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HNG-X CHANGE PROPOSAL		CP NO:
CP TITLE: HNG-X CPnnnn – Enable analysis of Horizon Counter event messages within the HNG-X Audit solution		DATE RAISED: 13 Oct 2008
REQUIRED IMPLEMENTATION / PURCHASE DATE: (dd/mm/yy)		ORIGINATOR: Alan Holmes
ANTICIPATED CP CLOSURE / COMPLETION DATE: (mm-yy)		CHANGE OWNER: Pete Sewell
DATE BY WHICH CP TO BE IMPACTED: (dd/mm/yy)		TECHNICAL SPONSOR: Alan Holmes
CP CLASSIFICATION: FAST TRACK/URGENT/ROUTINE/FOR INFORMATION* (*strikethrough as applicable)		Budget Holder Approval for Impacting: (Email or Hard Copy Signature)
DAB Required: Yes/No (<i>Strikethrough as applicable</i>)	Date DAB Authorised:	
LIFECYCLE STAGE: Stage 1 : Strategic Approval Stage 2 : Start-Up & Feasibility Stage 3 : Requirements Analysis (*strikethrough as applicable)	Stage 4 : Solution Specification Stage 5 : Solution Build & Test Stage 6 : Implementation Not Applicable	
RELATED Change Request/Request for Work Package: N/A		
RELATED PEAKs: PC0152376		
RELATED HORIZON CPs: N/A		
RELATED HNG-X CPs: N/A		
Impact statements must consider all transitional states between Horizon and HNG-X, as well as the final HNG-X solution.		
Description of Change Proposed: <p>The Audit system supports a service (the Prosecution Support Service) whereby POL can request an extract of historical data that is held within the Audit archive. Typically this requires retrieval of archived Riposte transaction data. The data, as returned to POL, is often used to support legal proceedings where, say, a postmaster is accused of fraud. In such cases, we must also provide a witness statement with the audit data which attests to its provenance and integrity.</p> <p>Historically, the Horizon Audit service has relied solely on the retrieval & analysis of archived Riposte message store data when servicing POL audit data requests for Horizon branch transaction data. A recent issue (PC0152376) has identified a deficiency in this approach. In certain failure scenarios, it is possible that the Horizon counter may write an inconsistent set of messages to the local message store. This casts a doubt over the overall integrity of the resulting transaction data.</p> <p>When a Horizon counter hits one of the above mentioned failure scenarios, an NT event message is written to the local event log. This event is captured by Sysman & relayed to the central Sysman events database. This event data is subsequently written to the Audit archive. A tactical solution has been incorporated into the Horizon Audit retrieval process to provide a short term remedy to this problem. For every branch Riposte data retrieval, the archived events generated by counters at the branch are also analysed to identify any possible occurrences of problems which might adversely affect the integrity of the transaction data.</p> <p>The current Horizon tactical solution has a number of deficiencies viz:</p> <ul style="list-style-type: none"> ➤ It is a largely manual process which is error prone & time consuming. ➤ It involves moving large volumes of data between the Audit server and workstation ➤ It requires local & insecure storage of event audit data, invalidating certain statements made within the current witness statement ➤ It has no DR mechanism in the event of DR from BRA01 to LEW02 		



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Whilst we believe that we will have to live with this tactical solution for the remaining life of the Horizon Audit system, a permanent solution for the HNG-X Audit solution is required which addresses the above deficiencies. In outline, this will require the following:

- Amending the HNG-X Audit server (ARC) and workstation (AUW) applications to automatically retrieve and filter Events data when performing Horizon branch data retrievals.¹
- Amending the HNG-X Audit server (ARC) and workstation (AUW) applications to automatically retrieve and filter Events data when performing HNG-X branch data retrievals.²
- Introduce Prosecution Support process changes around the operation of the amended system & the production of witness statements.
- Identify suitable skilled & committed resources to perform any manual analysis required.
- Identify all ongoing operational costs associated with operating the revised service.

Acceptance Criteria and Methods *(Functional and Non Functional):*

Testing will be required to ensure that all suspect counter events are extracted by the system and presented to the Audit workstation user for further analysis

Reason for Change and Justification for Required Date *(above):*

While we do not believe that (due to time constraints) it is practicable to introduce this change into Horizon, it is required to ensure the viability of the ongoing Prosecution Support service within HNG-X.

The changes will be required to be present within the initial live version of the HNG-X Audit system at Weekend D

¹ The HNG-X Audit solution will need to support the retrieval & analysis of Horizon branch audit data for seven years

² While there is no reason to believe that the HNG-X counter will suffer the same deficiencies as the Horizon counter, it is advisable that similar checks are performed in both environments



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**Consequences if Not Approved:**

We are obliged to present, and vouch for the integrity of, Audit data that is fit for purpose – i.e. admissible as evidence in court. If this change is not approved, we will need to continue operating the current Horizon tactical process for the lifetime of HNG-X. This raises the following issues:

- We are liable to service penalty payments If we cannot provide dependable audit data and witness statements when requested by POL
- There is a risk of prosecution support service suspension if there is any interruption to the current tactical process
- Will require ongoing allocation of resource (??? Man days per month) to operate the current tactical process.
- Data integrity issues inherent within the current process need to be addressed by weakening the content of the witness statement

Platforms (Physical) Affected: *(insert identity and details of all platforms requiring software update by this CP – where known)*

- ARC – Audit Server
- AUW – Audit Workstation

Business Applications Affected: *(insert identity and details of all Applications requiring update by this CP – where known)*

- Audit Server retrieval application
- Audit workstation client application

External Impact Assessment Distribution: *(insert contact details and additional rows as required)*

Name:	Organisation:	Contact No:

Impact on Royal Mail Group Account: *(insert additional rows as required)*

Resource Grade	Man-days	Non Labour Cost (£)
TOTAL		

Documents Affected: *(insert additional rows as required)*

Document Reference	Title	Current Version