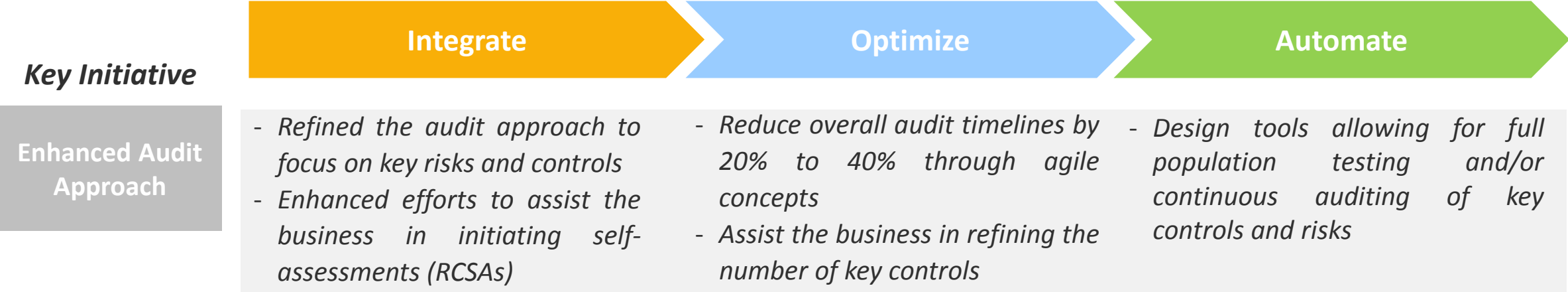


IAG Audit Process and Approach

Enhanced Approach (Effective September 1, 2018)

This training program is designed to prepare the audit teams to deliver audits using the new enhanced audit approach while optimizing and automating the process over time.



Session Objectives

- Understand changes to audit process under enhanced approach
- Refresh knowledge of end to end audit process/lifecycle of an audit
- Review examples of key audit documents with enhanced approach concepts applied
- Understand how to adapt agile concepts in our audit process
- Gain knowledge of analytics tools and processes

Topic	Slide #'s
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Audit Lifecycle	6
Audit Sample	7
❖ Analytics Pre-work	8-10
❖ Pre-Planning	11-15
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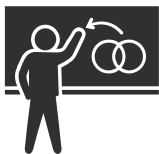
IAG Audit Process and Approach | *Key Concepts*

- Focus audit scope on key risks and controls that mitigate underlying risk
- Help the business to assess their key risks and key controls; highlighting deficiencies and/or gaps
- Test agreed key controls; automate testing, where applicable
- Determine opportunities to leverage data analytics by considering available tools and data to assess the process, scope audit, identify risks and test controls; collaborate with business to imbedded requirements into business process and tools, where applicable
- Utilize agile concepts to finish audits more efficiently and effectively



As we fully deploy the enhanced approach, the following outcomes are expected:

- Improved risk culture across the firm
- Enhanced collaboration across assurance functions
- Increased level of assurance and insights through the use of automation and other techniques
- Increased efficiencies by using agile concepts during the audit process

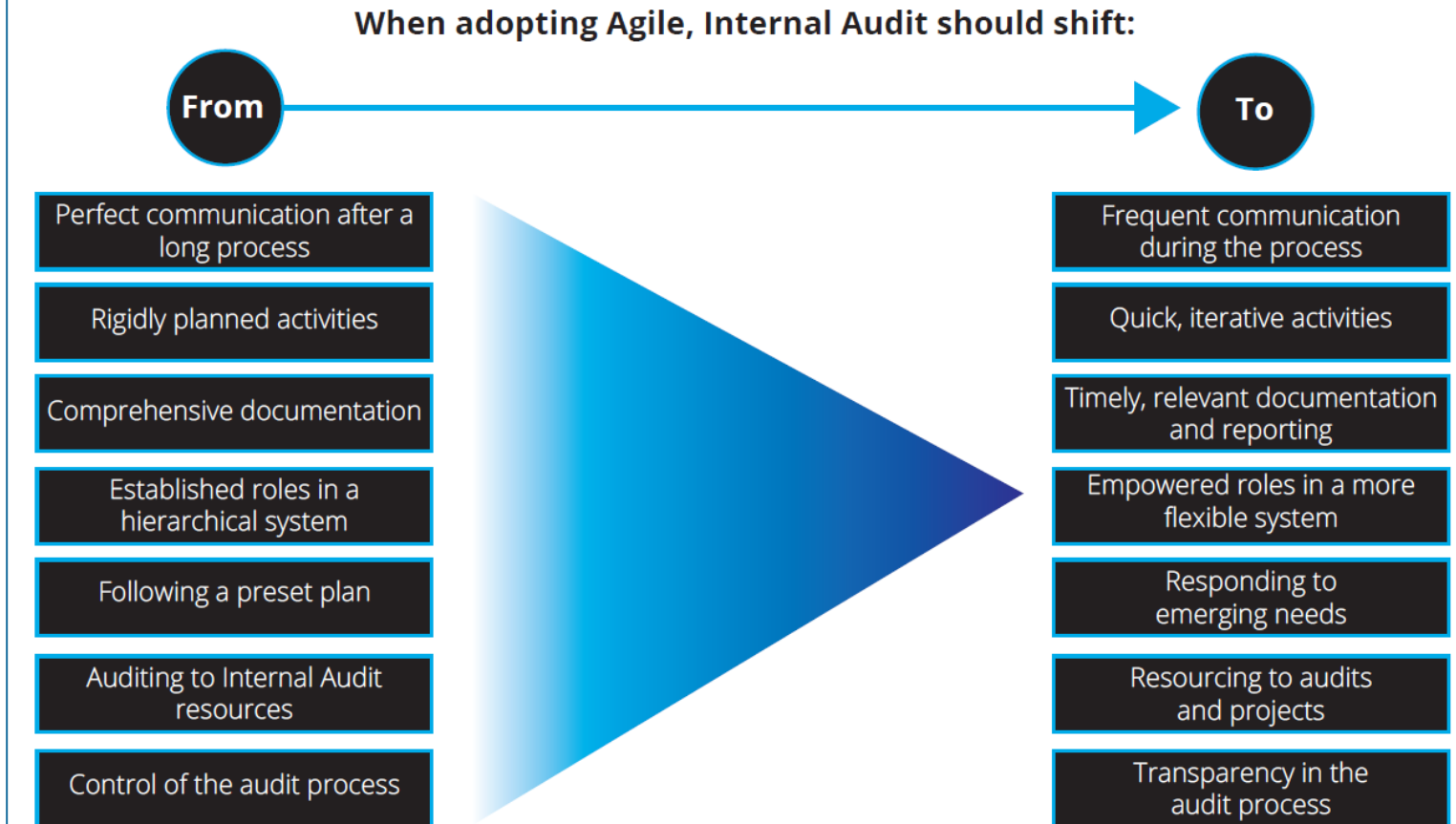


The collaboration between management, Internal Audit, Compliance and ORM will lead to a the development of an enhanced key risks and controls library for the business that will streamline and drive consistency across the AIG assurance functions. Upfront time investment during audit planning to understand the business process, identify key risk, keys controls and available data and tools will help to reduce the overall audit duration.

Impacts of Applying Agile Concepts

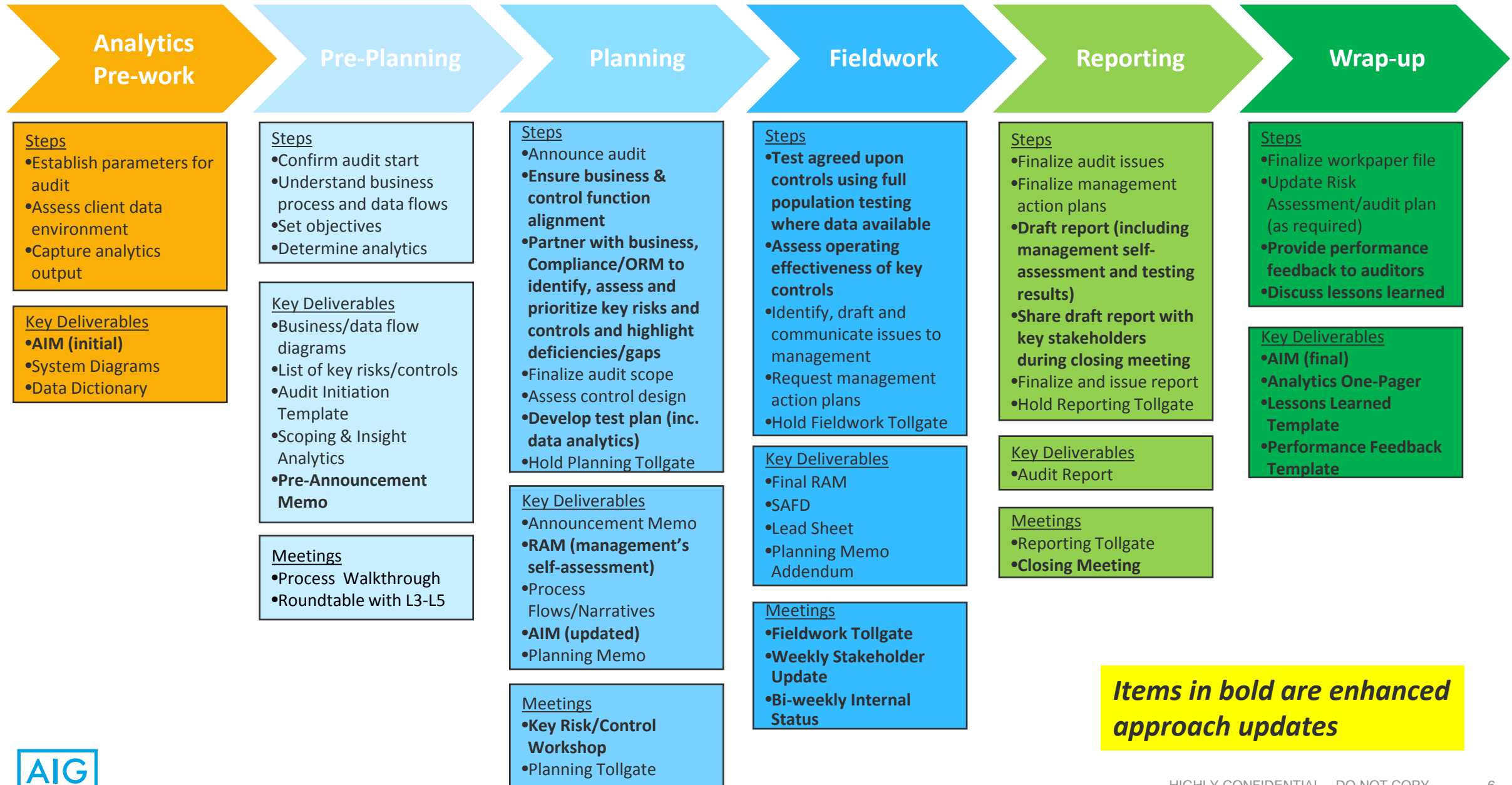
- Engage stakeholders earlier and more often
- Define shorter path to more insightful results
- End an audit at the point of diminishing returns
- Accelerate Internal Audit cycle times
- Partner with stakeholders so audit teams can determine appropriate scope

Figure 1: Considerations when adopting Agile for internal auditing



Source: Deloitte, Becoming Agile | A guide to elevating Internal Audit's performance and value

IAG Audit Process and Approach | *Audit Lifecycle*



Items in bold are enhanced approach updates

For the purposes of this training session samples of audit documentation required during all phases of the audit are included. The sample documentation is based on an ***audit of Aerospace Claims*** and will focus on **one claims process (i.e., adjudication)** and the corresponding key risks and controls.

To demonstrate how the enhanced approach will be applied, examples of the following types of documentation are included and will be discussed:

- Audit Initiation Template
- Pre-Announcement Memo
- Announcement Memo
- Risk and Controls Matrix (during planning and fieldwork)
- Process Flows
- Planning Memo
- Lead Sheet
- Summary of Audit Findings and Dispositions (SAFD)
- Planning Memo Addendum
- Audit Report*
- AIM - Analytics Integration Matrix (AIM) (preliminary and final)
- Analytics One-Pager
- Lessons Learned Document

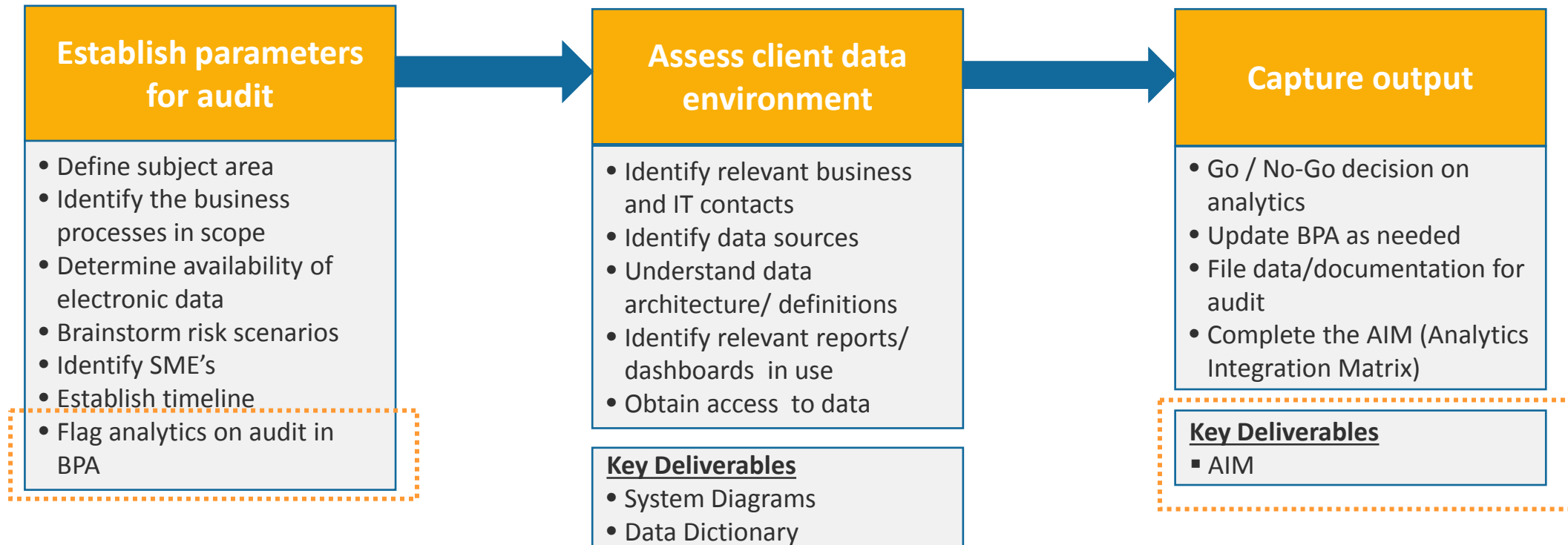
(All examples are for illustration purposes only)

Enhanced approach is applicable to audits following a risk-based approach and excludes regulatory compliance rules-based audits.

IAG Audit Process and Approach



During analytics pre-work the audit team performs activities to identify and develop analytics for a future audit(s). Pre-Work occurs well before pre-planning, typically when an audit is considered for activation in an upcoming quarter. The following steps are performed during analytics pre-work:



Changes

The sample Analytics Integration Matrix (AIM) shown for the Aerospace Claims Audit demonstrates how risk scenarios and analytics information should be documented in the AIM template.

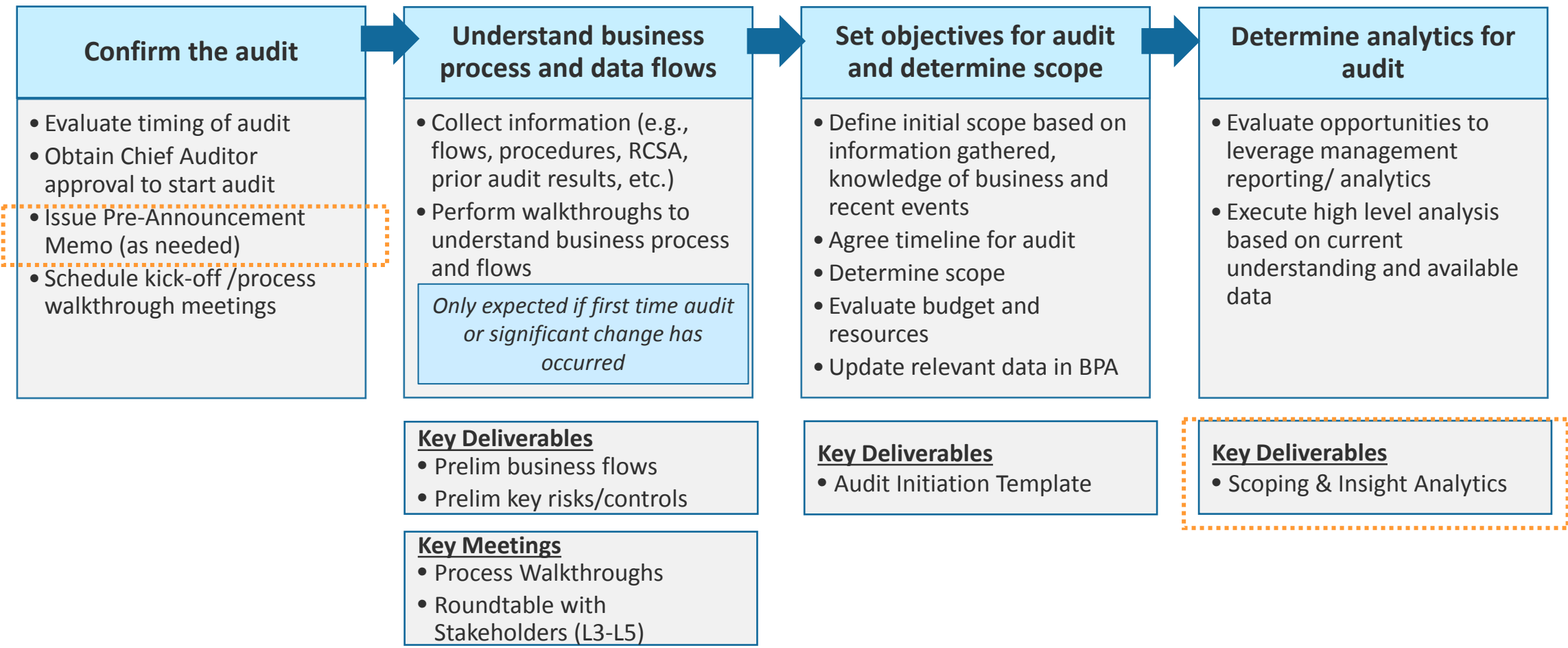
The AIM History tab in the AIM excel workbook can be used as a searchable source of reference for previous analytics performed in the Subject Area.

Project_Name	Audit_ID	Process Type	L1 Process	L2 Process	Question ID	Audit Question	Risk Scenario	Expected Control(s)	Analytics Testing Approach	Anal
Aerospace Claims	27255	Operational Processes	Manage Claims and Recoveries	First notice of loss (FNOL) and Triage	59	Are all critical data elements properly captured in the claims set up process?	1) Key data elements that affect reserving in reporting are not properly captured Risk: Ineffective claims handling resulting in claims leakage, customer dissatisfaction, and inaccurate management reporting.	A review process that monitors the proper capture of critical information is performed by management	Is there missing information within key data fields? Cause of loss, sub cause of loss.	Key c prop to in repo
Aerospace Claims	27255	Operational Processes	Manage Claims and Recoveries	Evaluation	34	Are MLRs prepared for all claims over the threshold? Are reserves timely updated in the claims application?	1) Due to the manual nature of the process, claims meeting the criteria may be reported late or not at all 2) Claims were entered into the MLR system, but the reserves were not updated in the claims application	Reconciliation between claims system and MLR report that identifies exceptions (MLRs without updated reserves, reserves without created MLRs) Automated control built into claims system that generates entries for the MLR	Test the entire claims population by comparing claims with Incurred Amounts that exceed the threshold in MLR criteria to see if they are present in the MLR report; provide context of duration (i.e. how long does it take a claim to appear on the MLR report after the threshold has been crossed, or how long did it take to update the reserve after	Majd appr resul claim oppo recov Rese awar lead

IAG Audit Process and Approach




During pre-planning the audit team performs activities to assist with developing audit scope and audit timeline. The following steps are performed during pre-planning:



Example of a Pre-Announcement Memo shown for the Aerospace Claims Audit

Pre-Announcement Memo can be leveraged when audit teams would like to engage management and request information prior to announcing the audit.



Sumukh Shah
Managing Director
Internal Audit Group

Internal Audit is planning to conduct an audit of the North America Aerospace Claims process in 3rd Quarter 2018. Prior to starting the audit we would like to engage your team in discussions to help us gain a better understanding of your business processes and associated risks. Additionally, we will collect information (e.g., policies, procedures, process flows, metrics, data from key systems, etc.) to help define the scope of the audit and identify where we may be able to leverage analytics or automate our testing during the audit.

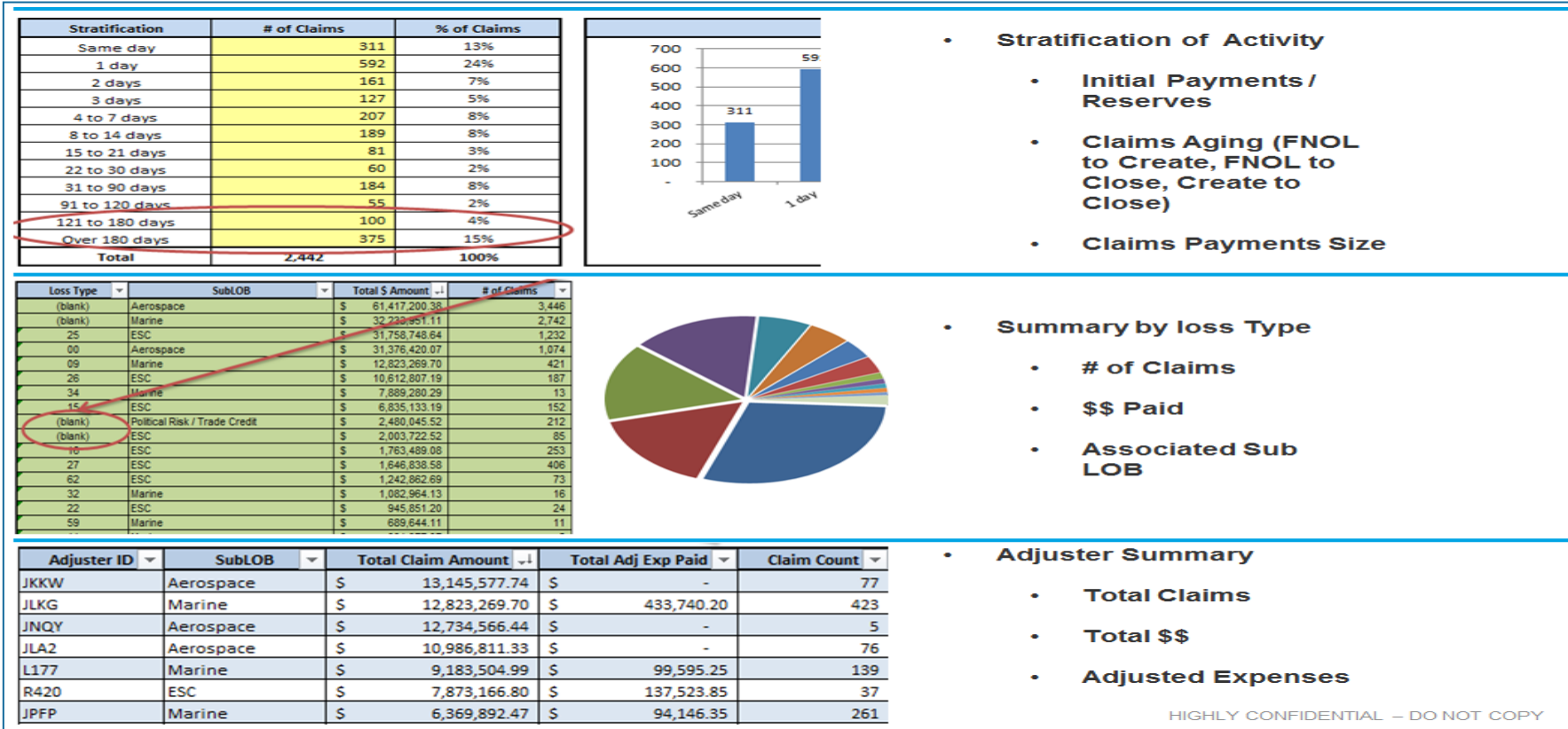
Michael Kumaresan will be leading the audit and Technology support will be provided by Nan Ge.

We look forward to working with you and your team. Please contact myself or Michael Kumaresan with any questions you may have.

As an example, the audit initiation template shown for the Aerospace Claims Audit.

Audit Activity Initiation Tool					
Audit Activity Name			Audit Activity Type	Timing of Audit	
Aerospace Claims Audit			Audit	Q2'18	
Audit Objectives/Strategy					
The objective of this audit is to evaluate the design and operating effectiveness of controls surrounding the Aerospace claims process					
Key Risk Drivers of Coverage				Inherent Risk Categories	
<ul style="list-style-type: none">High number of late claim acknowledgementsRate of change in denied claimsReserving activities are manipulated to achieve financial targets, leading to incomplete reporting				Operational Insurance	
Scope of Coverage					
Claims Adjudication (Coverage Determination, Investigation, Reserving, Settlement/ Payment, Recoveries).					
Key Components in Scope					
Line of Business	Process	Product	Application	Locations	Models
Property and Special Risks Aerospace Claims	Claims Adjudication	Aviation	OneClaim	US	N/A

As an example, the sample Scoping & Insight Analytics shown for the Aerospace Claims Audit shows how the Claims Workbook can be executed based on a standard data extract from the Claims Data Warehouse. This analytic tool has been used on several audits to provide an overview of Claims activity with a preliminary glimpse on the control environment.



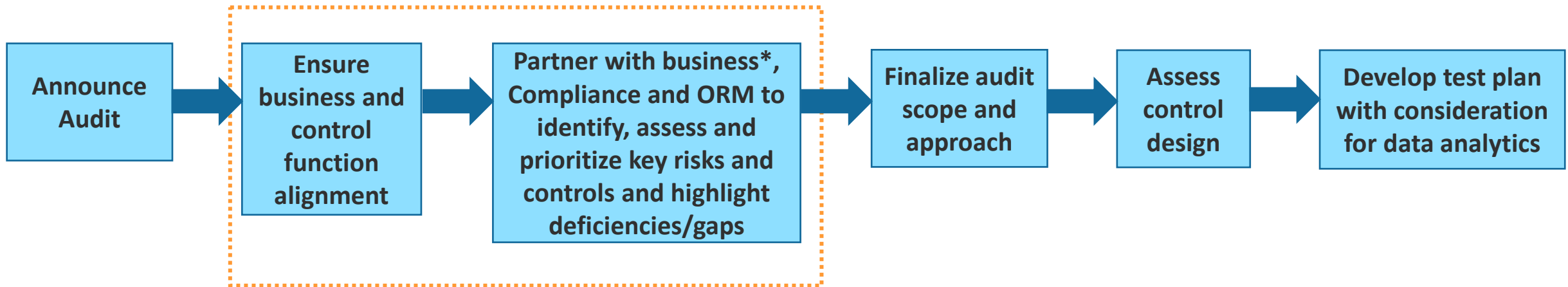
Benefits of analytics during pre-planning

- ✓ Drive increased value from the walkthrough process by generating questions and identifying outliers
- ✓ Early indication of control weakness /opportunity for self identified issues
- ✓ Refined audit scoping by reviewing population density

IAG Audit Process and Approach

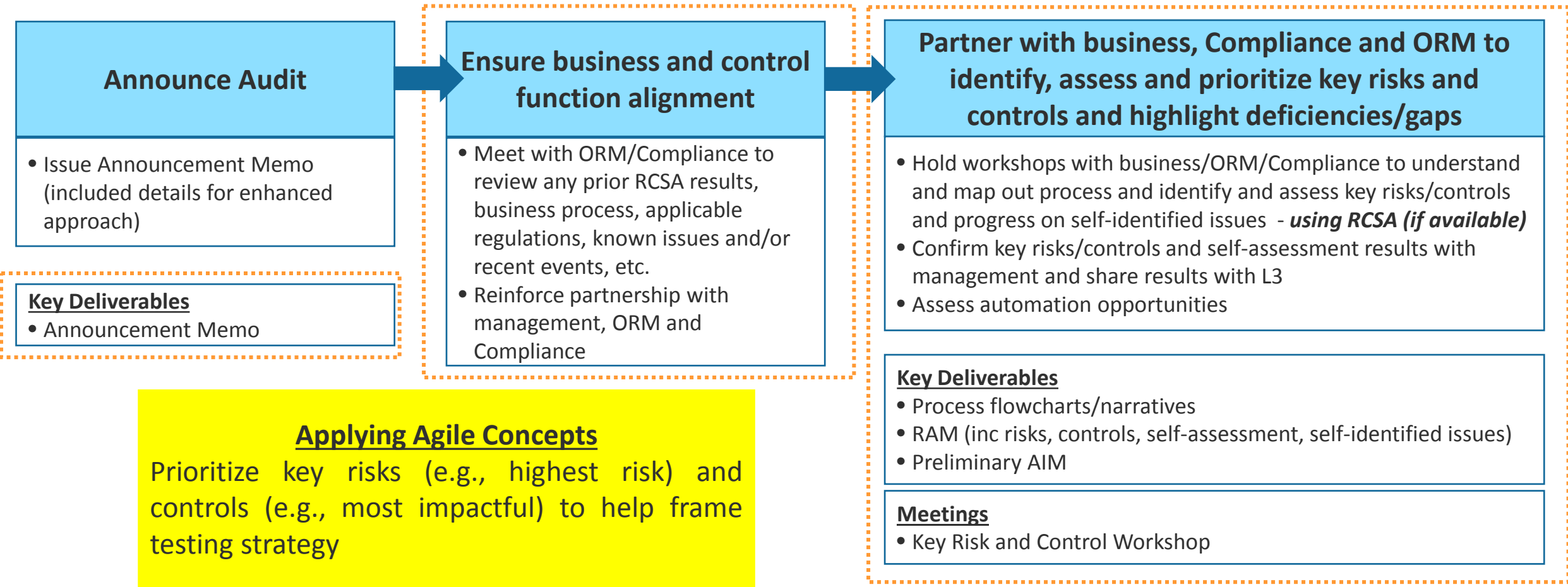


During planning the audit team completes the following steps to finalize scope, coverage, and develop the overall audit test plan and strategy:



* All applicable support functions related to the process (e.g., IT, Finance, ERM, etc.) should be included in the workshops and meetings

During planning the audit team completes the following steps to finalize scope, coverage, and develop the overall audit test plan and strategy:



The sample Announcement Memo shown (for illustration purposes only) for the Aerospace Claims Audit highlights how the document will change with the enhanced approach.

The Announcement Memo now explains how IAG will be hosting meetings with the business and ORM/Compliance to confirm understanding of business process, and identify and assess key risks, key controls and self-identified issues.



Sumukh Shah
Managing Director
Internal Audit Group

Internal Audit will begin an audit of the North America Aerospace Claims process on May 7, 2018.

Key risks will be identified and controls addressing these risks will be tested to evaluate their design and operating effectiveness. Areas being assessed during the period under review from October 1, 2017 to March 31, 2018 include, but are not limited to, the following:

- Claims Handling Governance (Org structure, Policies and Procedures/Guidelines, etc.)
- Claims Adjudication, Coverage Determination, Claim Reserving, Settlement and Payments
- Management Oversight/Information Reports (KPIs)

As part of IAG's enhanced approach we will partner with ORM and Compliance to hold workshops with your team. The objective of these workshops will be to review the end to end process, identify and assess key risks and controls and discuss management's assessment on the current state of each key risk and control, including any self-identified issues. After documenting the initial meeting, we will hold a follow-up meeting with the business to confirm all key risks and controls, self-assessment results and the scope of the audit.

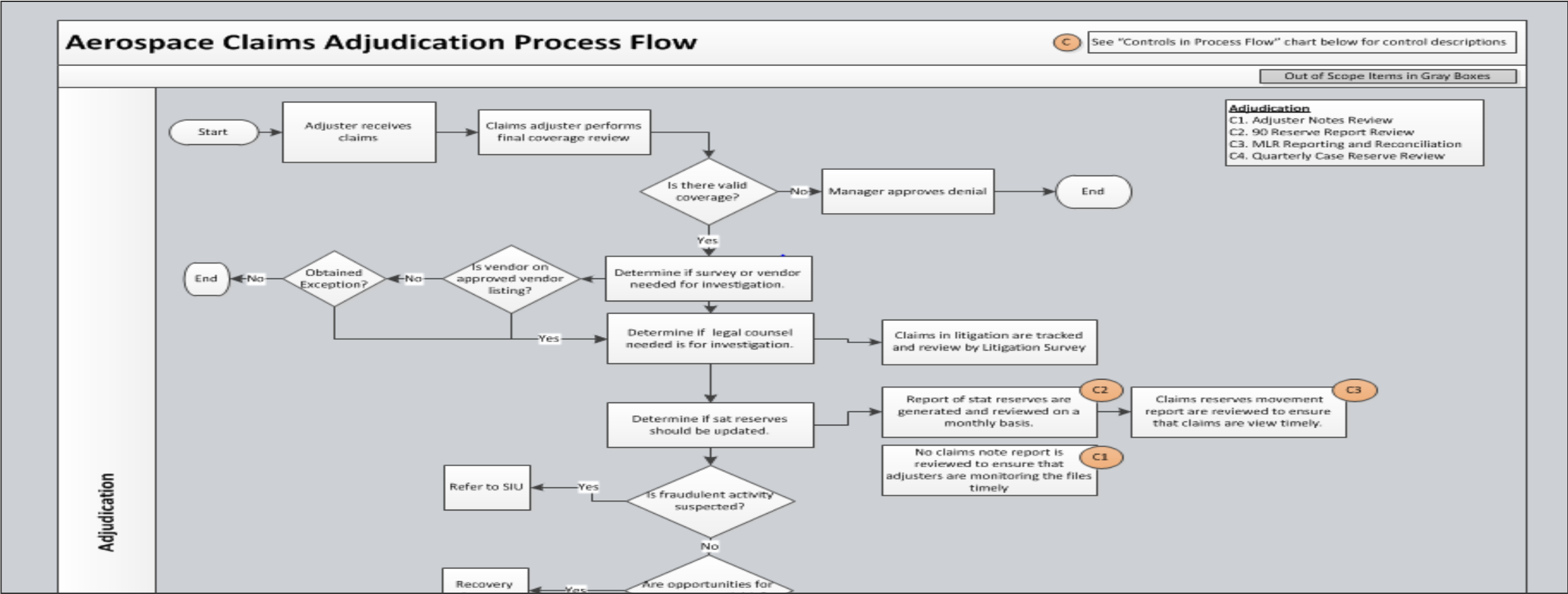
We will coordinate meetings throughout the audit to advise you of any findings and provide you with the status of the audit. You will also be advised about any changes to audit coverage during these meetings. Any identified issues will be communicated during the audit to provide timely feedback from our audit work and to allow for appropriate corrective action plans.

Once the audit is complete, we will schedule a closing meeting with you to summarize any audit concerns. We will provide a draft report for concurrence on the issues prior to issuing the final report and collect management action plans with target dates to address any issues identified. The final audit report will opine on the quality of the controls that mitigate the key risks and will include an audit rating of Satisfactory, Needs Improvement, or Unsatisfactory. In addition, opportunities to improve efficiency or effectiveness of processes/operations under review will also be included in the final audit report.

Michael Kumaresan will be leading the audit with assistance from Ayo Sanni and Johanna Terrero. Technology support will be provided by Nan Ge.

We look forward to working with you and your team. Please contact myself or Michael Kumaresan with any questions you may have.

The sample Process Flowchart shown for the Aerospace Claims Adjudication process provides an example of how a process should be documented and aligned to the controls identified. For complete process flowchart refer to the attached.



Key Risk Identification

Identification of key risks should occur during the process workshops between IAG, management and ORM/Compliance. The RCSA (if available) should be leveraged as the starting point for the discussion.

When evaluating risks in the business, consider higher rated risks (i.e., High or Elevated) as **key risks** to the business and prioritize those for control evaluation.

Risks are rated based on the inherent risk rating scale shown.

Management should be able to justify/support their risk rating for each applicable risk.

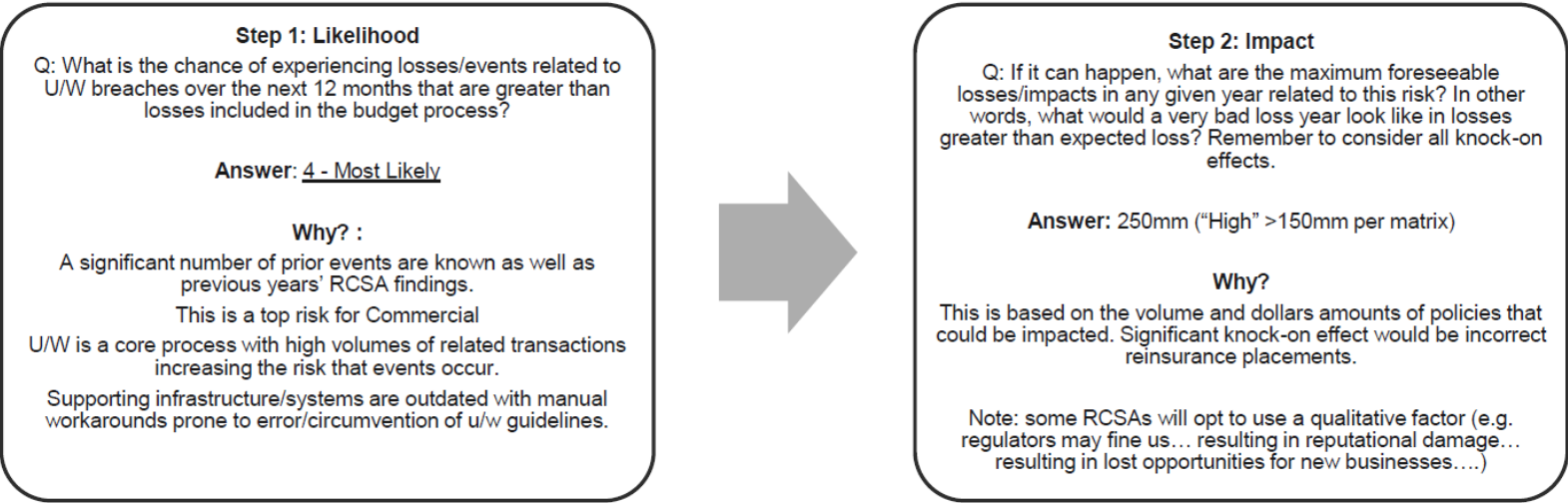
Inherent Risk Rating	Description
	If controls are not in place, or all controls fail:
High	Risks that could result in unacceptable losses and/or have the most significant impact on achieving strategic and/or business objectives should they occur. A High rating takes into account risks that have a high chance of occurring in the absence of controls with a high impact (single event or aggregate of events), as well as those with a low chance of occurring, but with significant impact should they occur. The effectiveness of the control environment for mitigating High inherent risks is a top priority.
Elevated	A secondary tier of material risks when considering the chance of occurrence and impact. While not as critical as High risks, Elevated risks could still result in impacts or losses unacceptable to Management should they occur, and warrant careful monitoring of the control environment.
Moderate	Risk deemed acceptable by Management in the regular course of business. Management should apply their knowledge of the risk environment and discretion in determining whether to perform control evaluations for these risks. If a moderate risk is deemed significant enough to require control evaluation then it is recommended that the inherent risk rating be revisited to determine if the risk should potentially be rated higher.
Low	Risks of minimal concern to Management, and could be easily rectified should they occur with little to no impact.

Source – ORM’s RCSA risk ratings

Key Risk Identification

When rating risks, consideration should be given to the likelihood as well as impact of occurrence.

Example RCSA - Aerospace US	Tier 1 Financial Factor (in matrix based on US GPW)
Risk: Risk associated with breach of underwriting authorities, guidelines, limits, referral or approved appetite by inexperienced underwriter(s), administrator(s) or agent(s) leading to increased exposure to loss, adverse claims experience or acceptance of unquantified risk exposures and/or unprofitable business.	



Risk Rating Table - (determine final rating based on Step 1. Likelihood and Step 2. Impact)

		Impact			
		1 - Low	2 - Moderate	3 - Elevated	4 - High
Likelihood	4 - Most Likely	Moderate	Elevated	High	High
	3 - Likely	Moderate	Elevated	High	High
	2 - Possible	Low	Moderate	Elevated	High
	1 - Least Likely	Low	Moderate	Elevated	High

Risk Level Rating

High

Elevated

Moderate

Low



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Assessment of Key Controls

Identification of key controls that mitigate key risks should occur during the process discovery workshops between IAG, management and ORM/Compliance. The RCSA (if available) should be leveraged as the starting point for the discussion.

A control is considered a **key control** if it is one of the primary controls management relies on to mitigate a key risk.

Control effectiveness is assessed using the rating scale shown. In conjunction with ORM/Compliance, IAG should work with the business to evaluate each control. Management provides a self-assessment rating and IAG independently tests/validates the rating.

Controls assessed by management as Ineffective and/or Partially Effective should result in self-identified issues. Ineffective controls will not be tested during an audit.

Management Control Rating	Description
Effective	<ul style="list-style-type: none"> Control is well established, relevant and deemed reliable in mitigating the risk of loss Control is appropriately designed and executed as intended
Partially Effective	<ul style="list-style-type: none"> There is only partial fulfillment or adherence and risk mitigation with the control as stated (i.e., the control is not being performed with full effectiveness, is being performed inconsistently or with irregular frequency) Control design needs some improvement (may not be fully effective in mitigating risk) or the design might be manual (where automated controls would be more effective)
Ineffective	<ul style="list-style-type: none"> Control does not mitigate the risk that this is inherent in the key business process: <ul style="list-style-type: none"> The control either does not exist or if in place does not mitigate the portion of the risk for which it is designed (the control design is inadequate in mitigating the risk and requires significant redesign) The control is performed improperly or not at all

Source – ORM’s RCSA control ratings

After working with management to identify and assess key risks and controls, management will be well positioned to initiate their RCSA in the event there isn’t one already existing. The audit team should consider the timing management is planning to complete their RCSA and make recommendations in the audit report as needed. Where an RCSA does exist, consideration should also be given to whether it is well designed (part of culture) and include commentary on this in the audit report.

Assessment of Key Controls

Once key controls for a key risk have been identified, each key control is evaluated to determine its effectiveness in mitigating the associated risk. This is accomplished in two steps:

Design Factors	Considerations
Repeatable	Is the control designed in a way that allows it to be repeatable over time?
Frequency	Does the control operate at a scheduled frequency that supports the process/risk?
Automation	Does the level of automation support the complexity of the process/data?
Operation	Does the control owner have sufficient knowledge of the control procedures or is the control functioning as intended?
Known Factors	Do prior Audits, Loss Events, KRIs or RCSA results indicate a design or operating flaw?
Exceptions	Are the exceptions or control failures apparent from the output of the control?
Exception Follow Through	Does the control provide examination, review or resolution of exceptions identified?
Evidence	Can the operation of the control be easily demonstrated, documented and understood by a 3rd party?

Operation Method Indicators	Description
Observation	Perform a walkthrough of the control in action. Is the process/control being performed as described or intended?
Risk Metrics (KRIs/KPIs)	If the business has KRIs/KPIs that produce metrics related to the controls being evaluated do they adequately measure the control? Do they cover all key elements and inputs from a completeness perspective? Do they capture the essence of the underlying risk?
Issues (Loss Events, Audit Findings)	Have the control gaps identified during prior issues been resolved (action plan closure)? Is the process/control being managed today based on the control enhancements or improvements following the action plan closure?
Sample/Artifact Substantiation	Do control documents/reports or other artifacts evidence the control is being properly executed based on the required frequency, scope, and design?
Recurring or Known Issues (Issues, Risk Acceptances)	Are there recurring issues or events that suggest that the control continues to fail? If a control is ineffective and not operational, when will it be remediated in order for re-evaluation?

Source – ORM's RCSA guidance

The sample Risk and Control Matrix shown provides an example of how the risks and controls, including management's self-assessment, should be documented under the enhanced approach.

Risk

Level 2, Level 3, Level 4	Process (LS)	Sub-Process	Sub-Process 2	Risk #	Risk (Type/Name)	Risk Key	Risk Category	Risk Description	Risk Rating
General Insurance Specialty Claims	Manage Claims and Recoveries	Evaluation	N/A	R.1	Claims Validation	Yes	Operational	Ineffective claims handling resulting in claims leakage, customer dissatisfaction, regulatory scrutiny and inaccurate management reporting.	High

Control

Control #	Products	Applications	Control	Key Control	Control Description	SOX Control (Y/N)	Management Control Rating	Dependent Processes	Customers (Who uses the data)	Handoffs (From this process)	Frequency	Regulatory Required Control	Control Type	Data Source	Data Type	Analytics Opportunities?	Is Test of Control Automated?
C.1	Aviation	OneClaim	Peer Review/ Quality Control	Yes	Aerospace Claims management performs Open File Reviews (OFRs) monthly on claims files to prevent or manage potential leakage by selecting: <ul style="list-style-type: none"> 2 claim files per adjuster per quarter; or 1 claim file, per quarter for high performing adjuster (with a consistent GQA rating score of 90%), 	No	Partially Effective	Aerospace Claims	Aerospace Claims	No	Monthly	No	Detective	OneClaim	Structured	Yes	No

The sample AIM shown for the Aerospace Claims Audit provides an example of how to define the analytics testing approach that corresponds to the key risks and controls identified from Analytics Pre-Work through Planning.

Analytics Test and Value Proposition

- Define Audit Questions being addressed by analytics
- Link Questions to Risk and Expected Key Controls
- Document testing approach
- Assess Value Proposition of adverse results (minimum should be Moderate Issue reported)

Analytics Services and Assurance

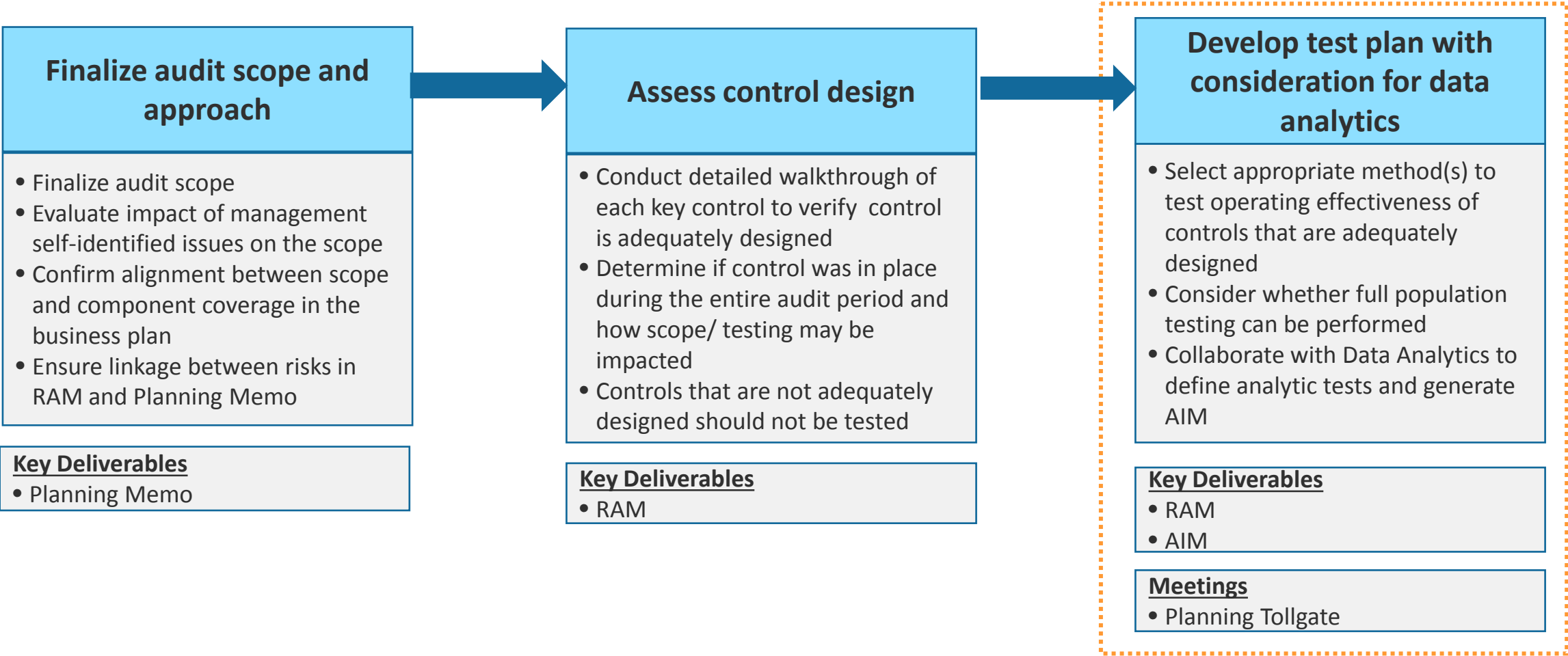
- Identify the appropriate Analytics Service being proposed
- Document the Control Assurance that can be provided to business if no exceptions found

Requirements and Approach

- Define data requirements
- Document agreed upon business logic
- Identify known limitations and assumptions

Analytics Integration Matrix									
Objective: The purpose of this document is to capture the analytics scoping process, agreed delivery timeframes, statuses as the audit progresses, and results summary.									
Project ID	42	Upload Options							
Project	Aerospace Claims								
Audit ID	27255								
Segment	General Insurance								
Link	WPWCCOSSPOTIAQ01.r-core.r1.aig.net/AnalyticsFramework/Projects/1/AuditSupport/AuditPlan								
		Do not edit. Question ID will be assigned for new questions at the completion of the		What is the audit team trying to answer - be specific, and limit to one key question per line.		Specify whether this is a question addressed by Data Analytics or traditional Audit techniques.		What are some scenarios where a risk has been realized?	
								What are examples of controls that should be in place?	
								How can this question be answered through analytics techniques?	
								What issue or report if the realized, even exceptions?	
Process	L1 Process	L2 Process	Question ID	Audit Question	Question Type	Risk Scenario	Expected Control	Analytics Testing Approach	Analytics V
Operational Processes	Manage Claims and Recoveries	Establish Claim Reserves	33	Are the reserves posted in a timely manner (in accordance with business guidelines, e.g. based on new information received)?	Analytics	1) Inaccurate management reporting 2) Decisions cannot be made in a timely manner (especially for large claims) 3) Actuarial projections may not be timely and/or accurate Risk: Reserving activities are not timely and accurate, leading to incomplete financial and operational reporting.	1) Reserving reports reviewed by the management (e.g. stat reserves, MLR, duration of time at a reserve limit etc.)	1) Review the time between initial (stat) reserve and subsequent reserve changes 2) Stratify large reserve changes by dollar amount, time from claim create date, time before claim close date 3) Review reserve changes before quarter end and after quarter start (e.g. 7 days before, 7 days after) 4) Review reserve amounts at 270 days after claim create and 3 months before claim close to see if variances are within 10% range	1) Reserves at resulting in na 2) Poor best p handling/delay 3) Poor custo
Operational Processes	Manage Claims and Recoveries	Evaluation	34	Are MLRs prepared for all claims over the threshold? Are reserves timely updated in the claims application?	Analytics	1) Due to the manual nature of the process, claims meeting the criteria may be reported late or not at all	Reconciliation between claims system and MLR report that identifies exceptions (MLRs without updated reserves,	Test the entire claims population by comparing claims with Incurred Amounts that exceed the threshold in MLR criteria to see if they are present in the MLR report; provide context of	Major losses appropriate le resulting in po mishandled or reinsurance re

During planning the audit team completes the following steps to finalize scope, coverage, and develop the overall audit test plan and strategy:



Excerpt from the sample Planning Memo shown for the Aerospace Claims Audit highlights how the document will change with the enhanced approach. For the complete Planning Memo refer to the attached.



Include key risk and control listing and results of management's self-assessment

Key Risk:	Key Control	Management's Control Rating	SOX	Systems/ Application	Scope Rationale
Ineffective claims handling resulting in claims leakage, customer dissatisfaction, regulatory scrutiny and inaccurate management reporting.	Adjuster Notes Review	Effective	N/A	OneClaim eCSO PnC	In Scope
	Open File Review (OFR)	Partially Effective	N/A	TeamThink	Limited Scope IAG testing will be limited to the accuracy of the review and scoring of the OFRs completed. IAG will not review if the required number of OFRs had been completed as Management is addressing this issue through a global action plan raised in the Global Commercial Claims Quality Assurance report (17-158).
	Closed File Review (CFR)	Effective	N/A	TeamThink	Out of Scope The CFR process was audited in 2017 - Report No: 17-158.
	Automatic Stat Reserve – Claims Application Control	Ineffective	✓	OneClaim	No Testing Management has assessed the control as ineffective.
Reserving activities are not timely and accurate, leading to incomplete financial and operational reporting and incorrect information being used by downstream users (reserving actuaries, reinsurance, etc.)	90 Day Reserve Report Review	Effective	N/A	OneClaim eCSO PnC	In Scope
	Quarterly Case Reserve Review	Effective	N/A	OneClaim eCSO PnC	In Scope
	MLR Reporting and Reconciliation	Effective	N/A	One Claim/eCSO PnC/ MLR App	In Scope
	Open File Review (OFR)	Partially Effective	N/A	TeamThink	Limited Scope IAG testing will be limited to the accuracy of the review and scoring of the OFRs completed. IAG will not review if the required number of OFRs had been completed as Management is addressing this issue through a global action plan raised in the Global Commercial Claims Quality Assurance report (17-158).
	Closed File Review (CFR)	Effective	N/A	TeamThink	Out of Scope The CFR process was audited in 2017 - Report No: 17-158.

Discuss full population testing

Data Analytics: IAG will use data analytics in the following areas:

- Major Loss Reporting – to test that 100% of the claims reaching the MLR threshold has been reported and approved.
- Reserving – to identify and evaluate accuracy of any reserve movements around quarter end and reserve changes within short periods of time
- Reopened claims – to identify any trends from period to period and amongst adjusters

The Planning Tollgate is a key meeting that occurs at the conclusion of planning prior to starting fieldwork.

Planning Tollgate

- Meet with IAG management to discuss and review:
 - Audit scope and approach
 - Results of risk and control workshops
 - Planning Memo, process flows and RAM
 - Plans to use data analytics , perform additional work for self-identified issues or not use full population testing
- Tollgate attended by all members of the audit team involved, Managing Director, and Chief Auditor, including representatives from all audit teams on integrated audits (e.g., business/financial, IT, Actuarial, etc.)
- Update BPA prior to starting fieldwork with any adjustments agreed to at the Tollgate and enter fieldwork start date

IAG Culture Audit Approach

Approach and framework to assessing culture is multi-faceted and is aligned to the dimensions that define AIG’s culture. Audit Teams should consider incorporating relevant areas into scope of audits. Where applicable, the Executive Summary of the audit report will include comments on risk culture.

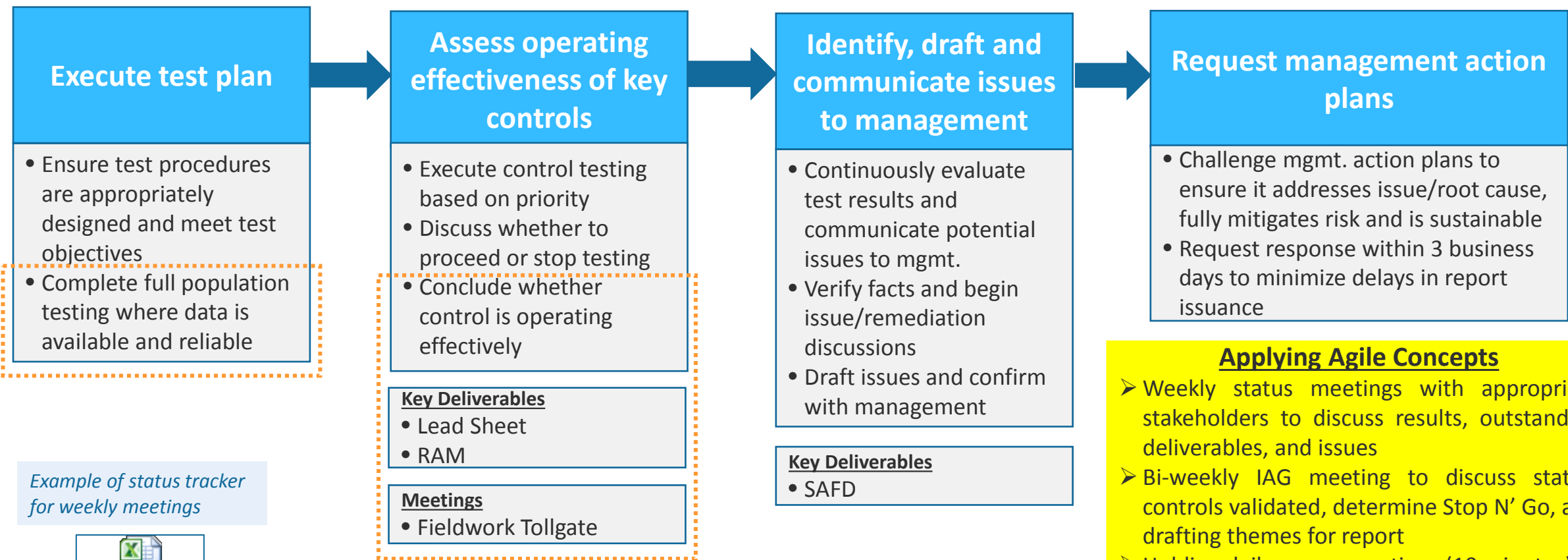
Governance	Customers	Employee Life Cycle	Risk Management	Operations
<ul style="list-style-type: none">• Thematic Governance related audits (e.g. RCSA framework)• Participation in Control related Committees• Integrated Assurance	<p>Audits covering:</p> <ul style="list-style-type: none">• sales practices• customer complaints• new product initiatives (pre and post implementation) <p>Monitor and trend customer experience, for example, time to pay a claim or reach and underwriting decision.</p>	<p>Assess existing data and tools that help the firm measure culture</p> <ul style="list-style-type: none">• coordinate with other assurance functions to review and analyze existing data related to culture measures and outcomes (e.g. staff surveys, exit surveys).	<p>Continue to perform risk based audits of businesses and functions and enhance scoping to include culture elements.</p> <p>Assess the approach taken by management and their teams to risk management and internal control by evaluating how management designs and implements effective RCSAs, identifies control deficiencies/ weaknesses, and addresses control deficiencies in a timely manner.</p>	<p>Continue to provide coverage of Key performance risk indicators (KRPIs): Performance Monitoring and Measurements</p>

Key areas of focus as culture is assessed during individual audits.

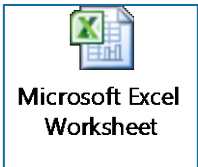
IAG Audit Process and Approach



During fieldwork the audit teams determine whether adequately designed controls are operating effectively to mitigate identified risks, conclude on results of control/substantive testing to form an opinion on the control environment and initiate identification and notification of potential issues. The following steps are performed:



Example of status tracker for weekly meetings



Applying Agile Concepts

- Weekly status meetings with appropriate stakeholders to discuss results, outstanding deliverables, and issues
- Bi-weekly IAG meeting to discuss status, controls validated, determine Stop N’ Go, and drafting themes for report
- Holding daily scrum meetings (10 minutes) to discuss progress from yesterday, plan for current day and if any escalation is required

Excerpt from the Lead Sheet shown highlights how the document will change with the enhanced approach.

Document management’s and IAG’s control ratings

If no testing is performed for controls assessed by management as ineffective or partially effective, a lead sheet would not need to be documented. Issues should be generated from the Planning Memo with details supporting the issue documented in the Planning Memo.

Standard Lead Sheet						
RAM Reference:	Risk:	Ineffective claims handling resulting in claims leakage, customer dissatisfaction, regulatory scrutiny and inaccurate management reporting.		Control:	Aerospace Claims management performs Open File Reviews (OFRs) monthly on claims files to prevent or manage potential leakage by selecting: <ul style="list-style-type: none">2 claim files per adjuster per quarter; or1 claim file, per quarter for high performing adjuster (with a consistent GQA rating score of 90%)	
Control Ratings	Management's Control Rating:	Partially Effective	IAG's Rating for Control Design:	Effective	IAG's Rating for Control Operating Effectiveness:	Ineffective
Test Name:	Open File Reviews					
Test Objective:	To confirm that the control is designed adequately and is operating effectively.					
Stakeholder Contact:	Edward Green, Global Head of Aerospace Claims					
Source of Information:	CQR Team Think : Open File Review Population for Q42017 and Q12018					
Sampling Information:	Population:	350 OFRs	Control or Transaction Frequency:	Monthly	Control Type:	Manual
	Sample Period:	10/01/2017 – 3/31/2018	Sample Selection Method:	TOE Judgmental WTO Haphazard	Sample Size:	TOE 25 WTO 1
Completeness of Population:	IAG generated OFRs completed for Q42017 and Q12018 from GQR Team Think.					
Sampling Rationale:	Test of Operating Effectiveness and Substantive Testing: IAG judgmentally selected files to include different adjusters.					
	Walkthrough Test of One: IAG haphazardly selected the WTO to ensure each sample had an equal opportunity of being selected.					
Test Steps:	Review the OFR to determine if it was scored accurately.					
Test Results:	IAG observed the following: Based on a sample of five OFRs, IAG noted that four were not accurately scored based on the OFR scoring guidelines. Scoring did not reflect issues relating to documentation (e.g. claims acknowledgment, rationale for reserves not updated within 30 days from FNOL) and timeliness (e.g. coverage analysis, follow up every 60 days, updates of reserves). One file was updated one day prior to the OFR being completed.					
Conclusion:	Control is designed but not operating effectively. For EXCEPTIONS, please refer to W/P: OFR Testgrid OFR Testgrid OFR Testgrid OFR Testgrid Open File Review (OFR)					

The sample Risk and Control Matrix shown provides an example of how the test results and conclusions should be documented.

Testing

Control #	Control Description	Management Control Rating	IAG Control Rating of Design	IAG Control Rating of Operating Effectiveness	Self-Identified Issues	Self-Identified Issues (link to RITA)	Link to Test Control/ Results	Audit Test Steps	Priority	Test Results	Conclusions	Issue	Any In-flight Initiatives / Transformation Projects going on?
C.1	Aerospace Claims management performs Open File Reviews (OFRs) monthly on claims files to prevent or manage potential leakage by selecting: <ul style="list-style-type: none"> 2 claim files per adjuster per quarter; or 1 claim file, per quarter for high performing adjuster (with a consistent GQA rating score of 90%), 	Partially Effective	Effective	Partially Effective	Moderate	N/A	"Link"	For a sample of OFRs, re-perform review and assess for accuracy.	High	Management's review is effective and remediation is underway to ensure the appropriate number of files are reviewed on a go-forward basis.	Control is adequately designed and not operating effectively.	Moderate	Yes

Full Population Testing Principles

Using data analytics and techniques to test full complete populations provides:

- ✓ *Greater assurance provided through testing of full populations*
- ✓ *Penetration across the audit universe*
- ✓ *Repeatable, fact based findings*
- ✓ *Gateway to continuous auditing*

When analyzing results from full population testing, audit teams will need to research any exceptions:

- Work with management to understand rationale for the exceptions
- Management will be able to provide supporting rationale to dispose of some exceptions, while others will stem from a control gap/weakness resulting in an issue
- Exceptions that management can not rationalize/determine the root cause will be included in the audit report with an action plan for management to perform appropriate analysis to determine the root cause and remediate control deficiency
- Charts and graphs illustrating audit results and any applicable issues will be included in the audit report

Excerpt from the SAFD shown



Note 1: The findings in the Audit were discussed with the following:
 Steve Agutter – Head of Property & Special Risks Claims and Chief Claims Officer, Europe/G
 Ted Green – Global Head of Aerospace Claims/General Insurance
 Renee Miller – Global Head of Aerospace Operations/General Insurance
 Sumukh Shah – Managing Director-Internal Audit/Internal Audit
 Paul Wigham – Senior Managing Director I/Internal Audit

Summary of Audit Findings and Disposition (SAFD)

Finding #	Link to Issue Template	Summary of Finding	Disposition of Finding	Issue Number in Report	Combined with Finding(s)	Reason Finding is Not Reported	Individuals Finding was Discussed with
1.	ISS.1	Claims are not effectively monitored by Management for some key steps across the end to end claims adjudication process to detect delays around claims set up, adjuster review and Medicare reporting. Claims are not effectively monitored by Management to detect delays between First Notice of Loss (FNOL) and when a claim is set up. Management does not validate that all bodily injury claims are screened for Medicare eligibility prior to payment as required by the Medicare, Medicaid and SCHIP Extension Act of 2007 (MMSEA).	Reported	2	5	NA	Note 1
2.	ISS.2	Recoveries are not being managed effectively to verify the completeness and accuracy of the identification and tracking of recovery opportunities. The current process is manual in nature and therefore prone to error. Aerospace adjusters handle all aspects (e.g. Subrogation, salvage, litigation) of claims recoveries without the assistance and oversight from Global Recovery Services (GRS). Recovery opportunities are tracked manually on a spreadsheet that is compiled by the claims adjuster however this was found to be	Reported	5	NA	NA	Note 1



Analytics
Pre-work

Pre-
Planning

Planning

Fieldwork

Reporting

Wrap-up

The Fieldwork Tollgate is a key meeting that occurs during Fieldwork to discuss results and verify/adjust the audit scope.

Fieldwork Tollgate

- One formal Fieldwork Tollgate meeting is required during Fieldwork, generally when fieldwork is 50% complete or earlier if significant issues arise
- Audit team should also meet frequently to ensure the audit is progressing as planned and discuss challenges that may affect timely completion of the audit
- Potential audit findings should be discussed when identified to ensure timely communication to management
- Based on audit results and issues identified, the audit team will consider continuing with the audit as planned, continuing with modifications to audit test plan or stopping fieldwork and move directly into Reporting

Key Deliverable

- Planning Memo Addendum

As fieldwork progresses update BPA with potential audit report rating and if Audit is on-track to complete as planned.

At conclusion of fieldwork update fieldwork end date in BPA.

<div>Draft Audit Report Rating:</div> <div>Needs Improvement</div>	04/30: F&O hours updated to reflect training of a new SM, and undertaking a mapping of the end to end claims environment.
<div>Audit Plan RAG Status:</div> <div>On Track</div>	

The sample Planning Memo Addendum shown provides an example of how the enhanced approach impacts what may be captured in the Addendum.

Planning Memo Addendum					
Audit Name	Aerospace Claims Audit				
Audit #	27255	Audit Activity Type	Audit	Addendum Date	July 20, 2018
Managing Director	Sumukh Shah	Audit Director	Michael Kumaresan	Senior Manager	Ayo Sanni

SUMMARY OF CHANGES

During the fieldwork tollgate it was agreed to stop testing and move straight to reporting due to the number and nature of issues identified. As a result, some items in scope were not covered and are further described below. Additionally, some analytics that were planned could not be performed due to unreliable data for which an issue was raised.

AUDIT SCOPE

The following items were not covered and are being removed from the scope. The scope change is a result of the decision to stop testing and move straight to reporting based on the number and nature of issues identified half-way through fieldwork.

Items removed from scope:

- Claim Investigations
- Claim Recoveries

DATA ANALYTICS

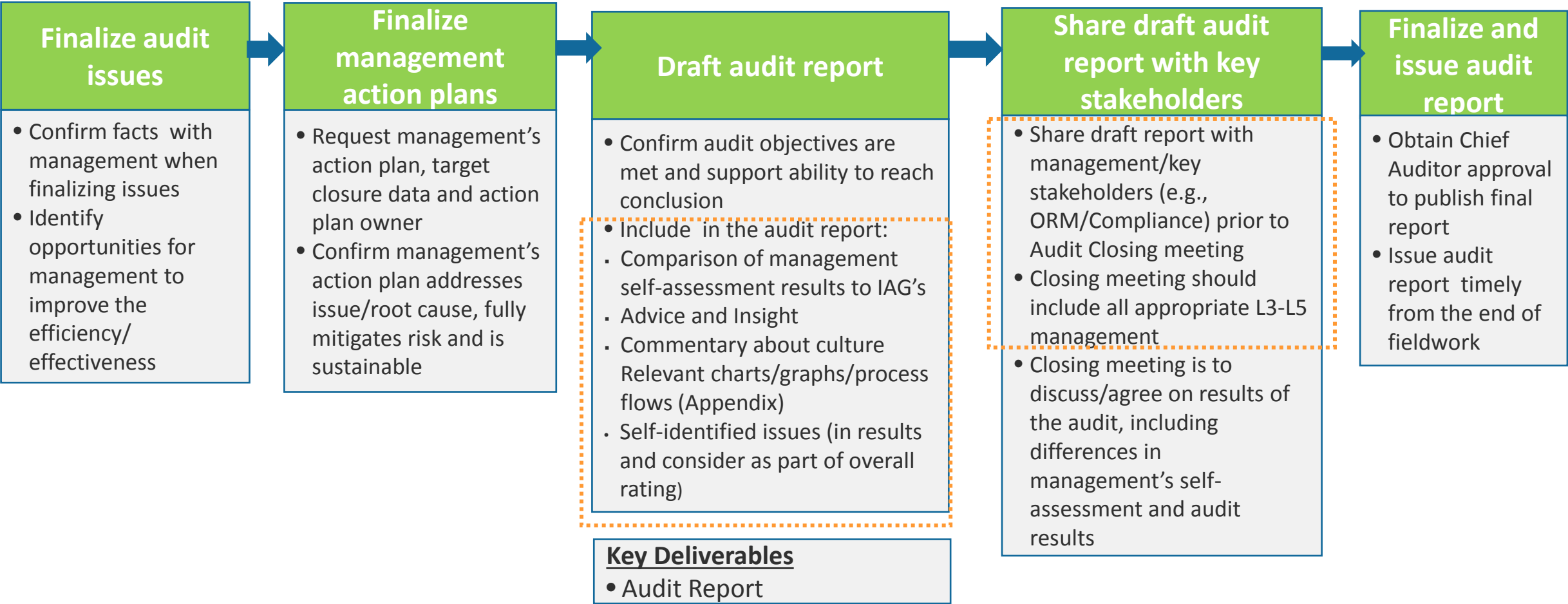
The following analytic was not performed due to unreliable and incomplete data for which an issue was raised:

- Reserving – to identify and evaluate accuracy of any reserve movements around quarter end and reserve changes within short periods of time

IAG Audit Process and Approach



The audit team will complete the following steps during Reporting to confirm and finalize issues with management in preparation of issuing the final audit report that provides an independent assessment and opinion of management’s control environment.



Excerpt from the Global Fronting Audit Report that highlights how the report template and content will change with the enhanced approach.

Discuss and compare management’s and IAG’s control assessment in the Executive Summary at a high level

Management Self-Assessment of Key Controls

During this audit, we piloted our enhanced audit approach which included a detailed review of the key risks and controls in the end to end Global Fronting process. IAG engaged with the control process owners from the business, along with ORM, and Compliance to agree on the key risks and controls within the Global Fronting process. Management was asked to self-assess the operating effectiveness of these risks and controls. For the key risks and controls that were self-assessed as operating effectively, IAG independently tested their design and operating effectiveness.

As a result of these meetings, we agreed on testing **eight key risks** and **14 key controls**; **10 controls** were operating effectively and **four** were not. The chart below lists the specific instances where testing identified deficiencies as well as references to the two moderate issues noted.

Through discussions with management, we understand the CRDB has system limitations forcing GF Credit to manually upload exposure and collateral data; this control did not operate as intended in four months of the twelve month scope period. Further discussions with management noted this control could be automated and management will consider this as part of a future MN Xpress roll-out. Additionally, since the CRDB is deficient we noted instances where the reporting used by GF Credit was inaccurate. Lastly, GF peer reviews were not always performed by an underwriter of equal or greater authority. The Self-Checklist issue noted below is exclusive to EMEA as this is a key control performed only in that region.

This was the first time that an assurance function has independently tested these controls. Details of the key risks and key controls tested can be found in Appendix B; the grid immediately below highlights the key controls where IAG’s testing of each control resulted in operating deficiencies. A Risk and Control Self-Assessment (RCSA) had not been performed for the Fronting Process at the time of the audit.

Complete Audit Report



Adobe Acrobat
Document

Excerpt from the Global Fronting Audit Report that highlights how the report template and content will change with the enhanced approach.

Below summarizes each of the key controls where management's self-assessment and IAG's testing of the operating effectiveness differed. Refer to Appendix B for the full assessment.

Include a table summarizing management's and IAG's assessment of each control tested including references to any issues identified in the Executive Summary

(This replaces the table that summarizes the critical and moderate issues identified)

Control Name	Control Summary	Management Assessment	IAG Assessment		Issue Description
			Design Effectiveness	Operating Effectiveness	
Credit Exposure Review	The Credit officer uploads three (global) CRDB file extracts reports (CRDB Exposure file, Lexington file, and CRDB Collateral file) into Skynet and performs a reconciliation to confirm that all exposure and collateral information is complete and accurate.	Effective	Effective	Partially Effective	Moderate Issue – Credit Risk Monitoring (Issue #1)
Credit Risk Management	The Credit Officer (US) / Compliance Manager (EMEA) run credit risk reports (Legal document overdue report and collateral report) to identify any outstanding items/exceptions and follows up to resolve.	Effective	Partially Effective	Partially Effective	Moderate Issue – Credit Risk Monitoring (Issue #1)
Peer Reviews	Global Fronting (GF) underwriters are subject to monthly peer reviews, performed by a GF underwriter of the same delegated authority or higher.	Effective	Effective	Partially Effective	Moderate – Underwriting Supervision (issue #2)
Self-Checklists (EMEA only)	The MN Centre Of Excellence (MCOE) completes a self-checklist pre-bind confirming all requirements such as credit checks, collateral, pricing, program structure, legal, risk transfers, agreements, have been completed.	Effective	Effective	Partially Effective	Moderate – Underwriting Supervision (Issue #2)

Excerpt from an Audit Report for Global Fronting shown highlights how the report template and content will change with the enhanced approach.

Include a table summarizing management’s and IAG’s assessment of each control tested including references to any issues identified

Management and IAG Assessment of Control Environment

The below table provides the full listing of risks and controls covered in this audit, along with the assessment performed by Global Fronting Management and IAG.

Key Risk	Description of Control Activity	Management Assessment	IAG Assessment	
			Design Effectiveness	Operating Effectiveness
Poor operational and underwriting performance lead to financial loss as a result of lost market share opportunities and excessive risk exposure.	<u>Oversight Framework</u> The Multinational Heads review and update: detailed Oversight Framework, Underwriting Guidelines and Credit Guidelines annually: <ul style="list-style-type: none">Global Fronting Underwriting Guidelines (Pooja Barodekar)AIG Credit Risk Policy (AIG Credit)ORR Captive Rating Methodology (Pat Gully)Credit Exposure Methodology (Pat Gully) Any necessary updates are made prior to distributing them.			
	<u>Credit Approval</u> The Credit Officer approves all clients in line with their Credit Authority Statements prior to Global Fronting undertaking business. Accounts that do not fall within the Credit Officers limits are referred to Global Credit Officers via e-mail approval.			
AIG enters into fronting arrangements with counterparties resulting in unforeseen credit exposures and potential financial loss.	<u>Credit Review</u> The Credit Officer performs on-going credit checks for approved accounts on an annual basis to assess credit risk, exposures/collateral, and transaction suitability.			
	<u>Credit Exposure Review</u> The Credit officer uploads three (global) CRDB file extracts reports (CRDB Exposure file, Lexington file, and CRDB Collateral file) into Skynet and performs a reconciliation to confirm that all exposure and collateral information is complete and accurate.			Credit Policy dictates GF Credit as the responsible party. Some uploads failed and were not followed up on (see comment above)
	<u>Credit Risk Management</u> The Credit Officer (US) / Compliance Manager (EMEA) are credit risk reports		The CRDB has performance	The CRDB has performance issues

The Reporting Tollgate is a key meeting where the team discusses and reviews the draft audit report, audit rating, and confirms whether audit objectives were met prior to sharing a draft audit report with management.

Reporting Tollgate

- Discuss the results of the audit and the draft audit report with the Managing Director before sharing the report draft with management
- For Unsatisfactory/Needs Improvement reports, the report and rating must also be discussed with the Chief Auditor
- Consider if any issues/draft report should be discussed with other IAG teams/groups within AIG prior to issuance
- The Reporting Tollgate Meeting should be attended by all members of the audit team, the Managing Director and Chief Auditor
- Involve adequate representation from all audit teams involved if the audit is an integrated audit

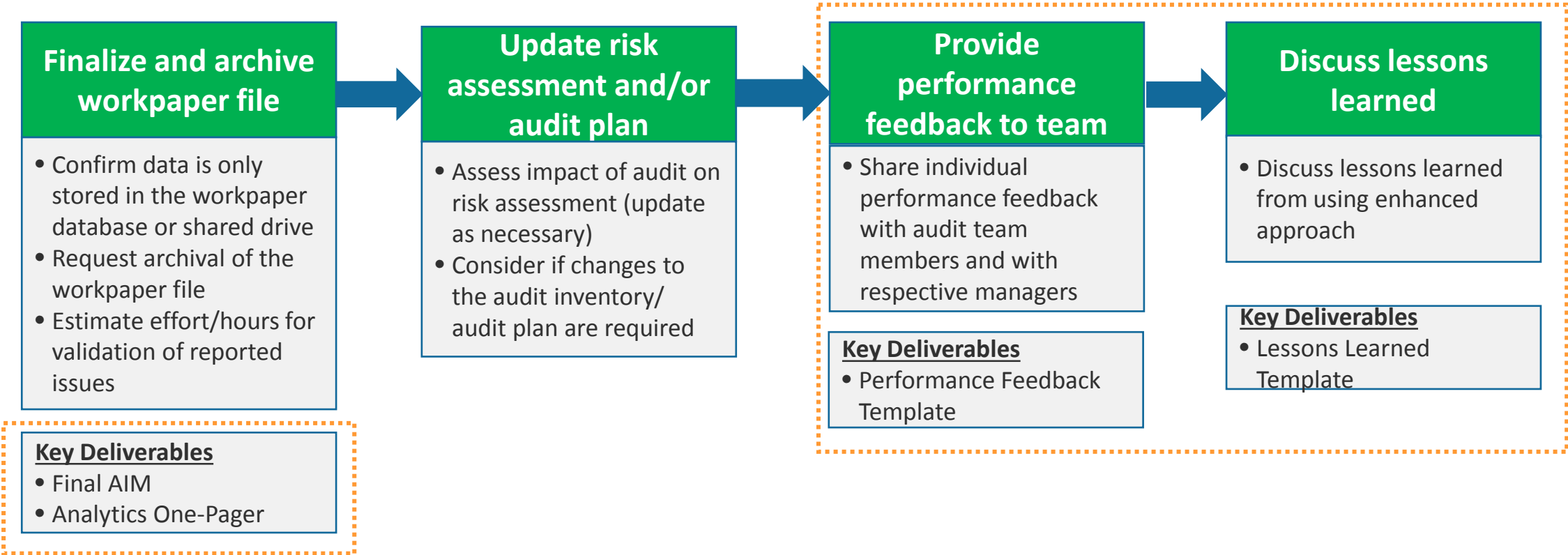
Key Deliverables

- Audit Report

IAG Audit Process and Approach



The audit team will complete the following steps to finalize and conclude the audit:



The sample final AIM shown for the Aerospace Claims Audit provides an example of how to finalize the AIM in a manner to ensure procedures and results are documented accurately.

			Question Review			
Summary of analytics results and relevant observations	Link to detail testing spreadsheet	Summary of how the audit team has used the analytics results			Value Realized	
Results Summary	Results Detail Link	Audit Team Follow-up	Primary Data Source Used (Use icon above to add new data)	Select Existing Analytics Solution Used (if applicable)	Value Add	Question Score
Using claims extracts with test flags identified 303 (of 2,092) claims that occurred within 14 days of policy effective date (inception or renewal)	WPWCCOSSPOTIAD01.rtl-core.r1aig.net\AnalyticsFramework\Projects\Audit Support\Audit Plan Related\Aerospace Claims (27255)\Questions\66	Audit team did not perform additional testing, because they were unable to distinguish newly incepted policies from renewed policies.	Claims Data Warehouse CDW (5)	Claims Workbook		0
Results were included in the claims workbook (tab "A03b Initial Claim Activ NO STAT" – days to initial reserve analysis without stat reserves of \$111 and tab "A04b Initial Reserve AmtNOSTAT" – amount of initial reserve without stat reserves of \$111) and a flag was added to the claim data extract (column AH, FNOLtoCreateFlag)	WPWCCOSSPOTIAD01.rtl-core.r1aig.net\AnalyticsFramework\Projects\Audit Support\Audit Plan Related\Aerospace Claims (27255)\Questions\32	Claims are not being set up timely from the receipt of FNOL. IAG identified 42% (2,617 of 6,200 claims) were set up after 14 days from when FNOL was received. Claims management is not currently monitoring this metric. Additional testing to be completed and determine if claim adjusters are not sending the FNOL timely to Shared Services. Of 10 claims sampled, 6 claims had delays from the time the FNOL was received by the adjuster to the time it was sent to Shared Services for claim set up. Delays	Claims Data Warehouse CDW (5)	Claims Workbook	Control Finding	1
Sample Final AIM (for illustration purposes only)						

The sample Performance Feedback Template for the Aerospace Claims Audit provides an example of how to complete the template.

Performance Feedback Template

Auditor Name:	John Smith	Manger Name:	James Johnson
Audit Name:	Aerospace Claims	Duration of Audit:	May-July 2018 (3 months)
Objectives/Goals /Responsibilities on Audit:	<ul style="list-style-type: none"> Assist with preparation of process flowcharts Execute fieldwork testing Engage with auditee to understand and resolve exceptions and discuss issues Lead weekly status meetings Draft issues identified through their testing 	Were They Met?	<ul style="list-style-type: none"> Yes Yes Yes Yes Partially
Strengths:	<ul style="list-style-type: none"> Engages effectively with management to resolve questions timely Ability to lead status meetings with management and provide accurate and clear picture of our audit status, potential issues and challenges faced during the audit Quickly adapted to covering an unfamiliar business process 	Development Areas:	<ul style="list-style-type: none"> Increase knowledge of analytics tools and familiarity with automated testing techniques to leverage for future audits Enhance issue writing to focus on themes/larger issues rather than individual exceptions
Comments			
John quickly adapted to covering an unfamiliar business process and jumped right in to assist the auditor in charge. He looked for learning opportunities and asked for stretch tasks. He identified important issues and was able to clearly articulate those issues to management during meetings. While John has excellent audit and verbal skills, he can work on developing his writing and analytic skills to better support future audits.			
Feedback Provided By:	Michael Jones		

The sample Lessons Learned Template for the Aerospace Claims Audit provides an example of how to complete the template.

Audit Name:		Aerospace Claims		
Include in Audit Y/N*	Concept	+	-	Additional Comments/Feedback
Y	Met with Management, ORM, and Compliance to identify key risks and controls	Management facilitated the session to identify key risks and key controls in their process	Missed coordination/collaboration opportunities as ORM and Compliance were not available to attend all scheduled walkthrough meetings	As management had not completed an RCSA additional time was spent during planning to identify and assess key risks and key controls.
Y	Perform Full Population Testing for each in scope control	Completed Full Population Testing for claims approvals	Limited opportunities for Full Population Testing with several manual controls (e.g. File Review), pockets of unstructured data and time/resource constraints on individuals with knowledge of data/logic in the business	Where full population testing was used, management was unable to identify the root cause of exceptions. An action plan has been created for management to perform a root cause analysis that will identify where control weaknesses exist.
Y	Use of Analytics/Automation during the Audit	Used previously developed analytics to assist with scope selection and Full Population Testing	Additional opportunities to leverage analytics were not realized due to resource constraints on analytics SMEs	On future audits of this process more analytics work can be done up front to capitalize on all opportunities
Y	Use of Agile Techniques (e.g., testing sprints, prioritization of control testing, frequent meetings, etc.)	Divided testing of controls into 2 sprints based on prioritization	Time commitment from some team members (working on multiple audits) and all stakeholders to attend sprint meetings and daily scrum meetings	Last sprint concluded early and did not complete all control testing due to issues identified

Applying Agile Concepts

Complete and report Lessons Learned while audit is in progress to allow for learnings to be applied for other audits as soon as possible. Include at bi-weekly meetings.

The sample Lessons Learned Template for the Aerospace Claims Audit provides an example of how to complete the template.

Questions	Answers	Comments
1. Did Management have a completed RCSA prior to audit?	Y/N	Management plans to create and perform RCSA within next 3 months leveraging key risks and controls identified during audit.
2. What levels of management were engaged on the audit?	[insert L# of management] L4 and L5	Management was engaged and participated in all walkthrough meetings.
3. How many controls exist and how many are key/were tested?	[insert # of total controls vs. # of key controls] 11 vs. 5	Time savings using enhanced approach and potential opportunities to create efficiencies in management's process.
4. How many issues did management self-identify?	[insert # of self-identified issues] 3	This area typically did not raise any self-identified issues prior to enhanced approach.
5. How many days from start of Planning to Report issuance?	[insert days] 85	Expect future audit to take less time as management will complete RCSA and knowledge gained will allow for increased automation.
6. What % of the audit budget was spent on Pre-Planning?	[insert % of audit budget spent] 15%	Due to limited knowledge of this area pre-planning took more time than anticipated but in future audits would be streamlined based on knowledge gained.
7. How many days spent in Planning?	[insert days] 30	Management was onboard with the approach and made the time to meet as much as needed to discuss and identify key risks and controls.
8. How many days spent in Fieldwork?	[insert days] 25	Testing was completed in less time than anticipated with issues identified on higher priority key controls earlier on.
9. How many days spent in Reporting?	[insert days] 30	Delays in receiving action plans as root cause of some issues could not be easily identified.
10. Did audit work identify future automation opportunities?	Y/N	Completed AIM to develop automation for monitoring of partial claims payments.
11. Did any aspects of enhanced approach lead to efficiencies?	Y/N	Enhanced approach resulted in 6 less controls being tested as part of audit. Last sprint concluded early and did not complete all control testing due to issues identified.

Analytics Integration Matrix (AIM) Training

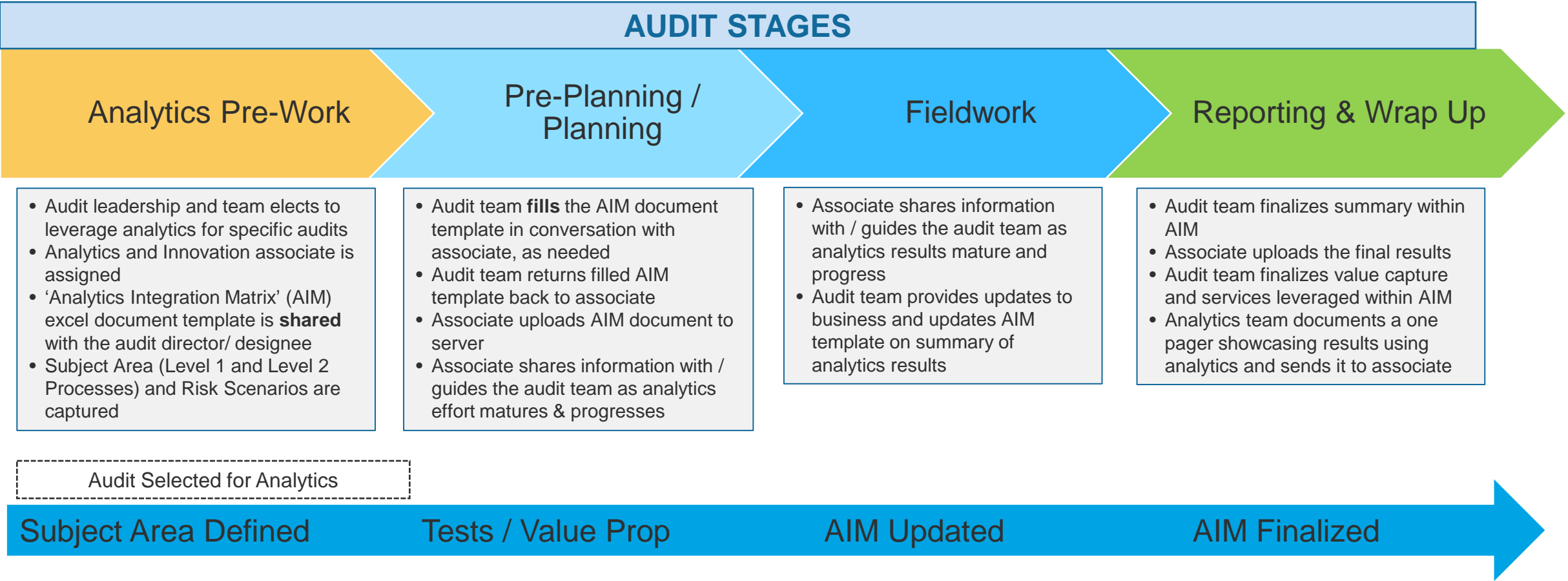
Enhanced Audit Approach as applicable to Data Analytics



Topics

- *Selecting an Audit for Analytics and completing the Analytics Integration Matrix (AIM) Template*
- *Align analytics to full population testing of key control*
- *Define requirements and testing approach*
- *Facilitate re-use by storing procedures in a centralized location that may be referenced late*

The ‘Analytics Integration Matrix’ (AIM) excel document template is shared with the audit team by an Analytics and Innovation associate, when the audit team elects to leverage analytics within an audit during the early stages of an audit.



AIM Training | Selecting an Audit for Analytics

Fields have been added to BPA to allow for Data Analytics to be selected. The **BLUE** fields are a quick survey to consider feasibility of analytics. The **GREEN** fields represent the decision and the justification for the use or non-use of analytics on the audit.

Selecting an Audit for Analytics will place a work item in the queue of one of the members of the Data Analytics team. They will generate an AIM and contact the Audit Team to begin the analytics process.

Audit No: 27255	Inventory Ref #: 4625					
Audit Plan Name: *	Aerospace Claims					
Audit Scope: *	Evaluate the design and operating effectiveness of controls for North America Aerospace claims, including: - Claims Handling Governance					
Analytics						
Identify Audit Questions that can be Addressed Via Data?	Logic/Requirements:	Data Availability:	Is there an Efficiency Opportunity?	Expertise Required:	Action:	Opportunity to run the Claims Analytics workbook and other analysis related to performance metrics and data quality.
Yes	Need input from c	IAG has direct ac	Yes	Analytics resourc	Select	

This section must be filled out by the end of 'Planning'

Specify 'Yes' if there are Audit Questions that can be addressed via data analytics.

Indicate level of understanding of business logic.

Indicate our current knowledge of the data environment.

Specify 'Yes' if there is a clear reduction of hours in play or potential for automation..

Indicate level of involvement required by Data Analytics team..

Select / Defer / Decline the Audit Activity for Analytics.

For 'Selected' projects, provide brief value proposition. For Declined and Deferred, provide an explanation

AIM Training | Subject Area and Risk Scenarios

Populate L1 and L2 Process and applicable relevant Risk Scenarios (you can reference the [AIM History](#) tab in the AIM workbook for a searchable repository of previous analytics work)

Analytics Integration Matrix
Objective: The purpose of this document is to capture the analytics scoping process, agreed delivery timeframes, statuses as the audit progresses, and results summary.

Project ID	42
Project	Aerospace Claims
Audit ID	27255
Segment	General Insurance
Link	WPWCCDSSPOTIAQ01.r1-core.r1.aig.net\AnalyticsFramework\Projects\Audit Support\Audit Plan

<i>Do not edit. Question ID will be assigned for new questions at the completion of the</i>	<i>What is the audit team trying to answer - be specific, and limit to one key question per line.</i>	<i>Specify whether this is a question addressed by Data Analytics or traditional Audit techniques.</i>	<i>What are some scenarios where a risk has been realized?</i>	<i>What are examples of controls that should be in place?</i>	<i>How can this question be answered through analytics techniques?</i>	<i>What issue can IAG be expected to report if the risk scenario(s) are realized, even with a small number of exceptions (e.g. 5% exception rate)?</i>
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Process	L1 Process	L2 Process	Question ID	Audit Question	Question Type	Risk Scenario	Expected Control	Analytics Testing Approach	Analytics Value Proposition
Operational Processes	Manage Claims and Recoveries	Establish Claim Reserves				1) Inaccurate management reporting 2) Decisions cannot be made in a timely manner (especially for large claims) 3) Actuarial projections may not be timely and/or accurate Risk: Reserving activities are not timely and accurate, leading to incomplete financial and operational reporting.			

If the audit is related to Insurance Value Chain, please select 'Operational Processes', else if it relates to 'Corporate Support', please select 'Management and Support Processes'.
[Click](#) on this box to see taxonomy.

Enter the L1 and L2 processes related to the audit (from AIG's interactive Enterprise Taxonomy pdf document*) (attached)

Describe the risk scenario related to the identified processes

Provided for reference, the AIM History tab contains a record of all of the analytics tests that have been completed on audits with references on where to find the associated deliverables. This includes:

- Risks and controls addressed
- Overview of the testing approach
- Summary of Results with an indication of the value capture

Process Type
Operational Processes

L1 Process
Manage Claims and Recoveries

L2 Process
First notice of loss (FNOL) and Triage

Project Name	Audit ID	Process Type	L1 Process	L2 Process	Question	Audit Question	Risk Scenario	Expected Control(s)	Analytics Testing Approach	Analytics Value Proposition
Aerospace Claims	27255	Operational Processes	Manage Claims and Recoveries	First notice of loss (FNOL) and Triage	32	Are the claims set up within 48 hours from FNOL?	1) Claim setup is delayed due to understaffing 2) High volume of new claims 3) Communication breakdown Risk: Ineffective claims handling resulting in claims leakage, customer dissatisfaction, and inaccurate management reporting.	1) Centralized mailbox with multiple people monitoring it 2) Backup support for individual responsible for claim setup 3) Monitoring metrics of claim setup time	1) Compare the FNOL date to the claim create date to check against the SLA for full population	1) Claims are not set up timely not processed timely (missed sensitive dates)
Aerospace Claims	27255	Operational Processes	Manage Claims and Recoveries	First notice of loss (FNOL) and Triage	59	Are all critical data elements properly captured in the claims set up process?	1) Key data elements that affect reserving in reporting are not properly captured Risk: Ineffective claims handling resulting in claims leakage, customer dissatisfaction, and inaccurate management reporting.	A review process that monitors the proper capture of critical information is performed by management	Is there missing information within key data fields? Cause of loss, sub cause of loss, CAT codes	Key data elements are not properly captured which may lead to inaccurate management reporting.
Aerospace Claims	27255	Operational Processes	Manage Claims and Recoveries	First notice of loss (FNOL) and Triage	65	Are claims being processed for valid policies?	Ineffective claims handling resulting in claims leakage, customer dissatisfaction, and inaccurate management reporting.	System controls prevent set up/assignment of claims not within the policy period.	Extract claims with DOL not within the effective and expiration dates.	Claims are being adjusted as payments are made on invalid claims.

AIM Training | Define Question and Testing Approach

Define Audit Questions and Testing Approach (you can reference the [Question Library](#) tab in the AIM workbook to reuse previously defined Audit Questions)

Analytics Integration Matrix
Objective: The purpose of this document is to capture the analytics scoping process, agreed delivery timeframes, statuses as the audit progresses, and results summary.

Project ID	42
Project	Aerospace Claims
Audit ID	27255
Segment	General Insurance
Link	WPwCCDSSPOTIA001rl-core.rtaig.net\AnalyticsFramework\Projects\AuditSupport\AuditPlan

<i>Do not edit. Question ID will be assigned for new questions at the completion of the</i>	<i>What is the audit team trying to answer - be specific, and limit to one key question per line.</i>	<i>Specify whether this is a question addressed by Data Analytics or traditional Audit techniques.</i>	<i>What are some scenarios where a risk has been realized?</i>	<i>What are examples of controls that should be in place?</i>	<i>How can this question be answered through analytics techniques?</i>	<i>What issue can IAG be expected to report if the risk scenario(s) are realized, even with a small number of exceptions (e.g. 5% exception rate)?</i>			
Process	L1 Process	L2 Process	Question ID	Audit Question	Question Type	Risk Scenario	Expected Control	Analytics Testing Approach	Analytics Value Proposition
Operational Processes	Manage Claims and Recoveries	Establish Claim Reserves	33	Are the reserves posted in a timely manner (in accordance with business guidelines, e.g. based on new information received)?	Analytics	1) Inaccurate management reporting 2) Decisions cannot be made in a timely manner (especially for large claims) 3) Actuarial projections may not be timely and/or accurate Risk: Reserving activities are not timely and accurate, leading to incomplete financial and operational reporting.	1) Reserving reports reviewed by the management (e.g. stat reserves, MLR, duration of time at a reserve limit etc.)	1) Review the time between initial (stat) reserve and subsequent reserve changes 2) Stratify large reserve changes by dollar amount, time from claim create date, time before claim close date 3) Review reserve changes before quarter end and after quarter start (e.g. 7 days before, 7 days after) 4) Review reserve amounts at 270 days after claim create and 3 months before claim close to see if variances are within 10% range	1) Reserves are not being posted timely, resulting in inaccurate financial reporting 2) Poor best practices in claim handling/delays in claim handling 3) Poor customer service

If the audit is related to Insurance Value Chain, please select 'Operational Processes', else if it relates to 'Corporate Support', please [select](#) 'Management and Support Processes'. Click on the box to see taxonomy.

Enter the L1 and L2 processes related to the audit (from AIG's interactive Enterprise Taxonomy pdf document*) (attached)

Enter a question which the audit team is trying to answer. Note: Be specific and limit an entry to 1 key question per line. (please see example above)

Select 'Analytics' from drop down menu options

Describe the risk scenario related to the audit question

List the controls which should be in place to prevent or mitigate the described risk

Describe (in conversational English) how this audit question may be answered leveraging available data (please see example above)

Describe the issue which would be reported if the risk scenario is realized, even with a small number of exceptions (adverse results should result in reporting of a Moderate issue at minimum)

AIM Training | Select Analytics Services and Specify Assurance Provided

Description of the Analytics Services Involved and Assurance Expected

What assurance can IAG be expected to provide Management if nonnegligible exceptions are noted?

Summary of output agreed with audit team / AIC

Control Assurance if No E

1) Reserves are posted timely
2) Best practices are followed
3) Management reporting is operating well

Expected Analytics Output

1) List of claims showing the reserve change amount by predefined range, time period to facilitate focused judgmental sampling

Select analytics services which should be leveraged to answer the audit question (multi-select question; see table for detailed descriptions)

Describe the assurance which would be provided to management if the risk scenario is not realized and no/ negligible exceptions are found

Analytics Services	Description
Full Population Testing	Develop conclusion, typically on controls, based on review of full population of transactions.
Audit Scoping	Provide population statistics that guide the focus of the audit.
Sample Selection	Provide contextual analysis that informs judgmental sampling.
Automation	Replace manual audit steps with push-button processes.
Analysis	Inspect, cleanse, and transform data with the objective of highlighting meaningful information, suggesting conclusions, and supporting decisions. -- Hindsight, Predictive, Prescriptive.
Continuous Auditing	Solution that provides on-demand testing of controls or monitoring of risk indicators.
Data Visualization	Visual representation that can be used to enhance to messaging of analytics' results (e.g. chart included in the audit report).
Self Service Data	Provide data to inform decisions (user performs queries or generates reports on their own, with nominal support)
Data Quality Assessment	Evaluating data in order to determine whether it is the right type and appropriate to support the intended use.
Next Generation	Provide insights leveraging emerging and disruptive technologies e.g. Natural Language Processing, Machine Learning , AI, Cognitive and Intelligent Automation technologies

Address what will be needed as inputs and outputs for the test to be successful.

<i>Summary of output agreed with audit team / AIC</i>	<i>What data points are required to answer the audit question?</i>	<i>Summary of coding logic</i>	<i>Are there any limitations or assumptions in producing our results that the audit team should be aware of?</i>
Expected Analytics Output	Data Requirements	Processing Logic	Limitations / Assumptions
1) List of claims showing the reserve change amount by predefined range, time period to facilitate focused judgmental sampling	Claim Number Claim Create Date Claim Close Date Transaction Date Transaction Type Reserve Amount	1) Classify the reserve changes into the ranges based on: * reserve amount (\$250-500\$k, \$500k-\$1M, over \$1M), * time from claim close date (same day as close to 30 days, 31 to 60 days, 61 to 90 days, 91 to 180 days, 181 to 270 days, over 270 days) * time from claim create date (same day as create to 30 days, 31 to 60 days, 61 to 90 days, 91 to 180 days, 181 to 270 days, 271 to 365 days, 1 to 2 years, over 2 years)	Only transactions that result in a reserve amount change are captured in the CD'w' extract (e.g. we will not be able to see if an adjuster opened a claim file and put a note in, or uploaded a new document)

Describe a summary of what is expected as an analytic output (in conversational English). e.g. if you envision a graphical view, share information on the X and Y axes? (please see examples above)

List all known & guessed data fields which will be required to answer the audit question and help achieve the described analytics output

Describe (in conversational English) any known processing logic which will be required to answer the audit question and support achieving the described analytics output

Describe any known limitations or assumptions in producing results that the audit and analytics team should be aware of

The **Question Library** can be used to automatically populate the AIM with Audit Questions and associated Level1 and Level2 processes that have been addressed on previous audits.

Process Type

Operational Processes

L1 Process

Manage Claims and Recoveries

L2 Process

First notice of loss (FNOL) and Triage

1. Filter for relevant Process

3. Hit the '+' sign to add the question(s) to the AIM



Process Type	L1 Process	L2 Process	Question ID	Question Description	Add Question to AIM?
Operational Processes	Manage Claims and Recoveries	First notice of loss (FNOL) and Triage	3	Are claims set up and reserved timely upon first notice of loss?	
Operational Processes	Manage Claims and Recoveries	First notice of loss (FNOL) and Triage	4	Are claims assigned to adjusters that are actively licensed in that state?	Yes
Operational Processes	Manage Claims and Recoveries	First notice of loss (FNOL) and Triage	5	Did the claim occur (loss date) within the policy effective period?	
Operational Processes	Manage Claims and Recoveries	First notice of loss (FNOL) and Triage	30	Do actual caseload levels exceed the staffing model caseload levels?	
Operational Processes	Manage Claims and Recoveries	First notice of loss (FNOL) and Triage	32	Are the claims set up within 48 hours from FNOL?	Yes
Operational Processes	Manage Claims and Recoveries	First notice of loss (FNOL) and Triage	57	Are claims assigned to adjusters that have the requisite expertise to handle the claim?	
Operational Processes	Manage Claims and Recoveries	First notice of loss (FNOL) and Triage	59	Are all critical data elements properly captured in the claims set up process?	
Operational Processes	Manage Claims and Recoveries	First notice of loss (FNOL) and Triage	65	Are claims being processed for valid policies?	
Operational Processes	Manage Claims and Recoveries	First notice of loss (FNOL) and Triage	120	Are the data for key dates valid for all claims?	
Operational Processes	Manage Claims and Recoveries	First notice of loss (FNOL) and Triage	121	Is claim created on a timely manner after FNOL?	
Operational Processes	Manage Claims and Recoveries	First notice of loss (FNOL) and Triage	122	Are there any claims paid despite being outside effective policy dates?	

2. Specify 'Yes' for the questions you would like to select

Summary of analytics results and relevant observations	Link to detail testing spreadsheet	Summary of how the audit team has used the analytics results
Results Summary ▼ Provided a summary of large claims transactions (1,190 in total over \$100k) flagging each of them based on number of days from claim creation, to claim closure, and in relation to quarter end.	Results Detail Link ▼ \\Pw\CCOSSPOT\AD01\rl-core\rl.aig.net\AnalyticsFramework\Projects\Audit Support\Audit Plan Related\Aerospace Claims (27255)\Questions\33	Audit Team Follow-up ▼ <ul style="list-style-type: none"> Through Data Analytics, there were 4 claims identified that had a reserve change greater of \$250k that occurred 30 days prior to claims close and were over 30 days since claim create. No trend was determined by either adjuster or handling office. IAG sampled 2 files and observed that reserves were established on an incorrect file and immediately closed and the payment was corrected from indemnity to expense. Between Q1 2017 and Q1 2018, there were 4 claims (6 features) that had a reserve increase over \$1M that occurred either 7 days prior to quarter close or 7 days after the quarter began. No trend was identified. IAG sampled all 6 files and verified that reserves were changed timely.

Once the analytics have been delivered to the linked location and discussed, provide a high level summary of analytics results housed in files at the location

Describe how the audit team is using the analytics results during discussions with business and in the audit report. If the test did not produce any value, please provide some comments so we can learn from the experience.

Primary Data Source Used (Use icon above to add new data)	Select Existing Analytics Solution Used (if applicable)	Value Realized	
 Claims Data Warehouse CDW (5)		Value Add Controls Assurance	Question Score 1

Select the relevant data source for the question from the menu options. If your data source is not listed, please click on the icon to add the data source

Select the relevant analytic solution for the question from the menu options. If your solution is not listed, please click on the icon to add a new solution

Select all 'Value add' options that apply to the question from the menu

AIM QA Overall Objectives

1. To assess if each AIM entry clearly explains how the analytics work adds value* to the audit.
2. For each value-add AIM entry, verify if it can be re-performed to enable automation and/or in another audit with similar scope.
3. Where AIM entry does not provide value-add, are we clear on the “lessons learned” so we can improve going forward.

* Value-Add Categories:

- | | |
|-------------------------|------------------------|
| 1. Controls Assurance | 4. Insightful Learning |
| 2. Control Finding | 5. Advice |
| 3. Improved Audit Focus | 6. Efficiency |
| | 7. In Use by Business |

AIM QA Phase	When	Purpose
Initial/Interim QA	Before Planning Tollgate	To evaluate if the AIM contents are clear to enable IAG to potentially generate value-add. QA specifically looks at the following: Audit Questions, Risk Scenarios, Control Assurance to be provided, and if the processing logic is achievable to achieve the Testing Approach using the Data Requirements as set out in the AIM.
Final QA	After Reporting stage	To evaluate the completeness of the AIM contents against the three QA objectives as set out on this page.

Main AIM QA Criteria

#	Category	#	QA Criteria	QA Question	Which Field should be Adequately Filled In
1	AIM Output / Value Assessment	1.1	Accurate Value Capture	Is each “value captured” justified?	Main: 4.11-Results Summary 4.14-Audit Team Follow-up Secondary: 4.1-Audit Question 4.2-Risk Scenario 4.3-Expected Controls 4.5-Analytics Value Proposition / Impact if Exceptions Found 4.7-Control Assurance if No Exceptions Found
		1.2	Reperformability	- If this test is considered valuable, can I re-perform it adequately with the info in the AIM record? - Is the analytics approach clear enough for me (or an experienced data analyst) to replicate? - Can I obtain the data? - If there is a need to reperform, are there any significant steps where I (or an experienced data analyst) get stuck and cannot proceed?	4.4-Analytics Testing Approach 4.6-Analytics Services 4.8-Expected Analytics Output 4.9-Data Requirements 4.10-Processing Logic 4.11-Limitations / Assumptions
		1.3	Lessons Learned	If the test did not lead to a valuable outcome, can I understand what I should do differently to arrive at a valuable outcome in future?	4.14 Audit Team Follow-up (if applicable)

Detailed AIM QA Criteria:
See file embedded below



AIM QA Checklist
v2

Description: The entire population of claims for the scope of the audit was reviewed to determine if the First Notice of Loss for each claims was entered into the system within the 2 day threshold established by the business. The preliminary results indicated that the majority of claims exceeded this threshold. Samples were taken to substantiate the results. Although there were some false positives, this test resulted in a moderate finding for the business.

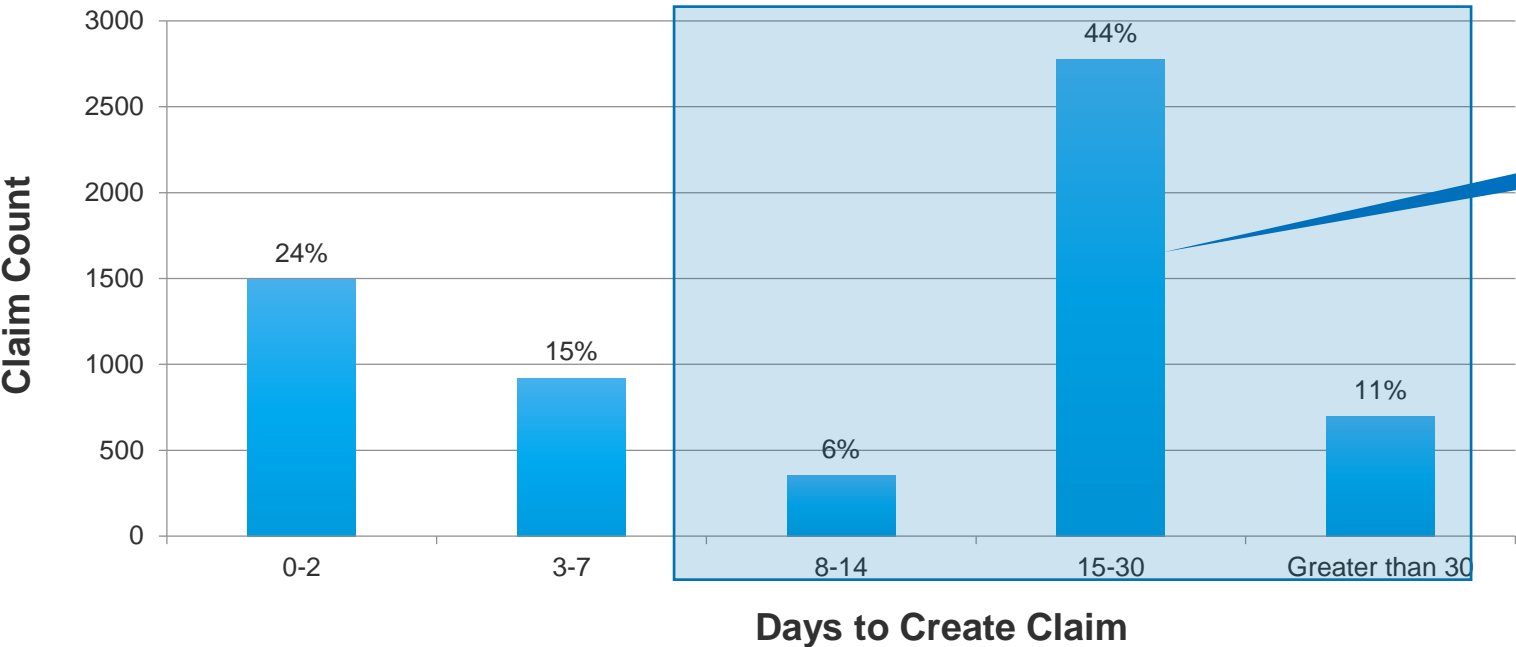
Analytic Service(s): Analysis, Sample Selection

Business Value:

- Insightful conversations with client related to the claims triage process
- Action plan related to the remediation of the issue will focus on communication of business standards and increased monitoring of the Claim Create metric

When the audit is complete, the Analytics team will prepare a one-pager that summarizes the Services and Value Capture.

FNOL to Claim Create Date



61% of claims analyzed exhibited a Claim Create Date greater than 7 days after FNOL

Benefits of Approach

- Provides visibility into full population of claims rather than the limited view provided by sampling
- Details easily shareable with the client so they can validate or refute the findings

Enhancements to Audit Process

Planning

- Understand end to end process
- Identify and assess key risks and controls
- Management Self – Assessment (RCSA)
- Design of controls completed
- Confirm scope of testing – only test key controls
- Partnership with ORM/Compliance

Fieldwork

- Test operating effectiveness for agreed upon controls
- Where possible, full population testing of controls to provide additional assurance
- Fieldwork Tollgate will evaluate results to determine if audit should continue or move into reporting

Reporting

- Walk through draft audit report with the business
- Audit Report will include comparison of business self assessment to audit results and commentary on culture
- Any self-identified issues will be included in the results and considered as part of overall report rating

Executing Audits Using Agile

- Audit Increment Planning meeting build a backlog of key risks and controls
- Execute each sprint (2 week intervals)
- After each sprint have a sprint review meeting with L4 to discuss results and initiate. After each sprint have tollgate to discuss stopping or continuing with audit
- After each sprint and before next Sprint have Lessons learned session to discuss went well in sprint and what needs enhancements from next sprint
- Hold daily scrum meetings (10 minutes) to discuss progress from yesterday, plan for current day and if any escalation is required



Guidance Documents



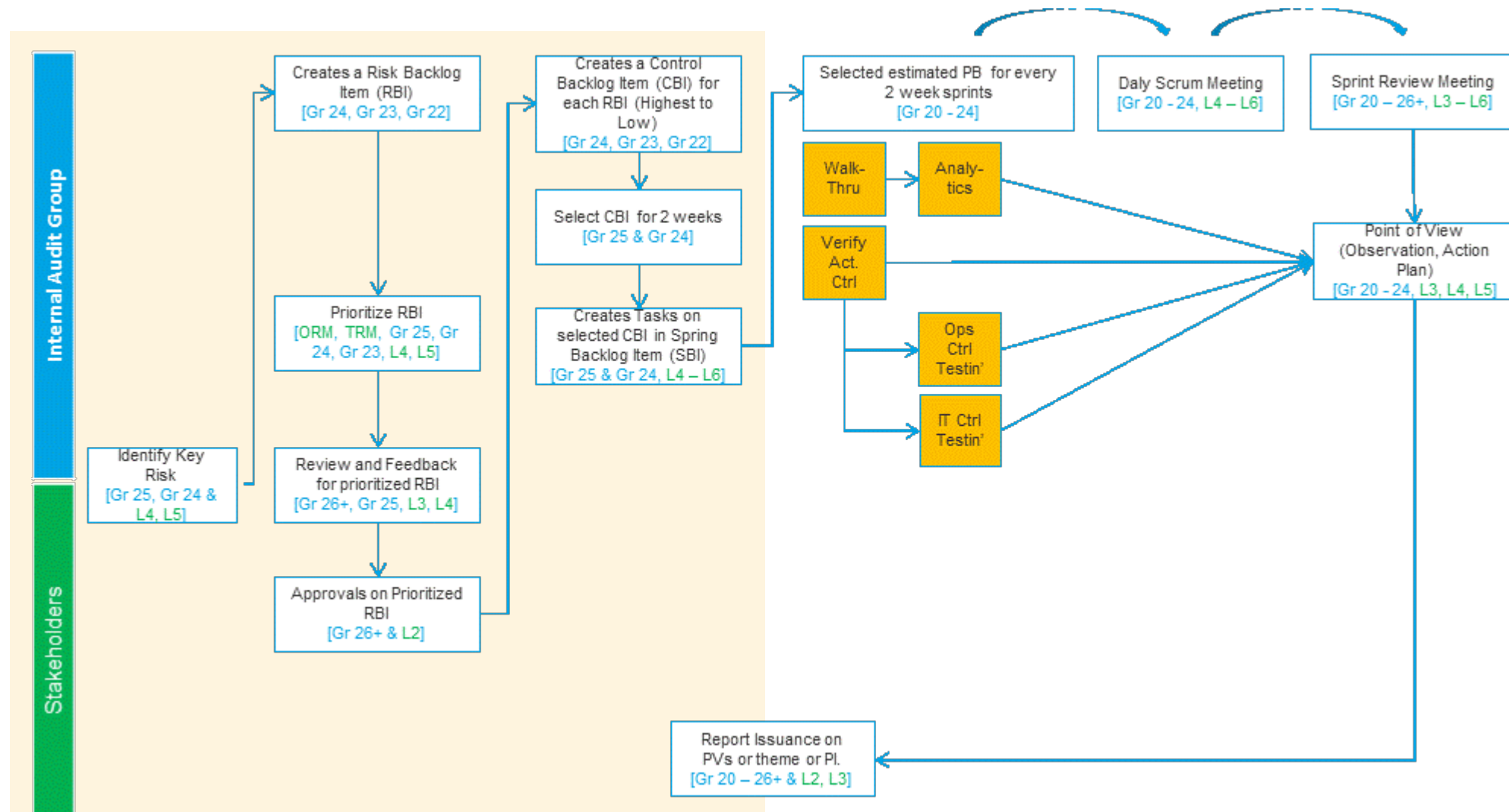
Templates

Analytics Pre-work	Pre-Planning	Planning	Fieldwork	Reporting	Wrap Up
<ul style="list-style-type: none"> Preparing the AIM 		<ul style="list-style-type: none"> Preparing and Issuing an Announcement Memo Preparing a Planning Memo Preparing Process Flowcharts and Narratives Elements of a Well Written Risk Elements of a Well Written Control Documenting a RAM Coverage of SOX Controls Performing and Documenting a Control Walkthrough Documenting a Lead Sheet Facilitating and Documenting Key Audit Meetings 	<ul style="list-style-type: none"> Documenting a RAM Documenting a Lead Sheet Completing the Summary of Audit Findings and Dispositions (SAFD) Preparing a Planning Memo Full Population Testing Facilitating and Documenting Key Audit Meetings 	<ul style="list-style-type: none"> Completing the Summary of Audit Findings and Dispositions (SAFD) Elements of a Well Written Issue Assigning Ownership to Issues and Action Plans Preparing and Issuing an Audit Report Standard Report Distribution Facilitating and Documenting Key Audit Meetings 	<p><i>For further details refer to IAG Policy 4 – Audit (will be updated prior to Sept 2018 rollout)</i></p>
	<ul style="list-style-type: none"> Audit Initiation Template AIM (initial) Pre-Announcement Memo Scoping & Insight Analytics 	<ul style="list-style-type: none"> Announcement Memo Planning Memo Process Flowcharts Risk Assessment Matrix (RAM) Control Walkthrough (Test of One) 	<ul style="list-style-type: none"> Risk Assessment Matrix (RAM) Leadsheet SAFD Planning Memo Addendum 	<ul style="list-style-type: none"> SAFD Audit Report Key Meetings Tracker 	<ul style="list-style-type: none"> Analytics One-Pager Performance Feedback Lessons Learned AIM (final)

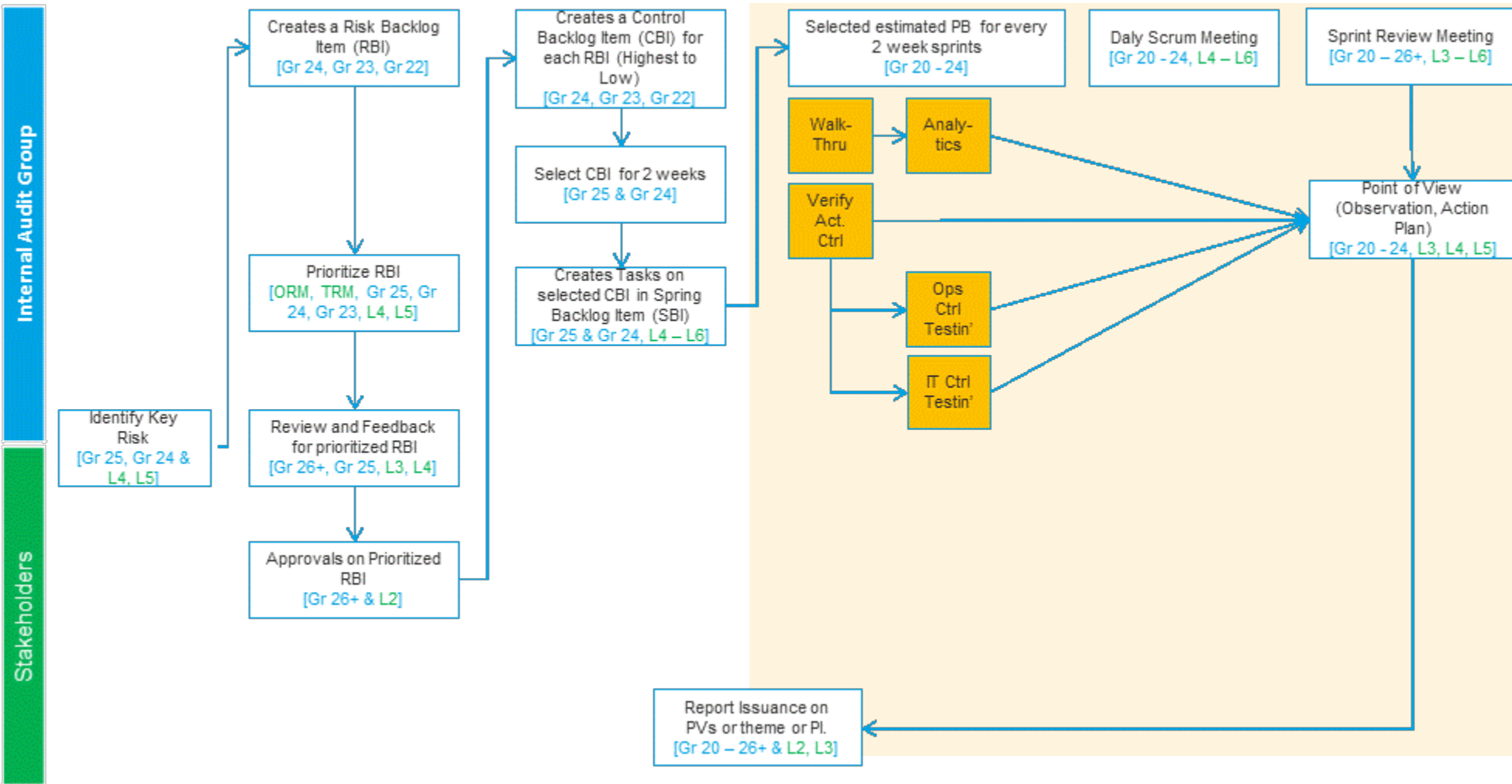
Executing Audits Using Agile

Agile concepts:

- “Audit Increment planning” build a backlog of key risks and controls



Executing Audits Using Agile



Agile concepts:

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