POST OFFICE LIMITED
BOARD REPORT

Title:	Belfast Data Centre Fortification	**Meeting Date:**	24th January 2023
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Input Sought: Decision

Board is requested to: -

- Review and endorse the recommendation for delegated funding approval to GE for IRRELEVANT Capex to allow the Data Centre Fortification Project to approve work orders with Fujitsu to deliver the scope the Board agreed to on the 27th September 2022. IRRELEVANT to compile contingent options should a data centre support contract extension (from March 2024-March 2025) with Fujitsu not be reached.

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Previous Governance Oversight

- A decision was made to cease Belfast Cloud Migration on 27th September 2022, a revised focus on Application Modernisation – to enable NBIT and further progression on the Belfast Data Centre fortification planning/cost estimation was agreed.

Executive Summary

- At the September 2022 Board, the Board agreed to halt Belfast Cloud Migration, and this stimulated the need to recontract, upgrade and fortify the Belfast Data Centres to allow Fujitsu to continue operating Horizon until March 2025, at which point all branch core trading will be executed on NBIT.
- In parallel, Post Office has commenced negotiations for an additional IRRELEVANT extension to extend our current Data Centre infrastructure support contract which expires in March 2023 until IRRELEVANT. (The application services support contract extension with Fujitsu is already secured through to IRRELEVANT. Extending this Data Centre support contract has proved to be very challenging, as the Fujitsu position since 2020 has consistently been that they wish to exit the Horizon contract and that they harbour multiple concerns about supporting out of date hardware and software in the Data Centres. The shared expectation of Fujitsu and Post Office was that much of the end-of-life hardware/software would have been eliminated had the Data Centre transition to AWS cloud activity been completed as originally expected.
- The Horizon infrastructure, although stable, is old and most of the hardware and software is beyond the end of supported manufacturer life IRRELEVANT

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- As of the compilation date of this paper, Fujitsu are currently only willing to agree to a single year Data Centre support contract extension from March 2023 until March 2024 subject to the current Data Centre Fortification Project scope being agreed, funded and delivery initiated. Fujitsu have also indicated that there may be some additional technical investments in additional to the existing scope required as an enabling condition for a March 2024 until IRRELEVANT extension which relate to the upgrade of some very old operating systems. This is an additional, newly emerging condition which is under review (and robust scrutinisation by Post Office).

- In overall terms, Fujitsu have limited the period of the extension for two reasons: -
  - Fujitsu are concerned that the NBIT roll out will not have completed by IRRELEVANT IRRELEVANT (i.e., Horizon will still be in operational use) and that Fujitsu will be required to continue support for an indeterminate further period on a hardware/software environment during which support capabilities are diminishing.
  - Fujitsu have already signalled that any further extension of the Data Centre support contract from March 2024 until IRRELEVANT will be conditional on additional hardware/software upgrades (including the old operating system upgrades referenced earlier) and an Oracle Database refresh which is un-costed activity in this current proposal. Historically, Oracle Database upgrades, executed by Fujitsu, have cost in the range of IRRELEVANT; however Post Office are exploring the expiring support position and upgrade options directly with Oracle to validate the execution cost estimation range.

- The Data Centre Fortification Project mitigates hardware failure for the components in scope that are being fortified, either through direct replacement or by creating an extensive bank of spares. However, the project is not a full refresh of the entire infrastructure in Belfast; replacement scope has been aligned to those components with the greatest security vulnerabilities, unsupported technologies and end of serviceable life software which is not receiving vulnerability patching.

- At the previous Board submission, it was estimated that IRRELEVANT would be required to complete Belfast datacentre fortification scope. This has been revised to be IRRELEVANT (through reconciliation of Project and BAU run costs assumptions). This is the best estimate based on current knowledge and could increase due to risk materialisation, or if we are forced to accept the additional operating system request investment from Fujitsu during the contract negotiations for the March 2024 Data Centre support extension. Delegated Approval for IRRELEVANT Capex is requested to GE related to this activity.

- Informal discussions between Post Office and Fujitsu indicate that there is zero appetite at Fujitsu to extend either application or infrastructure support contracts for Horizon beyond IRRELEVANT. Fujitsu have repeatedly reinforced their desire to withdraw from all aspects of the Horizon contract and their stance and posture seem to be a unified position for Fujitsu UK and the Fujitsu Japanese parent.

- If Horizon is required post March 2025 the Post Office will require a backup plan to provide Data Centre and Application support services for Horizon until the NBIT roll out is complete, should a further extension not be achievable with Fujitsu. This is a major operational risk and Post Office have limited time to compile a realistic

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alternative strategy that fulfils procurement, commercial, technical and transitioning activities. GE have requested urgent analysis of this scenario to determine the full technical, commercial, and organisational implications of ongoing operational support should a stalemate with Fujitsu occur. GE have allocated up to IRRELEVANT of investment to execute this work and Board are requested to delegate approval of up to IRRELEVANT to GE to facilitate urgent completion of the background analysis and options planning work.

Overview

1. What is the Horizon Support Position to IRRELEVANT?

- Fujitsu have been consistently communicating, since 2020, that they want to exit the Horizon contract and even offered Post Office incentivisation for the early transfer of infrastructure and application support ahead of March 2023 contractual expiries.
- We negotiated (in December 2020) a revised IRRELEVANT application support contract that provided Post Office application support until IRRELEVANT which then terminates with no further provisions to extend.
- Our current Data Centre infrastructure support contract expires in March 2023. Following on from the cancellation of the AWS cloud migration activity, Post Office have been seeking IRRELEVANT extension to IRRELEVANT. However, the totality of conditions required by Fujitsu for the full IRRELEVANT extension (to IRRELEVANT) is changing as more end of life software impacts emerge and total delivery costs are potentially onerous for Post Office. The absolute present limit of what Fujitsu are prepared to offer is an extension until March 2024. The Fujitsu delivery position appears to have hardened in the last 3 months which may be partially influenced by the degree of external scrutinisation by the Horizon Inquiry and Fujitsu's escalating concerns about the aging/supportability of the Horizon platform and the inherent reputational impact of a major security/operational incident.
- One of the main end of life components that Fujitsu are concerned about is the Oracle database which is supporting all of Horizon's branch transactions. IRRELEVANT IRRELEVANT IRRELEVANT Fujitsu will almost certainly seek an upgrade as a condition of March 2024 to IRRELEVANT extension which could cost up to IRRELEVANT This is not budgeted in our current delivery estimates and would represent a significant level of unplanned activity to be understatement in parallel with present technical commitments occurring in the Horizon live environment.
- Fujitsu have stated that to even consider a support extension beyond March 2024 we will need to agree a further package of end-of-life hardware/software upgrades beyond the present commitments for Data Centre Fortification by June 2023. If we cannot reach agreement Fujitsu will provide no further Data Centre support after March 2024 which will leave the Post Office in a position of having no Data Centre support available from April 2024 onwards. Clearly this is an untenable operational situation, and GE

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have initiated compilation of the full range of options available should Fujitsu support be withdrawn after March 2024. This will include analysis of our market procurement requirements, identification of appropriate technical support partners, a high-level transitioning strategy and a costed programme delivery plan. GE have allocated up to IRRELEVANT to be overseen and approved by IADG.

2. What are the options for a Horizon extension after IRRELEVANT?

- Informal discussions indicate that there is zero appetite from Fujitsu to extend either application or infrastructure support contracts for Horizon beyond IRRELEVANT. If support beyond IRRELEVANT is unavailable from Fujitsu, then the Post Office will either need to recontract with an alternative partner or undertake direct Horizon support.
- Solution options and the organisational/technical/commercial impact of these scenarios are neither modelled nor costed within the present scope of the Data Centre Fortification project. The options analysis activity referred to earlier, will provide high level options and a contingency plan for both the March 2024-IRRELEVANT period and for support arrangements post IRRELEVANT.

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3. What is the Data Centre Fortification Scope?

- The Data Centre Fortification Project delivery activity has already commenced based on the scope approved previously. An initial IRRELEVANT funding allocation was assigned to begin discovery and design activities with Fujitsu. This initial funding has been used for the following items: -
  - Discovery, Scoping and Design of all elements by Post Office resources and Fujitsu technical design analysis of the proposed scope to produce work orders.
  - The project has started and has commissioned Fujitsu to deliver of the first elements in the Cybersecurity Infrastructure area: -
    - Replacement of the Citrix Load Balancer Replacements
    - Upgrade the Intrusion Detection Sensors in the Network
    - Deployment of new Vulnerability Management appliances
- The IRRELEVANT for which approval is sought will allow the following hardware and software delivery to commence with Fujitsu: -

1. IRRELEVANT
2.
3. Business Continuity Plant - Refresh of cooling systems in IRE11
4. Business Continuity Infrastructure - Procurement of Hardware spares

4. Summary of Funding Position and Drawdown Request?

- Originally in the previous board submission, the project was estimated to cost between IRRELEVANT, with an indicative allocation set at IRRELEVANT.

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- The project is tracking to IRRELEVANT, this could be exceeded due to the following risks:-
  - The costs are based on Fujitsu initial estimates which are non-committed forecast of costs. The Project team are reviewing (and challenging) each scoping decision against a risk of hardware failure to control costs. However, Fujitsu have already indicated that several work packages may well exceed their original estimates which would increase the total to IRRELEVANT. Given nascent security events in tandem with Fujitsu's diminishing risk tolerance of end-of-life hardware/software vulnerabilities it may be extremely difficult to abate these additional investment requirements if we are to maintain our support arrangements for Horizon.
  - Further initial fortification activity may be discovered during the design phase which either Post Office decides it must resolve due to the inherent risk to Horizon, or which Fujitsu insists must be resolved as a prerequisite to any further Data Centre contract extensions. This could take the total cost beyond IRRELEVANT by an amount that cannot currently be quantified.
- Even with judicious challenge Post Office may not be able to resist any further scope changes (and increased costs) due to the weakness of our negotiating position with Fujitsu. If this risk crystallises the project will revert with a further paper.
- The requested drawdown amount delegated to GE is:-
  - IRRELEVANT Capex to allow us to commit to work orders with Fujitsu. Together with the IRRELEVANT which was previously approved to allow to project to begin this would leave a balance of £4.8m against the IRRELEVANT cost estimate to be requested at a future date.
  - IRRELEVANT Capex to compile contingent options should a data centre support contract extension (from March 2024- IRRELEVANT) with Fujitsu not be reached.

5. What are the benefits for the Post Office and NBIT of Fortification

- The present hardware support situation in the Data Centres represents a low likelihood but high impact risk for the Post Office. If a component experienced a critical issue which was unresolvable by reboots or localised workarounds, the Post Office could be without a branch trading platform for an indeterminate downtime period. The Data Centre Fortification Project mitigates this risk for the components in scope that are being fortified, either through replacement or by creating an extensive bank of spares. However, the project is not a 100% refresh of the entire hardware/software infrastructure or plant in the Belfast Data Centres.

  The programme of work is a necessary enabler of retaining our Data Centre support contract with Fujitsu minimally until March 2024 and potentially until IRRELEVANT with further conditional investments. This will provide the operational runway, in conjunction with Application Modernisation deliverables, for the Post Office to dual run core branch transaction processing on Horizon and migrate to NBIT. Should Horizon be required beyond IRRELEVANT, alternatives to Fujitsu provided support will need to planned, mobilised and funded.

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