total households surveyed in NEF (Noise Exposure Forecast) > 40 areas, or 27.34%, received compensation payments, while only 11 out of 15,283 total households surveyed in NEF 30-40 areas, or 0.07%, received compensation. The cause of delay in payments is that while the Resolution of the Council of Ministers concerning the compensation payments stipulated immediate action, it did not set a definite timeframe for disbursement. Therefore, there were no follow-up procedures.

Second Finding: The budget for problem resolution of the people affected by airport noise increased sharply.

The Resolution of the Council of Ministers on 29 May 2007 stipulated that the government would pay an amount up to 12 billion baht (US\$ 333 million) to compensate people living in the communities nearby the airport to reduce noise impacts on their residences. This amount, which represented an enormous increase over earlier projections, stems from the fact that the number of residents increased in the impact areas after the government had already approved the construction of the new airport project in 2001. For example, in the area north of the airport construction area, 1,871 people asked for construction permits—a huge increase over the 309 people living there before the construction of the new airport.

Our audit determined that the larger-than-projected number of residents in the affected areas occurred because the government did not sufficiently communicate to the public the extent of the problems that would be caused by noise from the airport. In the absence of this information, more and more people moved near the new

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airport, hoping to achieve the economic benefits the new airport would bring. Ultimately, however, the larger number of people moving into the area made the compensation budget higher than what was forecast in the EIA (Environmental Impact Assessment) report, and made the problem more difficult to solve. In fact, the amount of the compensation budget increased from 887.30 million baht (US\$ 24.65 million) to 12 billion baht (US\$ 333 million).

### Third Finding: The problems of the people affected by the airport's noise have not yet been resolved.

The Airports of Thailand Public Company Limited (AOT) has not satisfactorily addressed the problems as stipulated in the Resolution of the Council of the Ministers. That resolution had insisted on urgent compensation payments to the people living in the noise impact area, and improvement of the concrete compensation procedure. AOT, however, has not made timely payments as required. In addition, there have been disagreements on the noise exposure forecast areas between the government and people in the affected area, leading many to reject the compensation calculation criteria. Consequently, in many cases, affected people have declined to accept the payments offered.

### **Recommendations**

- Set up the compensation payment plans, both in the short- and long-term, in such a way that it defines detailed activities and operational timeframes. The activities should be prioritized according to their importance. A secondary plan must be ready in case the primary plan does not work as expected.
- Set up the process and timeframe for compensation rejection to ensure that the people affected by the airport's noise will be fairly treated by the government.
- Set up a long-term strategy by collecting a noise surcharge from aircraft that exceed standard noise levels, and use the proceeds to establish a

compensation fund for affected people. The Fund Manager should be reliable and accepted by all stakeholders.

- Develop noise reduction measures for the people living in the impact areas after 2001, in which the government and the people share the cost of the noise reduction. For instance, the government would pay to reduce noise to acceptable levels (i.e., 70 decibels). People who need to reduce the noise below 70 decibels would be responsible for the additional expenses themselves.
- Install small noise measurement devices in houses located in the borderline noise exposure forecast (NEF) areas to ensure that the people will be continuously taken care of by the government. The compensation would be paid to those people whose noise exposure level exceeds the acceptable limit.
- The government should apply the lessons learned from the Suvarnabhumi airport's 1st phase by making adjustments in its plans for the 2nd phase expansion of the airport. This is particularly important because the construction costs alone for the 2nd phase are expected to cost 74 billion baht (US\$ 2.05 billion). The government should also apply the lessons learned to other government projects that may affect people and the environment. Finally, the experience of the first phase underscores how important it is that information presented to the Council of Ministers for approval be carefully prepared and accurate. Specifically, when initial estimates had to be revised—leading to a reduction in compensation to many recipients—it led to significant opposition by many who saw themselves as losing promised benefits.

### Recent meetings

- The very first meeting of the Steering Committee of the INTOSAI Committee on Knowledge Sharing and Knowledge Services (Goal 3), under the chairmanship of the SAI of India, was held on 5 to 6 March 2009 in New Delhi, India. The WGEA made a presentation in which it introduced its work plan, gave an overview of latest events, and provided a progress report. During the meeting, mutual cooperation in the future was discussed, the Terms of Reference of the Knowledge Sharing Committee were approved, and INTOSAI's strategy for the next period and its communication strategy were introduced.
- During the 58th INTOSAI Governing Board meeting on 13 to 14 November 2008, the main themes for INCOSAI XX were fixed: Theme I is entitled "Value and Benefits of SAIs." Theme II is entitled, "Environmental Auditing and Sustainable Development," and is chaired by the SAI of China and co-chaired by the SAI of Poland.
- The EUROSAI WGEA Steering Committee gathered on 13 March 2009 in Hague, the Netherlands.
- OLACEFS' regional WGEA meeting was held on 23 to 24 April 2009 in Buenos Aires, Argentina. The presidency of the OLACEFS' WGEA (COMTEMA) was taken over by the SAI of Argentina. The main items on the agenda were the regional work plan for 2009-2011 and the committee's future.

### Upcoming meetings

- The 8th Steering Committee (SC8) meeting of the INTOSAI WGEA will be held on 3 to 6 August 2009 in Bali, Indonesia. The first drafts of the developed guidance materials are one of the main discussion topics. Additionally, two larger topics on the agenda are the United Nations Environment Programme's handbook for auditors on multilateral environmental agreements and INCOSAI Theme II. Project leaders of the guidance materials are asked to send in their first drafts by 8 June 2009.
- The parties of the United Nations Framework Convention on Climate Change (UNFCCC) will meet for the last time on a government level before the new climate agreement is to be developed at the Climate Conference in Copenhagen on 6 to 18 December 2009. The conference in Copenhagen is the 15th conference of parties (COP15) of the UNFCCC. In 2012, the Kyoto Protocol to prevent climate changes and global warming expires. The meeting in Copenhagen is expected to culminate in a Copenhagen Protocol to prevent global warming and climate changes. The WGEA is hoping to get

permission to participate in this event, and that we will be provided time during one of the side events to present preliminary results of our Global Audit on Climate Change.

### Other key items

- The Sixth Survey on environmental auditing was sent to every INTOSAI member in the beginning of March 2009. The completed questionnaires are expected to be sent back to the Secretariat by 1 June 2009. The Secretariat strongly encourages SAIs to fill out the survey electronically, using the WGEA's website, [www.environmental-auditing.org](http://www.environmental-auditing.org). Every SAI has been issued a separate password. Should you have any trouble accessing or completing the electronic survey, please contact the Secretariat.
- Environmental audits conducted by SAIs are still expected by the Secretariat so that the Environmental Audits Worldwide database will be up to date, and users will have the latest overview of relevant issues in environmental auditing. SAIs that have not yet sent in their environmental audits are encouraged to do so.
- Olavi Tammemäe, until recently the Director General of the WGEA, left the office on 20 April 2009. His duties have been taken over by Mr Tõnis Saar, who also serves as the Director of Corporate Services of the National Audit Office of Estonia. The Secretariat and the National Audit Office of Estonia thank Mr. Tammemäe for his efforts and dedication in leading the INTOSAI-WGEA Secretariat for the past two years, and wish him good luck and much success in his new challenges. (See *Olavi's Farewell message below*)

### A farewell message from Olavi Tammemäe

Environmental auditors can change the World.

During last two years I have had the privilege to work together with environmental auditors within INTOSAI's WGEA. I have learned that the WGEA is an effective tool for learning, knowledge sharing, and synergetic cooperation for auditors on environmental issues all around the world. Through communication with the Steering Committee members, project leaders, and environmental auditors during our meetings, I have also learned how dedicated and enthusiastic our WGEA community is. I have felt like a member of a big, friendly family and I have contributed from my side to justify that advantage. Having an environmental background, I really felt myself within an adherent team where people mildly and without any trouble were able to understand each others' thoughts, aspirations and actions.

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As I'm moving back to the society of "environmental bureaucrats," I promise to do my best in order to change the environmental field to the more solid and clear audit objective, and I am open to contributing to the capacity building of the environmental auditing field.

Part of my heart stays with the WGEA community, which has hands long enough to change the World for the better and to help create a healthier living space for all of us.

Thank you for being my colleagues!

Sincerely yours,

Olavi Tammemäe

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## Pilot Training Course on Auditing Biodiversity

### Pilot Training Course on Auditing Biodiversity – January 23-24, 2009 in Doha, Qatar: A Success!

Endangered species, protected areas, invasive species, the International Convention on Biological Diversity—all these different topics were discussed during the pilot training course on auditing biodiversity delivered by the SAIs of Brazil and Canada in Qatar in January 2009. This training course builds on the guidance document that was developed by WGEA in 2007, “Auditing Biodiversity: Guidance for Supreme Audit Institutions,” and is in line with the 3rd goal of the WGEA work plan 2008-10 to “enhance information dissemination, exchange and training.” As project leaders, our role has been to develop a training module on biodiversity and run a pilot course before finalizing all the course material and forwarding it to the WGEA regional coordinators. Regional WGEA coordinators are encouraged to offer the course during their meetings.



*WGEA instructors, IDI instructors, participants from the SAI of Thailand and representatives from the WGEA Secretariat*

Participants in the course discussed the importance of protecting biodiversity, learned what kind of actions governments put in place to protect biodiversity, and about the four-step approach to choosing and designing an audit on biodiversity. The objective of this course was to encourage SAIs, particularly those new to the field, to undertake audits on biodiversity and to demonstrate how to go about it. To this end, Peter McVay from the SAI of Australia gave a presentation on that office's 2007 audit on threatened species. This presentation gave the participants the opportunity to hear about a “real” audit on an important topic related to biodiversity.



*Participants were asked to bring in pictures representing biodiversity features of their country, which are displayed by Leila Para (Philippines) and Elaine Ferreira Souza (Brazil)*

#### More participants than expected!

Holding this pilot training course immediately prior to the WG12 meeting in Doha, Qatar, gave many participants the opportunity to attend the 1½ day training course. SAIs answered the WGEA Secretariat's invitation in great numbers. In fact, 69 participants from 37 countries attended the course and participated with enthusiasm in the different exercises and case studies. In their evaluation of the course, participants mentioned that it was very valuable and that they hope to have it delivered in their region.

This was the first time that the WGEA offered a training course based on a published WGEA guidance document. Participation shows that such activities are needed, and project leaders who are currently developing WGEA guidelines are already considering developing a course as a second step of their project.

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*Participants were divided into groups representing biodiversity; at the forefront is the "mangrove" table working on an exercise*

## **Participation of three IDI instructors**

In the hope that this course will continue to flourish in the regions, we invited three INTOSAI Development Initiative (IDI) instructors (who were previously involved in

developing the WGEA-IDI two-week training course on environmental auditing in 2003-04) to help deliver the course. With IDI's financial help and the support of their SAIs, Florence Kiriinya from the SAI of Kenya for the AFROSAI region; Leila Paras from the SAI of Philippines for the ASOSAI region; and Allen Parker from the SAI of Cook Islands for the PASAI region attended the course and helped to deliver its exercises. IDI instructors could also be a resource for the future regional delivery of the course.

## **What's next?**

The updated course will be available at the end of May 2009 and will be sent to the WGEA Secretariat and to all regional WGEA coordinators. If you are interested in this course, contact your regional WGEA coordinators to see if they are planning to have the course delivered in your region.

Carolle Mathieu, SAI of Canada

Elaine Ferreira Souza, SAI of Brazil

## News Briefs from Around the SAI World



### **ANGOLA: Court of Auditors undertakes serious efforts to engage in environmental auditing**

The Angolan Court of Auditors was created in 1996, but started to function effectively in 2001. Our Public Audit Act (Lei Orgânica do Tribunal de Contas) established five departments responsible for auditing financial management and compliance with the rules of procedures by State bodies.

As yet, an Environmental Audit Department has not been created. Nevertheless, the Court of Auditors recognizes that as it sets up its structures and builds its staff capabilities, there is a need to start sending staff to attend training and international conferences on environmental auditing.

As a result, a project was initiated to create the Environment Department at the Court of Auditors. This move will allow for a greater alignment of the Court to deal broadly with environmental issues in Angola as its economy gathers pace.

Some critics suggested that not having such a project would render a legitimacy problem for the Court, for it would not be able to tackle the very serious man-made environment problems the country faces, such as oil leaking in the sea and the issue of anti-personnel mines, just to name a few. Other problems are more related to the economy itself, such as increasing desertification due to the diamond industry, and forest devastation caused by wood production without proper remediation.

The Court acknowledges the importance of tackling this critical issue, and is thus far doing its utmost to kick off this process through the enactment of laws and the development of necessary institutions and procedures.

*For further information, contact Nádía Chaves at [gab\\_internacionais@yahoo.com.br](mailto:gab_internacionais@yahoo.com.br)*



### **CANADA: Commission on Sustainable Development tables reports on a wide range of environmental, health, and sustainability issues**

It has been a busy year for audit teams at the Office of the Auditor General of Canada and the Commissioner of the Environment and Sustainable Development: The Commission reports that it has been working on three reports to Parliament. Environmental audits tabled include: Managing Air Emissions, Managing Environmental Programming at Agriculture and Agri-Food Canada, Safety of Drinking Water, and the Air Quality Health Index. It is also planning to table chapters in May

dealing with the protection of Fish Habitat and the Kyoto Protocol Implementation Act. This audit will be the first report by the Commissioner of the Environment and Sustainable Development under the Kyoto Protocol Implementation Act. This new Act requires that the Minister of the Environment prepare and implement an annual climate change plan that includes a series of measures aimed at reducing greenhouse gas emissions.

Another project underway, planned for tabling in Parliament in November 2009, is the Study on Decision-Making for Sustainable Development. The study's purpose is to help establish criteria against which we can objectively examine management practice and performance in the realm of sustainable development. The study will clarify expectations in relation to good management practices and good information to support decision making for sustainable development. It will also address what is reasonable to expect of management when it comes to paying due regard for the environmental effects of expenditures in the context of sustainable development. The report should also assist Parliamentarians in their oversight role by articulating what is fair and reasonable to expect of government officials when it comes to sustainable development.

*For further information, contact Kimberly Leach at [leachka@oag-bvq.gc.ca](mailto:leachka@oag-bvq.gc.ca)*



### **COOK ISLANDS: Audit Office undertakes review of water systems and waste streams**

The Cook Islands Audit Office (CIAO) has engaged a consultant to undertake a review of the water system on the main island and the Cook Islands' capital, Rarotonga. This review will consider the quality of water, water catchments, any risk posed by the current water systems, and distribution of water and water usage. It will provide recommendations to address any water issues identified. Once the report is completed, the Audit Office will make copies available to interested parties.

The CIAO also plans to undertake a review of the waste stream of the Island of Rarotonga.

*For further information, contact Allen Parker at [allen.parker@auditoffice.gov.ck](mailto:allen.parker@auditoffice.gov.ck)*



### **CZECH REPUBLIC: Supreme Audit Office begins major audit on renewable energy resources**

In 2008, the Czech Supreme Audit Office initiated an audit focused on energy generation from renewable energy resources (RER) and RER energy savings

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programs. The audit will focus on allocations to support RERs, and efforts to enable RERs to account for 8 percent of raw electricity consumption in the Czech Republic by 2010. The audit results will be published in the 4th quarter of 2009.

The audit will evaluate: (1) the methods that providers of financial support used for certain aspects of RER energy generation and savings; (2) whether goals set in accordance with the sustainable development preferences, including international requirements, are clear and measurable; (3) whether RER programs' outcomes, including the effectiveness of applied instruments, are thoroughly monitored and evaluated, (4) the economy, efficiency and effectiveness of recipients' use of financial support; and (5) whether contracts for financial support adhere to statutory obligations and conditions and are achieving their expected outcome.

The results of the audit will be used in a project called "Sustainable Energy" that is part of Goal 1 of the WGEA's Work Plan for 2008 – 2010. The project, whose leader is the Czech Supreme Audit Office, will result in a document to guide future RER audits.

*More information about this project can be found at <http://web1/pages/en/international-cooperation/sustainable-energy-project/default.htm> or <http://www.environmental-auditing.org>.*



## **ESTONIA: NAO audited governmental regulation and activities associated with mining sand, gravel, limestone and dolomite**

According to data from Statistics Estonia, between 2001 and 2007, the quarried amounts of minerals used in the country as building materials increased 4-fold in the case of sand and gravel mining, more than 3-fold in the case of limestone, and 2.5-fold in the case of dolomite. The NAO of Estonia audited governmental regulation and related activities in order to evaluate the sustainability of mining.

According to the NAO's evaluation, the mining of minerals has not been regulated sustainably because of poor long-term planning. For example, national annual mining rates have not been established. Opening new strip mines originates above all at enterprisers' interests, and surveillance over mining is insufficient. Therefore, the NAO concluded, mining of minerals is not environmentally friendly and the interests of local inhabitants are not considered.

The NAO's most important observations about governmental mining regulation and activities are:

- The government has yet to determine how long the known resources of sand, gravel, limestone and dolomite will last;
- The process for selecting areas for new strip mines emphasizes enterprisers' interests at the expense of

environmental interests and the interests of affected local inhabitants;

- Enterprisers' mining reports are not checked properly, and so the actual quarried amounts of mineral may be understated, resulting in an underpayment of resource taxes; and
- The total area of marred landscape is increasing, because as new strip mines are being established, the scars from old mines are not being reforested or otherwise restored.

The full report is available in English at the NAO's website: [www.riiqikontroll.ee](http://www.riiqikontroll.ee).

*For further information, please contact Tuuli Rasso at [Tuuli.Rasso@riiqikontroll.ee](mailto:Tuuli.Rasso@riiqikontroll.ee)*



## **INDONESIA: Board of Audit uses Geo-Spatial Technology to audit forestry management**

The Audit Board of the Republic Indonesia (BPK) has developed a strategy using Geo-Spatial Technology to audit government forestry management with a special focus on its economic, social and environment aspects. The technology has proven to be particularly useful in identifying problems and choosing the audit sample. The implementation of Geo-Spatial technology, such as Remote Sensing, Geographic Information System (GIS) and Global Positioning System (GPS), improves the quality of the audit and makes the audit cost more efficient, both in its planning and execution phases. In the planning phase, the technology is used to identify the riskiest area of the forest to be audited or tested. In the executing phase, the technology is used to measure the area and compare time series data or images.

By using this technology, BPK can identify the rate of deforestation in a certain forest area, any illegal use of the forest area (i.e., illegal conversion of forest areas to mining, agriculture and housing development), and illegal logging.

Any audit evidence resulting from this technology needs to be approved or agreed upon by respective parties of the audit, such as the auditee, the auditor, the forestry department dealing with geo-spatial technology, and other related parties. This approval and agreement increases both the quality of the audit evidence and the audit findings.

The use of this technology can widen the area of the forest to be audited, focus the audit on the riskiest forest areas, and show satellite images of a changing forest area on a time series basis. It can be also used to determine the compliance of licensed forest companies with applicable rules and regulations.

*For further information, contact Edward Simanjuntak at [edward.simanjuntak@bpk.go.id](mailto:edward.simanjuntak@bpk.go.id)*

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## **KUWAIT: Environmental audit team tackles a variety of oil industry-related issues**

Since its inception in 1998, the State Audit Bureau's performance audit unit began to implement an array of strategic goals and objectives to enhance its audit products by addressing different activities and programs in all sectors of the government. One of its main performance audit specialties was environmental auditing.

Since that time, a team of environmental auditors has tackled a variety of environmental subjects: as an oil producing country with all kinds of oil related industries and a small population that lives close to industrial areas with significant environmental risks, the performance audit unit has had to keep a close eye on industrial, governmental, and semi-governmental entities with products and services that can cause environmental or ecological harm.

Some of the reports issued by the performance audit unit's environmental team include the following:

- Solid Waste Management environmental audit report - Feb. 2004.
- Asbestos Waste Management environmental audit report - Dec. 2004.
- Poultry Safety from Salmonella Diseases environmental audit report - May 2006.
- Liquid Wastage Disposal procedures and policies audit report - Mar. 2008.

*For further information, contact Mr. Faisal Al-Ansari at [training@sabq8.org](mailto:training@sabq8.org)*



## **LESOTHO: Reviving Environmental Impact Assessments**

In 2007, OAG Lesotho undertook an audit on the management of soil erosion by the Department of Soil and Water Conservation in the Ministry of Forestry and Land Reclamation. One of the audit's findings was that the National Environment Secretariat (NES) should issue clearance certificates for development projects only after subjecting them to an Environmental Impact Assessment (EIA), to assess whether such developments would have a negative impact on the environment.

Our audit revealed that the Department and other stakeholders did not abide by the terms stipulated in the clearance certificates. This in turn resulted in continued improper land use practices and, hence, increased soil erosion and land degradation.

Through our continuous monitoring (Area Watching), we subsequently discovered that NES recently presented a programme on National radio where it sensitized the nation to the importance of EIAs, and the risks of not

abiding by the terms of clearance certificates. NES said it wanted to revive the National Steering Committee to oversee implementation of the National Action Plan, and to revive the Environment Authority to regulate and monitor activities of all development projects. The OAG will continue monitoring progress on these developments.

*For further information, contact Mr. Mamahooana Leisanyane at [mamahooanal@yahoo.co.uk](mailto:mamahooanal@yahoo.co.uk)*



## **MALAYSIA: SAI undertakes parallel study with Indonesian SAI on forest management**

Malaysia and Indonesia have embarked a parallel study on forest management, one of the cooperative projects identified under a Memorandum of Understanding signed between the two countries on 4 November 2007. The study, started in 2008, focuses on the importance of forest management to the environment. It is in line with the government's emphasis on environmental stewardship to ensure an optimal balance between development needs and the environment.

Several technical discussions pertaining to the objectives, scope, and methodology of the study were conducted between the two countries to streamline the study. Under the bilateral agreement, both countries will prepare a combined report on the study and it will be presented during the upcoming 8th Steering Committee Meeting of INTOSAI WGEA in August 2009, Bali, Indonesia. This parallel audit has enabled both SAIs to exchange information and experiences relating to forest management and environmental audits, especially on the regulations, policies, implementation, and monitoring aspects within the country legal remits. By pooling their knowledge, resources, and best practices, both SAIs will be able to bring to bear effective auditing to improve oversight and public accountability.

*For further information, contact Dr. Masiah Ahmad at [masiah@audit.gov.my](mailto:masiah@audit.gov.my)*



## **NETHERLANDS: SAI urges Dutch government to combat the problem of outdated industrial zones more seriously**

The Netherlands Court of Audit has audited government policy to combat the problem of outdated industrial zones, and concluded that little progress has been made. Many more of such zones have become outdated in recent years. A variety of problems are preventing policy success:

- The government does not have adequate insight into the 'restructuring task' it is facing: which zones are outdated, in what way are they outdated, how many hectares are outdated, what measures are needed, and how much money is involved.

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- It is difficult for municipalities and entrepreneurs to raise the money needed to improve industrial zones. Subsidies have chiefly been spent on large projects. There is little funding available to improve smaller industrial zones. The government provides the municipalities with inadequate help to tap other, private, funding sources.
- Government support in the form of information, training, and the like for municipalities that have to carry out restructuring projects is not available.
- Government policy lacks a clear and unambiguous line on the sustainable use of space when industrial zones are developed or restructured. A guideline which prescribes that new industrial zones may not be built until optimal use has been made of all available space at existing zones has not been worked out very clearly.
- Municipalities primarily want to accommodate economic growth with a view to local employment and land sales. However, regional cooperation is not obligatory. In practice, therefore, there has been a steady increase in the number of new industrial zones, leading to the “cluttering” of the Dutch landscape.

The Netherlands Court of Audit recommended that the government should develop a better system that generates more practical information on outdated industrial zones than the existing one. The effectiveness of existing grant schemes for restructuring should be evaluated. The government should help municipalities tap private funding sources, and also work out practical support facilities. The government should also present a straightforward interpretation of the guideline for optimal use of existing space, and ensure that municipalities are familiar with it. Finally, the government has to encourage provinces and municipalities to find solutions to the inadequate regional coordination of spatial planning for local business.

*For further information, please contact Koos Postma at [K.Postma@rekenkamer.nl](mailto:K.Postma@rekenkamer.nl)*



## **NEW ZEALAND: Solid waste management to be the subject of the first cooperative environmental audit for the PASAI region**

Solid waste management has been selected as the audit topic for the first cooperative environmental performance audit for the PASAI region. The topic was selected after the New Zealand Office of the Auditor General, the WGEA regional coordinator for the PASAI region, surveyed PASAI Auditors-General on their environmental auditing experience and preferred topic. Of the 20 Auditors-General surveyed, many responded that they were keen to take part in the audit, seeing it as a good learning exercise for building capability in performance auditing and environmental issues. The topic of waste was selected as a suitable topic for a first cooperative audit, and the group plans to use recently-issued WGEA guidance on auditing solid waste.

The audit is being conducted as part of the Pacific Regional Audit Initiative (PRAI), an initiative involving PASAI, the Asian Development Bank, the Australian Agency for International Development, the Pacific Islands Forum Secretariat, and the INTOSAI Development Initiative (IDI), to build the capability of Pacific Island Audit Offices in financial and performance auditing.

PASAI Auditors-General will decide whether to participate in the cooperative waste audit after the next PASAI congress in Palau in July 2009. It is hoped that around 8-10 SAIs will take part. In developing the proposal, New Zealand's OAG has drawn on the WGEA guidance on conducting cooperative audits, and the expertise of WGEA colleagues in this area. The IDI will cooperate with PASAI in organising an audit planning meeting for the project in late 2009 and a reporting meeting in 2010.

The PRAI-supported cooperative environmental audit is a very good fit with the WGEA's expectations of the PASAI region. The regional coordinator will assist with the PRAI project and ensure integration with the WGEA as appropriate.

*For further information, contact Jonathan Keate at [Jonathan.keate@oag.govt.nz](mailto:Jonathan.keate@oag.govt.nz)*



## **NORWAY: OAG provides an update on meetings and related matters for the EUROSAI Working Group on Environmental Auditing**

The EUROSAI Working Group on Environmental Auditing held its 6th meeting in Ukraine in October 2008. Approximately 80 participants from 30 member countries and invited organisations attended the meeting. The topics were fisheries management, sustainable energy and climate change. At this meeting, the working group adopted its Work Plan for 2008 – 2011. The plan's main goals are to promote cooperative environmental audits, and to develop methodology and build capacity among its members to carry out environmental audits. In addition, dissemination and cooperation among EUROSAI's working groups, INTOSAI's working groups, and other relevant organisations and institutions are main objectives. To support the chair, a steering committee was also established at this meeting. As of April 2009, the Working Group consists of 45 member SAIs.

The 7th EUROSAI WGEA meeting is scheduled to take place on 6- 8 October 2009 in Sofia, Bulgaria. Topics will include water management and the use of external experts in audit projects. In connection with this meeting, the EUROSAI WGEA secretariat will arrange a one-day course on auditing biodiversity issues. This course is based on the biodiversity training module developed by INTOSAI WGEA.

*For further information about the EUROSAI Working Group's work plan for 2008-2011, the report from its 6th meeting, and its Newsletters, please visit the Working*

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## Group's website

([www.riksrevisjonen.no/en/InternationalActivities/Euroesai/wgea/](http://www.riksrevisjonen.no/en/InternationalActivities/Euroesai/wgea/)) or contact the EUROSAI WGEA secretariat at [EUROSAI-WGEA@riksrevisjonen.no](mailto:EUROSAI-WGEA@riksrevisjonen.no) or at Tel:+ 47 22 24 10 00.

## **POLAND: Supreme Chamber of Control hosts meeting to initiate EUROSAI climate change audit**

On 15-16 January, 2009, the Supreme Chamber of Control of the Republic of Poland hosted the first meeting of representatives of the Supreme Audit Institutions of Cyprus, Denmark, Estonia, Israel, the former Yugoslav Republic of Macedonia, Poland, and Russia, as participants in the joint audit of the activities pursued to mitigate the effects of climate change.

At the meeting, the Common Position on Cooperation for the Coordinated Parallel EUROSAI Audit of Climate Change and Framework Audit Programme was signed. The Supreme Audit Institutions of Switzerland and Ukraine, whose representatives did not attend the meeting, accepted the above documents through official letters of confirmation. All participating SAIs have since initiated audit proceedings.

Performed in parallel by the co-operating SAIs, the audit is planned to be concluded in November 2009.

The second (mid-term) meeting of the participants in the joint audit is scheduled to take place on 27-29 May, 2009, in Warsaw.

For further information, contact Ms Alicja Gruszecka, Audit Coordinator at [algru@nik.gov.pl](mailto:algru@nik.gov.pl)

## **RWANDA: OAG reports on early efforts to incorporate environmental issues in its work**

The Office of the Auditor General would like to report on its early efforts to consider environmental issues in its audit work. The OAG, which has existed for eight years, notes that it is currently still perfecting its methods to carry out financial audits, but has also engaged in several Value for Money audits. One of the departments it audits is the Rwanda Environmental Management Authority. The OAG notes further that it is developing its knowledge of, and capacity to perform, environmental audits, and in particular appreciates its recent participation in several WGEA-sponsored workshops.

For further information, contact Obadiah Birado, Deputy Auditor General, at [obiraro@yahoo.co.uk](mailto:obiraro@yahoo.co.uk)

## **SOUTH AFRICA: SAI and AFROSAI-E secretariat make progress on WGEA 2010 goals**

The SAI of South Africa has made good progress on the WGEA project on fisheries in its capacity as leading author. The first draft of the concept document was sent for comment in December 2008 to the team consisting of Canada, Norway, the Netherlands, New Zealand, Botswana, and the Bahamas. The SAI of South Africa also facilitated a session on the fisheries document at the 12th WGEA meeting in Qatar during January 2009. Participants discussed the document and provided valuable comments that contributed to improving the document. The final concept document will be presented during the WGEA Steering Committee meeting in August 2009.

The AFROSAI-E secretariat was represented by Louis Heunis in a workshop during March/April 2009, which was attended by representatives from a number of African SAIs. The purpose of the workshop was to develop a regularity audit course. During the workshop, several practical working papers on environmental auditing were developed that dove-tail with the rest of the regularity audit course.

For further information, contact Annerie Pretorius at [Annerie@aqsa.co.za](mailto:Annerie@aqsa.co.za)

## **TONGA: Audit office expected to initiate its first environmental performance audit in the coming year**

To date, the Tonga audit office's environmental work has been limited to financial and compliance auditing. However, this may soon change. A new division for Performance Auditing was formally established by the Public Audit Act of 2007, which gave the Auditor General a mandate to perform performance audits in addition to traditional financial and compliance audits. Subsequently, the audit office took part in a survey on proposed cooperative environmental performance audits conducted by the PASAI Pacific Regional Audit Initiative.

Even though our SAI has yet to perform its first environmental audit, we have taken the initiative to get started by participating in the 5th meeting of the ACAG/PASAI Regional Working Group on Environmental Auditing, held in Melbourne Australia in April 2008. Two office staff, including our Auditor General, also participated in the 12th WGEA meeting held in Doha, Qatar, in January 2009. In priority order, our office has identified water issues, waste management, and sanitation as our preferred environmental auditing topics. We are looking forward to performing our first environmental audit, which is expected to be carried out in the next financial year (July 2009-June 2010).

For further information, contact Dr Pohiva Tu'ionetoa at [ptuionetoa@audit.gov.to](mailto:ptuionetoa@audit.gov.to) or Utuone Vena at [uvena@audit.gov.to](mailto:uvena@audit.gov.to) or Tel: (676) 24 288 or (676) 21 600

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## **UKRAINE: Accounting Chamber focuses on protecting the Black Sea against pollution**

As an essential component of the European community's economic and geopolitical structure, the Black Sea is a matter of special focus for the Accounting Chamber of Ukraine. In recent decades, the Sea has been heavily affected by human activity and is at high risk. It therefore requires concrete actions—individually and collectively, and at the national and regional levels—in order to ensure the rehabilitation and protection of its ecosystem and the sustainability of its resources.

Recognizing these impacts and risks, and in the spirit of collaboration articulated in their Joint Action Plan, the SAIs of Ukraine and Bulgaria in 2008 initiated a parallel audit on the implementation of the Bucharest Convention on the Protection of the Black Sea against Pollution. Six basin-sharing contracting parties from Bulgaria, Georgia, Romania, the Russian Federation, Turkey and Ukraine signed the Convention in 1992.

Following the audit findings laid down in its national audit report, the SAI of Ukraine drew conclusions about a comprehensive legislative framework established at the national level—in particular, focusing on the National Program on protection and rehabilitation of the marine environment of the Black Sea and the Sea of Azov. The Ukrainian auditors reported that the National Program was not being implemented according to the plan, that the system for environment monitoring was inefficient, and that an increasing anthropogenic load was causing a gradual deterioration of the marine environment.

The Accounting Chamber noted that one of the greatest threats to the Black Sea ecosystem comes from nutrients, which enter the Black Sea from land-based sources (particularly through rivers). The Danube River alone accounts for well over half of the nutrient input to the Black Sea. Numerous oil spills within the vicinity of the Black Sea and the Sea of Azov have also had dramatic consequences both for populations and the environment.

Citing its findings of inadequate monitoring and control over the Black Sea environment, and of insufficient cooperation between the basin countries, the Accounting Chamber proposed that a new cooperative audit on protection of the Black Sea against pollution be conducted in 2010-2011 by the SAIs the Black Sea region. Having received the support of the EUROSAI WGEA Steering Committee in this endeavour at its March 2009 meeting, the Accounting Chamber will hold consultations with prospective participating SAIs and present a proposal at the next EUROSAI WGEA meeting in October 2009 in Bulgaria.

*For additional information, contact the Accounting Chamber of Ukraine at E-mail: [ird@ac-rada.gov.ua](mailto:ird@ac-rada.gov.ua) or Tel: +38 044 2060755*



## **UNITED KINGDOM: A wide array of NAO environmental audits completed, underway, and planned**

The NAO has recently completed work on a wide range of environmental and sustainability topics: Addressing the environmental impacts of government procurement (April 09); The European Union Emissions Trading Scheme (April 09); The Health of Livestock and Honeybees in England (Mar 09); the Warm Front Scheme to support the implementation of energy savings measures in the homes of the fuel poor (Feb 09); Natural England's Role in Improving Sites of Special Scientific Interest (Nov 08).

We are currently working on Climate Change Adaptation and during this work have been very pleased to host a visit from our USGAO colleagues; and a study on agri-environment schemes. The team working on agri-environment schemes would be very interested to hear from organisations or individuals who have undertaken studies in similar areas. Their study will focus on the Organic Entry Level Scheme (OELS) operated by the Department for Environment, Food and Rural Affairs, an agri-environment scheme targeted at securing environmental benefits within the organic farming sector. The study will examine the design, delivery and regulation of OELS and the environmental benefits attributed to the scheme. For more information, please contact David Raraty ([david.raraty@nao.gsi.gov.uk](mailto:david.raraty@nao.gsi.gov.uk)), Lauren Tucker ([lauren.tucker@nao.gsi.gov.uk](mailto:lauren.tucker@nao.gsi.gov.uk)), or Jennifer Brown ([jennifere.brown@nao.gsi.gov.uk](mailto:jennifere.brown@nao.gsi.gov.uk)).

Our other work, currently in the planning stage, is addressing The Environment Agency's work to tackle diffuse water pollution; Support for the adoption of renewable energy generation technologies; and Construction and Refurbishment of the Government Estate.

*In addition to those listed above, contact Jill Goldsmith at [Jill.Goldsmith@nao.gsi.gov.uk](mailto:Jill.Goldsmith@nao.gsi.gov.uk) for additional information.*



## **UNITED STATES: SAI studies climate change adaptation efforts with assistance from the UK's National Audit Office**

The U.S. Government Accountability Office (GAO) is studying climate change adaptation at the request of a congressional committee. Adaptation can be defined as adjustments to natural or human systems in response to actual or expected changes in the climate. The results of this study will be compiled into a report to help the Congress understand the actions being taken to adapt to climate change; the challenges faced by those engaged in such activities (or contemplating such activities); and the actions the Congress and federal agencies could take to help address such challenges. The report will also figure prominently in GAO's contribution to the WGEA multi-lateral climate change audit. As part of its study,

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GAO is reviewing several examples of innovative actions taken by certain state and local governments in the United States.

The audit team is also studying the United Kingdom's experiences with adaptation efforts because available studies identify the UK, and the City of London in particular, as among the world's leaders in developing adaptation strategies. To assist GAO in its description of the UK's adaptation initiatives, the UK National Audit Office (NAO) helped organize a visit to London by GAO staff, arranging meetings with national and local government officials. The knowledge of NAO staff, and

their relationships with government officials at both the national and municipal levels, enabled GAO staff to plan their trip more quickly and ensured that they spoke with the most knowledgeable officials. In addition, NAO staff attended some of the meetings to supplement their own ongoing work on adaptation.

GAO expects to produce its report on climate change adaptation in late 2009.

*For further information, contact Joe Thompson at [thompsonj@gao.gov](mailto:thompsonj@gao.gov)*