WHITE PAPER

Auditing Inspection Process – Nuclear Regulator

Contents

Introduction

With support from leadership, the internal audit functions at both the Canadian Nuclear Safety Commission (CNSC) and the Federal Authority for Nuclear Regulation (FANR) have established the International Internal Audit Collaboration Working Group (IIACWG) for nuclear regulatory bodies. The CNSC and FANR have since collaborated extensively to strengthen various aspects of their respective mandates by initiating periodic knowledge-sharing meetings between their internal audit functions and technical functions, and allowing experience sharing that can enrich practices at both organizations.
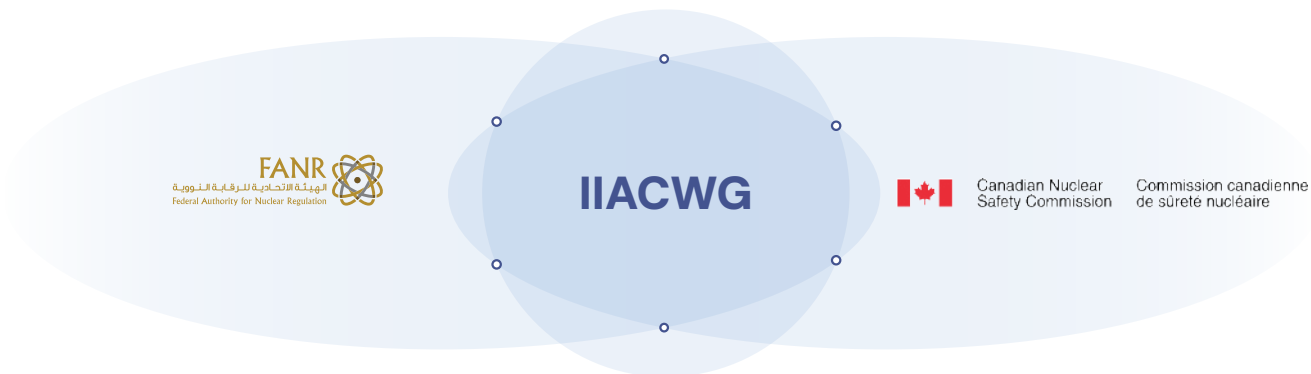
Most industries or major sectors have networks, working groups, technical groups and knowledge groups in the internal audit field/profession (e.g., the Institute of Internal Auditors). This provides the benefit of searchable risk registers, audit programs, audit challenges, solutions and easy-to-access experts from the sector/industry for discussions, and experience and knowledge sharing. However, the nuclear regulatory body and industry lack such networks, which leads to a lack of access to a knowledge repository or register of experts for people to contact when in need of advice on matters pertaining to technical audits.

This collaboration incubated the idea of a white paper that would be developed to assist the internal audit functions (IAFs) of other nuclear regulatory bodies to enhance their assurance (audit) activities and build a trusted network of internal audit functions' within nuclear regulatory bodies. The focus of this white paper is to provide high-level guidance in the form of a methodology and audit program for IAF's at the nuclear regulatory bodies to audit the inspection process for nuclear power plants and regulated materials licensees (radioactive and nuclear material users).

This white paper serves as an example of the value that internal audit functions within nuclear regulators can derive from a wider collaboration, a knowledge-sharing initiative and technical working groups. It further emphasizes the benefits that IAFs can deliver to their respective regulatory bodies in enhancing their functions and achieving the regulatory mandate through their assurance activities.

In the future, the IAFs expect to create different white papers and develop new initiatives that can serve the international internal audit community of nuclear regulatory agencies. The CNSC and FANR plan to present this white paper to other nuclear regulatory organizations with the intention of encouraging their membership and participation in this international working group. In addition, CNSC and FANR intend to have future discussions with the International Atomic Energy Agency (IAEA) to help facilitate this working group.

Background

Internal Audit

The International Professional Practices Framework (IPPF) promulgated by the Institute of Internal Auditors (IIA) define internal auditing as "an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes." The internal audit function is an essential part of every organization's governance framework because its unique independent positioning within the organization allows it to enhance the organization's ability to serve public interests through assurance and advisory activities.

To assist the IAFs at nuclear regulatory bodies, this white paper additionally provides an overview of the internal audit methodology curated based on combining internal audit methodologies of CNSC and FANR as presented in Appendix 1. Both entities follow a well-defined internal audit methodology that is drawn from International Professional Practices Framework (IPPF) promulgated by the Institute of Internal Auditors. The methodology defined in Appendix 1 can be used for audits of inspection processes at nuclear regulatory bodies.

Phase of the IA Methodology
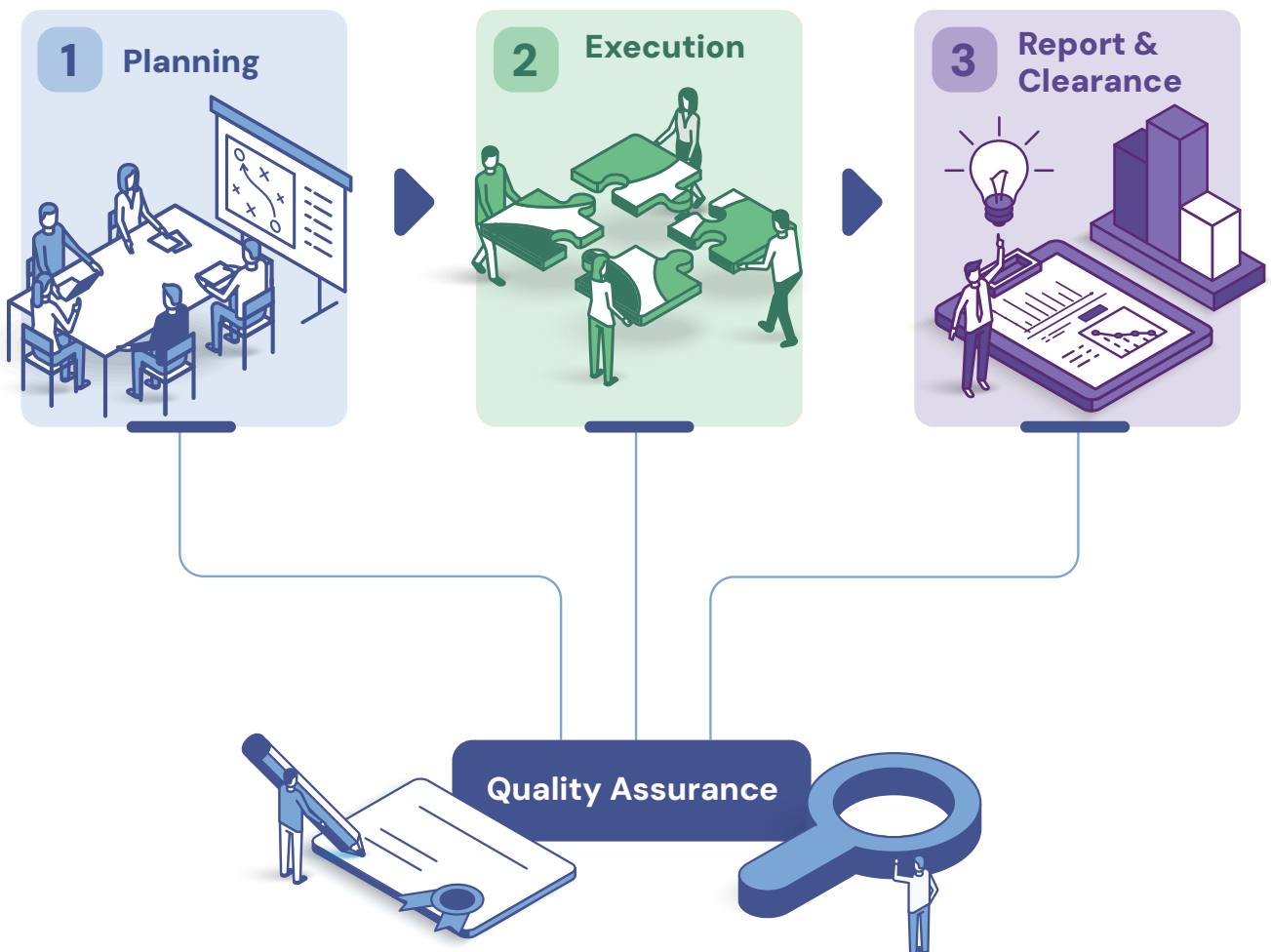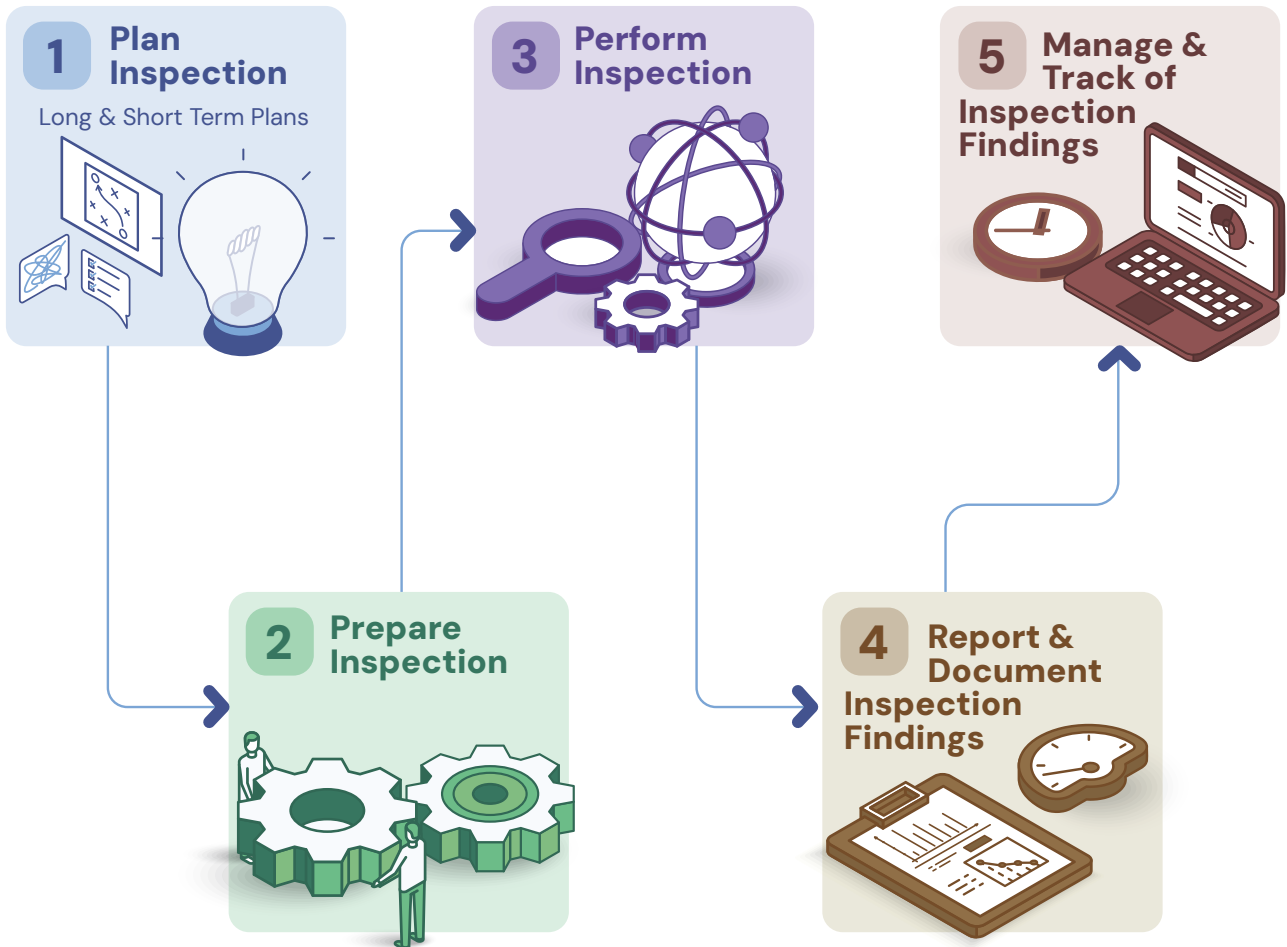
Inspections at Nuclear Regulatory Bodies

For the purpose of this white paper, inspection refers to:

◆ Compliance verification activities for regulated technical areas of safety, nuclear safety, nuclear security, radiation protection and safeguards, including nuclear export controls

◆ Other visits that were initiated following allegations (reports of concerns relating to safety, security or safeguards) and that may transition to regulatory inspections when an encountered situation must be remedied to restore safety and security.

The above explanation of the term "inspection" applies to inspections carried out at both nuclear facilities (NF) and facilities other than nuclear facilities (non-nuclear facilities). The inspections can be conducted as planned inspections or as reactive inspections. Planning for inspections is both risk informed and performance informed.
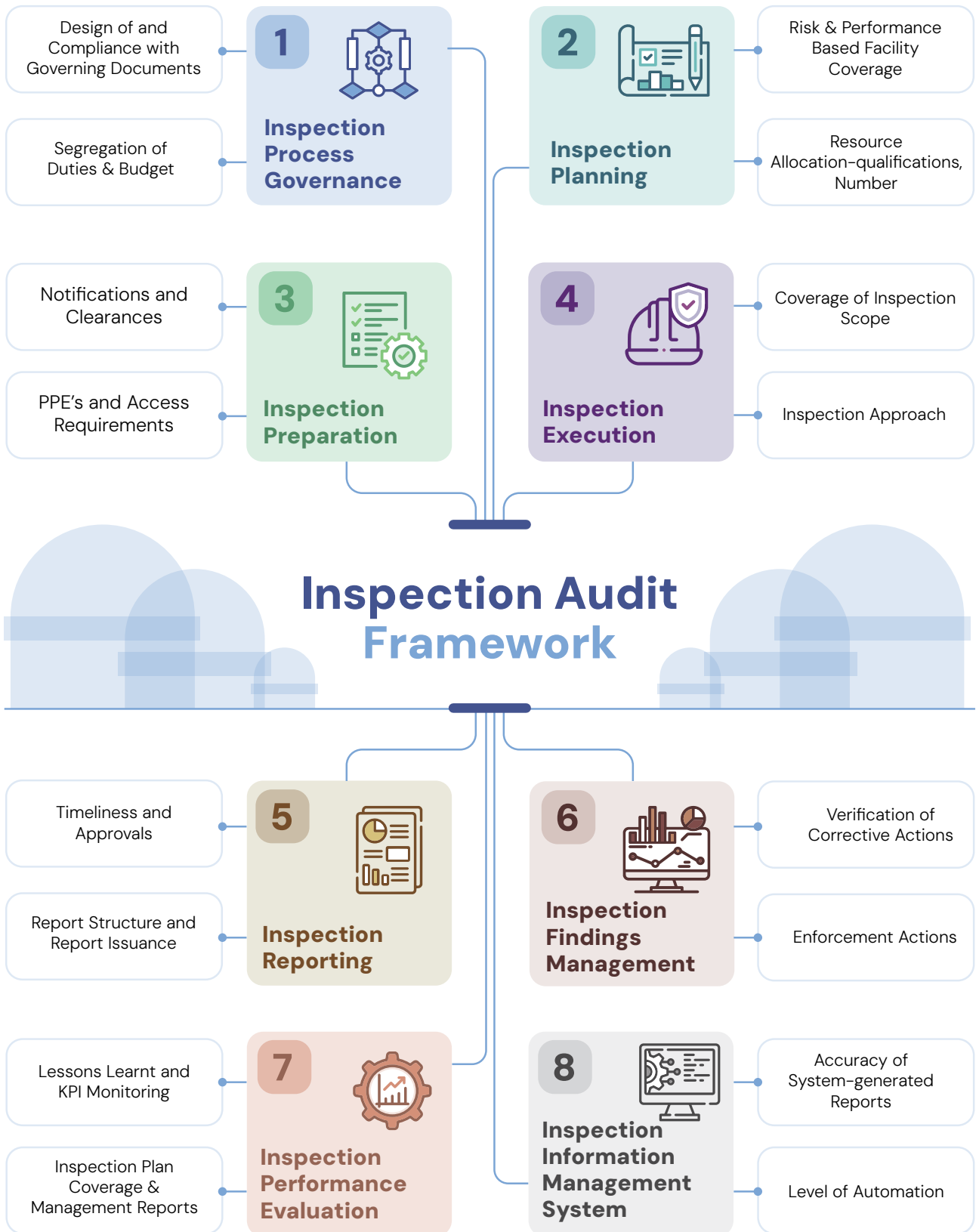
Inspection activities within nuclear regulatory bodies are typically conducted as indicated below.

Steps in a Typical Inspection Process

1 Plan Inspection
Long & Short Term Plans

2 Prepare Inspection

3 Perform Inspection

4 Report & Document Inspection Findings

5 Manage & Track of Inspection Findings

Audit Program for Inspection Audit

A framework was designed comprising eight core elements. This is the minimum number of elements to be reviewed by IAFs during audits of inspection processes at nuclear facilities (NF) and facilities other than nuclear facilities (non-nuclear facilities). IAFs of regulatory bodies may customize the suggested framework to address their specific organizational needs.

1
Inspection Process Governance
- Design of and Compliance with Governing Documents
- Segregation of Duties & Budget

2
Inspection Planning
- Risk & Performance Based Facility Coverage
- Resource Allocation-qualifications, Number

3
Inspection Preparation
- Notifications and Clearances
- PPE's and Access Requirements

4
Inspection Execution
- Coverage of Inspection Scope
- Inspection Approach

Inspection Audit
Framework

5
Inspection Reporting
- Timeliness and Approvals
- Report Structure and Report Issuance

6
Inspection Findings Management
- Verification of Corrective Actions
- Enforcement Actions

7
Inspection Performance Evaluation
- Lessons Learnt and KPI Monitoring
- Inspection Plan Coverage & Management Reports

8
Inspection Information Management System
- Accuracy of System-generated Reports
- Level of Automation

Key factors to consider under each of the 8 elements are as listed below.

1.	Inspection Process Governance: (governing documents / management systems such as policies, procedures, delegation of authorities concerning the inspection process):

No.	Audit Steps
1	Review the availability and design adequacy of existing governing documents (e.g., policies, procedures and instructions for the inspection process) in terms of capturing all action steps in the inspection process
2	Review compliance with existing governing documents
3	Review and approve of governing documents – Verify the approval authority and timeliness of review of the governing documents to ensure they are up-to-date
4	General awareness of the process – Assess the awareness of the employees responsible for implementation (e.g., through surveys and interviews)
5	Segregation of duties – Verify whether segregation of duties is in place as part of the process captured within the governing documents and within the entity's delegation of authority. Assess the clarity regarding roles and responsibilities for all action steps
6	Assess whether governing documents are aligned with national laws and regulations
7	Review the consistency and alignment between various internal governing documents, such as procedures, policies and instructions
8	Assess whether the existing budget is adequate for conducting inspections based on a review of prior-year estimates and actual inspection spending, and next year's plans / baseline plans.

2.	Inspection Planning

No.	Audit Steps
1	Review the design and existence of risk-based (prioritizing inspection activities that pose higher risks to safety, security and safeguards) and performance-based (utilizing inspection methods such as direct observations and interviews) planning processes to develop baseline inspection plans and select entities requiring inspection.
2	Review the sources that will be used to develop the inspection plan (e.g., licensee performance assessments, external reports, safety assessments performed by licensees, operational schedule of the facility) and ensure they are appropriately considered during inspection planning.
3	Review whether the inspection plans (monthly, quarterly, annually, or Level 1 and Level 2 detailed, etc.) are developed on a timely basis.
4	Review the inspection coverage across entities to ensure it follows the inspection planning methodology.
5	Review the inspections conducted in the past and determine if adequate follow-up inspections were done where applicable.
6	Assess the balance between reactive and announced inspections to ensure resources are available to conduct reactive inspections (when required).
7	Review the resource (inspector) allocation for the inspection of facilities to ensure a rotation of inspectors to facilities and take inspector competencies into consideration.
8	Review the approval of inspection plans to ensure these are approved by the relevant and appropriate authority level.

9	Review whether adequate justifications are available and approved for any modifications to the inspection plan (inspection date, inspection facility, inspection team, etc.).
10	Review whether a sufficient amount of time is allocated to cover the scope of areas identified for the inspection.
11	Review whether a conflicts check is performed (e.g., conflict declarations) before inspectors are assigned to inspect certain facilities.
12	Review whether the inspectors assigned to inspections are qualified, in accordance with the inspector qualification program, and have a valid inspection qualification card.
13	Review whether the inspection program captures the authority's future/strategic direction and continues to meet regulatory oversight requirements with the advent of emerging technologies.

3.	Inspection Preparation
No.	**Audit Steps**
1	Review whether the inspection notifications are adequately detailed and sent to licensees with sufficient notice (for planned inspections).
2	Review whether the inspection notifications are aligned with the inspection plan.
3	Review the existence of applicable PPEs (including TLDs) for inspectors before embarking on inspections.
4	Review whether well-maintained and tagged inspection equipment is in place for inspectors before they embark on inspections.
5	Review whether appropriate security clearance and access requirements are applied for and received before inspections are conducted.

4.	Inspection Execution
No.	**Audit Steps**
1	Shadow the inspectors to review the actual performance of the inspection and the roles performed by various members to verify compliance with procedures. This will assist in identification of areas of improvement to enhance the efficiency and effectiveness of the inspection process.
2	Review whether inspections performed cover the planned scope areas by checking the inspection approach/steps or going over inspection checklists.
3	For a sample of past inspections (of a similar nature), review whether the inspection approach was applied consistently and it aligns with governing documents (e.g., procedures).
4	Review whether kickoff meetings and exit meetings are conducted for all inspections.
5	Verify whether inspectors comply with the requirements of the radiation protection program.
6	If inspections are being conducted for the same facility by various departments, verify whether adequate coordination exists among the departments for the inspection process, avoid duplication of efforts, avoid creating a nuisance for licensees and optimize regulatory oversight.

5.	Inspection Reporting
No.	**Audit Steps**
1	**Review the inspections reports to verify:**
	› Compliance with the inspection scope
	› That the inspectors conducting the assignment match the inspection plan
	› Whether the categorization of inspection findings is adequate (e.g., violation or potential violation, unresolved issue (URI), non-cited violation, deviation, non-conformance, issue of concern)
	› That correct references are made to regulatory requirements when violations are stated
	› The authorization/approval requirements and verify whether they are electronically approved
	› Whether previous inspection findings have received follow-up and the status was mentioned (where applicable).
2	Assess whether the cancellation of inspections is justified and review whether the cancelled inspections are rescheduled, where applicable.
3	Identify the existence of standardized inspection report templates and verify whether the correct inspection report templates were used to document inspection.
4	Review the time taken to complete inspections and compare this with the time allocated to the identification of any abnormal reasons for increased duration.
5	Review whether the time taken to issue inspection reports are in line with the defined KPIs and identify reasons for delays (if any).
6	Verify the existence of appropriate of enforcement actions for various types of violations.
7	**For the inspection findings:**
	› With major violations, check whether notices of violation are issued on a timely basis and licensees send an acknowledgement of receipt within the requested timeframe.
	› Timelines for corrective actions are adequately defined by licensees and shared with the authority.
	› Verify whether appropriate enforcement actions (e.g., administrative penalties, licence suspensions) have been levied in accordance with respective regulations.
8	In case draft and final inspection reports are available, verify whether dropped findings are adequately justified.
9	For inspection reports that are to be issued publicly, verify whether these are approved by respective departments prior to public release (e.g., on a website) and that the reports are released on a timely basis.

6.	Inspection Findings Management
No.	**Audit Steps**
1	For issued inspection reports, review whether all inspection findings are tracked by the respective department.
2	**For the inspection findings:**
	› Verify whether all findings are entered in a manual/automated tracker.
	› Verify whether follow-up has been completed on a timely basis.
	› Verify whether inspection findings are closed upon receipt of adequate documents.
3	For follow-up inspections conducted to verify completion of corrective actions, verify whether these are planned on a timely basis and inspection findings are closed adequately.
4	Review whether correct enforcement actions were taken by the authority when licensees failed to take corrective actions for significant findings.
5	Review whether inspection findings from various departments conducting inspections are used as part of licensee performance assessments.

7.	Inspection Performance Evaluation
No.	**Audit Steps**
1	Review the existing inspection debriefs or lessons learned documented by the inspection team (if any) and verify how these have been incorporated into the inspection process (where applicable).
2	Review the existence of appropriate KPIs for key inspection activities (e.g., timeliness of plan development, number of planned inspections vs. number of actual inspections, coverage of inspection facilities, timeliness of report issuance, closure of findings, reports to management, etc.)
3	Verify whether the inspection KPIs set by management are being monitored and reported periodically to the respective performance management teams.
4	In case the defined KPIs are not met, review whether justifications are provided and corrective action / management plans are identified.
5	Verify whether the inspection were performed as per the plan.
6	Review the existence, accuracy, timeliness and adequacy of reporting to Management/Senior Management regarding inspections.
7	Review reasons inspections were not performed (e.g., lack of required personnel) and identify the actions taken by management to prevent the issue from reoccurring.
8	Review a sample of management reports on inspection to verify whether all critical aspects of inspections are captured and reported accurately.
9	Review reports issued by international missions, the IAEA, federal auditors, external auditors and the second line of defence (e.g., risk management, compliance) to verify that the recommendations are implemented by the respective department and on a timely basis.
10	For a sample of inspections, seek feedback from licensees on the performance of inspections by FANR inspectors to identify areas of improvement.
11	Review whether all equipment used by the inspectors is returned on a timely basis, in good condition, and that returns are tracked adequately.
12	Compare inspection budgets with actual inspections conducted to verify any discrepancies in expense allocations and reimbursements.

8.	Inspection of Information Technology Systems
No.	**Audit Steps**
1	**Perform system walk-throughs for activities done using these systems:** › To identify non-compliance with the existing procedures and underutilization of the systems. › To review appropriate segregation of the duties and approval authorities defined on the system. › To review the access restrictions/controls on inspection data. › To verify the accuracy of any process-based KPIs, if any.
2	Verify the accuracy of system-generated reports through comparison with timelines, respective documents and actual tasks conducted.
3	Identify any activity that is currently performed manually but which could be performed using these systems, and suggest opportunities for improvement.
4	Verify whether all documents pertaining to the inspections are in the document management systems for future reference.

Overall Conclusion

Collaboration between the internal audit functions of nuclear regulatory bodies, like this white paper created by the Internal Audit Collaboration Working Group for Nuclear Regulators, is just the beginning of many other initiatives that may be developed to enhance the role of internal audit functions at nuclear regulatory bodies, which can in turn provide significant benefits to the nuclear regulatory functions, processes and activities.

This white paper amalgamates the respective organizational learning from an audit inspection process where both organizations have highlighted that moving beyond compliance is crucial for all audits. It has presented a framework of 8 core elements to be reviewed during the audit inspection process and emphasizes the need for an assessment of the design and effectiveness of the risk-based planning approach to inspections and a focus on fulfilling the purpose of an inspection.

Additionally, this white paper presents a methodology for auditing the inspection process that focuses on the cost, time and resource decisions of internal audit functions. It further emphasizes that audit reports are most useful when auditors address audit concerns in a comprehensive manner that take into account:

> Management's expectations of the inspection process considering entity-specific constraints (e.g., resource availability)

> Eternal factors (e.g., pandemic, government directives)

> The contribution of the process to the overall regulatory mandate of the entity

Wayforward

Inter-organizational collaboration is the cornerstone of success for any industry. We therefore suggest that a working group / technical group be proposed for internal audit both at the Institute of Internal Auditors (IIA) and the International Atomic Energy Association (IAEA) such as this working group between the CNSC and FANR, or that membership of this working group be expanded to include other regulatory bodies to obtain the benefits of:

> Sharing experiences, including lessons learned from technical audits through periodic working group meetings or workshops

> Developing technical guidance documents to enhance technical audits at nuclear regulatory bodies

> Creating a network of internal audit experts in the nuclear regulatory field to provide ease of access to technical subject-matter expertise

Working group/ technical group at the IAEA and the IIA level

Sharing of Experiences

Development of Technical Guidance Documents

Creation of Network of Internal Audit Experts within the Nuclear Sector

References

- Audit and evaluation reports – Canadian Nuclear Safety Commission

- Internal audit execution and follow-up procedures – Federal Authority for Nuclear Regulation

- Audit reports pertaining to inspections – Federal Authority for Nuclear Regulation

- Assurance Engagements Manual - Canadian Nuclear Safety Commission

- Institute of Internal Auditors (IIA) – International Professional Practices Framework (IPPF)

Acknowledgements

About the Nuclear Regulators and their Internal Audit Functions

Canadian Nuclear Safety Commission (CNSC)

On October 12, 1946, the Government of Canada proclaimed the Atomic Energy Control Act. Under the Act, the Atomic Energy Control Board was formed as a regulatory agency to provide for "control and supervision of the development, application and use of atomic energy and to enable Canada to participate effectively in measures of international control of atomic energy." On May 31, 2000, the Nuclear Safety and Control Act replaced the Atomic Energy and Control Act, and the Canadian Nuclear Safety Commission (CNSC) was established. The new act provided the CNSC with the authority to regulate the development, production and use of nuclear energy, and the production, possession and use of nuclear substances, prescribed equipment and prescribed information in Canada.

The Canadian Nuclear Safety Commission regulates the use of nuclear energy and materials to protect health, safety, security and the environment; to implement Canada's international commitments on the peaceful use of nuclear energy; and to disseminate objective scientific, technical and regulatory information to the public.

The CNSC has an independent departmental audit committee (DAC) of external members that is responsible for providing the President with independent advice and recommendations on the sufficiency, quality and results of internal and external audit engagements related to the adequacy and functioning of the department's frameworks and processes for risk management, control and governance.

The Internal Audit Evaluation and Ethics Division (IAEED) was formed in 2021 through the merger of Strategic Evaluation and Value and Ethics with the Internal Audit Function. Led by the Chief Audit Executive, Internal Audit, reporting functionally to the President. The IAEED comprises 12 full-time-equivalent employees (6 of which are dedicated to internal audit and evaluation). The division's mandate is to provide a suite of independent, objective and neutral internal audit, evaluation and values and ethics services designed to support the achievement of the CNSC's strategic goals, and improve the technical and staff experience at the CNSC.

Federal Authority for Nuclear Regulation (FANR)

In September 2009, FANR was established to be the regulatory body for the nuclear sector in the UAE in accordance with Federal Law by Decree No. 6 of 2009, Concerning the Peaceful Uses of Nuclear Energy, which was issued by the UAE President H.H. Sheikh Khalifa bin Zayed Al Nahyan. FANR protects the UAE's public, its workers and the environment through nuclear regulatory programs relating to safety, security, radiation protection and safeguards, which fulfill key objectives in licensing and inspection, in accordance with best international practices. FANR also oversees the implementation of the UAE's obligations under international treaties, conventions and agreements in the nuclear sector, and determines administrative standards that support excellence in regulation.

The Internal Audit Department was established in 2015, comprising 5 staff members headed by the Chief Audit Executive reporting functionally to the Audit and Risk Committee (ARC) and administratively to the Director General. The mandate of the department includes internal audit activities and anti-fraud and ethics activities, including the management of FANR's centralized whistleblowing system (Report to Protect). The department further supports the Audit and Risk Committee in fulfilling its oversight responsibilities and adds value to the authority, so that it can achieve its objectives through a systematic and disciplined approach to review the authority's risk management, control and governance processes.

Copyright & Disclaimer

Copyright

This white paper contains a variety of copyright materials. Part of this includes intellectual property or is owned by the regulators (the CNSC and the FANR), as shown through attribution and referencing. Some material is in the public domain. Except for material that is unambiguously and unarguably in the public domain, only material owned by the regulators, and so indicated, may be copied, provided that textual and graphical contents are not altered and the source is acknowledged. The CNSC and the FANR reserve the right to revoke this permission at any time. Permission is not given for any commercial use or sale of the material.

Disclaimer

While the nuclear regulators (the CNSC and the FANR) have attempted to ensure the information in this white paper is as accurate as possible, the information is for personal and educational use only, and is provided in good faith without any express or implied warranty. There is no guarantee given as to the accuracy or currency of information contained in this white paper. The CNSC and the FANR do not accept responsibility for any loss or damage resulting from use of the information contained in this white paper.

Abbreviations

>	**IA**	Internal Audit
>	**IAF**	Internal Audit Function
>	**CNSC**	Canadian Nuclear Safety Commission
>	**FANR**	Federal Authority for Nuclear Regulation
>	**IAEA**	International Atomic Energy Association
>	**IIA**	Institute of Internal Auditors
>	**PPE**	Personal Protective Equipment
>	**RCM**	Risk and Control Matrix
>	**TLD**	Thermoluminescence dosimetry

Definitions

>	**Auditee**	Also known as the Audit Client refers to those in charge of the processes/functions being audited.
>	**Audit Program**	Also known as the Risk and Control Matrix refers to the repository of risks that pose a threat to the process/function being audited, the controls in place to mitigate those risks, the tests to be performed to evaluate the effectiveness of controls and the results.

Appendices

>	**Appendix 1**	Internal Audit Approach for Conducting Technical Audits

Appendix 1

Internal Audit Approach for Conducting Technical Audits

Collaborative support has led the entities to design the following three-phased approach for conducting technical audits that combines the best practices of both entities. Additionally, the methodology presented below is influenced by each entity's country-specific internal audit governing documents, namely:

› The UAE Federal Government's internal audit methodology

› The Government of Canada's Treasury Board Policy on Internal Audit

Internal Audit Approach for Conducting Technical Audits

1 Planning Phase

Activities

- Determine engagement plan comprising scope, resource needs, budget, timelines.
- Complete pre-engagement formalities (such as code of ethics declarations, Non-disclosure agreements, security clearances, competency matrices etc.).
- Prepare audit management software.
- Issue the audit commencement Letter, conduct kick off meeting with process owners and share terms of reference with process owners.
- Review existing internal audit risk register and develop process understanding document.
- Develop the initial audit program and agree upon the approach.

Deliverables

- Engagement Plan
- Audit Commencement Letter
- Pre-Engagement Formalities
- Terms of Reference
- Kick off Meeting Minutes
- Process Understanding Document
- Initial RCM (Risk and Control Matrix also known as Audit Program)

2 Execution Phase

Activities

- Request detailed information (evidence gathering).
- Confirm the audit techniques, sampling techniques and sample size are in line with the audit program.
- Perform and document tests, analyze audit evidence, and evaluate control design and operating effectiveness.
- Maintain exception control log, document issues, and validate findings with process owners.
- Debrief management and document justifications for dropped observations (observations not reported in final report).
- Complete audit program with results in order to finalize the audit observations and recommendations.

Deliverables

- Audit Request Log
- Working Papers
- Test Sheets and Supporting Documents
- Exception Control Sheet
- Completed RCM (Audit Program)

3 Report & Clearance Phase

Activities

- Prepare and issue draft IA report including the development of an audit opinion on the control effectiveness rating. Prepare management letter (if any).
- Conduct exit meeting, and incorporate management feedback and action plans (responses).
- Present audit results to senior management and the audit and risk committee, and issue the final report.
- Review audit satisfaction/feedback survey, conduct audit team performance assessment and prepare a lessons learnt report.
- Update the follow up tracker/system for Management Action Plan monitoring.

Deliverables

- Draft Audit Report
- Exit Meeting Minutes
- Presentation of Significant Audit Observations
- Final Audit Report
- Satisfaction Survey, Performance Assessment Report, lessons learnt report
- Updated Follow-up Tracker
- QA Checklist

Perform Quality Assurance Checks & Update the Audit Management Software

The Planning Phase

The planning phase is designed to lay the foundation for an effective, efficient and high-value audit engagement and meet its intended objectives. During the planning phase, the auditors gather extensive information to develop their knowledge of the functions under review and the risks to which they are exposed. Based on this insight, they scope the audit, and develop a well-rounded audit program to focus on the areas of greatest significance to management. This ensures that competent resources, time and the budget are devoted to the most critical areas and, ultimately, that they add maximum value to the audit client. If done well, the planning phase equips the auditor with the knowledge to be credible, effective and efficient during the fieldwork phase and creates a common understanding between the auditee and the audit team on the approach and expectations from the audit engagement.

Key points for the Planning Phase

> In line with IIA's IPPF Standard 2230, it is necessary to ensure that staff deployed to the engagement have the right set of skills, knowledge and competence to perform the engagement. Therefore, the scope of the engagement and the qualifications of the in-house audit team must be considered and should influence decisions on whether to use in-house or external resources (co-source, outsource). Additionally, it is suggested that adequate budget and resource allocations are determined prior to the approval of the risk-based internal audit plan.

> To ensure timely execution of fieldwork, it is necessary to ensure all pre-engagement formalities are completed well in advance of the start date as per the RBIA Plan, for instance, getting access to IT systems (e.g., ERP modules), and obtaining necessary security clearances and access/passes to various sites/facilities.

> A predominant factor in the success of every engagement is a clear agreement and communication of the scope, objectives, approach and responsibilities with the process owners of the function being audited. Additionally, it is also recommended that the positive aspects/benefits of having the audit be emphasized to obtain buy-in from the process owners and support for the next phases of the audit process. Discussions on such matters should occur at the project kickoff meeting as opposed to the project terms of reference merely being shared via email.

The Execution Phase

This phase involves the audit team executing the audit program. Activities central to this phase include: obtaining sufficient, reliable, relevant and useful evidence for the purpose of analysis; testing to allow the team to develop observations about whether the controls have been designed adequately and are operating as designed, whether or not performance is consistent with the identified audit criteria; or identifying opportunities for improving performance. The goal of the work in this phase is to be able to draw conclusions for each audit objective, and to formulate audit recommendations and conclusions. The execution phase ends with a clarification meeting held with the auditee to validate & confirm the findings. It is essential to determine if the controls have been designed adequately and are operating as designed. The appropriateness of the controls in mitigating the identified risks will be evaluated for:

› **Design Adequateness**   Advancing the understanding of how the controls are designed and evaluating whether they are appropriate for achieving the technical objectives.

› **Operational Effectiveness**   Conducting an assessment based on adequate samples, if the controls are operating effectively as designed.

Key points for the Execution Phase

◆ The use of data analytics to test the entire population seems attractive and would make it possible to provide greater assurance over the respective area. To do so, it is essential to identify the extent of digitization of the process and the level of integrity of the data to determine the feasibility of data analytics to test various controls.

◆ Shadowing inspectors during an inspection, as part of fieldwork, could lead to auditors obtaining first-hand insights and better process understanding, and result in auditors identifying risks beyond those documented in notes and help them develop value–added recommendations to management as well.

◆ Maintenance of exception control logs, including records of observations that were not reported in the final audit report. These could help auditors in understanding the viewpoints of management and their justifications for acceptance of risks (if any).

Reporting and Clearance

This phase is focused on providing the senior management and the audit and risk committee with internal audit objective assessments and reasonable assurance over the controls pertaining to the functions under review. Hence, internal audit must take the utmost care to communicate the audit engagement conclusions and recommendations effectively, incorporate relevant feedback and management action plans, and promptly deliver a high-quality, value-added draft internal audit report. This phase ends a review of auditee feedback, team performance assessments, documentation of lessons learned, completion of a quality assurance review and preparation for follow-up in the management action plans.

Key points for the Reporting & Clearance Phase

◆ **Structure of the internal audit report:**

- To facilitate a better understanding of the audit observations by the process owners, adoption of the 5 Cs structure – Criteria (background), Condition (observation), Cause, Corrective Action, and Consequence (Impact) – is suggested while observations are drafted.

- Internal auditors should remember this while making audit observations, and recommendations help process owners enhance their process controls and governance. It is also good to suggest best practices or opportunities for improvement that are not necessarily risks but rather areas that can be improved upon by process owners to enhance the efficiency of their activities.

◆ **Timeliness of the internal audit report:**

- If the report is not delivered on time to the process owners, it may become less valuable for the process owners or observations may become obsolete. Human process owners may also forget the discussions held about the identified observations and this may lead to a need for discussions of issues to be repeated.

- The recommendation is therefore that performance metrics, such as time taken to close an audit, are tracked and reasons for delays are reviewed, so that auditors understand how to improve/achieve on-time delivery of audits.

◆ **Closeout**

- A quality assurance checklist should be maintained right from the initiation of an audit all the way to report closure. The QA checklist should be updated regularly, especially after each of the 3 phases.

- Additionally, peer review by colleagues from within the internal audit function is recommended to ensure all completed documentation is easily understood by lay people.