Internal Audit Report

HIJ Phase 1 Validation

Context

Following the judgments from the Group Litigation Order, Post Office has undertaken a programme of improvements to overhaul culture, practices and procedures throughout every part of the business. The Judgment on the Horizon Issues trial (the "HIJ") was handed down in December 2019. The Judgment identified 15 specific issues, relating to bugs, errors and defects in Horizon, and the operation of Horizon.

A four phase HIJ Remediation Programme has been set up to address the issues raised in the judgment and to identify and map required activity against each of the issues. Internal Audit reviewed the HIJ Remediation Programme and Phase 0 activities within the 2020/21 audit plan. This review validates activities and outputs for Phase 1, which are based on rapid fixes identified at the programme outset and additional activities defined during initial investigations.

Audit objective

To confirm that outputs and activities reported as completed for Phase 1 of HIJ remediation have been fully delivered and evidenced, that any delayed activities have been properly communicated, and to highlight progress and concerns in the context of the wider programme, given the status of Phase 1 outputs.

Assessment

To arrive at our assessment, Internal Audit worked with the Programme Lead, HM and BAU IT teams, and KPMG, to identify activities forming the initial phase of remediation and to gather evidence to support any internal assessment of completeness. We have highlighted where activities are still in progress, or where there is insufficient evidence to fully validate the activity.

Conclusion

Significant progress has been made within Phase 1 of the HIJ Remediation Programme, leading to measurable improvements in Horizon processes, controls and oversight, including more robust management of KELS (Known Error Logs), enhanced testing and oversight of system and data changes, more secure and transparent Horizon application support, and laying the groundwork for enhanced Postmaster communications and programme management.

We confirmed that activities proposed at programme initiation are reflected in the Phase 1 Close report. The HIJ requirement to test and close historic KELS has now been addressed but completion of the remaining Phase 1 activities is not, and was not planned to be sufficient to fully remediate the remaining HIJ findings.

We identified a total of 51 Phase 1 outputs for 21 activities across the 10 workstreams, 42 of which we validated as fully delivered. Nine outputs across 5 activities have not yet been completed, all of which have been formally flagged and escalated through programme governance forums. One of these outputs, covering the approach to Non-functional Testing, has been reported as complete for Phase 1, despite being flagged as delayed in IDG updates and reporting should be updated to reflect this.

Our discussions indicated that challenges with Fujitsu resourcing and engagement was the primary cause for the delays identified and management are investigating alternative solutions to address this gap.
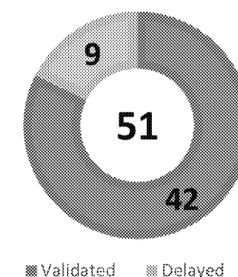
Next Steps

This report will be presented to the July RCC and ARC meetings. Further validation will be undertaken as part of the 2021/22 Internal Audit plan to assess progress against Phase 2 activity, and to follow up any Phase 1 activities not yet completed.

Post Office Ltd: CONFIDENTIAL

Report date: 07/07/2021

Executive Summary

Background

Following the judgments from the Group Litigation Order, Post Office has undertaken a programme of improvements to overhaul culture, practices and procedures throughout every part of the business. The Judgment on the Horizon Issues trial (the "HIJ") was handed down in December 2019. The Judgment identified 15 specific issues, relating to bugs, errors and defects in Horizon, and the operation of Horizon.

In response, Post Office have set up an HIJ Remediation Programme, intended to address concerns raised by the Judgment. A summary of the HIJ remediation journey is attached at Appendix 3. HIJ remediation activity has been split into multiple phases:

- Phase 0 – Horizon Review
- Phase 1 – Analyse issues, define solutions and implement immediate fixes
- Phase 2 – Structured plan to address Horizon issues and integrate across POL
- Phase 3 – Iterate, embed and sustain the change

Internal Audit reviewed the remediation programme structure, governance and approach, along with Phase 0 activities, as part of the 2020/21 audit plan. This review validates activities and outputs for Phase 1 (Rapid Fix in Appendix 3). Additional validation work will be undertaken for further remediation phases.

Scope & Approach

The purpose of this audit was to consider the outputs of the Phase 1 HIJ remediation activities to confirm whether they were fully implemented and evidenced. We identified all Phase 1 outputs, matched evidence against all completed activities, and considered the impact of any delayed activities or activities for which we were unable to obtain sufficient evidence to validate the outputs. We compared this list of activities with the original plan for deploying rapid fixes and with progress reported within the Horizon Programme Phase 1 Close Out Report.

Conclusion

Significant progress has delivery activities identified for Phase 1 of the HIJ Remediation Programme, with a total of 51 defined Phase 1 outputs relating to 21 activities across the 10 workstreams. This has resulted in clear improvements in Horizon processes and controls and enhanced oversight of changes to the system and the data held thereon. A further 5 outputs were identified but we confirmed these related to Phase 2 delivery. Discussions with management indicated that these had been added to reflect work in progress.

We validated completion of 42 outputs against evidence provided by workstream leads and identified 9 outputs across 5 activities which had not been completed. All 9 outputs have been internally flagged and escalated through the IDG and other governance mechanisms, however, delivery of an agreed approach for Non Functional Testing is reported as complete within the Phase 1 Close Out report and this should be amended to reflect the additional effort required to close. Discussions with senior management and workstream leads indicated that engagement with, and resourcing within, Fujitsu has been the primary barrier to the completion of planned Phase 1 activities.

The HM IT Director has performed an assessment of the risks posed to the overall programme by delays in Phase 1 deliverables. For the majority of outputs, management consider the impact to be minimal, but additional work is required to mitigate the effect of delays in accessing keystroke logs and transactional data. We concur with this assessment.

Executive Summary (cont.)

Conclusion (cont.)

We confirmed that current Phase 1 activities accurately reflect those proposed at programme initiation. These activities form part of an ongoing programme of remediation and, with exception of Historic KELS, the completion of Phase 1 activities is not, and was not planned to be, sufficient to fully remediate the specific HIJ findings.

Discussions with workstream leads identified remediation activities delivered independently of the KPMG reported outputs and management should consider how best to reflect this work.

Management Comment

"*I appreciate the complex set of deliverables and outcomes that the IA team have sought to review in this audit report and confirm that the report reflects the overall progress we have made in remediation of the 15 core judgement findings. This Phase has set the foundations for Phase 2 with workstreams developing their analysis and solutions for the longer term, while also implementing immediate interim fixes to address critical issues for the Postmasters.*

Whilst the audit report calls out 9 areas where they have been unable to fully verify completion I am confident that the majority of these have little impact on our overall remediation progress. Exceptions to this are shown in the table below (attached at Appendix 6) with their respective impacts and our plans to address in Phase 2."

Simon Oldnall – HM IT Director

POL00031790

POL00031790

Summary of Findings

Finding	Rating	Action Owner	Date
Scope Area: Activity and output validation			
1. The Phase 1 Close Out report includes outputs which are only partially completed, and which are now scheduled for Phase 2 delivery.	P2	Emma Williams, Horizon Remediation Lead	31 July 2021
2. Improvements developed as part of ongoing BAU processes may not be reflected in Phase 1 progress reporting.	P2	Emma Williams, Horizon Remediation Lead	31 July 2021

Scope Area: Activity and output validation

The HIJ Remediation Programme team have tracked activities and outputs as part of their weekly update activities and these are summarised in 'HZ Remediation Programme Phase 1 Progress' reports, compiled with the help of KPMG. Using the 8 July report as a starting point, we identified all activities and expected outputs designated for Phase 1. For those areas that were reported as complete, we discussed each activity with the workstream leads and key stakeholders and obtained evidence to match each defined output.

We identified 21 activities with 56 outputs across the 10 remediation workstreams. Some outputs are assigned to multiple activities and we have counted each such instance separately. A list of all activities, outputs and evidence is attached at Appendix 4 and a summary of the workstreams is attached at Appendix 5.

Forty-two outputs were confirmed as completed through discussions with stakeholders and through evidence obtained for each output. A further 5 outputs reported in Phase 1 were confirmed as relating to Phase 2 activities and should not, therefore, be included for validation.

Four activities with 8 outputs have been reported as delayed. These have been highlighted to senior management and are included in IDG and other governance reporting, as well as the 'Phase 1 Close Out' report. These relate to activities to address help screen freezing, BranchHub improvements, keystroke logging, access to transactional data, and regression management. A further output, relating to finalising and integrating non functional testing, is reported as complete within the 'Phase 1 Close Out' report despite being escalated as delayed to the IDG.

The HM IT Director has assessed and communicated the impact of delays to Phase 1 deliverables and believes that, in the majority of cases, the effect on the HIJ remediation programme as a whole is minimal. However, requirements to address keystroke logging and to access transactional data are likely to have a greater impact and are being addressed as a matter of urgency. The HM IT Director's impact assessment and close out actions for these areas is attached at Appendix 6.

Our discussions also identified BAU and other activity to address HIJ remediation which were not formally reported as part of the Phase 1 activities. These were largely developed as the programme progressed and were not part of the original Phase 1 remediation plan, however, management should consider whether reporting on these outputs is required to demonstrate the full range of activity to support HIJ remediation. Enhanced tracking of actions implemented for Phase 2 should ensure that all remediation work is captured in future. Outputs included include improvements in privileged access reporting and development of testing templates.

We compared proposed Phase 1 activities detailed in the 'Horizon Improvements Programme – Objectives, POAP and workstream descriptions' document initially reviewed by Internal Audit on 2 April 2021 with the currently reported activities and outputs and found that these were in broad alignment, with additional outputs added to Phase 1 since it's inception.

1. The Phase 1 Close Out report includes outputs which are only partially completed, and which are now scheduled for Phase 2 delivery
Finding (P2)   Our review identified 6 outputs across 4 activities which have either not been fully delivered or relate to Phase 2 deliverables.   As per the Phase 1 Close Out report, remediation work to finalise and integrate Non-Functional Testing is currently reported as complete, however discussions with the HM IT Director and the workstream lead confirmed that additional work is required to finalise this activity.   We also identified 5 outputs across 3 activities, relating to Postmaster communication and Model Office analysis, which are reported as ongoing but relate to Phase 2 deliverables.
Risk   Programme activities may not be accurately tracked, impacting POL's ability to deliver improvements to Horizon and address HIJ findings.
Agreed Management Action   The Horizon Remediation Lead will review reporting of Phase 1 activities and confirm that only relevant activities and outputs are tracked, and that any delayed activities are accurately reported and escalated.   ***Action Owner:*** *Emma Williams, Horizon Remediation Lead*   ***Date:*** *31 July 2021*

2. Improvements developed as part of ongoing BAU processes may not be reflected in Phase 1 progress reporting
Finding (P2)
Discussions with workstream leads identified activities which have been developed independently of KPMG and which are not included in progress reporting.
Progress reporting focuses on those activities delivered as part of the collaboration between POL and KPMG, with KPMG coordinating progress updates. Process improvements developed in-house as part of BAU improvements, including increased oversight of Fujitsu privileged access and the creation of testing templates, may not be reflected in management updates, resulting in an incomplete picture of Horizon improvements. Enhanced activity tracking implemented for Phase 2 will help to address this gap for ongoing remediation activity.
Risk
Management may not be aware of, or able to demonstrate, the full range of activity undertaken to enhance Horizon processes, controls and functionality.
Agreed Management Action
The Horizon Remediation Lead will identify any key activities and outputs delivered in-house during Phase 1 which form part of the overall response to the HIJ and include these within the overall narrative for Horizon improvements.
Action Owner: *Emma Williams, Horizon Remediation Lead*
Date: *31 July 2021*

Distribution List

Executive Sponsor:	Declan Salter	HMU Director
Distribution:	Jeff Smyth	Group CIO
	Simon Oldnall	HM IT Director
	Emma Williams	Horizon Remediation Programme Lead
Audit Team:	Diogo Vidinhas	Senior Audit Manager
	Jonathan Acres	Audit Manager
	Johann Appel	Head of Internal Audit
Key Dates:	ToR	N/A (follow up of HIJ Remediation Programme review)
	Fieldwork	June 2021
	Draft Report	30 June 2021
	Final Report	07 July 2021
	RCC	13 July 2021
	ARC	27 July 2021

Appendix 1 – Terms of Reference

Background:

Following the judgments from the Group Litigation Order, Post Office has undertaken a programme of improvements to overhaul culture, practices and procedures throughout every part of the business.

The Judgment on the Horizon Issues trial (the "HIJ") was handed down in December 2019. The judgement identified 15 specific issues, relating to bugs, errors and defects in Horizon, and the operation of Horizon.

POL have instituted a number of initiatives designed to support remediation and assurance around the HIJ, including:

- Setting up within a separate business unit, the HM BU, a team with the objective of providing technical and process solutions to address the HIJ issues.
- Enhancing the IT Controls Framework (ITCF) to provide more specific control definition and evidence provision for Horizon related controls.
- Engaging a third party, KPMG, to review processes and controls in place for Horizon and feed into the ITCF.
- Setting up workstreams within the IT team to review and enhance controls over Horizon.
- A review of the Postmaster Journey, being undertaken by Deloitte, the findings of which will feed into HIJ remediation.

The upcoming Post Office Horizon IT inquiry 2020 will assess whether POL has delivered or made good progress on issues raised in the HIJ.

This audit forms part of the revised 2020/21 Internal Audit plan, as approved by POL Audit, Risk and Compliance Committee.

Key Risks:

We identified the following key risks:

- Reputational – risk of adverse publicity as a result of not delivering against commitments made to address the results of the various judgments.
- Financial - risk of Government funding restrictions due to POL failing to address the issues raised.
- Operational – Inefficiencies and rework as actions are not appropriately and timely implemented or do not fully address the issues raised.

Scope of Audit:

We will undertake an assessment of POL's approach to addressing the issues arising out the HIJ. Specifically, we will:

1. Review the strategy and roadmap in place to address the HIJ issues.

2. Assess progress and plans against each of the 15 HIJ issues and any CIJ issues which have been passed over to HMU IT.

3. Review governance mechanisms and level of coordination in place around the activities being done to address HIJ issues, including work being done internally and by third parties (e.g. Postmaster Journey, KPMG review of Horizon). This includes agreement of remediation, monitoring of progress, upwards reporting and escalation of issues.

4. Review mechanisms being planned or already in place to ensure lessons were learnt and improvements are being embedded into the pipeline of key programmes and activities (e.g. Fujitsu exit strategy, SPM requirements).

Timeline:

Pre-Work:	February-March 2021
Field Work:	8 March – 26 March 2021
Draft report:	2 April 2021
Final report	16 April 2021

Audit Team:

Diogo Vidinhas	Senior Audit Manager
Jonathan Acres	Audit Manager

Reporting:

We will produce a report to management at the end of the audit and the results will be summarised for the May 2021 RCC and ARC meetings.

Appendix 2 – Report and findings rating guide

Finding ratings	Description
P1 (High)	Issues arising referring to important matters that are fundamental and material to the system of internal control. The matters observed might cause a system objective not to be met or leave a risk unmitigated and need to be addressed as a matter of **urgency**.
P2 (Medium)	Issues arising that if not addressed may in time adversely impact the controls environment.
P3 (Low)	Issues arising that would, if corrected, improve internal control or efficiency in general but are not vital to the overall system of internal control.

Report Ratings:
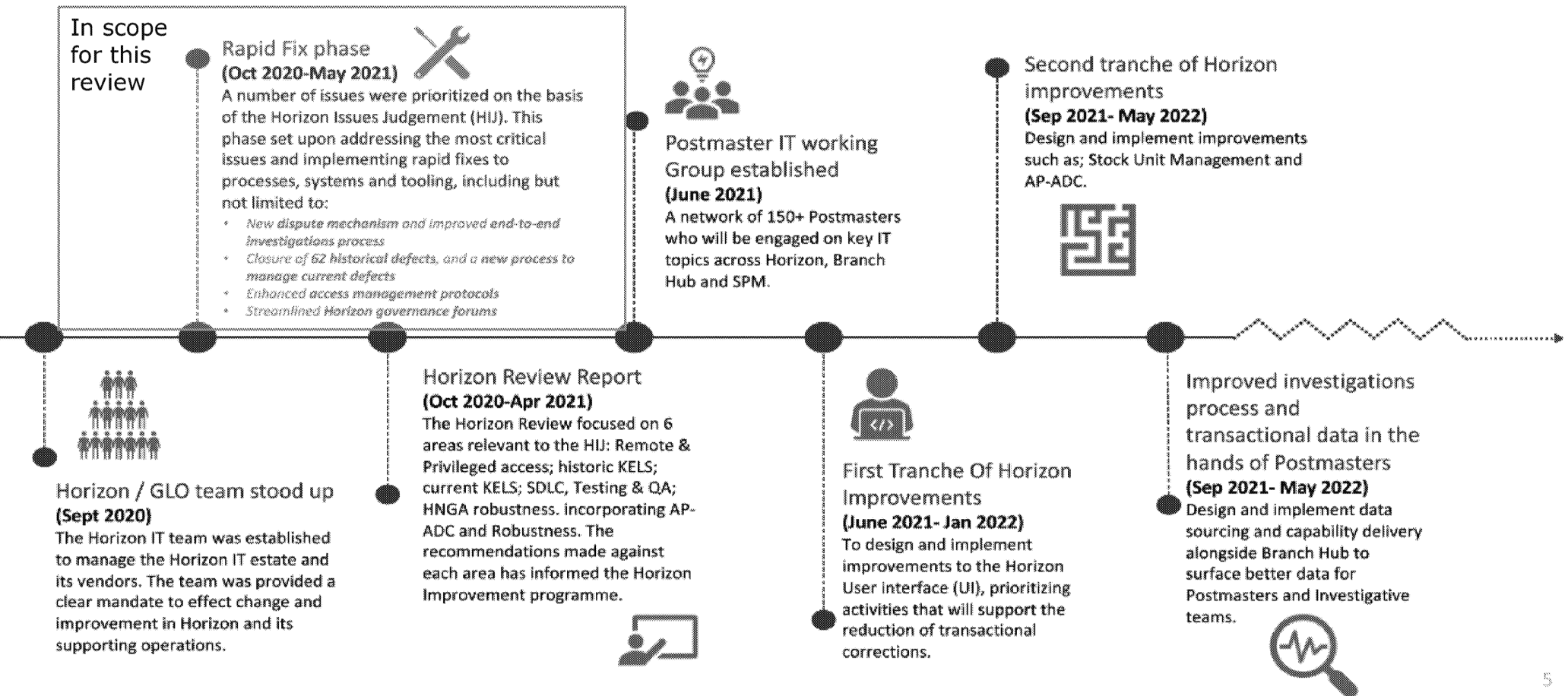The specific rationale for the report opinion rating will depend on a variety of factors including:
* The number of control issues identified
* The priority rating given to these issues
* The significance of the risks attaching to the area under review
* The overall status of the control environment for the business area under review

We will categorise our report opinion according to the below rating criteria:

Rating	Description
Satisfactory	Generally appropriate design and operation of the key controls tested with only minor control weaknesses or process inefficiencies identified.
Needs Improvement	Some weaknesses in internal controls which need resolving. A number of non-compliance issues with internal and external guidelines and weaknesses in records, systems and controls were identified.
Needs Significant Improvement	Inadequate internal control environment which requires management attention and improvement as priority. A high number of non-compliances with internal and external guidelines, weaknesses in records, systems and controls and/or non-compliance with regulator/contractual requirements. Examples may include reputational damage or inappropriate use of assets.
Unacceptable	Major breakdown in internal control environment which requires urgent Senior Management intervention. A significant number of non-compliances with internal and external guidelines and weaknesses in records, systems and controls were identified. Non-compliance with regulatory/contractual requirements, risk of significant reputational damage or significant inappropriate use of assets.

Appendix 3 – Summary of HIJ Remediation Workstreams

Our journey so far to address rapid fix and our plan for beyond...

In scope for this review

Rapid Fix phase (Oct 2020-May 2021)
A number of issues were prioritized on the basis of the Horizon Issues Judgement (HIJ). This phase set upon addressing the most critical issues and implementing rapid fixes to processes, systems and tooling, including but not limited to:
- *New dispute mechanism and improved end-to-end investigations process*
- *Closure of 62 historical defects, and a new process to manage current defects*
- *Enhanced access management protocols*
- *Streamlined Horizon governance forums*

Postmaster IT working Group established (June 2021)
A network of 150+ Postmasters who will be engaged on key IT topics across Horizon, Branch Hub and SPM.

Second tranche of Horizon improvements (Sep 2021- May 2022)
Design and implement improvements such as; Stock Unit Management and AP-ADC.

Horizon / GLO team stood up (Sept 2020)
The Horizon IT team was established to manage the Horizon IT estate and its vendors. The team was provided a clear mandate to effect change and improvement in Horizon and its supporting operations.

Horizon Review Report (Oct 2020-Apr 2021)
The Horizon Review focused on 6 areas relevant to the HIJ: Remote & Privileged access; historic KELS; current KELS; SDLC, Testing & QA; HNGA robustness. incorporating AP-ADC and Robustness. The recommendations made against each area has informed the Horizon Improvement programme.

First Tranche Of Horizon Improvements (June 2021- Jan 2022)
To design and implement improvements to the Horizon User interface (UI), prioritizing activities that will support the reduction of transactional corrections.

Improved investigations process and transactional data in the hands of Postmasters (Sep 2021- May 2022)
Design and implement data sourcing and capability delivery alongside Branch Hub to surface better data for Postmasters and Investigative teams.

5

Appendix 4 – All Activities and Outputs for Validation

#	Workstream	Area	Plan	Lead	Reported Status	Phase 1 Outputs	Evidence Received	Validated
1	Organisational Change	Change Impact	1.0 change activity support to effective planning and integration of intermediate solutions into the Hz ways of working.	Emma Williams	Complete	1. Finalised programme vision and case for change. 2. Finalised comms channel assessment and communications strategy. 3. Finalised programme change impact assessments and 'bottom-up' identification of impacted stakeholder groups. 4. Supported communications for IT Change MVP for Ref Data and Investigations TOM 1.0.	1. Case for Change. 2a. POL Comms Strategy. 2b. Changes to Hz Info Service Request comms. 3. POL Change Impact Assessment Stakeholder mapping 4. Investigation TOM.	Yes
2	ITOM	IT Governance & Change	1.0 End-to-end IT change process for AP-ADC scripts & Ref Data 1.0 New mandated IT governance. 1.0 Job Descriptions for prioritised roles 1.0 KPI/Metrics dashboard v1.0.	Martin Godbold	Complete	1. E2E IT Change process: Process improvements now live. Impactful Ref Data, including APADC, now impact assessed from a Post Master perspective. 2. Hz IT Governance: Forums defined at management level. Ready for implementation. 3. Job Descriptions to enable Hz team growth written, HR approved and, where needed, being recruited against for: H/o Experience & Product Mgmt, Hz Product Mgr, Post Master Experience Mgr, Post Master Exp. Analyst. 4. KPI/Metrics dashboard for the H/o Post Master Experience & Product Mgmt designed, data sourced and validated, design approved. Handed over to POL team for implementation.	1. Horizon IT_E2E Process for Reference Data Change. 1. Information Service Requests - User Guide (on SNOW KB). 1. Simon Oldnall email confirming new change process. 2. Horizon IT Governance Status. 3. Job descriptions shared. 4. Horizon IT Postmaster Experience dashboard_210521	Yes
3	Horizon System Improvements	Enterprise Architecture	0.1 - Assessment of reference data usage, App Dynamics for CDP transactions, Data Platform requirements, Information services architecture, Instrumentation and Monitoring Strategy.	Dan Addy	Complete	1. 0.1 Reference Data / AP-ADC report. 2. AppDynamics high level design delivered and reviewed. 3. Data platform functional and non-functional requirements complete. 4. Instrumentation & monitoring strategy work complete. 5. Review of HNG-A functions with FJ complete. 6. Finalised report (Dan Addy) on the findings from the deep dive sessions complete.	1. & 6. AP-ADC script and Reference Data assessment v1.7 2. AppDynamics HLD 004 3. Investigations requirements 0.4 4. Instrument Monitoring Strategy draft v0.4 5. HZ services catalogue v6 6. See 1.	Yes

Appendix 4 – All Activities and Outputs for Validation (cont.)

#	Workstream	Area	Plan	Lead	Reported Status	Phase 1 Outputs	Evidence Received	Validated
4	Horizon System Improvements	7. Horizon HNGA software issues	0.1 – Recommendations to improve processes and review AP-ADC / ref data	Dan Addy	Complete	1. 0.1 AP-ADC / reference data report updated from comments. 2. Improvement plan complete and moving to implementation.	1. AP-ADC script and Reference Data assessment v1.7 2. Horizon System Improvements Charter & POAP	Yes
5	Horizon System Improvements	13. Horizon help improvements	0.1 – Define and agree requirements for technical solution	Dan Addy	Delayed	1. (a) Existing help screen freezing the counter - Delay target to confirm root cause is 11 Jun using AppDynamics. 2. (b) FJ producing options for Hz help improvements to BranchHub on counter – transferred to BranchHub programme. AppDynamics deployed to find root cause of help screen problems. Target to confirm root cause is end 11 Jun for help screen freezing. Close out requires complete assessment of help screen freezing root cause, then develop, test and implement solutions.	N/A	N/A
6	Testing	5 - Current KELS	3.0 – Fully embedded process into ServiceNow and have complete control by tooling.	Harsh Soman	Complete	1. The paper based FJ managed process is now a formal process owned, managed, executed by POL, with KELS from all third parties. Service Now is being used to run the whole process, and is the source of all evidence. All current defects are being managed within this new process. 2. This has moved to BAU process, with improvements to root cause analysis tooling and management by Service Now Reporting and analysis components	1. Email from Cherise Osei confirming MVP SNOW Ref Data Change release included as BAU change and therefore not formally captured as a change. 2. HIJ Phase 1 Remediation Activities - SNOW screenshots	Yes
7	Testing	6a - Historic KELS - testing	1.0 – Test and close historic KELs	Harsh Soman	Complete	1. All historic KELS testing complete (27 KELS / 62 BEDS). 2. Engagement with Postmasters to review reports in progress. (Ph2) 3. Engagement with Postmasters in progress, working with Postmaster Union on the report for KELS closure, waiting on feedback. (Ph2) 4. FJ and POL test closure reports will be closed and meeting held to walk Postmaster through. CEO of Postmaster Union has reviewed, no issues. (Ph2)	1. TSTOTREP4269 1. POL_Test Clsoure Report - Historical KELS v0.5 1. Historic KELS Closure Report v0.1	Partial

Appendix 4 – All Activities and Outputs for Validation (cont.)

#	Workstream	Area	Plan	Lead	Reported Status	Phase 1 Outputs	Evidence Received	Validated
8	Testing	6b – Historic KELS - regression	1.0 – Create, test and execute regression suite using new Hz solution and structured process to manage regression.	Harsh Soman	Delayed	1. 0.1 Understanding of current regression packs and gaps captured, now building regression pack to fill the gaps to test and ensure no reoccurrence of historic KELS. 2. Build regression for historic KELs ongoing - first run target 30 Jun by POL/FJ teams.	N/A	N/A
9	Testing	9a - Test HNGA under load - NFT	1.0 Non-functional testing – create NFT approach and framework to implement the appropriate tooling. New process for NFT, new tooling for testing and monitoring within Hz to do it with. *Build NFT framework(1.0)*	Harsh Soman	Complete	1. 0.1 NFT requirements established. 2. 1.0 NFT framework approach drafted. 3. NFT approach design with FJ / Accenture / Verizon / Computacenter being finalised to understand their approaches to NFT and integrate into overall POL approach (delayed)	1 & 2. NFT Strategy_v0.2	Partial
10	Testing	9b – Test HNGA under load – BC / DR	1.0 Stress testing (BCP/DR) – analyse DR approach and identify gaps and create a BC policy. *Build BCP / DR framework (1.0)*	Harsh Soman	Complete	1. 1.0 DR test for counters completed - Outcome demonstrated minor issues, overall the test was successful using SME knowledge and skill. 2. 1.0 Formal framework drafted - to be iterated in phase 2.	1. POL Post Implementation Review - Verizon - CHG0040080_UK5_Failover 2. IT DR Policy V1.4	Yes
11	Testing	10 - SDLC / QA	1.0 – New process for test policy, develop and implement framework and test tooling and embed (outside Hz).	Harsh Soman	Complete	1. 0.1 Overall regression testing approach is complete. 2. 1.0 First tranche of formalised templates for all testing delivered 3. 1.0 Test Policy first draft complete and test tools implemented 4. Further analysis of Model Office is ongoing to assess suitability for future testing and changes needed. (Ph2)	1. GLO Horizon_Test Regression Optimisation_V0,1 2. POL_Test Plan_Template v0.3 2. POL Test Closure Memo - Large Releases v0.3 2. POL Test Closure Memo Template - Small BAU Projects v0.3 2. POL Test Impact Assessment Template 2. POL Execution Report Template 3. POL Test Policy v1.7	Partial
12	Testing	8 - Inform errors to PMs	1.0 – Communications to Postmasters on defects sent using current technology.	Harsh Soman	Complete	1. 1.0 complete. The current defects process includes communication of identified defects and actions to the PMs 2. Communications to Postmasters on defects are sent using current technology, only for selected issues raised. 3. Informing errors as part of the current defects process sits with BAU (Martin Godbold) and Sree (PM communication)	1 & 3. Review or dispute - Business Change 2. Evidence - email chain Draft Historic KEL - Example	Yes

Appendix 4 – All Activities and Outputs for Validation (cont.)

#	Workstream	Area	Plan	Lead	Reported Status	Phase 1 Outputs	Evidence Received	Validated
13	Investigations	01 - Hz Dispute mechanism	1.0 - Tactical solution with updated process and name in Horizon (to replace 'Settle centrally', driven by ref data) for dispute mechanism. Training and comms will be needed to support PMs and Hz supporting team.	Dean Bessell	Complete	1. 1.0 - Dispute 'button' is live. The preliminary estimate is that the number of branches who used the new dispute option is ca.30% higher compared to branches who used 'Settle Centrally' option before resulting in higher workload for PAS team. 2. Development of the Supporting BranchHub form is in progress with target date delayed to early June to allow Postmasters to provide further information to POL and reduce need for a call from POL. (Ph2)	1. Replacing the Term 'Settle Centrally 14.05.21.pdf 1. Review or Dispute - business change evidence (email) 1. Investigations Process Flow June 2021 1. SHORT TERM - Changing the term Settle Centrally - Business Change 14.05.2021	Partial
14	Investigations	02 - Keystroke Logging	1.0 – New process for sourcing keystroke logging data from branch counter terminals. Fujitsu already have the technology to pull the data, but current process uses Service Now incident tickets rather than something specific to logging data requests – proposed new process will be specific. Fujitsu have started testing of the log file creation process to ensure that the contents can be relied upon to support the investigation process.	Dean Bessell	Delayed	1. Red following FJ response. Fujitsu have stated that they cannot complete the RTQ with the Keystroke logging data and associated tooling in their current form. 2. Fujitsu will not provide Keystroke logging to POL under the current situation. Work is underway to understand the issues and establish an acceptable position for data supply.	N/A	N/A
15	Investigations	03 - Post Office staff direct access to transactional data	1.0 – updated process for sourcing ARQ data with set SLAs, incorporating small tech change with digital (rather than physical) media, and a digital fingerprint demonstrating that the file supplied has not been altered. (Process change)	Dean Bessell	Delayed	1. Red trending Green following FJ confirmed target date. Fujitsu working at risk on response to RTQ (digital signature). CWO received 28 May with proposal for PGP encryption. 2. CWO received. Fujitsu have been working at risk. Target 18 Jun	N/A	N/A

Appendix 4 – All Activities and Outputs for Validation (cont.)

#	Workstream	Area	Plan	Lead	Reported Status	Phase 1 Outputs	Evidence Received	Validated
16	Investigations	04 - Post Office sharing of transaction data with Postmasters	0.1 – Agreed options and recommendation for tactical data sharing solution 1.0 – Process change using existing technology so that investigation reports (including relevant transactional data) are routinely shared with Postmasters (process change only; uses existing technology)	Dean Bessell	Complete	1. 1.0 complete - Sharing of dispute resolution / investigation reports is now live	1. Replacing the Term 'Settle Centrally 14.05.21.pdf 1. Review or Dispute - business change evidence (email) 1. Investigations Process Flow June 2021 1. SHORT TERM - Changing the term Settle Centrally - Business Change 14.05.2021	Yes
17	Investigations	14 - Investigation of postmaster transactional concerns	1.0 – New investigations process, incorporating changes to process, and technology enablement through MS Dynamics, providing an enhanced and standardised experience for Postmasters. Investigation teams re-organised into to-be org chart subject to consultation with TUs and are trained on new processes with a new interim CMT workflow in place.	Dean Bessell	Complete	1. Launched 1.0 changes on 10 May - case triage, Review committee, QC, lessons learnt, process workflow automation, etc. The current focus is on development and delivery of upskilling training, HIJ conformance analysis and scoping of 2.0. 2. Postmaster Accounting Dispute Resolution policy was approved by ARC on 18 May. Case management tool activities have been removed from the scope	1. Investigations Process Flow June 2021 1. Training for Tier 2 - Investigations TOM 1.0 - v0.3 2. Postmaster Accounting Dispute Resolution Polict V1.4	Yes
18	IT Controls	Controls rapid fix	0.1 - Initial draft for enhanced IT controls roadmap. 0.1 - wave one lessons learnt report. 1.0 - Training and implementation for selected IT controls - 15 prioritised controls to give direction on testing on first line in the business.	Dean Bessell	Complete	1. 1.0 Complete - updated 15 short term controls agreed with POL Head Hz Security to de-risk the entire end to end process initially are complete. Enhanced wording for these has informed lessons learned report and roadmap for phase 2. Enhanced working includes direction and faciliation to the first line from the second line complete. 3. Refining roadmap IT controls implementation 2.0 and moving to Phase 2 activity e.g. governance deliverables and updating content.	1. DRAFT - POL Observations Report V1.2 2. Workpaper (DRAFT) - spreadsheets covering each of the 15 controls. 3. POL Plan On A Page	Yes

Appendix 3 – All Activities and Outputs for Validation

#	Workstream	Area	Plan	Lead	Reported Status	Phase 1 Outputs	Evidence Received	Validated
19	Data	Data governance	0.1. Information Asset Register draft structure, 0.1 Data Governance Policy Framework draft structure. This provides a combination of principles, policies, processes, roles & responsibilities, governance structures (decision making forums) drafted for approval then testing with pilots.	Dan Addy	Complete	1. 1.0 complete - Draft Data Governance Framework controls agreed and to be further developed in the Data TOM as part of Phase 2. 2. We have completed the initial population of the Information Asset Register, to be validated by POL. The content will iterate in phase 2 as reference data model and journey maps are developed as the key activity.	1. Data Governance Framework - POL - Draft 2. POL Reference Data Information Register	Yes
20	Security	12 - PAM/ RAM	1.0 – Review, assess and complete remediations/improvements to processes and permissions. JML, access and permissions processes updated with the correct approvals for the appropriate actions. Low level changes to who manages these, no technology changes and limited training requirements. Targets include FJ PAM activities and reporting inc. APPSUP TC- BRT/Global User (Branch)/SmartID.	Dean Bessell	Complete	1. 1.0 - FJ / POL in go-live for AppSup process and PAM reporting now live. 2. AppSup process is now captured into an end to end record and this is held in a ServiceNow ticket with details of the issue and result including PAM intervention with the engineer identified. 3. FJ Security (PAM) report provides improved detail and enables individuals to be monitored against platforms AND group account use.	1 & 2. Horizon Support Approval Process v1.0 1 & 3. PAM Weekly Report WE 11.06.2021	Yes
21	Tooling	ServiceNow	0.1 Proof of Value (POV)) - Dispute Resolution (POV), Change Management (POV), CMDB (POV) - no specific changes to system but demonstration of future options. 1.0 Minimum Viable Product (MVP) - Dispute Resolution (MVP Scoping), Change Management (MVP Scoping). Roadmap / Platform Review initiation	Dan Addy	Complete	1. Tactical MVP ServiceNow Change Management - Released and successfully went live as of 24/05/21.	1. HIJ Phase 1 Remediation Activities - SNOW screenshots 1. Email from Cherise Osei confirming MVP SNOW Ref Data Change release included as BAU change and therefore not formally captured as a change.	Yes

Appendix 5 – Summary of HIJ Remediation Workstreams

#	Workstream	Workstream Objective	POL Lead
1	Organisation Change and Comms	• Accelerate programme delivery through effective change management • Focus on delivering Objective 1: Re-establish trust and confidence	Emma Williams
2	IT Target Operating Model	• Provide an effective Horizon IT function that can control and prioritise Horizon change and improve operations • Deliver Objective 6: Improve Service Delivery & Operations	Martin Godbold
3	Horizon System Improvements	• Identify and implement improvements to the Horizon system • Improve usability of the HZ platform to reduce no. of user errors, improve training and outcomes • Improve integration and data transfer elements of the platform to improve transaction integrity	Dan Addy
4	Investigations	• Re-design the investigations process to provide standard and transparent experience for the post masters • Provide the technology and data to enable a data-driven approach to investigation	Dean Bessell
5	IT Controls	• Establish IT Controls to govern GLO and Horizon IT • Ensure appropriate controls are in place to protect data (will help deliver Objective 5)	Dean Bessell
6	Data	• Implement interventions identified in the Data Governance review • Deliver an overarching Horizon Data Strategy and Roadmap • Design and implement new Data TOM, Tools and Architecture	Dan Addy
7	Security	• Provide an effective Horizon security function that can secure and manage Horizon (will help deliver Objective 6) • Ensure appropriate controls are in place to protect data (will help deliver Objective 5)	Dean Bessell
8	Tooling	• Create a tooling strategy and roadmap for GLO / HZ IT • Deliver technical capability needed to execute the roadmap and support the programme workstreams	Dan Addy
9	Testing	• Design and implementation of a Testing CoE including agreement on test capability sourcing	Harsh Soman
10	Remediation Management Office	• Track the delivery of all objectives across the programme, co-ordinate design and implementation governance	Emma Williams

Appendix 6 – Impact of Delayed Activities

Workstream	Description	Phase 1 not fully delivered	Impact to HIU Remediation	Close out actions
Horizon System Improvement	13 - Hz help improvements	0.1 – Define and agree requirements for technical solution	L	AppDynamics deployed to find root cause of help screen problems. Close out requires complete assessment of help screen freezing root cause, then develop, test and implement solutions to the First activation issue and Intraday help/counter performance issues. Deliverables for Phase 2 are being defined, FJ will be engaged where required.
Investigations	02 - Keystroke Logging	1.0 – New process for sourcing keystroke logging data from branch counter terminals.	H	Fujitsu will not provide Keystroke logging to POL under the current situation. Work is underway to understand the issues and establish an acceptable position for data supply. Phase 2 deliverable D-04-14 'Keystroke logging data available for Investigator self-service' will pick up this requirement, with a target date of 31 Oct 21.
	03 - Post Office staff direct access to transactional data	1.0 – Updated process for sourcing ARQ data with set SLAs, incorporating small tech change with digital (rather than physical) media, and a digital fingerprint demonstrating that the file supplied has not been altered. (Process change)	H	Work is ongoing in this area and will be fully delivered by w/e 23/7/21. There is no specific Phase 2 deliverable - D-04-03 Investigations operating model to track to completion
Testing	6b – Historic KELS - regression	1.0 – Create, test and execute regression suite using new Hz solution and structured process to manage regression.	M	The build of regression for historic KELs ongoing - first run target 30 Jun by POL/FJ teams. This will be picked up as part of the Phase 2 deliverable D-09-01 Regression test Pack with target date Aug 21.