1. ITEM TRANSACTION MODES

PROBLEM DEFINITION	BUSINESS IMPACT	ROOT CAUSE	ACTIONS	WHO	WHEN
A. It is possible for the POCL ref data and Pathway menu hierarchy to be out of line with regard to what are valid item transaction modes. Pathway may therefore allow txns which Ref Data and TIP see as invalid	1. Invalid txns at outlet 2. Files rejected at TIP because of invalid txns	• Pathway design problem in not using ITMs explicitly • Inconsistencies in ref data in testing exacerbate problem which LRDP will reduce for live	⇒ Pathway system change to be planned/agreed ⇒ Errors in testing to be addressed by using same data (as far as possible). Manual edit on rejected files may be a temporary expedient for testing only ⇒ Review AIS to assess changes to TIP process and validation rules to allow 'invalid' txns. Assess business impact and procedures to support ⇒ Review ongoing change control process on ref data - in order to minimise risk of invalid txns	TA SR P Jones Phil Kennedy	30/11/98
B. Given Problem A, where and how do Pathway map invalid ITMs to cash account lines as they will not have a mapping for these txns ?	1. Potential missing lines on cash account	• Unknown	⇒ Assess whether and how this situation arises	P Jeram	

(Handwritten annotations in margins:)
- Risk analysis on failures
- differentiate between ITMs < NR2+ > NR2+
- SR. Ref Data differences ⇒ • needs to be in step. • what happens if we are not in step. + recovery.
- Risk Analysis → Ref. data
- unclear
- Documented + discussed as part as NR2 Solution

1. ITEM TRANSACTION MODES (continued)

PROBLEM DEFINITION	BUSINESS IMPACT	ROOT CAUSE	ACTIONS	WHO	WHEN
C. Are there other ITM ref data changes which may not be not applied at the right time or incorrectly (eg. Must a 'child' product have the same effective dates as its parent on Pathway although this may not be the case in ref data? Home care stamps may be an example)	1. Invalid txns at outlet 2. Files rejected by TIP	• Pathway design problem • Ref data change control process	⇒ Review current Pathway design and agree fixes ⇒ Review change control process	P Jeram Phil Kennedy	

2. CASH ACCOUNT MAPPINGS

PROBLEM DEFINITION	BUSINESS IMPACT	ROOT CAUSE	ACTIONS	WHO	WHEN
A. It is essential to check cash account mappings are consistently implemented between POCL and Pathway and applied at the counter. B. So far no detailed cash account mappings exercise has been carried out by Pathway and or Horizon. C. Overall checks are planned within Live Reference Data Proving but not all instances. D. Unclear what tests Pathway have or will carry out. E. MO and E2E testing is not covering all possible combinations.	Items mapped to incorrect lines may generate one or more of a range of problems including: 1. an imbalanced cash account 2. settlement errors 3. stock holding errors 4. errors in client information 5. Mis matches (errors created in CBDB) between cash account and supporting document	Pathway solution not driven directly from POCL Ref. Data: • Human intervention can cause errors in its translation • Not all required cash account mappings taken by Pathway from Ref. Data • Interface passed via 3 mediums	⇒ Ref. Data carry out full cash account mapping exercise for the POCL Ref. Data which includes internal checking to CBDB mappings ⇒ Pathway and or Horizon carry out full cash account mapping exercise for possible combinations ⇒ Develop and test procedures for the testing of ongoing changes which effect cash account mappings		

[Done before E2E + Model Office .]

Changes to Ref Data

3. MIGRATION TOOLS AND PROCESS

PROBLEM DEFINITION	BUSINESS IMPACT	ROOT CAUSE	ACTIONS	WHO	WHEN
A. When migrating a manual office (using the MiMan tool) it is not possible to: • (1) migrate non core value stock (e.g. home care stamps). • (2) migrate fixed price receipts and payments (e.g. key products including bus tickets, passports, TV licence, fishing licence and meals on wheels).	1. Only option would be to map to cash and unable to sell product	• (1) Mapping table rationalised (to avoid being excessively large) and only a single product is provided (e.g. a specific Bus ticket or a single home care stamp) which is not sold by every outlet. Since it therefore does not appear in Ref Data for that outlet, MiMan is unable to present the User with the option to migrate this specific product at this specific outlet. • (2) The Cash Account has a number of single line entries comprising several products of differing values. The Ref Data mapping is a single product. If this is fixed price, but the constituent products are of differing values (e.g. both colour and b&w TV licences) the validity rules dictated by a fixed price product are broken. It is not possible to map correctly therefore the actual quantities and values. The only way to comply with the validity rules is to input erroneous data on the Horizon system.	⇒ No code change required to MiMan ⇒ Create 5 migration specific products (for home care stamps, bus tickets, passports, TV licences, fishing licence). ⇒ Amend the Manual mapping table for MiMan ⇒ Amend the Class B Cash Account mapping. ⇒ Incorporate new parameter tables into MiMan ⇒ Amend the procedures to advise the HFSO of the action to be taken. ⇒ Establish suitable environment to test the new procedures and MiMan.	n/a G Darby G Latham GLatham S.Warwick S Grayston (E Long) T Austin	n/a 20/11/98 30/11/98 30/11/98 30/12/98 14/12/98 1/1/99

• How can we ensure that the feed two' to mo?

• Ref Data needs to change Ref data

PROBLEM DEFINITION	BUSINESS IMPACT	ROOT CAUSE	ACTIONS	WHO	WHEN
B. When migrating an ECCO office (using the MiEcco tool) it is not possible to: • migrate a product which appears on the Ecco Counter terminal Disc (CTD) but which, according to Reference Data, is not held within this outlet. • migrate non core value stock (e.g. home care stamps). • migrate fixed price receipts and payments (e.g. bus tickets, passports, TV licence and fishing licence). • migrate any discrepancies such as suspense accounts unless total balance within an office is established prior to the start of any migration.	Unable to migrate outlet	• Reference Data inaccurate (it does not identify that this outlet is selling this product). • Mapping table rationalised (to avoid being excessively large) and only a single product is provided (e.g. a specific Bus ticket or a single home care stamp) which is not sold by every outlet. Since it therefore does not appear in Ref Data for that outlet, MiEcco is unable to migrate this specific product at this specific outlet. • In the absence of suspense account migration facilities we would need to balance each complete office before migrating each stock unit which imposes unacceptable time constraints on migration.	⇒ Document requirements for mapping non-existent products, fixed price products and suspense accounts. ⇒ Code of MiEcco will be modified to map the product to the default product identified by Ecco PLU 000 (which in the first instance will be cash). MiEcco will also be modified to display these instances at the end to enable the HFSO to take action to correct Reference Data and to help with understanding what has been mapped to the default product. ⇒ Create 4 migration specific products (for uncharged receipts in and out and unclaimed payments in and out). ⇒ Amend the Ecco mapping table for MiEcco (including PLU's 000-999 in accordance with Class B Ref Data) ⇒ Amend the Class B Cash Account mapping. ⇒ Incorporate new parameter tables into MiMan ⇒ Amend the procedures to advise the HFSO of the action to be taken. ⇒ Establish suitable environment to test the new procedures and MiEcco.	S Grayston R Laking & S Warwick G Darby G Latham G Latham S Warwick S Grayston (& E Long) T Austin	25/11/98 30/12/98 20/11/98 30/11/98 30/11/98 30/12/98 14/12/98 1/1/99

4. COUNTER REPORTING

PROBLEM DEFINITION	BUSINESS IMPACT	ROOT CAUSE	ACTIONS	WHO	WHEN
A. A significant number of errors (approx 40) exist across a range of counter and office summaries and stock unit balance reports. Together these errors make it impossible at present to manage the financial position of an office	1. Internal reconciliation not possible within offices 2. Incorrect information sent to clients 3. Cannot produce balanced cash accounts	• Pathway software errors • Possibly due to spec/design errors as well	⇒ Fixes required prior to start of MOT ⇒ Errors involving more serious issues require identification and assessment if they cannot be fixed quickly.	Pathway	14/12/98

P'way haven't resolved it
assistance from
J. Meagher.

resolve client summary

Should have resolved

5. BES PROCESSING

(handwritten margin notes: "○ Work with Linda Austin from POCL TP.")

(handwritten margin notes: "Evidence to demonstrate still a fault.")

PROBLEM DEFINITION	BUSINESS IMPACT	ROOT CAUSE	ACTIONS	WHO	WHEN
A. Voided BES / EPOSS transactions are being sent to TIP with the original transaction value instead of £0.00. This is being tracked within PinICL 14575	1. Reconciliation not possible between PAS and TIP	• Pathway software error	⇒ Fix required prior to start of MOT	Pathway	14/12/98
B. POCL / TP state they are unable to reconcile the BES Summary file (BARSF) to PMSR101 section 1 'Total Encashed Payments' as this file includes 'Suspended' encashed payments, i.e. those payments which have been suspended by PAS and not passed to CAPS due to 'DIDVR' errors etc.	1. Apparent reconciliation difference	• ICL Pathway believes this is working to specification, as the encashments themselves have taken place. It is important that POCL / TP reconcile this file to Section 3 of PMSR101 'Adjusted Total Encashed Payments', and not to Section 1	⇒ POCL to comment on whether spec is as required	POCL	30/11/98
C. Record/file rejections by TIP are also causing discrepancies with PAS	1. Cannot reconcile	• Various - see other problems.	⇒ Pathway to investigate	Pathway	30/11/98
D. PMSR report differences - various	1. Difficulties in reconciliation	• 9 of 24 incidents have been attributable to the testing environment	⇒ Pathway to complete investigation of other incidents	Pathway	30/11/98
E. One fallback and recovery incident was generated during E2E.(This required the clerk to input a different amount into the recovery screen at the counter than from the value encashed by the PCHL). In doing so, this should have created a genuine fallback and recovery exception and reported within report PMSR115, as the BES / EPOSS value posted to TIP should equate to the value recovered by the clerk and value posted to PMSR should equate to the value encashed by the PCHL. In practice, the value posted to TIP equated to the value encashed by the PCHL, therefore no difference was identified.	1. Invalid accounting for exceptions	• Pathway software error	⇒ This is being tracked within PinICL 17260 and is thought to be due to a problem with the exception indicator within the Oracle tables. *Pathway to sort out*	Pathway	30/11/98

6. REFERENCE DATA

PROBLEM DEFINITION	BUSINESS IMPACT	ROOT CAUSE	ACTIONS	WHO	WHEN
A. In the same way that ITMs could, during live running, fall out of synchronisation between TIP and Pathway so could office code versions (aka organisational unit versions). Although current procedures are designed to minimise the likelihood of this happening, it is still a possibility. Two types of error may occur at TIP validation: • those in which the incoming record fails validation because of fundamental processing faults in the Pathway system • those which fail because of known limitations in the end-to-end design of Ref. Data (of which office code versions is one example).	1. High level of disruption at TIP interface and throughout end-to-end accounting and reconciliation process	• Flaws in the end-to-end design which may be traced to design assumptions that have since proven to be false.	⇒ The office code version problem is in resolution. It has been agreed by TIP, as minuted by Bruce Talmage on 11 November, that the only viable way to deal with errors resulting from known Reference Data inconsistencies across Pathway and TIP in the live environment will be for the TIP interface to accept the record/s in error, overriding or bypassing the rejection process as necessary. This will require a CR to be raised. Until that CR has been accepted, the current practice throughout testing of rejecting and amending files must continue, although this solution is not appropriate beyond testing. (The longer term end-to-end design issues must also be addressed – but this activity is not so time critical).	S. Rist	
B. There is the possibility that product attributes will also become out of step between Pathway and TIP, in much the same way as ITMs or office code versions. Horizon testing currently understands that Pathway correctly apply the effective dates for the application of changes and that this should not, therefore, be an issue.[DN - this needs to be confirmed with both Pathway and TIP] Should it in fact be an issue, this would again be defined as a known limitation in the end-to-end design (see above).	1. High level of disruption at TIP interface and throughout end-to-end accounting and reconciliation process	• Flaws in the end-to-end design which may be traced to design assumptions that have since proven to be false.	⇒ Until the product attribute problem is confirmed to exist and more clearly understood, it is inappropriate to assign actions.		

linked into reference data.

PROBLEM DEFINITION	BUSINESS IMPACT	ROOT CAUSE	ACTIONS	WHO	WHEN
C. There is the possibility that different sets of Ref Data are being applied across Pathway and TIP during the test phases. Such a situation would generate errors as a result of inconsistencies, would potentially hide other problems and invalidate the objectives achieved in the test runs. There is no implication that a specific set of data is required in any given test phase (eg. That pre-proven live reference must be used across MOT and E2E Final), although this factor will be considered as part of the detailed re-plan of the test activity moving forward. • A second part of this issue is that the scope of testing does not currently allow the procedures for keeping Pathway and TIP aligned in terms of Ref Data, during live running, to be proven.	1. High level of disruption at TIP interface and throughout end-to-end accounting and reconciliation process	• Flaws in the end-to-end design which may be traced to design assumptions that have since proven to be false.	➡ Versions and dates of Ref Data must be explicitly checked and verified across Pathway and TIP to ensure that the same versions are in use on each MO/E2E test environment. NOTE: ➡ The viability of MO/E2E for proving the maintenance of alignment of Ref Data across TIP and Pathway must be examined.		

↳ ➡ *use agreed versions of Ref. Data.*

HORIZON TESTING - KEY PROBLEM AREA ANALYSIS AND ACTION PLAN 　　　　10 　　　　17/11/98

7. FILE DELIVERY

PROBLEM DEFINITION	BUSINESS IMPACT	ROOT CAUSE	ACTIONS	WHO	WHEN
A number of problems exist at a technical operational level in transferring and accepting files between Pathway and TIP over and above the data accuracy within the files : A. Invalid formats and integrity check failures on dates and totals B. Delivery not within the required 'time' slots which leads to errors on which 'counter day' is being processed C. Long delays in file delivery D. Manual edits required to get files through	1. Day to day operation of the system will become difficult to manage. 2. Potential for Pathway and TIP to become more and more out of step. 3. Reconciliation difficult to achieve.	• E2E2 is a test environment that was not expected to run overnight. Many of the problems in this phase were created by running the overnight processing the following day, but with the clock set to real time (ie 8am). • The TPS database was set-up with an incorrect date. This caused a delay and rejection of TIP files produced during the first week until it was diagnosed and corrected. • The FTMS system failed to work correctly and had to be bypassed manually. This manual transmission of files was not performed at the correct point in the Maestro schedule and was delayed until the following morning, therefore falling outside the agreed time slots. • Files were rejected by TIP and manually edited in an attempt to allow TIP to process the data through to the back end systems whilst discussions (e.g. ITM) progressed in parallel.	⇒ Further checks are to be included in the system set-up scripts to ensure all dates are correctly set. ⇒ FTMS was inoperable during MOR3 because of a problem found in the Humingbird software. A patch has been received and tested and will now allow the correct transmission of data. This will allow the TIP files to be sent out at the correct point in the overnight schedule, as built into the Maestro schedule.	Pathway Pathway	14/12/98 14/12/98

gateway

Service agreements

97% would be acceptable

SLA

7. FILE DELIVERY (contd.)
NOTE:
Whilst it is accepted that there were some software issues in the production of the TIP files which led a TIP rejection, this was a minority -

28% of files rejected

Of the 27 files rejected by TIP:

1   13 files rejected for invalid date, caused by TPS db vhatabase set-up error. This was corrected on test date 17/11 after which all files should have the correct date
2   4 files rejected for invalid organisation code/version number
3   3 files rejected for missing mandatory data field
4   4 files rejected for invalid Item Transaction Mode (but this is valid according to reference data)
5   1 file rejected for duplicate OTX record
6   1 file rejected for incorrect/duplicate end of day marker

Rejections 2 and 4 will be discussed at the Horizon led workshop on the 19/11.

8. HAPS DIFFERENCES

PROBLEM DEFINITION	BUSINESS IMPACT	ROOT CAUSE	ACTIONS	WHO	WHEN
A. There are inconsistencies in the data being received and reported within the Pathway, HAPS and TIP domains although they should all be derived from the same source transactions.	1. It will not be possible to reconcile the PO with HAPS and TIP.	• During E2E2 and MOR3 Pathway has not produced the APR reports. This is a process operated by the Business Support Group that we have failed to put in operation. This is designed to assist the recognition of potential reconciliation issues prior to the issue of files to HAPS and TIP. These reports are now being produced for MOR3, but this will not help where we are today. • Investigations are continuing but there appears to be a problem when Harvesting the APS data. This has not been experienced during System Testing and must be resolved.	⇒ The Operational procedure for producing APR reports must be put in place. ⇒ The 'Harvesting' problems in E2E/MOR must be resolved and corrected. ⇒ A shorter, more controlled, dedicated reconciliation test should be performed.	Pathway Pathway/ Horizon	14/12/98 December