

Bringing Technology to Post Offices and Benefit Payments

REPORT ON EVALUATION OF RESPONSES TO THE SSR

AMC

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GLOSSARY

ACT	Automated Credit Transfer
ARTS	Association of Retail Technology Standards (used in context of standard data models for EPOS)
CAPS	Customer Accounting and Payments System
Card authentication	The processes and systems that support the accurate identification of cards.
Cardholder verification	The processes and systems that support the accurate identification of individuals using a card.
CIS	Counter Interface Service
CMS	Card Management Service
ECCO	Electronic Cash Registers at Counters (existing POCL system)
EPOS	Electronic Point of Sale
ESNS	Electronic Stop Notice System
IPR	Intellectual Property Rights
OSS	Operational Support Services
PAS	Payment Authorisation Service
PIN	Personal Identification Number (used in conjunction with a card to verify the cardholder)
SSR	Statement of Service Requirements
TMS	Transaction Management Service
Watermark	Trademark of Thorn Secure Science (used to support card authentication)

1. PURPOSE

- 1.1. The purpose of this report is to present to the Evaluation Board:
- (a) the Evaluation Team's findings on the proposals received from the five Service Providers in response to the Statement of Service Requirement ('SSR') issued on 13 April 1995; and
 - (b) their conclusions on the implications for shortlisting each Service Provider for detailed discussions, demonstration of products and services and draft contract negotiations with the aim of inviting best tenders.
- 1.2. The Evaluation Board are to meet on the 13 and 19 July to consider the team's findings and make the shortlist decision. Issue 1.0 of this report has been prepared for input to the meeting on 13 July.

2. SUMMARY OF EVALUATION TEAM'S CONCLUSIONS

- 2.1. The team have concluded that the Evaluation Board should select a shortlist of two or three from the following:
- BT
 - Cardlink
 - IBM
 - Pathway.
- 2.2. Section 6 sets out the main strengths and weaknesses of each of these Service Providers and Section 7 discusses the results for consideration.

3. THE EVALUATION PROCESS

- 3.1. All the Service Providers who received the SSR submitted proposals on 8 June, i.e.:
- BT
 - Cardlink
 - EDS
 - IBM
 - Pathway.
- 3.2. The evaluation was conducted according to the various papers lodged with the programme's lawyers before responses were received:
- (a) Proposal Evaluation Process (PWKP2-2, Issue 1.0, 7 June 1995);

- (b) Proposal Evaluation Model (PWKP2-3, Issue 1.0, 7 June 1995);
 - (c) Proposal Evaluation Weights (PSC 12/95 (PWKP2-6), 22 May 1995);
 - (d) Evaluation of SSR Chapter 8 - Commercial Polices and Relationships, (PWKP2-5, Draft D, 5 June 1995);
 - (e) Service Provider Risk Register (PWKP2-4, Final, 17 May 1995).
- 3.3. The members of the evaluation and facilitation teams are listed at Annex A.
- 3.4. The team met to produce its initial findings from 14 to 22 June. Each proposal was read and the principal features summarised by a 'pre-reader', and the five pre-readers presented their findings to the evaluators. Each proposal was then considered in turn by the groups responsible for evaluation under the Characteristics, Viability and Commercial criteria. In the larger Characteristics and Viability groups a minimum of two 'prime readers' were appointed for each criterion or group of criteria. They were tasked with reading in detail Service Providers' responses on particular criterion / criteria, scoring the responses individually, progressively agreeing the scores and supporting rationale among themselves and then presenting the findings to their group for quality assurance and final agreement. Requests for clarification were issued to Service Providers where appropriate.
- 3.5. After all proposals had been scored the markings were revisited and rationalised to ensure consistency of marking standards across all five Service Providers.

Sensitivity Analyses

- 3.6. The resultant scores were then processed according to the weights agreed by the Evaluation Team and Evaluation Board before the proposals were received. The scores were also subjected to a number of sensitivity analyses which are described in Annex B and summarised as follows:
- (a) giving more weight to the first objective in SSR 1.2.1 ("a fraud-free method of paying benefits ...") by effecting a 20% increase in weight to relevant criteria;
 - (b) giving more weight to the second objective ("extending automation to POCL's other client transactions ...") by effecting a 20% increase in weight to relevant criteria. This also took on board a commitment to POCL to test the effect of a change in emphasis in the lower-level weights under 1.1.1 Service Architecture;
 - (c) taking account of Mr Peaple's request to test the impact of giving more importance to roll-out than to pilot;
 - (d) picking out component scores for BA and POCL perspectives on facilities and services.

Commercial Evaluation

- 3.7. All Commercial group members read the relevant parts of all five proposals and scored the Service Providers. No weightings were attached to these criteria.

Service Provider Risk Register

- 3.8. In the course of agreeing their scores the groups also agreed their associated rationale on the score forms and where there were significant concerns or issues recorded these on Service Provider Risk Register submission forms. The rationales, concerns and issues were then collated to create the Service Provider Risk Register in respect of each proposal.

Key Strengths and Weaknesses

- 3.9. The Evaluation Team met on the 5 and 6 July to agree their overall assessments of each proposal. The outcome from these sessions was that the team cleared the outstanding points / clarifications on Characteristics and Viability and agreed the conclusions and main strengths and weaknesses presented in this report.

4. SUMMARY OF PROPOSALS

- 4.1. A summary of the main features of the proposals is given at Annex C. It is worth bringing out some detail of two of the most significant characteristics of the proposed solutions, so that the Evaluation Board can put into perspective the comments made on individual proposals in subsequent paragraphs:

- (a) the choice of a distributed or centralised solution; and
- (b) the type of card authentication and cardholder verification methods used.

- 4.2. These are discussed below.

Centralised vs Distributed

- 4.3. There is considerable semantic debate in the IT industry as to what constitutes a centralised or a distributed solution. However, in this particular context, the distinction is straightforward. In a centralised solution virtually every transaction involves data being sent from a post office to a central processing point along a telecommunications line and then data being returned from the central point to the post office. A distributed solution does not always necessitate such traffic since the data to enable the transaction to be performed is often held locally at the post office.
- 4.4. There are a number of trade-offs to be made when making a choice between the two options:
- (a) a distributed solution has advantages in terms of inherently better response times and in the ability of post offices to function independently of any central processor (and so keep working in the event of central system malfunction);

- (b) the work done within the Programme indicates lower data network costs for a distributed solution;
- (c) the system software to manage a distributed solution is more complex and, because distributed solutions have not been around for so long, is less mature than the equivalent for a centralised solution;
- (d) dealing with 'foreign' encashments (i.e. encashments at a post office other than the claimant's normal one) is more complex for a distributed solution because the task of finding the data is more difficult.

Card Authentication & Cardholder Verification

4.5. To ensure a fraud-free method of paying benefits it is necessary to ensure benefit is paid to the right person. For cards, this may be thought of in two parts:

(a) **Card Authentication**

The mechanisms for ensuring the card is the original issued and not a counterfeit card. Two strands support card authentication. Those driven by the data held on the card (e.g. on a magnetic stripe) which may be checked by the system, and those related to the design of the card in terms of the visual and tactile features (e.g. holograms, ultra-violet codes).

(b) **Cardholder Verification**

The mechanisms for confirming that the card is being used by its authorised holder. For example a signature or photograph on the card or by use of a personal identification number (PIN).

4.6. Various mechanisms are technically possible for both. These have varying degrees of effectiveness, acceptability to the cardholders and cost. The Service Providers all based their proposals on the use of a magnetic stripe card. The current standard in finance industry is for a magnetic stripe card verified with a signature; and as such probably represents the most acceptable option to cardholders. However experience shows that this is susceptible to fraud by copying the cards and forging signatures. The significant options presented in proposals were:

(a) **Watermark technology**

This technology patented by Thorn Secure Science embeds a hidden code in the magnetic stripe. This presents a good mechanism for card authentication as standard card readers and writers currently on the market cannot copy these cards.

(b) **PINs**

The use of PINs is presented as a means of supporting cardholder verification. However there are policy and public acceptability issues to be considered.

(c) **Integrated Circuit ("smart") cards**



This is a relatively new technology that allows significant amounts of information to be stored and updated on each card. The proposals recognised that this would not be a cost effective option in the short term, but should be considered for the future.

(d) Signature panel / Verification codes / Encryption

All the proposals discussed various options for making the card method of payment more secure. These will need to be taken forward during the Demonstrator.

4.7. Further discussion is provided against specific Service Providers in Section 6.

5. EVALUATION SCORES

5.1. Overall Picture

5.1.1. The overall scores for each Service Provider as agreed by the groups are shown in the following table. The Characteristics and Viability scores are weighted averages using the standard weights and are out of a total of ten, and the third column shows the number of criteria (out of a total of 170) scoring less than four, which is indicative of the level of risks.

	Characteristics	Viability	Scores < 4
BT	6.0	4.8	23
Cardlink	5.4	5.1	16
EDS	4.6	3.7	68
IBM	5.9	4.6	13
Pathway	5.1	5.5	13

5.1.2. Details of the scores for the main groups of criteria are given at Annex D. The above scores for Characteristics and Viability are used to show the positioning of the proposals on the evaluation grid in Figure 1.

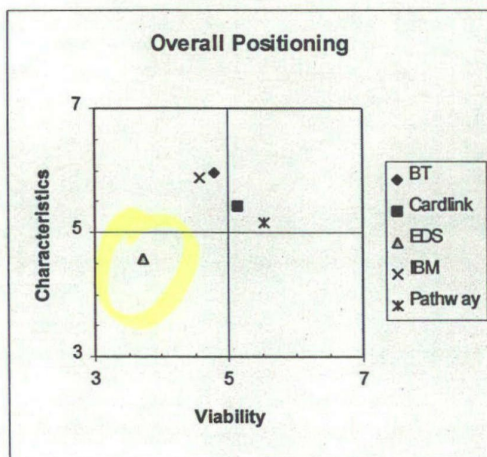


Figure 1 Overall Positioning

5.1.3. Figure 1 shows an overall picture combining all aspects of Service Providers' proposals. The position of the crossed lines at a score of five is not precise. The guidance on scores set four as the minimum acceptable, so an average score of over four would be required for a good response. Hence further inspection is needed of the underlying scores and risks before drawing any firm conclusions.

5.2. Commercial Scores

5.2.1. The commercial group scored the proposals against seven commercial evaluation criteria as shown in Figure 2.

Business Case Question Mark

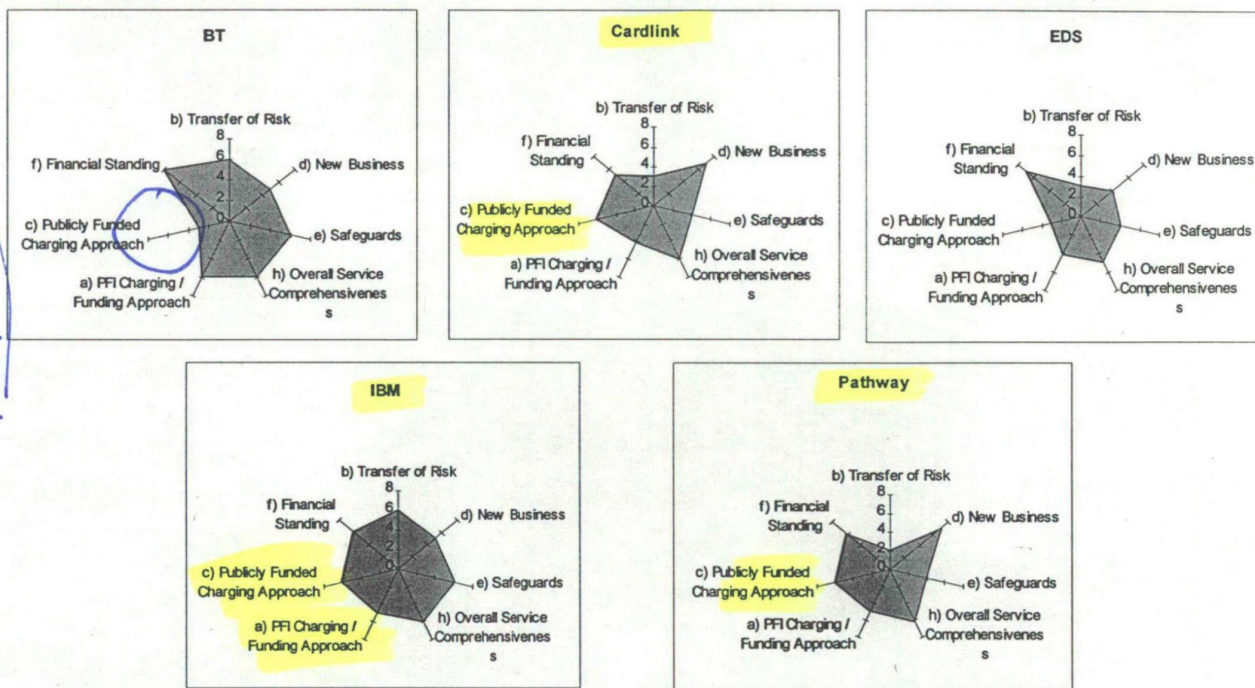


Figure 2 Commercial Evaluation

5.2.2. The guidance for scoring the commercial evaluation criteria differs slightly from that for Characteristics and Viability and is given in Annex D. Commercial issues for specific Service Providers are discussed in Section 6, and Section 8 provides a summary of the commercial findings including the assessment of the business case.

5.3. Sensitivity to Programme Objectives

5.3.1. The first two sensitivity analyses identified in section 3 are concerned with emphasising the two primary programme objectives. The results of applying these weight changes are shown in Figure 3 (details of the scores are given in Annex E).

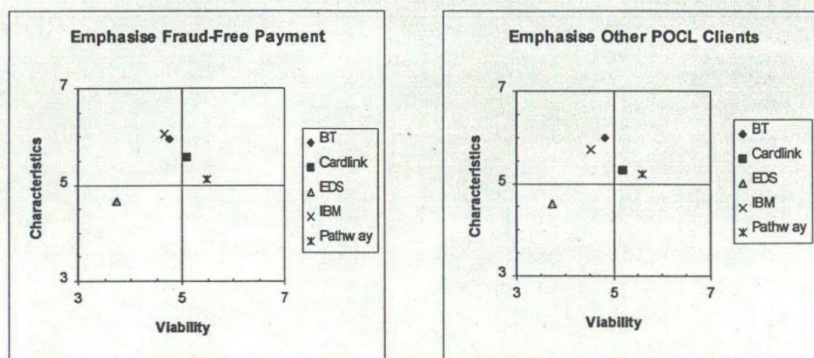


Figure 3 Sensitivity to Programme Objectives

5.3.2. As can be seen, the changes in position on the grids are minimal, and the relative positioning between proposals is largely unaffected. Similarly for the component services under Characteristics and Viability, changing the emphasis for the primary programme objectives does not change the relative positioning of the proposals.

5.4. Pilot Programme vs Roll-out

5.4.1. Similar to the programme objectives, the sensitivity test putting more weight onto roll-out and less to the pilot programme does not alter the relative positioning of the proposals. The scores are given in Annex E.

5.5. Facilities, Roll-out and Delivery

5.5.1. Returning to the standard weights, differences in positioning of the proposals can be seen when considering the first level down in the model: Facilities, Roll-out and Delivery. These are shown in Figure 4.

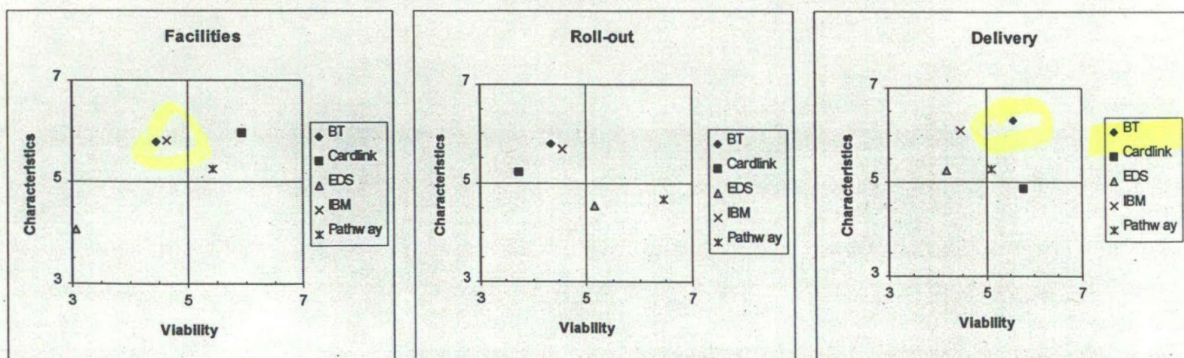


Figure 4 - Facilities, Roll-out & Delivery

5.5.2. In addition, the Viability scores shown in Figure 1 include a factor for the Pilot Programme for which the scores were as follows:

	EDS	Cardlink	BT	IBM	Pathway
Score	2.2	2.8	4.8	4.8	5.2

5.5.3. On inspection the following points are apparent:

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- (a) BT generally hold a high Characteristics position with good Viability for Delivery, but worse for Facilities and Roll-out;
 - (b) Cardlink have strong Facilities, but move around significantly for Pilot, Roll-out and Delivery, indicating need for further investigation on their services. The strong position for Facilities pulls their overall position on Figure 1 into the top right quadrant;
 - (c) EDS score poorly for Facilities, and have question marks against their Roll-out and Delivery, these having the worst Characteristics and the worst Viability respectively;
 - (d) IBM hold a consistent position for all three areas, being high on Characteristics and borderline on Viability. Thus their Viability needs further consideration;
 - (e) Pathway generally hold a middling position on Characteristics with a varying and good Viability.

NB

5.5.4. The scores in themselves do not give a clear indication of the shortlist. None of the proposals have scored particularly well and all have risks, as apparent from the number of criteria scoring less than 4. The next sections discuss the strengths and weaknesses of the proposals.

6. STRENGTHS AND WEAKNESSES

6.1. Introduction

- 6.1.1. After considering the scores and sensitivity analyses, it was concluded that no further work should be done in respect of EDS. They had fared worst in both Characteristics and Viability assessments and substantial gaps in the information provided meant that no score could be given in a number of areas. Parts of their proposal were felt by the Characteristics group to be fundamentally unacceptable in business terms and significant doubts had been raised as to the viability of what had been put forward. None of the sensitivity analyses had improved their position significantly relative to the other proposals. They also fared worst on the Commercial scoring giving no reason to suppose that their approach here was so innovative that the proposal should be revisited to see if scope for clarification existed.
- 6.1.2. At its workshop on 5/6 July, the team considered the scores produced at Section 5 in association with the most significant strengths and weaknesses of the proposals, drawing heavily on the entries identified in the Service Provider Risk Register. Their conclusions are set out below for the remaining four Service Providers.

6.2. BT

- 6.2.1. This Service Provider has a good generic and flexible approach to the CIS, but there is very little evidence of the viability of the solution or of a critical analysis of the transaction design. The audit facilities proposed are comprehensive. The EPOS package is widely used in the retail environment (15,000 positions) but there is a confused response to the provision of ECCO/EPOS type functionality. The team are concerned that the equipment proposed for the counter may not fit into the limited space.
- 6.2.2. A card with a PIN has been proposed despite the warning given in the SSR: "for these groups" - i.e., the most disadvantaged - "careful consideration should be given to the appropriateness and effectiveness of Personal Identification Numbers (PINs)". The team felt that this was a fundamental weakness in the proposal, causing related problems in areas such as:
- the transaction times at the counter would be lengthy because of the customer having to enter the PIN on each visit to claim benefit (and also when exercising the option to alter it at the counter);
 - the transaction authorisation process at the counter is weak, relying totally on an unprotected magnetic stripe and the PIN, with the system (not the clerk) making the decision to accept the card. However this Service Provider is prepared to accept the risk of fraudulent use of the card, and is also the only one to accept some risk in the area of public acceptability;

- there is a high fraud risk when the system is down as the PIN cannot be used for verification and repudiation would be a risk. Research from the finance sector suggests that there would be a large number of phantom withdrawals at such times;
 - customer acceptability would be poor both because of the physical use of the PIN and because it is suggested that the customer would be responsible for the misuse of the card and PIN, as in the USA. The team expect that this would require a change of legislation in the UK;
 - POCL are concerned that the use of the PIN would be a move away from the personal service offered at the counter;
 - no viable alternatives are proposed to the PIN; secondary features of dynamic signatures or photographs are mentioned but not proved;
 - the proposals for proxies, in particular casual agents, are considered unsatisfactory in a PIN-based system.
- 6.2.3. Technically the team had no reason to doubt that the TMS would work but very little evidence or rationale for the design was given. The plans for resilience and recovery are excellent.
- 6.2.4. While the proposal for OSS and audit trails has good potential, there are no plans for the migration of the existing services and no demonstration of the requirements for office accounting.
- 6.2.5. The PAS proposed is supported by good evidence of modelling, which gave the team confidence in the solution, and the design for financial reconciliation of benefit payments is thorough. However, the solutions for proxies and urgent payments are very weak, and the team felt that they would not be workable in practice. The proposal is subject to the constraints of all the solutions proposing centralised authorisation; and the design of PAS and CMS suggests that the two might not be readily separable if that were required in future.
- 6.2.6. The roll-out plans are very focused on POCL, with detailed plans for the physical implementation in post offices, but very little thought is given to BA (no mention of TMS, PAS) and to the migration of applications and dependencies of the systems. BT's experience and awareness of the problems of rolling out large-scale programmes is apparent in the realistic timetable and good proposals for publicity and programme communications. The response on service delivery is also strong and shows their experience and a good understanding of the issues, but the plans for the pilot are missing any indication of units of time.
- BT Commercial Issues***
- 6.2.7. The Service Provider proposes an optional data warehousing facility for TMS which could provide accounting and settlement with POCL's clients. This could be seen as a commercial threat to POCL.

Summary of BT Proposal

6.2.8. Apart from the major weakness of the use of the PIN and the other weaknesses above, the characteristics and viability of this proposal were considered to be generally good (with characteristics being the stronger) although the proposal is more thorough on the POCL aspects than on those of BA. The design of the card is fundamental to the proposed solution as it is based on an existing system used in the USA. If the decision is made that the PIN is not acceptable and an alternative design is sought in the Demonstrator, then it is not clear that an alternative solution could be offered within the available time.

6.3. Cardlink

6.3.1. This Service Provider's counter interface proposal is based on a strong underlying design and demonstrates a good understanding of POCL's business issues and the existing ECCO and automated payments systems. It uses an existing EPOS package which, although from a relatively small supplier, is widely used. The Service Provider is planning to work with the software supplier to customise it into the five generic functions, but the extent of this development is not known at this stage.

6.3.2. A robust solution is proposed for TMS using a product that is from the UK financial arena and to be implemented in a relatively short timescale.

6.3.3. The PAS proposal shows a good understanding of the business issues. The approach to CMS is comprehensive, offering a card using Thorn Secure Science's Watermark technology (a leader in card security) to support card authentication, and clearly thought out procedures for proxies and temporary token management.

6.3.4. The viability of their roll-out proposal is particularly poor and the plans do not give confidence of having been thought through (e.g. the logistics of card production, the fact that the design and build of the bespoke keyboards has not been planned). Cardlink propose an aggressive timescale for the roll-out; their approach is to complete the roll-out in 7 months, are planning a "Big Bang" approach to card issue, are bringing elements of the Operational Trial forward into the Demonstrator, and propose to sign-off the design of the card and system prior to selection. While this could produce early savings if achieved, it is not considered viable as it does not recognise Programme constraints such as availability of staff.

6.3.5. The team were concerned at potential cultural differences between Cardlink and BA/POCL. They perceived that the Service Provider intends to be a leader, not a partner, and that BA and POCL will be unable to react at the pace proposed. This may limit the time for BA and POCL consideration and acceptance of the Service Provider's deliverables; and any delay may incur contract penalties. The approach to contract transfer is generally over confident, seeing no reason why the contract would need to be transferred.

6.3.6. The proposed technical solution is well thought out. However it is subject to the constraints of all the solutions proposing centralised authorisation. Also, the decision to hold all the PAS, TMS and CMS databases on the same physical platform could make it difficult to secure separate provision of one or more of the elements later.

Cardlink Commercial Issues

- 6.3.7. It was announced at the time of submitting the proposal that Barclays were no longer to be a member of this consortium. This appeared to have had an unsettling effect on the bid; for example, the lack of availability of Barclays' premises could necessitate the creation of a greenfield mainframe computer site in a very short time. Given that the consortium has been formed for this procurement, there is not an established culture or procedures for the companies working together nor any indication of how many staff are currently employed or are expected to be employed in the future. This is also a potential issue for the other Service Providers. As with the Pathway proposal, there are concerns that the creation of a consortium company provides potential for the major shareholders to limit their liability later in the procurement process unless this is clarified before shortlisting.
- 6.3.8. The Service Provider proposes a separate associated company to develop new business opportunities, with POCL staff as company directors. There could be some advantages to such an approach but there may also be issues around conflict of interest and ability to develop business outside the new company.

Summary of Cardlink Proposal

- 6.3.9. This is a well presented proposal covering the main aspects required. If shortlisted the main concerns relate to:
- inadequacies in the current roll-out proposals;
 - the apparent attitude of the Service Provider and the associated implications for a long-term relationship;
 - reducing the risk transfer by asking for sign-off of the system design before award of contract and potentially through the creation of a consortium company;
 - lock-in through the single joint venture company proposed for all new business, the difficulty in separating PAS, CMS and TMS, delaying the agreement of rights to systems until transfer and proposing transfer only as a going-concern.
- 6.3.10. If this Service Provider is taken forward, strong management and negotiation will be required.
- 6.4. **IBM**
- 6.4.1. This proposal demonstrates a good understanding of the BA and POCL requirements through its consideration of benefit payment issues such as proxy and fallback arrangements and through its understanding of the five generic functions for the counter infrastructure.
- 6.4.2. A particular strength is the use of Thorn Secure Science's Watermark technology to support card authentication (also used by Cardlink) which, combined with the use of

a customer signature for cardholder verification, is likely to minimise potential adverse customer reaction.

6.4.3. While the proposal offers the facilities required, it does have weaknesses. In particular:

- (a) the Tillmaster package for the POCL counter interface and operational support services is said to be in use by "the South African post office and other retail organisations worldwide" but no technical information is given;
- (b) the TMS solution, while theoretically sensible and robust, is not proven in the proposed configuration with the volumes expected and gives doubts on scalability;
- (c) there is a good approach to the design of the PAS and CMS; however these work simultaneously and might not be readily separable and are subject to the constraints of all the solutions proposing centralised authorisation.

6.4.4. The proposal for sequencing the roll-out of benefits showed an appreciation of the issues facing BA. However the proposals for the POCL roll-out appear to underestimate the complexity of physical implementation in post offices due to over-optimistic timescales (some 9 months in their preferred option), low resource estimates, not addressing the migration of existing systems and minimal training offered to POCL staff. Similarly to Pathway, the roll-out proposal includes an option to extend the roll-out of ESNS as an interim measure to try and maximise the reduction of order book fraud.

6.4.5. IBM's solution provides for a period of system development that delays the operational trial and start of roll-out by some six months. In the team's assessment this may prove to be more realistic than some of the other Service Providers. The long period for system development implies that a significant development / tailoring exercise is required; this does not appear to be consistent with the description of the apparently existing facilities of the packages to build the service.

6.4.6. The PAS, CMS and TMS central systems are to be operated from existing sites by FDR, an organisation experienced in these areas. The proposals for fallback and recovery to maintain the availability of the central system are well presented. However these could be inadequate for disaster recovery due to the close geographic location of FDR's main and backup sites (11 miles).

IBM Commercial Issues

6.4.7. The Service Provider suggests that a future option may be to offer the service via a limited recourse company. This brings into question the extent to which risks might be underwritten by the parent company or shareholders.

Summary of IBM Proposal

6.4.8. Outwardly the proposal is satisfactory but it lacks sufficient explanation of how the services would be delivered. While not in itself a significant determinant for

shortlisting, when combined with the issues on POCL roll-out this indicates that significant clarification should be expected during the Demonstrator during which there is a risk that unacceptable issues may arise.

6.5. Pathway

- 6.5.1. The distributed architecture proposed by this Service Provider contains a considerable degree of innovation, although an element of risk is inevitably inherent in this. A proprietary package provides a significant component of the solution, potentially exposing the Programme to restrictions on the speed of future development and contract transfer. The distributed solution brings a great deal of resilience (e.g. a post office can work independently of the network for 2 days) and potentially fewer problems on response times, although there would be potential problems on foreign encashments. The modelling work done within the Programme team indicates an expectation of lower network costs from a solution of this kind.
- 6.5.2. A considerable part of Pathway's proposal - including the system architecture - is based on a similar system installed in the Irish Republic. Whilst this gave a degree of confidence through the existence of a working system, the difference in scale (400 offices compared with 20,000 in the UK) led to concern over the manageability of such a large distributed system.
- 6.5.2. The CIS proposal shows a good understanding of the current POCL business and, as mentioned before, this is enhanced by the existence of a working system of this kind elsewhere. However, the Service Provider has re-cast the five generic functions towards broad client groupings, rather than a functional approach (an example is the Girobank Transcash product compared with POCL's preferred generic In-pay). This raised concerns over potential obstacles to future POCL developments.
- 6.5.3. The PAS proposal is generally acceptable although more complex than a centralised solution. One implication of this is that the PAS and TMS use the same distributed systems, which could make it difficult to secure separate provision of these services later. There are good proposals on payment monitoring, although proxy arrangements are not adequately addressed.
- 6.5.4. The cardholder verification is signature-based, as with two other proposals. Whereas the other two have proposed the superior Watermark technology for card authentication, this one does not and is therefore only at the level of current standards in use in the credit card industry. The security shortcomings are emphasised by Pathway's indication in its commercial proposal that it would not wish to accept any risks associated with losses due to fraudulent copying or counterfeiting of the card. It is prepared to provide a more fraud-resistant card, at higher cost to the contracting authorities, which is still likely to be at BA's risk unless there is a willingness to share a percentage of the fraud savings with the Service Provider.
- 6.5.5. The proposals for the Pilot Programme and roll-out to post offices are well thought out, recognising the constraints that will exist. However, the phased approach to acceptance of products (because of the need for development work) and to roll-out would result in PAS and CMS not being proven by the end of the Operational Trial.

As a consequence roll-out is proposed to start in November 1996, six months later than requested in the SSR. To compensate for this, the Service Provider proposes a quick national roll-out of ESNS as an interim measure to try and maximise the reduction of order book fraud.

Pathway Commercial Issues

- 6.5.6. Pathway propose re-engineering POCL in-payment products, including licences, as part of their generic Transcash approach. This could have commercial implications for POCL with regard to its contractual relationships with other existing core clients.
- 6.5.7. The Service Provider implies that it might restrict POCL options on debit/credit card payment to using Girobank as the merchant acquirer.

Summary of Pathway Proposal

- 6.5.8. This proposal has two major areas of risk, under technical and commercial. The technical risks associated with the distributed architecture cannot be conclusively addressed in the Demonstrator, though some of the aspects in scaling from current to prospective volumes can be proved in a test environment. The refusal of the Service Provider to accept the risks associated with cardholder verification and card authentication is not considered in itself to be a reason for disqualifying Pathway at this stage. There is no conclusive evidence that such a risk arrangement would represent an unacceptable deal. The type of card and the degree of risk to be accepted by the Service Provider would need to be explored further during the next stage of the procurement. The delay in starting roll-out may change during Demonstrator / Negotiation, and the 'staged delivery' issue might be safeguarded contractually by linking the payment profile to the availability of user application services.

Key point here

7. DISCUSSION OF RESULTS

7.1. Whilst reducing the field from five to four was very easy, the process of reducing below that is not clear-cut even taking account of the sensitivity analyses and the analyses of the main strengths and weaknesses. The team felt that none of the remaining proposals was unworthy of further consideration, and that the Board should consider the four survivors and select a shortlist of two or three. In summary the main strengths and weaknesses identified in Section 6 are summarised in the following table.

BT	Cardlink	IBM	Pathway
<u>Strengths</u>			
CIS generic & flexible	EPOS widely used	Proxy & fallback procedures	Distributed architecture
EPOS widely used	TMS	Understanding of five generics	Based on working system
TMS	Watermark card	Watermark card	Detail of Pilot and roll-out plans
PAS modelling	Design of facilities	BA roll-out	
PAS financial reconciliation		PAS, CMS, TMS to be run by FDR	
Roll-out of CIS			
<u>Weaknesses</u>			
PIN	Roll-out viability	Lack of information about Tillmaster	Card authentication
Customer acceptability	Pilot Programme	TMS	Risks associated with distributed architecture
Card authentication		POCL roll-out	Broad client groupings, not five generic functions
Viability of solution		Delays in start of Operational Trial and roll-out	Foreign encashments
Proxy & urgent payments		Disaster recovery	Complex PAS
Roll-out of TMS & PAS		Lack of detail	Late roll-out
			Transcash approach

*You left out the
print on cards?*

BT	Cardlink	IBM	Pathway
<p><u>Opportunities</u></p> <p>Grow POCL's BT business</p> <p>Marketing of IPRs and software jointly</p>	<p>Options on use of existing assets & staff (e.g. Romec)</p> <p>"Smart store" type approach to new business</p>	<p>New business with Service Provider's partners</p> <p>Extend ESNS roll-out</p>	<p>Extend ESNS roll-out</p> <p>Performance in peak periods linked to payment</p> <p>Options for low-cost counter equipment in smaller post offices</p>
<p><u>Threats</u></p> <p>Optional data warehousing facility in TMS</p> <p>PAS & CMS may not be separable</p>	<p>Limit on liability due to consortium</p> <p>Attitude & culture</p> <p>Sign-off system design before contract award</p> <p>Joint venture for <u>all</u> new business</p> <p>Delay agreement on IPRs until contract termination</p> <p>Transfer only as a going-concern</p> <p>PAS, CMS & TMS may not be separable</p>	<p>Option for limited recourse company</p> <p>PAS & CMS may not be separable</p> <p><i>depin</i></p>	<p>Limit on liability due to consortium</p> <p>BA/POCL to take card fraud risks</p> <p>Girobank</p> <p>PAS & TMS may not be separable</p>

7.2. The team were opposed to the idea of taking the 'soft option' of a shortlist of four:

- (a) the incentive to the Service Providers to put maximum effort into Stage 3 would be reduced if they had a one-in-four chance of winning rather than one-in-three or one-in-two; this is not in the best interests of the Programme;
- (b) handling negotiations with and demonstrations by four Service Providers instead of three or two would have a major impact on the Programme Team in Stage 3 for which the timetable is already extremely challenging, and there would be a serious danger of the timetable being substantially elongated and/or risk reduction being curtailed in the demonstrations and contract negotiations;
- (c) it is considered to be a poor return on the investment of time and money in Stage 2 to have achieved nothing more than the elimination of one Service Provider.

- 7.3. The EC Services Directive requires a minimum shortlist of three Service Providers unless for legitimate reasons three could not be shortlisted. The reasons need to derive from the proposals themselves; it is not sufficient to use merely grounds of expediency (e.g. the reduction of the burden on the Programme Team in handling only two Service Providers and thus the increased confidence in the firmness of the timetable).
- 7.4. If contemplating a shortlist of two, careful consideration needs to be given to the chances of the remaining two Service Providers reaching the stage of being invited to submit Best Tenders so as to ensure continuing competition and thus maximum value for money for the Programme. The team's view is that no combination of two Service Providers is outstandingly strong. In that case a reduction from three to two should only be contemplated for the negative reason that there are felt to be very strong grounds why one of the three should not be taken further.
- 7.5. In reaching their decision the Board may find it helpful to address a number of questions:
- (a) what are the realistic chances of a particular Service Provider being able to overcome the deficiencies in its proposal during Stage 3 to a degree that would be acceptable to the Programme?
 - (b) are there strengths or unique elements that a Service Provider brings that are particularly attractive to the Programme and mean that if all other things are more or less equal that Service Provider should be given the edge over another contender?
 - (c) what is the 'risk profile' for the Programme that would result from selecting particular combinations of Service Providers, e.g. do all members of a potential shortlist exhibit the same risk, so that the Programme stands or falls on the outcome of that particular element?
- 7.6. Applying these questions to the results of the evaluation team's findings can produce a number of portfolios, as follows.

PIN as Deciding Factor

- 7.7. One approach is to address the BT PIN issue up-front. If the answer is that PINs are unacceptable and the PIN is such an integral part of BT's proposal (see 6.2.7) that the Board do not believe an alternative can be adopted without imposing an unacceptable delay on the Programme, then the means of reducing from four is solved immediately. A shortlist of Cardlink, IBM and Pathway gives a portfolio of:
- (a) one distributed solution (Pathway) and two centralised; and
 - (b) a measured (IBM) and an aggressive (Cardlink) pilot/roll-out approach.

Emphasise Card Security

- 7.8. Another way of looking at the card issue is to say that both the Watermark proposals should be kept since this technology is regarded as the best approach to reducing fraud. In that case the portfolio is:
- (a) Cardlink (with Watermark);
 - (b) IBM (with Watermark);
 - (c) BT or Pathway; both have weaker card authentication, and of the two the Pathway approach to cardholder verification is likely to be more acceptable to the public.
- 7.9. This portfolio would put at risk the retention of a distributed option because of Pathway being one of the proposals at risk, and the Board would need to consider whether, other things being more-or-less equal, it wished to give preference to retaining the distributed option.

Strength of Solution vs Delivery

- 7.10. It is also possible to consider options according to the strength of their solution versus the delivery of it, on the basis that it is more easy to change the implementation than the solution being implemented. The fact that the SSR gave far more guidance on what was wanted than on how it was to be implemented gives further support to this line of reasoning. In that case the portfolio would be:
- (a) Cardlink;
 - (b) Pathway;
 - (c) BT or IBM.
- 7.11. The Evaluation Board are invited to consider the above portfolios as a rationale for their decision.

8. COMMERCIAL EVALUATION**8.1. Risk Appraisal**

- 8.1.1. All of the Service Providers indicated a willingness to take on standard risks of system operations including implementation and ongoing performance.
- 8.1.2. As far as fraud risk was concerned then, with the exception of Pathway, there was an acceptance of risk linked to forgery, hacking etc although this was suitably caveated. There was also a lack of evidence in some areas e.g. casual agents, fallback, internal fraud.

- 8.1.3. For other commercial risks such as existing volume (BA) and new business the Service Providers are generally seeking additional information prior to making any firm commitments. However three of them specified minimum volume guarantees ranging from 80-90% for BA volumes, and the other two simply did not provide data but suggested they would be required.
- 8.1.4. None of the Service Providers were prepared to take on public policy risks e.g. compulsory ACT.
- 8.1.5. IPR approaches varied from a refusal to transfer which was tempered by an interest in joint marketing (given the PFI nature of the procurement) through to a more negotiable stance, but these were typically caveated by issues around third party licences.
- 8.1.6. A number of Service Providers suggested a first refusal on new business development linked to a partnership approach which would pose a commercial lock in. A range of new business opportunities within the financial, retail and communication areas were proposed for POCL although there were few really new ideas and they were generally at an early stage of development.
- 8.1.7. Whilst most of the issues identified are thought to be capable of resolution during the Demonstrator, the commercial group are concerned that the Programme should not go ahead without assurances on the coverage of liabilities for the two consortium companies. This issue is currently being pursued.

8.2. Impact on Business Case

- 8.2.1. Service Providers were asked to provide indicative costings but with the assurance that these would not be used as part of the evaluation. However, it is necessary to feed the indications into the business cases in order to test whether, on the best evidence now available, they are still valid. If they are not, there is no case for going on with the Programme.
- 8.2.2. After they had completed their work on the scoring of proposals, from which point they took no further part in the evaluation process, two members of the Commercial group were given access to the costings submitted by the Service Providers. Final assurances that the business cases are still viable have not yet been given, but it is hoped that these will be forthcoming by the time of the second Evaluation Board meeting (19 July).