

The 7th Survey on Environmental Auditing

2012



INTOSAI
Working Group
on Environmental
Auditing

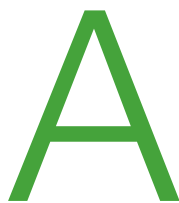
This publication was prepared by the INTOSAI Working Group on Environmental Auditing (WGEA). The WGEA aims to encourage the use of audit mandates and audit methods in the field of environmental protection and sustainable development by Supreme Audit Institutions (SAIs). The WGEA has the mandate to

- help SAIs gain a better understanding of environmental auditing issues,
- facilitate exchange of information and experiences among SAIs, and
- publish guidelines and other informative materials.

This publication may be downloaded free of charge from the INTOSAI WGEA website <http://www.environmental-auditing.org>. Permission is granted to copy and distribute this publication, giving appropriate credit, provided that such copies are for academic, personal or professional use and are not sold or used for commercial gain.

Data analysis: OÜ Faktum & Ariko and the Secretariat of INTOSAI WGEA
Design: Velvet OÜ
ISBN 978-9949-9061-5-4 (PDF)

January 2013



ACRONYMS AND ABBREVIATIONS

4

- AFROSAI** – African Organization of Supreme Audit Institutions
- ARABOSAI** – Arab Organization of Supreme Audit Institutions
- ASOSAI** – Asian Organization of Supreme Audit Institutions
- BA** – Bachelor of Arts
- CAROSAI** – Caribbean Organization of Supreme Audit Institutions
- CBD** – Convention on Biological Diversity
- CITES** – Convention on International Trade in Endangered Species of Wild Flora and Fauna
- CO₂** – Carbon Dioxide
- EA** – Environmental Auditing
- EUROSAI** – European Organisation of Supreme Audit Institutions
- GMO** – Genetically modified organism
- IDI** – INTOSAI Development Initiative
- INTOSAI** – International Organisation of Supreme Audit Institutions
- INCOSAI** – International Congress of Supreme Audit Institutions
- IPPC** – International Plant Protection Convention
- ITTA** – International Tropical Timber Agreement
- MARPOL** - International Convention for the Prevention of Pollution from Ships
- MEA** – Multilateral Environmental Agreement
- NO_x** – Nitrogen Oxide
- OLACEFS** – Organization of Latin American and Caribbean Supreme Audit Institutions
- OSPAR** – Convention for the Protection of the Marine Environment of the North-East Atlantic
- PASAI** – Pacific Association of Supreme Audit Institutions
- PIC** – Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides on International Trade (Rotterdam Convention)
- POPs** - Persistent Organic Pollutants
- RWGEA** – Regional Working Group on Environmental Auditing
- SAI** – Supreme Audit Institution
- SO₂** – Sulphur Dioxide
- SPSS** – Statistical Product and Service Solutions (software package)
- UNCCD** – United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa
- UNCLOS** - United Nations Convention on the Law of the Sea
- UNEP** – United Nations Environment Programme
- UNFCCC** – United Nations Framework Convention on Climate Change
- USA** - The United States of America
- WGEA** – Working Group on Environmental Auditing

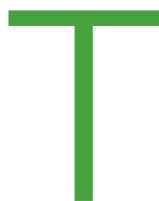


TABLE OF CONTENTS

Acronyms and abbreviations	4
Table of contents	5
Introduction	6
Summary	8
RESULTS	10
1. Auditing mandate	10
2. Environmental audits	13
3. The impact of environmental audits	21
4. Environmental auditing capacity	25
5. Cooperation between SAIs	31
6. WGEA products	34
APPENDICES	37
A. Data and methodology	37
B. Survey questionnaire	39
C. Detailed results in table format	53
D. Survey respondents	76

INTRODUCTION

6

In recent years, many Supreme Audit Institutions (SAIs) worldwide have initiated or further expanded the practice of environmental auditing. This trend goes hand in hand with increasing global awareness of the finite supply of most natural resources and the burden that human activities place on Earth's ecosystems. Public sector audit practices are being refined on topics such as natural resource management, the effectiveness of international environmental agreements, domestic environmental policies and programmes and sustainable development.

About INTOSAI and WGEA

The **International Organisation of Supreme Audit Institutions (INTOSAI)** operates as an umbrella organisation for the external public sector audit community, drawing together SAIs from 190 countries that belong to the United Nations or its specialized agencies. Established in 1953, INTOSAI remains the single most important international framework for SAIs, promoting exchange of knowledge and the development of professional audit tools and capacities among its members. **The INTOSAI Working Group on Environmental Auditing (WGEA)** is the largest working group of INTOSAI, with 72 member SAIs and a 16-member Steering Committee. INTOSAI WGEA aims to improve the use of the audit mandate and audit instruments at SAIs' disposal specifically in the case of environmental protection and sustainable development. Exchange of knowledge, cooperative audit activities, joint development of environmental auditing guidelines and background materials are continuously promoted to achieve the WGEA's goals.

Given the magnitude of INTOSAI, professional and technical cooperation also takes place at the regional level: Africa (AFROSAI), the Arab countries (ARABOSAI), Asia (ASOSAI), the Caribbean (CAROSAI), Europe (EUROSAI), Latin America (OLACEFS) and the South Pacific (PASAI). The USA and Canada are not directly affiliated with any of the INTOSAI regions. Regional working groups on environmental auditing (RWGEAs) have been established in six INTOSAI regions.

About the Survey

Since 1992, the INTOSAI WGEA Secretariat has conducted a total of seven surveys to map global and regional trends in environmental auditing together with the challenges SAIs face upon undertaking environmental audits. This report has been compiled on the basis of the **7th Survey on Environmental Auditing** carried out from February-May 2012 and targets the period of January 2009 to December 2011.

The 7th Survey was distributed among all 190 INTOSAI members by e-mail. The SAIs could submit their responses via regular mail or e-mail, or complete an online version of the questionnaire. Aside from the English version, Arabic, French and Spanish questionnaires were made available for the convenience of respondents. The overall response rate was 62%: **112 SAIs completed the survey** and six audit offices informed they had neither conducted nor were planning to undertake environmental audits in the near future. Of the 112 respondents, 16 had had no relevant experience in the previous three years, but were participating as they were planning to start conducting environmental audits.

We wish to express our deep gratitude to the SAIs that took the time to participate in the survey.

‘Environmental audit’ was defined in the survey as a “financial, compliance and performance audit that evaluates and gives opinions on environment-related matters”.

The report is structured along the lines of the questionnaire, with separate chapters on auditing mandate, environmental audits, the impact of audits, environmental auditing capacity, cooperation between SAIs and use of WGEA products and services. A data and methodology overview, the original survey questionnaire, detailed results and the list of respondents are presented in appendices.

The survey report is presented in both text and graphs. Several comparisons with the 6th Survey on Environmental Auditing are drawn to identify important trends and developments since 2009. It must be noted, however, that the amount and line-up of respondents are not identical to those of the 6th Survey (see Appendices A and D). To maintain the report’s legibility and clarity, however, the reader is not burdened with detailed interpretations in this respect; rather, appropriate reservations are presented in places where they appeared relevant in the course of data analysis.

S

SUMMARY

The results of the INTOSAI WGEA 7th Survey on Environmental Auditing reflect the global status of and trends in public sector environmental auditing practice on the basis of the work that 112 SAIs worldwide undertook from 2009-2011.

Auditing mandate

The legal mandate of the majority of the SAIs who responded enables them to undertake performance, compliance and financial audits on environmental issues. An explicit environmental auditing mandate has been granted by law to 1/5th of the audit offices who responded. For most SAIs, an auditing mandate ensures access to the national government and state-owned enterprises and companies. Non-governmental public organisations and private sector entities remain somewhat beyond the reach of audit offices. Since 2009, no changes have been made to the mandates of 95% of SAIs.

The results indicate that increasingly more SAIs can undertake environmental audits, using a larger variety of methods and tools and scrutinizing different government – as well as private sector and third sector – entities. At the same time, legal mandates have been updated in few SAIs and the proportion of audit offices with a specific environmental auditing mandate has remained constant. Thus, increased activities of SAIs in the field have likely resulted from **SAIs becoming more aware of the ways in which their traditional mandate can be applied to examine environmental laws, programmes and policies** than on account of updates to their legal mandates. However, it is still important to note that for approximately 10% of the audit offices who responded, an inadequate mandate is a perceived barrier to environmental auditing and also to international cooperation on the issue.

Environmental audits

Since 2009, SAIs have most often examined environmental issues in their performance and compliance audits. By total volume and objectives, many completed audits remain of the compliance type, while increasingly more performance audits have also been undertaken. **The total number of environmental audits conducted by SAIs from 2009-2011 increased remarkably compared to the previous survey period, and approximately 2/3rd of respondents indicated that their volume of environmental audits would increase in the coming years.** Among other things, the XX INCOSAI (congress of INTOSAI) held in 2010, a year prior to the 7th Survey, where “Environmental Auditing and Sustainable Development” was one of the main themes, can have also contributed to this trend by raising the awareness of environmental auditing in SAIs.

Positively, environmental issues have also been integrated into audits on other topics in several SAIs, and half of the respondents regarded this as a development their respective offices would need to work towards in the coming years. 1/3rd of audit offices have audited some or all aspects of sustainable development since 2009 (as also per the 6th Survey) and **increasingly more SAIs have used multilateral environmental agreements in their work.**

In terms of future perspectives for environmental auditing, the survey revealed that **the plans of SAIs do not always meet actual development needs, possibly highlighting a lack of resources and/or capacity.** The gap is especially noticeable in the case of developing performance indicators and training on environmental issues and auditing (notably more SAIs underscored the need for these developments than marked them as planned).

Impact of audits

As a remarkable indicator of progress since 2009, 86% of SAIs stated that they were considering the impact of their environmental audits. Government responses to audit recommendations and follow-up audits have served as the main tools to this end. **The area that the SAIs perceived as most improved as a result of their environmental audits was the functioning of government policies and programmes.** 80% of respondents publish the results of their environmental audits, and almost all of them consider the communication of findings beneficial in increasing the impact of audits. Notably, 6% of SAIs are not making any parts of their audit reports public.

Environmental auditing capacity

In 35% of SAIs, a separate unit dealing with environmental auditing exists, and in the majority of audit offices (71%) one or more percent of employees work on environmental audits. On average, 1-4% of SAI staff are assigned to environmental issues and in half of SAIs environmental auditors work also with other topics aside from the environment. **61% of respondents mentioned plans to increase their number of environmental auditors in the coming years.**

Environment-specific competencies exist in approximately half of SAIs (i.e. education or work experience in the sector). Performance auditing experience and compliance auditing experience emerged in the survey as the prevailing competencies of SAI employees working on environmental audits. **A shortage of environmental data, insufficient monitoring and reporting systems and a lack of human resources, skills and expertise have been encountered most frequently by SAIs when undertaking environmental audits.** As 2/3rd of respondents identified existing environmental auditing potential in their SAI, human resource challenges could be overcome by utilizing this; however, the lack of skills and expertise on the part of those already devoted to environmental auditing in many SAIs implies that capacity-building via training and raising competence levels are just as, if not more, crucial.

Cooperation between SAIs

International cooperation on environmental auditing has intensified since 2009: 2/3rd of SAIs reported having cooperated with another SAI on environmental issues (in the 6th Survey, approximately half had). **Exchange of information and audits on multilateral environmental agreements (MEAs) have been the main areas of cooperation.** 76% of SAIs have also been involved in the work of their regional environmental auditing working group. A lack of resources (increasingly so, compared to the 6th Survey), an absence of skills and expertise and a shortage of partners were listed by SAIs as reasons for no international cooperation experience on environmental auditing.

WGEA products

The **website of the WGEA remains the best-known source of information for SAIs** and the use of the web-based products of the working group is continually rising. Of the available guidance materials, 'Towards Auditing Waste Management' and 'Cooperation between Supreme Audit Institutions: Tips and Examples for Cooperative Audits between SAIs' have found most use in audit offices. Many SAIs are expecting additional guidance materials on the topics of waste and water audit and proposed climate change, energy, water and sustainable development as the potential central themes of the WGEA's next work plan for 2014-2016.

1

AUDITING MANDATE

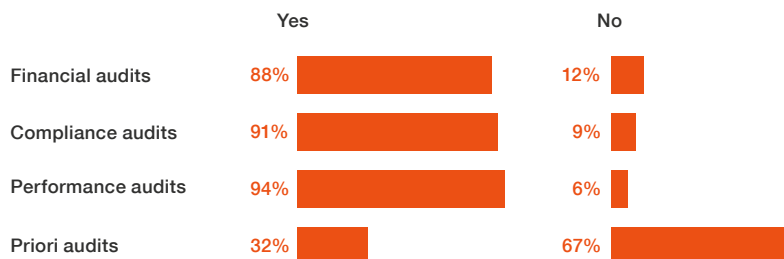
Results

10

The legal mandate of an SAI defines the types of audits it is able to conduct, the extent of access it has to information held by government and non-government entities and the audit tools it can utilize in its work. As the mandates of SAIs worldwide differ, various working methodologies can be seen being implemented and several kinds of audits issued. This chapter provides an overview of the legal status of SAIs in the context of environmental audits: the level of access and set of tools the mandates provide for the undertaking of environmental audits and how the situation has changed since the WGEA's last survey in 2009.

In responding to the 7th Survey, the majority of SAIs stated that they had a mandate allowing them to conduct performance (94%), compliance (91%) and financial audits (88%) on environmental issues. Priori audit (audit in advance of expenditure) was not identified with as often, with 32% of respondents indicating the possibility to apply the audit type (Graph 1).

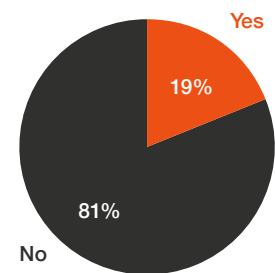
Graph 1.
Does your SAI have a legislative mandate to audit environmental issues in ...? (% of SAIs, n=112)



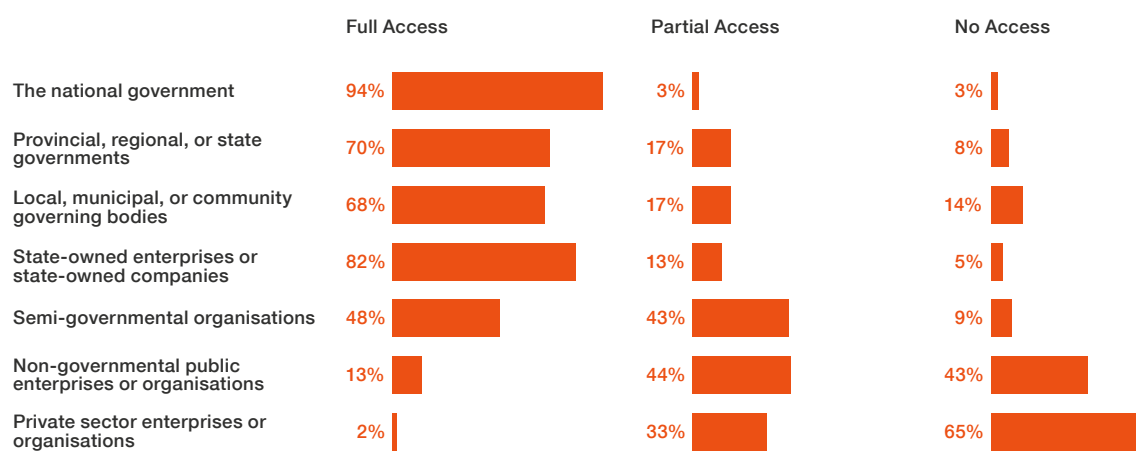
On the whole, since the 6th Survey, a certain expansion of SAIs' mandate access can be observed for all audit types. But as the majority of respondents did not report on actual changes in SAI legislation since 2009 (Graph 4), the **increase in positive answers seems to be the result of SAIs becoming more aware of environmental auditing and using different methods in conducting environmental audits.**

In the survey, it also emerged that approximately **1/5th of respondents have an explicit environmental auditing mandate** (Graph 2).

Graph 2.
Does your SAI's legislative mandate refer specifically to environmental auditing? (% of SAIs, n=112)



Graph 3.
What level of access does your SAI's mandate give to undertake environmental auditing of the following governmental and non-governmental organisations? (% of SAIs, n=112)



The amount of audit offices with a specific environmental auditing mandate has not significantly changed over the past three years. At the same time, many SAIs have increased and have plans to further increase their volume of environmental audits in the coming years (Chapter 2). This indicates that an explicit environmental auditing mandate or the expansion of SAIs' traditional mandate is not always necessary for the undertaking of environmental audits. However, an inadequate mandate was still regarded as a barrier by several ARABOSAI, CAROSAI and PASAI audit offices (Chapter 4). It is therefore possible that establishing a specific reference to environmental audits in the legal mandate could help some SAIs expand their activities in the environmental field.

An institutional dimension was also included in the survey questionnaire. **Most SAIs responded as having full access to their national governments (94%), state-owned enterprises or companies (82%), provincial, regional or state governments (70%) and local, municipal or community governing bodies (68%) when undertaking environmental audits** (Graph 3). Around half of the SAIs stated having full access to semi-governmental organisations (an increase from 27% to 48% since 2009). Access to non-governmental public enterprises or organisations and to private sector enterprises or organisations seems most limited. The "partial access" response relatively often selected in these cases likely translates to the possibility of an SAI to inspect only the use of the public funds allotted to these entities.

No significant trends in SAIs' access to different institutional levels since the 6th Survey can be identified. A small increase in access is apparent for all institution types, with the most notable one that of semi-governmental organisations (non-access decreased by 13%).

The majority of audit offices (95%) noted in the survey that no changes had been made to their mandate since 2009 (Graph 4). Of the six SAIs that recorded legislative changes from 2009-2011, one gained an explicit environmental auditing mandate, three were granted a mandate for performance audits and one was granted access to state-owned enterprises and companies. One SAI lost its mandate to inspect public sector revenue.

Graph 4.
Has your SAI's environmental auditing mandate changed since 1 January 2009? (% of SAIs, n=112)



Regions

- **AFROSAI:** All respondents have a mandate to audit environment-related issues in compliance and performance audits. The results indicate increased access to various levels of government and state-owned enterprises. These trends may be influenced by 10 new survey responses from the region (did not take part of the 6th Survey). 33% of SAIs have a specific reference to environmental auditing in their legal mandate – a higher share than in most other regions. 19% of SAIs have a mandate to conduct priori audits.
- **ARABOSAI:** In a significant increase since 2009, all respondents have a legal mandate to audit environment-related issues in compliance and performance audits. SAIs' access to national government and state-owned enterprises seem also to have notably expanded. At the same time, none of the SAIs listed concrete examples of changes in their legal status which could point to an increased awareness and experience in environmental auditing.
- **ASOSAI:** Progressively more SAIs perceived themselves as having a mandate to conduct compliance (from 76% to 91%) and performance audits (from 82% to 94%) on the environment. Results also point to increased access to state-owned enterprises and non-governmental organisations. However, only 3% of SAIs mentioned changes in their legal status.
- **CAROSAI:** SAIs in the region have a relatively low level of access to their national governments (67%) compared to other regions and often regard their legal mandate as not allowing them to conduct audits on environmental issues. However, a small increase since 2009 is apparent at many levels. None of the respondents have a special environmental auditing mandate.
- **EUROSAI:** No significant trends can be noted since 2009. Almost all SAIs can conduct financial, compliance and performance audits on environmental subjects. While only 14% of respondents have an explicit environmental auditing mandate and the mandates of SAIs do not otherwise stand out as more extensive, many audits are still conducted (Chapter 2) and cooperation between SAIs is close (Chapter 5).
- **OLACEFS:** A special environmental auditing mandate is more common in this region (33%). There has been a notable increase in the proportion of SAIs with a mandate for financial (from 64% to 87%), performance (from 79% to 93%) and priori audits (from 29% to 40%) on the environment. While no concrete changes in the mandates of SAIs have occurred since 2009, progressively more respondents regarded access to semi- and non-governmental organisations as having expanded which could point to an increased awareness/experience.
- **PASAI:** Compared to 2009, fewer SAIs perceived themselves as having the ability to conduct compliance (from 86% to 67%) and priori audits (from 29% to 11%) on the environment. Four new respondents from a total of nine may have influenced the result here. One SAI has a special environmental auditing mandate. Access to various institutional levels has increased, and 100% of respondents perceived full access to state-owned enterprises (up from 43% in 2009).
- **USA and Canada:** For both SAIs the auditing mandate has remained unchanged and enables them to conduct environmental audits of most types. The two SAIs have a more limited access to local, municipal and community governing bodies and private sector enterprises compared to many other respondents.

2

ENVIRONMENTAL AUDITS

The second group of survey questions was targeted at the type and volume of environmental audits conducted by SAIs since 1 January 2009. Questions about international environmental agreements, sustainable development and innovative methodologies were also asked, as well as those regarding prospects for the near future.

It appears that the **most common types of environmental audits conducted by SAIs from 2009-2011 are performance audits (75%) and compliance audits (66%)**. Approximately half of the respondents stated that they had conducted financial audits and just 12% priori audits (Graph 5).

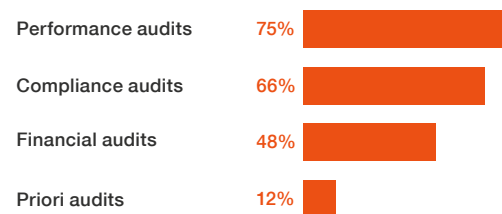
Compared to the previous survey, the total volume of environmental audits conducted by SAIs has increased remarkably, even doubling in some cases:

- 510 financial audits (383 in 2009);
- 1203 compliance audits (622 in 2009);
- 1010 performance audits (640 in 2009); and
- 1382 non-environmental audits in which environmental issues were considered (a new enquiry; 50% of the whole number was reported by one SAI from the OLACEFS region).

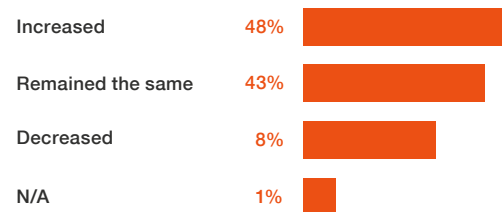
It should be noted that as one audit can simultaneously be a financial, compliance and performance audit (consisting of elements of one, some or all three areas), the sum of all types does not reflect the total number of audits.

The impressive increase in audits is also reflected in individual SAI responses, with 48% observing an increase in the amount of environmental audits conducted from 2009-2011 compared to the 6th Survey period (Graph 6).

Graph 5. Which of the following types of environmental audit has your SAI conducted since 1 January 2009? (% of SAIs, n=112)



Graph 6. Since 1 January 2009, has the total number of environmental audits conducted in your SAI compared to the previous period...? (% of SAIs, n=112)



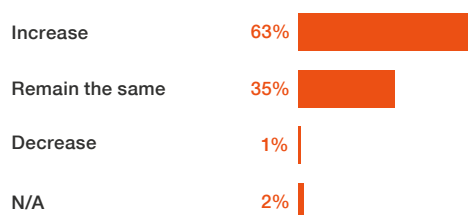
As to the future, almost 2/3rd of the SAIs plan to increase their volume of environmental audits over the next three years (Graph 7) while others (35%) intend to maintain their current level.

The SAIs were asked to rate potential audit objectives on a scale of 0-3 according to how frequently they were considered in environmental audits undertaken from 2009-2011. The SAIs attributed the highest average ratings to 'compliance with domestic environmental legislation' and 'compliance with domestic environmental policies' (Graph 8). These two objectives were also the most common in the 6th Survey. 'Environmental impact of non-environmental government programmes' and 'evaluation of environmental impact of proposed environmental policies and programmes' emerged as the least relevant aspects of investigation.

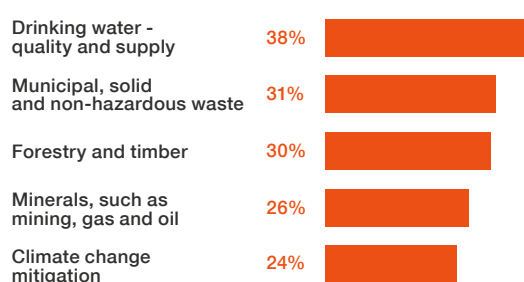
Since the 6th Survey, the importance of 'performance of government environmental programmes' seems to have lessened slightly, while 'compliance with international environmental agreements and treaties' has grown in importance.

The SAIs considered the top five environmental issues for their countries to be drinking water; municipal, solid and non-hazardous waste; forestry and timber; minerals; and climate change mitigation (Graph 9). These issues were also high on the priority list in 2009, and drinking water remains most crucial.

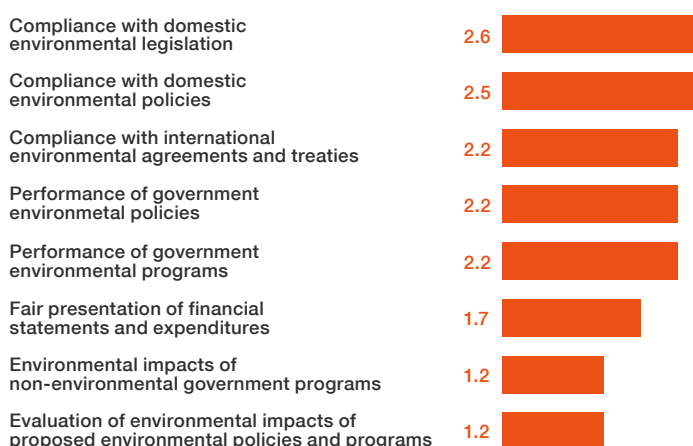
Graph 7.
How does your SAI plan to change the volume of conducting environmental audits in the next three years? (% of SAIs, n=112)



Graph 9.
What does your SAI consider to be the five most important environmental issues facing your country? (% reflects proportion of SAIs that marked issue as being among five most important, n=112)



Graph 8.
Please rate the potential objectives of environmental audits listed below according to how they have been used by your SAI since 1 January 2009 in the following way:
3 – objective always considered;
2 – objective often considered;
1 – objective rarely considered;
0 – objective not considered.
(average rating, n=112)

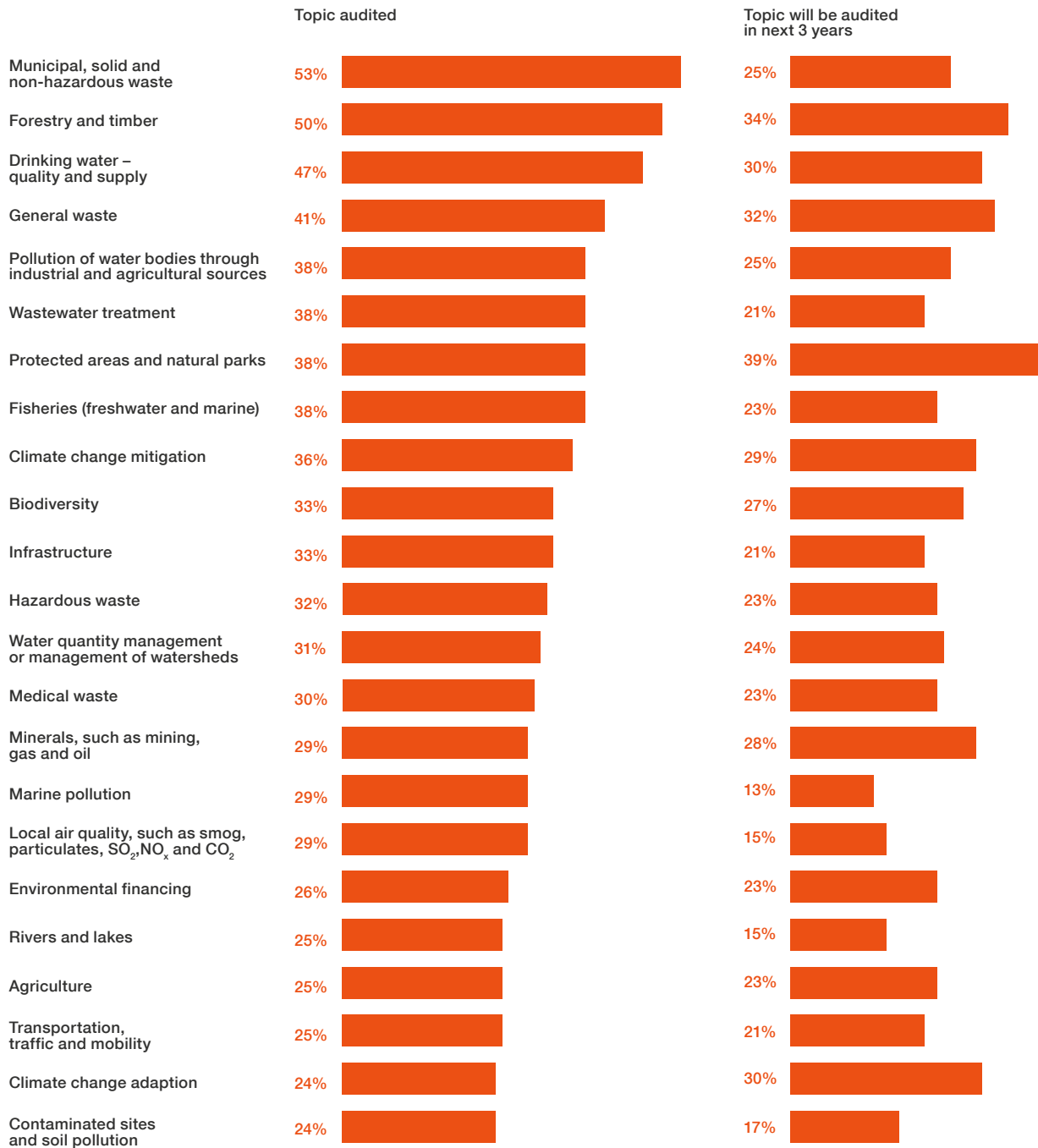


The top three environmental issues that the SAIs have audited (Graph 10) are municipal, solid and non-hazardous waste; forestry and timber; and quality and supply of drinking water. The SAIs listed protected areas and natural

parks (39%), forestry and timber resources (34%), general waste (32%) climate change adaptation (30%) and drinking water (30%) as the main subjects of their environmental audits over the next three years.

Graph 10.

Which topics your SAI has ever audited and which it intends to audit in the next three years?
(% of SAIs, n=112)

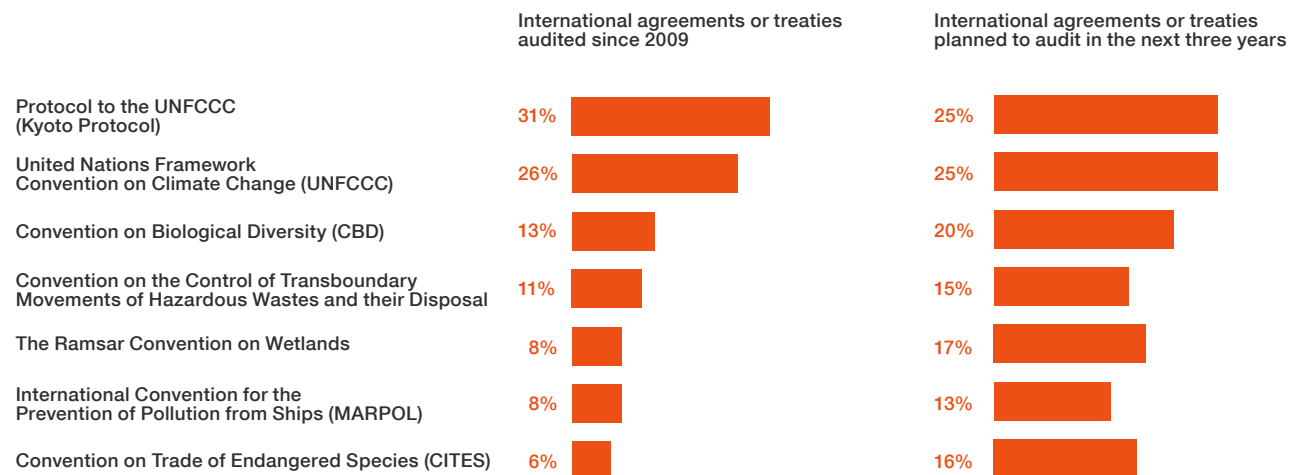


Roughly three-quarters of the respondents indicated that they had examined or planned to use international multilateral environmental agreements (MEAs) in their work. Two of the most popular MEAs that stood out, as also per the previous survey, were the **United Nations Framework Convention on Climate Change** (26%) and its **Kyoto Protocol** (31%, see Graph 11). Both the **Kyoto Protocol** and **UNFCCC** are popular MEAs likely to be audited in the next three years – a quarter of all SAIs are planning to consider these agreements in their work. Other major global agreements that the SAIs have and will increasingly examine are the Convention on Biological Diversity; the Convention on the Control of Transboundary Movements of Hazardous Wastes and their

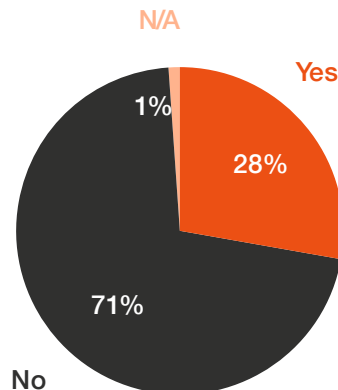
Disposal (the Basel Convention); the Ramsar Convention on Wetlands; the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); and the International Convention for the Prevention of Pollution from Ships (MARPOL).

28% of SAIs have commenced or completed audits of their countries' progress in sustainable development (Graph 12), a concept defined in the questionnaire as "development that integrates social, environmental and economic objectives". This result is largely the same as in the 6th Survey. **Three popular themes of audits given as examples of investigating all or some aspects of sustainable development** by SAIs were **water, waste and forestry**.

Graph 11.
Please mark the international environmental agreements or treaties your SAI has audited since 1 January 2009 and plans to audit in the next three years (% of SAIs, n=112)



Graph 12.
Since 1 January 2009, has your SAI started or completed audits of your country's progress in sustainable development? (% of SAIs, n=112)



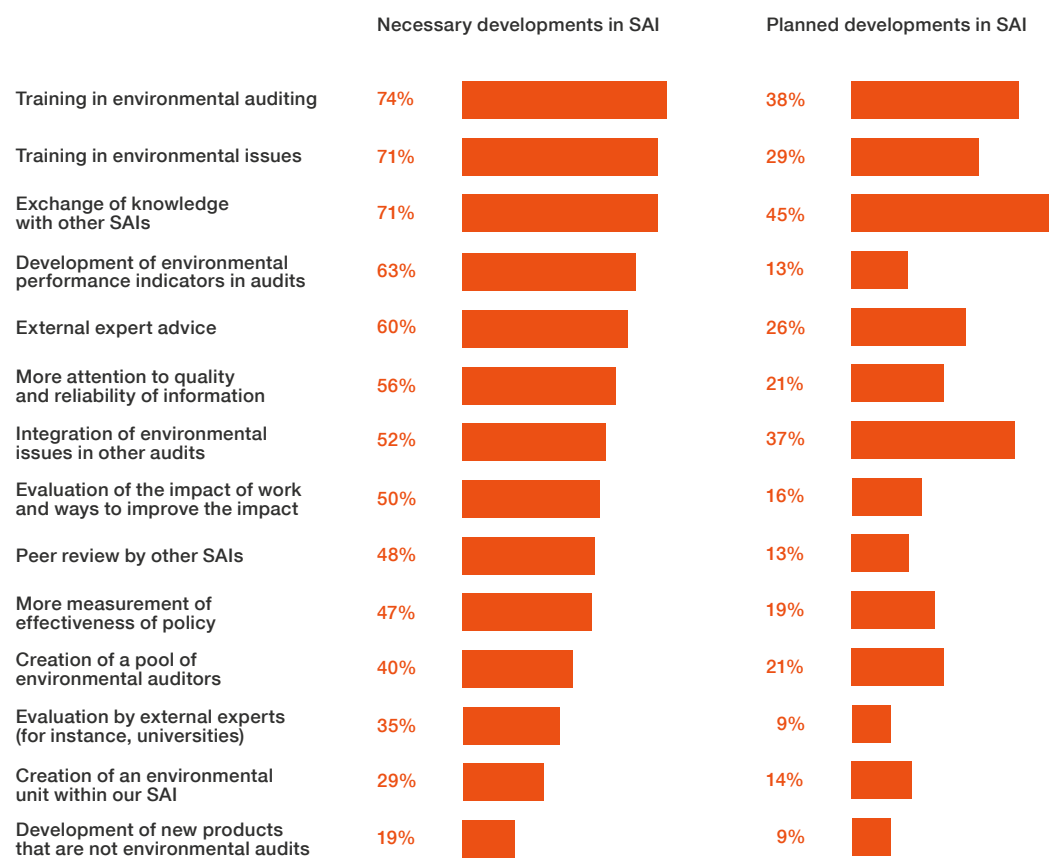
With the complexity of environmental auditing tools and approaches in mind, the SAIs were invited to describe innovative work methodologies they had used in their audits. **Geospatial technology** (10 SAIs), **external expertise** (10 SAIs) and **best practice guidelines or standards** (8 SAIs) **were the tools most frequently considered by respondents as innovative**. Focus groups, surveys and questionnaires, cooperation with other SAIs and media are further examples.

The survey results show that the **most needed SAI developments are training on environmental auditing** (74%), **training on environmental issues** (71%) and **exchange of knowledge with other SAIs** (71%). Developments

already planned in SAIs are **exchange of knowledge with other SAIs** (45%), **training on environmental auditing** (38%) and **integration of environmental issues in other audits** (37%), similar to the previous survey.

Comparing the needs and plans of the SAIs (Graph 13) reveals that **the actual plans of SAIs do not meet the identified needs, possibly indicating a lack of resources and/or capacity**. For instance, 71% of respondents regarded training on environmental issues as an important development area, but in reality only 29% have training planned for the next three years. The gaps are apparent in all regions.

Graph 13.
Please mark developments that you regard as necessary in your SAI and developments you have already planned in your SAI.
(% of SAIs, n=112)



Regions

- **AFROSAI:** The environmental audits completed are by volume mostly compliance audits, and this is in correlation with the objective of compliance with domestic policies most often considered (also as per 2009). 52% of SAIs have increased their number of environmental audits and in 33% of SAIs the volume has remained unchanged. An impressive 90% of SAIs plan to undertake more environmental audits in the next three years. Drinking water and waste are regarded as the most important environmental issues. SAIs also plan water (52%) and waste (43%) audits over the next three years, as well as forestry and timber resources (52%), minerals (43%) and protected areas and natural parks (43%). As in the 6th Survey, relatively few SAIs have considered MEAs in their audits, but increasingly more plan to use them in future. Specific to the region, the Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification is the most important MEA (38% plan to audit this), followed by CITES, the Convention on Biological Diversity, the Aarhus Convention and UNFCCC and its Kyoto Protocol (29% plan to audit these). 24% of SAIs have audited some or all aspects of sustainable development. Development of environmental performance indicators (86%) and peer review by other SAIs (81%) are the most crucial development needs, but very few SAIs have planned activities in this regard. Integration of environmental issues in other audits (71%) and training on environmental auditing (52%) are developments SAIs foresee as likely to happen in the near future.
- **ARABOSAI:** SAIs have mainly undertaken environmental audits of the compliance or performance type (89% of SAIs for both). Compliance with domestic legislation/policies has been the prevalent audit objective. 67% of SAIs have increased their number of environmental audits and 89% of respondents reported their intent to conduct more environmental audits in the next three years. Local air quality emerged as the top environmental issue (44%) for the region's countries, surpassing waste, the most frequently mentioned theme in 2009. SAIs have plans to audit various environmental topics in the near future: general and medical waste; minerals; contaminated sites; fisheries; agriculture; energy; and wastewater and water quantity management (all mentioned by 33% of respondents). MEAs remain little examined since 2009, but 44% of
- SAIs intend to use UNFCCC and its Kyoto Protocol in their upcoming audits. 22% of SAIs have audited some or all aspects of sustainable development. While the development of performance indicators (78%) and creation of an environmental unit in SAIs (67%) are important development needs, only 1-2 audit offices have planned activities in these fields.
- **ASOSAI:** SAIs reported mainly environmental performance (81%) and compliance audits (75%) as having been conducted. Notably, seven SAIs in the region (22%) have also completed priori audits. In 59% of SAIs, more environmental audits have been completed since 2009 compared to the previous period and 66% of respondents plan to further increase their number of audits in the next three years. Similar to the 6th survey, compliance with domestic environmental legislation emerged as the most common audit objective. 44% of SAIs marked forestry and timber and 31% minerals and mining as the top environmental concerns in their countries. In the coming years, forestry and timber sector audits will also be undertaken most often (31% of SAIs) alongside climate change mitigation and adaptation (28%). 22% of respondents have audited some or all aspects of sustainable development and the same proportion of SAIs will consider the Kyoto Protocol in their future work. 75% of SAIs considered training on environmental auditing an important development need, and an encouraging 41% of SAIs will take measures to meet this. However, a notable gap emerged between the perceived need for more attention to quality and reliability of information (69%) and the actual plans of SAIs to overcome this challenge (just 13%).
- **CAROSAI:** Of the six respondents, only two SAIs reported previous environmental auditing experience, and survey results reveal that, by volume, compliance audits represent the majority of the audits completed in the region. Since 2009, increasingly more audits have been conducted in only one audit office, but all respondents informed of future plans to start or expand environmental auditing. 50% of SAIs considered drinking water, municipal, solid and non-hazardous waste and natural disaster management their top environmental concerns. In the coming three years, 33% SAIs plan to carry out audits on the topics of medical waste, protected areas and natural parks and natural disaster management. Similar to the 6th survey, the region's

audit offices are yet to undertake audits on sustainable development and MEAs. Almost all SAIs (83%) highlighted the creation of a pool of environmental auditors, the integration of environmental issues in other audits, training on environmental issues, development of performance indicators and peer review by other SAIs as crucial areas of improvement. Regrettably, virtually no respondents foresaw actual developments in their offices in these fields in the near future.

- **EUROSAI:** On environmental subjects, SAIs have carried out mostly performance (86%) and compliance audits (73%). The total volume of environmental audits has increased in 46% of audit offices, but also decreased in 11%. As an indicator of stability, 59% of SAIs intend to maintain their current volume of environmental auditing, and 35% to increase it. Energy and energy efficiency (41%) and climate change mitigation (32%) emerged as the most important environmental issues for countries (natural resources and waste in 2009) while protected areas and natural parks (38%) were more frequently mentioned in the case of planned environmental audits in the survey. More SAIs have used MEAs in their audit work here than in any other region (more than half of respondents) and the same observation applies to sustainable development audits (32%). The Kyoto Protocol is the unrivalled MEA: 62% of SAIs have examined and 30% will examine the agreement in the next three years. Training on environmental auditing (73%) and environmental issues (65%) were regarded as necessary developments in SAIs, but training was planned in notably fewer SAIs (30% and 16% respectively). Exchange of knowledge with other SAIs was perceived the most probable area of progress by 54% of respondents.
- **OLACEFS:** Environmental audits completed in the region since 2009 have mainly been of the compliance (87%) and performance (73%) types. Compliance with domestic environmental legislation has been assessed in most of the audits conducted. The volume of environmental audits has either increased (53%) or remained the same (47%) in an almost equal number of SAIs. 2/3rd of the region's respondents plan to increase their level of environmental audits in the next three years. As also per the 6th Survey, water remains of great importance to these countries – drinking water was underscored by 53% of SAIs. Municipal, solid and non-hazardous waste, minerals, and for-

estry and timber came a close second (top priorities for 47%). Upcoming audits will be made on the topics of protected areas and natural parks (67%), climate change adaptation (60%) and drinking water (60%). 27% of SAIs have audited some or all aspects of sustainable development; 60% have examined the UNFCCC agreement and 40% of respondents have also used the Kyoto Protocol and Ramsar Convention on Wetlands in their audits. The Convention on Trade of Endangered Species (CITES) will be considered by 40% of SAIs in the coming years. Respondents deemed the exchange of knowledge with other SAIs (87%) and training on environmental issues and the development of performance indicators (80%) as the most needed developments. Interestingly, the top planned development in SAIs appeared to be external expert advice (40% of SAIs).

- **PASAI:** Performance audits constitute the highest proportion (89%) of completed environment-related audits since 2009 and performance of government environmental policies and programmes was a frequently mentioned audit objective in the survey. For 56% of SAIs the total number of audits has increased, but one SAI also reported a decrease since 2009. 67% of respondents plan to expand their environmental auditing practices and 33% to continue at their current level in the coming three years. Drinking water is evidently the top environmental issue for this region's countries (as it was in 2009). Notably, seven of the nine respondents have audited their countries' fisheries stocks - a direct influence of the IDI/PASAI cooperative performance audit on fisheries. Of the future audit topics mentioned, pollution of water bodies through industrial and agricultural sources recurred often (44% of SAIs), followed by climate change adaptation, general and medical waste, urban environment quality and the environment and human health (33%). The United Nations Fish Stocks Agreement appeared to be the most utilized MEA in environmental audits (three SAIs; very probably influenced by the cooperative fisheries audit) and the UNFCCC and its Kyoto Protocol will be examined more in future (also by three SAIs). 33% of respondents have audited some or all aspects of sustainable development, a slight upward trend since the 6th Survey. Training on environmental issues and environmental auditing were marked as crucial developments by almost all SAIs, but few respondents (one and three respectively) knew of concrete plans to meet these demands in their offices.

- **USA and Canada:** These two SAIs have mainly conducted performance audits and integrated environmental issues into a considerable number of other audits. The volume of audits has remained the same or decreased slightly and the respondents did not predict significant changes for the next three-year period. Compliance with domestic legislation and performance of government policies and programmes are almost always the central audit objectives. For both the USA and Canada, environmental financing is an important issue and SAIs plan to audit this field in the

near future along with various topics related to climate change, contaminated sites, minerals, fisheries, biodiversity, chemicals management and protected areas. The UNFCCC and Kyoto Protocol have been examined by both SAIs, as well as progress in sustainable development. Respondents regarded the integration of environmental issues into other audits, staff training, exchange of knowledge with other SAIs, expert advice and peer review developments both necessary and planned in their offices in the near future.

3

THE IMPACT OF ENVIRONMENTAL AUDITS

The main purpose of the environmental auditing undertaken by SAIs worldwide is to ensure that audit findings lead to positive changes in the state of the environment and in the use of public resources. However, establishing links between audits and their direct impact can prove a challenge due to the complex nature of the subject matter – the environment itself. This chapter provides an insight into the different methods SAIs use to measure and increase the effectiveness of their work and the challenges they face therein.

Of the 112 SAIs who completed the survey, 86% attempt to evaluate the impact of their environmental audits. The increase in activities considering audit impact has been significant since the previous survey in 2009, when only 56% of respondents identified with the practice.

Impact is most often measured (Graph 14) by **observing government responses to audit recommendations** (66%) and **conducting follow-up audits** (63%). In 2009 the same two measures were listed as the most popular, albeit in lower proportions.

A lack of and/or the quality of environmental data (15 SAIs), untimely or non-implementation of audit recommendations (13 SAIs) and a lack of know-how in SAIs (13 SAIs) were regarded as the main factors complicating the evaluation of audit impacts.

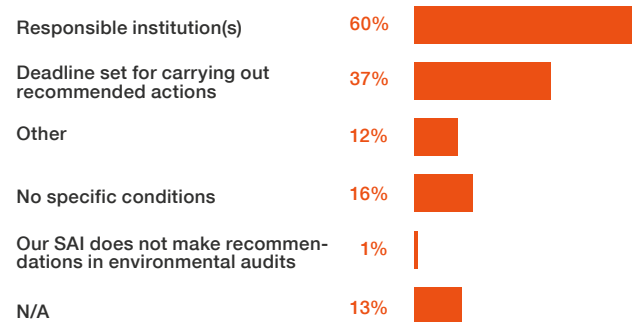
As is apparent from the results of this and the 6th Survey, audit recommendations are a key tool in achieving impact. Recommendations can help an auditee improve its operations and SAIs to keep track of the process of actions undertaken post-audit. The survey results indicate that recommendations made by SAIs in environmental audits usually determine **responsible institutions** (60%) and less

often also a **deadline for carrying out recommended actions** (37%). 16% of respondents could not identify any special conditions that their audit recommendations established and one SAI stated that it did not make recommendations in audits (Graph 15).

Graph 14.
How does your SAI measure the impact of your environmental audits? (% of SAIs, n=112)



Graph 15.
Do the recommendations made by your SAI in environmental audits usually include specific conditions? (% of SAIs, n=112)



The implementation of the recommendations of environmental audits is usually tracked via follow-up audits (67%) and less frequently with a follow-up survey (30%). Just 3% of SAIs stated that implementation was not followed up at all (Graph 16).

To elaborate upon the extent of the impact of the work of SAIs, the respondents were asked to assess the level of positive developments having taken place on account of their environmental audits. Many SAIs noted that their answers were subjective evaluations as the exact impact was hard to determine or that there was no formalised evaluation system in place in their office.

73% of SAIs regarded their environmental audits as having had either medium or high impact in helping government departments improve the functioning of policies and programmes (Graph 17). A relatively high proportion of respondents also observed a more or less strong impact with regard to helping auditees evaluate their capacity to develop and implement environmental policies or programmes (59%) and to formulate environmental legislation or environmental policies and programmes (53%). Less impact was sensed in the case of the environmental management systems and environmental reports.

Since the previous survey, the proportion of SAIs that consider their audits to have no impact has notably decreased for all impact levels. However, as the methodology of the question has been slightly adjusted – with a ‘low impact’ dimension introduced in the 7th Survey – the comparison could be somewhat distorted.

Graph 16.
How does your SAI track the implementation of the recommendations of environmental audits?
(% of SAIs, n=112)

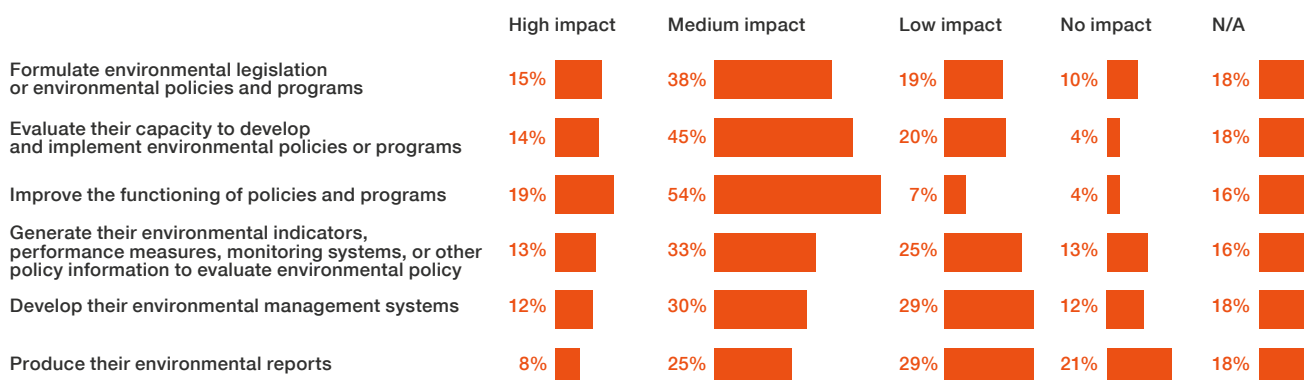


Based on their experiences, a quarter of respondents prioritized good communication with auditees as the most effective way of increasing the impact of audits. Publishing audit results, monitoring the implementation of audit recommendations and communicating with parliament were also mentioned.

According to the survey results, the top 3 means for communicating the results of environmental audits (Graph 18) are publishing full audit reports online (55%), distributing printed versions of audit reports (53%) and issuing press releases (47%). 6% of the SAIs stated that no parts of their audit reports were made public. Additionally, many SAIs also publish audit results in their annual reports, or the results appear in the reports of their respective parliaments.

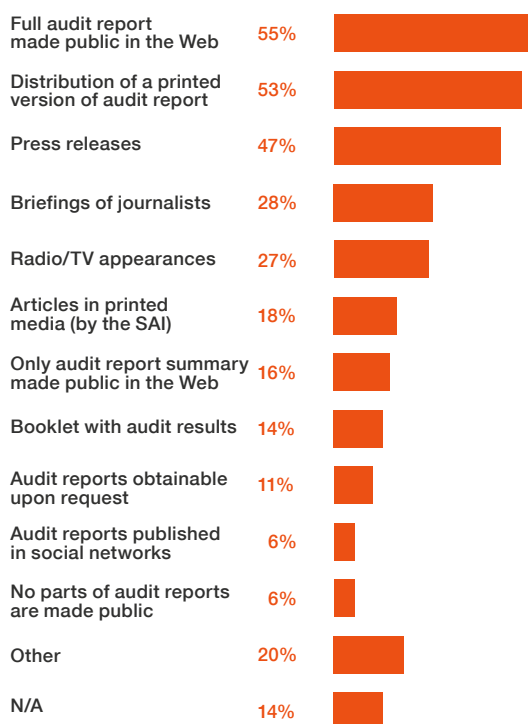
The SAIs expressed rather positive opinions about the increase in audit impact achieved by disseminating the results (Graph 19). In total 79% of SAIs assessed that communication of the results of audits had increased impact either significantly or to some extent.

Graph 17.
Please assess what level of impact the environmental audits conducted by your SAI have had in helping government departments to.... (% of SAIs, n=112)



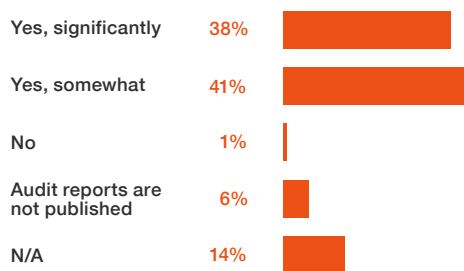
Graph 18.

How does your SAI usually communicate the results of environmental audits? (% of SAIs, n=112)



Graph 19.

Please assess whether communicating the results of environmental audits has helped your SAI increase the impact of these audits (% of SAIs, n=112)



Regions

- AFROSAI:** 13 of the 21 respondents reported on their measuring of the impact of their environmental audits. Keeping track of the government's response to audit recommendations was marked most often (57%) as the main measurement tool. The results point to remarkable developments in the region, as in 2009 just 18% of SAIs were assessing the impact of their audits. Audit recommendations usually include responsible institutions (57%) and implementation is tracked via follow-up audits (67%). On all listed potential accounts, the SAIs stated that audit impact had been mainly medium. Low or no impact was perceived in particular in terms of helping the government to formulate environmental legislation, policies or programmes and also in case of environmental reports. The results show that the region's audit offices usually distribute their environmental audit reports via regular mail (printed versions, 43%) while three SAIs do not make any parts of their audits public. 57% of respondents felt that the communication of audit results had helped increase impact.

- ARABOSAI:** Seven of the nine SAIs measure the impact of their environmental audit work, with follow-up audits (78%) being the most popular means to this end. Recommendations are made in the audits of most SAIs; they most often include responsible institutions (44%) and are mainly tracked via follow-up audits (78%). In the survey the SAIs found that their work had helped auditees first-hand to evaluate their capacity to develop and implement environmental policies or programmes and to improve the functioning of policies and programmes. It is noteworthy that 44% of SAIs do not publish their audit findings. Printed reports and online report summaries are the main and almost only way of disseminating audit results. 33% of SAIs felt that publishing their work had been useful.

- ASOSAI:** More than 80% of the region's respondents assess the impact of their environmental audits, mostly by scrutinising the government's response to audit recommendations (69%) or through follow-up audits (66%). Audit recommendations usually establish responsible institutions and/or a deadline for carrying out action. 76% of respondents perceived high or medium impact in terms of improving the functioning of policies and programmes. SAIs mostly pub-

lish their environmental audit reports online (53%) and also distribute a printed version (50%). Three-quarters of respondents deemed the communication of audit results to be significantly or somewhat beneficial.

- **CAROSAI:** Due to a lack of environmental audit experience, only two SAIs were able to report on their activities in impact measurement and audit publishing. Both respondents have been monitoring the implementation of audit recommendations and their governments' responses in addressing the matter. One SAI has included responsible institutions and the other a deadline as specific conditions in their audit recommendations; follow-up audits have been undertaken by both. The perceived impact on various listed levels appeared rather on the low side, except for auditees' capacity to develop and implement environmental policies or programmes, where one SAI deemed the impact as high. Both SAIs agreed that communicating the results of their environmental audits (on paper) had somewhat helped to increase impact.
 - **EUROSAI:** All SAIs stated that action had been taken to determine the effects their environmental audits had had. In addition to government responses to audit recommendations, implementation of recommendations is also a frequent indicator, relatively more than in other regions. 65% of respondents identify responsible institutions in their audit recommendations and 73% conduct follow-up audits to ascertain whether recommendations have been adopted by auditees. While retaining a moderate opinion about the extent of audit impact, proportionally more SAIs (81%) saw a high or medium impact in terms of improving the functioning of policies and programmes. SAIs mostly publish their environmental audit reports online; 76% of SAIs issue press releases; and offices utilize various other means for communicating audit results. Nearly all respondents deemed this either significantly (49%) or somewhat (49%) beneficial.
 - **OLACEFS:** 87% of respondents – progressively more than in 2009 – have been examining the effects of their environmental audits, predominantly through follow-up audits (67%). Follow-up audits are also a prevalent method when SAIs track the implementation of audit recommendations. Compared to the 6th Survey, respondents appeared somewhat less optimistic about the impact of environmental audits. As the most positive result, 74% considered the functioning of policies and programmes as having improved greatly or some-
- what as a result of their work. Among other types of communication, full reports are published online most often, by 73% of respondents. A notable share of SAIs (60%) attributed significant importance to the communication of results and 33% found it somewhat helpful in increasing the impact of audits.
 - **PASAI:** Compared to the 6th Survey, increasingly more SAIs (eight of the nine respondents) now consider the impact of environmental audits. The government response to audit recommendations has been the key indicator for 89% of SAIs, the extent of which is determined by undertaking follow-up audits (56% of SAIs). The survey results indicate that SAIs are more positive about the effect of their environmental audits than they were in 2009: for all the listed impact areas, more than half of the respondents identified a medium or high impact. The SAIs felt that their audits had contributed most to increasing auditees' capacity to develop and implement environmental policies or programmes and to improving the functioning of policies and programmes. Audit results are mainly communicated by distributing a printed report and by publishing a full electronic version online. Almost all respondents saw communication as a good way of increasing audit impact.
 - **USA and Canada:** Both SAIs measure the impact of their environmental audits and use all of the listed tools (from media coverage to follow-up audits) to this end. Audit recommendations assign responsible institutions and their implementation is tracked via follow-up audits; less so with follow-up surveys. The respondents stated that environmental audits had resulted in auditees' increased capacity to develop and implement environmental policies and programmes and in improved functioning of policies and programmes. Less impact was perceived in terms of the development of the auditees' environmental management systems and environmental reports. The two SAIs utilize various channels to introduce their environmental audits, ranging from disseminating printed and electronic audit reports and media articles to modern tools such as platforms provided by social networks. Both SAIs found that communicating audit results had significantly increased the impact of their work.

4

ENVIRONMENTAL AUDITING CAPACITY

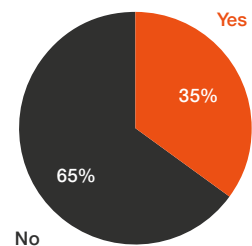
Given the broad nature and interdisciplinarity of environmental issues, the variety of stakeholders, new knowledge and complex policy tools can pose a significant challenge even to experienced auditors. Consequently, the key to successful environmental auditing lies in SAI's human resources – the knowledge and skills of its employees. A separate section of the survey was devoted to questions about the number and competence of SAI employees, barriers to environmental auditing and training.

35% of the SAIs who responded have a specific environmental audit department or section (Graph 20).

In 71% of SAIs, one or more percent of employees work on environmental audits (Graph 21). These results are roughly the same as in 2009, when 40% of the SAIs stated that they had an environmental auditing unit and 82% had employees assigned to conduct environmental audits. Given that in the 7th Survey there were 16 respondents with no previous experience in environmental auditing and many new respondents (who did not participate in the 6th Survey), the slight decrease in overall percentages is probably not an indicator of a decline in human resources of SAIs working on environmental audits.

In half of the audit offices, 1-4% of employees are involved in environmental auditing (Graph 21). This average is identical to the previous two surveys. Other results (levels of 5-9% and 10 or more %) have also remained unchanged.

Graph 20.
Does your SAI have a specific department or section working full-time on environmental audits? (% of SAIs, n=112)



Graph 21.
How many auditors are involved in environmental auditing in your SAI*1? (% of SAIs, n=112)



1 On the basis of the question about the number of environmental auditors, three separate analyses could be made, concerning the proportion of auditors (Graph 21), their work load (Graph 22) and existing additional capacity in SAI (Graph 23).

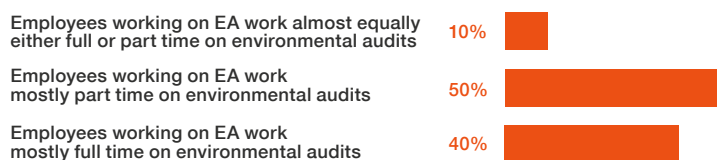
As a new enquiry, the survey included a question about the proportion that the environmental auditing constitutes in the total workload of employees. It appears that **in 50% of SAIs environmental audits are conducted alongside other tasks, i.e. employees work mostly part-time on them** (Graph 22). 40% of audit offices have auditors devoted full-time to environmental audits, which corresponds with the share of SAIs that have a separate environmental auditing unit (35%).

65% of SAIs identified existing potential in their SAI for more employees to conduct environmental audits (Graph 23).

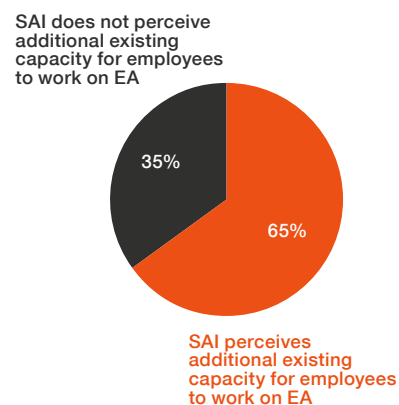
Since 1 January 2009, **an average of 1-4 auditors have been involved in conducting one environmental audit in 47% of the SAIs** who responded (Graph 24). The proportions of smaller and larger audit teams in SAIs are divided almost equally (16-20%) between the remaining respondents. **Apart from auditors, other employees have also been engaged in environmental audits in 1/3rd of audit offices** (34%). 'Other employees' were defined as "employees who are not auditors, but who contribute significantly to the audit process" (e.g. internal experts, engineers, apprentices and support staff).

The majority of SAIs stated that the proportion of auditors working on environmental audits had remained constant since 1 January 2009 (Graph 25). Positively, in 1/3rd of the SAIs this number has increased.

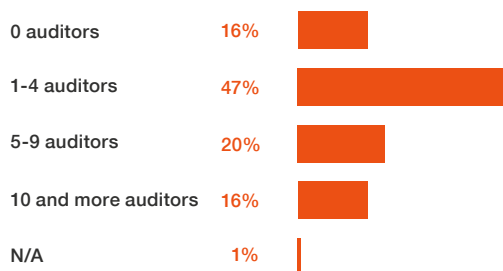
Graph 22.
How many auditors are involved in environmental auditing in your SAI**? (% of SAIs, n=80)



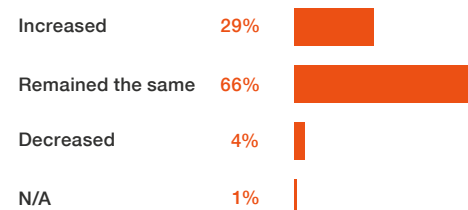
Graph 23.
How many auditors are involved in environmental auditing in your SAI***? (% of SAIs, n=110)



Graph 24.
Since 1 January 2009, on average, how many employees are involved in an audit team conducting one environmental audit in your SAI? (% of SAIs, n=112)



Graph 25.
Since 1 January 2009, has the share of auditors working on environmental audits changed in your SAI? Has the share ...? (% of SAIs, n=112)

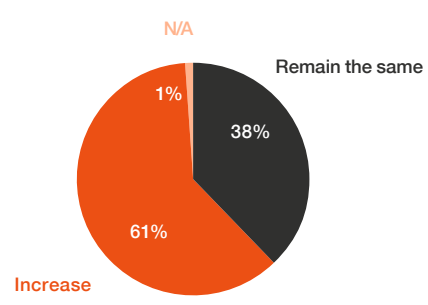


More than half of the SAIs (61%) indicated plans to increase the number of auditors involved in conducting environmental audits in the next three years and most others did not expect the proportion of environmental auditors to decrease (Graph 26).

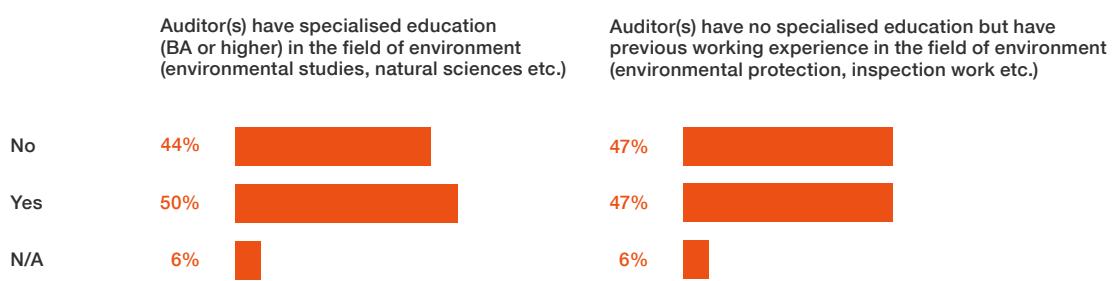
Questions about the qualifications and competence of employees were also included in the survey. Results show that **in 50% of the SAIs there are people with a degree in an environment-related field among the employees conducting environmental audits, while in 47% of audit offices at least one auditor has previously worked in the environmental sector** (Graph 27).

The SAIs were also asked to map the competence of their employees working on environmental audits. **Performance auditing experience was marked most often, by 76% of respondents** (Graph 28), followed by compliance auditing experience (73%). In general, all types of competence listed in the questionnaire were covered in more than half of the SAIs. Of 'other competencies', engineering was a common answer.

Graph 26.
How does your SAI plan to change the number of auditors involved in conducting environmental audits in the next three years? (% of SAIs, n=112)



Graph 27.
How many employees working on environmental audits in your SAI have an educational background or previous working experience in the field of the environment? (% of SAIs, n=111)



Graph 28.
Which of the other competencies are covered in your SAI by the employees working on environmental audits? (% of SAIs, n=112)



While coverage of the competence of employees conducting environmental audits appears relatively high, it must be noted that lack of skills and knowledge remains an issue for consideration in terms of the capacity-building needs of SAIs. The development needs of SAIs (see Chapter 2) as well as the barriers to environmental auditing they have identified (see Graph 29) illustrate this.

The three **most frequently encountered barriers** that the SAIs have experienced when performing environmental audits since 1 January 2009 have been **insufficient data on the state of the environment** (66%), **insufficient monitoring and reporting systems** (65%) and **lack of human resources** (65%) (Graph 29). Noteworthy also is the fact that for 11% of SAIs an inadequate mandate is a perceived barrier.

These results are quite similar to those of the previous survey. Insufficient data has slightly increased in importance since 2009. Lack of human resources, a new barrier type, was included in the 7th Survey to differentiate between physical (i.e. number of people) and intellectual (i.e. knowledge and skills) barriers. Based on these results, both appear relevant for SAIs.

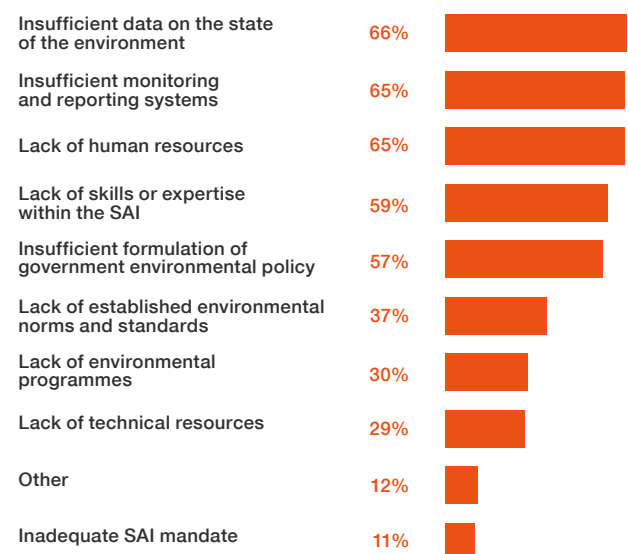
As in the previous survey, the most popular measures for tackling barriers were again **training SAI staff** (67%) and **collecting environmental data directly from the field** (53%) (Graph 30).

The SAIs were asked about the kind of training they had provided to employees conducting environmental audits since 1 January 2009. **Environmental audits** (30 SAIs), **specific environmental topics to audit** (19 SAIs) and **performance audits** (9 SAIs) were the most popular subject areas.

On the basis of the responses, it could also be concluded that **participation in regional seminars or seminars organised by a regional environmental working group** (28 SAIs), **in-house training** (15 SAIs) and **participation at**

INTOSAI WGEA meetings and seminars (11 SAIs) were **popular types of training**. Annual environmental auditing training course held by the SAI of India's International Centre for Information Systems and Audit and the trans-regional cooperative forestry audit programme coordinated by INTOSAI Development Initiative were the two specific training projects several SAIs mentioned in the survey.

Graph 29.
Which of the following barriers has your SAI experienced in executing environmental audits since 1 January 2009? (% of SAIs, n=112)



Graph 30.
Which of the following measures did your SAI take to attempt to overcome the barriers? (% of SAIs, n=112)



As INTOSAI WGEA was developing the programme for the first international WGEA training course on environmental auditing at the time of the 7th Survey, the questionnaire sought to identify how many SAIs would welcome the initiative and be willing to participate in it. 84% indicated their readiness to do so, but at the same time many (47%) noted that they were not able to provide funding (Graph 31).

Graph 31.

Would your SAI be interested in and have the means for sending its auditor(s) to an approximately 3-week training course? (% of SAIs, n=112)



Regions:

- AFROSAI:** A separate environmental auditing unit exists in four of the 21 SAIs. The proportion of environmental auditors in the SAIs' total workforce is 1-4%, 5-9% and more than 10% in an almost equal number of SAIs; most respondents stated that the level had remained unchanged since 2009. In the survey, seven SAIs reported that no auditors had been assigned to work on environment-related issues at that point. At the same time, an impressive 90% of SAIs reported having plans to increase the number of staff devoted to environmental auditing in the coming three years and 70% felt that the capacity needed for this already existed among SAI employees. In the region, auditors work mostly part-time on environmental audits and teams (per audit) consist most often of 1-4 people (in 38% of SAIs); in some SAIs they consist of more than 4 people. In approximately half of the SAIs, auditors have special environment-related education and/or previous working experience in the environmental sector. Financial audit and performance audit experience are other more often recurring types of competence. A lack of human resources was marked by many respondents (76%) as a barrier to environmental auditing; insufficient monitoring and reporting systems and lack of data came a close second. Training has been the main means of overcoming challenges (by 81%).

- ARABOSAI:** Two of the nine audit offices have a special environmental auditing division, and the proportion of staff conducting environmental audits is on average 1-4% or 5-9%. The number of environmental auditors remained stable in 67% of SAIs and increased in 33% from 2009-2011. Notably, all but one SAI stated that there would be additions to environmental auditing staff in the coming years. On average, more than 10 auditors have been involved in completing one environmental audit in 44% of SAIs, making audit teams relatively large compared to SAIs in other regions. In most SAIs, auditors carry out work on environmental issues alongside other responsibilities. Performance auditing experience is a prevalent competence of environmental auditors; in 50% of SAIs they have higher environment-focussed education and in 38% also working experience in the field. All respondents felt that insufficient monitoring and reporting systems and insufficient data were frequent barriers; 22% also indicated an inadequate mandate in this regard (a downward trend since 2009). Training appeared to be a response implemented by all since 2009.

- ASOSAI:** As many as 34% of respondents i.e. 11 SAIs have a separate unit devoted to environmental auditing. On the other hand, seven did not have auditors assigned to environmental audits at the time of the survey. In most SAIs, 1-4% of total staff are involved in environmental auditing – a stable level since 2009 in 62% of SAIs. In more than half of respondents' offices employees deal with environmental auditing mostly on a part-time basis. As the SAIs in the region range from considerably small to fairly large, results on an average team per audit also vary. 66% of respondents expected their SAI's amount of environmental auditors to increase in the next three years, while 81% perceived existing potential within their SAI. Competence-wise, SAIs most often mapped performance and compliance auditing experience as existing skills. 52% of SAIs have auditors with work experience in the environmental sector and those with specialised education in 39% of SAIs. A lack of skills or expertise was the main barrier to environmental auditing underscored by respondents in the survey, while an inadequate mandate has decreased in importance since 2009 (from 11 to three SAIs). To overcome challenges, training has been provided to staff in 78% of SAIs.

- **CAROSAI:** In interpreting survey results on capacity, the fact that only two of six respondents conducted environmental audits from 2009-2011 plays an important role. None of the region's SAIs have a special environmental auditing unit and no auditors were reported to be working on environmental audits at the time of the survey. Since the 6th Survey, little development has taken place in this regard. However, all respondents stated that plans were being made to recruit staff to launch or expand environmental auditing. Two SAIs regarded in-house capacity as being present in their office to this end, while one reported having employees who have worked in the field of the environment. In the environmental audits undertaken in the region since 2009, teams have consisted of 1-4 auditors. Lack of skills and expertise as well as a lack of human resources are the main barriers that SAIs have faced in regard to environmental auditing (83%); an inadequate mandate was indicated by two SAIs. Three have provided training to improve environmental auditing capacity, while other potential measures remain little used.
- **EUROSAI:** 38% of respondents (14 SAIs) informed that their office accommodated an environmental auditing unit. On average, 1-4% of staff were assigned to environmental issues and in 68% of respondents' offices the level of environmental auditors has remained fixed since 2009. To complete one environmental audit, 1-4 auditors on average were teamed up in 70% of SAIs. While 82% of respondents perceived additional capacity for environmental auditing within their SAI, only 30% plan to increase the number of auditors in the coming three years. Half of the SAIs have auditors with specialised environment-related education and work experience and, notably, in most audit offices performance auditing, financial, law-based and public administration competence are represented. Barriers to environmental auditing were identified relatively less often than by other regions' SAIs; insufficient monitoring and reporting systems emerged as most relevant (indicated by 59%).
- **OLACEFS:** As was the case in the 6th Survey, proportionally more SAIs (67%) have a separate environmental auditing unit compared to other regions. In 80% of respondents' offices, environmental auditors constitute 1-4% of total staff and the overall level has remained quite stable since 2009 (the same in 60% of SAIs; increased in 33% of SAIs). The sizes of audit teams vary across offices; employees dedicate 100% of their time to environmental issues in most SAIs. Positively, 67% of SAIs plan to increase the number of employees involved in conducting environmental audits in the next three years. Compared to other regions, proportionally more SAIs employ auditors with specialised education (73%) or work experience (67%) in the environmental sector. In terms of the competence of auditors, finance and public administration were mentioned in the survey more than audit-specific experience and knowledge. Insufficient data on the state of the environment remains one of the main challenges to environmental auditors (marked by 87%).
- **PASAI:** One of the nine respondents has an environmental auditing unit in its organisation structure. 44% of SAIs marked an increase in the number of employees working on environmental audits since 2009 and 67% expected the proportion to increase further in the coming years. Environmental auditors constitute a varying share of total staff across the respondents (for three SAIs it surpasses the level of 10%); they generally work either full-time (three SAIs) or part-time (two SAIs) on environmental audits. On average, 1-4 auditors have participated in carrying out one audit in nearly all SAIs. Compliance and performance auditing experience are the most often occurring types of competence. Two SAIs marked that they also had auditors with specialised education or previous work experience in the environmental field. 89% of respondents deemed a lack of skills and expertise as well as a lack of human resources as the main barriers to environmental auditing; an inadequate mandate was indicated by three SAIs. Training and benchmarking with international standards have been undertaken by 78% to overcome challenges.
- **USA and Canada:** No significant changes have occurred since 2009. Both SAIs have a separate unit assigned to environmental issues; environmental auditors account for more than 5% of total staff and they work, in general, full-time on environmental audits. Specific environment-related education is common among the environmental auditors of both offices and a variety of other types of competence exist (experience with different audit methods, finance, law and public administration). Respondents indicated such barriers as insufficient formulation of government environmental policy, insufficient monitoring and reporting systems and lack of data as those they had faced in performing environmental audits. Among other measures, both marked cooperation with universities or research institutions, agreeing upon performance criteria with auditees and benchmarking with international standards as ones they had taken to meet the challenges.

5

COOPERATION BETWEEN SAIS

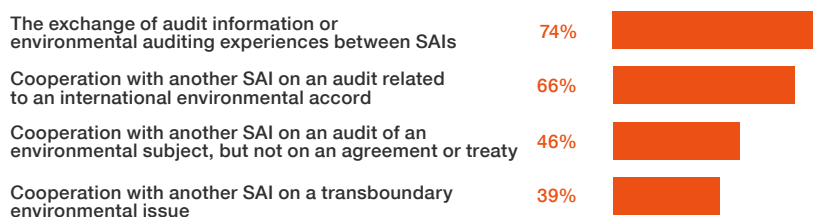
Building relationships with colleagues from other countries can have many benefits for SAIs. With the 7th Survey the tradition of investigating the extent and content of cooperative activities between SAIs was continued to identify the most prevalent trends and prospects.

66% of the SAIs that participated in the 7th Survey have cooperated with another SAI on environmental issues since 1 January 2009 (Graph 32). The intensity of mutual contact seems to be on the rise, as in 2009 half of the respondents had cooperation experience.

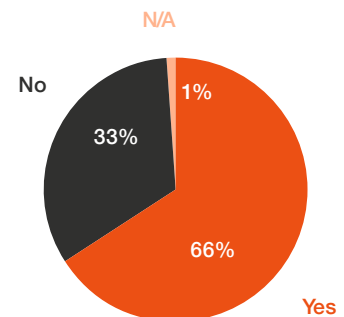
Frequently given reasons as to why 1/3rd of SAIs have not engaged in cooperative activities are a **lack of resources** (62%), a **lack of skills or expertise within the SAI** (51%) and a **lack of partners** (27%) (Graph 33). The proportion of SAIs highlighting a resource and skill shortage has nearly doubled since 2009.

SAIs have mostly engaged in an **exchange of audit information or environmental auditing experience between SAIs** (74%) and **cooperated with another SAI on an audit related to an international environmental accord** (66%) (Graph 34). These two areas of cooperation also topped the list in 2009.

Graph 34.
Please specify what types of cooperative activities your SAI has experienced since 1 January 2009 (% of SAIs who have had cooperation, n=74)



Graph 32.
Since 1 January 2009, has your SAI had any experience in cooperation with another SAI in environmental auditing issues? (% of SAIs, n=112)



Graph 33.
Could you please indicate reasons why your SAI has not been engaged in cooperative activities since 1 January 2009? (% of SAIs who have had no cooperation, n=37)



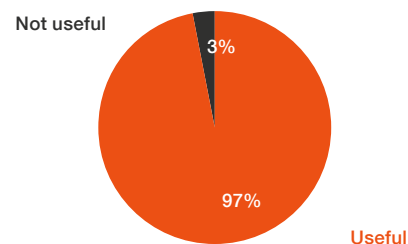
Nearly all SAIs (97%) regarded international cooperation as useful (Graph 35) and there have been no major changes since the previous survey in this respect. Exchanging knowledge was the main benefit SAIs (57) perceived as having gained from cooperation with colleagues from other countries. Benchmarking opportunities (12), improved capacity (9) and new perspectives (8) were other positive aspects of cooperation frequently listed.

Of the 112 respondents, 76% reported having been involved in the activities of the environmental auditing working group in their region (Graph 36). Similar to international cooperation in general, a lack of resources was indicated as the main reason for no contact with the regional working group. Several SAIs also remained unclear about the reasons.

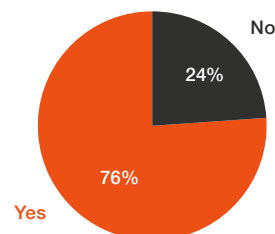
Regions

- AFROSAI:** 57% of respondents cooperated with another SAI on environmental auditing issues in the period from 2009-2011. The proportion of SAIs with cooperation experience is nearly the same as in the 6th Survey, but upon considering the 10 new responses from the region, it can be assumed that SAIs have become more active. Also as in the 6th Survey, exchange of audit information remains the main type of collaboration with international colleagues (75%) while cooperation on international environmental accords has increased in importance (five SAIs). 14 of the 21 SAIs stated that they had contact with the AFROSAI environmental auditing working group. A lack of resources was marked as the main reason for no external connections, and also for not participating in the activities of the regional working group.
- ARABOSAI:** Four SAIs reported having cooperated with another SAI since 2009, a slight increase since the last survey, when only two had had such experience. While the exchange of audit information is the main collaboration form for all these SAIs, 2 of them have also conducted a cooperative audit on an environmental issue with another SAI. No SAIs had cooperative audit experience in 2009. Lack of skills or expertise within SAIs continues to be a prominent barrier to international cooperation. A total of seven respondents have engaged in the activities of the ARABOSAI regional environmental working group.
- ASOSAI:** Contact between SAIs has become more frequent, with 56% of respondents (18 SAIs) indicating experience in international cooperation (33% in 2009). An increase has occurred in the case of cooperative audits on environmental issues: as many as 72% of SAIs reported having taking part in them. The exchange of audit information also remains as important. SAIs with no cooperation experience have been mainly restrained by scarce resources and a lack of skills or expertise. 72% of respondents have knowledge of and contact with the ASOSAI environmental auditing working group.
- CAROSAI:** One of the six respondents has experienced international cooperation – in the form of a cooperative audit on an environmental issue with another SAI and the exchange of information. Lack of skills or expertise and a lack of resources were recurring reasons marked by other SAIs as to why they had not collaborated with international colleagues. A regional environmental auditing working group has not yet been established in the CAROSAI region.
- EUROSAI:** Audit offices in the region have been very active in the international arena, with 81% of respondents having experience in cooperating on auditing environmental issues, and 97% being involved in the activities of the EUROSAI environmental auditing working group. Compared to the 6th Survey, the proportion of SAIs who have cooperated on an audit on an international environmental accord has risen notably (26 SAIs). Seven of the 37 respondents had not collaborated with colleagues from other audit offices mainly due to a lack of resources.

Graph 35.
Has the cooperation been useful for your SAI? (% of SAIs who have cooperated, n=74)



Graph 36.
Have you been involved in the activities of your Regional Working Group on Environmental Auditing (RWGEA)? (% of SAIs, n=112)



- **OLACEFS:** Nearly all (14 of 15) SAIs collaborated with other SAIs on environmental auditing in the period from 2009-2011. This is a marked increase compared to the previous survey (up from 43%). Cooperation on an audit of an international environmental accord and exchange of information and experience are the two prevailing activities in this respect. 80% of SAIs have participated in the work of the OLACEFS environmental auditing working group. One SAI lacks external cooperation experience due to a lack of resources.
- **PASAI:** SAIs in the region have broadened cooperation on environmental auditing with colleagues from other SAIs since 2009, with 78% of respondents indicating external contact (29% in the 6th Survey). Five SAIs have conducted an audit on an environmental subject in collaboration with other SAIs and seven have participated in the PASAI environmental auditing working group. A lack of resources, skills or expertise and partners were perceived as barriers to external cooperation by the two SAIs without experience.
- **USA and Canada:** Both SAIs have international cooperation experience ranging from the exchange of information to collaborative audits focussed on certain environmental topics, international environmental agreements and transboundary environmental issues.

6

WGEA PRODUCTS

NTOSAI in general and INTOSAI WGEA in particular strive to help build audit capacity in SAIs through best practice-based standards, guidance materials and knowledge exchange among its members. To receive feedback on the WGEA's work as well as for better planning of future activities, SAIs were asked about their awareness of and the applicability and usefulness of several WGEA products.

The website www.environmental-auditing.org remains the best-known and most utilized WGEA information source: 76% of SAIs stated that they had used it since 2009 (Graph 37). Other products available online, such as materials from WGEA meetings (63%), the 'Environmental Audits Worldwide' database (61%), the Greenlines newsletter (59%) and WGEA work plans (58%) are also popular. Website-based products seem to have progressively increased in importance since 2009, reflected also in the statistics on webpage visits from 2009-2011 which point to an upward trend.

Of the WGEA guidance materials, 'Towards Auditing Waste Management' (48%) and 'Cooperation between Supreme Audit Institutions: Tips and Examples for Cooperative Audits' (45%) have found most use in SAIs. Guidance materials on auditing biodiversity and sustainable development have, on the contrary, lessened in importance compared to the previous period.

Compared to the 6th Survey, the share of SAIs utilizing the WGEA's guidance materials has decreased somewhat overall, while the use of web-based products is continuously rising. This can at least partly be explained by the addition of many new respondents and respondents with little experience in the environmental auditing field – the website and shorter electronic materials may be easier to become acquainted with and do not necessarily call for in-depth scrutiny.






SAIs attributed the highest estimations generally to WGEA's guidance materials, the website www.environmental-auditing.org and training courses and seminars (Graph 38). Positively, average ratings of the importance and usefulness of all of the listed WGEA products surpassed the level of 'relatively important'.

54% of respondents expressed a specific interest in additional guidance materials on environmental auditing. A wide array of topics was offered, with waste- and water-related issues mentioned most often. SAIs also frequently recommended **climate change, energy, water and sustainable development as potential central themes for the WGEA's next work plan for 2014-2016.**

Graph 38.

Please rate ALL the following INTOSAI WGEA products and services listed below on a scale of 0-3 in the following way:

'3' very important/useful for my SAI;
'2' relatively important/useful for my SAI;
'1' not very important/useful for my SAI;
'0' not at all important/useful for my SAI
(average rating, n=112)

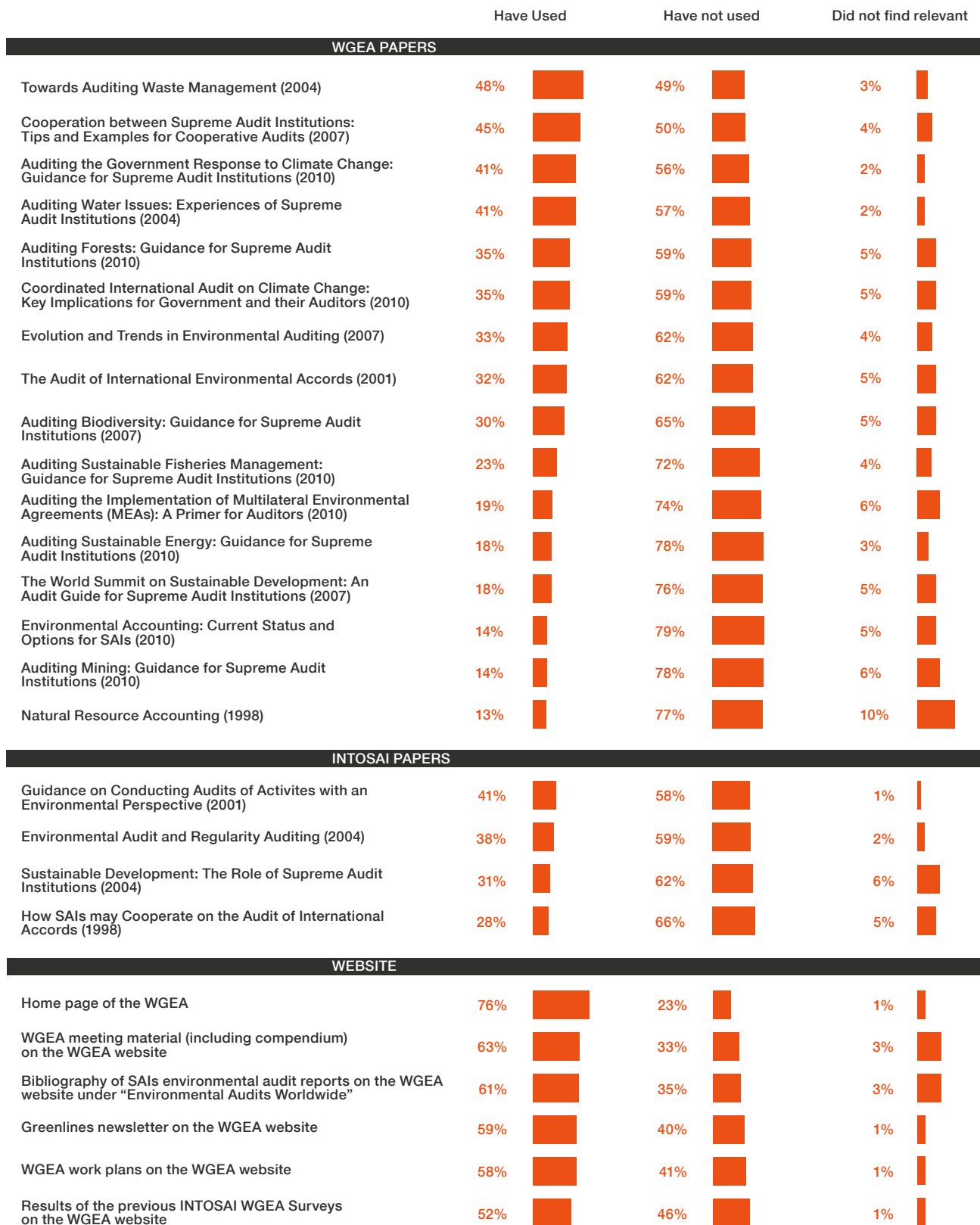
Greenlines newsletter	2.3	
Working Group meetings	2.6	
Training courses, seminars	2.7	
Website: www.environmental-auditing.org	2.7	
Guidance materials	2.7	

Graph 37.

Since 1 January 2009 has your SAI

A. not used B. used C. not found the product relevant in its work?

(% of SAIs, n=112)



Regions

- **AFROSAI:** 60% of SAIs have used the WGEA website, Greenlines newsletter, meeting materials and work plans. Guidelines on auditing waste management (55%) and forestry audit (50%) found most use in SAIs from 2009-2011. The respondents attributed slightly higher importance to WGEA's guidance materials, training courses and seminars than to other products.
- **ARABOSAI:** SAIs found the WGEA's paper on evolution and trends in environmental auditing (2007) most useful (67%); earlier guidance materials on auditing sustainable development, waste management and water issues also emerged as relatively important. 56% of SAIs have used the WGEA website and the results of previous survey reports. By type, SAIs regarded training courses and seminars as slightly more relevant than other products.
- **ASOSAI:** 75% of respondents said that they had used the WGEA website, which they regarded as relatively more important than other materials and activities. Of the guidance materials, those on cooperation between SAIs, auditing waste management and water issues found the most use, in 50% of SAIs from 2009-2011.
- **CAROSAI:** While 67% of SAIs reported having used the WGEA website and half that they had used particular documents such as meeting materials and survey results; few were familiar with guidance materials (not many environmental audits have been conducted). The guidance paper on auditing waste management has been used the most, by two SAIs. As an indicator of future plans in the environmental auditing field, all six respondents deemed the WGEA's guidance materials, website, training courses and seminar and meetings as very important to their SAIs.
- **EUROSAI:** WGEA's guidance paper on cooperation between SAIs have been used by 62% of SAIs since 2009, followed in popularity by recent (2010) guidance materials on auditing governments' responses to climate change (59%). An impressive 92% of respondents have used the WGEA website, which was also deemed a prominent information source by SAIs by product type in the survey. The global database of environmental audits is relatively important in EUROSAI, being utilized by 81% of SAIs.
- **OLACEFS:** Since 2009, 60% or more of SAIs have used WGEA's recent guidance paper and global coordinated audit on the topic of climate change in their work. The WGEA website has been utilized by 73% of respondents. All 15 respondents attributed the highest rating – "a WGEA product very important to my SAI" – to the WGEA's guidance documents.
- **PASAI:** While not many SAIs reported having used the WGEA's guidance materials from 2009-2011, those on fisheries and water issues had been used in six audit offices (67%). Auditing guidance also received a higher rating from the respondents than other WGEA products. Six of the nine SAIs have also used the WGEA website.
- **USA and Canada:** From 2009-2011 both SAIs considered the WGEA's guidance papers on auditing climate change, multilateral environmental agreements, cooperation between SAIs, waste management and the WGEA's global audit on climate change in their work. The WGEA website was equally relevant. By product type, respondents attributed higher ratings to the website, the WGEA's meetings and the Greenlines newsletter.

A

Appendices

DATA AND METHODOLOGY

Prior to the launch of the 7th Survey, the previous questionnaire was examined and modifications made where considered necessary. For the most part the questions remained the same, so as to track trends and developments since 2009. Several new questions were added to either specify the information collected or examine novel aspects of potential interest to report readers.

The questionnaire, in MS Word format, was e-mailed to all 190 INTOSAI members in February 2012. A hard copy was selectively mailed to audit offices who had not responded to the 6th Survey in order to reach the maximum number of SAIs. The survey contained 50 questions (see Appendix B) and was available in Arabic, English, French and Spanish. SAIs had the opportunity to respond electronically, by fax or on paper. Additionally, the questionnaire was also available online (in English), hosted by a special environment provided by the National Audit Office of Estonia. Responses were collected until mid-June 2012.

Table 1.

	Number of responses					Response rates			
	2000	2003	2006	2009	2011	2009		2011	
						INTOSAI population	Response rate	INTOSAI population	Response rate
AFROSAI	21	17	22	11	21	51	22%	49**	43%
ARABOSAI	17	9	12	15	9	22	68%	22	41%
ASOSAI	25	31	32	33	33	45	73%	45	73%
CAROSAI	8	8	6	5	6	22	23%	15**	40%
EUROSAI	34	39	39	38	40	50	76%	50	80%
OLACEFS	13	14	14	14	17	22	64%	22	77%
PASAI	6	8	6	7	9	25	28%	15**	60%
Other	4	2	5	2	2	2	100%	2	100%
Total	110*	114*	119*	125*	137*	239*	57%	220	62%

* Because some INTOSAI members are affiliated with more than one region, the sum of respondents exceeds the total of respondents.
 ** Only SAIs who are members of INTOSAI are included in the regional populations (in some regions, non-member audit offices also take part in the regional working group's work).

Compared to the 6th Survey, the composition of respondents has somewhat changed (see Appendix D). The proportion of 'core countries', i.e. SAls who also participated in the 6th Survey, constitutes 52% in the case of AFROSAl, 100% in that of ARABOSAl, 70% in that of ASOSAl, 67% in that of CAROSAl, 87% in that of EUROSAl, 71% in that of OLACEFS and 56% in that of PASAl in the total of 7th Survey responses submitted. The total overlap is 71%. At the same time, 30 SAls who participated in the 6th Survey did not take part this time.

SPSS and Microsoft Excel were used for data processing and the quantitative results were complemented by qualitative analysis presented in the report text. It was acknowledged that the respondents were not identical to those of the last survey, but for the sake of the report's legibility and clarity, detailed interpretations in this respect were avoided. Rather, appropriate reservations are presented in places where they appeared relevant in the course of data analysis.

B

SURVEY QUESTIONNAIRE

Introduction

In the context of this survey, by environmental audit we mean financial, compliance and performance audit that evaluates and gives opinions on environment-related matters.

Auditing mandate

Q1

Does your SAI have a legislative mandate to audit environmental issues in ...?

		Yes	No
1	Financial audits	[]	[]
2	Compliance audits	[]	[]
3	Performance audits (value-for-money)	[]	[]
4	Priori audits (for example, audits in advance of expenditures)	[]	[]

Q2

Does your SAI's legislative mandate refer specifically to environmental auditing?

- [] Yes
[] No

Q3

What level of access does your SAI's mandate give to undertake environmental auditing of the following governmental and nongovernmental organisations? Please select one access option per line.

		Full Access	PartialAccess	No Access
1	The national government	[]	[]	[]
2	Provincial, regional, or state governments	[]	[]	[]
3	Local, municipal, or community governing bodies	[]	[]	[]
4	State-owned enterprises or state-owned companies	[]	[]	[]
5	Semi-governmental organisations (autonomous organizations with government appointed management)	[]	[]	[]
6	Non-governmental public enterprises or organisations	[]	[]	[]
7	Private sector enterprises or organisations	[]	[]	[]

Q4

Has your SAI's environmental auditing mandate changed since 1 January 2009?

- [] Yes
[] No

IF Q4=YES**Q5**

Please specify how the environmental auditing mandate of your SAI has changed since 1 January 2009.

40

Environmental Audits**Q6**

Which of the following types of environmental audit has your SAI conducted since 1 January 2009?

		Yes	No
1	Financial audits	[]	[]
2	Compliance audits	[]	[]
3	Performance audits (value-for-money)	[]	[]
4	Priori audits (for example, audits in advance of expenditures)	[]	[]

Q7

Please indicate the number of audits your SAI has completed related to environmental matters since 1 January 2009. If none, please mark 0.*

- [] number of financial audits conducted related to environmental matters
[] number of compliance audits conducted related to environmental matters
[] number of performance audits conducted related to environmental matters
[] number of non-environmental audits where environmental issues were considered

* SAIs are encouraged to check information on their audits on the WGEA's website www.environmental-auditing.org, in the "Environmental Audits Worldwide" section and send information regarding environmental audits that are not in the database to the WGEA's Secretariat

Q8

Since 1 January 2009, has the total number of environmental audits conducted in your SAI compared to previous period ...?

- [] ... increased
[] ... remained the same
[] ... decreased

Q9

How does your SAI plan to change the volume of conducting environmental audits in the next three years?

- [] increase
[] remain the same
[] decrease

Q10

Please rate ALL the potential objectives of environmental audits listed below according to how they have been used by your SAI since 1 January 2009 in a following way:

“3” – objective always considered

“2” – objective often considered

“1” – objective rarely considered

“0” – objective not considered

Audit objectives	Rating
Fair presentation of financial statements and expenditures	[] []
Compliance with international environmental agreements and treaties	[] []
Compliance with domestic environmental legislation	[] []
Compliance with domestic environmental policies	[] []
Performance of government environmental policies	[] []
Performance of government environmental programs	[] []
Environmental impacts of non-environmental government programs	[] []
Evaluation of environmental impacts of proposed environmental policies and programs	[] []

Q11

In the table below, a list of environmental issues is presented in 6 main themes.

Q11a

What does your SAI consider to be the five (5) most important environmental issues facing your country? In the column 11a, please mark with “1” the most important issue, with “2” the second most important issue, etc., until you have 5 issues marked per entire table.

Q11b

In the column 11b, please tick all the topics your SAI has ever audited. Tick all topics from the list that apply.

Q11c

In the column 11c, please tick which of the topics your SAI intends to audit in the next three years. Tick all topics from the list that apply.

		11a Priority rating	11b Audited my SAI	11b Planned to audit
Natural resources	minerals, such as mining, gas and oil	[] []	[] []	[] []
	forestry and timber resources	[] []	[] []	[] []
	fisheries (freshwater and marine)	[] []	[] []	[] []
Water	drinking water: quality and supply	[] []	[] []	[] []
	pollution of water bodies through industrial and agricultural sources	[] []	[] []	[] []
	wastewater treatment	[] []	[] []	[] []
	acidification	[] []	[] []	[] []
	water quantity management or management of watersheds	[] []	[] []	[] []
	marine pollution	[] []	[] []	[] []

Air and atmosphere	climate change mitigation	[]	[]	[]
	climate change adaptation	[]	[]	[]
	stratospheric ozone layer depletion	[]	[]	[]
	acid precipitation	[]	[]	[]
	local air quality, such as smog, particulates, SO ₂ , NO _x and CO ₂	[]	[]	[]
	indoor air quality	[]	[]	[]
	toxic air pollutants, such as organic POPs, dioxins, furans	[]	[]	[]
Waste	general waste	[]	[]	[]
	hazardous waste	[]	[]	[]
	municipal, solid and non-hazardous waste	[]	[]	[]
	radioactive waste	[]	[]	[]
	contaminated sites and soil pollution	[]	[]	[]
	medical waste	[]	[]	[]
Ecosystems	biodiversity	[]	[]	[]
	protected areas and natural parks	[]	[]	[]
	ecosystem management and ecosystem changes	[]	[]	[]
	species at risk	[]	[]	[]
	wetlands	[]	[]	[]
	rivers and lakes	[]	[]	[]
	protection of marine habitat	[]	[]	[]
	coastal areas	[]	[]	[]
Human activities and sectors	agriculture	[]	[]	[]
	land development	[]	[]	[]
	land regeneration	[]	[]	[]
	energy and energy efficiency	[]	[]	[]
	natural disaster management: preparedness responses	[]	[]	[]
	transportation, traffic and mobility	[]	[]	[]
	recreation and tourism	[]	[]	[]
	cultural heritage	[]	[]	[]
	urban environment quality (sustainability)	[]	[]	[]
	biosafety and genetically modified organisms (GMOs)	[]	[]	[]
	chemicals management	[]	[]	[]
	pesticides	[]	[]	[]
	environment and human health	[]	[]	[]
	infrastructure	[]	[]	[]
	environmental financing	[]	[]	[]
	environmental taxation	[]	[]	[]
Other (please name):	[]	[]	[]	

Q12

Please mark the international environmental agreements or treaties your SAI

A. has audited since 1 January 2009 and B. plans to audit in the next three years.

		A Audited	B Plan to audit
Nature conservation and biodiversity	The Ramsar Convention on Wetlands	[]	[]
	Convention on Trade of Endangered Species (CITES)	[]	[]
	Convention on the Conservation of Migratory Species of Wild Animals (CMS or Bonn Convention)	[]	[]
	Convention on Biological Diversity (CBD)	[]	[]
	International Tropical Timber Agreement (ITTA)	[]	[]
	Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (UNCCD)	[]	[]
	Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention)	[]	[]
	Inter-American Convention for the Protection and Conservation of Sea Turtles	[]	[]
	International Plant Protection Convention (IPPC)	[]	[]
	International Treaty on Plant Genetic Resources for Food and Agriculture	[]	[]
Atmosphere and climate change	Convention on Access to Environmental Information, Public Participation in Environmental Decision-making and Access to Justice (Aarhus Convention)	[]	[]
	Convention for the Protection of the Ozone Layer (Vienna Convention)	[]	[]
	Montreal Protocol on Substances that Deplete the Ozone Layer	[]	[]
Hazardous materials, waste, chemicals	United Nations Framework Convention on Climate Change (UNFCCC)	[]	[]
	Protocol to the UNFCCC (Kyoto Protocol)	[]	[]
	Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention)	[]	[]
	Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides on International Trade (Rotterdam Convention, PIC)	[]	[]
Marine and freshwater	Convention on Persistent Organic Pollutants (Stockholm Convention or POPs)	[]	[]
	Protocol on Biosafety to the Convention on Biological Diversity (Cartagena Protocol)	[]	[]
	United Nations Convention on the Law of the Sea (UNCLOS)	[]	[]
	The United Nations Agreement for the Implementation of the Provisions of the UNCLOS relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UN Fish Stocks Agreement)	[]	[]
	International Convention for the Prevention of Pollution from Ships (MARPOL)	[]	[]
	International Convention for the Regulation of Whaling (Whaling Convention)	[]	[]

	Regional Seas Conventions and Action Plans (UNEP Regional Seas Programme)	[]	[]
	Convention on the Protection of the Black Sea Against Pollution (Bucharest Convention)	[]	[]
Marine and freshwater	Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention)	[]	[]
	Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR)	[]	[]
	Convention on Cooperation for the Protection and Sustainable Use of the Danube River	[]	[]
Other(s) (please name):	[]	[]	
	Our SAI has not audited any international environmental agreements or treaties since 1 January 2009 nor plans to do so in the next three years	[]	[]

Q13

Since 1 January 2009, has your SAI started or completed audits of your country's progress in sustainable development*?

- [] Yes
[] No

*By sustainable development we mean development that integrates social, environmental and economic objectives.

IF Q13=YES**Q14**

Please list up to three most important audit(s) your SAI has conducted on the topic of sustainable development since 1 January 2009.

Q15

Has your SAI used any innovative methodologies for conducting environmental audits? Please describe your best practices.

Q16

Please evaluate whether there is a need in your SAI for developing the environmental auditing practice and/or resources. In the following table there are possible developments of environmental auditing listed. Taking the perspective of next three years, please mark:

A. developments that you regard as necessary in your SAI and

B. developments you have already planned in your SAI. Mark all that apply.

		A. Necessary	B. Planned
1	Creation of an environmental unit within our SAI	[]	[]
2	Creation of a pool of environmental auditors	[]	[]
3	Integration of environmental issues in other audits	[]	[]
4	Training in environmental issues	[]	[]
5	Training in environmental auditing	[]	[]

6	Development of environmental performance indicators in audits	[]	[]
7	More attention to quality and reliability of information	[]	[]
8	More measurement of effectiveness of policy	[]	[]
9	Evaluation of the impact of work and ways to improve the impact	[]	[]
10	Development of new products that are not environmental audits	[]	[]
11	Exchange of knowledge with other SAIs	[]	[]
12	External expert advice	[]	[]
13	Peer review by other SAIs	[]	[]
14	Evaluation by external experts (for instance, universities)	[]	[]
15	Other, please specify:	[]	[]
16	Our SAI does not anticipate any special developments regarding environmental auditing in the next three years	[]	[]

The impact of environmental audits

Q17

How does your SAI measure the impact of your environmental audits? Mark all that apply.

- Parliamentary hearings
- Media coverage
- Follow-up audit
- Monitor the implementation of recommendations/audit findings (e.g. letter, interview, survey)
- Government response to audit recommendations
- Our SAI does not measure impact of environmental audits
- Any other method:

Q18

What are the main challenges your SAI has faced in measuring the impact of environmental audits?

Q19

Do the recommendations made by your SAI in environmental audits usually include specific conditions?

Mark all that apply.

- Deadline set for carrying out recommended actions
- Responsible institution(s)
- Other (please specify)
- No specific conditions
- Our SAI does not make recommendations in environmental audits

Q20

How does your SAI track the implementation of the recommendations of environmental audits?

- Follow-up survey
- Follow-up audit
- Implementation is not followed up
- Our SAI does not make recommendations in environmental audits
- Other (please specify):

Q21

Please assess what level of impact the environmental audits conducted by your SAI have had in helping government departments to....?

		No impact	Low impact	Medium impact	High impact
1	formulate environmental legislation or environmental policies and programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	evaluate their capacity to develop and implement environmental policies or programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	improve the functioning of policies and programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	generate their environmental indicators, performance measures, monitoring systems, or other policy information to evaluate environmental policy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	develop their environmental management systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	produce their environmental reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q22

In your experience, what methods/activities have helped most to increase the impact of environmental audits conducted in your SAI? Please describe your best practices.

Q23

How does your SAI usually communicate the results of environmental audits (mark all that apply)?

- Distribution of a printed version of audit report
- Full audit report made public in the Web
- Only audit report summary made public in the Web
- Press releases
- Briefings for journalists
- Articles in printed media (by the SAI)
- Radio/TV appearances
- Booklet with audit results
- Audit reports published in social networks (such as Facebook, Twitter etc.)
- Audit reports obtainable upon request (not distributed otherwise)
- No parts of audit reports are made public
- Other (please specify):

Q24

Please assess whether communicating the results of environmental audits has helped your SAI to increase the impact of these audits?

- Yes, significantly
- Yes, somewhat
- No
- Audit reports are not published

Environmental auditing capacity**Q25**

Does your SAI have a specific department or section working full time on environmental audits?

- Yes
- No

Q26

How many auditors* are involved with environmental auditing in your SAI? If none, please mark 0.

- auditors are working full time on environmental audits.
- auditors are working part time on environmental audits.
- auditors are not currently working on environmental audits, but have the capacity to do so.
- is the total number of employees in my SAI.

* In this questionnaire the word "auditor" stands for employees who are directly involved in performing environmental audits.

Q27

Since 1 January 2009, on average, how many employees are involved in an audit team conducting one environmental audit in your SAI? If none, please mark 0.

- auditor(s)
- other employees*

By "other employees" we mean employees who are not auditors, but who contribute significantly to the audit process (e.g. internal experts, engineers, apprentices, supportive staff).

Q28

Since 1 January 2009, has the share of auditors working on environmental audits changed in your SAI?

Has the share ...?

- increased
- remained the same
- decreased

Q29

How does your SAI plan to change the number of auditors involved in conducting environmental audits in the next three years?

- increase
- remain the same
- decrease

Q30

How many employees working on environmental audit in your SAI have an educational background or previous working experience in the field of environment?

- [] auditor(s) have specialised education (BA or higher) in the field of environment (environmental studies, natural sciences etc.)
- [] auditor(s) have no specialised education but have previous working experience in the field of environment (environmental protection, inspection work etc.)

Q31

Overall, which of the other competencies are covered in your SAI by the employees working on environmental audits?

- [] financial auditing experience
- [] compliance auditing experience
- [] performance auditing experience
- [] finance (e.g. experience/knowledge of accounting, taxation, financial analysis)
- [] law (e.g. experience/knowledge of public law, business law, environmental law)
- [] public administration and management (knowledge of the system and operations of the government)
- [] other(s) (please specify):

Q32

Which of the following barriers has your SAI experienced in executing environmental audits since 1 January 2009?

		Yes	No
1	Inadequate SAI mandate	[]	[]
2	Lack of skills or expertise within the SAI	[]	[]
3	Lack of human resources	[]	[]
4	Insufficient formulation of government environmental policy, such as goals that are not measurable, absence of a strategy, or insufficient regulatory framework	[]	[]
5	Lack of environmental programmes	[]	[]
6	Lack of established environmental norms and standards	[]	[]
7	Insufficient monitoring and reporting systems	[]	[]
8	Insufficient data on the state of the environment	[]	[]
9	Lack of technical resources (e.g. insufficient equipment, poor Internet connection etc.)	[]	[]
10	Other(s) (please specify):	[]	[]

Q33

Which of the following measures did your SAI take to attempt to overcome the barriers?

- [] modified SAI's mandate
- [] trained SAI's staff
- [] engaged subject matter experts
- [] collected environmental data directly from the field
- [] used environmental standards of an international organisation
- [] cooperated with universities or research institutes
- [] developed performance indicators
- [] agreed performance criteria with auditee
- [] used benchmarking with international/other countries standards
- [] used services provided by the Regional Working Group on Environmental Auditing (RWGEA)
- [] other(s) (please specify):

Q34

What kind of training has your SAI provided for auditors conducting environmental audits since 1 January 2009?

Q35

INTOSAI WGEA is developing a training course on environmental auditing in cooperation with the SAI of India, to be first delivered in 2013 in Jaipur, India.

Would your SAI be interested in and have the means for sending its auditor(s) to an approximately 3-week training course?

- [] Yes
- [] Interested to participate, but without financial means to do so
- [] No (please specify, why):

Cooperation between SAIs

Q36

Since 1 January 2009, has your SAI had any experience in cooperation with another SAI in environmental auditing issues?

- [] Yes
- [] No

IF Q36=NO**Q37**

Could you please indicate reasons why your SAI has not been engaged in cooperative audits since 1 January 2009? Mark all that apply.

- [] lack of interest in our SAI
- [] lack of resources
- [] inadequate SAI mandate
- [] lack of skill or expertise within the SAI
- [] lack of partners
- [] no perceived need for cooperation
- [] other, please specify:

IF Q36=YES**Q38**

Please specify what types of cooperative activities your SAI has experienced since 1 January 2009.

		Yes	No
1	Cooperation with another SAI on an audit related to an international environmental accord (including treaties, international agreements, obligations, or commitments)	[]	[]
2	Cooperation with another SAI on an audit of an environmental subject, but not on an agreement or treaty	[]	[]
3	Cooperation with another SAI on a transboundary environmental issue	[]	[]
4	The exchange of audit information or environmental auditing experiences between SAIs	[]	[]

IF Q36=YES

Q39

Has the cooperation been useful for your SAI?

[] Yes

[] No

Q40

Please indicate the reasons for the cooperation having been useful or not useful.

WGEA and INTOSAI products

Q41

In the following table WGEA products are listed. Since 1 January 2009, has your SAI

A. not used B. used C. not found the product relevant in its work? Tick answer per each product.

	Product	A. Have not used	B. Have used	C. Did not find relevant
1	WGEA Paper - Auditing the Government Response to Climate Change: Guidance for Supreme Audit Institutions (2010)	[]	[]	[]
2	WGEA Paper - Environmental Accounting: Current Status and Options for SAIs (2010)	[]	[]	[]
3	WGEA and UNEP Paper - Auditing the Implementation of Multilateral Environmental Agreements (MEAs): A Primer for Auditors (2010)	[]	[]	[]
4	WGEA Paper - Auditing Sustainable Fisheries Management: Guidance for Supreme Audit Institutions (2010)	[]	[]	[]
5	WGEA Paper - Auditing Sustainable Energy: Guidance for Supreme Audit Institutions (2010)	[]	[]	[]
6	WGEA Paper - Auditing Mining: Guidance for Supreme Audit Institutions (2010)	[]	[]	[]
7	WGEA Paper - Auditing Forests: Guidance for Supreme Audit Institutions (2010)	[]	[]	[]
8	WGEA coordinated audit – Coordinated International Audit on Climate Change: Key Implications for Governments and their Auditors (2010)	[]	[]	[]
9	WGEA Paper – Auditing Biodiversity: Guidance for Supreme Audit Institutions (2007)	[]	[]	[]
10	WGEA Paper – The World Summit on Sustainable Development: An Audit Guide for Supreme Audit Institutions (2007)	[]	[]	[]
11	WGEA Paper – Evolution and Trends in Environmental Auditing (2007)	[]	[]	[]
12	WGEA Paper - Cooperation between Supreme Audit Institutions: Tips and Examples for Cooperative Audits (2007)	[]	[]	[]
13	INTOSAI Paper – Sustainable Development: The Role of Supreme Audit Institutions (2004)	[]	[]	[]
14	INTOSAI Paper – Environmental Audit and Regularity Auditing (2004)	[]	[]	[]
15	WGEA Paper – Towards Auditing Waste Management (2004)	[]	[]	[]

	Product	A. Have not used	B. Have used	C. Did not find relevant
16	WGEA Paper – Auditing Water Issues: Experiences of Supreme Audit Institutions (2004)	[]	[]	[]
17	INTOSAI Paper – Guidance on Conducting Audits of Activities with an Environmental Perspective (2001)	[]	[]	[]
18	INTOSAI Paper – The Audit of International Environmental Accords (2001)	[]	[]	[]
19	INTOSAI Paper – How SAIs may Cooperate on the Audit of International Accords (1998)	[]	[]	[]
20	INTOSAI Paper – Natural Resource Accounting (1998)	[]	[]	[]
21	Home page of the WGEA website	[]	[]	[]
22	Bibliography of SAIs environmental audit reports on the WGEA website under "Environmental Audits Worldwide"	[]	[]	[]
23	Greenlines newsletter on the WGEA website	[]	[]	[]
24	WGEA meeting material (including compendium) on the WGEA website	[]	[]	[]
25	WGEA work plans on the WGEA website	[]	[]	[]
26	Results of the previous INTOSAI WGEA Surveys on the WGEA website	[]	[]	[]

Q42

Please rate ALL the following INTOSAI WGEA products and services listed below on a scale of 0-3 in the following way:

“3” very important/useful for my SAI

“2” relatively important/useful for my SAI

“1” not very important/useful for my SAI

“0” not at all important/useful for my SAI

	Product/Service	Rating
1	Guidance materials	[]
2	Website: www.environmental-auditing.org	[]
3	Training courses, seminars	[]
4	Working Group meetings	[]
5	Greenlines newsletter	[]
6	Other, please specify:	[]

Q43

Would your SAI be interested in additional INTOSAI WGEA guidance materials or studies on environmental auditing? Please specify the most interesting topic(s).

Q44

What do you recommend to be the main theme of the 2014-2016 WGEA work plan*? Please explain your choice.

*This information will help us to build the 2014-2016 INTOSAI WGEA work plan. You can consult the current work plan on our website under WGEA Activities-Work Plan

Q43

Have you been involved in the activities of your Regional Working Group on Environmental Auditing (RWGEA)*?

[] Yes

[] No

* A regional Working Group on Environmental Auditing is established in six of the seven INTOSAI regions. The regional coordinating SAIs are Tanzania (AFROSAI WGEA), Egypt (ARABOSAI WGEA), People's Republic of China (ASOSAI WGEA), Norway (EUROSAI WGEA), Argentina (OLACEFS WGEA), and New Zealand (ACAG/PASAI WGEA).

IFQ46=NO**Q47**

Please explain the reasons for not being engaged with the RWGEA of your region.

Q48

Are there any specific products or services that you would expect that your RWGEA could provide in the future?

Q49

Would you like to add any additional comments to the 7th Survey for the INTOSAI WGEA?
Would you like to ask something or provide comments to the WGEA secretariat?

Q50

Please provide contact information for the official(s) completing this survey.
We will use this information only to clarify responses, if required.

Country

Name

Position

E-mail

Phone

Fax

This was our last question. We highly appreciate the time and effort you and your SAI contributed to filling in the survey form. Thank you!



DETAILED RESULTS IN TABLE FORMAT

Q1 (Graph 1).

Does your SAI have a legislative mandate to audit environmental issues in ...?

		Region								
		EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
		%	%	%	%	%	%	%	%	%
Financial audits	Yes	95%	84%	95%	87%	78%	67%	67%	100%	88%
	No	5%	16%	5%	13%	22%	33%	33%		12%
	N/A									
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%
Compliance audits	Yes	97%	91%	100%	87%	100%	67%	67%	100%	91%
	No	3%	9%		13%		33%	33%		9%
	N/A									
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%
Performance audits (value-for-money)	Yes	100%	94%	100%	93%	100%	67%	78%	100%	94%
	No		6%		7%		33%	22%		6%
	N/A									
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%
Prior audits (for example, audits in advance of expenditures)	Yes	41%	34%	19%	40%	33%	33%	11%	50%	32%
	No	59%	63%	81%	60%	56%	67%	89%	50%	67%
	N/A		3%			11%				1%
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%

Q2 (Graph 2).

Does your SAI's legislative mandate refer specifically to environmental auditing?

		Region								
		EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
		%	%	%	%	%	%	%	%	%
Does your SAI's legislative mandate refer specifically to environmental auditing?	Yes	14%	12%	33%	33%	22%		11%	50%	19%
	No	86%	88%	67%	67%	78%	100%	89%	50%	81%
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%

Q10 (Graph 8).

Please rate all the potential objectives of environmental audits listed below according to how they have been used by your SAI since 1 January 2009 in a following way: “3” – objective always considered; “2” – objective often considered; “1” – objective rarely considered; “0” – objective not considered.

	Region								
	EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
	rating	rating	rating	rating	rating	rating	rating	rating	rating
Fair presentation of financial statements and expenditures	2.2	1.8	1.5	1.0	2.0	0.5	1.8	0.5	1.7
Compliance with international environmental agreements and treaties	2.2	2.1	2.2	2.1	2.1	1.5	2.4	1.5	2.2
Compliance with domestic environmental legislation	2.6	2.6	2.5	2.9	2.5	2.0	2.5	2.5	2.6
Compliance with domestic environmental policies	2.4	2.5	2.7	2.5	2.5	2.0	2.5	2.0	2.5
Performance of government environmental policies	2.3	2.3	2.3	1.7	2.3	1.0	2.5	2.5	2.2
Performance of government environmental programs	2.3	2.3	2.2	2.0	1.9	1.0	2.5	2.5	2.2
Environmental impacts of non-environmental government programs	1.1	1.4	1.4	0.9	1.6	0.0	1.4	2.0	1.2
Evaluation of environmental impacts of proposed environmental policies and programs	1.3	1.2	1.4	1.2	1.4	1.0	1.3	1.0	1.2
TOTAL-AVERAGE	2.0	2.0	2.0	1.8	2.0	1.1	2.1	1.8	2.0

Q11a (Graph 9).

What does your SAI consider to be the five (5) most important environmental issues facing your country?

	Region								
	EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
	%	%	%	%	%	%	%	%	%
drinking water - quality and supply	19%	25%	67%	53%	33%	50%	67%		38%
pollution of water bodies through industrial and agricultural sources	19%	28%	5%	20%			22%	50%	19%
wastewater treatment	14%	19%	10%	40%	22%				15%
acidification									
water quantity management or management of watersheds	27%	25%	5%	27%	33%	17%	11%	50%	20%
marine pollution	14%	9%			22%		11%		7%
other water issues									
climate change									
stratospheric ozone layer depletion	3%	3%		7%					3%
acid precipitation									
local air quality, such as smog, particulates, SO ₂ , NO _x and CO ₂	11%	22%		7%	44%				11%
indoor air quality			5%						1%
toxic air pollutants, such as organic POPs, dioxins and furans	3%	3%						50%	2%
other air issues									
general waste	27%	16%	38%	13%	33%	17%	11%		22%

hazardous waste	16%	16%	5%		33%				10%
municipal, solid and non-hazardous waste	22%	19%	48%	47%	11%	50%	22%		31%
radioactive waste	14%	3%			11%				5%
contaminated sites and soil pollution	3%	6%		13%	11%				4%
other waste issues									
minerals, such as mining, gas and oil	11%	31%	33%	47%	33%	17%	22%		26%
forestry and timber	16%	44%	29%	47%		33%	22%		30%
fisheries (freshwater and marine)	16%	13%	19%	7%		33%	44%		16%
other natural resources issues									
biodiversity	22%	16%	19%	13%	22%	17%	33%	50%	20%
protected areas and natural parks	16%	19%	24%	27%		17%	11%		19%
ecosystem management and ecosystem changes	11%	3%	5%	20%				50%	9%
species at risk	3%	3%		20%					4%
wetlands	3%	3%		7%	11%				3%
rivers and lakes	5%	6%	10%	7%					6%
protection of marine habitat	5%	3%							3%
coastal areas						33%			2%
other ecosystem issues									
agriculture	19%	16%	33%	7%	22%	33%	22%		20%
land development	3%	9%	14%	13%	22%				7%
energy and energy efficiency	41%	6%	10%	33%	22%				21%
natural disaster management - preparedness, responses	14%	9%	14%	7%		50%	44%		16%
transportation, traffic and mobility	14%	6%	5%	20%	11%	17%	22%		11%
recreation and tourism	5%	3%	19%						5%
cultural heritage	3%			7%					2%
urban environment quality (sustainability)	3%	9%		7%	22%		11%		5%
biosafety and genetically modified organisms (GMOs)									
chemicals management	5%		5%	7%				50%	4%
pesticides									
environment and human health	3%	9%	14%	13%	11%		22%	50%	10%
infrastructure	14%	16%		7%			22%		10%
other human activities /sectors									
pesticides	3%	3%							1%
medical waste	5%	6%	14%	7%	11%				7%
land regeneration	3%	3%					11%		2%
environmental taxation	5%	3%			11%			50%	4%
environmental financing	11%		10%	7%				100%	8%
climate change mitigation	32%	25%	19%	13%	11%	33%	22%	50%	24%
climate change adaption	22%	22%	24%	13%	11%		44%	50%	22%

Q11b (Graph 10).

Please tick all the topics your SAI has ever audited

	Region								
	EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
	%	%	%	%	%	%	%	%	%
minerals, such as mining, gas and oil	32%	28%	14%	47%	44%		11%	100%	29%
forestry and timber	57%	53%	38%	67%	11%	17%	11%	100%	50%
fisheries (freshwater and marine)	54%	25%	24%	27%	22%		78%	100%	38%
drinking water - quality and supply	49%	47%	43%	47%	22%		67%	100%	47%
pollution of water bodies through industrial and agricultural sources	49%	47%	14%	53%	44%		22%	100%	38%
wastewater treatment	46%	44%	19%	53%	44%		22%	100%	38%
acidification			5%	7%	11%		11%	100%	4%
water quantity management or management of watersheds	46%	41%	5%	33%	22%		22%	100%	31%
marine pollution	49%	28%	10%	20%	44%		11%	100%	29%
climate change mitigation	62%	19%	19%	47%	22%		22%	100%	36%
climate change adaption	27%	9%	19%	53%	11%		22%	100%	24%
stratospheric ozone layer depletion	11%	3%	5%	13%	11%		11%	100%	10%
acid precipitation	8%		5%	7%	11%		11%	100%	7%
local air quality, such as smog, particulates, SO2, NOx and CO2	32%	31%	10%	27%	56%		22%	100%	29%
indoor air quality	3%	6%	10%		33%		11%	50%	6%
toxic air pollutants, such as organic POPs, dioxins and furans	22%	3%	10%	20%	22%		11%	100%	15%
general waste	41%	41%	19%	73%	22%	17%	56%	50%	41%
hazardous waste	32%	41%	10%	60%	44%	17%	22%	100%	32%
municipal, solid and non-hazardous waste	46%	50%	52%	73%	33%	17%	44%	100%	53%
radioactive waste	22%	9%	5%	40%	11%		11%	100%	17%
contaminated sites and soil pollution	27%	19%	5%	53%	22%		33%	100%	24%
medical waste	14%	31%	38%	53%	22%	17%	22%	100%	30%
biodiversity	49%	25%	5%	60%	22%		22%	100%	33%
protected areas and natural parks	54%	38%	5%	73%	11%		11%	100%	38%
ecosystem management and ecosystem changes	27%	9%		40%			11%	100%	19%
species at risk	19%	6%		27%			22%	100%	14%
wetlands	19%	6%	5%	60%	11%		11%	100%	20%
rivers and lakes	27%	25%	10%	40%	11%		11%	100%	25%
protection of marine habitat	16%	6%		13%			11%	100%	11%
coastal areas	22%	16%	5%	33%	22%		11%	100%	19%
agriculture	41%	19%	10%	20%	22%		11%	100%	25%
land development	24%	22%	14%	33%	22%		11%	100%	22%
land regeneration	14%	6%	5%	7%	11%		22%	100%	11%
energy and energy efficiency	46%	9%	5%	13%	11%		22%	100%	23%
natural disaster management - preparedness, responses	27%	16%	24%	20%			33%	50%	22%
transportation, traffic and mobility	38%	25%	10%	13%	22%		11%	100%	25%
recreation and tourism	19%	16%	14%	33%	33%		22%	50%	19%
cultural heritage	24%	13%	10%	40%			22%	100%	21%
urban environment quality (sustainability)	5%	13%		20%	22%		11%	50%	10%
biosafety and genetically modified organisms (GMOs)	14%		5%		11%		11%	100%	8%
chemicals management	14%		5%	27%	11%		11%	100%	12%
pesticides	16%	3%	10%	20%	22%		11%	100%	13%
environment and human health	8%	9%	19%	33%	33%		22%	100%	16%
infrastructure	46%	25%	24%	40%	22%		22%	100%	33%
environmental financing	43%	13%	24%	20%	22%		11%	50%	26%
environmental taxation	35%	3%	5%	7%			11%	100%	16%

Q11c (Graph 10).

Which of the topics your SAI intends to audit in the next three years?

	Region								
	EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
	%	%	%	%	%	%	%	%	%
climate change mitigation	32%	28%	24%	40%	11%		22%	100%	29%
climate change adaption	24%	28%	24%	60%	11%		33%	100%	30%
climate change									
stratospheric ozone layer depletion	3%	6%	10%	7%				50%	6%
acid precipitation		3%	10%	7%				50%	4%
local air quality, such as smog, particulates, SO2, NOx and CO2	16%	9%	14%	27%	22%			50%	15%
indoor air quality		6%	10%	7%	11%			50%	5%
toxic air pollutants, such as organic POPs, dioxins and furans	5%	9%	10%	20%	22%		11%	50%	10%
other air issues									
general waste	32%	19%	43%	53%	33%	17%	33%	50%	32%
hazardous waste	32%	22%	14%	33%	11%		22%	50%	23%
municipal, solid and non-hazardous waste	27%	13%	33%	40%	22%	17%	22%	50%	25%
radioactive waste	14%	13%	19%	20%	11%			50%	14%
contaminated sites and soil pollution	8%	19%	14%	33%	33%		11%	100%	17%
medical waste	5%	25%	24%	40%	33%	33%	33%	50%	23%
other waste issues									
minerals, such as mining, gas and oil	8%	22%	43%	53%	33%	17%	11%	100%	28%
forestry and timber resources	24%	31%	52%	47%	11%		22%	50%	34%
fisheries (freshwater and marine)	19%	22%	33%	27%	33%		22%	100%	23%
other natural resources issues									
biodiversity	27%	16%	29%	53%	11%		11%	100%	27%
protected areas and natural parks	38%	25%	43%	67%	22%	33%	22%	100%	39%
ecosystem management and ecosystem changes	8%	13%	10%	27%	11%			50%	13%
species at risk		6%	19%	47%	11%			100%	13%
wetlands	3%	13%	14%	47%	11%	17%		50%	15%
rivers and lakes	11%	6%	14%	40%		17%		50%	15%
protection of marine habitat	16%	3%	10%	27%				100%	13%
coastal areas	14%	3%	19%	33%	11%	17%		50%	15%
other ecosystem issues									
agriculture	30%	9%	29%	27%	33%		22%	50%	23%
land development	11%	9%	29%	33%	22%		22%	50%	18%
land regeneration	3%	9%	14%	7%	11%			50%	8%
energy and energy efficiency	16%	6%	19%	33%	33%			50%	16%
natural disaster management: preparedness responses	8%	13%	29%	40%		33%	22%	50%	20%
transportation, traffic and mobility	27%	6%	24%	27%	11%	17%	22%	50%	21%
recreation and tourism	5%		24%	20%	11%		22%	50%	12%
cultural heritage			10%	33%				50%	7%
urban environment quality (sustainability)		6%	10%	20%	11%		33%	50%	10%
biosafety and genetically modified organisms (GMOs)	3%		10%	13%				50%	5%
chemicals management	3%	3%	10%	7%				100%	6%
pesticides			19%	13%	22%			50%	6%
environment and human health	11%	3%	24%	27%	22%	17%	33%	100%	18%
infrastructure	22%	13%	19%	40%	11%		22%	50%	21%
drinking water - quality and supply	16%	19%	52%	60%	22%	17%	22%	50%	30%
pollution of water bodies through industrial and agricultural sources	14%	19%	33%	47%	11%		44%	50%	25%
wastewater treatment	16%	19%	33%	27%	33%			50%	21%
acidification		3%	10%	20%				50%	6%
water quantity management or management of watersheds	24%	25%	24%	40%	33%		22%	50%	24%
marine pollution	14%	3%	14%	20%	11%		11%	50%	13%
environmental financing	27%	9%	29%	27%	22%		22%	100%	23%
environmental taxation	24%	3%	14%	13%		17%	11%	100%	15%

Q12a (Graph 11).

Please mark the international environmental agreements or treaties your SAI has audited since 1 January 2009

	Region								
	EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
	%	%	%	%	%	%	%	%	%
The Ramsar Convention on Wetlands	8%	3%		40%					8%
Convention on Trade of Endangered Species (CITES)	3%			33%				50%	6%
Convention on the Conservation of Migratory Species of Wild Animals (CMS or Bonn Convention)	3%								1%
Convention on Biological Diversity (CBD)	24%	6%		27%	11%				13%
International Tropical Timber Agreement (ITTA)			5%						1%
Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (UNCCD)	3%	9%		7%	11%				4%
Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention)	3%		5%	13%					4%
International Plant Protection Convention (IPPC)				7%					1%
International Treaty on Plant Genetic Resources for Food and Agriculture	3%								1%
Convention on Access to Environmental Information, Public Participation in Environmental Decision-making and Access to Justice (Aarhus Convention)	11%			7%					4%
Convention for the Protection of the Ozone Layer (Vienna Convention)		9%		13%	11%				4%
Montreal Protocol on Substances that Deplete the Ozone Layer	3%	9%		13%	11%				5%
United Nations Framework Convention on Climate Change (UNFCCC)	38%	9%	10%	60%			11%	100%	26%
Protocol to the UNFCCC (Kyoto Protocol)	62%	19%	5%	40%			22%	100%	31%
Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention)	19%	6%		7%	11%		22%	50%	11%
Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides on International Trade (Rotterdam Convention, PIC)	5%						11%		3%
Convention on Persistent Organic Pollutants (Stockholm Convention or POPs)	3%			7%			11%		3%
Protocol on Biosafety to the Convention on Biological Diversity (Cartagena Protocol)	5%	6%		7%					4%
United Nations Convention on the Law of the Sea (UNCLOS)	3%						22%		3%
The United Nations Agreement for the Implementation of the Provisions of the UNCLOS relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UN Fish Stocks Agreement)	5%						33%		4%
International Convention for the Prevention of Pollution from Ships (MARPOL)	16%			13%				50%	8%
Convention on the Protection of the Black Sea Against Pollution (Bucharest Convention)	16%	9%							5%
Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention)	14%	3%							4%
Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR)	3%								1%
Convention on Cooperation for the Protection and Sustainable Use of the Danube River	5%								2%

Q12b (Graph 11).

Please mark the international environmental agreements or treaties your SAI plans to audit in the next three years

	Region								
	EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
	%	%	%	%	%	%	%	%	%
The Ramsar Convention on Wetlands	16%	16%	14%	33%	22%		11%		17%
Convention on Trade of Endangered Species (CITES)	3%	16%	29%	40%	33%			50%	16%
Convention on the Conservation of Migratory Species of Wild Animals (CMS or Bonn Convention)		13%	5%		33%				4%
Convention on Biological Diversity (CBD)	16%	16%	29%	33%	33%			50%	20%
International Tropical Timber Agreement (ITTA)		9%	14%	13%	22%		11%		8%
Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (UNCCD)		6%	38%	7%	33%				10%
Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention)	5%	9%	19%	7%	22%				9%
Inter-American Convention for the Protection and Conservation of Sea Turtles		3%	10%	7%	11%				4%
International Plant Protection Convention (IPPC)		6%	14%	7%	22%		11%		6%
International Treaty on Plant Genetic Resources for Food and Agriculture	5%	6%	14%	7%	22%				7%
Convention on Access to Environmental Information, Public Participation in Environmental Decision-making and Access to Justice (Aarhus Convention)	3%	3%	29%		11%				7%
Convention for the Protection of the Ozone Layer (Vienna Convention)	8%	16%	19%	13%	22%		22%		13%
Montreal Protocol on Substances that Deplete the Ozone Layer	5%	13%	14%	13%	22%		11%		10%
United Nations Framework Convention on Climate Change (UNFCCC)	22%	19%	29%	33%	44%		33%	50%	25%
Protocol to the UNFCCC (Kyoto Protocol)	30%	22%	29%	20%	44%		33%	50%	25%
Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention)	14%	13%	19%	20%	22%		11%		15%
Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides on International Trade (Rotterdam Convention, PIC)		9%	10%	13%	22%		11%		7%
Convention on Persistent Organic Pollutants (Stockholm Convention or POPs)	8%	13%	10%	7%	33%				9%
Protocol on Biosafety to the Convention on Biological Diversity (Cartagena Protocol)	3%	13%	10%	7%	22%		11%		7%
United Nations Convention on the Law of the Sea (UNCLOS)	3%	6%	10%		22%				4%
The United Nations Agreement for the Implementation of the Provisions of the UNCLOS relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UN Fish Stocks Agreement)	8%	6%	14%	7%	11%				7%
International Pollution from Ships (MARPOL)	14%	6%	24%	20%	22%		11%		13%

International Convention for the Regulation of Whaling (Whaling Convention)		3%	5%		11%		11%		3%
Regional Seas Conventions and Action Plans (UNEP Regional Seas Programme)	5%	3%	5%		11%		11%		4%
Convention on the Protection of the Black Sea Against Pollution (Bucharest Convention)	5%	6%			11%				3%
Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention)		3%			11%				1%
Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR)	5%	3%			11%				3%
Convention on Cooperation for the Protection and Sustainable Use of the Danube River	8%	3%			11%				4%

Q13 (Graph 12).

Since 1 January 2009, has your SAI started or completed audits of your country's progress in sustainable development?

	Region								
	EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
	%	%	%	%	%	%	%	%	%
Yes	32%	22%	24%	27%	22%		33%	100%	28%
No	65%	78%	76%	73%	78%	100%	67%		71%
N/A	3%								1%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%

Q16a (Graph 13).

Taking the perspective of next three years, please mark developments that you regard as necessary in your SAI.

	Region								
	EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
	%	%	%	%	%	%	%	%	%
Creation of an environmental unit within our SAI	8%	41%	38%	33%	67%	33%	22%		29%
Creation of a pool of environmental auditors	16%	56%	48%	40%	56%	83%	33%		40%
Integration of environmental issues in other audits	43%	50%	52%	53%	33%	83%	44%	100%	52%
Training in environmental issues	65%	69%	67%	80%	44%	83%	89%	100%	71%
Training in environmental auditing	73%	75%	67%	73%	56%	67%	89%	100%	74%
Development of environmental performance indicators in audits	46%	56%	86%	80%	78%	83%	56%		63%
More attention to quality and reliability of information	35%	69%	71%	53%	56%	50%	78%	50%	56%
More measurement of effectiveness of policy	27%	50%	62%	67%	44%	50%	56%		47%
Evaluation of the impact of work and ways to improve the impact	32%	53%	48%	73%	44%	67%	67%	50%	50%

Development of new products that are not environmental audits	3%	19%	29%	20%	22%	50%	22%	50%	19%
Exchange of knowledge with other SAIs	62%	69%	76%	87%	44%	67%	67%	100%	71%
External expert advice	49%	66%	57%	73%	44%	67%	56%	100%	60%
Peer review by other SAIs	14%	41%	81%	60%	56%	83%	44%	100%	48%
Evaluation by external experts (for instance, universities)	16%	38%	52%	40%	33%	50%	22%	50%	35%

Q16b (Graph 13).

Taking the perspective of next three years, please mark developments you have already planned in your SAI.

	Region								
	EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
	%	%	%	%	%	%	%	%	%
Creation of an environmental unit within our SAI	3%	16%	33%	20%	22%				14%
Creation of a pool of environmental auditors	16%	22%	38%	13%	33%		11%		21%
Integration of environmental issues in other audits	27%	28%	71%	27%	44%	17%		100%	37%
Training in environmental issues	16%	31%	43%	27%	44%	17%	11%	100%	29%
Training in environmental auditing	30%	41%	52%	33%	56%	33%	33%	100%	38%
Development of environmental performance indicators in audits	8%	16%	14%	27%	11%		11%		13%
More attention to quality and reliability of information	22%	13%	29%	7%	22%	17%	33%	50%	21%
More measurement of effectiveness of policy	19%	9%	38%	13%	11%		11%		19%
Evaluation of the impact of work and ways to improve the impact	14%	3%	29%	20%	11%		22%	50%	16%
Development of new products that are not environmental audits	3%	6%	19%	7%			33%	50%	9%
Exchange of knowledge with other SAIs	54%	47%	43%	33%	67%	17%	22%	100%	45%
External expert advice	11%	28%	29%	40%	11%		33%	100%	26%
Peer review by other SAIs	11%	13%	10%	7%			33%	100%	13%
Evaluation by external experts (for instance, universities)	8%	9%	14%	7%				50%	9%

Q17 (Graph 14).

How does your SAI measure the impact of your environmental audits?

	Region								
	EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
	%	%	%	%	%	%	%	%	%
Parliamentary hearings	62%	34%	52%	20%	33%		67%	100%	43%
Media coverage	68%	41%	43%	40%	11%		56%	100%	46%
Follow-up audit	76%	66%	52%	67%	78%	17%	56%	100%	63%
Monitor the implementation of recommendations/audit findings (e.g. letter, interview, survey)	78%	59%	43%	47%	44%	33%	44%	100%	57%
Government response to audit recommendations	78%	69%	57%	53%	67%	33%	89%	100%	66%
Any other method	3%			20%			11%		4%
Our SAI does not measure impact of environmental audits		6%	10%	7%	11%				4%
N/A		13%	29%	7%	11%	67%	11%		14%

Q19 (Graph 15).

Do the recommendations made by your SAI in environmental audits usually include specific conditions?

	Region								
	EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
	%	%	%	%	%	%	%	%	%
Deadline set for carrying out recommended actions	46%	44%	14%	47%	33%	17%	22%		37%
Responsible institution(s)	65%	47%	57%	73%	44%	17%	67%	100%	60%
Other	14%		24%	20%	11%		11%	100%	12%
No specific conditions	16%	28%	19%	13%	33%		22%		16%
Our SAI does not make recommendations in environmental audits	3%								1%
N/A		13%	24%	7%	11%	67%	11%		13%

Q20 (Graph 16).

How does your SAI track the implementation of the recommendations of environmental audits?

	Region								
	EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
	%	%	%	%	%	%	%	%	%
Follow-up survey	46%	38%	19%	7%	33%	17%	33%	50%	30%
Follow-up audit	73%	59%	67%	73%	78%	33%	56%	100%	67%
Implementation is not followed up			10%	7%					3%
Our SAI does not make recommendations in environmental audits	3%								1%
Other	22%	19%	14%	27%	22%		33%	50%	19%
N/A		13%	24%	7%	11%	67%	11%		13%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%

Q21 (Graph 17).

Please assess what level of impact the environmental audits conducted by your SAI have had in helping government departments to....?

		Region								
		EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
		%	%	%	%	%	%	%	%	%
formulate environmental legislation or environmental policies and programs	High impact	19%	19%	5%	20%			11%		15%
	Medium impact	41%	41%	24%	47%	33%	17%	56%	100%	38%
	Low impact	27%	19%	19%	7%	33%		22%		19%
	No impact	8%	9%	24%	7%	22%	17%			10%
	N/A	5%	13%	29%	20%	11%	67%	11%		18%
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%
evaluate their capacity to develop and implement environmental policies or programs	High impact	11%	9%	10%	20%		17%	11%	100%	14%
	Medium impact	46%	59%	43%	27%	78%		67%		45%
	Low impact	35%	13%	14%	27%			11%		20%
	No impact	3%	6%	5%	7%	11%	17%			4%
	N/A	5%	13%	29%	20%	11%	67%	11%		18%
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%
improve the functioning of policies and programs	High impact	16%	13%	14%	27%	11%		22%	100%	19%
	Medium impact	65%	63%	52%	47%	67%		56%		54%
	Low impact	14%	9%				17%	11%		7%
	No impact	3%	3%	5%	13%	11%	17%			4%
	N/A	3%	13%	29%	13%	11%	67%	11%		16%
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%

generate their environmental indicators, performance measures, monitoring systems, or other policy information to evaluate environmental policy	High impact	8%	13%	14%	13%	11%		22%		13%
	Medium impact	43%	28%	33%	27%	33%		44%	100%	33%
	Low impact	38%	28%	10%	20%	22%	17%	11%		25%
	No impact	8%	19%	14%	27%	22%	17%	11%		13%
	N/A	3%		13%	29%	13%	11%	67%	11%	
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%
develop their environmental management systems	High impact	8%	13%	10%	20%			11%		12%
	Medium impact	41%	31%	24%	20%	33%		56%	50%	30%
	Low impact	32%	28%	29%	27%	44%	33%	11%	50%	29%
	No impact	14%	16%	10%	13%	11%		11%		12%
	N/A	5%	13%	29%	20%	11%		67%	11%	
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%
produce their environmental reports	High impact	5%	9%	14%	13%	11%				8%
	Medium impact	27%	38%	10%	27%	11%		56%		25%
	Low impact	41%	22%	24%	20%	33%	17%	11%	100%	29%
	No impact	22%	19%	24%	20%	33%	17%	22%		21%
	N/A	5%	13%	29%	20%	11%		67%	11%	
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%

Q23 (Graph 18).

How does your SAI usually communicate the results of environmental audits (mark all that apply)?

	Region								
	EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
	%	%	%	%	%	%	%	%	%
Distribution of a printed version of audit report	57%	50%	43%	67%	22%	17%	67%	100%	53%
Full audit report made public in the Web	70%	53%	29%	73%	11%		67%	100%	55%
Only audit report summary made public in the Web	24%	19%	10%	20%	22%		11%		16%
Press releases	76%	44%	29%	40%			22%	100%	47%
Briefings for journalists	46%	28%	19%	20%				50%	28%
Articles in printed media (by the SAI)	24%	22%	5%	13%			22%	100%	18%
Radio/TV appearances	46%	16%	14%	20%			33%	100%	27%
Booklet with audit results	16%	25%	5%	7%				50%	14%
Audit reports published in social networks (such as Facebook, Twitter etc.)	5%	3%	5%	7%			11%	100%	6%
Audit reports obtainable upon request (not distributed otherwise)	11%	6%	5%	13%			22%	50%	11%
No parts of audit reports are made public	3%	9%	14%		44%				6%
Other	24%	16%	24%	13%	44%	17%	11%	50%	20%
N/A		13%	29%	7%	11%	67%	11%		14%

Q24 (Graph 19).

Please assess whether communicating the results of environmental audits has helped your SAI to increase the impact of these audits?

	Region								
	EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
	%	%	%	%	%	%	%	%	%
Yes, significantly	49%	34%	14%	60%	22%		33%	100%	38%
Yes, somewhat	49%	41%	43%	33%	11%	33%	56%		41%
No		3%			11%				1%
Audit reports are not published	2%	9%	14%		44%				6%
N/A		13%	29%	7%	12%	67%	11%		14%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%

Q25 (Graph 20).

Does your SAI have a specific department or section working full time on environmental audits?

	Region								
	EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
	%	%	%	%	%	%	%	%	%
Yes	38%	34%	19%	67%	22%		11%	100%	35%
No	62%	66%	81%	33%	78%	100%	89%		65%
N/A									
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%

Q26^{*2} (Graph 21).

How many auditors are involved with environmental auditing in your SAI?

	Region								
	EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
	%	%	%	%	%	%	%	%	%
0 % of employees working full or part time on environmental audits	11%	22%	33%	13%	11%	83%	33%		22%
1-4% of employees working full or part time on environmental audits	62%	59%	24%	80%	44%		22%		50%
5-9% of employees working full or part time on environmental audits	9%	9%	19%		33%		11%	50%	13%
10 and more % of employees working full or part time on environmental audits	3%	3%	14%				33%	50%	8%
N/A	5%	6%	10%	7%	11%	17%			6%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%

² On the basis of the question about the number of environmental auditors, three separate analyses could be made, concerning the proportion of auditors (Graph 21), their work load (Graph 22) and existing additional capacity in SAI (Graph 23).

Q26** (Graph 22).

How many auditors are involved with environmental auditing in your SAI?

	Region								
	EUROSAI (n=31)	ASOSAI (n=23)	AFROSAI (n=12)	OLACEFS (n=12)	ARABOSAI (n=7)	CAROSAI (n=0)	PASAI (n=6)	Other (n=2)	TOTAL (n=80)
	%	%	%	%	%	%	%	%	%
employees working on EA work mostly full time on environmental audits	32%	39%	8%	75%	29%		50%	100%	40%
employees working on EA work mostly part time on environmental audits	48%	52%	83%	25%	71%		33%		50%
employees working on EA work almost equally either full or part time on environmental audits	20%	9%	8%				17%		10%
TOTAL	100%	100%	100%	100%	100%		100%	100%	100%

Q26*** (Graph 23).

How many auditors are involved with environmental auditing in your SAI?

	Region								
	EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=20)	OLACEFS (n=15)	ARABOSAI (n=8)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=110)
	%	%	%	%	%	%	%	%	%
SAI perceives additional existing capacity for employees to work on EA	82%	81%	70%	60%	63%	33%	44%	50%	65%
SAI does not perceive additional existing capacity for employees to work on EA	18%	19%	25%	40%	25%	67%	56%	50%	34%
N/A			5%		12%				1%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%

Q27 (Graph 24).

Since 1 January 2009, on average, how many employees are involved in an audit team conducting one environmental audit in your SAI?

		EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
		%	%	%	%	%	%	%	%	%
auditor(s)	0		19%	29%	7%	22%	67%	11%		16%
	1-4 auditors	70%	38%	38%	33%	33%	33%	89%		47%
	5-9 auditors	22%	19%	19%	33%				50%	20%
	10 and more auditors	8%	25%	14%	27%	44%			50%	16%
other employees	no	70%	66%	71%	40%	78%	100%	67%	50%	65%
	yes	27%	34%	29%	60%	22%		33%	50%	34%
	N/A	3%								1%
	TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%

² On the basis of the question about the number of environmental auditors, three separate analyses could be made, concerning the proportion of auditors (Graph 21), their work load (Graph 22) and existing additional capacity in SAI (Graph 23).

Q31 (Graph 28).

Overall, which of the other competencies are covered in your SAI by the employees working on environmental audits?

	Region								
	EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
	%	%	%	%	%	%	%	%	%
financial auditing experience	73%	75%	71%	60%	67%	33%	67%	100%	69%
compliance auditing experience	81%	81%	67%	67%	67%	33%	78%	100%	73%
performance auditing experience	92%	84%	71%	47%	89%	33%	78%	100%	76%
finance (e.g. experience/knowledge of accounting, taxation, financial analysis)	84%	53%	57%	73%	44%	17%	33%	100%	62%
law (e.g. experience/knowledge of public law, business law, environmental law)	86%	53%	48%	60%	56%		22%	100%	57%
public administration and management (knowledge of the system and operations of the government)	89%	56%	57%	73%	33%	17%	44%	100%	66%
other	5%	13%	5%	47%	11%	17%		50%	13%

Q32 (Graph 29).

Which of the following barriers has your SAI experienced in executing environmental audits since 1 January 2009?

		Region								
		EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
		%	%	%	%	%	%	%	%	%
Inadequate SAI mandate	Yes	5%	9%	10%	7%	22%	33%	33%		11%
	No	92%	88%	86%	87%	78%	50%	67%	100%	85%
	N/A	3%	3%	5%	7%		17%			4%
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%
Lack of skills or expertise within the SAI	Yes	41%	72%	43%	80%	78%	83%	89%		59%
	No	57%	25%	52%	13%	22%		11%	100%	37%
	N/A	3%	3%	5%	7%		17%			4%
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%
Insufficient formulation of government environmental policy	Yes	49%	50%	57%	73%	56%	17%	78%	100%	57%
	No	49%	47%	38%	20%	44%	67%	22%		39%
	N/A	3%	3%	5%	7%		17%			4%
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%
Lack of established environmental norms and standards	Yes	38%	38%	48%	20%	56%		56%	50%	37%
	No	59%	56%	48%	73%	44%	83%	44%	50%	58%
	N/A	3%	6%	5%	7%		17%			5%
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%
Insufficient monitoring and reporting systems	Yes	59%	53%	71%	80%	100%	50%	67%	100%	65%
	No	35%	41%	24%	13%		33%	33%		29%
	N/A	5%	6%	5%	7%		17%			6%
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%
Insufficient data on the state of the environment	Yes	49%	69%	71%	87%	100%	50%	78%	100%	66%
	No	46%	25%	24%	7%		33%	22%		28%
	N/A	5%	6%	5%	7%		17%			6%
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%
Lack of human resources	Yes	46%	63%	76%	80%	56%	83%	89%	50%	65%
	No	49%	31%	24%	13%	33%		11%	50%	30%
	N/A	5%	6%		7%	11%	17%			5%
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%

Used benchmarking with international/other countries standards	Yes	24%	31%	43%	20%	22%	17%	78%	100%	34%
	No	76%	69%	57%	80%	78%	83%	22%		66%
	N/A									
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%
Other	Yes			14%	13%		33%	22%		8%
	No	100%	100%	86%	87%	100%	67%	78%	100%	92%
	N/A									
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%

Q35 (Graph 31).

INTOSAI WGEA is developing a training course on environmental auditing in cooperation with the SAI of India, to be first delivered in 2013 in Jaipur, India. Would your SAI be interested in and have the means for sending its auditor(s) to an approximately 3-week training course?

	Region								
	EUROSAI I (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
	%	%	%	%	%	%	%	%	%
Yes	27%	63%	38%	27%	89%	17%	33%		37%
Interested to participate, but without financial means to do so	43%	28%	57%	67%	11%	67%	56%		47%
No	22%	9%	5%	7%			11%	100%	13%
NA	8%					17%			3%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%

Q36 (Graph 32).

Since 1 January 2009, has your SAI had any experience in cooperation with another SAI in environmental auditing issues?

	Region								
	EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
	%	%	%	%	%	%	%	%	%
Yes	81%	56%	57%	93%	44%	17%	78%	100%	66%
No	19%	44%	38%	7%	56%	83%	22%		33%
N/A			5%						1%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%

Q37 (Graph 33).

Could you please indicate reasons why your SAI has not been engaged in cooperative audits since 1 January 2009?

	Region								
	EUROSAI (n=7)	ASOSAI (n=14)	AFROSAI (n=8)	OLACEFS (n=1)	ARABOSAI (n=5)	CAROSAI (n=5)	PASAI (n=2)	Other (n=0)	TOTAL (n=37)
	%	%	%	%	%	%	%	%	%
Lack of interest in our SAI		7%				20%			5%
Lack of resources	57%	57%	63%	100%	40%	60%	100%		62%
Inadequate SAI mandate	14%	7%	25%		20%	20%			14%
Lack of skill or expertise within SAI	29%	57%	38%		60%	80%	100%		51%
Lack of partners	14%	21%	38%		20%	20%	100%		27%
No perceived need for cooperation		29%			20%	20%			14%
N/A	29%	21%	38%			20%			24%

Q38 (Graph 34).

Please specify the types of cooperative activities your SAI has experienced since 1 January 2009.

		Region								
		EUROSAI (n=30)	ASOSAI (n=18)	AFROSAI (n=12)	OLACEFS (n=14)	ARABOSAI (n=4)	CAROSAI (n=1)	PASAI (n=7)	Other (n=2)	TOTAL (n=74)
		%	%	%	%	%	%	%	%	%
Cooperation with another SAI on an audit related to an international environmental accord	Yes	87%	56%	42%	64%	25%		43%	100%	66%
	No	13%	44%	58%	36%	75%	100%	57%		34%
	N/A									
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%
Cooperation with another SAI on an audit of an environmental subject, but not on an agreement or treaty	Yes	47%	72%	25%	14%	50%	100%	71%	100%	46%
	No	53%	28%	75%	86%	50%		29%		54%
	N/A									
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%
Cooperation with another SAI on a transboundary environmental issue	Yes	50%	44%	25%	14%	25%		29%	100%	39%
	No	50%	56%	75%	86%	75%	100%	71%		61%
	N/A									
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%
The exchange of audit information or environmental auditing experiences between SAIs	Yes	77%	72%	75%	64%	100%	100%	57%	100%	74%
	No	23%	28%	25%	36%			43%		26%
	N/A									
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%

Q39 (Graph 35).

Has the cooperation been useful for your SAI?

	Region								
	EUROSAI (n=30)	ASOSAI (n=18)	AFROSAI (n=12)	OLACEFS (n=14)	ARABOSAI (n=4)	CAROSAI (n=1)	PASAI (n=7)	Other (n=2)	TOTAL (n=74)
	%	%	%	%	%	%	%	%	%
Useful	93%	100%	100%	100%	100%	100%	100%	100%	97%
Not useful	7%								3%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%

Q41 (Graph 37).

In the following table WGEA products are listed. Since 1 January 2009 has your SAI

A. not used B. used C. not found the product relevant in its work?

		Region								
		EUROSAI (n=37)	ASOSAI (n=32)	AFROSAI (n=21)	OLACEFS (n=15)	ARABOSAI (n=9)	CAROSAI (n=6)	PASAI (n=9)	Other (n=2)	TOTAL (n=112)
		%	%	%	%	%	%	%	%	%
WGEA Paper - Auditing the Government Response to Climate Change: Guidance for Supreme Audit Institutions (2010)	Have used	59%	34%	20%	67%	22%		33%	100%	41%
	Have not used	38%	63%	80%	33%	78%	83%	67%		56%
	Did not find relevant		3%				17%			2%
	N/A	3%								1%
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%
WGEA Paper - Environmental Accounting: Current Status and Options for SAIs (2010)	Have used	22%	13%	10%	13%	11%		22%	50%	14%
	Have not used	70%	78%	90%	87%	78%	100%	67%	50%	79%
	Did not find relevant	5%	9%			11%		11%		5%
	N/A	3%								1%
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%	100%

D

SURVEY RESPONDENTS

76

In total, 118 SAIs responded to the 7th Survey. In the following tables, the respondents are listed according to the INTOSAI regions. “**” refers to SAIs that belong to two INTOSAI regions simultaneously. SAIs who responded both to the 6th and the 7th Survey are marked bold.

EUROSAI		
Albania	Iceland	Slovak Republic
Armenia*	Italy	Slovenia
Azerbaijan*	Latvia	Spain
Bulgaria	Liechtenstein	Sweden
Croatia	Lithuania	Switzerland
Czech Republic	Macedonia (FYR of)	Turkey*
Cyprus*	Malta	United Kingdom
Denmark	Moldova	Ukraine
Estonia	Monaco	
European Court of Auditors	Montenegro	
Finland	Netherlands	
France	Norway	
Georgia*	Poland	
Germany	Portugal	
Greece	Romania	
Hungary	Russian Federation*	
ASOSAI		
Armenia*	Indonesia	New Zealand*
Azerbaijan*	Iran (Islamic Republic)	Oman*
Australia*	Iraq*	Papua New Guinea*
Bahrain*	Japan	Philippines
Bangladesh	Jordan*	Russian Federation*
Bhutan	Korea (Republic of)	Saudi Arabia
Cambodia	Kuwait*	Singapore
China	Maldives	Thailand
Cyprus*	Mongolia	Turkey*
Georgia*	Myanmar	Vietnam
India	Nepal	Yemen*

AFROSAI		
Botswana	Kenya	Senegal
Burundi	Lesotho	South Africa
Cameroon	Madagascar	Swaziland
Central African Republic	Morocco*	Zambia
Egypt*	Namibia	Zimbabwe
Ghana	Nigeria	Tanzania
Ivory Coast	Rwanda	Uganda

OLACEFS		
Argentina	Dominican Republic	Paraguay
Belize*	El Salvador	Peru
Brazil	Guatemala	Puerto Rico
Chile	Honduras	Uruguay
Colombia	Mexico	Venezuela
Costa Rica	Panama	

ARABOSAI		
Bahrain*	Jordan*	Oman*
Egypt*	Kuwait*	Saudi Arabia*
Iraq*	Morocco*	Yemen*

CAROSAI		
Belize*	Grenada	Saint Lucia
Bahamas	Jamaica	Suriname

PASAI		
Australia*	Kiribati	Samoa
Cook Islands	New Zealand*	Solomon Islands
Fiji	Papua New Guinea*	Tonga

Other		
Canada	USA	

**The 7th Survey on
Environmental Auditing**

2012