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Abstract: This document provides a definition of the Network Banking Service (NBS) which is an Existing Business Application provided by Fujitsu Services to Post Office.

This document provides a high level summary definition of NBS and is intended to be referenced from Schedule 18 -Application Management - of the 'Amendment' to the contract between Fujitsu Services and Post Office.

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0.0 Document Control

0.1 Document History

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0.3 Associated Documents

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BP/CON/262	4.0	19/06/2001	Document - NBS Service Definition	

Unless a specific version is referred to above, reference should be made to the current approved versions of the documents.

0.4 Abbreviations/Definitions

Abbreviation	Definition

0.5 Changes in this Version

Version	Changes
0.1	None

0.6 Changes Expected

Changes

0.7   Table of Contents

1.0 INTRODUCTION

1.1 This document details the Network Banking Service ("NBS") and the NB System required to support the operational use of the NBS which Fujitsu Services shall provide.

1.2 Requirements, functionality and/or services which will not be supported by or are excluded from the scope of the NBS are set out (without limitation) in Annex 1 to this document. Document

1.3 **Not used**.

1.4 The NBS constitutes the elements of End to End Banking (supporting Banking Transactions) that are within the Service Boundaries referred to in paragraph 2.8 of this document Documentfor which Fujitsu Services shall have responsibility.

1.5 All references in the form "NBRXXX" or "PPRXXX" (or similar) which follow at the end of provisions of this DocumentDocument are references to Post Office's requirements which correspond to those provisions. However, all such references are for each party's internal reference and information use only and none of those references, or the requirements to which they relate, shall be relevant either in construing or interpreting any of the provisions of this document or otherwise in determining the extent of Fujitsu Services' obligations.

2.0 SCOPE OF THE NBS

2.1   In developing the NBS, Fujitsu Services shall:

2.1.1   use the message server elements of WebRiposte [NBR022] (but not the Framework or Asset Manager);

2.1.2   ensure that the Counter Equipment configuration and specification set out in the CCD entitled *"Counter Hardware Design Specification" (BP/DES/003)* will not need changing for the introduction of the NBS (and in particular that no memory upgrade to counter equipment will be necessary or carried out), other than for PIN Pads in accordance with paragraph 2.7 of this document; and

2.1.3   ensure that Banking Transactions shall be in a standard format for all Banks, and shall be driven by Post Office Reference Data e.g. each type of Banking Transaction shall be Bank independent with the context being set by the IIN. [NBR023]

2.2   **Not used**.

2.3   The NBS shall be available at all automated Counter Positions, mobile configurations (as described in Schedule 19);

[DN: Assuming that the provisions of old Schedule A12 are contained in Schedule 19]

operational sets of Counter Equipment which are not Counter Positions ("Admin Positions") and trolley based solutions in Outlets in each case wherever there is a

network connection, unless otherwise specified by Post Office, subject to the overall limits applicable to each as set out in Schedule19.

[DN: As for comment above]

2.4   The availability of the NBS in any other location in addition to the locations specified in paragraph 2.3 shall be dealt with through the Change Control Procedure.

2.5   Subject to the overall limits set out in Schedule 19 [DN: As for comment above]], in relation to those Outlets and Admin Positions where there is no network connection point or where Post Office or its Agents do not use such connection provided to it the NBS software shall be installed but will not be able to commence or perform Banking Transactions. The NBS software installed in those Outlets and Admin Positions shall not be kept up to date with new NBS Releases or Reference Data other than by way of the Optional Post Office Services (if any) introduced by CCN 898. [NBR053, NBR235]

2.6   Fujitsu Services shall inform Post Office monthly of any operational and external technical constraints which relate to the allocation of Outlets where the NBS is available between the categories set out in sub-paragraphs 2.6.1 - 2.6.4 of this Document which shall apply in addition to the constraints agreed between the parties and specified in the CCD entitled *"Horizon New Service Business Volumes"* (PA/PER/031). Fujitsu Services shall each month carry out an initial allocation of those Outlets where the NBS is available between the categories set out in sub-paragraphs 2.6.1 - 2.6.4 of this Document. Post Office shall be entitled each month to change Fujitsu Services's initial allocation of Outlets where the NBS is available between the categories set out in sub-paragraphs 2.6.1 - 2.6.4 of this Document within such constraints notified by Fujitsu Services on a monthly basis and within the

constraints specified in the CCD entitled *"Horizon New Service Business Volumes"* (PA/PER/031).

2.6.1   Bronze Service Outlet;

2.6.2   Silver Part Time Service Outlet;

2.6.3   Silver Daytime Service Outlet; or

2.6.4   Silver 24 Hour Service Outlet.

2.7   PIN Pads

2.7.1   Subject to paragraph 2.7.2, Fujitsu Services shall ensure that all automated Counter Positions where the NBS is available (as set out in paragraphs 2.3 and 2.4 of this Schedule) shall have the capability to support the use of PIN Pads. [PPR010] [NBR066]

2.7.2   PIN Pad support provided by the NBS shall be for the purposes of Customer Verification and change of PIN, and no other purpose. [NBR250] [PPR001] [PPR012] [NBR431] It shall be possible to add additional Banking Transactions through the Change Control Procedure and Fujitsu Services shall design the NBS so as not to inhibit such additions. PIN Pad support provided for CAPO shall be no different to that provided for any other Bank.

2.7.3   **Not used**.

2.7.4   The specification for the interface and interaction required between PIN Pads and other elements of the NB System shall be documented in the CCD entitled *"Generalised API for OPS/TMS" (TD/STD/004).*

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2.7.5   The NB System/Counter Clerk dialogue required for Customer Verification by PIN entry shall be as documented in the CCD entitled *"Network Banking Counter Dialogue – Activity & Screen Flows" (NB/SPE/003)*. [NBR250] [PPR002] [PPR014]

2.8   The NBS shall be bounded by Service Boundaries with the following computer systems:

2.8.1   NBE;

2.8.2   Post Office RDS; and

2.8.3   TIP Gateway,

as specified in the relevant AIS and TIS.

2.9   Fujitsu Services shall be responsible for provision of, security of, and management of the communications link between the Data Centres and the NBE (which for the purposes of this schedule shall include the physical routers, encryption devices, file transfer management servers and associated cabling), subject to Post Office complying with (and ensuring that any third party Post Office uses for siting or storage of such equipment complies with) the following:

2.9.1 provision of a suitable physical operating environment for Fujitsu Services's equipment used for or in connection with the communications link including the following:

(a)   ensuring the physical security of all equipment which is located on Post Office and/or any such third party's premises to protect against unauthorised access; and

(b)   provision of environmental conditions as reasonably required by Fujitsu Services,

2.9.2 permitting Fujitsu Services to gain access (at reasonable times and on reasonable notice) to all locations where such equipment is held or is to be installed, in order to enable Fujitsu Services to effect or procure the installation, maintenance, repair, renewal and support of such equipment.

2.10   For the purposes of paragraphs 2.11 and 2.12 of this Document:

"**NB System Design Information**" means information concerning the design and characteristics of the NB System held by Fujitsu Services but not available to Post Office ; and

the "**Purpose**" means the operation of End to End Banking and the integration of the NB System with other elements of End to End Banking.

2.11   Fujitsu Services shall supply or give access to Post OfficePost Office such NB System Design Information as Post OfficePost Office reasonably requires for the Purpose, subject to the following conditions and restrictions:

2.11.1   the provision of copies of or access to NB System Design Information to Post OfficePost Office by Fujitsu Services shall be subject to such confidentiality provisions and restrictions on disclosure or access as Fujitsu Services may reasonably specify, taking into account the sensitivity of the particular System Design Information concerned and any obligations of Fujitsu Services to third parties in respect of that NB System Design Information; and

2.11.2 where Fujitsu Services is restricted or prohibited by binding obligations to third parties from disclosing NB System Design Information to Post OfficePost Office:

(a) Fujitsu Services shall use all reasonable endeavours to procure the mitigation and release of those restrictions or prohibitions; and

(b) Fujitsu Services shall not be obliged to disclose to Post OfficePost Office any NB System Design Information which it is prohibited from so disclosing.

2.12 Post OfficePost Office shall not use NB System Design Information for any purpose other than the Purpose.

2.13 The provisions of paragraph 2.11 and paragraph 2.12 of this DocumentDocument shall be in addition to and without prejudice to the provisions of Clause 607 of this Codified Agreement.

3.0   INTERFACES

3.1   The data flows and the NBS interfaces at the Service Boundaries referred to in paragraph 2.8 of this DocumentDocument and the responsibilities of each party for the transmission and receipt of data in either direction across those interfaces shall be as set out in the AISs and TISs applicable to those interfaces. [NBR285]

3.2   The interfaces between the Data Centre and the NBE shall support the transmission of data defined in the CCD entitled *"NBE – Horizon Application Interface Specification"(NB/IFS/008)*. The technical detail of the interfaces between the Data Centre and the NBE shall be defined in the CCD entitled *"Technical Interface Specification – Horizon to NBE"(NB/IFS/009)*. The procedures which each party shall follow and the responsibilities of each party in respect of the transmission of Requests, Authorisations, Confirmations, D Messages and any other data to be transmitted between the Data Centre and NBE interfaces shall be defined in the Working Document entitled *"NBE Operational Level Agreement"*.

[NBR050, NBR285, NBR020, NBR219, NBR037, NBR045, NBR109, NBR147, NBR202, NBR228, NBR277, NBR286, NBR536, NBR537, NBR252, NBR278]

3.3   The interfaces between the Data Centre and TIP shall support the transmission of data (to be used by Post Office for Banking Transaction settlement and exception reporting) from the DRSH to the TIP Gateway as documented in the CCD entitled *"Network Banking End to End Reconciliation Reporting" (CS/SPE/011)*. Fujitsu Services shall update the TIS required for those interfaces for approval by Post Office, such approval not to be unreasonably withheld. [NBR109] [NBR147]

3.4   The interfaces between the Data Centre and Post Office RDS shall support the transmission across those interfaces of Post Office Reference Data for the NBS as documented in the AIS entitled *"AIS Reference Data to Pathway"* ([BP/IFS/010]).

3.5   Fujitsu Services and Post Office shall agree from time to time the procedures which each party shall follow and the responsibilities of each party in respect of the transmission of Post Office Reference Data which shall be documented in Working Documents.

3.6   Fujitsu Services shall use all reasonable endeavours to update the CCD entitled *"Generalised API for OPS/TMS"(TD/STD/004)* to describe the NB Counter Application interfaces as developed by Fujitsu Services by the date three months after the NBS Acceptance Date and shall in any event do so by the date six months after the NBS Acceptance Date.

4.0   NBS QUALITIES

4.1   Extensibility

4.1.1   The NBS shall support, through changes to or the introduction of appropriate Reference Data, the introduction and removal of new instances of and changes to each of the items listed in the table below for the purposes of the NBS. The initial allocation of each of the items to the classifications described in the CCD entitled *"ICL Pathway/ PON Interface Agreement for Operational Business Change – Product" (CS/PRD/058)* shall be as specified in the table below. The parties may agree to vary the allocation of the items from time to time, such variation to be documented by Fujitsu Services in the Working Document entitled *"Reference Data Change Catalogue" (CS/IFS/001)*.

Item type (and, where different, the description of such item used in the CCD entitled *"AIS Reference Data to Pathway" (BP/IFS/010))*	Introduction classification (as described in the CCD entitled *"ICL Pathway/PON Interface Agreement for Operational Business Change – Product"(CS/PRD/058))*	Change classification (as described in the CCD entitled *"ICL Pathway/PON Interface Agreement for Operational Business Change – Product" (CS/PRD/058))*
Bank issuer schemes (CCD description – Issuer scheme)	Advanced Complex	Advanced Complex – unless name change only, in which case High Risk
Banking operation	Advanced Complex	Advanced Complex – unless change to

		presentation sequence only, in which case High Risk
IINs for an existing Bank card

(CCD description - IIN range) | High Risk | High Risk |
| NB Token element definitions

(CCD description - Bank card and bank card element) | Advanced Complex | Advanced Complex |
| Method of data entry

(CCD description – Permitted method of entry) | High Risk | High Risk |
| NBE Routing IDs, item names, minimum value, maximum value, multiple allowed value | N/A (Reference Data used in the Existing Services – except NBE Routing ID which is a new element within the existing item history record) | N/A (Reference Data used in the Existing Services - except NBE Routing ID which is a new element within the existing item history record) |
| Screen displays, changes to menu hierarchy, new desktop buttons, help text and picklists | N/A (Reference Data used in the Existing Services) | N/A (Reference Data used in the Existing Services) |
| MCWP and MAAWP

(NB: Not described in the CCD entitled "AIS | N/A (as both are system parameters, they may be changed | System Parameter – Pure |

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Reference Data to Pathway" *(BP/IFS/010))*	but can not be introduced)	

[NBR405, NBR401, NBR404, NBR406, NBR023, NBR168]

4.1.2   **Not used.**

4.1.3   The introduction of changes to and new instances of items specified in paragraph 4.1.1 of this DocumentDocument:

(a)   shall be in accordance with the procedures and timescales as specified in the CCD entitled *"ICL Pathway/ PON Interface Agreement for Operational Business Change – Product"* *(CS/PRD/058)* The CCD shall be updated by Fujitsu Services before the start of the Full E2E Testing Stage to include the procedures for dealing with items classified as System Parameter - Pure and any other new procedures for introduction of and changes to those items and in that first updated version of that CCD, it shall be provided that changes to an item classified as System Parameter – Pure, insofar as such changes are undertaken by Fujitsu Services shall take no more than 2 working days;

(b)   shall be effected using only the functions and processes used for introduction of and changes to Reference Data for the Existing Services;

(c)   shall not cause to be exceeded:

(i)   any limit or range in respect of any such item (including, without limitation, limits or ranges on the number of IINs) where such limit or range is specified in the CCD entitled *"Horizon New Service Business Volumes" (PA/PER/031)*; and/or

(ii)   if no such limit or range is specified in that CCD then a reasonable limit or range [NBR025];

and

(d)   shall not cause to be exceeded the limits in respect of the rates of change of introduction of and/or changes to any such item specified in the CCD entitled *"ICL Pathway/ PON Interface Agreement for Operational Business Change – Product" (CS/PRD/058)*. [NBR025] [NBR024] [NBR416]

4.1.4   Post Office shall be responsible for verifying and validating all NBS related Post Office Reference Data for use in End to End Banking, save to the extent that Fujitsu Services is obliged to do so (for the purposes of the use of such Post Office Reference Data within the Post Office Service Infrastructure) in accordance with paragraph 4.1.3 of this DocumentDocument. For the avoidance of doubt, the Change Control Procedure shall be used if Post Office requires, in connection with the introduction of any of the items referred to in paragraph 4.1.1, Reference Data validation or testing of the NB System (or any element thereof) outside the scope of the CCD entitled *"ICL Pathway/ PON Interface Agreement for Operational Business Change – Product" (CS/PRD/058)*.

4.1.5   For the avoidance of doubt, where Post Office Reference Data contains future fields which are not enabled at the time of introduction of that Post Office Reference Data as set out in the CCD entitled *"AIS Reference Data to Pathway"* (*BP/IFS/010*), Fujitsu Services shall not carry out any processing of data in those fields until use of such fields is agreed through the Change Control Procedure. [NBR410, PPR014]

4.1.6   Fujitsu Services's charges and rates for the creation and the introduction of new icons shall be as set out in Schedule A12.

4.2   Integration with Existing Services

The NBS shall coexist with the Existing Services and the NBS shall appear as another service at automated Counter Positions alongside the Existing Services. Banking Transactions shall be reflected in EPOSS (including integration in Customer Sessions) and the Cash Account. The counter dialogue for the NBS shall be as documented in the CCD entitled *"Network Banking Counter Dialogue – Activity & Screen Flows"* (NB/SPE/003) and by the applicable date specified in the NB Project Plan Fujitsu Services shall propose and Post Office shall agree (such agreement not to be unreasonably withheld) any enhancements required to the CCD entitled *"Horizon OPS Style Guide"* (*SD/STD/001)* for the NBS. [NBR448 NBR493, NBR159] [NBR028]

4.3   Reference Data

Components of the NBS shall be controllable by Reference Data defined in the AIS referred to in paragraph 3.4 of this DocumentDocument such that new or changed items referred to in paragraph 4.1.1 of this schedule may be introduced under Operational Business Change or the Change Control Procedure, as applicable. [NBR460]

4.4 Post Office Reference Data Distribution

4.4.1 On and after the applicable date specified in the NB Project Plan, Post Office shall be responsible for generating and transmitting (as reasonably required by Fujitsu Services) test Reference Data to Fujitsu Services's RDMC. [NBR096]

4.4.2 Post Office Reference Data used in the NBS shall be processed in accordance with the CCD entitled *"ICL Pathway/ PON Interface Agreement for Operational Business Change – Product"* (*CS/PRD/058*) once that CCD has been amended in accordance with paragraph 4.1.3 (a) of this DocumentDocument. [NBR025]

4.4.3 Post Office shall be responsible for ensuring that Post Office Reference Data is introduced and is effective in the NBE no later than the date and time on which it is due to be made effective in the NBS by Fujitsu Services and that Post Office Reference Data shall continue to be valid in the NBE until a date and time no earlier than that on which it is due to cease to be valid in the NBS. Subject to the lead times in the CCD entitled *"ICL Pathway/ PON Interface Agreement for Operational Business Change – Product"* (*CS/PRD/058*) Fujitsu Services shall ensure that Post Office Reference Data is implemented in the NBS on the date and time specified by Post Office and that it remains valid until the expiry date and time specified by Post Office. [NBR418]

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5.0 COUNTER POSITION FUNCTIONALITY, PROCEDURES AND PERFORMANCE

5.1 Supported Tokens and Transactions

5.1.1   The Tokens which shall be supported by the NBS ("NB Tokens") and shall be used to initiate Banking Transactions exclude smart cards [NBR063] and are limited to those which:

(a)   have a magnetic stripe; [NBR001]

(b)   conform to ISO 7810, 7811, 7812, 7813; [NBR394] [NBR395] [NBR396] [NBR397] [NBR501] and

(c)   relate to a single account (including multiple account cards where these automatically default to a single account). [NBR165]

5.1.2   The Transactions which shall be supported by the NBS ("Banking Transactions") are listed in the table below:

| Cash Deposit |
| Cash Withdrawal |
| Balance Enquiry |
| Cash Withdrawal with Balance |
| Withdraw Limit |

Change of PIN at PIN Pad

[NBR001] [NBR003] [NBR004]

5.1.3   In addition, the NBS shall provide capability for further types of Banking Transaction to be supported but Fujitsu Services shall not develop that capability for any further types of Banking Transaction unless and until agreed under the Change Control Procedure.

5.1.4   Banking Transactions in the table above shall all be carried out across on-line network communication links between the NB System and the NBE. [NBR009]

5.1.5   Where required in respect of a Banking Transaction in accordance with the terms of this Schedule, Customer Verification shall take place in accordance with paragraph 5.8.2 of this DocumentDocument.

5.1.6   The Banking Transactions (and underlying Post Office Products) and Issuer Schemes (as such expression is defined in the CCD entitled *"AIS Reference Data to Pathway" (BP/IFS/010))* supported by the NBS for each type of NB Token shall be identified by Fujitsu Services through the Post Office Reference Data associated with the IIN contained in each NB Token. [NBR006, NBR429, NBR018]

5.2   Application Principles

5.2.1   Post Office shall be responsible for the integration of the NBS and the NB System into End to End Banking.

5.2.2   The NB Counter Application shall comply with the CCD entitled *"Network Banking Counter Dialogue – Activity & Screen Flows" (NB/SPE/003).* Post Office Reference Data held locally in Outlets shall be used by the NB System to determine the appropriate counter dialogue for each Banking Transaction. Each type of Banking Transaction may involve a number of different dialogues between the NB System and the Counter Clerk and between the PIN Pad and Customer, depending upon a number of variable factors (such as, without limitation, whether, and if so what method of Customer Verification is required in respect of a Banking Transaction). Prompts to Counter Clerks displayed by the NB Counter Application shall be standard for all Banks. The principles upon which text is to be generated by the NB Counter Application and displayed to Counter Clerks and text displayed to Customers on a PIN Pad, together with specific agreed text shall be as set out in the CCD entitled *"Network Banking Counter Dialogue – Activity & Screen Flows" (NB/SPE/003).* [NBR451, NBR439] [PPR011, PPR021, PPR023]

5.2.3   **Not used.**

5.2.4   The front-end processes for the Existing Services (e.g. menu hierarchy) shall be reviewed and modified if reasonably necessary (subject to the Change Control Procedure) in order to support the NBS functionality [NBR463]. The NB System shall be integrated within the Post Office Service Infrastructure such that a Counter Clerk shall be able to serve a Customer by carrying out any of the various types of Transaction supported (e.g. OBCS, EPOSS, APS and NBS) as required by that Customer and all Transactions for that Customer shall be included in the same EPOSS Customer Session. For the avoidance of doubt, a Banking Transaction shall not automatically

conclude a Customer Session even if it brings the balance to zero. [NBR448, NBR450]

5.2.5   **Not used**.

5.2.6   Input of Banking Transaction data by Counter Clerks at Counter Positions shall be supported by touch screen and keyboard in combination or separately, as described in the CCD entitled *"Network Banking Counter Dialogue – Activity & Screen Flows"* (*NB/SPE/003*). [NBR438, NBR484]

5.2.7   All Transactions shall be conducted under a common access control regime such that a Counter Clerk is required to log-on once only (providing only their allocated user identification and password) in order to make use of both the NBS and Existing Services. [NBR449]

5.2.8   Reference Data held locally in Outlets shall be used to carry out initial validation of NB Tokens presented by Customers for the purpose of carrying out Banking Transactions. [NBR240]

5.2.9   Once a Banking Transaction has been initiated, and a Request generated, that Banking Transaction shall be completed and the Banking Transaction outcome added to the EPOSS transaction stack before any other Transaction can commence. [NBR468]

5.2.10   **Not used**.

5.2.11   The NBS shall operate in a single currency and Banking Transactions shall be recorded in that currency which, unless agreed otherwise under the Change Control Procedure, shall be sterling. Fujitsu Services shall design the NB System in a way which will not preclude a future development to transact business in EUROs. However any such development shall be subject to agreement through the Change Control Procedure. [NBR153]

5.2.12   The NB Counter Application shall be designed and implemented to minimise (within the constraints associated with performing Banking Transactions in accordance with the CCD entitled *"Network Banking Counter Dialogue – Activity & Screen Flows"* (*NB/SPE/003*) and the constraints imposed by the Hardware and the development tools connected with the Software used to develop the NB Counter Application) the counter times for the system processing elements particular to each variation of a Banking Transaction involving data entry via screen or keyboard (and not using an NB Token swipe). The CCD entitled *"Generalised API for OPS/TMS" (TD/STD/004)* shall be updated to reflect the design characteristics and limitations of the NB Counter Application as implemented. [NBR447]

5.2.13   Banking Transaction data that Fujitsu Services is responsible for shall be recorded at source to ensure the integrity of that data. [NBR453]

5.2.14   The NB Counter Application shall provide a print preview facility incorporating all details on the NB Receipt to enable the Counter Clerk to produce a manual NB Receipt in the event of printer failure. [NBR155]

5.3 Transaction Flow

5.3.1   Banking Transactions shall follow the RAC0C1 Model. [NBR038, NBR020] Requests, Authorisations and C0 Confirmations shall be processed using on-line network communication links between the NB System and NBE. [NBR038] The C1 Confirmations committed to the transaction stack shall be replicated in the manner used for Existing Services. [NBR021]

5.3.2   The date/time stamp which shall be inserted in Requests shall be based on the local time in the relevant Outlet, as present on Counter Equipment in that Outlet. Such date/time stamps shall be carried through any dialogue with a Bank (in Requests, Authorisations and Confirmations) and the Customer receipts to ensure consistency. [NBR157]

5.3.3   The Request, Authorisation and Confirmations for each Banking Transaction shall have a common identifier as defined in the CCD entitled *"NBE – Horizon Application Interface Specification" (NB/IFS/008)* which is unique to that Banking Transaction. [NBR158, NBR536]

5.3.4   The C1 Confirmation shall form part of the associated EPOSS Transaction such that a message shall be recorded at the Outlet at the end of a Customer Session in addition to any C0 Confirmation recorded at the Outlet during a Customer Session. [NBR182]

5.3.5   C1 Confirmations shall be generated in all cases where a Request has been generated. C0 Confirmations will be generated and transmitted on-line to the NBE if:

(a)   a Banking Transaction is Declined at the Counter Position (unless a Decline has been received from the NBE);

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(b)   a Banking Transaction is failed at the Counter Position; or

(c)   there is system time-out either at the Counter Position or at the Authorisation Agent such that an NBE Authorisation is not received at the Counter Position for a corresponding Request.

5.3.6   Post Office shall be responsible for ensuring that the NBE supports receipt of C0 Confirmations sent to the NBE, and is able to generate C4 Confirmations to the DRSH, as applicable.

5.4   Processes and Procedures

5.4.1   Fujitsu Services shall develop for agreement by Post Office (such agreement not to be unreasonably withheld) clear and unambiguous processes and procedures for the operation of the NBS in Outlets. Fujitsu Services shall document such agreement in a PPD (the "NB PPD") and such other PPDs as the parties agree to be appropriate. However, until such time as the NB PPD is agreed by the parties, the processes and procedures to be followed at Counter Positions shall be those set out in the CCD entitled *"Network Banking Counter Dialogue – Activity & Screen Flows"* (*NB/SPE/003*). The parties intend that the content of the CCD entitled *"Network Banking Counter Dialogue – Activity & Screen Flows"* (*NB/SPE/003*) which needs to be maintained after completion of development of the NBS shall be included in such other CCDs as the parties agree to be appropriate and references in this DocumentDocument to that CCD will be replaced as appropriate. [NBR232, , NBR463, NBR026].

5.4.2   Fujitsu Services's Help Desk and the NBSC processes for dealing with enquiries from Outlets in connection with the NBS shall be enhanced by Fujitsu Services and Post Office respectively to support the NBS and each

party shall ensure that it follows any related new procedures. [NBR248, NBR046, NBR047, NBR452] [NBR272]

5.4.3   In addition to its obligation in paragraph 5.4.2 of this DocumentDocument, Post Office shall be responsible for providing a support desk service which in respect of the NBE and its associated links to LINK and/or Banks, shall act as a central point for obtaining information on the working state of the NBE, and shall be responsible for notifying Fujitsu Services of any scheduled interruptions. Such support desk service shall be the reporting point for Fujitsu Services to log faults in systems and services outside the Post Office Service Infrastructure and shall be responsible for progressing the resolution of faults and for notifying Fujitsu Services when faults have been resolved. A description of the service operation of such support desk shall be documented in the Working Document entitled "ICL Pathway/Post Office Interface Agreement for the NBSC and HSH Interface" *(CS/IFS/007)*.

5.4.4   Post Office shall ensure that all Users of the NBS in Outlets are trained in the use of the NBS within their role and the procedures as set out in the NB PPD. Each User shall be so trained prior to using the NBS, Post Office shall be responsible for the production of the relevant training material.

5.4.5   To enable Post Office to design and develop training for NBSC personnel Fujitsu Services shall provide in a timely manner such accurate information about the NBS (beyond that which is contained in the NB PPD or other NBS related CCDs) as may be reasonably requested by Post Office.

5.5 Counter Environment

The counter environment for the NBS shall comply with the CCDs entitled *"TMS Architecture Specification" (TD/ARC/029)* and the *"OPS Architecture Specification" (TD/ARC/030)* which shall be updated by Fujitsu Services before the start of NBS Tests to include the amendments required to those CCDs to reflect changes to the counter environment required for the NBS including, without limitation, the development, introduction and use (for the purposes of the NBS) of WebRiposte, the NB Counter Application, new Post Office Reference Data objects, PIN Pads, and any consequential changes to the counter environment to be made by Fujitsu Services.

5.6 Customer Sessions

5.6.1   Banking Transactions shall be carried out within a Customer Session.

5.6.2   Each Banking Transaction shall be separate from other Banking Transactions, such that, for example, a deposit and a withdrawal by a Customer shall be two separate Banking Transactions with no system relationship between them. [NBR151]

5.6.3   The NBS shall ensure that Session Mobility is prohibited between the start of a Banking Transaction and the time that the C1 Confirmation is written to the transaction stack. [NBR070]

5.6.4   The NBS shall ensure that suspend session as described in Requirement 825 of Schedule A15 of this Codified Agreement is prohibited between the start of a Banking Transaction (as described in paragraph 5.7.2(a) of this DocumentDocument) and the time that the C1 Confirmation is written to the transaction stack. [NBR071]

5.6.5   The NBS shall ensure that forced end of session shall not compromise the integrity of the RAC0C1 Model. [NBR072]

5.7   Data Capture

5.7.1   The NBS shall enable the Counter Clerk to capture certain details from the Customer's NB Token electronically or manually (as described in this paragraph 5.7 below), select the Banking Transaction type (e.g. withdrawal) required by the Customer and the details of that Banking Transaction (e.g. withdraw £50). Banking Transactions shall be capable of being initiated only when in the serve customer mode described in the CCD entitled *"Generalised API for OPS/TMS" (TD/STD/004).*

5.7.2   For the purposes of data capture, the NBS shall operate in accordance with the following principles and in compliance with the provisions applicable to data capture set out in the CCD entitled *"Network Banking Counter Dialogue – Activity & Screen Flows"* (*NB/SPE/003*):

(a)   Initiation of Banking Transaction shall occur when a NB Token is swiped through and recognised by the magnetic card reader, or when the Counter Clerk manually selects a Banking Transaction (e.g. because the NB Token swipe fails) using the keyboard or touch screen. [NBR164] [NBR486]

(b)   The IIN recorded on the NB Token in conjunction with the method of data entry and whether or not a PIN Pad has been installed shall determine the Banking Transactions which the NBS shall support

for that NB Token. [NBR006] A separate NB Token swipe will be required:

(i)   for each individual Banking Transaction; and

(ii)   unless a PIN is determined to be invalid at the Outlet, if an incorrect PIN is input to the PIN Pad.

(c)   Once the NB Token details have been successfully captured and validated in accordance with paragraph 5.8.1(a) of this DocumentDocument, only the Banking Transactions available to the Customer using that NB Token shall be selectable. The Counter Clerk shall be prompted to select the Banking Transaction type required and, in the case of cash deposits and cash withdrawals (excluding Banking Transaction type "Withdraw Limit") to enter the appropriate financial amount in the prevailing currency.

(d)   Following Banking Transaction initiation by manual selection, once data entry is complete, the Banking Transaction data flow shall be the same as for a Banking Transaction initiated by NB Token swipe, with the NB Counter Application recording that initiation was manual rather than automatic. [NBR536]

5.8   NB Token Validation and Customer Verification

5.8.1   NB Token Validation

NB Token Validation shall operate in accordance with the following principles and shall be carried out in accordance with the provisions applicable to NB Token Validation set out in the CCD entitled *"Network Banking Counter Dialogue – Activity & Screen Flows"*. (*NB/SPE/003*):

(a)   NB Tokens shall be validated against Reference Data held locally in Outlets, and Banking Transactions shall be terminated where such validation fails. [NBR240] [NBR168] [NBR007] [NBR008] [NBR033]

(b)   Multiple and minimum Banking Transaction limits shall not apply to the Banking Transaction type 'Withdraw Limit'. [NBR166, NBR168, NBR430]

(c)   If before a Request is generated, the Banking Transaction is abandoned by the Counter Clerk or terminated at a Customer's request, no C1 Confirmation, C0 Confirmation or other record of that attempted Banking Transaction shall be recorded by the NB System. [NBR008]

(d)   Following successful validation of the NB Token, a screen prompt shall tell the Counter Clerk to perform the agreed checks documented in the CCD entitled *"Network Banking Counter Dialogue – Activity & Screen Flows"* (*NB/SPE/003*). [NBR161]

5.8.2   Customer Verification

Customer Verification shall operate in accordance with the following principles and shall be carried out in accordance with the provisions applicable to Customer Verification set out in the CCD entitled *"Network Banking Counter Dialogue – Activity & Screen Flows"* (*NB/SPE/003*):

(a)   In respect of each Banking Transaction, whether or not Customer Verification is required, and if required the verification method applicable, shall be identified through the Post Office Reference Data held locally at Outlets associated with the IIN contained in the NB Token presented to the Counter Clerk. Each method of verification shall be able to operate independently of the others (e.g. it will not be necessary to have installed a PIN Pad in order to operate functionality associated with Customer Verification by signature comparison). If Customer Verification is required the method used shall be one of the following:

- Verification by the Counter Clerk comparing the Customer's signature with that on the NB Token, as the only method

- Verification involving the Customer entering a PIN using the PIN Pad, as the only method; or

- Verification by signature comparison as an alternative to PIN entry, where the PIN Pad is not available by reason of it not having been deployed in accordance with Schedule G12.

[NBR002] [NBR250] [NBR251] [NBR585] [NBR152] [PPR001] [PPR002] [PPR014]

(i)   Verification by signature comparison

The result of verification by signature comparison shall be recorded in the C1 Confirmation and, as applicable, in any C0 Confirmation produced for the relevant Banking Transaction. [NBR173]

(ii)   Verification by PIN entry

Where a Customer's NB Token is verified by PIN entry, the encrypted PIN value shall be encapsulated in the Request and the outcome (e.g. whether or not the PIN value is correct) shall be returned via the Authorisation. Where verification is by PIN entry the Customer will not be required to sign a NB Receipt. The PIN shall not be displayed nor printed on any NB Receipt. [PPR071] [NBR575, NBR577] [PPR071]

(iii)   Verification by signature comparison as an alternative to PIN entry

The principles set out in paragraph 5.8.2 (a)(i) of this DocumentDocument shall apply.

5.9   Request, Authorisation and Confirmation Action

5.9.1   Fujitsu Services shall ensure that:

(a)   Following successful NB Token Validation, a Banking Transaction shall not proceed unless a network connection to the Data Centre can be reasonably expected to be established to obtain on-line Authorisation, as set out in the CCD entitled *"Network Banking Counter Dialogue – Activity Screens & Flows"* (*NB/SPE/003*). Once that connection has been established, a Request shall be sent to the NBE, and the Banking Transaction shall only proceed if a positive Authorisation is received from the NBE and that Banking Transaction is not Declined by the Counter Clerk. In the event that the Counter Clerk Declines a Financial Transaction a C0 Confirmation shall be sent on-line to the NBE. [NBR010, NBR008, NBR011, NBR012]

(b)   There shall be no local facility within an Outlet to override a Decline response in an Authorisation. [NBR156]

(c)   If the Authorisation is not for the same amount as the Request, the Banking Transaction will be Declined by the NB System, except in the case of a Request for a Banking Transaction type "Withdraw Limit", which will be permitted to proceed subject to the maximum limit set by Reference Data.

(d)   The MAAWP and the MCWP shall be:

(i)   set as parameters in the NB System;

(ii)   common for all Banks; and

(iii)   configurable by Pathway Reference Data.

and in any event the MCWP shall not exceed 40 seconds.

If after the generation of a Request at a Counter Position or after the Authorisation Agent makes a Request available to the NBE a corresponding Authorisation is not received within the MCWP or MAAWP respectively, the Banking Transaction shall be Declined.

(e)   The outcome of each Banking Transaction shall be written to the EPOSS stack. Each Banking Transaction shall be identifiable to an individual Counter Clerk "log-in ID" and Stock Unit. [NBR239]

5.9.2   For the purposes of the NBS, and in particular the NBS Service Levels described in Schedule N08, the result of the following calculation:

- MCWP minus MAAWP,

(such result being referred to in this paragraph 5.9.2 as the "Additional Time") shall not be less than 15 seconds. Once set, or as otherwise specified in this Schedule changes to the MCWP and/or MAAWP where the resulting MCWP is less than or equal to 40 seconds and where the resulting Additional Time is more than or equal to 15 seconds shall be subject to change under Operational Business Change, and changes where the resulting MCWP is greater than 40 seconds and/or the resulting Additional Time is less than 15 seconds shall be subject to agreement under the Change Control Procedure. [NBR221]

5.10 Withdraw Limit

5.10.1 In the case of the Banking Transaction type "Withdraw Limit", the NBS shall not require the Counter Clerk to enter the withdrawal amount into the NB System. [NBR430]

5.10.2 Following transmission of the Request for such Banking Transaction, Post Office shall ensure that the amount which is permitted to be withdrawn shall be included in the Authorisation. The NB System shall not allow the amount permitted to be withdrawn to be overridden locally at the Outlet other than by Declining the Banking Transaction. [NBR430]

5.11 Declined Transactions

Banking Transactions shall be Declined or shall be capable of being Declined by a Counter Clerk or the NB System in accordance with the applicable processes and procedures set out in the CCD entitled *"Network Banking Counter Dialogue – Activity & Screen Flows"* (*NB/SPE/003*), and in particular the provisions of that CCD which relate to the:

(a)   rules which govern when a Banking Transaction may or shall be Declined; [NBR008] [NBR010] [NBR458] [NBR480]

(b)   NB Receipts which shall be produced when a Banking Transaction is Declined; [NBR167]

(c)   prompts and messages which shall be displayed to a Counter Clerk when a Banking Transaction is Declined; [NBR480] and

(d)   Confirmation messages which shall be produced in event of a Decline. [NBR167] [NBR008]

5.12 Reversed (Contra Entry) Transactions

The NBS will not support contra entries, that is Banking Transactions which negate preceding Banking Transactions to which they refer. [NBR015]

5.13 Receipts

5.13.1   NB Receipts shall be produced by the NB System in accordance with paragraphs 5.13.2 to 5.13.4 (inclusive) of this DocumentDocument and the applicable provisions of the CCDs entitled *"Network Banking Counter Dialogue – Activity & Screen Flows"* (*NB/SPE/003*) and *"Horizon OPS Reports and Receipts" (SD/DES/005).*

5.13.2   Derivation of NB Receipts

(a)   The same form of NB Receipt shall be used for all Banks for each Banking Transaction type. [NBR029]

(b)   The NB System shall provide the capability for printing NB Receipts in English and bilingual NB Receipts in English and Welsh in the same manner as for the Existing Services. The language used by the NBS in printing Outlet specific headers and footers in such NB Receipts shall be determined by Reference Data. [NBR149]

(c)   The NB System shall support the interpretation of messages received from the NBE in accordance with the CCD entitled *"NBE – Horizon Application Interface Specification" (NB/IFS/008)*) and such messages shall be printed within defined areas on NB Receipts and documented in the CCD entitled *"Network Banking Counter Dialogue – Activity & Screen Flows" (NB/SPE/003)*. [NBR149, NBR031]

5.13.3   Production of NB Receipts

(a)   The NB System shall print NB Receipts for all Banking Transactions undertaken using the NBS other than those which are abandoned before a Request is generated. [NBR030] [NBR238]

(b)   An NB Receipt shall be produced where an Authorisation is received with instruction to retain the NB Token in accordance with paragraph 5.17 of this DocumentDocument.

(c)   The circumstances in which the NB System shall support the capability of reprinting a current NB Receipt are described in the CCD entitled *"Network Banking Counter Dialogue – Activity & Screen Flows" (NB/SPE/003)*.

5.13.4   Content of NB Receipts and reports

(a)   The detailed content and layout of each type of NB Receipt and report and the circumstances in which they shall be printed shall be:

(i)   consistent with paragraphs 5.13.1 and 5.13.2 of this DocumentDocument;

(ii)   as described in the CCD entitled *"Network Banking Counter Dialogue – Activity & Screen Flows" (NB/SPE/003)*; and

(iii)   documented by amendment to the CCD entitled *"Horizon OPS Reports and Receipts" (SD/DES/005)*. [NBR030, NBR032, NBR539, NBR031, NBR429] [NBR237]

(b)   The NBS shall support printing of free text in agreed fields where this is received from the NBE provided the free text does not exceed the limit specified in the CCD entitled *"NBE – Horizon Application Interface Specification" (NB/IFS/008)*.

(c)   The provision of information required via the NBE for printing on a NB Receipt is the responsibility of Post Office.

5.14 Error Screens

Error messages displayed by the NB System shall be as set out in the CCD entitled *"Network Banking Counter Dialogue – Activity & Screen Flows" (NB/SPE/003)*.

5.15 Settlement

For the purposes of this paragraph, "EPOSS Settlement" is the process at the end of a Customer Session whereby monies and Receipts (as appropriate) are exchanged between the Counter Clerk and Customer and all Transactions on the transaction stack are written to the message store. Transactions written to the message store at EPOSS Settlement shall include C1 Confirmations for Banking Transactions carried out during the relevant Customer Session. [NBR254]

5.16 Messages

5.16.1   The Authorisation received from the NBE may contain codes for translation into messages for display to the Counter Clerk or for printing on the NB Receipt (or both) and the NB System shall display or print such messages as described in the CCD entitled *"Network Banking Counter Dialogue – Activity & Screen Flows" (NB/SPE/003)* and in accordance with the CCD entitled *"NBE – Horizon Application Interface Specification" (NB/IFS/008)*.

5.16.2   The NB System shall display a message to the Counter Clerk asking him to notify the Customer of any fees chargeable by a Bank for the Banking Transaction requested by that Customer, provided that all required fee data is included in the Authorisation received from the NBE. [NBR150] The NB System shall allow the Customer the option to elect not to continue with that Transaction without incurring the fee, or to proceed with that Transaction with the fees as notified. [NBR150]

5.16.3   Collection of the fees referred to in paragraph 5.16.2 of this DocumentDocument shall not be supported by and is excluded from the NBS. [NBR242]

5.17 Retained NB Tokens

5.17.1 Where an Authorisation is received instructing that a NB Token be retained, the NB System shall require the Counter Clerk to indicate whether or not that NB Token has been retained and the result shall be included in the C1 Confirmation. [NBR014] [NBR252]

5.17.2 The NB System shall print a NB Receipt when a NB Token is retained in accordance with the CCD entitled *"Network Banking Counter Dialogues – Activity and Screen Flows" (NB/SPE/003)*.

5.17.3 The production of NB Token retention reports shall not be supported by the NBS. [NBR064]

5.18 Recovery of Banking Transactions

Where a failure at a Counter Position causes Confirmation messages not to be written to the message store or to be lost before they are replicated, irrespective of whether such failure is catastrophic (requiring replacement of an element of the NB System) or temporary (cured by "re-booting") and whether such failure is at a single or multi Counter Position Outlet, the NB System shall initiate a recovery process in accordance with the CCD entitled *"Network Banking Counter Dialogues – Activity and Screen Flows" (NB/SPE/003)* (the "Recovery Process").

[NBR035, NBR176, NBR013, NBR505]

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5.19 Outlet Reports

The reports that shall be capable of being generated on demand in respect of the NBS in Outlets (in relation to the Outlet in which such reports are requested) shall be in the form described in the CCD entitled *"Network Banking Counter Dialogue - Activity & Screen Flows" (NB/SPE/003)*. [NBR256]

5.20 Help Functions

The NB System shall display integrated context sensitive help messages to assist Counter Clerks at key points in the Banking Transaction as described in the CCD entitled *"Network Banking Counter Dialogue – Activity & Screen Flows" (NB/SPE/003)*. [NBR028]

5.21 Cash Account

The total value of successful Banking Transactions and the aggregate number of successful and Declined Banking Transactions conducted in an Outlet shall be recorded in the Cash Account for that Outlet using the mechanisms controlled by Post Office Reference Data which are used for Existing Services. [NBR017, NBR018, NBR464, NBR258, NBR263]

6.0 BANKING TRANSACTION MANAGEMENT FUNCTIONALITY

6.1 Introduction

The functions of the TMS in supporting each element of the NBS shall be as set out in the CCD entitled *"TMS Architecture Specification" (TD/ARC/029)*.

6.2 Interactive Communications between NBE and Horizon

The NBS shall support the RAC0C1 Model and the sequence for each Banking Transaction, as set out in the CCDs entitled *"NBE – Horizon Application Interface Specification" (NB/IFS/008)* and *"Network Banking Counter Dialogues – Activity and Screen Flows" (NB/SPE/003)*. Fujitsu Services shall document the RAC0C1 Model in detail in a Working Document within a reasonable time (and in any event not more than three months) after signature of the NBS CCN.

6.3 Bulk Agents

The TPS Agent shall harvest C1 Confirmations originating from each Outlet for transmission via the TPS Host to Post Office TIP (as for EPOSS as an Existing Service) making them available to the Data Warehouse and the DRSH.

6.4 Message Store Archive

The contents of the message store in the Data Centre shall be archived to the Archive Server in accordance with the CCD entitled *"Audit Trail Functional Specification" (CR/FSP/006)*.

7.0 MANAGEMENT INFORMATION, AUDIT AND ARCHIVE

7.1 TPS Host

The TPS Host shall process C1 Confirmations harvested by the TPS Agent.

7.2 Transaction Recording and Archiving

7.2.1   All Banking Transaction messages (including those to and from the NBE) will be auditable consistent with the principles set out in the CCD entitled *"Audit Trail Functional Specification" (CR/FSP/006)* and an audit trail of each Banking Transaction message will be maintained for fifteen years after its creation. [NBR441, NBR016, NBR542] All such audit trails shall:

(a)   have protection against unauthorised alteration and deletion;

(b)   be irretrievably deleted or destroyed as soon as reasonably practicable after that fifteen year period has expired, except where Post Office has requested (prior to such deletion or destruction) an Audit Record Query in connection with litigation support (in accordance with paragraph 7.3 of this DocumentDocument), in which event the relevant audit trail data (extracted by the Audit Record Query) shall be retained for the duration of the associated investigation; and

(c)   identify the log-on identification used for each Banking Transaction. [NBR541]

For the avoidance of doubt, the data contained in such audit trails are Post Office Data.

7.2.2   It shall be Post Office's responsibility to ensure that Users of the NBS, log-on with separate log-on "IDs" and do not perform Banking Transactions under a different log-on ID in order that the User responsible for each Banking Transaction may be identified from audit trail data. [NBR541]

7.3   Information Retrieval and Audit

7.3.1   For the purposes of this paragraph 7.3:

"Banking Transaction Record Query" means a Record Query in respect of a Banking Transaction which the Data Reconciliation Service has reconciled or has reported as an exception, the result or records of which are subsequently queried or disputed by Post Office or a third party;

"Audit Record Query" means a Record Query which is not a Banking Transaction Record Query and which relates to Transactions;

"Old Format Query" means the extraction of records created before commencement of NB Pilot (Soft Launch) relating to Transactions (other than Banking Transactions) meeting the Search Criteria, such extraction being limited to the following specific types of information/data fields: the ID for the user logged-on, Counter Position ID, stock unit reference, Transaction ID, Transaction start time and date, Customer Session ID, mode (e.g. serve customer), product number and quantity, and sales value;

"Period One" means, in respect of each Transaction the period of 90 days commencing on the date of that Transaction;

"Period Two" means, in respect of each Transaction the period commencing the day after expiry of Period One for that Transaction, expiring the earlier of the date:

(a)   18 months (in the case of Transaction records created before commencement of NB Pilot Soft (Soft Launch)) or 15 years (in the case of Transaction records created after commencement of NB Pilot Soft (Soft Launch)), after the records of that Transaction were first created; or

(b)   of completion of transfer of Post Office Data (including the record of that Transaction) in accordance with paragraph 4.1 of Schedule N06 or paragraph 4.1 of Schedule A07, as applicable;

"Query Day" means each date against which an Audit Record Query or an Old Format Query is raised;

"Record Query" means the extraction of records created after commencement of NB Pilot (Soft Launch) in accordance with the terms of this paragraph 7.3 relating to Banking Transactions (and, in the case of Audit Record Queries relating to all Transactions) meeting the Search Criteria, such extraction being limited to specific types of information/data fields as follows:

- in the case of an Audit Record Query - the ID for the user logged-on, Counter Position ID, stock unit reference, Transaction ID, Transaction start time and date, Customer Session ID, mode (e.g. serve customer), product number and quantity, and sales value; and

- in the case of a Banking Transaction Record Query - Banking Transaction ID, Banking Transaction type, receipt date, receipt time, the reason code (in the case of a discrepancy) and DRSH sub-value(s) (eg C0 Confirmation, C1 Confirmation, Decline); and

"Search Criteria" means:

- in the case of an Audit Record Query or Old Format Query either of:

(a) date or dates (not exceeding 31 consecutive days), time-range, Outlet and PAN (or equivalent identifier); or

(b) date or dates (not exceeding 31 consecutive days), time-range and Outlet; and

- in the case of a Banking Transaction Record Query either of:

(a) date, time-range, Outlet and PAN; or

(b) date, time-range and Outlet, [NBR544]

to be specified for each individual Record Query or Old Format Query (as applicable).

7.3.2   Fujitsu Services shall have access (such access being restricted to properly authorised Contractor staff) to records of each Banking Transaction during Period One and Period Two.

7.3.3   Limits and target times for Record Queries

(a)   The table below sets out the limits on Record Queries and/or Old Format Queries which Fujitsu Services shall be obliged to carry out and the target times for carrying out each Record Query and/or Old Format Query:

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	(1) Limits on Banking Transaction Record Queries		(2) Aggregate Limits on Audit Record Queries and Old Format Queries	(3) Limits on Old Format Queries
	Period One	Period Two	Period One and Period Two	Period One and Period Two
Limits	900 per year (on a rolling year basis) with no more than 126 in any calendar month	100 per year (on a rolling year basis) with no more than 14 in any calendar month	Subject to paragraph 7.3.6 below, the limit per year (on a rolling year basis) shall be the first of the following to be reached: (i) 550 (in aggregate) Audit Record Queries and Old Format Queries; or (ii) 7700 Query Days, and the limit per calendar month shall be the first of the following to be reached (i) 77 (in aggregate) Audit Record Queries and Old Format Queries, or (ii) 1078 Query Days	The limit per year (on a rolling year basis) shall be the first of the following to be reached: (i) 50 Old Format Queries; or (ii) 700 Query Days, and the limit per calendar month shall be the first of the following to be reached: (i) 7 Old Format Queries; or (ii) 98 Query Days.
Target Time	5 MSU Days	7 MSU Days	Subject to paragraph 7.3.4 below and applicable only in respect of Audit Record Queries, 7 working days (for queries of 14 or less days' duration) and 14 working days (for queries of greater than 14 days' duration).	Subject to paragraph 7.3.4 below, 14 working days (for queries of 14 or less days' duration) and 28 working days (for queries of greater than 14 days' duration).

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(b)   The limits set out in columns numbered 1 and 2 in the table above and the provisions of this paragraph 7.3 relevant in connection with the application of those limits shall apply with effect from commencement of NB Pilot (Soft Launch).

(c)   The limits set out set out in the column numbered 3 in the table above and the provisions of this paragraph 7.3 relevant in connection with the application of those limits shall apply with effect from the date of approval by both parties of the CCN which introduces the NBS (CCN[no]) and shall cease to be applicable 18 calendar months after the commencement of NB Pilot (Soft Launch).

(d)   For the purpose of applying the limits in column 3 from the date of approval by both parties of the CCN which introduces the NBS (CCN[no]), the equivalent of Old Format Queries (and associated Query Days) carried out in the 12 months prior to that date shall count towards the annual limit (on a rolling year basis) and the equivalent of Old Format Queries carried out in the calendar month in which the NBS CCN is approved (prior to the date of such approval) shall count towards the limits for that month.

(e)   For the purpose of applying the limits in columns 2 and 3 after commencement of NB Pilot (Soft Launch), any Old Format Queries (and associated Query Days) carried out in the 12 months prior to commencement of NB Pilot (Soft Launch) shall count towards the annual limits (on a rolling year basis) and Old Format Queries carried out in the calendar month in which NB Pilot (Soft Launch)

commences (prior to that commencement) shall count towards the limits for that month

7.3.4 Where:

(a) a new Audit Record Query or Old Format Query is received by Fujitsu Services or Post Office requires analysis of an existing Audit Record Query or Old Format Query; and

(b) a member of Fujitsu Services's personnel is needed to deal with that new or existing Audit Record Query or Old Format Query; but

(c) that person is unavailable due to his or her attendance at court or other proceedings in connection with an Audit Record Query or Old Format Query,

the target times specified in paragraph 7.3.3 shall not apply to that new or existing Audit Record Query or Old Format Query referred to in paragraph 7.3.4 (a) which Fujitsu Services shall instead deal with as soon as reasonably practicable.

7.3.5 For the avoidance of doubt, the limits set out in paragraph 7.3.3 in respect of Banking Transaction Record Queries shall not apply in respect of reconciliation incident management and settlement reporting carried out as a function of the Data Reconciliation Service.
[NBR260, NBR546]

7.3.6   Post Office may at any time on three months' notice (such notice expiring no earlier than commencement of NB Pilot (Soft Launch) vary the aggregate limits of Audit Record Queries and Old Format Queries which Fujitsu Services is required to carry out as specified in column numbered 2 in the table in paragraph 7.3.3,

7.3.6.1   between

(a)   the limits specified in paragraph 7.3.3; and

(b)   the following substitutes for those limits (applicable on the same basis): 800 Audit Record Queries or 11200 Query Days per year on a rolling year basis, and 112 Audit Record Queries or 1568 Query Days per calendar month;

7.3.6.2   and between

(a)   the substitute limits set out in paragraph 7.3.6.1(b); and

(b)   the following substitutes for those limits (applicable on the same basis): 1050 Audit Record Queries or 14700 Query Days per year on a rolling year basis, and 147 Audit Record Queries or 2058 Query Days per calendar month,

and in each case Fujitsu Services's charges in respect of dealing with any Audit Record Queries and/or Old Format Queries up to the limits as varied in accordance with this paragraph shall be as specified in part C of Schedule A12.

7.3.7   **Not used**.

7.3.8   Post Office shall submit:

(a)   Banking Transaction Record Queries to the Horizon System Help Desk which will pass the Record Query to Fujitsu Services's customer service management support unit; and

(b)   Audit Record Queries and Old Format Queries to Fujitsu Services's customer service security prosecution support section.

Fujitsu Services shall accept Record Queries and Old Format Queries only from properly authorised Post Office staff.

7.3.9   Litigation Support

Where Post Office submits an Audit Record Query or Old Format Query, at Post Office's request Fujitsu Services shall, in addition to conducting that query:

(a)   present records of Transactions extracted by that query in either Excel 95 or native flat file format, as agreed between the parties; and

(b)   subject to the limits set out below:

(i)   analyse:

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- the appropriate Fujitsu Services' Help Desk records for the date range in question;

- Outlet non-polling reports for the Outlet in question; and

- fault logs for the devices from which the records of Transactions were obtained

in order to check the integrity of records of Transactions extracted by that query; [NBR260, NBR545]

(ii) request and allow the relevant employees of Fujitsu Services to prepare witness statements of fact in relation to that query, to the extent that such statements are reasonably required for the purpose of verifying the integrity of records provided by Audit Record Query or Old Format Query, and are based upon the analysis and documentation referred to in this paragraph 7.3.9; and [NBR547]

(iii) request and allow the relevant employees to attend court to give evidence in respect of the witness statements referred to in (ii) above,

provided that:

(iv) Fujitsu Services's obligations set out in (i) and (ii) above shall be limited, in aggregate, to dealing with a maximum

of 250 (in aggregate) Record Queries and Old Format Queries per year (on a rolling year basis); and

(v)   Fujitsu Services's obligations in the case of provision of witnesses referred to in paragraph (iii) above shall be to provide witnesses to attend court up to a maximum (for all such attendance) of 100 days per year (on a rolling year basis).

For the avoidance of doubt the target times set out in paragraph 7.3.3 for dealing with Audit Record Queries and Old Format Queries shall not apply in respect of Fujitsu Services's obligations under paragraph 7.3.9.(b).

7.3.10   Any information requested beyond that available by Record Query and/or any witness statements or witness attendance beyond that available in accordance with this paragraph 7.3 shall be agreed on a case by case basis and shall be dealt with in accordance with the Change Control Procedure.

7.3.11   Sensitive Data included in records of Banking Transactions extracted by Record Query and provided to Post Office (but, for the avoidance of doubt, not that included in records for Transactions extracted for Audit Record Queries in respect of any other Post Office Service) shall be in the encrypted form in which they are held by the NB System. [NBR538]

7.3.12   Audit Access

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Reasonable access to the audit trail of Banking Transactions for Post Office auditors for audit purposes shall be by request (and reasonable notice to) Fujitsu Services's Audit Manager. [NBR444]

8.0 DATA RECONCILIATION SERVICE

8.1 Introduction

The reconciliation and settlement reporting services for Banking Transactions (the "Data Reconciliation Service") are described in this paragraph 8.

8.2 Reconciliation

8.2.1   This paragraph 8.2 describes the functionality for that part of the end-to-end network banking reconciliation system required by Post Office which shall be developed and operated by Fujitsu Services as part of the NBS. Such part is referred to in this DocumentDocument as the "Reconciliation System". [NBR040]

8.2.2   Post Office and Fujitsu Services shall follow the reconciliation and incident management procedures (applicable to each of them) for the investigation, reporting and resolution of business incidents related to the NBS as set out in the CCD entitled *"Network Banking Reconciliation and Incident Management"* (*NB/PRO/002*). [NBR041, NBR500, NBR504]

8.2.3   Post Office shall not unreasonably withhold or delay its agreement to the design of back end processes and Banking Transaction processing procedures required to support the reconciliation and incident management of Banking Transactions. [NBR041, NBR495, NBR496]

8.2.4   Reconciliation between counter and Cash Account

Reconciliation of EPOSS Transactions to the Cash Account shall be dealt with at summary level using the reconciliation functionality used for EPOSS as an Existing Service [NBR454]. Such reconciliation functionality shall ensure that all Banking Transactions (reflected in C1 Confirmations) are included in the Cash Account, but shall not identify erroneous Cash Account mappings which cause such Banking Transactions to be included in the wrong line of the Cash Account, or non-Banking Transactions to be included in Cash Account lines intended for Banking Transactions. Reconciliation to the Cash Account described in this paragraph 8.2.4 will be performed after the electronic Cash Account is produced, which will be an indeterminate time after the Transactions have been settled (in the same manner as for the Existing Services).

8.2.5   Branching data-flows

(a)   The Reconciliation System shall enable reconciliation of Financial Transactions arriving at the DRSH from the following three sources: [NBR183, NBR212, NBR229]

(i)   the Confirmation Agent (i.e. the C1 Confirmations received by the Confirmation Agent from the Counter Position);

(ii)   the NBE (i.e. D Messages and C4 Confirmations) [NBR294, NBR389]; and

(iii)   the TPS Host (i.e. the C1 Confirmations harvested by the TPS Agent as described in paragraph 6.3 of this Schedule),

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which reconciliation shall be reported by Fujitsu Services in accordance with the CCD entitled *"Network Banking End to End Reconciliation Reporting"* (*CS/SPE/011*).

In the event that a C0 Confirmation is sent to the NBE the relevant C1 Confirmation will indicate that a C0 Confirmation has been generated.

(b)   The Reconciliation System shall monitor the Financial Transactions and report Banking Transaction states which are:

(i)   intrinsically anomalous, in that their occurrence implies malfunction in End to End Banking; or

(ii)   anomalous in that an expected state has persisted for an unexpected duration (e.g. where C1 Confirmations are received from the Confirmation Agent and C4 Confirmations are received from the NBE but the Confirmation from the TPS Host has not been received after an abnormal delay),

identifying any such anomalous Banking Transaction states which require human analysis for resolution. [NBR042, NBR228]

(c)   The expected Banking Transaction states and Banking Transaction states which constitute exceptions are those set out in the CCD entitled *"Network Banking End to End Reconciliation Reporting" (CS/SPE/011).*

(d)   The Data Reconciliation Service shall not produce reports which relate Banking Transactions included in Cash Accounts to Banking Transactions included in the Transaction files sent by the TPS Host to TIP, as these shall be covered by the reconciliation reporting and processes used for EPOSS (as an Existing Service) and for TIP.

8.2.6   Complete processing

(a)   The Reconciliation System shall:

(i)   ensure that all data received by it are processed;

(ii)   check for completeness of Financial Transactions; and

(iii)   report exceptions/anomalies for resolution as described in paragraphs 8.2.5 (b) and 8.2.5 (c) of this DocumentDocument. [NBR227, NBR042]

(b)   The Reconciliation System shall not regard a Banking Transaction as complete until reported as such in accordance with the CCD entitled *"Network Banking End to End Reconciliation Reporting"* (*CS/SPE/011*).

8.3   Reconciliation and Settlement Reporting

The Reconciliation System shall transmit to the TIP Gateway the reports described in the CCD entitled *"Network Banking End to End Reconciliation Reporting"* (*CS/SPE/011)*) at intervals set out in that CCD. [NBR456]

8.4 Widespread Errors (as referred to in the CCD entitled *"Network Banking Reconciliation & Incident Management" (NB/PRO/002))* shall be dealt with in accordance with the provisions of that CCD.

8.5 Fujitsu Services shall use reasonable endeavours to resolve all exceptions in each of the following categories within 5 MSU Days:

    (a) Priority Exceptions to which the Minimum Acceptable Threshold set out in paragraph 2.4.6 of Schedule N08 does not apply, as specified in paragraph 2.4.5 of Schedule N08; and

    (b) all other exceptions in any of the system state categories set out in the CCD entitled *"Network Banking End to End Reconciliation Reporting" (CS/SPE/011).*

8.6 For the purposes of paragraph 8.5 of this DocumentDocument, the resolution time for:

    (a) Priority Exceptions shall be measured by Fujitsu Services in accordance with paragraph 2.4.1 of Schedule N08; and

    (b) all other exceptions shall be measured in accordance with the CCD entitled *"Network Banking Reconciliation and Incident Management" (NB/PRO/002).*

8.7 Fujitsu Services shall report on a monthly basis (in the Working Document entitled *"TIP Operational Review Book"* its performance against the 5 MSU Day target referred to in paragraph 8.5 of this DocumentDocument.

9.0 COMPLIANCE

9.1   Subject to paragraph 9.2 of this DocumentDocument, Fujitsu Services shall after completion of NB Go Live provide reasonable co-operation and support as reasonably requested by Post Office in carrying out the following activities:

    (a)   ISO17799 policy and system audit: a single external audit, conducted by an independent third party appointed by Post Office, of the documented policies, procedures and processes adopted within each of the network banking domains to validate conformance to ISO17799. The audit shall be conducted at a mutually convenient time for all parties; and

    (b)   LINK compliance: as required by LINK when the Post Office Services change Fujitsu Services shall assist Post Office to review LINK security compliance requirements to identify any changes required.

9.2   Fujitsu Services's obligations to provide co-operation, support and assistance under paragraph 9.1 of this Document shall be introduced in accordance with the Change Control Procedure and Fujitsu Services shall not unreasonably withhold agreement to provision of such co-operation, support and assistance.

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10.0 SYSTEM AND DATA SECURITY

10.1 Legal and Regulatory Controls

10.1.1   Regulation of Investigatory Powers Act 2000

The security features, capabilities and related procedures provided by Fujitsu Services in respect of the NBS shall be compliant with the requirements of Part 3 of the Regulation of Investigatory Powers Act 2000 (the "Act"). In the event that any provision of this Codified Agreement imposes an obligation on Fujitsu Services which is inconsistent with any requirement imposed by the Act, the requirement of the Act shall prevail over the provisions of this Codified Agreement and those provisions shall cease to apply to the extent of such inconsistency.

10.1.2   Other Legal and Regulatory Controls
Fujitsu Services shall comply with all banking laws and regulations, including all relevant instructions, standards and directions of a regulatory authority, which are in force and applicable to Fujitsu Services on signature of the CCN to introduce the NBS into the Codified Agreement. Fujitsu Services shall co-operate with Post Office to agree any necessary changes to ensure compliance with any subsequent changes to such laws, regulations, instructions, standards and directions and the Banking Code, such changes (and Fujitsu Services's reasonable charges in respect of such changes) to be agreed and introduced under the Change Control Procedure. [NBR503]

10.1.3   CAPO

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The parties agree and acknowledge that in the event that additional or different legal or regulatory requirements arise in respect of provision of the NBS to CAPO beyond those which apply for provision of the NBS to other Banks then compliance by Fujitsu Services with such additional or different legal and/or regulatory requirements and the charges for such compliance will be dealt with through the Change Control Procedure.

10.2 Security for the Existing Services

The security features, facilities and functionality of the NBS set out in this paragraph 10 shall not reduce, mitigate, add to or modify any of Fujitsu Services's security obligations under this Agreement in respect of the Existing Services. [NBR568]

10.3 Security Standards

10.3.1 Fujitsu Services shall adhere, in providing the NBS, to the security standards and requirements referred to in paragraph 4.1.4 (b) and (c) of Schedule A02. Fujitsu Services shall co-operate with Post Office (and shall provide such assistance as may reasonably be required by Post Office) in developing Post Office's network banking automation security policy, but shall not undertake any new or modified obligations arising in respect of that policy, save as may be agreed and introduced under the Change Control Procedure. Fujitsu Services's charges in respect of such co-operation and assistance provided at any time following completion of NB Go Live shall be paid by Post Office to Fujitsu Services and calculated on a time and materials basis using the applicable Fujitsu Services' rates specified in paragraph 22.1 of Schedule A12.

10.3.2 Fujitsu Services shall update the CCDs entitled *"ICL Pathway Security Policy" (RS/POL/002)* and *"Security Functional Specification" (RS/FSP/001)* to document the NBS security features, facilities and/or functionality provided by Fujitsu Services in accordance with this Document. [NBR479, NBR501, NBR557]

10.4 Security Organisation and Management

10.4.1 Security for the NBS shall be managed and organised by Fujitsu Services in accordance with the CCD entitled *"ICL Pathway Security Policy" (RS/POL/002)* once updated in accordance with paragraph 10.3.2 of this Document. [NBR559]

10.4.2 In any investigation carried out by Post Office and/or by Fujitsu Services of any potential or actual security breach or threat, Post Office and Fujitsu Services shall report to each other (or Fujitsu Services shall report to Consignia, if required by Post Office) any actual or potential threats identified in the course of such investigation that may have a material adverse effect upon the NBS itself or End to End Banking. Fujitsu Services and Post Office shall agree the procedures by which such threats shall be reported and the methodology for investigating and resolving security incidents (including disputed Banking Transactions) associated with the NBS and/or End to End Banking. Such methodology shall be recorded by Post Office in the CCD entitled *"Security Incident Management"* by the applicable date specified in the NB Project Plan and, once agreed by Fujitsu Services (such agreement not to be unreasonably withheld), the relevant sections of that CCD setting out those procedures which impose obligations on Fujitsu Services in respect of the NB System shall be referenced in the CCD entitled *"ICL Pathway Security Policy" (RS/POL/002)* by the applicable date specified in the NB Project Plan . [NBR563]

10.4.3   Fujitsu Services shall not unreasonably withhold assistance requested by Post Office (or by Post Office on behalf of Consignia) in connection with the investigation and resolution of any actual or potential security breach or threat.

10.4.4   The scope of the CCDs entitled *"Security Incident Management"* and *"ICL Pathway Security Policy"* (*RS/POL/002*) shall include all potential security breaches or threats, other than those arising in exceptional circumstances.

10.4.5   Where this Codified Agreement does not cover potential security breaches or threats Fujitsu Services's charges in respect of co-operation and assistance in respect of such breaches or threats (which shall be paid by Post Office to Fujitsu Services) shall be calculated on a time and materials basis using the applicable Fujitsu Services' rates specified in paragraph 22.1 of Schedule A12. [NBR562]

10.5 Development and Maintenance

Fujitsu Services shall comply with the relevant parts of ISO17799 in the development and implementation of the NBS. Security related assumptions and processes, upon which the NBS may depend, which are identified and/or developed by Fujitsu Services during the design of the systems required to support the operation of the NBS shall be reported to Post Office's network banking automations security working group and, as may be required by Post Office, to Consignia, unless Post Office requests otherwise. [NBR561, NBR560]

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10.6 Network Banking Security Architecture

10.6.1   PIN Pads

(a)   The use of PIN Pads and the associated cryptographic management shall be supported by the NBS. PIN Pads shall comply with the requirements of ISO 9564. Fujitsu Services's key management for any key directly or indirectly protecting the secrecy of PIN values (together, "PIN Encryption Keys") shall comply with ISO 11568 Parts 1 to 3. The key management scheme used between each PIN Pad and the rest of the Post Office Service Infrastructure shall be the DUKPT scheme as described in section 4.7 and Appendix A of the ANSIX9.24-1998 standard. Secure remote initialisation of any PIN Encryption Keys held in PIN Pads will be put in place (by the applicable date specified in the NB Project Plan by Fujitsu Services) for PIN Encryption Keys within the NB System using an enhanced version of the key management service and manual procedures used for the Existing Services. Until such time as remote key initialisation is in operation, Fujitsu Services shall use secure key generation and loading processes managed in conjunction with the supplier of the PIN Pads. [NBR582, NBR506] [PPR095] [NBR575]

(b)   Whenever information is passed between the Post Office Service Infrastructure and the NBE the NBS shall translate any encrypted PIN value received from a PIN Pad used within the Post Office Service Infrastructure into a different encrypted value, using the PIN Encryption Keys in force at the time, prior to transmission of that PIN value to the NBE. Each translation shall be performed as

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a result of a single call to a HSM. Any HSM used to process encrypted PIN values or PIN Encryption Keys shall be conformant to the requirements of the versions of FIPS 140-1 level 3 and ISO 9564-1 section 6.3.1 as specified in the LINK Information Security Standard issued January 2001 (subject to such dispensations from that Standard (if any) as LINK may grant from time to time). [NBR501, NBR575,] [PPR028]

(c)   In the event of an actual or suspected key compromise in respect of a PIN Encryption Key used within the Post Office Service Infrastructure, Fujitsu Services shall implement key change mechanisms in accordance with the principles stated in ISO 11568 Parts 1 to 3. Where the actual or suspected compromise affects a key shared with the NBE the parties' obligations in respect of key change mechanisms shall be as documented in the CCD entitled *"NBE – Horizon Application Interface Specification".(NB/IFS/008)* [NBR574]

(d)   Fujitsu Services shall provide preventative measures against replay of encrypted PIN values between the PIN Pad and the Counter Position in accordance with the principles set out in the CCD entitled *"Security Functional Specification"(RS/FSP/001)* in respect of protection against replay attacks.[NBR581]

(e)   PIN values shall be protected in accordance with the requirements of ISO 9564 from the point of entry to the PIN Pad to the Service Boundary with the NBE. Fujitsu Services shall ensure that any plain-text PIN block is formatted as specified in ISO 9564 prior to encryption, that PIN values do not appear in plain text other than

within a HSM as specified in paragraph 10.6.1 (b) above or within a PIN Pad and that any PIN Encryption Key used to encipher a PIN block shall not be used for any other cryptographic purpose. [NBR575] [NBR576] [NBR577] [NBR578]

10.6.2   The Counter Terminal

(a)   The NBS shall provide cryptographic protection of discretionary data held on track 2 of a NB Token magnetic stripe and NB Token details entered by a Counter Clerk (which will be one of or a combination of the start date, NB Token issue number, validation period and/or expiry date, according to the specific Banking Transaction) (together, "Sensitive Data") between the NB Counter Application and the Service Boundary with the NBE. [NBR538]

(b)   Once captured, Sensitive Data shall remain encrypted whilst it is within the Post Office Service Infrastructure whether in transit or in storage, save as necessary during the process of translation from encryption under keys used within the Post Office Service Infrastructure to encryption under keys in force at the relevant time in the NBE. [NBR567] [NBR445] [NBR538]

(c)   The technical security architecture shall differ between those Outlets with PIN Pads and those Outlets that do not have PIN Pads in that where a PIN Pad has been installed an encrypted PIN block and associated cryptographic controls will be present within the message following entry by the Customer of the PIN value. [NBR584]

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10.6.3   Data transit across the Post Office Service Infrastructure

(a)   All NBS Request, Authorisation and Confirmation messages will be digitally signed prior to transmission. [NBR567] [NBR569] [NBR558] [NBR228] [NBR445]. For the avoidance of doubt, the use of such digital signatures is in addition to the security provided by the virtual private network deployed at the Outlet LAN and the WAN between the Outlet and the Data Centres. [NBR445]

(b)   In the event of a duplicate Request being submitted to the Data Centre, which has been copied from the original Request without authority, the NBS software will identify the duplicate Request as having been originated at the Data Centre. Only Requests that originate at a Counter Position will be passed to the NBE. Furthermore if by some other means a duplicate Request is submitted, the Authorisation arising from a duplicate Request would not be processed by the Counter Position as it could not be paired with the originating Request. [NBR580]

10.6.4   The Data Centre/NBE Interface

(a)   All interface connections between the Data Centres and the NBE shall in addition to other security measures specified in this paragraph 10 be protected by a combination of firewalls and filtering routers to guard against unauthorised access, protocols and services. [NBR558]

(b)   Message authentication codes ("MACs") shall be used to verify and authorise the integrity of all message or file data exchanged between the Data Centres and the NBE. The MACs shall be calculated using uni-directional MAC keys ("MAC Key"). [NBR228] [NBR445] The process and procedures which Fujitsu Services uses for MAC computation and MAC Key management shall comply with the CCD entitled *"NBE – Horizon Application Interface Specification"(NB/IFS/008)*.[NBR569] [NBR570] [NBR582] [NBR506]

(c)   Fujitsu Services's encryption devices for the network communications link between the Data Centre and the NBE (other than those located on Post Office's premises or Post Office's agents' premises) shall be located within the physical security boundary of the Data Centre. [NBR573]

(d)   The crypto keys used by Fujitsu Services in respect of PIN Pads shall be different from any other crypto keys used by Fujitsu Services.

(e)   The crypto keys used by Fujitsu Services in respect of the network communications link between the Data Centres and the NBE shall be different from any other crypto keys used by Fujitsu Services. [NBR573] [NBR445]

(f)   The protection of encrypted PIN values in transit between the Post Office Service Infrastructure and the NBE shall be performed in

accordance with paragraph 10.6.1(b) of this Document. [NBR575] [NBR576] [NBR577] [NBR578]

(g)   The protection of Sensitive Data in transit between the Post Office Service Infrastructure and the NBE shall be as documented in the CCD entitled *"NBE – Horizon Application Interface Specification"* (*NB/IFS/008)*.

(h)   Post Office shall ensure the security, safe keeping and proper management (as defined in ISO 11568 parts 1 to 3) of all keys shared between the Data Centre and the NBE on the NBE side of the interface between the Data Centre and the NBE. Fujitsu Services shall ensure the security, safe keeping and proper management (as defined in ISO 11568 parts 1 to 3) of all keys which are used by it in connection with the NBS.

(i)   Post Office shall be responsible for ensuring that the link from the NBE to the Data Centres and information transmitted from the NBE to Fujitsu Services across that link shall be in accordance with the CCDs entitled *"NBE – Horizon Application Interface Specification"* (*NB/IFS/008)* and *"Technical Interface Specification - Horizon to NBE"* (*NB/IFS/009)*.

(j)   If data received by Fujitsu Services from the NBE is in accordance with or as described in the CCDs entitled *"NBE – Horizon Application Interface Specification"(NB/IFS/008)* and *"Technical Interface Specification -Horizon to NBE"(NB/IFS/009)* then

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Fujitsu Services shall not be liable to Post Office for acting in accordance with that data.

(k)   If data received by Fujitsu Services from the NBE is not in accordance with or as described in the CCDs entitled *"NBE – Horizon Application Interface Specification"(NB/IFS/008)* and *"Technical Interface Specification – Horizon to NBE" (NB/IFS/009)* then:

(i)   Fujitsu Services shall reject such data and not act upon it; and

(ii)   to the extent that Fujitsu Services can show that such data caused it to fail to comply with Service Levels under this Codified Agreement, it shall be released from such obligations and shall use reasonable endeavours to achieve such Service Levels.

For the purpose only of Clauses 102.5.1 and 102.5.2, the provisions of paragraph 10.6.4(k)(ii) of this Document shall be deemed to be included also in Schedule A06.

(l)   Fujitsu Services shall be responsible for ensuring that the link from the Data Centres to the NBE and information transmitted from the Data Centres to the NBE across that link shall be in accordance with the CCDs entitled *"NBE – Horizon Application Interface Specification" (NB/IFS/008)* and *"Technical Interface Specification - Horizon to NBE" (NB/IFS/009)*.

10.6.5   Audit

Notwithstanding any requirements in Schedule A03, any PIN values or Sensitive Data held in audit and archive logs or trails maintained by Fujitsu Services shall only be held in encrypted form and not as a plain text value. [NBR577] [NBR538] Fujitsu Services shall retain the encryption keys used to encrypt Sensitive Data but not those used to encrypt PIN values. For the avoidance of doubt Fujitsu Services shall not be required to provide a mechanism or means to decrypt any Sensitive Data or PIN values held on audit and archive logs and trails.

10.6.6   Protection against malicious software

Fujitsu Services shall provide in relation to the NBS such protection against malicious software (including viruses, network worms, logic bombs and Trojan horses) and such physical security as commensurate with the protection it provides in relation to the Existing Services including (to the extent not already provided):

(a)   the use of logical and physical floppy drive locking mechanisms to prevent the unauthorised physical introduction of malicious software; and

(b)   the installation and appropriate configuration of NBS-dedicated firewalls at the interface between the NBE and each Data Centre. [NBR589]

10.6.7   Operational System and Security Management

The NB System elements in Outlets shall be remotely managed from the Data Centres and Fujitsu Services's other premises at Stevenage and Belfast over public bearer networks by an operational management team authorised by Fujitsu Services. Such team shall carry out legitimate maintenance and diagnostic functions authorised in accordance with the CCD entitled *"Security Functional Specification" (RS/FSP/001)* and the Working Document *"Access Control Policy" ((RS/POL/003)*. All public networks between the Data Centres and the Outlets shall be protected by a virtual private network. [NBR572]

10.7 Conflict and precedence

For the avoidance of doubt, the provisions of this Document in respect of cryptographic mechanisms (e.g. encryption key lengths) and the security architecture of the NBS shall apply to the NBS and to the extent that they differ from other provisions relating to cryptographic mechanisms set out elsewhere in this Codified Agreement (excluding the N Schedules) shall not apply to the Existing Services.

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11.0 PIN PADS - ADDITIONAL PROVISIONS

11.1   **Not used**.

11.2   Fujitsu Services shall provide and maintain firmware distribution facilities from the applicable date specified in the NB Project Plan to ensure the distribution of firmware from the Data Centres to PIN Pads. The facility shall meet the software control requirements of ISO 9564.   [PPR031] [NBR575]

12.0 NBS CAPACITY MANAGEMENT SERVICE

12.1   For the purposes of this paragraph 12:

12.1.1   the following terms shall have the following meanings:

"Contracted Notice Period"

The meaning ascribed to it in the CCD entitled *"Horizon New Service Business Volumes" (PA/PER/031)*;

"Design Limit"

Each of the levels defined as a Design Limit in the CCD entitled *"Horizon New Service Business Volumes" (PA/PER/031)* applicable to components of the Post Office Service Infrastructure as specified in that CCD;

"Design Limit Notice Period"

The meaning ascribed to it in the CCD entitled *"Horizon New Service Business Volumes" (PA/PER/031)*; and

"Scalability Threshold"

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Each of the levels defined as a Scalability Threshold in the CCD entitled *"Horizon New Service Business Volumes" (PA/PER/031)* applicable to the components of the Post Office Service Infrastructure as specified in that CCD; and

12.1.2   the Contracted Volumes, Design Limits and Scalability Thresholds shall, save as provided in paragraph 12.2, be those applicable in respect of Phase 1 (as such term is defined in the CCD entitled *"Horizon New Service Business Volumes" (PA/PER/031))*.

12.2   In the event that Post Office serves a Phase 2 Notice on Fujitsu Services, the Contracted Volumes, Design Limits and Scalability Thresholds shall, with effect from the date specified in the Phase 2 Notice, be those applicable in respect of Phase 2 (as such term is defined in the CCD entitled *"Horizon New Service Business Volumes" (PA/PER/031))*. For the purposes of this paragraph 12.2, a "Phase 2 Notice" shall be a notice in writing given by Post Office to Fujitsu Services specifying a date, at least six months after the date of service of that notice but not earlier than 1 September 2003, on which Post Office requires Phase 2 to commence.

12.3   The NB System shall support the Contracted Volumes. EFTPoS volumetrics shall be included in the capacity sizing for the NB System, to the extent and for such purposes as described in the CCD entitled *"Horizon New Service Business Volumes" (PA/PER/031)*, and in accordance with the assumptions described in that CCD, but the introduction of EFTPoS shall be subject to agreement under the Change Control Procedure.

12.4. On each day that any of the following Contracted Volumes is exceeded the measures of Fujitsu Services's performance for the applicable NBS Service Level(s) listed in the table below shall be disregarded on that day:

Contracted Volume exceeded (by reference to the volume sets specified in the CCD entitled *"Horizon New Service Business Volumes" (PA/PER/031))*	NBS Service Level (as specified in Schedule N08) measurement(s) to be disregarded
Network Banking - 5 minute (per second) Contracted Volume – CCD paragraphs 2.2.1 and 2.2.2	Request and Authorisation transmission times – paragraph 2.1 of Schedule N08
Online transactions - 5 minute (per second) Contracted Volume– CCD paragraphs 4.2.1 and 4.2.2	Request and Authorisation transmission times – paragraph 2.1 of Schedule N08
Outlet to Data Centre network – 5 minute online transaction rate (per second); 5 minute dialled transaction rate period 1 (per second); 5 minute dialled transaction rate period 2 (per second); and/or 5 minute dialled transaction rate period 3 (per second)CCD paragraph 5.3.1	Request and Authorisation transmission times – paragraph 2.1 of Schedule N08 and NBS reliability measures - paragraph 2.3 of Schedule N08

and Fujitsu Services shall use reasonable endeavours to meet the applicable Service Levels (specified in the table above) on that day.

12.5 If any of the Design Limits is exceeded then this paragraph 12.5 shall apply (in addition to paragraph 12.4, as may be applicable):

(a) the measures of Fujitsu Services's performance for:

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(i)   any Service Level related to data processing by Fujitsu Services (involving either automated or manual processing or both), whether in respect of the NBS or any other Post Office Service; and/or

(ii)   (in the case of Help Desk calls) any of the service targets set out in paragraphs 4.3.2.1, 4.3.2.2, 4.3.2.3 and 4.3.2.4 of Schedule G10, requirement 914 paragraphs 1.164.25, 1.164.26 and 1.164.27 of Schedule A15 and solution reference 914 paragraphs [2.1.3 and 2.11.1] (targets 1, 2, 3, 5 and 6) of Schedule A16,

shall be disregarded to the extent Fujitsu Services can show that failure to meet the Service Level and/or service target, as the case may be, occurred as a result of the Design Limit being exceeded. Fujitsu Services shall use reasonable endeavours to meet those Service Levels and/or service targets during the period when the measures of Fujitsu Services's performance are disregarded; and

(b)   Fujitsu Services shall not be in breach and shall not be liable to Post Office for any failure to perform its obligations related to data processing (involving either automated or manual processing or both) and/or related to dealing with Help Desk calls, whether in respect of the NBS or any other Post Office Service, under this Codified Agreement, or delay in performing such obligations, to the extent it can show that such failure or delay occurred as a result of any of the Design Limits being exceeded.

12.6   In the event of a Design Limit being exceeded, Fujitsu Services shall be entitled to recover from Post Office its reasonably incurred, increased costs and expenses of performing obligations under this Codified Agreement to the extent that such increased costs and expenses were the result of that Design Limit being exceeded. Fujitsu Services shall use all reasonable endeavours to mitigate the amounts payable in accordance with this paragraph and shall provide a statement of such increased

costs and expenses incurred for approval by Post Office, such approval not to be unreasonably withheld.

12.7   In the event that Post Office requires a Contracted Volume or a Design Limit to be increased it shall only be increased where such increase (and the amount of any additional NB System equipment required and/or the allocation of any system capacity or equipment to the NBS from any other Post Office Service) has been agreed, through the Change Control Procedure, in advance of the required Contracted Notice Period or Design Limit Notice Period as applicable.

12.8   For the avoidance of doubt any proposed increase in the Scalability Thresholds shall be in accordance with the Change Control Procedure.

12.9   Fujitsu Services shall monitor the actual volumes as against the volumes specified in the CCD entitled *"Horizon New Service Business Volumes"* (*PA/PER/031)* and shall report such numbers and resulting trends at each meeting of the Service Review Board. The Service Review Board shall review volume forecasts and may in the light of such reports, recommend changes that may be required to the CCD entitled *"Horizon New Service Business Volumes"(PA/PER /031)*. The parties shall agree volumes, trends and/or peak thresholds which, if they occur or are exceeded in live operation, shall be reported by Fujitsu Services to the Service Review Board.

12.10   For the purpose only of Clauses 102.5.1 and 102.5.2, the provisions of paragraphs 12.2 and 12.4 of this Document shall be deemed to be included also in Schedule A06.

ANNEX 1 TO DOCUMENT

1. EXCLUDED AND UNSUPPORTED REQUIREMENTS

1.1   For the avoidance of doubt, the following features, functionality, equipment, services and/or requirements that are referenced in the Post Office document "Network Banking Automations Requirements Catalogue" shall not in any respect be provided, supported, met or installed by or as part of the NBS:

1.1.1   training mode; [NBR027]

1.1.2   any form of fraud risk management service; [NBR068]

1.1.3   Banking Transactions involving cheque deposits; [NBR069]

1.1.4   any form of NBS demonstrator; [NBR186, NBR307, NBR308, NBR309, NBR310, NBR311, NBR312, NBR313, NBR314, NBR378]

1.1.5   any support for a banking transaction type "cash deposit" with provision of balance information (except as two separate Banking Transactions which may be within a single EPOSS Customer Session); [NBR467]

1.1.6   functionality associated with Bank account opening, Customer enquiries or Customer complaints; [NBR001]

1.1.7   functionality associated with delivery of NB Tokens to Outlets or Customers or receipt of NB Tokens at Outlets, "pick-up" notices, or notification of initial PIN to Customers;

1.1.8   functionality associated with NB Token reporting or redirection;

1.1.9   resilience features over and above those provided in respect of the Existing Services, other than for the infrastructure that supports on-line Banking Transactions;

1.1.10   direct connections between the Post Office Service Infrastructure and the internet; [NBR571]

1.1.11   the requirement that messages are delivered to the NBE once only, although the circumstances in which the same message may be delivered to the NBE more than once shall be the exception (e.g. during recovery from system failure) rather than the rule and shall be as specified in the CCD entitled *"NBE – Horizon Application Interface Specification" (NB/IFS/008);* and

1.11.12 extended verification procedures. [NBR152]