Digitalization, open data and data mining: relevance and implications for SAIs' audit work and for enhancing their contributions to the follow-up and review of the SDGs

Numérisation, données ouvertes et exploration de données : pertinence et implications pour le travail d'audit des ISC et pour accroître leur contribution au suivi et à l'examen des ODD

Digitalisierung, Open Data und Data Mining: Relevanz und Auswirkungen auf das Prüfgeschehen der ORKB und auf die Stärkung ihres Beitrags zum Follow-up und zur Überprüfung der Ziele für nachhaltige Entwicklung (SDGs)

Digitalización, datos abiertos y extracción de dato: relevancia e implicaciones para las auditorias de las EFS y para aumentar su contribución al seguimiento y la revisión de los ODS

الرقمنة والبيانات المفتوحة واستخراج البيانات، أهميتها وتأثيراتها على مجريات العمليات الرقابية لدى الأجهزة العليا للرقابة المالية والمحاسبة ومتابعة مساهماتها في تحقيق أهداف التنمية المستدامة

Conclusions and Recommendations

of the 24th UN/INTOSAI Symposium
on Digitalization, open data and data mining:
relevance and implications for SAIs' audit work and for
enhancing their contributions to the follow-up and review of the
SDGs

Considerations

A. **Welcoming** the new opportunities that digitalization, open data and data mining can bring to improve lives, preserve the planet and guarantee peace and prosperity for all;

B. **Emphasizing** that SAIs can also leverage data to improve their audit work and their contribution to an effective, efficient, transparent and accountable public administration;

C. **Recalling** that access to publicly available and open data without additional costs and legal restrictions provides the opportunity for SAIs to get a more comprehensive picture of governments' activities;

D. **Taking into account** that large amounts of data as well as innovative data tools also entail new challenges for all SAIs related to analytical capacities, data security and reliability;

E. **Noting** that some SAIs in developing countries face particularly acute challenges regarding data availability and capacity and financial resources more generally;

F. **Basing** themselves on the mandate of the XXII INCOSAI, encouraging INTOSAI to support SAIs to make a decisive contribution to the success of the 2030 Agenda for Sustainable Development, and thereby help improve people's lives around the world;

G. **Recalling** the very fruitful results and recommendations of the 23rd UN/INTOSAI Symposium of 2015 on "Post-2015 Development Agenda: The Role of SAIs and Means of Implementation for Sustainable Development";

H. **Building on** Resolution A/66/209 "Promoting the efficiency, accountability, effectiveness and transparency of public administration by strengthening Supreme Audit Institutions" and Resolution A/69/228 "Promoting and fostering the efficiency, accountability, effectiveness and transparency of public administration by strengthening supreme audit institutions" adopted by the United Nations General Assembly, in which the international community of nations especially

    a. Recognizes the important role of SAIs in promoting the efficiency, accountability, effectiveness and transparency of public administration, which is conducive to the achievement of national development objectives and priorities as well as the internationally agreed development goals; and

b.   Encourages the UN Member States to give due consideration to the independence and capacity-building of SAIs as well as to the improvement of public accounting systems in the context of the 2030 Agenda for Sustainable Development;

I.   **Welcoming** the ongoing efforts to implement the 2030 Agenda for Sustainable Development and the Sustainable Development Goals adopted by the United Nations General Assembly on 25 September 2015;

J.   **Recalling** the importance of the development of "effective, accountable and transparent institutions at all levels," as set out in Goal 16, Target 16.6 of the Sustainable Development Goals; noting also that this is a key factor for realizing every single SDG;

K.   **Reaffirming** INTOSAI's commitment to further deepening its relationship with the United Nations, in particular with regard to the goal of promoting and communicating the contribution SAIs can make to the follow-up and review of the 2030 Agenda for Sustainable Development through their independent audit work;

L.   The participants of the Symposium adopt the following

Conclusions and Recommendations

The participants of the Symposium have intensively worked on the relevance and implications of digitalization, open data and data mining for the audit work of SAIs and for enhancing their contributions to the follow-up and review of the SDGs.

In detail, they have elaborated on

- Challenges and opportunities that digitalization, open data and data mining can entail for the audit work of SAIs;

- Practical experiences of SAIs and examples of best practice SAIs can share in the area of digitalization, open data and data mining;

- Follow-up on the XXII INCOSAI with regard to the contribution of SAIs to the implementation of the SDGs, as reflected in the Abu Dhabi Declaration.

As a result of the intensive discussions, the participants of the Symposium

1. **Welcome** the establishment of the INTOSAI Working Group on Big Data and **support** the coordination and alignment of tools, mechanisms and approaches in the framework of this Working Group as well as within the Working Group on IT Audit;

2. **Recommend** INTOSAI, its Regional Organizations and Member SAIs to explore opportunities for sharing knowledge and best practices in the field of digitalization, open data and data mining, as also highlighted in the 2030 Agenda for Sustainable Development;

3. **Consider it necessary for** SAIs to develop – in accordance with their capacities - **internal strategies** in the field of digitalization, open data and data mining, in order to

   a. Build human resources, including through training and recruitment of staff with capacities in the area of IT and issues related to data analysis and digitalization, and implement possible organizational changes;

   b. Build up necessary infrastructural resources;

   c. Develop new audit methods, tools and techniques and incorporate them into their audit methodology in order to leverage from data analytics for auditing purposes and to ensure quality in the use of open data;

d. Adjust the audit process;

e. Clarify issues of audit data storage and access;

f. Ensure that SAIs have the capabilities to audit IT systems in which the data reside;

4. **Emphasize** the importance of cumulative learning in the field of digitalization, open data and data mining and **recommend** SAIs to develop strategies in this regard and also to comply with applicable international standards;

5. **Encourage** SAIs to develop **external strategies** in the field of digitalization, open data and data mining with regard to

a. Legal aspects of and specifications about data security;

b. Issues related to assessing and ensuring data quality and data access, in particular related to the access of the auditees to data, on a permanent or only on a case-related basis;

c. Open data as regards to

i. the question of their use as input for audits and

ii. the extent to which data from audits can be published as open data in order to generate an additional benefit for the public;

6. **Encourage** SAIs to ensure that their auditees implement open data and digitization and take steps to guarantee their access to such data, both for the purposes of their analysis and for reporting purposes;

7. **Recommend** INTOSAI to work with SAIs and the INTOSAI Regional Organizations, to the extent that their mandates allow SAIs to align their efforts to make the best possible use of digitalization, open data and data mining in their audit work;

8. **Emphasize** that SAIs have a central role in promoting transparency as well as the access of the public and civil society to public information in open data formats that allow civil society and others to use them;

9. **Encourage** INTOSAI, the Regional Organizations and IDI to create a platform to strengthen digitalization and data analysis as well as the exchange of

knowledge and experience in this field by elaborating tools, methods and frameworks;

10. **Welcome** the commitment of the United Nations Member States to engaging in systematic follow-up and review of the implementation of the 2030 Agenda for Sustainable Development with the support of the UN System where needed;

11. **Support** the encouragement of the 2030 Agenda for UN Member States to develop as soon as practicable ambitious national responses to the overall implementation of the 2030 Agenda for Sustainable Development;

12. **Underline** the UN General Assembly Resolutions' encouragement to support the important role of SAIs in promoting the efficiency, accountability, effectiveness and transparency of public administration, which is conducive to the achievement of the internationally agreed development goals**;**

13. **Recognize** the growing global recognition of and expectation towards the central roles of INTOSAI and SAIs in promoting accountability, good governance and sustainable development and supporting and reviewing SDG implementation;

14. **Underline** that capable, well-resourced, and independent SAIs at the national level will help to substantially strengthen transparency and accountability and thereby provide the basis for effective review and monitoring of the implementation of the SDGs worldwide;

15. **Reaffirm** that INTOSAI is committed to make a decisive contribution to the successful implementation of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals;

16. **Welcome** INTOSAI's commitment in its Strategic Plan 2017-22 to contributing to the implementation of the SDGs by defining "Contributing to the follow-up and review of the SDGs within the context of each nation's specific sustainable development efforts and SAIs' individual mandates" as a crosscutting priority of INTOSAI;

17. **Encourage** SAIs to develop strategies to ensure that they contribute most effectively to SDG follow-up and review at national level;

18. **Emphasize** that SAIs can essentially contribute to the follow-up and review of the Sustainable Development Goals, in particular through the following four approaches:

a. Assessing the readiness and preconditions of national systems to report on progress towards the achievement of the SDGs, and subsequently to audit their operation and the reliability of the data they produce;

b. Undertaking performance audits that examine the economy, efficiency, and effectiveness of key government programs that contribute to specific aspects of the SDGs;

c. Assessing and supporting the implementation of SDG 16 which relates to trans-parent, efficient, and accountable institutions;

d. Being models of transparency and accountability in their own operations, including auditing and reporting;

19. **Consider it necessary** to develop frameworks for implementing the four approaches based on SAIs' initiatives, bearing in mind the different capacities of SAIs and the different reporting mandates in different country contexts, and including in detail:

a. An auditing preparedness model consistent with the UN's voluntary national reporting guidelines in order to assess the preparedness of national governments to implement the SDGs;

b. An audit findings framework providing INTOSAI with a tool to aggregate performance audit results at regional as well as the global level;

c. A PFM (public financial management) framework assessing the functionality of the national public financial management systems in order to assess and support the implementation of SDG 16;

d. A global SAI performance evaluation framework that can showcase SAIs' performance across the globe and performance improvements;

20. **Recommend** SAIs to conduct cooperative audits, e.g. in line with the KSC-IDI Auditing SDGs programme, in order to support them in conducting ISSAI based performance audits of preparedness for the implementation of SDGs in their national contexts;

21. **Support** the production of high-quality SDG-related information through the above-mentioned frameworks and its sharing within the SAI community as well as with the United Nations and other external partners;

22. **Underline** the importance of ensuring effective relations and as well as continuing the successful cooperation between SAIs and the United Nations as well as other external partners, in order to make a decisive contribution to the success of the 2030 Agenda for Sustainable Development and thereby help improve people's lives around the world, i.a. by providing joint aggregated contributions to follow-up and review in UN intergovernmental bodies;

23. **Encourage** INTOSAI and member SAIs to take into account and contribute to the work of other oversight institutions (e.g. Parliaments) at the international and national levels both with regard to

    a.   the contribution of SAIs to the follow- up and review of the implementation of the 2030 Agenda for Sustainable Development;

    b.   the relevance and implications of digitalization, open data and data mining for the audit work of SAIs and

24. **Welcome** the proposal to address the SDGs and the four INTOSAI approaches to the implementation of the SDGs in framework of the next UN/INTOSAI Symposium;

25. **Recommend** that INTOSAI uses the KSC-IDI Community Portal, on which SAIs can share their findings of reviews across all four approaches in looking at the SDGs as a data-driven effort; in some cases this may entail formal processes regarding the sharing of information.