1. **Purpose**

The purpose of this procedure is to outline the activities for conducting and documenting a virtual audit when extraordinary events or circumstance makes it impractical, impossible or unwise to conduct an on-site audit.

1. Reference:
2. IAF MD 4, Issue 2, IAF Mandatory Document for the Use of Information and Communication Technology (ICT) For Auditing/Assessment Purposes
3. ISO/IAF Auditing Practices Group - “Electronic documented information systems
4. IAF ID 12 - Principles on Remote Assessment
5. IAQG OPMT ICOP Resolution #157 dated March 17, 2020
6. IAQG Notice March 17, 2020; Management of Extraordinary Events or Circumstances Affecting ABs, CBs and Certified Organizations - Novel Coronavirus - COVID-19
7. IAQG Notice March 25, 2020 - Management of Extraordinary Events or Circumstances Affecting ABs, CBs and Certified Organizations - Novel Coronavirus - COVID-1
8. ISO 27001
9. ISO 27006

1. Definitions:

1. Virtual audits: Paperless, electronic audits that are conducted remotely, without on-site face to face interaction between auditee and auditor.  Audit communication and the exchanged of audit evidence and data are performed using Information and Communication Technology (ICT)

1. Information and Communication Technology (ICT): Technology for gathering, storing, retrieving, processing, analyzing and transmitting information. It includes software and hardware such as smartphones, handheld devices, laptop computers, desktop computers, drones, video cameras, wearable technology, artificial intelligence, and others.
2. **Responsibility**

1. When performing a virtual audit careful consideration must be given to the available technology.

* Telephone, video conferencing
* Normal mail, overnight delivery, e-mail
* PDF files, text, video, digital pictures and EDI files
* File repository access

Remote access to SharePoint online

SharePoint on premise

Drop box

OneDrive

* Virtual Desktop
* Access to Citrix
* Windows VDI
* Horizon
* Online screen sharing: VNC, LogMeIn
* Meeting with screen sharing

WebEx,

GoToMeeting

Zoom

Teams

* Remote login to network using Cisco or Microsoft solutions

1. When it is determined that a remote and virtual audit may be necessary or required, an agreement (audit confirmation) between the audit client and the CB must be confirmed and documented.
2. Both the CB and the Audit Client must have readily available the necessary and compatible ICT.
3. The CB’s assigned lead auditor must be trained and/or experienced in the performance of virtual audits, to include the technology, techniques and ICT to be employed.
4. The Audit Client must also assign a point of contact/escort who is also experience or has access to the experience of the necessary ICT to be used as well as the Audit Clients Quality Management System
5. The agreement (audit confirmation) will document the details of the virtual audit.
6. The agreement between the CB and Audit Client, to include confirmation of access to the appropriate ICT, Electronic Documented Information Systems and security protocols for appropriate electronic access to files, records and information.
7. This record should also include any long-term impacts, adjustments or actions which may result from this virtual audit.
8. The CB shall identify and document the risks and opportunities that may impact the virtual audit’s effectiveness, including the selection of the technologies, and how they are managed.
9. Considering the risks and opportunities identified, the Certification Manager or Designee shall identify how ICT will be utilized and the extent to which ICT will be used for the virtual audits purposes to optimize the activity effectiveness and efficiency while maintaining the integrity of the audit process.
10. The audit team is required to have an adequate setting for the conduct of an ICT audit (an environment with minimal interruptions).
11. Measures shall also be taken to ensure that security and confidentiality is maintained rigorously throughout virtual audit activities.
12. The audit team and auditee should continually confirm connection and communication is effectively being achieved during the audit.

1. When direct human interaction is eliminated between auditee and auditor, additional time and care needs to be dedicated to preparation and performance.  Audit duration may be adjusted to accommodate performing a virtual audit.  Should this be necessary and has been determined to be necessary by the CB, notification will be made to the audit.
2. The Lead Auditor will prepare an Audit Plan for its assessment of activities.  This audit plan provides the basis for agreement regarding the conduct and scheduling of the audit activities.  This audit plan will take into consideration ICT.  This audit plan shall be in accordance with the relevant guidance provided in IAF MD 4and ISO/IEC 17021-1or AS 9104/1.
3. Care should be exercised to take into consideration the audit client’s hours of operation, shift pattern and time zones (when the auditor and Audit Client reside in different zones).
4. The audit plan shall be appropriate to the objectives and the scope of the audit. It will also clearly identify that the audit to be conducted is virtual in nature and will be using ICT resources.
5. The audit team leader, in consultation with the audit team, shall assign to each team member responsibility for auditing specific processes, functions, sites, areas or activities. Such assignments shall consider the need for competence, and the effective and efficient use of the audit team, as well as different roles and responsibilities of auditors, auditors-in-training and technical experts. Care should be exercised with consideration to team member experience with specific type, methods and techniques of ICT.  Changes to the work assignments may be made as the audit progresses to ensure achievement of the audit objectives. During the audit, the audit team periodically assesses the audit progress and exchange information. The audit team leader will reassign work as needed between the audit team members and periodically communicates the progress of the audit and any areas of concern to the client.
6. The conduct of the ICT audit is to be the same as if on-site using fundamental auditing skills with real-time active auditing. An ICT audit is not an audit team reviewing documented information in isolation of the client being audited.

1. The audit team shall conduct the virtual audit in accordance with the relevant guidance provided in ISO/IEC 17021-1, AS9101, AS9104/1, IAF MD 4and this procedure.
2. The audit team shall:
3. Have the necessary degree of understanding enough to make a reliable assessment of the competence of the client to provide products, processes or services in its registered scope.
4. Have a general understanding and background in which technological and industrial sector in which it operates (IAF code); and
5. Be able to determine whether the design and implementation of the system is such that the organization has the capability of systematically meeting agreed requirements for any product or service supplied within the scope of certification, adequately complies with the requirements of the applicable management system standard.
6. If an item cannot be reviewed or a complete determination made, a notification of such will be included in the audit records.
7. Daily debriefs will need to be part of the daily activities to ensure all relevant participants are clear on the completed activities, any findings, and the plan moving forward.
8. The closing meeting will be conducted as if the audit team was on-site addressing all requirements in the Aerospace Addendum.
9. In case of failure of the virtual audit due to ICT technical reasons or personnel incompatibility the audit will be terminated, and other audit arrangements pursued.
10. Where and when necessary the knowledge and skills of the audit team leader and auditors may be supplemented by technical experts, experienced in ICT where such technical experts are employed, they are not involved in the evaluation of effectives of the clients’ management system effectiveness.
11. Auditors-in-training may be included in the audit team as participants, provided an auditor is appointed as an evaluator. The evaluator shall be competent to take over the duties and have final responsibility for the activities and findings of the auditor-in-training. With virtual auditing each step in the auditing process will require revised considerations and careful application of skills.
12. The audit results will be documented in the standard fashion as required by requirements; however, the report will include clear reference to the fact that the audit was conducted remotely using CIT and other details as appropriate.

Additional Requirements for AS 91xx clients only

1. Where a physical location of a site exists, and ICT is utilized, a maximum of 50% of the audit duration may be conducted remotely.
2. Where a physical location of a site does not exist (i.e., a virtual site -reference IAF MD 1), ICT shall be utilized in accordance with IAF MD 4.
3. The use of ICT by a CB shall not reduce the calculated audit time.

**Requirements for ISO 27001 ISMS Clients only**

SCB utilizes network-assisted audit techniques in its audit plan to enhance the effectiveness and efficiency of the audit process. These techniques are identified as appropriate and may include teleconferencing, web meetings, interactive web-based communications, and remote electronic access to ISMS documentation or processes. The focus of these techniques is to support the integrity of the audit process.

Network assisted auditing techniques may include, for example, teleconferencing, web meeting, interactive web-based communications and remote electronic access to the ISMS documentation or ISMS processes

SCB identifies the appropriate amount of audit time required for each client and certified ISMS. A documented procedure is followed for the calculation of audit time, which includes remote auditing activities that represent less than 30% of the planned on-site audit time. The audit time chart is used to determine the appropriate audit time, based on the total number of persons doing work under the organization's control for all shifts and adjusting for significant factors applying to the ISMS scope being audited. Any deviations from the maximal restriction are taken into account, and adjustments to the audit time may be made during the course of the audit based on the findings in stage 1.

**Instructions for ISO 27001 Auditing: Remote Auditing (ICT)**

* ICT Auditor Days: The number of days the ICT auditor is expected to be auditing all sites combined.
* Technology Used: The technology used in the ICT auditing process.
* Processes Audited: The processes that were audited in the ICT component of the audit. The Audit Plan needs to be consulted for a list of noted ICT processes.
* Fulfillment of ICT Audit Objectives: The auditor needs to verify if all of the ICT audit objectives were fulfilled.
* Effectiveness of ICT Use: The auditor needs to determine if the use of ICT during the audit was effective.
* Rescheduling or Limited ICT Attempt: If the answer to either of the above questions is "No," the ICT portion of the audit may needs to be rescheduled as an onsite event or limited to a second ICT attempt. If the second ICT attempt is unsuccessful, an onsite event must take place.

Note: These instructions align with the requirements specified in ISO 17021-1 and ISO 27006 for remote auditing of information and communication technology (ICT).

**The use of ICT for remote auditing:**

* Stage 1 audit: The stage 1 audit, also known as the pre-certification audit, is the first step in the certification process. During this stage, the auditor evaluates the client's ISMS documentation, security controls, and processes. If the auditor determines that the client's ISMS is ready for the stage 2 audit, they will proceed with the stage 2 audit. For remote auditing, the stage 1 audit should be conducted using ICT tools such as video conferencing, screen sharing, and file sharing tools to ensure that the auditor can thoroughly evaluate the client's ISMS from a remote location.
* Stage 2 audit: The stage 2 audit is the on-site assessment of the client's ISMS. During this stage, the auditor evaluates the client's ISMS in action, verifying the implementation and effectiveness of security controls. If the auditor determines that the client's ISMS meets the requirements of ISO 27001, they will recommend certification. For remote auditing, the stage 2 audit should be conducted using ICT tools such as video conferencing, screen sharing, and file sharing tools to ensure that the auditor can thoroughly evaluate the client's ISMS from a remote location.
* Surveillance 1 audit: The surveillance 1 audit is the first follow-up audit after the initial certification. The auditor evaluates the client's ISMS to determine if it is being maintained and improved. For remote auditing, surveillance 1 audit should be conducted using ICT tools such as video conferencing, screen sharing, and file sharing tools to ensure that the auditor can thoroughly evaluate the client's ISMS from a remote location.
* Surveillance 2 audit: Surveillance 2 audit is the second follow-up audit after the initial certification. The auditor evaluates the client's ISMS to determine if it is being maintained and improved. For remote auditing, the surveillance 2 audit should be conducted using ICT tools such as video conferencing, screen sharing, and file sharing tools to ensure that the auditor can thoroughly evaluate the client's ISMS from a remote location.
* Recertification audit: The recertification audit is the audit conducted to determine if the client's ISMS is still in compliance with ISO 27001 and if the client should be recertified. For remote auditing, the recertification audit should be conducted using ICT tools such as video conferencing, screen sharing, and file sharing tools to ensure that the auditor can thoroughly evaluate the client's ISMS from a remote location.