



Message from the Chair of WGEA

Dear Colleagues,

The year 2012 has the potential to serve as a remarkable milestone on our way toward sustainable development. In June, world leaders will convene in Rio de Janeiro for the UN Conference on Sustainable Development (Rio+20 Conference) to review the progress in the field and renew political commitment.

In the Zero draft of the Rio+20 outcome document, the world leaders recognized the need to reinforce sustainable development globally through collective effort. Progress, toward sustainability, however, has been moderate at best, so a good push from Rio could "snowball" into more sustainable decision making, regionally and globally.

SAIs worldwide have an important role to ensure that governments practice what they preach. Just prior to the Rio+20 Conference, on 17-20 June 2012, the World Congress on Justice, Governance and Law for Environmental Sustainability will convene Auditors-General, Chief Justices, Attorneys-General, and Chief Prosecutors to discuss their roles in putting into place the mechanisms needed to promote environmental sustainability. INTOSAI WGEA has partnered with UNEP in preparing for the World Congress. I suggest you follow the outcomes of both Rio+20 and the World Congress, and participate if possible.

In recent decades more and more people have become concerned about the severity of environmental problems and failure to act sustainably on this planet. I call your attention to one voluntary action that started here in Estonia in 2008, and has now grown into a worldwide network of environmentally concerned people who have opted to clean as much waste as they can in one day.

On 3 May 2008, more than 50,000 volunteers picked up over 10,000 tonnes of waste from Estonian roadsides, forests, and riversides. The effort changed not only the landscape, but attitudes as well. This success inspired others to follow, with over 80 countries now involved. Clean-up actions are taking place worldwide under the slogan, "Let's do it!"

Consider supporting this kind of voluntary activity in your country, both to help the environment and to raise public consciousness on the merits of acting sustainably. And please feel free to visit <http://www.letsdoitworld.org/>.

Mihkel Oviir
Auditor General of Estonia

Feature Story

WGEA Welcomes Newcomers to Environmental Auditing With Special "Training Day"

Prior to the 14th WGEA assembly meeting, the Secretariat decided to organise, in close cooperation with the SAIs of Finland, USA and several other members of the WGEA Steering Committee, a one-day training seminar called "Environmental Auditing for Beginners." The training day was geared toward auditors with little experience in auditing environment-related matters. But the initiative spurred wider interest... (*Read more on the following page...*)

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South Africa Hosts Key United Nations Climate Change Conference

The Republic of South Africa hosted the 17th Congress of the Parties on Climate Change in the city of Durban, 28 November – 9 December 2011. The meeting was attended by Heads of State, government leaders and political decision-makers, all getting together to confirm or endorse the discussions of chief negotiators from various countries. (*Read more starting on page 4...*)

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WGEA Welcomes Newcomers to Environmental Auditing With Special “Training Day”

By the Secretariat of WGEA

Prior to the 14th WGEA assembly meeting, we decided to organise, in close cooperation with the SAIs of Finland, USA and several other members of the WGEA Steering Committee, a one-day training seminar called “Environmental Auditing for Beginners.” The training day was geared toward auditors with little experience in auditing environment-related matters, but we are happy to report that the initiative spurred wider interest among the participants of the assembly meeting. Altogether, an impressive total of 50 of them from 26 SAIs convened on November 6, making the event lively and worthwhile.

Inspiring lectures and active work in groups

In the lecture part of the day, a general introduction to the concept and trends of public sector environmental auditing along with the work and products of INTOSAI WGEA were first presented by *Mr Tõnis Saar, Secretary General of the WGEA Secretariat*. He underlined the importance of pondering over the concept and definition of environmental auditing as well as the kind of mandate SAIs needed to effectively conduct environmental audits.

Mr Steven Elstein from the U.S. Government Accountability Office put the question of how different environmental audits really were from other types of performance audits before the participants. He took the audience through the building blocks and key processes of performance audits and supplemented these with examples of specific characteristics of environmental topics and environmental audit. He concluded that while good basic knowledge and skills of performance audit lay good foundations for conducting environmental audits, awareness of the specific nature of environmental problems and, consequently, environmental auditing were very helpful for managing the complexities and making environmental audits effective.

Dr Vivi Niemenmaa from the National Audit Office of Finland introduced the concept of sustainable development, its origins and main pillars, listing both the benefits and downsides of its application. She used different practical cases – e.g. biofuel for reducing GHGs, public transportation vs. private car traffic– to illustrate the theoretical perplexities. Participants were encouraged to think and discuss about means for achieving integration of the sustainable development dimension into environmental auditing practice such as cooperation of different audit units, training and education, external experts, etc.

The lecture part was followed by a practical exercise in groups whereby *Ms Tuuli Rasso from the WGEA*



Dr. Vivi Niemenmaa, SAI Finland

Secretariat presented a case of an imaginary fast growing country, “Dreamland,” faced with several environmental, economic and social challenges. Work ensued in thematic groups (e.g. water, waste, biodiversity) which had been assigned tasks of identifying environmental problems, risks, a potential audit focus, objectives and methodology from the perspective of a respective topic assigned for them. Presentations from groups demonstrated the diversity of possibilities for setting the audit focus.

Expert Panel Discussion

For the last session of the training day, we had invited several representatives from the WGEA’s Steering Committee member-SAIs to take part in a “panel of experts” discussion. Dr Vivi Niemenmaa (Finland), Ms Nameeta Prasad (India), Mr Helge Strand Østtveiten (Norway), Ms Jill Goldsmith (UK) and Mr Steven Elstein (USA) reflected upon their experiences in answering the following three questions:

What are the major environmental audit challenges in comparison with other types of auditing?

Panelists were unanimous in their belief that environmental auditing shared common traits with other audit types, but pointed to a number of aspects as being particularly characteristic to the field:

- A lack of environmental data, it being often dispersed and not holistically attainable as a challenge at the local, regional and international level;
- The relative newness of environmental problems and environmental policy issues;
- Sustainability being one core dimension, but difficult to address;

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- Establishing a material link of environmental issues to state finances is a challenge;
- Cost-benefit analysis of long term benefits of environmental engagements is crucial but difficult;
- The international and interdisciplinary nature of environmental issues;
- The challenge in finding audit criteria, and particularly in persuading governments to adopt international criteria; and
- The increasing focus of many audits on future as opposed to retrospective issues.



Training Day Panelists, from left to right, included, Dr Vivi Niemenmaa (Finland), Ms Nameeta Prasad (India), Mr Helge Strand Østveiten (Norway), Ms Jill Goldsmith (UK), and Mr Steven Elstein (USA)

What are the future challenges of environmental auditing?

In mapping the future challenges, panelists were in many respects thinking in the same direction. They pointed out globalisation of environmental problems as an increasing trend with the impacts of climate change becoming ever more apparent and the future challenge for environmental auditors therefore addressing complex issues such as sustainable development and climate change.

Other important observed challenges included:

- Expanding the pool of environmental auditors and providing them proper training;
- Planning audits, particularly in choosing topics and focuses amidst the vast array of options;
- Raising awareness about the environmental auditing practice among the public and politicians; and
- Maintaining integrity and professionalism in a highly politicized atmosphere.

Tips for the first environmental audit

Based on their extensive audit experience, the panelists brought forward key elements for helping first audits of

environmental issues to succeed:

Audit topic

Spend enough time on planning the audit and get as much information as possible about the topic. Choose a clear problem that is also recognised by others as such. Do not think that you have to be the “world champion” in your first environmental audit. Rather, start with familiar things or things that are important for your country (e.g. fisheries for Norway). Scope is important—make sure it is manageable and not overly broad.

Once you have chosen the topic, find out what other SAIs have done by consulting the WGEA website.

Questions and Criteria

Design good, clear and researchable questions and objectives, even if it takes more time. The single greatest cause of audit failure is poor audit questions. Get your management and all other important parties to agree to the questions you choose.

Also develop good audit criteria against which to measure the government’s performance. A successful audit depends heavily on clear and defensible criteria.

Field work and recommendations

After designing the audit, assign clear tasks and responsibilities to each member of the team; this will greatly facilitate the whole process.

Establish what recommendations you are going to make and identify those who would act on them.

Concluding thoughts

Considering the high level of participation in Training Day, we feel that it served its purpose in cutting to the core of the matter. Many of the attendees certainly could not have been deemed “beginners” in the field, and most were quite well equipped with an overall knowledge of the audit processes and tools, as seen from the discussions and group activities.

Perhaps this goes to show that embarking on an environmental audit is really not so much about “reinventing the wheel” as it is about understanding the various specific facets of environmental problems, and having the skill to apply suitable auditing tools when addressing them. These challenging questions remain of interest to audit offices, with scarce or abundant experience alike. And this is exactly why environmental auditing is so enthralling. INTOSAI WGEA will continue to provide an international forum to support these processes.



South Africa Hosts Key United Nations Climate Change Conference

By Wynand Wentzel, Office of the Auditor General, Republic of South Africa

The Republic of South Africa hosted the 17th Congress of the Parties on Climate Change (COP17) in Durban, South Africa 28 November – 9 December 2011. The main objectives of COP 17 were to deliver a legally binding agreement on climate change commitments, and to assess the progress and to identify further needs for implementation on the Cancun agreements (COP 16).

COP17 was a meeting of Heads of State, government leaders and political decision-makers, all getting together to confirm or endorse the discussions of chief negotiators from various countries. COP17 was essentially a governmental process under the auspices of the United Nations, with thousands sitting in on the negotiations.



COP17 attendees are addressed by Mr Jacob Zuma, President of the Republic of South Africa

UN Secretary General Ban Ki Moon summed it up at the start of the high-level segment negotiations: "Grave economic troubles in many countries were bound to impact on the chance of success in Durban. In a nutshell, many nations and their leaders continued to face overwhelming economic problems at home, compounded by abiding political differences. Add to that conflicting priorities and strategies for responding to climate change, and it was quite remarkable that there was any progress at all. We must pull back from the abyss. You are the people to pull us back from the edge. While Kyoto alone

will not solve today's climate problem, it is a foundation to build on, with important institutions. It provides the framework that markets sorely need."

The meeting had its roots in the 20-year old United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC is a multilateral environmental treaty produced by the United Nations Conference on Environment and Development (more commonly known as the Earth Summit), in Rio de Janeiro, Brazil, in 1992. The objective was to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous interference by man with the earth's climate system.

The Convention itself sets no mandatory limits on greenhouse gas emissions for individual countries and contains no enforcement mechanisms. In that sense, the Convention is considered legally non-binding. Instead, the Convention provided for updates, commonly called protocols, which would set mandatory emission limits. In this regard, the principal update has been the Kyoto Protocol, which is better known than the UNFCCC itself.

On the future of the Kyoto Protocol, the UN leaders said it was the closest thing the world has to a global binding agreement. However, as the end of the first commitment period of the Kyoto Protocol (31 December 2012) is approaching, none of the global binding agreements considered necessary to support a global response to human induced climate change are in place.

At the end of COP 17, delegates agreed to start work in 2012 on a new, legally binding treaty to cut greenhouse gases. A roadmap was approved leading to an accord that for the first time will bring all major emitters of greenhouse gases under a single legal roof. If approved as scheduled in 2015, the accord will be operational from 2020 and become the prime weapon in the fight against climate change.

The world forum also launched a "Green Climate Fund" to help channel up to USD 100 billion a year in aid to poor, vulnerable countries by 2020, an initiative born under the 2009 Copenhagen Summit.

New technology and inventions in addressing greenhouse gas emissions were also exhibited and presented by various national and international companies and governments as a contribution to addressing climate change.

INTOSAI WGEA AT COP 17

At INCOSAI XX, the INTOSAI Working Group on Environmental Auditing (WGEA) was encouraged to increase awareness of the importance of environmental auditing and natural resource accounting among key international and regional organisations with responsibilities for environmental and sustainability issues, and build working relationships with them.

From 5 to 9 December 2011, Wynand Wentzel and Eric Smith from the Auditor-General of South Africa hosted an exhibition booth on behalf of the WGEA. Information shared with delegates and participants included the background, history and interaction of the WGEA and Environmental Auditing.

Information booklets about the WGEA and its recent publications were distributed along with the Coordinated International Audit on Climate Change: Key Implications for Governments and their Auditors.



Wynand Wentzel, SAI South Africa, representing WGEA at the Working Group's Exhibition Booth

The UNEP-WGEA report, *Auditing the Implementation of Multilateral Environmental Agreements (MEAs): A Primer for Auditors* and the *Greenlines* newsletter also attracted interest from delegates and participants.

During the interaction with delegates and interested parties, most of the questions on the WGEA related to:

- What the INTOSAI WGEA is all about, and the mandates, roles, and responsibilities of SAIs;
- Which countries are represented on the WGEA and how government officials can engage with the auditors of their respective countries;
- The exhibition materials and audits conducted, as well as the work that SAIs do in auditing environmental programmes and issues; and
- The value that SAIs can add by auditing environmental issues and reporting thereon in a transparent manner.

As an exhibitor on behalf of the WGEA, and observer and attendant of various main and side events and open dialogues, the following observations were made:

- There was consensus among parties, representatives, governments and delegates that immediate action is needed to address the impacts of climate change;
- In most events, dialogues and meetings, it was emphasised that countries should take action immediately to address the impacts of climate change;
- It was also emphasised that developing and very poor countries should be assisted with the necessary resources to curb or mitigate the impacts of climate change; and
- Various countries, groups and attendants have already progressed in addressing climate change, and many are implementing measures to rectify or repair the environment.

Representing the WGEA at COP 17 provided an ideal platform to interact with international organisations, for the purpose of furthering cooperation and sharing information, experiences and reports. Most notably, delegates took note of the INTOSAI community and showed interest in the work of SAIs.

SAI Argentina hosts INTOSAI WGEA 14th assembly meeting and 11th Steering Committee meeting

The 14th meeting of INTOSAI WGEA was hosted by the SAI of Argentina in Buenos Aires from 6-10 November 2011. Approximately 140 participants from 55 SAIs and several international organisations attended the event. Prior to the meeting, a one-day training on environmental auditing for beginners was arranged in cooperation with the WGEA Steering Committee and Secretariat. Participating SAIs contributed to the meeting's success by sharing information about cooperative audits and other audit experiences. SAIs' audit work was also presented in the parallel sessions organised by the SAIs leading projects in the WGEA's work plan. A variety of international organisations—the World Bank, INTERPOL, Transparency International, the Association of Chartered Certified Accountants and OECD—contributed keynote presentations, and representatives of WGEA cooperation partners UNEP and INTOSAI Development Initiative introduced the status of joint undertakings.



Delegates convened for the 14th Meeting of the WGEA in Buenos Aires, November 2011

A day after the WG14 meeting, the WGEA Steering Committee convened to review the progress of work plan projects, a task which was successfully completed. Another major agenda item was the transition of the Chairmanship of the WGEA Secretariat after the completion of the current work period 2011-2013. Reflecting the consensus expressed by Steering Committee members, the current INTOSAI WGEA Chair proposes to transition the WGEA Secretariat to the SAI of Indonesia. This proposal has been submitted for approval to the INTOSAI Governing Board. The formal transition to the new WGEA Chair will take place during the 2013 INCOSAI.

Other recent news and events

- We are happy to announce that INTOSAI WGEA has gained two new members: The Royal Audit Office of Bhutan and the Kenya National Audit Office have joined, making the WGEA a 72-SAI community.
- The first AFROSAI WGEA meeting took place in Arusha, Tanzania on 3-7 October 2011. One of the key accomplishments was the formation of an 8-country Steering Committee. At the fringes of the annual meeting, the project team of the IDI-WGEA transregional forestry programme also gathered.
- The 9th annual meeting of EUROSAI WGEA was held in Stockholm, Sweden 11-13 October 2011. Key topics included transportation-related environmental issues and auditing the “3E-s.” Additionally, a one-day seminar on audit evidence and audit criteria based on ISSAIs was organised by the EUROSAI WGEA Secretariat prior to the meeting.
- In close cooperation with the General Secretariat of INTOSAI, INTOSAI WGEA submitted an official contribution paper to the compilation documents for the United Nations Conference of Sustainable Development (Rio+20). The contribution has been published on the Rio+20 official webpage: <http://www.uncsd2012.org/rio20/index.php?page=view&type=510&nr=228&menu=20>
- INTOSAI WGEA was represented at the 17th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP17) held in Durban, South Africa from 28 November to 9 December 2011, with the help of our colleagues from the Office of the Auditor General of South Africa (See related “Feature Extra”).
- The SAI of Norway has developed classroom training materials on auditing climate change, based on the INTOSAI WGEA guide, Auditing the Government Response to Climate Change: Guidance for Supreme Audit Institutions (2010). The training materials are now available on the WGEA website (“Focus on Climate Change” section) and have been sent to all the RWGEAs.
- Within the framework of the Global Environmental Auditing Training Facility Project, the WGEA Secretariat and sub-committee member representatives from SAI Norway and SAI Finland met in December in Tallinn to discuss and develop the first draft of the WGEA environmental auditing training pilot programme to be delivered in Jaipur, India in 2013. The

co-leaders of the project, SAI of India (Ms Nameeta Prasad) and the Secretariat of the WGEA also had an active and fruitful cooperation in outlining the programme and its strategic focus with the SAI of USA (Mr Steven Elstein), which contributed by advising and sharing its vast experience in environmental audit training.

- The 7th Survey on Environmental Auditing was sent to all INTOSAI member SAIs in February 2012. The results of the Survey will be an important input to the 2014-2016 WGEA work plan. Please contact Ms Kaire Kesküla (+372 6400115; kaire.keskula@riigikontroll.ee) if there are any questions or concerns.
- The 7th meeting of the ACAG/PASAI WGEA, hosted by the New South Wales Audit Office, was held from 17-19 April 2012 in Sydney, Australia. Updates on the activities of the ACAG/PASAI and INTOSAI WGEA were provided. Discussions about climate change adaptation, and strategies for auditing this subject, captured a lot of attention amongst agenda items.

Upcoming Events

- EUROSAI WGEA Secretariat will organise a seminar on sustainable forest and fisheries management in Oslo 15-16 May 2012. Participants will have a chance to exchange their audit experiences and knowledge, hear related keynote addresses by external experts, and get an overview of relevant INTOSAI WGEA documents and ongoing topical activities of the Working Group.
- INTOSAI Development Initiative and INTOSAI WGEA will organise a wrap-up meeting for the Transregional Programme on Performance Audit of Environmental Issues in Forestry in Võru, Estonia, 4-15 June 2012. Project participants will design forest audit case studies and a joint compendium of audit reports, and will discuss SAI action plans for further related audit work.

Project results will also be reflected upon in the light of the INTOSAI WGEA forest audit guide utilized throughout the programme.

- The 12th meeting of the Steering Committee of INTOSAI WGEA will take place in Jaipur, India 3-6 October 2012. The Steering Committee will then review and approve the progress and drafts of the 2011-2013 work plan projects.
- The 10th annual EUROSAI WGEA meeting will be hosted by the Court of Audit of the Republic of Slovenia in Ljubljana 23-25 October 2012. The meeting will focus on the topics of sustainability as well as application and audit of data sources. (See *Norway's related News Brief*)
- INTOSAI WGEA will be represented at the United Nations Rio+20 conference in Rio de Janeiro, scheduled for 20-22 June 2012. The WGEA Secretariat has attended various preparatory meetings leading up to the event, and will organize a side-event, "Environmental Auditing for Better Environmental Governance" on 21 June 2012, 9:00 – 10:30 in the Rio+20 venue (T-9) to introduce the Rio+20 paper compiled by the SAIs of Brazil and Canada. Summary and full versions of the paper will soon be available on the WGEA website under "WGEA Publications" in the Special Reports section.
- The United Nations Environment Programme has invited INTOSAI WGEA to contribute to the World Congress on Justice, Governance and Law for Environmental Sustainability, an event to be held near Rio de Janeiro prior to UNCSD, 17-20 June 2012. The Congress will bring together important stakeholders, such as Auditors General, Attorneys General, and Public Prosecutors. The Congress is expected to provide input to the Rio+20 Conference with a Statement of Principles on Justice, Governance and Law.



AUSTRALIA: Audit Office tables greenhouse gas emissions audit; completes guide to improve public sector environmental management

The Australian National Audit Office (ANAO) announces the completion of a major audit on the nation's greenhouse gas (GHG) emissions, and the publication of a Guide to help promote responsible public sector environmental management.

In February 2012, ANAO tabled an audit on the scheme designed to measure and report on a significant component of Australia's GHG emissions. The scheme provides the basis for much of Australia's reporting obligations under the Framework Convention on Climate Change. It will also provide the basis of the tax liability for relevant corporations after July 2012. The audit's objective was to assess the effectiveness of the implementation and administration of the scheme by the Australian Government Department of Climate Change and Energy Efficiency (DCCEE).

The audit concluded that the department had established a workable greenhouse gas and energy reporting scheme that provides a more accurate measurement of GHG emissions and energy use within Australia. DCCEE has established a positive relationship with the majority of registered corporations, and over 50 percent of corporations have indicated that tangible benefits have been obtained from measuring their GHGs and energy use. Notwithstanding these positive findings, key aspects of DCCEE's administration required strengthening to improve the scheme's operation. These include: enhancing the integrity of reported GHG emission and energy use data; better managing compliance with the regulatory requirements; and streamlining reporting obligations as intended.

The ANAO made three recommendations designed to: better target departmental compliance efforts; improve data sharing with Australian Government and authorised state or territory agencies; and advance efforts to further streamline GHG emission and energy use reporting requirements.

ANAO's public sector environmental management guide, published in April 2012, was developed within the context of the Australian public sector's environmental management framework, which includes the legislative, regulatory and policy requirements that currently apply to public sector entities. The Guide aims to assist Australian Government public sector entities to:

- Improve environmental management practices and reduce the environmental impacts of their operations;

- Foster greater efficiencies and operational cost savings; and
- Meet legislative, regulatory and policy requirements.

Part 1 of the Guide provides executives with a set of fundamental principles to assist them in establishing and maintaining an integrated strategy for environmental management within their organisations. Part 2 focuses on six key operational areas: energy; Information and Communications Technology (ICT); waste; water; travel; and property management. Practical implementation advice, case studies, and checklists have been included to assist environmental managers in meeting monitoring and reporting requirements, and to introduce them to improved practices.

For further information, contact Christina Bagot at Christina.Bagot@anao.gov.au. Audit reports and Better Practice Guides are available from the ANAO's website – www.anao.gov.au.



BOTSWANA: SAI reports on management of protected areas by wildlife and parks department

In August 2011, the Office of the Auditor General (OAG) completed an audit on the management of Protected Areas by the Department of Wildlife and National Parks (DWNP). The audit's overall objective was to assess DWNP's effectiveness in managing protected areas. To do this, OAG sought to determine the extent to which Regulations and Management Plans were implemented, and to assess the effectiveness of stakeholders' input toward the achievement of pre-determined goals.

Among the audit's key findings:

- *Review of Management Plans*--The DWNP had not reviewed the Management Plans for the Chobe National Park (CNP), Kgalagadi Transfrontier Park (KFP), nor the Moremi Game Reserve (MGR) within the statutorily-prescribed 5-year period. This meant that the socio-economic challenges that were supposed to be integrated therein, in order to manage the parks and reserve sustainably, were not addressed.
- *Elephant Population Explosion and Environmental Degradation*--The Department had not implemented some of the management interventions that were meant to conserve the environment and the diversity of animal species. As a result, a resurgent upswing in elephant population has led to crop damage, damage to farm fences and water supplies, and changes in woodland composition and structure.

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- **Human-Wildlife Conflict**--Although the DWNP had implemented some of its proactive human-wildlife interventions by fencing and providing artificial water points, the number of livestock killed by different animal species recorded for the year 2009 remained catastrophically high for a region so reliant on arable farming and livestock rearing. As a result, human-wildlife conflicts has remained high countrywide, resulting in high mortality rates of lions considered by farmers to be the cause of many livestock deaths. Additionally, elephants in the Moremi Game Reserve and Chobe National Park threatened residents' security and economic well being.
- **Research and Monitoring**--The Management Oriented Monitoring System(MOMS), a system vital to supporting the Department's conservation objectives in protected areas, was found to be inadequate. In particular, it did not include conclusive scientific information on vegetation changes caused by elephants nor on the impact of artificial water points, nor had soil baseline indicators been conclusively determined at MGR and CNP. As a result, adaptive management in the protected areas had not materialised.

The audit report recommended (1) a review of the Protected Areas' Management Plans within the predetermined 5-year period to ensure that they remain relevant to prevailing ecological, socio-economic and the conservation challenges within and around the protected areas; (2) implementation of the Elephant Management Plan (with modifications where necessary) to keep elephant populations at acceptable levels and minimise their impact on the ecology; and (3) implementation of existing intervention strategies aimed at eliminating human-wildlife conflicts and, where necessary, development of new strategies that could effectively reduce the destruction caused by wild animals.

Noting that the report was an "eye opener," DWNP Management expressed its appreciation for it and said the Department would implement its recommendations in earnest.

For further information contact Ms. Botho Entaile at bentaile@gov.bw.



BULGARIA: SAI finds transboundary waste transport problems as part of coordinated EU audit

The SAI of Bulgaria examined the transboundary shipment of wastes for the period 01.01.2007 through 30.06.2010, as part of a coordinated audit initiated by the Contact Committee of the Heads of EU SAIs and European Court of Audit. The SAI participated in the audit in recognition of the issue's importance to the environment and human health, and to promote a more uniform application of the relevant EU waste shipment

regulations throughout the Community, and in particular Regulation 1013/2007.

A key overall finding was that while steps have been taken to supervise and control transboundary waste shipments, sufficient knowledge and expertise outside the structure of the Ministry of Environment and Water is lacking, and the quantity and quality of necessary information on shipments does not guarantee effective implementation of relevant regulations. Appropriate recommendations were made to auditees to improve the identified weaknesses.

The coordinated audit's overall objective was to improve the enforcement of the EU Waste Shipment Regulations (EWSR) by obtaining information on enforcement strategies and performance (in terms of results and the achievement of intended effects) among the member states that are party to the European Economic Area (EEA). Among the audit's key conclusions are the following:

- The legislative preconditions to carry out the Regulation's enforcement are in place.
- The Ministry of Environment and Water (MOEW), and the Regional Inspectorates of Environment and Water (RIEW), all have established structures with clearly defined functions that (1) govern transboundary waste shipments in accordance with the Regulation and (2) allow for the control of transboundary waste shipments through the country's territory. The responsible units within the other authorities that check waste shipments at the Community borders, and/or during the shipment within the Community, are defined in accordance with their powers.
- A key factor impeding effective enforcement of the Regulation and relevant legislation is a lack of sufficient knowledge and expertise outside the structure of the MOEW.
- Issuing of notifications is done in accordance with normative requirements. The lack of control over facilities regarding the quantity of wastes recovered has led to inappropriate management decisions concerning the import of waste into the Republic of Bulgaria.
- Instances in which coercive administrative measures have been taken regarding illegal waste shipments have revealed problems in the application of the Waste Management Law regulating these matters, or with the regulation itself.
- Key information concerning the quantity of waste identified, imported, exported, and transported through the country's territory is neither sufficient nor reliable, a problem which has led to ineffective and inefficient management decisions.
- The format and content of the registers kept is not regulated, nor is the process for submitting, entering, and updating the data. The quantity and quality of the information they contain is therefore not guaranteed.

GREENLINES

For further information, contact Tania Konstantinova at t.konstantinova@bulnao.government.bg.



CANADA: SAI tables reports on climate change, oil sands, enforcement, other environmental issues

The Commissioner of the Environment and Sustainable Development (CESD), within the Office of the Auditor General of Canada, provides objective reports to Parliament on how well the federal government is managing environmental and sustainable development issues, and provides members of Parliament with the information they need to hold the federal government to account. In the latter half of 2011, the Commissioner tabled two reports.

The CESD's October 2011 report covers two audits: Climate Change Plans under the Kyoto Protocol Implementation Act (Chapter 1); and Assessing Cumulative Environmental Effects of Oil Sands Projects (Chapter 2). The report is available on line at http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201110_e_35765.html

The CESD's December 2011 report covers three audits: Transportation of Dangerous Products (Chapter 1); Environmental Science (Chapter 2); and Enforcing the Canadian Environmental Protection Act, 1999 (Chapter 3). It also covers two studies: Managing Fisheries for Sustainability (Chapter 4); and Environmental Monitoring (Chapter 5). The report is available on line at http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201112_e_36027.html

One of the key themes of the Commissioner's December 2011 report was the enforcement of key federal laws and regulations intended to protect Canadians and the environment. The report presents the audit results (Chapters 1 and 3) of how the federal government is managing the enforcement of some federal environmental laws and regulations according to the Canadian Environmental Protection Act, 1999, the Transportation of Dangerous Goods Act, 1992, and the National Energy Board Act.

According to the two audits, Transportation of Dangerous Products (Chapter 1) and Enforcing the Canadian Environmental Protection Act, 1999 (Chapter 3), the Government of Canada has established legislative and regulatory frameworks to protect human health and the environment. Transport Canada, the National Energy Board, and Environment Canada have programs intended to identify those who violate the law and have the authority to make violators take corrective action.

As discussed in Chapter 1, the Transportation of Dangerous Goods Act, 1992 regulates the everyday shipment of goods considered to be dangerous if mishandled. It covers transport systems and substances regulated by Transport Canada, such as industrial acids and petroleum products. The National Energy Board Act governs the shipment of petroleum products through the roughly 71,000 kilometres of oil and gas pipelines that are regulated by the National Energy Board.

Weaknesses in the management practices of Transport Canada's transportation of dangerous goods program are long-standing. An internal audit conducted in 2006 identified a number of weaknesses in management practices that have yet to be addressed. These include the need for a consistent approach to planning and carrying out Transport Canada's enforcement activities.

The National Energy Board has developed a sound risk-based approach for monitoring the adherence of regulated companies to established regulations and standards. Of concern is that the Board has yet to review many of the emergency response procedures manuals submitted by regulated companies.

In Chapter 3, Enforcing the *Canadian Environmental Protection Act, 1999*, CESD examined the enforcement of the *Canadian Environmental Protection Act, 1999* (CEPA 1999), and 45 of its 53 regulations that govern a wide variety of substances and activities in the Canadian economy—from hazardous wastes to contaminated fuels, asbestos, and the disposal of waste at sea. CEPA 1999 is enforced by Environment Canada.

The audit found that Environment Canada's enforcement program is not well managed to adequately enforce compliance with CEPA 1999, largely due to an incomplete knowledge of the regulated community. CESD noted that some of the regulations are not enforced at all due to a lack of training for enforcement officers or inadequate laboratory tests.

In terms of the two audit chapters, the three organizations identified therein have not been diligent in verifying that regulated companies have taken action to correct identified instances of non-compliance.

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CHILE: SAI examines hazardous waste and working conditions in hospitals, clinics, and laboratories

During 2011, the Comptroller General of the Republic of Chile conducted a follow-up audit related to the control exercised by the health Regional Secretariats (SEREMI)

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regarding hazardous waste and working conditions in hospitals, clinics and laboratories.

The review, conducted in eleven of the fifteen regions across the country, found that most Health SEREMI formally established inspection procedures of such topics, but that they did not always solve observed problems with waste and working conditions. The audit report also observed that not all the Regional Secretariats conducted the required surveys of Sterilization and Pathology Units in the hospitals, clinics and laboratories of their regions.

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CHINA: CNAO expert helps other SAls in region launch cooperative audit on Mekong River Basin

At the request of the ASOSAI Secretariat, Mr. LIU Huibo, an expert from the National Audit Office of China (CNAO), participated as an instructor and subject matter expert in a workshop in Thailand from 12-16 March 2012 entitled, “Cooperative Environmental Audit on Water Issue Focusing on the Mekong River Basin Management.”

The Workshop was facilitated under a cooperative arrangement involving the Asian Organization of Supreme Audit Institutions (ASOSAI) and the German International Cooperation (GIZ). Twenty-eight trainees participated from the SAls of Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Thailand and Vietnam. The 5-day workshop was intended to help these SAls to improve their capacities to carry out environmental audits, especially those concerning water issues.

Mr. LIU, an experienced CNAO auditor, served as an instructor at the workshop, providing an overview of environmental auditing and then offering lectures on “Water and Water Management” and “Environmental Audits Concerning Water Issues.” He also analyzed and commented on water audits conducted by the SAls of Indonesia and Malaysia, with the purpose of inspiring new ideas from the trainees. Meanwhile, in his capacity as subject matter expert, Mr. LIU provided guidance to the audit teams from Thailand (project leader), Cambodia, Myanmar, Laos and Vietnam (all of whom will take part in the cooperative audit) on key issues, such as the selection of audit subjects and the preparation of the audit plan. In sharing CNAO’s experiences and best practices, Mr. LIU also made recommendations on how the SAls might approach their cooperative environmental audit on Mekong River Basin management.

Also as part of the programme, a field trip was arranged to the Tha Chin River Educational Centre and the Wat Don Wail School in Nakorn Pathom Province. The aim was to provide participants with a better understanding of the Mekong River and the Mekong River Commission, as

well as these institutions’ efforts to protect the river environment.

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COSTA RICA: SAI completes audits on wetlands preservation and biodiversity

Among the performance audits completed by the SAI of Costa Rica in recent months have been one on the “Fulfillment with the Ramsar Convention on Wetlands in Costa Rica,” and on the “Effectiveness of the Government in measuring and reporting on the state of biodiversity.”

The wetlands audit was conducted to verify the Government’s progress in meeting the commitments of protection and conservation, as set forth in The Ramsar Convention on Wetlands. Three Costa Rican Wetlands on the Ramsar List were assessed: Palo Verde, Caño Negro and Térraba Sierpe. The audit criteria considered indicators for vegetation cover, soil composition and water quality. Important findings addressed such key issues as the loss of vegetation cover in Caño Negro (87 ha from 1988 to 2005) and Térraba Sierpe (766 ha from 1984 to 2005), invasive aquatic vegetation in Palo Verde, and *Escherichia coli* contamination in some areas of the wetlands. Also, unpermitted land uses were identified which were in clear violation of current regulations—a situation due to insufficient protection in surrounding areas. In addition, weaknesses in Governmental management were found, specifically in monitoring and in the use of Geographic Information Systems. The report recommended that mechanisms be established to strengthen management and surveillance of national wetlands.

The biodiversity audit was intended to verify the effectiveness of Government efforts to institute mechanisms to measure and report on the state of biodiversity. It was found that applicable regulations were unclear in setting out how biodiversity is to be identified and monitored, and that the National Biodiversity Strategy has not been updated. Monitoring efforts have been made at several Protected Areas but only in isolation, showing weaknesses in frequency and diffusion of information. The audit also observed that there are no parameters to classify the state of relevant ecosystems and to associate measures of mitigation and restoration; nor a methodology to review and update lists of vulnerable species. In addition, there are no updated priorities for biodiversity research, nor is there a system to organize and present information about this resource. The report’s recommendations are oriented toward ensuring accountability on the state of biodiversity to ensure its conservation and sustainable use.

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CZECH REPUBLIC: SAI audits funding and property management associated with several national parks' administrations

In December 2011, the Supreme Audit Office of the Czech Republic (SAO) completed an audit of the management of funds and state property associated with several national parks' administrations. Audited bodies included the Ministry of the Environment of the Czech Republic, the Krkonoše Mountains National Park Administration, and the National Park and Protective Landscape Area of Šumava.

The audit covered the years 2009 and 2010, and where relevant the period immediately before that and the period up to the date of the audit.

The national parks' administrations are founded as "allowance organizations" by the Ministry of the Environment of the Czech Republic. (State ministries sometimes set up allowance organizations to pay for ministry activities that are non-profit in nature, and which may have complicated structure that requires an independent legal framework.) During the period under review, they were budgeted CZK 962 032 thousand, and in the same period sold timber worth of CZK 800 844 thousand. The amount of state finances fell dramatically between the years 2009 and 2010. The lack of funds was balanced by increased timber sales. This raised a question as to whether the national parks' administrations should be established as allowance organisations, whose purpose is not timber mining and timber sales.

The auditors pointed out that the areas where pest disinfestation is not allowed constitute a specific category, having no straight connection to the nature protected zones. For example, the first zone of National Park Šumava, which by law is considered strictly natural, includes areas where pest disinfestation is sometimes allowed, while the second zone includes areas where pest disinfestation is prohibited.

In 2009, an international agreement between the Czech Republic and the Republic of Austria was signed, identified an area along their common border where spontaneous development of ecosystems in the National Park Šumava is not possible. The width of this area in 2011 was extended to a minimum 500 metres from the state borderline. The purpose of this agreement was apparently to protect Austrian forest land against infestation by bark beetles. Hence, pest disinfestation that was formerly prohibited in the first zones of the national park is now allowed.

A key overall finding by SAO auditors was the absence of a conceptual document related to the development of national parks. That is why the development of audited national parks was managed in accordance with the opinions of current representatives of the Ministry of the Environment, and why the current approach toward managing forest ecosystems is significantly different from approaches practised in earlier years.

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ESTONIA: NAO and Russian Accounts Chamber audit management of Lake Peipus

Lake Peipus is the fourth largest lake in the European Union, and the largest of a transboundary nature. It belongs to both the Republic of Estonia and the Russian Federation, both of which are responsible for its conservation and management. About 58 percent of the lake's catchment area is situated in Russia, 34 percent in Estonia, and eight percent in Latvia. The overall ecological condition of Lake Peipus has, according to the European Union directive's methodology, been evaluated as bad to moderate. The main ecological problem of Lake Peipus is its eutrophication due to an increased load of nutrients, phosphorous, and nitrogen compounds, caused by human activities (agriculture, wastewater).

The ecological status of transboundary waters depends greatly on cooperation among neighbouring countries. Therefore, the National Audit Office of Estonia and the Russian Accounts Chamber decided to conduct a parallel audit of conservation activities in both countries. The parties to the parallel audit first formulated common audit questions and criteria, developed separate national audit reports, and then signed a memorandum with common audit findings.

NAO of Estonia established in its audit that of all man-made pollution in Lake Peipus, about 70 percent of the phosphorous load and 90 percent of the nitrogen load are coming from agricultural diffused pollution in the Estonian part of the basin. The remainder of the anthropogenic pollution comes from point sources, including settlements and industry.

To date, water management measures in Estonia have been focused on point source pollution, with the largest investments devoted to urban wastewater treatment plants. Insufficient attention has been paid to agricultural fertilizer use. More broadly, the control measures and activities that have been taken to reduce diffuse pollution have been ineffective. As a result, the water conservation and management activities taken to date will not ensure a good ecological status of Lake Peipus by 2015, missing the goal of the EU water conservation policy.

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As two-thirds of the Peipus catchment area belongs to the Russian Federation, improvement of the ecological status of Lake Peipus depends on good cooperation between two countries. To help ensure cooperation in the conservation and management of the Lake, the Estonian-Russian Transboundary Water Commission was established in 1997. The Commission has been successful in promoting information exchange and in organizing monitoring expeditions and scientific seminars.

However, the NAO of Estonia and the Accounts Chamber of Russia both concluded that there is still a need for the two countries to agree on common conservation goals, common ecological evaluation criteria, and common monitoring programs. It is also necessary to coordinate the main activities to reduce pollution loads and guarantee sufficient financial means.

For further information, contact Airi Andresson at Airi.Andresson@riigikontroll.ee. The full audit report (with a summary in English) and the memorandum of the parallel audit are available on the NAO's website at www.riigikontroll.ee.



EUROPEAN COURT OF AUDITORS: Audit finds that EU measures to reduce fishing overcapacity have not worked

For many years, fish catches and fish stocks of the EU have declined. Fishing at unsustainable levels is threatening both the long-term viability of fish stocks and the fishing sector itself.

Overcapacity of the fishing fleets is one of the main reasons for the decline in fish catches. The EU's Common Fisheries Policy (CFP) has for many years attempted to reduce overcapacity of the fleets through various methods, including vessel scrapping schemes financed by the European Fisheries Fund (EFF), and fleet capacity restrictions imposed on the Member States.

The European Court of Auditors' performance audit examined the design and implementation of EU measures to reduce fishing overcapacity. The main conclusion of the Court's audit is that these measures have not worked:

- The ability of vessels to catch fish, and the extent of fishing overcapacity, is not reliably measured;
- Fleet capacity restrictions imposed on Member States have little real impact;
- The role of fishing rights in aligning fleet capacities to fishing opportunities is not specified;
- Member States had not put in place effective measures to remove overcapacity, although this is their responsibility under the CFP;
- There were delays in implementation of the EFF by Member States;

- The design and implementation of Member States' actions to target EFF aid on fleet overcapacity was weak;
- Vessel modernisation projects funded by the EFF could increase the ability to catch fish;
- Member States' vessel scrapping schemes were not well targeted and "deadweight" was not avoided; and
- Reporting of actions by Member States to balance fishing capacity with fishing opportunities was incomplete.

To address these problems, the Court recommended a number of actions to the Commission to effectively reduce overcapacity of the fishing fleet. The Court also recommended that Member States design and implement measures to adapt their fleet to fishing opportunities.

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INDIA: Workshop held on "Institutional Framework for Sustainable Development" at SAI's new iCED Training Centre

SAI India has set up a training centre for environment audit and sustainable development in Jaipur called the International Centre for Environment Audit and Sustainable Development (iCED). It is located 250 kilometres from India's capital, Delhi. To start off the activities of iCED, and keeping in mind the approaching Rio+20 Summit, the centre held a two-day workshop, "Institutional Framework for Sustainable Development."

The participants included 25 audit managers from across India who are involved in planning and undertaking audits of environment and issues of sustainable development. The participants were addressed by eminent speakers from fields like academia, management of natural resources, environmental lawyers, environmental regulatory authorities etc.

The wide range of issues discussed included, among others, combating environmental degradation through sustainable mining; food security; meeting the challenges of climate change; India's achievements and failures in environmental policy and legislation; regulation and implementation of environmental laws in India; rights of forest dwellers vis-a-vis protection of forests; environmental sustainability and equitable sharing of natural resources; the role of the Central Pollution Control Board; sustainable development; issues of displacement and re-settlement; and corporate responsibilities for environmental protection.

The workshop was intended to disseminate information to audit managers across the country about the initiatives taken by the government in the field of sustainable development, which can then be used as inputs for audits

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across India on environment and sustainable development issues. A lot of valuable input was derived from the workshop especially with regard to:

- Environmental laws and regulations in the different areas like mining, agriculture, and protection of forests;
- Challenges and difficulties in implementing environment policies and laws in India;
- Challenges faced in regulation of environment activities;
- India's legislative and policy framework for sustainable development, and policy interventions still required in India;
- Major environment problems being faced in India and the government response to these;
- Challenges of auditing diverse areas such as mining and agriculture;
- The need to involve local solutions to challenges of sustainable development and the lead taken by the government in this area; and
- Initiatives taken by corporate in the field of sustainability and environment protection.

The inaugural address for the iCED workshop was provided by the C&AG of India. He emphasized the fact that sustainable development is recognized as an overarching goal for institutions at the national, regional and international levels. He noted that as public auditors, we can contribute toward improving the environmental governance system of our country with timely, relevant, and evidence-based reporting along with constructive suggestions.

iCED plans to hold many such workshops to provide inputs for audit managers in SAI India who will be undertaking audits of sustainable development.

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INDONESIA: Audit Board partners with SAI Malaysia to audit illegal, unreported, and unregulated fishing

The Audit Board of the Republic of Indonesia (BPK) and the Audit Department of Malaysia (JAN Malaysia) agreed during an April 9 – 10, 2012 meeting in Pangkor Island, Perak, Malaysia, to conduct a parallel audit on illegal, unreported, and unregulated (IUU) fishing and its environmental impacts. The agreement is one of the cooperative activities the SAIs are pursuing under a Memorandum of Understanding signed in Mexico in 2007.

The plan calls for separate audit teams from each SAI to submit a report to their respective parliaments/governments. Hence, each SAI will tailor its audit approach to meet its national needs and preferences. Information exchange and lessons learned will be the

most important aspect of this cooperative endeavor, with the aim of enhancing audit capacity building.

The audit's main objective will be to assess whether illegal, unreported, and unregulated fishing have been controlled efficiently and effectively, in accordance with each country's relevant laws and regulations and in consideration of its environmental impacts. During the meeting, the SAIs discussed audit criteria, methodology, technique and approach, and audit tools.

In practice, BPK and JAN will adopt a comprehensive approach to assess government efforts to control IUU fishing, including prevention, surveillance and law enforcement. The design is similar to the UN Food and Agriculture Organization's Monitoring, Controlling and Surveillance (MCS) framework, as applied internationally. Environmental aspects will be examined as well, especially the impacts of IUU fishing on the sustainability of fishery stocks. Critical issues also discussed at the meeting included risk identification; information availability; resources allocation; monitoring of vessel licenses and vessel monitoring system; as well as key performance indicators applied by government institutions.

The study will start in Semester 1, 2012. The two SAIs developed one parallel consolidated Audit Design Matrix (ADM), to be followed as a reference in formulating each SAI's respective Audit Planning Memorandum and ADM. The SAIs agreed that the audit scope will cover the period 2010 – 2012.

Both SAIs will share knowledge and lessons learned from the Audit during the ASOSAI WGEA meeting in September, 2012 in Penang, Malaysia. A key goal of the parallel audit is to exchange information and experiences on fisheries management and its environmental perspectives, particularly with regard to each country's regulations, policies, implementation, and monitoring practices. Their hope is that the experience will lead to improved auditing of the issue, and in a manner that will improve public accountability and provide benefits for their respective peoples.

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IRAQ: SAI investigates link between cancer cases and elevated levels of radon gas

The Board of Supreme Audit issued a report on the link between certain cancer cases in the AN-najaf Al-ashraf governorate and elevated levels of radon gas. Based on work conducted by a research team from Al-Kufa University, which was visited by the SAI's audit team, the causes of increased cancer cases in Al-ansar and Al-fathi localities (which were not identified by the previously constituted committees) were attributed in part to

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naturally underground-emitted radon gas, and there was a direct, proportional relationship between radon emission rates and health effects.

Other causes of elevated radon levels were determined to be:

- Higher proportions of uranium in the governorate associated with the now-closed Abu-Skheir uranium mine, and the location of the governorate in the country's uranium belt.
- A higher presence of uranium associated with adjacent oil wells and underground water in the governorate.
- Periodic seismic earth vibrations in some Iraqi governorates, including An-najaf, Wasit, Maysan, Basra, and Baghdad (Alnahrwan).

For further information, contact Dr. Alaa Hatim Kadum, Director General, Office of Technical Affairs and Studies at bsa@bsai.raq.net



KAZAKHSTAN: SAI working to ensure better implementation of new environmental laws, programmes

Consistent with Kazakhstan's transition toward more environmentally sound and sustainable development, the Accounts Committee for Control over Execution of the Republican Budget (the country's SAI) is developing its capacity for environmental auditing with a focus on the accountability for, and effectiveness of, funds spent to protect the environment. In doing so, the SAI has extensively studied best practices of other SAIs so that it may better fulfill its own role in protecting Kazakhstan's environment and ecology for future generations.

In recent years, government institutions have been given substantially greater environmental responsibilities. In particular, there has been an increase in the number of ratified multilateral environmental agreements (MEAs); the enactment of new environmental laws; the authorization of projects to promote biodiversity; the establishment of wildlife reserves; and the authorization of programmes to reduce atmospheric emissions so as to ensure commitments under the Kyoto Protocol and other international treaties and conventions.

Attention has been increasingly drawn, however, to the ineffectiveness of Ministry of Environment activities, and in particular to criticisms that these activities are often fragmented. In this regard, the SAI has cited the general lack of a systematic approach to many Ministry activities, as well as specific violations of a financial nature. It has made a number of specific recommendations calling, for example, on the Ministry to build clear linkages among its strategic directions, goals, and objectives, and to develop modern methods to monitor compliance with international environmental agreements.

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LESOTHO: SAI holds workshop for ministries, departments on the Auditor General's role

On 23 February 2012, the Office of the Auditor General (OAG) organized a workshop whereby all Directors in government ministries and Departments were sensitized to the role of the Office of the Auditor General. The idea was to strengthen working relationships through discussion and networking so as to improve knowledge about OAG, which will in turn assist OAG in fulfilling its goals and objectives. There were 120 participants from all 20 ministries and media houses.

It was in this workshop whereby the concept of Environmental Auditing, and audits already undertaken since 2004, were presented. The presentation raised very interesting discussions and eagerness to know more about environmental issues and audits. The issue of the upcoming RIO +20 conference was also discussed and the representatives from the Ministry of Foreign Affairs indicated that there would be a South African Development Community Ministers meeting, to be held in Maseru, where progress reports to be presented at the conference would be discussed.

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LITHUANIA: SAI identifies untapped potential to better protect aquatic resources from dangerous chemical contamination

In April 2012, the National Audit Office (NAO) of Lithuania completed a performance audit aimed at evaluating the efficiency of environmental protection systems designed to ensure that dangerous chemical substances associated with industrial wastewater do not get into the aquatic environment.

The main source of chemical pollution of surface water is industrial wastewater, which does not biodegrade when it gets into the aquatic environment. Some chemical substances have carcinogenic, mutagenic or cumulative effects, which may be harmful even in very small concentrations.

Protection of the aquatic environment from the effects of such small quantities is difficult and expensive. It is therefore necessary to take preventive measures to keep them from getting into the aquatic environment in the first place. In Lithuania, elements of a prevention system are already operating, but a comprehensive and effective system is still not yet in place.

One of the key elements of such a comprehensive system is the Programme for Reduction of Water Pollution by Dangerous Substances, approved in 2004. The NAO audit, however, identified a number of Programme weaknesses that limit its effectiveness. Of particular note, no assessment criteria were established for the implementation of Programme objectives, and the implementation of measures that could improve programme results is substantially overdue.

The Programme's implementation is the responsibility of the Ministry of Environment and its subsidiaries. However, the Ministry does not exploit all opportunities to ensure that the aquatic environment is protected from contamination by dangerous chemical substances.

The NAO's audit report included recommendations to develop more favourable conditions for the effective protection of the aquatic environment; to amend the Programme for Reduction of Water Pollution by Dangerous Substances; and to reexamine legislation governing this area. The Ministry of Environment has since drawn up a Plan of Measures to implement the audit's recommendations.

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MACEDONIA: State Audit Office reports on implementation of new public hygiene law

Consistent with European standards to promote a healthy environment, the Parliament of the Republic of Macedonia passed new legislation in 2010 on public hygiene. The law specifies the responsibilities of various institutions to maintain hygiene in public places and to implement other aspects of the law.

Under the law, maintaining hygiene in public spaces is primarily a local government responsibility. One of the law's novelties is a provision for municipal employees called "communal wardens" to carry out decisions made by municipal councils. In addition, the law imposes an obligation on all property owners to undertake measures to maintain public hygiene. It provides penalties for improper waste disposal, improper storage of farm machinery and tools on public lands, leaving uncollecting waste after public events, and other environmental and health violations.

The State Audit Office recently completed a performance audit on the central and local governments' implementation of the law, broadly addressing the question, "Does the Republic of Macedonia provide conditions for improving public hygiene and ensuring a healthy and clean environment?" The auditors observed that health and environmental responsibilities of public utilities are not integrated, with public hygiene under the

authority of the Ministry of Transport and Communications and waste management under the authority of the Ministry of Environment and Physical Planning. According to the SAI, this lack of integration has led to inefficiencies in the law's implementation, and in particular to uncoordinated activities among state bodies and municipal services.

To improve the public hygiene law's implementation, the SAI recommended:

- Assigning public utilities' health and environmental responsibilities to a single state body to improve coordination;
- Stipulating accountability measures for municipal bodies that do not comply with the law or enact required regulations;
- Clarifying the rights, duties, and authorities of communal wardens;
- Ensuring that municipalities have reliable funding for public hygiene, and that they adopt sound methods to determine the cost of public hygiene services; and
- Improving cooperation between local governments and the central government in finding ways to more efficiently operate public utility companies.

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MEXICO: SAI audits progress in meeting carbon emission goals

Mexico signed the Kyoto Protocol in 1997 and ratified its endorsement in 2000. As a Non-Annex I party to the UN Framework Convention on Climate Change, Mexico did not commit itself to achieve a quantified emission limitation of greenhouse gases (GHG).

Nevertheless, given the importance of the issue, the Mexican Government developed a so-called "Special Climate Change Program" (PECC 2009-2012). The program uses a cross-sectional approach in that it involves actions by 43 government bodies to accomplish 105 objectives and 294 specific goals.

In 2011, the SAI of Mexico audited the government's achievements during 2010. The audit revealed that Mexico succeeded in mitigating the equivalent of 24.0 million metric tons of carbon dioxide out of an expected 30.0 million tons. This represented achievement of 47.1% toward a planned program goal of mitigating 51.0 million tons by 2012. The main weaknesses identified were as follows: the lack of a methodology to assess the capacity of human systems to recover and overcome the impacts of climate change; the absence of annual programs; insufficient coordination mechanisms for the implementation of actions; and insufficient budgetary resources for their operations. To address these weaknesses, the SAI issued 23 recommendations to the responsible government entities.

This kind of performance audit was the first conducted by the SAI of Mexico in the subject matter, but it plans to continue these assessments in light of the national and international relevance of the issue, the commitments assumed by the Mexican government, and the negative effects on the nation's population if the issue is not addressed.

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MOROCCO: SAI provides training on biodiversity auditing to ARABOSAI SAls

In cooperation with ARABOSAI, from 5-9 December 2011, the SAI of Morocco provided training to ARABOSAI SAls in the country's capital city of Rabat on auditing biodiversity issues.

The 5-day session was intended to:

- Introduce biodiversity to participants, including basic concepts, its importance, and problems and methods related to biodiversity protection;
- Provide tools and methods used to perform audits in the field, based on international standards and INTOSAI guidelines; and
- Exchange experiences among participants from different Arab SAls.

During this session, course work was presented by experts from the SAI of Morocco in collaboration with the SAI of Iraq.

In addition, a visit to the protected area, "Sidi Boughaba," was organized to view certain aspects of biodiversity. There, Moroccan experts presented the country's experience in its efforts to preserve biodiversity.

During the session, SAI participants shared their own experiences in environmental auditing, with a focus on biodiversity issues. The participants concluded that the ARABOSAI SAls are expected to build their capacities in this field in order to fully play their role in environmental protection.

At the end of this meeting, the President of SAI of Morocco, Dr Ahmed EL MIDAOUI, and the ARABOSAI representative distributed certificates to the experts and participants.

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NETHERLANDS: Audit finds national energy savings falling short of goals

A recently published report of the Netherlands Court of Audit shows three important reasons why energy savings in this country consistently lag behind their objectives:

- Fewer and weaker policy instruments have been used than ex ante evaluations had found necessary;
- The policy conducted in the energy-intensive manufacturing sector in the period 2000-2007 increasingly became less compulsory and hence had few results; and
- Policy in the manufacturing sector has only partially matched companies' reasons for investing in energy savings.

Since 2008, a fourth cause has grown in importance: part of the energy savings achieved through the national energy saving policy is negated by the European CO₂ emissions trading system (ETS).

The Court studied energy savings in the period 1995-2008. The audit, which combined a broad-based analysis with in-depth studies of the manufacturing sector (the biggest energy consumer), included:

- A comparison of ex-ante evaluations with the measures that were really taken;
- A large-scale internet survey of the manufacturing sector, based on a well-known theory of behaviour (Theory of Planned Behaviour); and
- An analysis of the costs and benefits of the main measures taken in the manufacturing sector.

The Court recommended that the Government, amongst other things, formulate a coherent climate and energy policy, bearing in mind that a substantial and cost-effective reduction in CO₂ emissions can be achieved chiefly by means of energy savings. The Court also suggested concentrating national energy saving policy on the sectors that are not subject to the ETS and/or on long-term innovations, because otherwise it would not contribute to reducing CO₂ emissions.

In March 2012, the Court organised a seminar on energy savings, together with the Netherlands Bureau for Economic Policy Analysis. Policymakers, scientist and entrepreneurs had a vivid discussion on the causes behind the slow pace of energy savings in the Netherlands in recent years, and discussed possible ways to speed it up. It was considered to be closely linked to a reduction of CO₂ emissions but also having some rights on its own. Among the conclusions reached were that the buildings, manufacturing and transport sector presents considerable potential for energy savings. In this sector, alliances between enterprises, local authorities and citizens are needed and possible.

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Integrating conditions concerning the CO₂ footprint into tenders would stimulate enterprises to develop energy-efficient products and services. On the contrary, low energy prices for big energy users (linked to fiscal regulations) inhibit such green developments.

The report may be downloaded from the Court's website at <http://www.courtsofaudit.com/english>. For more information, please contact Mr Marcoen Roelofs at m.roelofs@rekenkamer.nl.



NEW ZEALAND: SAI reports on challenges in managing freshwater quality

In September 2011, the SAI of New Zealand completed a significant audit on how responsible local authorities were managing freshwater quality in four regions of New Zealand. The report attracted much interest.

Together, the four regions covered by the audit cover nearly one-third of the country's land area. The regions have different sizes, topography, landscapes, soils, and river gradients. The SAI chose the four regions based on water quality trends and pressures and looked at all aspects of how the authorities were managing freshwater quality.

To work out whether the responsible authorities were maintaining and enhancing freshwater, the audit looked at whether they:

- Understood well the state of, and trends in, freshwater quality in their regions;
- Were responding appropriately and effectively to any deterioration in water quality; and
- Were improving their plans and policies in good time.

The SAI engaged an expert scientific organisation for advice on monitoring networks and on the state of, and trends in, freshwater quality in each of the four regions.

The audit focused on what has proved most difficult for the authorities to manage, namely pollution of freshwater bodies from:

- Surface runoff of nutrients, chemical pollutants, and bacteria from rural and urban land areas to waterways;
- Farm animals in waterways; and
- Contaminants from livestock farming and septic tanks leaching through soil into groundwater.

The audit found that all four regions have areas of declining freshwater quality. All four authorities understood well the state of freshwater in their regions. However, the authorities in the two regions seeing the most intensification of land use (for example, where sheep farms have been converted to dairy farms) are not adequately managing the effects of land use for

agricultural production on freshwater quality. Both authorities are trying to tackle the challenges of discharges to water from land use and their cumulative effects, but there is much work to be done. The other two authorities are doing better but also have areas within their regions where freshwater quality is at risk.

The report noted that local authorities say they cannot manage freshwater quality alone, believing that strong collaboration and communication is needed among the central government, local authorities, and dairy sector representatives.

With regard to enforcing compliance, the audit found that elected representatives in all the local authorities were involved either in deciding whether the authority should prosecute, or whether to investigate a case after a decision to prosecute had been made. In New Zealand, there are strong and longstanding conventions against elected officials becoming involved in prosecution decisions. The audit recommended that all investigation and enforcement decisions on such matters be delegated to council staff.

The report attracted considerable attention. Responses have been generally favourable, with one notable exception—a farming lobby group—which questioned why the Auditor-General would look at this topic. The audit was challenging but worthwhile. The SAI's extensive consultation with an expert scientific organisation went a long way in helping the report to convey the complexities of freshwater science. The part of the report about elected representatives being involved in prosecution decisions attracted much attention and comment, and some authorities have been reconsidering their approaches as a result. Several are using a self-assessment tool, contained in the report, to assess their own practises against the audit criteria.

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NORWAY: SAI announces plans for cooperative audit of the Arctic Council; updates key EUROSAI WGEA activities

Norway's Office of the Auditor General and the Russian Accounts Chamber are planning a cooperative audit on the Arctic Council. The other member countries will thereafter be invited to participate.

The Arctic Council was established to promote cooperation, coordination and interaction among the Arctic States (Canada, Denmark/ Greenland, Finland, Iceland, Norway, Russia, Sweden and USA) in particular issues of sustainable development and environmental protection in the Arctic.

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The SAIs' initial goal is to determine relevant topics and develop a scope, methodology and time frame for a cooperative audit investigation among Arctic Council member states. The result of this "feasibility study" will be a proposal to other member states to conduct a cooperative audit investigation.

Relevant topics for further investigation during the feasibility study include how the member states (as a result of the increased marine shipping) have addressed and solved a number of key issues: required marine infrastructure; the need for communication with, and involvement of, local communities; and the impact on the environment and habitat in the Arctic. The feasibility study began in January 2012 and is expected to run through June 2012.

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Norway's OAG also provided a number of updates in its capacity of Chair of EUROSAI WGEA. Among them are that of an upcoming seminar on ecosystems and natural resources in May 2012, to be led by the EUROSAI WGEA Secretariat in Oslo, Norway, 15-16 May 2012. The emphasis will be on auditing sustainable fisheries and forest management.

The OAG also announces the 10th Annual EUROSAI WGEA meeting, to be held in Ljubljana, Slovenia, 23-25 October 2012. This year's meeting will focus on sustainable development and experiences related to data in environmental auditing. As in previous years, a 1-day training seminar will be organised the day prior to the meeting. This year, the training seminar will focus on the INTOSAI WGEA Guidance on Auditing Forests. The project leader of guidance, the SAI of Indonesia, has kindly offered to hold the seminar.

Finally, the OAG reports that EUROSAI WGEA's cooperative audit on climate change adaptation (involving the SAIs of Austria, Bulgaria, Cyprus, Malta, the Netherlands, Norway, Russian and Ukraine, and the European Court of Auditors [ECA]), is in its final stage. The audit is based on national audits and an ECA fact-finding study. The project aims to clarify (1) how adaptation policies are implemented among European countries, (2) how risk and vulnerability assessments are applied in decision-making and how strategies and plans are implemented to prepare for climate change impacts, and (3) how coordination of adaptation issues is ensured at the governmental level. Based on the national findings and the fact-finding study, challenges will be identified and common conclusions made. The partners will conclude the cooperative audit in late June, and a joint report will be published and presented at several EUROSAI and international environmental events by end of 2012.

Further information on EUROSAI WGEA activities may be found at its website: www.eurosaiwgea.org.



SLOVENIA: SAI completes forest management audit

Slovenia is one of Europe's most heavily forested countries, with more than half its territory covered by forests. Forests are considered to be one of the country's most valued natural resources, and so proper forest management is essential. In this regard, the Court of Audit of the Republic of Slovenia conducted an audit focused on efficiency of forest management with special emphasis on the management of state-owned forests. The audit revealed significant deficiencies, among which the most important are:

- There are no strategy or action plans in place containing clear objectives consistent with the "SMART" principle, nor are there specific activities identified on how to reach set objectives. Monitoring progress toward achieving objectives has therefore not been possible;
- There is no accurate and up-to-date database on types of forests or on investments made regarding afforestation, nor are there any reliable data on the loss of trees due to disease. These deficiencies complicate plans to develop the kinds of measures needed to improve forests' conditions and monitor their performance; and
- The management of state-owned forests has been inefficient, with improper monitoring of concessionary contracts a particular problem. This in turn has led to unfinished contracted maintenance of forests and, consequently, increased risk of long-term deterioration in the health of Slovene forests.

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SRI LANKA: SAI completes audit of water pollution in Beira Lake—Colombo

In 2009 and 2010, the Auditor General's Department conducted an audit of water pollution in Beira Lake—Colombo, Sri Lanka, finalizing its report in 2010. This report is now ready for tabling along with the other reports before the Parliament of Sri Lanka.

The Beira Lake is ecologically important, and its environmental quality is vital to thousands of people living in Colombo. Due to population growth and economic development surrounding the Beira Lake basin during last couple of decades, environmental quality has degraded, threatening the quality of life of the people who live there. The Beira Lake, which comprises the largest system of freshwater in city of Colombo, is threatened on many environmental fronts.

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The audit's overall objective was to assess whether relevant government agencies have understood the Lake's problems and set clear priorities; established detailed "plans" defining expected results; and were measuring and reviewing their own performance. Auditor General reports often emphasize the need to clearly identify agencies' roles and responsibilities to help ensure their accountability to the Government and public.

The SAI's report broadly addresses the issues affecting Beira Lake, focusing in particular on how the Lake's water quality is managed. It draws on a wide range of sources of evidence, including meetings with agencies' managers and staff, as well as agency documents and other management information.

The audit was carried out by staff members of the Auditor General's Department, and took advantage of resources provided by the INTOSAI Working Group on Environmental Auditing. The Working Group has provided guidelines and extensive information on water pollution, as well as effective training on the auditing of environmental issues.

In summary, the audit identified numerous problems including illegal discharges of domestic sewage, solid waste and wastewater; unauthorized constructions by shanty dwellers; high algal colonies; inadequate monitoring; and inadequate arrangements for ensuring accountability. All negative findings reflect areas where attention should be drawn and corrective actions taken.

Among the audit report's recommendations are that the Urban Development Authority maintain better coordination among responsible agencies. Recommendations also called for effective monitoring; control over discharges of solid wastes, municipal and industrial wastewater, raw sewage etc.; removal of shanty dwellers; removal of sediment; improved water quality testing; the use of legal actions when necessary; and improved management.

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TANZANIA: SAI tables performance audit report on forest management

In February 2012, the Controller and Auditor General of Tanzania, Mr. Ludovick S.L Utouh, tabled a performance audit report on the management of forest harvesting to the Parliament of the United Republic of Tanzania.

The audit was prompted by a recent increase in illegal logging which had denied the government significant revenues. In December 2009, the Ministry of Natural Resources and Tourism reported that 57 percent of revenue (approximately 23 billion Tanzanian shillings)

from forest products was not collected during the 2008-2009 financial year.

The major findings of the audit were that the Ministry of Natural Resources and Tourism has not adequately ensured that the controls set to enhance revenue collection from the harvested trees are performing well; and that there were weaknesses in the monitoring and evaluation of forest harvesting activities.

The NAOT recommended that the Ministry of Natural Resources and Tourism revise its mechanisms for controlling revenue collection by improving the performance of the Check Points and Forest Surveillance Units that are in a position to mitigate illegal harvesting.

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THAILAND: SAI leads cooperative audit of Mekong River Basin management

The Office of the Auditor General of Thailand, as team leader of an environmental audit with funding support from German International Cooperation (GIZ) and subject matter support from INTOSAI and ASOSAI, organized and hosted a workshop in Bangkok from 12 -16 March 2012 on a planned regional cooperative environment audit on water issues, focusing on the management of the Mekong River Basin.

The workshop was the first step toward developing and implementing the cooperative audit's approach, which will include SAIs of the countries located along Mekong River. Participants will include the National Audit Authority of the Kingdom of Cambodia, the State Audit Organization of Lao P.D.R, the Office of the Auditor General of Thailand, and the State Audit Office of Vietnam. The Audit Board of the Republic of Indonesia and Jabatan Audit Negara Malaysia are also participating by sharing their best environmental audit practices.

At present, the Mekong River is facing serious problems arising from both the unsustainable use of water and the effects of climate change. Therefore, it is a challenge for the governments of all countries along the river basin to cooperatively form overall management practices for transboundary water management. The aim is to ensure that water and other natural resources related to water within the Mekong River Basin will be managed and used sustainably and equitably.

The project's objectives are to:

- Enhance the capability of ASEAN Supreme audit Institutions to conduct environmental auditing;

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- Enhance participants' capabilities to conduct a complex cooperative environmental audit;
- Share knowledge among ASEANSAI members; and
- Strengthen the network and the cooperation among ASEANSAI members.

The audit approach is in line with the approach recommended in INTOSAI WGEA guidance on cooperative environmental auditing. The project is set to be completed by December 2012. Three meetings were planned for the parties, with the first meeting being the March 2012 workshop discussed above. That workshop was conducted with assistance of an experienced instructor from the National Audit Office of China. At that meeting, the common audit topic, and the participating SAIs' individual audit programs, were also decided. (See *related China News Brief*.)

After completion of the individual audits, the second meeting will be held in August, where each SAI's audit findings will be individually presented and discussed. From September to October, the participating SAIs will develop their audit reports. A comprehensive audit report then will be prepared by OAG Thailand, and eventually be presented to GIZ and ASOSAI in the final, December 2012 meeting.

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TURKEY: SAI audits Black Sea issues as part of Coordinated Parallel Audit

Growing environmental challenges facing the Black Sea have led the SAIs of Turkey and other Black Sea countries to initiate a Coordinated Parallel Audit on the implementation of the Bucharest Convention, following an agreement at the EUROSAI Congress in 2009. Specifically, the Turkish Court of Accounts (TCA) explored the national implementation of commitments made under the Bucharest Convention; and pursuant to other Protocols, Black Sea Strategic Action Plans, and national legislation. Its work focused in particular on waste problem of the region, preparedness for incidents involving pollution from ships, the effectiveness of pollution monitoring systems, and the extent of international and regional cooperation. Among TCA's key findings:

- Waste management problems are more a matter of implementation than of the adequacy of the legal framework. Implementation problems stem largely from a lack of necessary institutional and technical capacity among relevant agencies;
- Intensive ship traffic is a growing threat to the marine environment of the Black Sea. Inspecting the

operational activities of ships, and controlling the risks of marine accidents, are of vital importance to maintain the safety of the Black Sea and in particular of the Bosphorus Strait;

- It is of critical importance to enhance the effectiveness of oversight activities among relevant agencies; and
- A reliable and up-to-date database is needed to develop regional strategies and priorities. Such a database would enhance pollution monitoring activities at the national level, ensure that they are consistent with those of other Black Sea countries, and contribute to greater regional and international collaboration.

The Joint Report of the Coordinated Parallel Audit, signed in the 8th EUROSAI Congress in Lisbon, Portugal by the Presidents of the Black Sea countries, is available at <http://www.environmental-auditing.org/tabid/126/CountryId/401/Default.aspx>.

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UNITED KINGDOM: NAO completes work on carbon capture and storage, and flood risk management

The National Audit Office has completed work on a range of environmental and sustainability issues. Most recently, in March 2012, NAO published a detailed lessons learned report on the Government's competition to design, construct, and operate the UK's first commercial-scale carbon capture and storage project.

The competition was launched in 2007 but cancelled four years later by the Department of Energy and Climate Change on the grounds of protecting value for money and because the project could not be funded within the £1 billion budget available. The NAO found that neither the Department, nor its predecessor, the Department for Business, Enterprise and Regulatory Reform, engaged sufficiently early with the commercial risk involved. During the competition, the Department's decisions to continue were not informed by detailed consideration of the probability of reaching acceptable contract terms and the time lost should the competition not succeed. The inability to agree on mutually acceptable terms among all members of the consortium contributed to the Department's decision to cancel the competition.

On 3 April, the Government launched a new UK Roadmap for Carbon Capture and Storage and a new competition, the 'CCS Commercialisation Programme', to drive down costs by supporting practical experience in the design, construction and operation of commercial scale CCS. The new programme addresses the lessons learned from the first project.

Elsewhere, NAO's two most recent environmental studies have looked at:

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- Flood risk management in England, finding that giving greater responsibility and discretion to local authorities to identify flood risk and target investment raises significant challenges. Local knowledge of surface water flood risk is far less advanced than national information on risk of flooding from rivers and the sea, and most local authorities lack the required technical expertise to manage the risk of flooding (October 2011); and
- The Department for Environment, Food and Rural Affairs' Geographic Information Strategy, finding that the Department had not set targets for cost reduction or quantified the benefits that could be achieved by collaboration or by sharing geographic information and

systems; and had not collected such financial information. The Department had put in place appropriate technical governance, but strategic governance arrangements could be strengthened (July 2011).

Work is currently underway on a landscape review of the electricity sector, and Value For Money studies into nuclear decommissioning and the Department for Environment, Food and Rural Affairs' commercial activities.

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