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# THE ELECTRONIC STAFF RECORD PROGRAMME



NATIONAL HEALTH SERVICE

## ESR-NHS0174 - IMPLEMENTING THE ATTENDANCE INBOUND INTERFACE FOR A LIVE ORGANISATION

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## 1.2. REVIEWERS

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## 1.3. DISTRIBUTION

Copy No.	Name	Location
1	Library Master	NHS Document Library
2		

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## 2. CONTENTS

<b>1. DOCUMENT CONTROL.....</b>	<b>2</b>
1.1. CHANGE RECORD .....	2
1.2. REVIEWERS.....	2
1.3. DISTRIBUTION.....	2
<b>2. CONTENTS.....</b>	<b>3</b>
<b>3. INTRODUCTION .....</b>	<b>4</b>
3.1. PURPOSE OF THIS DOCUMENT .....	4
3.2. OVERVIEW .....	4
<b>4. IMPLEMENTATION PROCESS .....</b>	<b>5</b>
4.1. LOG SR .....	5
4.2. REQUEST LETTER OF COMMITMENT .....	5
4.3. NON-DISCLOSURE AGREEMENT AND DATA PROTECTION .....	5
4.4. SET-UP FTP ACCOUNT DELIVERY .....	6
4.5. SET-UP WORKFLOW NOTIFICATIONS .....	6
4.6. TESTING THE INTERFACE .....	7
4.6.1. <i>Deliver File to FTP Account</i> .....	7
4.6.2. <i>File Received in FTP Account</i> .....	8
4.6.3. <i>Workflow Notification Received</i> .....	8
4.6.4. <i>Run File Load</i> .....	8
4.6.5. <i>Reviewing the “View Output” Report</i> .....	9
4.7. SR CLOSURE .....	10
4.8. ONGOING SUPPORT .....	10
4.9. INTERFACE SUPPORT WEBSITE.....	10
<b>5. APPENDICES.....</b>	<b>11</b>
APPENDIX I: IMPLEMENTATION PROCESS FLOW .....	11
APPENDIX II: EXAMPLE LETTER OF COMMITMENT .....	12
APPENDIX III: PURCHASE ORDER DETAILS.....	13
APPENDIX IV: SUMMARY OF INTERFACE CHARGES 2013/14.....	14
APPENDIX V: INTERFACE FILE TRANSPORT PROCESS .....	15
APPENDIX VI: EXAMPLE OF SUMMARY REPORT .....	16
APPENDIX VII: FTP PROTOCOL .....	17
APPENDIX VIII: CONTACTS .....	17

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## **3. INTRODUCTION**

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### **3.1. PURPOSE OF THIS DOCUMENT**

To provide guidance to an organisation implementing the Generic Attendance Inbound Interface. This document outlines the process that the NHS Organisation Implementation Lead, NHS ESR Commercial Team, NHS ESR Systems Integration Team and McKesson will follow in order to achieve a successful implementation.

### **3.2. OVERVIEW**

ESR receives data via the Generic Inbound Attendance Interface from external systems. The Interface can accept most types of non-recurring elements that can normally be entered into ESR against an Assignment.

The Interface file should include details of all non-recurring elements that are to be paid in a particular pay period.

Wherever possible, any proposed changes to the format of the interface file will be notified to sites three months prior to the changes being implemented. It is the responsibility of the NHS Organisation to inform their supplier of the proposed change.

Appendix I gives an overview of who takes responsibility for the various steps in the implementation process.

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## 4. IMPLEMENTATION PROCESS

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### 4.1. Log SR

A minimum lead time of 4-6 weeks is required prior to the first interface file being processed in ESR. If a site visit by the supplier is planned and test files are required for this date then the NHS ESR Systems Integration Team must be informed. If this visit is within the first 6 weeks of the implementation then it may be that the interface may not yet be available.

Once an NHS Organisation decides it requires the interface, a Service Request (SR) must be logged on the ESR Service Desk. The HR or Payroll Lead for the NHS Organisation can usually do this.

The text of the SR should contain the following reference –

*“Request the set-up of the Attendance Inbound Interface for NHS Organisation **nnn**. The NHS Organisation will be loading the Interface using the **xxx** system. Please pass this call to ESRNHSINT”.*

~ Replace **nnn** with the 3 digit ESR VPD number that is associated with the NHS Organisation.

~ Replace **xxx** with the name of the attendance system you are using.

Once the SR has been logged, the Service Desk team will pass the call to the NHS ESR Systems Integration Team who will continue with the implementation plan.

Once the SR is received, the NHS ESR Systems Integration Team will agree with the NHS Organisation the timescales for the implementation. The NHS Organisation will be added to the implementation schedule. If the implementation is delayed by the NHS Organisation or supplier and has to be rescheduled then the next available slot will be allocated by the NHS ESR Systems Integration Team. Implementations usually take between 4-6 weeks.

### 4.2. REQUEST LETTER OF COMMITMENT

The NHS ESR Systems Integration Team will request a Letter of Commitment and Purchase Order from the NHS Organisation. This letter is an agreement from the NHS Organisation, that the NHS Organisation accepts the implementation and annual support charges for this interface. The NHS ESR Systems Integration Team must be in receipt of this letter before the implementation process can begin.

The NHS ESR Systems Integration Team will be able to assist the NHS Organisation with the letter by providing a template. An example of this Letter of Commitment can be found in Appendix II. Purchase Order details can be found in Appendix III.

The NHS ESR Systems Integration Team can also supply a copy of the standard terms and conditions associated with this interface.

### 4.3. NON-DISCLOSURE AGREEMENT AND DATA PROTECTION

Where interface files or specification are generated from a 3rd Party Supplier system, there must be a Non-Disclosure Agreement (NDA) in place between ESR and the relevant 3rd Party Supplier.

Based on the information in the SR, the NHS ESR Systems Integration Team will check to see if there is already an NDA in place with the 3rd Party Supplier. If this is not already in place, the NHS ESR Systems Integration Team will require the NHS Organisation to supply contact details for the 3rd Party Supplier. The ESR NHS Commercial Team will then arrange for the NDA to be put in place.

Once the NDA is in place, the NHS ESR Systems Integration Team will be able to share the interface specifications with the 3rd Party Supplier.

Where data is to be held or processed by the 3rd Party Supplier, it is the responsibility of the NHS Organisation to ensure that there is adequate cover for Data Protection purposes.

## 4.4. SET-UP FTP ACCOUNT DELIVERY

Once the SR, Letter of Commitment and NDA (where applicable) has all been received, the NHS ESR Systems Integration Team will pass the SR to McKesson for configuration.

Before the SR is passed to McKesson, the NHS Organisation should supply one or more e-mail addresses that the NHS Hub will use to acknowledge receipt of the file.

The McKesson Technical Team will then set-up an ftp account on the NHS Interface Hub where the NHS Organisation can deliver the attendance interface files to. If there are any issues with connectivity to the ftp account, the McKesson Technical team and the NHS ESR Systems Integration Team will work directly with the NHS Organisation to resolve the issue. It usually takes around 5-10 working days for the ftp account to be set-up.

The NHS ESR Systems Integration Team will provide the ftp location, username and password to the NHS Organisation and check that they can log on.

## 4.5. SET-UP WORKFLOW NOTIFICATIONS

Every hour, a process runs in ESR that checks for new Time and Attendance (T&A) files. For each new file a workflow notification is sent to the relevant Payroll Super Admin users, to inform them that the new file is ready for processing.

To set up workflow notifications the NHS Organisation first need to ensure the employee receiving the notification is set up correctly. In Local HRMS Systems and User Admin > Set-up Users, find the employees user name and ensure the “Person” field on the top right is populated by the correct name. It is the “Person” field that gets picked up by the workflow notifications. Ensure the effective date is correct.

Next, (Step 1) go to Local HRMS Systems and User Administration > Maintain Roles. Ensure the effective date is correct. Next, (Step 2) select “Payroll Super Admin” enter (Step 3) the employees name into the “Person” box and tick the (Step 4) ‘Enabled’ box. Save this form.

There must be a person set-up to receive the workflow in order for the interface to work. The person configured to receive the workflow must also be present on the payroll. In addition to the workflow configuration, the NHS Organisation should supply one or more e-mail addresses that the NHS Hub will use to acknowledge receipt of the file, as shown in appendix IV.

The screenshots illustrate the steps to set up workflow notifications in the Local HRMS User Administration system:

- Step 1:** The 'Maintain Roles' window is shown. The 'Setup Users' option is selected in the left-hand menu. A red arrow points to the 'Maintain Roles' option in the menu.
- Step 2:** The 'Maintain Roles' window is shown. The 'Payroll Super Admin' role is selected in the list. A red arrow points to the 'Payroll Super Admin' role.
- Step 3:** The 'Maintain Roles' window is shown. The 'Person' field is populated with the employee's name, 'Leena01, Mrs. Vasan'. A red arrow points to the 'Person' field.
- Step 4:** The 'Maintain Roles' window is shown. The 'Enabled' checkbox is ticked. A red arrow points to the 'Enabled' checkbox.

## 4.6. TESTING THE INTERFACE

There is no test environment available to use for testing other than the production ESR system. The NHS Organisation should adopt an incremental test process, starting with a single transaction for a single element type. This single transaction interface file should be processed into ESR, assuming it is successful the test can then be repeated using a wider range of data.

The NHS Organisation should ensure that the “Unload File” process is completed for every file that is actually not required to make payments.

### 4.6.1. Deliver File to FTP Account

Once the workflow notifications have been set-up, the NHS Organisation should then deliver an attendance file to the ftp account that was provided to them by the NHS ESR Systems Integration Team.

Files will be named using conventions given below. Some of the constituent parts of the file name correspond to data items contained within the file header record.

```
TA_TTT_SYS_PRYNN_99999999.DAT
```

Where:

TA	Constant 'TA' denoting 'T&A Element'
TTT	NHS Organisation VPD. E.g '060' . A user can only load files associated to their designated NHS Organisation
SYS	Source System Code, e.g. 'UPT' = Universal People Time, 'MTH'= Nurse Bank. This must be unique to the relevant third-party system and have been agreed with the ESR NHS Interface Team.
PRYNN	Period Identifier P = Period Type ('M' Monthly, 'W' Weekly, etc.) R = Run Type ('N' for Normal/'S' for Supplementary) YY = Tax Year Ending, for 2001/2002 this will be 02 NN = Tax Period Number within the Year
99999999	Interface Run Sequence Number, incremented for each file
DAT	Constant 'DAT' extension denoting data file

If the source system cannot supply the Run Type, Tax Year, and Tax Period Number, then these values will be set to 'N', '99', and '99' respectively.

For example, TA\_060\_UPT\_MN0427\_00006871.DAT

NB. All characters in the file name must be supplied in upper case.

### 4.6.2. File Received in FTP Account

The NHS ESR Systems Integration Team will liaise with the NHS Organisation to check that the files have been received in the ftp account.

They will also check that the relevant NHS Organisation contact received the email from the NHS Hub acknowledging receipt of the file. An example e-mail notification is shown below.

From: ESR\_Manager@esrnhshuba.mhapp.nhs.uk  
Sent: 26 November 2007 10:56  
To: NHS Organisation.contact@sampleNHS Organisation.nhs.uk  
Subject: INFORMATION: NHS Interface Hub Time & Attendance Processing

NHS Interface Hub Time & Attendance Inbound Processing for XXX

File TA\_123\_MTH\_WN9999\_00000015.DAT has been processed by the NHS Interface Hub at  
2007/11/26 10:56:03 Target file TA\_123\_OPT\_WN9999\_00000015.DAT generated  
Recs Read : 19  
Recs Written : 19

Please do not reply to this e-mail address as it is not monitored.

If you have received this e-mail in error, please forward it to:  
ESR.Interfaces@nhs.net

### 4.6.3. Workflow Notification Received

ESR collects Generic Attendance Inbound Interface files from the NHS Interface Hub on an hourly basis. ESR loads the file into the relevant VPD and if the file passes a validation test, it creates the workflow notification referenced in Step 5.

When the Payroll Super User logs on, a pop up box will inform the user a notification is waiting. To see notifications select Payroll Super Admin > Requests > Workflow notifications.

The workflows will be displayed showing the file name that has been sent for processing. Once a notification has been opened, it is removed from the list of outstanding notifications as ESR expects the user to have then processed the file into ESR.

### 4.6.4. Run File Load

Go to "Requests > Submit Requests" and search on %attendance%. This will show a list of available attendance interface jobs:-

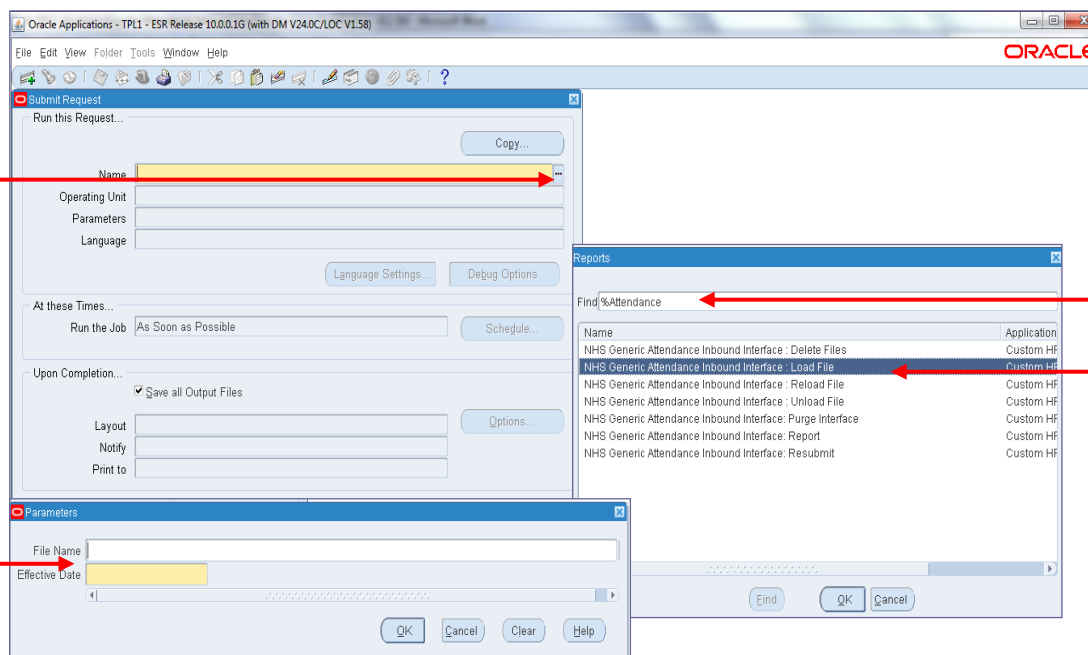
**NHS Generic Attendance Inbound Interface: Load File** – this is the job that processes the file. The parameters allow the filename to be selected, and the date to load the transactions against. See the screenshot and instructions below on how to load a file.

**NHS Generic Attendance Inbound Interface: Unload File** – this job will reverse the "Load File" process thus removing the elements from the individuals. This should be used where the wrong "effective date" has been entered during the "File Load" process, or when a wrong file has been loaded.

**NHS Generic Attendance Inbound Interface: Purge Interface** – this will clear down a file that has failed to process correctly.



**NHS Generic Attendance Inbound Interface Report** – this will reproduce the report created at the time the file was processed by the “NHS Generic Attendance Inbound Interface: Load File” job.



- 1) Click the ‘...’ button to bring up the search box.
- 2) Search %attendance and select ‘NHS Generic Attendance Interface: Load File’ and press OK.
- 3) Select the file you wish to load.
- 4) Finally click ‘Submit’ to run the job.

For normal processing, select the “Generic Attendance Inbound Interface: Load File”. Select the file name and enter a date from the week in which the work is to be paid. For testing purposes this date should be set to a period at least three months in the future. The drop down list will only show the files that have not yet been loaded. Once processed, the files will only appear again in the “Unload File” process parameters.

Investigate the source of any errors. In instances where individual transactions have been rejected, it is likely that these should be entered manually into ESR. If the wrong file has been processed into ESR, or the wrong “effective date” specified, the file can be backed out using the “Unload File” process. The parameters for “Unload File” will prompt for the Interface File ID, this is generated when the Load process runs and is shown on the “Load File” Report.

#### 4.6.5. Reviewing the “View Output” Report

Once the “Generic Attendance Inbound Interface: Load File” process has completed with a “Completed” status, use the “View Output” option to see a summary report.

The summary report gives details of the records processed by the interface, the number of rejections and for each rejection gives details of why the record was rejected. An example report is provided in Appendix VI.

Any transactions which are reported as being in error, that are required for the pay run, must either be re-submitted on another file, or entered directly into ESR.

## **4.7. SR CLOSURE**

The NHS ESR Systems Integration Team will liaise with the NHS Organisation to check that the files have processed into ESR successfully, both during any testing and for the first production run.

Once the NHS Organisation has confirmed the data was processed successfully into ESR, the NHS ESR Systems Integration Team will request that the NHS Organisation marks the SR as resolved and agrees to it being closed.

## **4.8. ONGOING SUPPORT**

Once the Initial SR has been closed, any issues arising that require support from either the NHS ESR Systems Integration Team or McKesson will require a new SR to be logged.

The NHS ESR Systems Integration Team will investigate issues to do with the content of the file.

SR's logged for this interface are dealt with to the same Service Level Agreements (SLA's) as other standard ESR SR's.

## **4.9. INTERFACE SUPPORT WEBSITE**

A website is provided to all NHS Organisations who are live on ESR with the Attendance interface. The website contains details of current versions of specifications for the interface as well as any proposed changes to the interface.

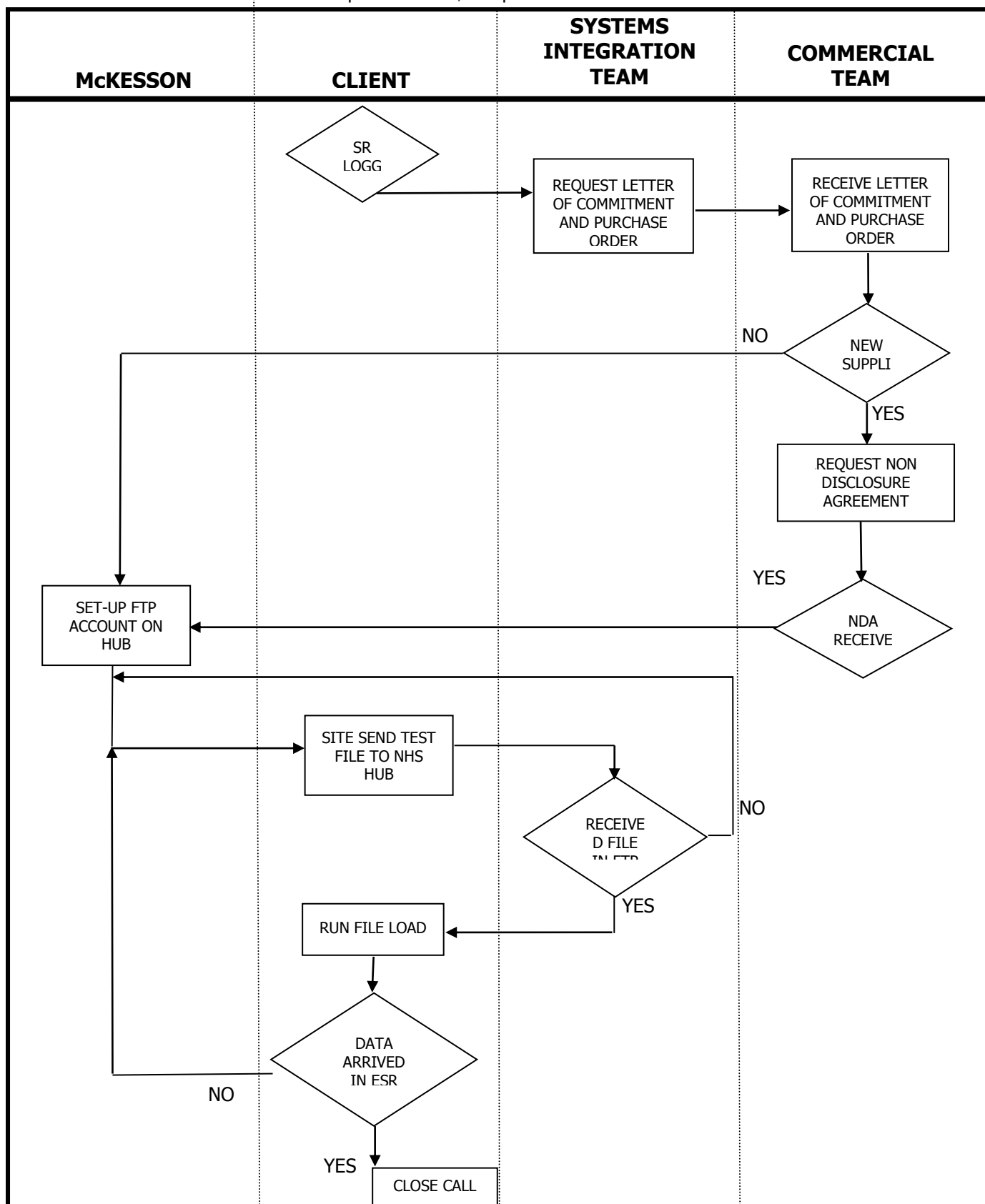
The website will also be used as a mechanism to communicate to NHS Organisations any system wide issues to do with the interface.

The NHS ESR Systems Integration Team will provide details of the address, username and password at the appropriate time during the implementation of the interface.

## 5. APPENDICES

### APPENDIX I: IMPLEMENTATION PROCESS FLOW

In order to achieve successful implementation, this process flow will be followed:-



## APPENDIX II: EXAMPLE LETTER OF COMMITMENT

NHS Electronic Staff Record  
5<sup>th</sup> Floor  
Don Valley House  
Savile Street East  
Sheffield  
South Yorkshire  
S4 7UQ

DD/MM/YYYY

Dear NHS ESR Systems Integration Team

### **Re: Implementation of Non-Core Interfaces**

***Insert Organisation Name & VPD*** would like to implement the following non-core interface/s and accepts the following costs as detailed in the charges table below with a go-live date of MM/YYYY.

Organisation Purchase Order Number: .....

Interface Type	Implementation Fee 2013/14	Annual Support Charge 2013/14*	Total
T&A Generic Attendance Inbound Interface	£865	£1205	£2070

\*Fee is pro-rata based on the above go-live date

The Organisation is committed to keeping the Interface supported by the NHS ESR Systems Integration Team beyond this current financial year. On this basis and in line with the charges detailed above, the Organisation accepts the future support costs associated with the interface beyond the financial year 2013/14. The charges run from April 1<sup>st</sup> to March 31<sup>st</sup> every year and will be subject to RPIX uplift on an annual basis.

If for whatever reason the Organisation wishes to cease the utilisation of the Interface they should raise a Service Request (SR) via the ESR Service Desk. Termination of the interface will require a 1 month notice period in writing from the Organisation to the NHS ESR Systems Integration Team. The Organisation also accepts that it will be liable for any interface support charges incurred up to and including the date at which the interface is switched off.

Responsibility and liability for using this Interface rests with the Organisation and Supplier. The Organisation will be responsible for the quality of the data held in ESR be it keyed by a user or entered via the Interface route.

Yours sincerely

***Signature***  
***Title***  
***Telephone number***

## **APPENDIX III: PURCHASE ORDER DETAILS**

### **NHS Electronic Staff Record**

5th Floor  
Don Valley House  
Savile Street East  
Sheffield  
South Yorkshire  
S4 7UQ

Purchase Orders should be made out to the "NHS Electronic Staff Record.

The NHS Electronic Staff Record bank details for receiving income are as follows:

Bank Name: Citibank  
Bank Address: 25 Canada Square, Canary Wharf, London, E14 5LB  
Account Name: GBS RE NHSBSA Hosted  
Sort Code: 08 33 00  
Account Number: 12 53 51 73

VAT is not applicable when charging other NHS Organisations.

**Invoice Queries:** [ESR.interfaces@nhs.net](mailto:ESR.interfaces@nhs.net)

## APPENDIX IV: SUMMARY OF INTERFACE CHARGES 2013/14

As a result of additional efficiencies in processing and support by the NHS ESR Systems Integration Team, the charges for Generic Non-Core Interface Implementations & Support have been held for the financial year 2013/2014.

### Implementation of Initial Instance of Non-Core Interfaces at a VPD

Interface	One-Off Implementation Fee	Annual Support Fee (per annum)
Generic Absence Inbound	£970	£1205
Generic Attendance Inbound	£865	£1205
Generic Outbound NHS Store Interface	£865	£1415
Generic Occupational Health Outbound	£525	£680
SMART Outbound	£865	£1415

### Implementation of Additional Instances of Non-Core Interfaces at a VPD

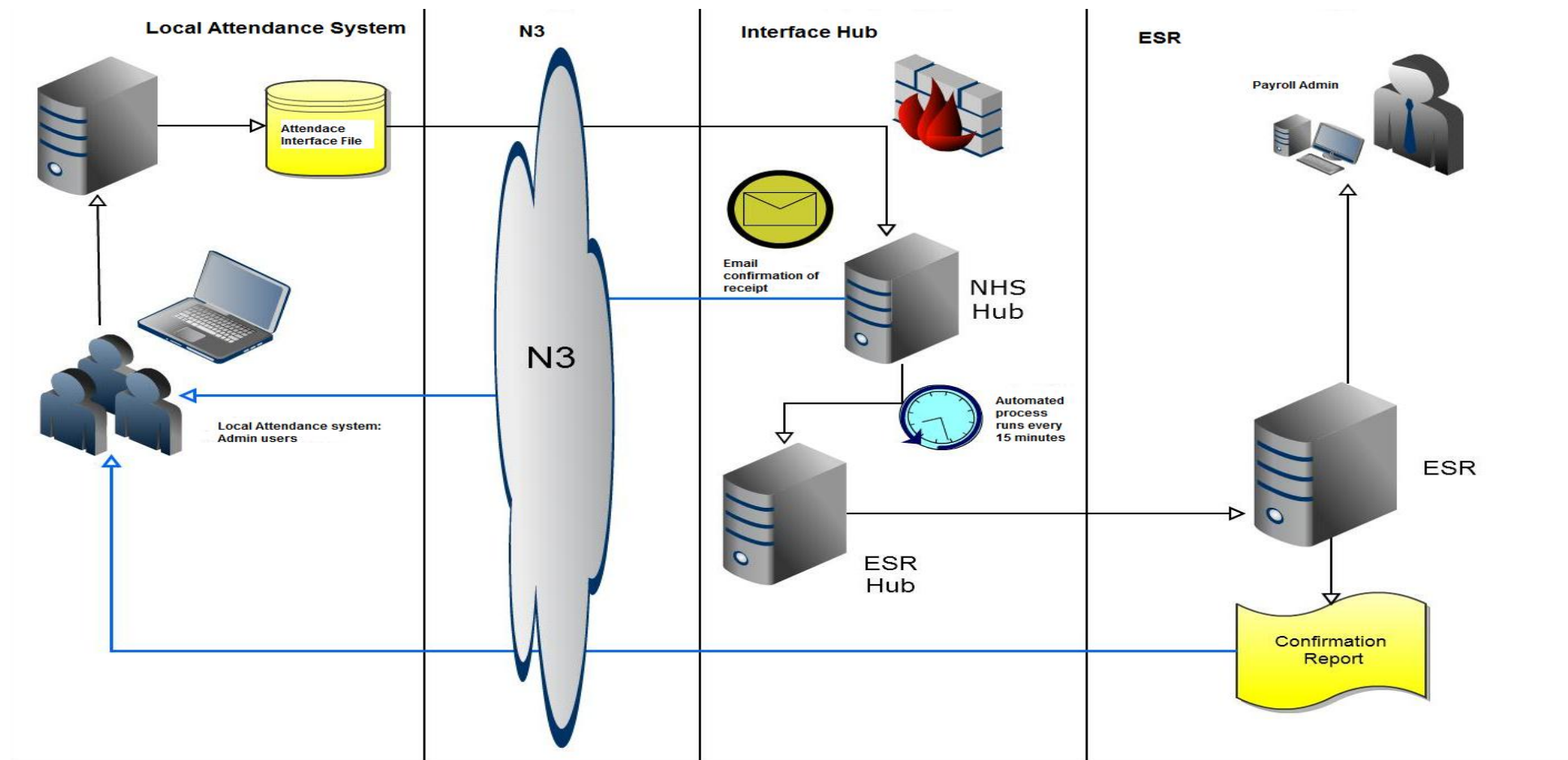
Interface	One-Off Implementation Fee	Annual Support Fee (per annum)
Generic Absence Inbound	£400	£200
Generic Attendance Inbound	£400	£200
Generic Outbound NHS Store Interface	£500	£260

### Implementation of Bespoke Interfaces

Interface	One-Off Implementation Fee	Annual Support Fee (per annum)
Bespoke Outbound Interface	£1265	£1615

## APPENDIX V: INTERFACE FILE TRANSPORT PROCESS

The following schematic shows the flow of the Attendance interface file from the local attendance system, through the NHS and ESR Interface Hubs into the ESR system. The schematic also shows where in the process the e-mail confirmation of receipt and the confirmation report are produced.



## APPENDIX VI: EXAMPLE OF SUMMARY REPORT

### NHS Generic Attendance Inbound Interface Report

Source System Code :EXP  
Interface File Id :12345  
Interface File Name :TA\_123\_EXP\_MN9999\_00000060.DAT

#### Interface Summary =====

Interface Status :Import Valid Lines - Completed with Interface Errors

Number of Lines Successfully Imported :5  
Number of Lines with Validation Errors :4  
Number of Lines with Import Errors :1

#### Interface Detail =====

Record Type	Organisation	Assignment Number	Employee Name	Error Message
Fail	123 CO Electronic Staff Record Soh	11223344	Lloyd, Henry Paul	Cost Allocation Keyflex is Invalid
Fail	123 CO Electronic Staff Record Soh	12345678	Lloyd, Henry Paul	Cost Allocation Keyflex is Invalid
Fail	123 CO Occupational Health Soh	11122233	Paige, Jennifer Liz	API Error: Claim Date is invalid for this tax
Fail	123			Invalid Assignment Number
Fail	123			Invalid Assignment Number
Success	123 2D Liver Donor Co-Ord	11112222	Flintoff, Fred	
Success	123 3D Speech Therapy Qemc	44556677	Parr, Katherine Jane	
Success	123 4B BPS Qemc	12341234	Price, Katie Jordan	
Success	123 4B Phlebotomy Qemc	43214321	Parsons, Andrew	
Success	123 4C Breast Screening Unit Soh	87654321	Mouse, Mickey	



## **APPENDIX VII: FTP PROTOCOL**

NHS Interface Hub:-

Production: esrnshub.mhapp.nhs.uk 10.129.117.11

Protocols available for sending:-

FTPS: Passive only (Port 21 and high port range 32768-65535). The high port range needs to be explicitly allowed through firewall due to the encryption.

Firewall Permission (for file delivery):-

If the delivery IP address is not N3 – a trust will need to allow 194.176.105.0 through to 194.176.105.8.

If the delivery IP address is on N3 – a trust will need to allow:

- 10.129.117.9
- 10.129.117.10
- 10.129.117.11

Please note – the NHS Interface Hub should be accessed via an FTP Client and not Internet Explorer.

## **APPENDIX VIII: CONTACTS**

### **NHS ESR Systems Integration Team**

Don Valley House

5th Floor

Savile Street East

Sheffield

South Yorkshire

S4 7UQ

[esr.interfaces@nhs.net](mailto:esr.interfaces@nhs.net)

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