

Transaction Information Processing (TIP) Project Interim TIP Working Papers

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Post Office Counters Ltd

Transaction Information Processing (TIP)
Project

*Working Papers for the Interim TIP
Business Case*

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Concurrences

Operational

Technical

Financial

Strategic

SUNK COSTS

The Project has incurred sunk costs to the 13 November 1996 as follows:

Cost Area	£k
Prior to the Prototype Phase	829.0
Prototype Phase	1547.8
Total Sunk Costs	2376.8

Prior to the Prototype Phase

The sunk costs prior to the Prototype phase are stated on the current MaPEC authority P3461 serial no. 30689 as £829.0k non-recoverable.

Prototype Phase

The costs of the Prototype Phase to 13 November 1996 (based on a Project cost forecast made on 3 October 1996) are £1547.8k.

Cost Area	£k
Capital	55.0
Revenue	
POCL Staff	333.7
External Staff	945.7
iT	169.9
Other Non-Staff	43.5
TOTAL	1547.8

Summary of Options

The following table gives a brief outline of the four options for consideration :-

*Ignore - as
discounted not
not considered
at this
stage.*

Option	Description
A	<p><u>CTP BES Development</u></p> <p>An alternative (CTP) development to provide a bespoke interface directly into CBDB for automated benefits encashment data only and retain cash account for all other transactions.</p> <p>Net (Cost) - (£215.0k)</p>
B	<p><u>TIP BES Development</u></p> <p>An alternative TIP development to provide a bespoke interface directly into CBDB for automated benefits encashment data only and retain cash account for all other transactions.</p> <p>Net Cost/Benefit - Nil</p>
C	<p><u>TIP BES & Cash Account Development</u></p> <p>A TIP development to provide a bespoke interface directly into CBDB for cash account data and automated benefits encashment data.</p> <p>Net Benefit - £72.9k</p>
D	<p><u>TIP Interim Development</u></p> <p>A TIP development to provide a bespoke interface directly into CBDB that is based on receiving detailed transaction level data from Pathway.</p> <p>Net Cost - £(66.4k)</p>

Key :-

CTP - Client Transaction Processing (Processing Systems Transition Team)

CBDB - Counters Business Database

BES - Benefits Encashment System (a part of the Pathway system)

TIP - Transaction Information Processing

PATHWAY - Private Finance Initiative Consortium developing the outlet system.

Transaction Information Processing (TIP) Project

Interim TIP Working Papers

OPTION	DESCRIPTION	BENEFITS	£(k)	COSTS	£(k)	NET (£k)
A	TIP BES Development	1. TIP Developing BES System	Nil	Capital	45.0	
				Development	35.0	
				Database conversion	20.0	
				Staff Costs	45.0	
				Data Collection & Operational Testing	50.0	
				Software Maintenance	20.0	
					215.0	(215.0)
B	TIP BES Development	1. TIP Developing BES System	182.2	POCL Staff	36.6	
				External Staff	120.3	
				System Support Costs	16.9	
				Non-Staff	8.3	
			182.2		182.2	(NIL)
C	TIP BES and Cash Account Development	1. TIP Developing BES System 2. Cash Account Keying 3. Cash Account Processing Resource	182.2 150.4 36.6	POCL Staff	59.4	
				External Staff	195.6	
				System Support Costs	27.5	
				Non-Staff	13.6	
			369.2		296.1	72.9
D	TIP Interim Development	1. TIP Developing BES System 2. Cash Account Keying 3. Cash Account Processing Resource 4. Client Benefits	182.2 150.4 36.6 20.0	POCL Staff	91.5	
				External Staff	300.9	
				System Support Costs	42.3	
				Non-Staff	20.9	
			389.2		455.4	(66.4)

Summary of Costs and Benefits

434.7
↓

Summary Of Benefit Descriptions

Benefit	Option A	Option B	Option C	Option D
1. CTP/TIP Developing BES System	Nil	182.2	182.2	182.2
2. Cash Account Keying			150.4	150.4
3. Cash Account Processing Resource			36.6	36.6
4. Client Benefits				20.0
TOTAL	NIL	182.2	369.2	389.2
w/p reference	10	13	17	24

1. This benefit is generated as a result of it being a minimum requirement to take Benefits Agency encashment (BES) data only from the Pathway system and process it to enable the reconciliation of automated transactions for settlement to the client until Full TIP is implemented. i.e. at least either Option A or Option B have to be adopted.

Because of this minimum requirement each option avoids the cost of doing one or other of these two options as an alternative solution.

2. These benefits arise from there being a decreasing need to key Cash Accounts in the Data Processing Unit (DPU) as the Pathway system rolls out.

They have been calculated based on the total DPU staff cost adjusted for the proportion of key depressions devoted to Cash Accounts.

3. If there are less Cash Accounts then these will neither need to be prepared for the DPU (scrutinised, 'phone copies taken and batched) nor amalgamated and filed afterwards.

4. The client benefit arises from the Department of National Savings (DNS) requirement to receive transaction level data from September 1997. Without a TIP solution the files would have to be transferred to the DNS direct from Pathway. The estimated cost of doing this has been included as avoided Pathway development cost based on 22m DNS transaction per year.

Summary of Costs

Cost	Option A	Option B	Option C	Option D
1. Capital	45.0			
2. POCL Staff	* 150.0	36.6	59.4	91.5
3. External Staff		120.3	195.6	300.9
4. System Support	20.0	16.9	27.5	42.3
5. Non-Staff		8.3	13.6	20.9
TOTAL	215.0	182.1	296.1	455.4
w/p reference	10	13	21,22	28,29

1. Capital costs are attributable to the acquisition of a server on which to run the CTP BES development. There are no capital costs for Options B - D which run on the iT mainframe.

2. POCL staff are required to manage the project, manage the interfaces, develop the system and test the development.

3. External Staff are being used from both iT and Sema to ensure the partnership relationships with these suppliers and the transfer of relevant skills. They will work together on project management, analysis and design, development, testing, operational testing and ongoing system maintenance.

4. System Support costs are related to the ongoing costs of operating the developed system such as service support, contingency and disaster recovery.

5. Non-Staff costs are related to the requirements of the POCL staff.

* The breakdown of these soft costs between POCL staff, External staff and other non-staff has not been fully defined on this option.

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OPTION A**CTP BES DEVELOPMENT**

An alternative CTP development to provide a bespoke interface directly into CBDB for automated benefits encashment data only and retain cash account for all other transactions.

Summary of Costs and Benefits

Benefits	(£k)	w/p	Costs	(£k)	w/p
1. TIP Developing BES System	0	10	Capital	45.0	10
			Development	35.0	10
			Database Conversion	20.0	10
			Staff Costs	45.0	10
			Data Collection & Operational Testing	50.0	10
			Software Maintenance	20.0	10
TOTAL	0			215.0	

Benefits

There are no benefits associated with this option.

Costs

A system is currently being developed within CTP to process automated transaction data for the Pathway Initial Go-Live (IGL). These costs represent those to extend and operate the system to support the Pathway roll out beyond IGL. The costs of the CTP development assume that negligible capital cost will be incurred for the IGL release. Thereafter a server would be required and the database would have to be converted from an Access to a SQL version to expand the capacity of the system beyond IGL.

They are based on the Project Initiation Document (PID) for the CTP BES project. Additional costs have been included by the TIP Project Team as soft estimates for data collection (e.g. comms, routing), operational testing and software maintenance which were not costed in the PID.

Cost Area	£k
Capital	45.0
Development	35.0
Database Conversion	20.0
Staff Costs	45.0
Data Collection & Operational Testing	50.0
Software Maintenance	20.0
Total	215.0

Discounted Cash Flow for Option A

The following DCF statement shows how this option affects the overall TIP Project which originally revealed a Net Present Value of (£22k).

Area	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Discount Rate	1.0000	0.8929	0.7972	0.7118	0.6355	0.5674	0.5066	0.4523
Original TIP Rects/Paymts								
Capital	-55.0	-2605.4	-2045.0	-225.0	-55.0	-33.0	-68.4	1052.5
Revenue	-1175.1	-4418.0	-8551.9	799.4	6535.9	6835.9	6810.9	8061.0
Cost Adjustments								
Capital		-45.0						
Development		-35.0						
Database Conversion		-20.0						
Staff Costs		-45.0						
Data Collection & Op. Test		-50.0						
Software Maintenance			-20.0					
Net Adjusted Cash Flow	-1230.1	-7218.4	-10616.8	574.4	6480.9	6802.9	6742.6	9113.5
NPV (£k)	-1230.1	-6445.0	-8463.7	408.9	4118.8	3860.2	3416.0	4122.5
Cumulative NPV (£k)	-1230.1	-7675.1	-16138.8	-15729.9	-11611.1	-7750.9	-4334.9	-212.5

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OPTION B**TIP BES DEVELOPMENT**

A TIP development to provide a bespoke interface directly into CBDB for automated benefits encashment data only and retain cash account for all other transactions.

Summary of Costs and Benefits

Benefits (£k)		w/p	Costs (£k)		w/p
1. CTP Developing BES System	182.2	10,13	POCL Staff	36.6	14
			External Staff	120.3	14
			System Support Costs	16.9	14
			Non-Staff	8.3	15
TOTAL	182.2			182.1	

Benefits**Cost avoidance of CTP Developing BES System**

Cost Area	£k
POCL Staff	36.6
External Staff	120.3
System Support Costs	16.9
Non-Staff	8.3
TOTAL	182.2

Costs

As mentioned previously these costs represent 40% of the totals in Option D.

POCL Staff

Staff	Grade	No.	Weekly Rate (£)	No. of weeks	% of time	Total (£)
Project Manager	BPC8	1	769	23	19	3400
Testing Manager	BPC9	1	606	23	80	11200
Interface Manager	BPC9	1	606	23	34	4800
Development Manager	CM1	1	526	23	23	2800
Analysis	CM2	2	407	23	77	14400
Total						36600

External Staff

These costs are based on competitive quotes obtained from iT.

Cost Area	£k
Project Management	12.2
Familiarisation	2.8
Analysis and Design	5.8
Development	27.0
Test	15.4
Operational Test	13.7
Maintenance	31.4
Consultancy	12.0
Total External Staff	120.3

System Support Costs

These costs are based on a quote obtained from iT and are the costs of running the system once it goes live excluding maintenance costs which are included in the staff costs above. These costs are based on volume of system usage.

Cost Area	£k
Service Support	7.0
Contingency	8.7
Disaster Recovery	1.2
Total System Support	16.9

Non-Staff Costs

The non-staff cost forecasts are based on typical levels of expenditure for the number of staff. The figures represent 40% of the non staff totals for Option D.

Non Staff	Cost (£)
Training Aids/Grants	1600
Reward & Recognition	70
Computer Hardware	140
Computer Software	1800
Furniture/Fittings Maintenance	175
Telephone Rental	185
Print & Stationery	315
Travel & Subsistence	3529
Hospitality	490
Miscellaneous Other	40
Total	8344

Discounted Cash Flow for Option B

The following DCF statement shows how this option affects the overall TIP Project which originally revealed a Net Present Value of (£22k).

Area	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Discount Rate	1.0000	0.8929	0.7972	0.7118	0.6355	0.5674	0.5066	0.4523
Original TIP Recls/Paymts								
Capital	-55.0	-2605.4	-2045.0	-225.0	-55.0	-33.0	-68.4	1052.5
Revenue	-1175.1	-4418.0	-8551.9	799.4	6535.9	6835.9	6810.9	8061.0
Cost Adjustments								
POCL Staff		-36.6	32.9					
External Staff		-120.3	108.3					
System Support			-16.9					
Benefit Adjustments								
- POCL Staff		36.6	-32.9					
- External Staff		120.3	-108.3					
- System Support			16.9					
Net Adjusted Cash Flow	-1230.1	-7023.4	-10596.8	574.4	6480.9	6802.9	6742.6	9113.5
NPV (£k)	-1230.1	-6270.9	-8447.7	408.9	4118.8	3860.2	3416.0	4122.5
Cumulative NPV (£k)	-1230.1	-7500.9	-15948.7	-15539.8	-11421.1	-7560.9	-4144.9	-22.5

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OPTION C**TIP BES & CASH ACCOUNT DEVELOPMENT**

A TIP development to provide a bespoke interface directly into CBDB that is based on receiving detailed transaction level data from Pathway.

Summary of Costs and Benefits

Benefits (£k)		w/p	Costs (£k)		w/p
1. TIP Developing BES System	182.2	13,17	POCL Staff	59.4	21
2. Cash Account Keying	150.4	17	External Staff	195.6	21
3. Cash Account Processing Resource	36.6	18	System Support Costs	27.5	21
			Non-Staff	13.6	22
TOTAL	369.2			296.1	

Benefits**Cost avoidance of TIP Developing BES System**

Cost Area	£k
POCL Staff	36.6
External Staff	120.3
System Support Costs	16.9
Non-Staff	8.3
TOTAL	182.2

Cash Account Keying

The cost per Cash Account of keying is based on the fact that 73% of key depressions in the Data Processing Unit are Cash Account related. The total staffing cost of the DPU including the relatively high proportion of agency labour was £332,231 in the quarter April - June 1996 when 205939 Cash Accounts were keyed. This equates to a cost of £1.18 per Cash Account.

Example

In week ending 09/11/97 a total of 6111 office cash accounts are planned to be automated which will result in a processing saving cost of £7197 (at £1.18 per Cash Account.)

Week Ending	No. Offices Rolled Out	Cost Per Week (£)
09/03/97	40	47
16/03/97	80	94
23/03/97	120	141
30/03/97	160	188
06/04/97	200	236

Week Ending	No. Offices Rolled Out	Cost Per Week (£)
13/04/97	200	236
20/04/97	200	236
27/04/97	200	236
04/05/97	200	236
11/05/97	200	236
18/05/97	200	236
25/05/97	200	236
01/06/97	200	236
08/06/97	457	538
15/06/97	714	841
22/06/97	971	1144
29/06/97	1228	1446
06/07/97	1485	1749
13/07/97	1742	2052
20/07/97	1999	2354
27/07/97	2256	2657
03/08/97	2513	2959
10/08/97	2770	3262
17/08/97	3027	3565
24/08/97	3284	3867
31/08/97	3541	4170
07/09/97	3798	4473
14/09/97	4055	4775
21/09/97	4312	5078
28/09/97	4569	5381
05/10/97	4826	5683
12/10/97	5083	5986
19/10/97	5340	6289
26/10/97	5597	6591
02/11/97	5854	6894
09/11/97	6111	7197
16/11/97	6368	7499
23/11/97	6625	7802
30/11/97	6882	8105
07/12/97	7139	8407
14/12/97	7396	8710
21/12/97	7653	9013
28/12/97	7910	9315
Total		150396

Cash Account Processing Resource

There are costs associated with paper Cash Accounts, i.e. resource required to prepare manual Cash Accounts for the Data Processing Unit (DPU), namely scrutiny, batching and the obtaining of telephone copies if Cash Accounts are missing. Following the keying there is a further process to amalgamate Cash Accounts to produce period data and the filing. These processes occupy an element of Postal Assistant resource within Client Transaction Processing.

Three CTP Regional Cash Account teams deemed to give a fair representation, NT and East Anglia, SWW and NE were used to obtain the processing costs utilised in the table. The costings were derived by taking staff costs applicable to the above work during the period April to June 1996 inc. and dividing it by the volume of work carried out to arrive at a cost per account of 0.29p.

Example

In week ending 09/11/97 a total of 6111 office cash accounts are planned to be automated which will result in a processing saving cost of £1753 (at £0.29 per Cash Account.)

Week Ending	No. Offices Rolled Out	Cost Per Week (£)
09/03/97	40	11
16/03/97	80	23
23/03/97	120	34
30/03/97	160	46
06/04/97	200	57
13/04/97	200	57
20/04/97	200	57
27/04/97	200	57
04/05/97	200	57
11/05/97	200	57
18/05/97	200	57
25/05/97	200	57
01/06/97	200	57
08/06/97	457	131
15/06/97	714	205
22/06/97	971	279
29/06/97	1228	352
06/07/97	1485	426
13/07/97	1742	500
20/07/97	1999	573
27/07/97	2256	647
03/08/97	2513	721
10/08/97	2770	795
17/08/97	3027	868
24/08/97	3284	942
31/08/97	3541	1016
07/09/97	3798	1089
14/09/97	4055	1163
21/09/97	4312	1237

Week Ending	No. Offices Rolled Out	Cost Per Week (£)
28/09/97	4569	1311
05/10/97	4826	1384
12/10/97	5083	1458
19/10/97	5340	1532
26/10/97	5597	1606
02/11/97	5854	1679
09/11/97	6111	1753
16/11/97	6368	1827
23/11/97	6625	1900
30/11/97	6882	1974
07/12/97	7139	2048
14/12/97	7396	2122
21/12/97	7653	2195
28/12/97	7910	2269
Total		36629

Costs

Costs for this option are estimated to be 65% of Option D.

POCL Staff

Staff	Grade	No.	Weekly Rate (£)	No. of weeks	% of time	Total (£)
Project Manager	BPC8	1	769	23	31	5500
Testing Manager	BPC9	2	606	23	65	18100
Interface Manager	BPC9	1	606	23	57	7900
Development Manager	CM1	1	526	23	37	4500
Analysts	CM2	3	407	23	83	23400
Total						59400

External Staff

These costs are based on competitive quotes obtained from iT.

Cost Area	£k
Project Management	19.8
Familiarisation	4.6
Analysis and Design	9.4
Development	43.9
Test	25.0
Operational Test	22.2
Maintenance	51.2
Consultancy	19.5
Total External Staff	195.6

System Support Costs

These costs are based on a quote obtained from iT and are the costs of running the system once it goes live excluding maintenance costs which are included in the staff costs above. Costs are based on the volume of system usage.

Cost Area	£k
Service Support	11.4
Contingency	14.2
Disaster Recovery	1.9
Total System Support	27.5

Non-Staff Costs

The non-staff cost forecasts are based on typical levels of expenditure for the number of staff involved

Non Staff	Cost (£)
Training Aids/Grants	2600
Reward & Recognition	114
Computer Hardware	228
Computer Software	2925
Furniture/Fittings Maintenance	285
Telephone Rental	300
Print & Stationery	511
Travel & Subsistence	5734
Hospitality	798
Miscellaneous Other	65
Total	13560

Discounted Cash Flow for Option C

The following DCF statement shows how this option affects the overall TIP Project which originally revealed a Net Present Value of (£22k).

Area	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Discount Rate	1.0000	0.8929	0.7972	0.7118	0.6355	0.5674	0.5066	0.4523
Original TIP Repts/Paym's								
Capital	-55.0	-2605.4	-2045.0	-225.0	-55.0	-33.0	-68.4	1052.5
Revenue	-1175.1	-4418.0	-8551.9	799.4	6535.9	6835.9	6810.9	8061.0
Cost Adjustments								
POCL Staff		-59.4	53.6					
External Staff		-195.6	176.04					
System Support			-27.5					
Benefit Adjustments								
- POCL Staff		36.6	-32.9					
- External Staff		120.3	-108.3					
- System Support			16.9					
Cash Account Keying			150.4					
Cash Account Processing			36.6					
Net Adjusted Cash Flow	-1230.1	-7121.5	-10331.1	574.4	6480.9	6802.9	6742.6	9113.5
NPV (£k)	-1230.1	-6358.5	-8235.9	408.9	4118.8	3860.2	3416.0	4122.5
Cumulative NPV (£k)	-1230.1	-7588.6	-15824.5	-15415.6	-11296.9	-7436.7	-4020.1	101.8

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Discounted Cash Flow for Option D

The following DCF statement shows how this option affects the overall TIP Project which originally had a Net Present Value of (£22k).

1995/96 1996/97

Area	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Discount Rate	1.0000	0.8929	0.7972	0.7118	0.6355	0.5674	0.5066	0.4523
Original TIP Repts/Paymts								
Capital	-55.0	-2605.4	-2045.0	-225.0	-55.0	-33.0	-68.4	1052.5
Revenue	-1175.1	-4418.0	-8551.9	799.4	6535.9	6835.9	6810.9	8061.0
Cost Adjustments								
POCL Staff		✓ -91.5	82.4					
External Staff (Union !!)		✓ -300.9	270.84					
Non Staff		✓ -20.9	18.81					
System Support			✓ -42.3					
Benefit Adjustments								
- POCL Staff		36.6	-32.9					
- External Staff		120.3	-108.3					
- System Support			16.9					
Cash Account Keying			150.4					
Cash Account Processing			36.6					
Client Benefits			20.0					
				} advanced fund benefit				
Net Adjusted Cash Flow	-1230.1	-7271.5	-10191.9	574.4	6481.0	6803.0	6742.6	9113.5
NPV (£k)	-1230.1	-6492.4	-8125.0	408.9	4118.8	3860.2	3416.0	4122.5
Cumulative NPV (£k)	-1230.1	-7722.5	-15847.5	-15438.6	-11319.8	-7459.6	-4043.7	

Re base :

* adjustments to original

OPTION D**TIP Interim Development**

A TIP development to provide a bespoke interface directly into CBDB that is based on receiving detailed transaction level data from Pathway.

Summary of Costs and Benefits

Benefits (£k)		w/p	Costs (£k)		w/p
1. TIP Developing BES System	182.2	17,24	POCL Staff	91.5	28
2. Cash Account Keying	150.4	24	External Staff	300.9	29
3. Cash Account Processing Resource	36.6	26	System Support Costs	42.3	29
4. Client Benefits	20.0	27	Non-Staff	20.9	29
TOTAL	389.2			455.6	

Benefits**Cost Avoidance of TIP Developing BES System**

Cost Area	£k
POCL Staff	36.6
External Staff	120.3
System Support Costs	16.9
Non-Staff	8.3
TOTAL	182.2

Cash Account Keying

The cost per Cash Account of keying is based on the fact that 73% of key depressions in the Data Processing Unit are Cash Account related. The total staffing cost of the DPU including the relatively high proportion of agency labour was £332,231 in the quarter April - June 1996 when 205939 Cash Accounts were keyed. This equates to a cost of £1.18 per Cash Account.

Example

In week ending 09/11/97 a total of 6111 office cash accounts are planned to be automated which will result in a processing saving cost of £7197 (at £1.18 per Cash Account.)

Week Ending	No. Offices Rolled Out	Cost Per Week (£)
09/03/97	40	47
16/03/97	80	94
23/03/97	120	141
30/03/97	160	188
06/04/97	200	236
13/04/97	200	236

Transaction Information Processing (TIP) Project

Interim TIP Working Papers

Week Ending	No. Offices Rolled Out	Cost Per Week (£)
20/04/97	200	236
27/04/97	200	236
04/05/97	200	236
11/05/97	200	236
18/05/97	200	236
25/05/97	200	236
01/06/97	200	236
08/06/97	457	538
15/06/97	714	841
22/06/97	971	1144
29/06/97	1228	1446
06/07/97	1485	1749
13/07/97	1742	2052
20/07/97	1999	2354
27/07/97	2256	2657
03/08/97	2513	2959
10/08/97	2770	3262
17/08/97	3027	3565
24/08/97	3284	3867
31/08/97	3541	4170
07/09/97	3798	4473
14/09/97	4055	4775
21/09/97	4312	5078
28/09/97	4569	5381
05/10/97	4826	5683
12/10/97	5083	5986
19/10/97	5340	6289
26/10/97	5597	6591
02/11/97	5854	6894
09/11/97	6111	7197
16/11/97	6368	7499
23/11/97	6625	7802
30/11/97	6882	8105
07/12/97	7139	8407
14/12/97	7396	8710
21/12/97	7653	9013
28/12/97	7910	9315
Total		150396

Cash Account Processing Resource

There are costs associated with paper Cash Accounts, i.e. resource required to prepare manual Cash Accounts for the Data Processing Unit (DPU), namely scrutiny, batching and the obtaining of telephone copies if Cash Accounts are missing. Following the keying there is a further process to amalgamate Cash Accounts to produce period data and the filing. These processes occupy an element of Postal Assistant resource within Client Transaction Processing.

Three CTP Regional Cash Account teams deemed to give a fair representation, NT and East Anglia, SWW and NE were used to obtain the processing costs utilised in the Table. The costings were derived by taking staff costs applicable to the above work during the period April to June 1996 inc. and dividing it by the volume of work carried out to arrive at a cost per account of 0.29p.

Example

In week ending 09/11/97 a total of 6111 office cash accounts are planned to be automated which will result in a processing saving cost of £1753 (at £0.29 per Cash Account.)

Week Ending	No. Offices Rolled Out	Cost Per Week (£)
09/03/97	40	11
16/03/97	80	23
23/03/97	120	34
30/03/97	160	46
06/04/97	200	57
13/04/97	200	57
20/04/97	200	57
27/04/97	200	57
04/05/97	200	57
11/05/97	200	57
18/05/97	200	57
25/05/97	200	57
01/06/97	200	57
08/06/97	457	131
15/06/97	714	205
22/06/97	971	279
29/06/97	1228	352
06/07/97	1485	426
13/07/97	1742	500
20/07/97	1999	573
27/07/97	2256	647
03/08/97	2513	721
10/08/97	2770	795
17/08/97	3027	868
24/08/97	3284	942
31/08/97	3541	1016
07/09/97	3798	1089
14/09/97	4055	1163
21/09/97	4312	1237

Week Ending	No. Offices Rolled Out	Cost Per Week (£)
28/09/97	4569	1311
05/10/97	4826	1384
12/10/97	5083	1458
19/10/97	5340	1532
26/10/97	5597	1606
02/11/97	5854	1679
09/11/97	6111	1753
16/11/97	6368	1827
23/11/97	6625	1900
30/11/97	6882	1974
07/12/97	7139	2048
14/12/97	7396	2122
21/12/97	7653	2195
28/12/97	7910	2269
Total		36629

Client Benefits

The client benefit arises from the Department of National Savings (DNS) requirement to receive transaction level data from September 1997. Without a TIP solution the files would have to be transferred to the DNS direct from Pathway. The estimated cost of doing this has been included as avoided Pathway development cost.

The formula provided by the Automation Development Team (ADT) is:

No. of transactions * Scorecard weighting for link to clients * Price per service point

22m * 1 * 0.265 = £58300 per year

or £20000 (September to December 1997) ie £58300 * 4 / 12.

Pathway would not wish to establish links to a client for such a short time and may therefore seek an additional one-off charge to cover set up costs if they did not see the transaction related charge covering their investment.

Costs

POCL Staff

The POCL staff costs are based on the formation of a discrete POCL team devoted to Interim TIP although it will not occupy 100% of all their time as shown in Table 2. The period of work will run from mid-November to the end of April 1997. The staff numbers include four temporary CM2 recruits to the project in addition to current template. The staff rates have from been derived from information obtained from the POCL Finance Executive Management Accounts.

Staff	Grade	No.	Weekly Rate (£)	No. of weeks	% of time	Total (£)
Project Manager	BPC8	1	769	23	40	7074
Testing Manager	BPC9	1	606	23	100	27861
Interface Manager	BPC9	1	606	23	50	6969
Development Manager	CM1	1	526	23	100	12098
Analysts	CM2	4	407	23	100	37448
TOTAL						91450

External Staff

These costs are based on competitive quotes obtained from iT.

Cost Area	£k
Project Management	30.4
Familiarisation	7.1
Analysis and Design	14.4
Development	67.6
Test	38.5
Operational Test	34.2
Maintenance	78.7
Consultancy	30.0
Total External Staff	300.9

System Support Costs

These costs are based on a quote obtained from iT and are the costs of running the system once it goes live excluding maintenance costs which are included in the staff costs above. Costs are based on the volume of system usage.

Cost Area	£k
Service Support	17.5
Contingency	21.8
Disaster Recovery	3.0
Total System Support	42.3

Non-Staff Costs

The non-staff cost forecasts are based on typical levels of expenditure for the number of staff involved.

Non Staff	Cost (£)
Training Aids/Grants	4000
Reward & Recognition	175
Computer Hardware	350
Computer Software	4500
Furniture/Fittings Maintenance	438
Telephone Rental	462
Print & Stationery	787
Travel & Subsistence	8822
Hospitality	1227
Miscellaneous Other	100
Total	20861

Discounted Cash Flow for Option D

The following DCF statement shows how this option affects the overall TIP Project which originally revealed a Net Present Value of (£22k).

Area	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Discount Rate	1.0000	0.8929	0.7972	0.7118	0.6355	0.5674	0.5066	0.4523
Original TIP Repts/Paymts								
Capital	-55.0	-2605.4	-2045.0	-225.0	-55.0	-33.0	-68.4	1052.5
Revenue	-1175.1	-4418.0	-8551.9	799.4	6535.9	6835.9	6810.9	8061.0
Cost Adjustments								
POCL Staff		-91.5	82.4					
External Staff		-300.9	270.84					
System Support			-42.3					
Benefit Adjustments								
- POCL Staff		36.6	-32.9					
- External Staff		120.3	-108.3					
- System Support			16.9					
Cash Account Keying			150.4					
Cash Account Processing			36.6					
Client Benefits			20.0					
Net Adjusted Cash Flow	-1230.1	-7258.9	-10203.3	574.4	6480.9	6802.9	6742.6	9113.5
NPV (£k)	-1230.1	-6481.2	-8134.0	408.9	4118.8	3860.2	3416.0	4122.5
Cumulative NPV (£k)	-1230.1	-7711.3	-15845.2	-15436.4	-11317.6	-7457.4	-4041.5	81.0

5/10/78.8k
T

ALTERNATIVE PLATFORM

Consideration was given to the implementation of the TIP solutions on an alternative Hewlett Packard (HP) hardware platform. This is initially attractive as there would be less conversion work to achieve a production system from the prototype constructed on the same platform. The development would therefore be lower risk. However there are a number of disadvantages in a mid range solution:

- the acquisition of an HP platform is likely to involve capital expenditure which may be non-recoverable in Full TIP implementation;
- hardware leasing over a 9-12 month period equates to purchase price although it may be possible to negotiate purchase against a guaranteed trade-in for future HP purchase within POCL. This is a high probability, but the expenditure remains at risk and the process would be difficult to control between individual projects;
- the total HP capital expenditure and the associated support costs would be required regardless of the timing, duration or volume throughput of the Interim System. This is not the case with the mainframe which is pro rata to the data volume;
- the overall cost of the midrange solution for the preferred option is £155.6k allowing for a 40% recovery on a trade-in value compared with the cost of the mainframe solution which is £42.3k (see working paper).

Cost Area	£k
Operational Acceptance	24.0
Decommissioning	2.0
Hardware (including HP support)	106.0
Service Support	51.0
Data Transfer	5.0
Disaster Recovery	10.0
Total Cost	198.0
Hardware Trade In @ 40%	42.4
Net Cost	155.6

These costs are based on a competitive quote.

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Advance Funding For Full TIPOption A

In order to maintain the TIP Project Team prior to authorisation of Full TIP advance funding of £338.3k is required as follows:

Cost Area	£k	W/P
Staff	170.9	33
Non Staff	167.4	33
Total	338.3	

Staff

The remaining POCL staff are being retained to work on preparing and issuing the Full TIP Invitation To Tender. They will be required until Post Office Board approval is obtained for Full TIP (currently planned to be April 1997) when they will start work on the development of Full TIP.

Staff	Grade	No.	Weekly Rate (£)	No. of weeks	Total (£)
Project Controller	CPC	1	909	17	15453
Project Managers	BPC8	2	769	17	26146
Development Managers	BPC9	4	606	17	41208
Business Development Managers	BPC9	3	606	17	30906
Business Analysts	CM1	5	526	17	44710
Financial Analyst	CM2	1	407	17	6919
Personal Secretary	P/Sec	1	324	17	5508
Total					170850

Non Staff

There are non-staff costs associated with retaining the POCL staff above. These have been based on expenditure rates to date with adjustments for the number of staff involved and any specific one-off items not required again.

Non Staff	Cost (£)
Removal Expenses	2480
Training Aids/Grants	8000
Reward & Recognition	238
Office Equipment Maintenance	820
Computer Hardware	1550
Computer Software	7500
Furniture/Fittings	600
Furniture/Fittings Maintenance	1118
Telephone Rental	2035
Telephone Purchase	120

Non Staff	Cost (£)
Print & Stationery	2011
Travel & Subsistence	22570
Imprests	1000
Contractors	30000
Hospitality	3135
Miscellaneous Other	1000
iT	56627
Intra Business (Recharge)	21344
Market Rent	5026
Training & DG	250
Total	167424

Option B

In order to maintain the TIP Project Team prior to authorisation of Full TIP advance funding of £377.2k is required as follows:

Cost Area	£k	W/P
Staff	154.4	34
Non Staff	159.1	35
TOTAL	313.5	

Staff

The remaining POCL staff are being retained to work on preparing and issuing the Full TIP Invitation To Tender. They will be required until Post Office Board approval is obtained for Full TIP (currently planned to be April 1997) when they will start work on the development of Full TIP.

The costs have been calculated as the full cost of retaining the Project team from January to April (17 weeks) less the cost of the staff working on the interim TIP option (where relevant).

For example:

Part of the BPC8 time is occupied managing Option B, quantified as £3400 for the 23 week period from mid-November to the end of April (w/p 14). £2516 of that cost (i.e. £3400*17/23) is attributable to Option B during the period January to April and is therefore not included in the BPC8 brought forward Full TIP funding required for Option B, the calculation being $(2*769*17) - £2516 = £23630$ shown below.

Staff	Grade	No.	Weekly Rate (£)	No. of weeks	Interim TIP (17 weeks)	Total (£)
Project Controller	CPC	1	909	17		15453
Project Managers	BPC8	2	769	17	(2516)	23630
Development Managers	BPC9	4	606	17	(11840)	29368
Business Development Managers	BPC9	3	606	17		30906

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Business Analysts	CM1	5	526	17	(2072)	42638
Financial Analyst	CM2	1	407	17		6919
Personal Secretary	P/Sec	1	324	17		5508
Total					(16428)	154422

Non Staff

There are non-staff costs associated with retaining the POCL staff above. These have been based on expenditure rates to date with adjustments for the number of staff involved and any specific one-off items not required again.

Non Staff	Cost (£)
Removal Expenses	2480
Training Aids/Grants	6400
Reward & Recognition	168
Office Equipment Maintenance	820
Computer Hardware	1410
Computer Software	5700
Furniture/Fittings	600
Furniture/Fittings Maintenance	943
Telephone Rental	1850
Telephone Purchase	120
Print & Stationery	1696
Travel & Subsistence	19041
Imprests	1000
Contractors	30000
Hospitality	2645
Miscellaneous Other	960
iT	56627
Intra Business (Recharge)	21344
Market Rent	5026
Training & DG	250
Total	159080

Option C

In order to maintain the TIP Project Team prior to authorisation of Full TIP advance funding of £298.1k is required as follows:

Cost Area	£k	W/P
Staff	144.2	36
Non Staff	153.9	36
Total	298.1	

Staff

The remaining POCL staff are being retained to work on preparing and issuing the Full TIP Invitation To Tender. They will be required until Post Office Board approval is obtained for Full TIP (currently planned to be April 1997) when they will start work on the development of Full TIP.

The costs have been calculated as the full cost of retaining the Project team from January to April (17 weeks) less the cost of the staff working on the interim TIP option (where relevant).

For example:

Part of the BPC8 time is occupied managing Option C, quantified as £5500 for the 23 week period from mid-November to the end of April (w/p 21). £4070 of that cost (i.e. £5500*17/23) is attributable to Option C during the period January to April and is therefore not included in the BPC8 brought forward Full TIP funding required for Option C, the calculation being $(2*769*17) - £4070 = £22076$ shown below.

Staff	Grade	No.	Weekly Rate (£)	No. of weeks	Interim TIP (17 weeks)	Total (£)
Project Controller	CPC	1	909	17		15453
Project Managers	BPC8	2	769	17	(4070)	22076
Development Managers	BPC9	4	606	17	(19240)	21968
Business Development Managers	BPC9	3	606	17		30906
Business Analysts	CM1	5	526	17	(3330)	41380
Financial Analyst	CM2	1	407	17		6919
Personal Secretary	P/Sec	1	324	17		5508
Total					(26640)	144210

Non Staff

There are non-staff costs associated with retaining the POCL staff above. These have been based on expenditure rates to date with adjustments for the number of staff involved and any specific one-off items not required again.

Transaction Information Processing (TIP) Project

Interim TIP Working Papers

Non Staff	Cost (£)
Removal Expenses	2480
Training Aids/Grants	5400
Reward & Recognition	124
Office Equipment Maintenance	820
Computer Hardware	1322
Computer Software	4575
Furniture/Fittings	600
Furniture/Fittings Maintenance	833
Telephone Rental	1735
Telephone Purchase	120
Print & Stationery	1500
Travel & Subsistence	16836
Imprests	1000
Contractors	30000
Hospitality	2337
Miscellaneous Other	935
iT	56627
Intra Business (Recharge)	21344
Market Rent	5026
Training & DG	250
Total	153864

Option D

In order to maintain the TIP Project Team prior to authorisation of Full TIP advance funding of £277.5k is required as follows:

Cost Area	£k	W/P
Staff	130.9	38
Non Staff	146.6	38
Total	277.5	

Staff

The remaining POCL staff are being retained to work on preparing and issuing the Full TIP Invitation To Tender. They will be required until Post Office Board approval is obtained for Full TIP (currently planned to be April 1997) when they will start work on the development of Full TIP.

The costs have been calculated as the full cost of retaining the Project team from January to April (17 weeks) less the cost of the staff working on the interim TIP option (where relevant).

For example:

Part of the BPC8 time is occupied managing Option D, quantified as £7074 for the 23 week period from mid-November to the end of April (w/p 28). £5230 of that cost (i.e. £7074*17/23) is attributable to Option D during the period January to April and is therefore not included in the BPC8 brought forward Full TIP funding required for Option D, the calculation being $(2*769*17) - £5230 = £20916$ shown below.

Staff	Grade	No.	Weekly Rate (£)	No. of weeks	Interim TIP (17 weeks)	Total (£)
Project Controller	CPC	1	909	17		15453
Project Managers	BPC8	2	769	17	(5230)	20916
Development Managers	BPC9	4	606	17	(25744)	15464
Business Development Managers	BPC9	3	606	17		30906
Business Analysts	CM1	5	526	17	(8942)	35768
Financial Analyst	CM2	1	407	17		6919
Personal Secretary	P/Sec	1	324	17		5508
TOTAL					(39916)	130934

Non Staff

There are non-staff costs associated with retaining the POCL staff above. These have been based on expenditure rates to date with adjustments for the number of staff involved and any specific one-off items not required again.

	Cost (£)
Removal Expenses	2480
Training Aids/Grants	4000
Reward & Recognition	63
Office Equipment Maintenance	820
Computer Hardware	1200
Computer Software	3000
Furniture/Fittings	600
Furniture/Fittings Maintenance	680
Telephone Rental	1573
Telephone Purchase	120
Print & Stationery	1224
Travel & Subsistence	13748
Imprests	1000
Contractors	30000
Hospitality	1908
Miscellaneous Other	900
IT	56627
Intra Business (Recharge)	21344
Market Rent	5026
Training & DG	250
Total	146563