



## **Cross Border Tangle**

### **The Search for Low Cost Retail Cross Border Payment Systems**

**Recent EC rules forcing the banks to charge no more for cross border than for domestic transfers have stimulated a search for new solution, including an enhanced role for the international card schemes.**

Specialists in the plastic card payments business tend to distance themselves from the traditional systems used to make international retail cross border payment transfers. The S.W.I.F.T. messaging concept, the correspondent banking model, nostro and vostro accounts and settlement via the BIS are delivery system and settlement concepts that bear little relationship to those used for retail payments. Within the plastic card business **“Straight Through Processing”** has been in operation for so long that it's difficult to comprehend why this is still an objective for the correspondent based payment systems.

For these reasons many within the plastic card business cannot understand the cause of the strong antagonism that has developed between the European Commission and Europe's banking federations over the issue of retail cross border payments.

From the Commission's perspective there have been ten years of broken promises by banks to improve processes and reduce charges (see Table 1 below for time lines). Repeated EC surveys indicate low service quality and reliability whilst the costs of making payments continue to increase a current average of between €17 - €24 per transaction. Several years ago the commission set a benchmark asking that retail cross border transfers should be no more costly than equivalent payments within domestic markets. Current rates are still 20 - 40 times higher than this target.

European bankers, on the other hand, have prayed for the past ten years that the issue would go away. Perhaps, they reasoned, if we do little customers and eurocrats will find alternative payment methods. After all the volumes were insignificant and end customer charges reflect a degree of manual intervention that the relatively unsophisticated delivery systems inevitably involved.

In addition, Europe's banks wanted to protect revenue streams even though they recognised that their high flat fee structure designed for high value payments was inappropriate for low value retail. Too late they proposed a Multilateral Interchange Fee (MIF) to share core costs between the paying and receiving banks but again a fixed fee was tabled rather than more acceptable ad valorem formula.

So an extreme game of brinkmanship has been played by the banks. Unfortunately, they failed to grasp the significance of their actions. On the other hand, the EC also failed to appreciate that Europe's weak banking clubs had no processes in place to ensure their promises were delivered. So the risk of failure to implement was very high from the onset.

Year	Activity	Action
Sep 1990	EC Paper <b>"Making Payments in the Internal Market"</b>	Argued high costs would inhibit Single Market Development – set principles for improved facilities
March 1992	EC Paper - <b>"Easier Cross Border Payments – Breaking the Barriers"</b>	Sets out five point action plan including linking of ACHs
1993 – 1996	Banks and banking associations begin to develop new processes and services to deliver bulk payments, improve standards and services	ECBS set up. Several new interbank services develop
1994/5 –1997	EC sponsored <b>'Mystery Shopper'</b> surveys of Bank Performance	Identifies persistent overcharging, lost payments, long delays and double charging
1997	EC Parliament – <b>'Regulation of Cross Border Payments'</b>	Mandates rules for transparency timing, redress but not charges
1998 – 2000	Further <b>'Mystery Shopper'</b> surveys	Improvements in service but charges remain high
2001	<b>EC Regulation of Cross Border Transfer charges</b>	Mandate charges for transfer to be no more than domestic by mid 2003

Table 1 Cross Border Transfer – EC Timelines

In July 2001 the European Commission's patience snapped. Unable to comprehend why rent, gas, electricity and small value money orders could not be handled at retail transaction rates they decided to mandate change! Draft regulations were issued which would oblige banks to reduce prices of credit transfers to the level of domestic payments by January 2003. The same draft also impacts ATM systems. From 1<sup>st</sup> July 2002 charges for cross border cash withdrawals must also be no more than domestic. Banks have recently won a concession to delay the retail credit transfer price reductions to July 2003. Beyond that date the EC will not be moved!

This places Europe's banks in a dilemma. Traditional correspondent bank transfers are costly to operate primarily because capital and infrastructure costs are high, transaction volumes are very low and typically no more than 2% of total domestic. Despite their high fixed costs, domestic ACH based payment systems handle very high volumes and thus have low operational costs (often less than €0.01). But even the most efficient banks, with traditional correspondent banking networks, can have end to end costs that average €1.0. Less efficient small and medium sized banks between €2.0-€3.0. The central switching component within these costs varies from €0.20 to €0.40 and a high proportion of remaining cost is picked up at each end of the payments pipeline.

Domestic transfer costs in many countries are free of charge. So if the EC directive is to be followed many banks will be forced to provide loss-making services. Thus there is now a desperate search to find very efficient delivery systems that have costs close to domestic ACHs. Systems have to be highly reliable, speedy and able to handle P2P, B2P, B2B and ultimately direct debit payments.

With hindsight many banks now realise that almost through an accident of history retail cross border payments have been incorrectly processed within a cost and charging framework designed for small volume, very secure high value corporate and international payments. Thus, it's now almost impossible to drive costs down to the

level of domestic payments processing. Many now question whether it's too late to redefine the processing model and make a switch!

In November 2001 the ECB issued a paper **“Towards an Integrated Infrastructure for Credit Transfers in Euro”** which reviews some of the alternative solutions that could replace the traditional correspondent banking arrangements. The ECB's strategy is clearly to minimise fragmentation and stimulate the development of a single delivery system that operates to common EU wide standards. They propose two solutions based on central ACHs and two on more loosely coupled distributed structures. The central ACH solutions are summarised within Table 2 below. Option 1 proposes a single Eurozone ACH for all domestic and cross border payments. Option 2 envisages a single ACH for cross border payments only.

ECB Option	Advantages	Disadvantages
<b>Option 1 – Single ACH for all Euro zone payments (Domestic and Cross Border)</b>	<ul style="list-style-type: none"> <li>• Massive volumes</li> <li>• Very low cost (&lt; €0.01)</li> <li>• Improved efficiency</li> <li>• Common methods/ processes</li> <li>• Open membership</li> </ul>	<ul style="list-style-type: none"> <li>• High cost and risk of development</li> <li>• Lack of country common standards</li> <li>• Long development time</li> <li>• National resistance</li> <li>• High write off domestic and international infrastructure costs</li> <li>• Monopoly service - Reduced competition</li> </ul>
<b>Option 2 – Pan European ACH for Cross Border only</b>	<ul style="list-style-type: none"> <li>• Intermediary Solution</li> <li>• Enables phased domestic migration</li> <li>• Common methods / processes</li> <li>• Shorter implementation timeframe</li> <li>• EBA support</li> </ul>	<ul style="list-style-type: none"> <li>• Potential higher txn costs</li> <li>• Openness of membership</li> <li>• Initial low volumes</li> <li>• High value payment system model</li> </ul>

**Table 2 – ECB Central ACH Based Solutions**

Clearly a single ACH for the whole of the eurozone (Option 1) able to handle domestic and cross border payments is a long term concept which would deliver high efficiency and very low costs (€<0.01) but could not be implemented in the short term because of lack of standards. It is also a high cost and risk development. Inevitably there will be resistance from domestic banks at the loss of independence and the high cost of current infrastructure write offs. Many may also object to a monopoly supplier. For these reasons this concept (which is similar to NACHA's Global Watch central ACH plans) is unlikely to be adopted for several years.

Option 2 – a pan European ACH is a more attractive solution, one which the Euro Banking Association (EBA) has been working towards over the past 18 months. Change comes slowly in Europe's banking community so EBA's evolutionary concept that builds on an existing framework is attractive. However, volumes are still an issue. The heart of the EBA infrastructure is still a high value payment system. Can EBA's costs fall below €0.15 and the target of <0.02 be achieved? In addition, can a commercial framework be designed which will enable all banks direct membership rather than costly agency arrangements for the medium and small. This concept appears to have a better chance of success than Option 1 but it is not yet the ideal proposition.

The ECB proposes two further solutions. Option 3, the linking together of all Europe's ACHs and Option 4, Bilateral Exchanges. These are summarised within Table 3.

The concept of peer-to-peer ACH linkages was the preferred EC solution in the early/mid 90s. Interfaces were developed between UK BACS and the Italian ACH and several other countries (Netherlands, Belgium, Austria). The concept proved to be technically workable but failed through lack of member bank support. The ECB now proposes a variation whereby ACHs are connected to Target which would route transactions to each ACH. This is a feasible solution which could be implemented quickly. However, Target as the central switch, is not an essential feature (given the small number of ACHs) but it's use should ensure that the service is used. This option is feasible and attractive provided Target costs are very low.

ECB Option	Advantages	Disadvantages
<b>Option 3 – ACH Linkages via Target</b>	<ul style="list-style-type: none"> <li>• Shorter implementation period</li> <li>• Existing domestic interfaces used</li> <li>• Open membership</li> <li>• Common ACH/Target standards</li> <li>• Maintains country ACHs</li> </ul>	<ul style="list-style-type: none"> <li>• Low volumes</li> <li>• High value payment system model</li> <li>• Potentially higher txn costs</li> <li>• Bank participation uncertain</li> <li>• Differing domestic standards</li> <li>• Excludes non - ACH countries</li> </ul>
<b>Option 4 – Bilateral Exchanges</b>	<ul style="list-style-type: none"> <li>• Low cost development</li> <li>• No intermediaries</li> <li>• One to one SLAs</li> <li>• Supports agency by local ACH</li> <li>• No technology barriers</li> </ul>	<ul style="list-style-type: none"> <li>• Smaller banks disadvantaged</li> <li>• Low volumes may not result in low costs</li> <li>• Fragmented – Not a universal solution</li> </ul>

**Table 3 – ECB Devolved Solutions**

The final ECB solution (Option 4) is based on bilateral networks linking bank to bank again on a peer-to-peer basis. This is a highly feasible solution given modern network technology despite the need for many connections. The cost of a central payments switch is eliminated. The down sides relate to fragmentation and potentially lack of common standards. Probably 90% of the total volume could be transacted amongst no more than 30 of the EU's major banks. So large banks will be motivated to implement. However, the medium and small will want a more formalised solution that is simple to implement. Smaller banks will not want costly agency arrangements with larger banks.

So an interesting set of options but disappointingly three constructed on existing high value platforms. In addition, without a formal framework the fourth option could become no more than an extension of current correspondent banking delivery systems. Obviously, there are other solutions available within the market place including the long established Western Union service, Eurogiro, TIPAnet and the own brand services of major EU banks, all of which offer services at modest cost but none achieve the EC objective of fees equal to the domestic markets.

However, the ECB paper hints that it is aware that there are other payment models that could be adopted. Thus two further options are reviewed in Table 4 below. The first is an open market solution and seeks to leverage e-commerce payments, the second an alternative centralised system.

New Option	Advantages	Disadvantages
<b>Option 5 – P2P Payment Solutions e-m commerce</b>	<ul style="list-style-type: none"> <li>• Low cost</li> <li>• No branch visit required</li> <li>• Bank regulated</li> </ul>	<ul style="list-style-type: none"> <li>• Excludes those with no PC access</li> <li>• Cross Border ACH interfaces need to be developed</li> </ul>
<b>Option 6 – Use of International Card Scheme delivery Channels</b>	<ul style="list-style-type: none"> <li>• Only high volume cross border network</li> <li>• Very low transaction costs</li> <li>• Existing settlement infrastructure</li> <li>• Potentially worldwide</li> <li>• Leverages P2P</li> </ul>	<ul style="list-style-type: none"> <li>• &lt;40% coverage of banks</li> <li>• Need for network nodes in non-covered countries</li> <li>• Need for payment switch interfaces</li> <li>• New MIF</li> </ul>

**Table 4 – Two New Possible Options**

Option 5 proposes the use of solutions from within the world of e and m-commerce. In a similar manner, banks have found it difficult to serve this sector. The result has been the development of many alternative methods of payment to enable P2P and B2B payments where neither of the parties have a relationship with each other (online auctions are a good example). The features of these services are well-known and are based on an account jointly held by the service provider and (in Europe) a bank into which funds can be temporarily deposited and then paid. The services use a variety of payment methods including debit/credit cards and direct debits and credits. Email is used to connect the two parties together to enable registration and to verify and check the account details. Major current providers include banks (HSBC, Citi) and independent operators including Paypal (\$ only), Payhound, Nochex, MinutePay and Paybox (mobile solution). Other major banks are expected to offer similar services during 2002.

All these services have delivery systems that operate at very low costs. Most have a preference for direct debit and credit based deposit and collection mechanisms and thus must utilise local ACHs. Little needs to be done to encourage these providers to move into cross border transfers (several including Payhound are already multi-currency). Most have no or very low end user charges. Banks already recognise the logic of using these mechanisms. Non banks have partnered with regulated banks so consumers deposits are protected. A more formal framework from the ECB to encourage non-bank adoption could ensure the evolution of P2P retail cross border payments. In some countries easier access into the local ACH and lower transaction fees would help facilitate expansion into full cross border services.

Finally, Option 6, which in a similar manner to Option 3, looks back to the early 90s when several new cross border payment concepts were tentatively proposed but for a variety of reasons were sidelined. The most interesting was to use the EU wide networks, interfaces, standards and settlement processes of the international plastic card schemes to effect cross border transfers. These networks had very substantial EU wide cross border volumes. The same infrastructure also processes domestic volumes for several countries. Visa proposed a centralised ACH and at that time predicted transfer costs of <€0.06. However, several problems were identified. Neither network had comparable reach to S.W.I.F.T. also there were technical complexities in adopting credit card account codes to carry branch and account identities. In addition, EPI operated an old IBM Series 1 based network and Visa a monolithic legacy central switch. For these and other reasons the idea was deferred and other more feasible options evaluated.

However, times have moved on. Nine years later a strong case can be made to revisit the concept. Scheme membership and plastic card cross border volumes have grown substantially. The international schemes are being encouraged to be more entrepreneurial. Networks and delivery systems are becoming business entities competing in Europe's processing markets with TPPs and other payment providers. It is now possible to obtain high volume switching and processing fees at <€0.04 per

transaction. Standards have much improved. The Standard Bank Identification codes (BIC) are now the world wide bank identifier. Banks are introducing International Bank Account Numbers (IBAN) which enables the transformation of domestic account numbers into a common international format thus overcoming the complexities of using credit card code structures. ECBS and S.W.I.F.T. have been active in setting new standards for retail payments and direct debits. New central and distributed switches are now available which have high capacity and low operational and maintenance fees. Finally, competition from alternative payment methods is driving the schemes to incorporate structures to support P2P cross border payments for e-commerce thus creating a clearing and settlement vehicle for cross border and other forms of transfer.

However, there are downsides to this approach. First Visa and EPI/Mastercard membership does not completely replicate that of S.W.I.F.T. In some countries (France, Portugal, Norway and others) membership representation is via a single entity which clears and settles with local membership. Thus one organisation (interbank body or/a local acquirer) would need to act as a gateway into the national ACH for non-scheme member banks.

Second, most banks enable cross border payments to be branch initiated using links to a central high value payment switch which in turn interfaces into their internal and/or S.W.I.F.T. networks. Interfaces into the card scheme networks will be required either by using an alternative retail channel (branch or ATM network) or via the current payment switch. The latter would be the simplest route provided costs could be contained.

Third, the receiving bank would expect payment for local payment much as a cross border ATM owner charges a card issuer for cash withdrawal. Thus a new Multilateral Interchange Fee will need to be established and approved that has parity with equivalent plastic card payments.

So to summarise, Table 5 below provides an analysis of the six solutions reviewed.

Option	Description	Bus / Tech Feasibility	Speed to Mkt	Reduct in Txn Cost	Deg of Dev Cost / Risk	Reliability and STP	Reach	Bank Take Up	Standardisation
1	Single Euro ACH (dom /CB)	•	•	•••••	H	••••	••••	•••	•••••
2	Pan EU ACH (CB only)	•••	•••	•••	M	••	••	•••	•••
3	ACH Linkages	••••	••	••••	L	••••	••••	••	••
4	Bilaterals	•••	•	••••	M	•••	•	•	•
5	Virtual Solutions (P2P payments)	•••	•••	••••	M	••••	••	••	•
6	International Card Schemes	••••	••••	•••••	L	•••••	•••	••••	••••

Table 5 – Analysis of Feasibility of Options

For historical reasons, small value retail cross border transfers are being processed through an inappropriate delivery channel and commercial charging framework. This has resulted in very high costs and end user charges. Banks have been reluctant to migrate to lower cost mechanisms because of commercial and technical complexities as well as a natural desire to protect their traditional charging structures and revenue streams. Because of the EC mandate, banks now have a limited choice. Either continue to use high cost methods and operate at a loss or migrate to new channels.

The ECB proposes four solutions but it can be argued that these are more of the same rather than a radical rethink. Of these a Pan EU ACH and direct ACH connections are predicted to be the lowest cost solutions but each involves development and extensive co-ordination to become operational services. With almost no fee incomes, banks may be hesitant participants in these ventures.

However, the ECB appears reluctant to encourage low cost market driven solutions that can compliment interbank developments and provide alternative routing mechanisms. For these reasons, the ECB should also help facilitate e and m-commerce P2P payments providers to move into low cost cross border transfers.

Finally, one of the most feasible options appears to be the use of international plastic card scheme infrastructures. Only these organisations have the high volume, standards and processes to deliver low cost reliable and common solutions that can be speedily implemented at relatively low risk.

So, can we expect 10 years of free of charge but declining retail cross border payment services? There is a risk that the EC mandate will deter banks rather than encourage. The ECB intervention is thus important. Their paper emphasises that success is only possible if Europe's banks build a solid co-ordination framework to ensure participation and delivery - a welcome recognition of the causes of past failures. Perhaps the ECB should also issue its own mandate to ensure something happens this time!!

***Peter Jones***  
***Director***  
***PSE Consulting***  
***+44 (0)20 8891 6244***  
***e-mail: peter.jones@pseconsulting.com***