



Digitizing public sector auditing: INTOSAI measures and country example of the Austrian Court of Audit

International Organization of Supreme Audit Institutions (INTOSAI)

- The auditing profession has been using technology to optimize its work for many decades now. Auditors are not only expected to understand the general risks, but also the **risks and controls** associated with intelligent algorithms that empower solutions for service delivery.
- INTOSAI – being aware of these new challenges – created **groups at working level for knowledge sharing and knowledge building** in this field:
 - Already in 1989, we started to share and build knowledge in the use and auditing of information technologies in the **Working Group IT-Audit (WGIT)**;
 - A few years ago, another working group has been established that deals with the opportunities and challenges facing SAIs in the field of **Big Data (WGBD)** – in areas like data mining, cloud computing or IT governance.
 - Challenges such as artificial intelligence, blockchain technology, cyber security, data analytics, 5G mobile network technology, machine learning, and quantum computing are addressed in the **Working Group on the Impact of Science and Technology on Auditing (WGISTA)**.

The Austrian Court of Audit (ACA)

Digital ACA

- In order to fulfill the extensive tasks of public auditing in an effective way, the following projects were implemented as part of the “**Digital ACA**” strategy in 2021 and 2022:
 - **Alfresco/myRH workflow**: Every audit that started after 1 January 2022 is supported throughout this customized process management system (from preparation of the audit to the approval of the final report). This is a further step towards more transparency, standardized audits and the automatic generation of numbers for key performance indicators of the audit process.
 - The “**RH-Cockpit**” has been established in 2022 as a web-based central point of contact for all staff members. The Cockpit replaced the former intranet portal and



accommodates extensive and up-to-date information as well as numerous applications for everyday use.

- The electronic filing, documentation and workflow system of the public administration, the **ELAK**, was introduced in the ACA in 2022. The electronic file system has brought the ACA a significant step closer to a modern and paperless institution.
- **eDok/Pro** is a web-based tool of the public administration to implement electronic processing of business cases in human resource administration. Since its introduction in 2021 it has been continuously extended and completely replaced paper-based personnel files with electronic documents and business case workflows.
- **Electronic training management (E-BM)** is also a web-based tool of the public administration and is being used for administering staff training.

Data Analysis

- In order to support audit reports, data analysts support audit teams whenever there are **large data sets** and/or more **complex analyses** needed:
 - **Search engine for large volumes of texts**; e.g. The ACA received over 160,000 scanned documents from various government agencies such as ministries. This amount of text cannot be processed by human readers. Therefore, the data analysis team provided an intelligent search engine that allows the audit team to search for single or multiple word sequences. Auditors can also use a **fuzzy search**, as the documents contain different spellings or abbreviations. The search engine is linked with all documents in which the word sequence is present, so that auditors can read these filtered documents in greater detail.
 - Data analysts help to make audit reports more accessible to the general public with **short dynamic storytelling formats and interactive dashboards** to present the key insights of the report; e.g., **COVID-19 short-time work**. As a response to the economic effects of COVID-19, the Austrian government implemented various short-work models. The main results of the audit were visualized as a dynamic visualization.



Upcoming challenges regarding Artificial Intelligence (AI)

- In June 2023, a **data analysis workshop** was organized by the Swedish and Austrian SAIs in Vienna, which was attended by the SAIs of Denmark, Netherlands, Norway, Sweden and United Kingdom:
 - The workshop was a mix of training, discussion and presentation of current developments in data analysis focusing on AI.
 - The a **follow-up event** in Stockholm in January 2024 will be dedicated on the issue of government agencies already relying on AI and in which form and to what extent should SAI rely on AI when auditing.