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National Payment Plan – Telsecure Consulting Response to Consultation

I have tried to give a view on all issues, but would note that I/the company have particular interest in Q8 (future of cash), Q26-31 (mobile payments), and Q39-45 (fraud and security). For information the company is an SME that specialises in work on security technologies in payments (particularly via mobile/remote channels), and currently leads BSI British Standards' development of a fraud management standard.

Response

Q1 The Payments Council is minded to develop a proactive industry plan to manage what it sees as the irreversible decline in cheques. Do you agree that a plan for cheques should be developed?

Yes – a plan for cheques is required to provide clarity that if (as we believe they should) cheques are to be withdrawn an adequate notice period be given to enable users to become comfortable with the alternative payment methods.

Q2 For which types of payment currently made by cheque do new alternatives need to be introduced?

Currently a cheque can be used to make an effectively 'delayed payment'. Whether presented face to face or via post one can currently be confident that the funds will not leave an account for a number of days. This makes cheques a de facto form of very short term credit, where goods and services can be procured on the spot but payment is only delayed for a few days. As other forms of payment utilising credit exist it is debateable whether this facility needs to be retained through any new payment development.

Q3 Would it be acceptable for the National Payments Plan to include a target date of 2018 for the closure of the cheque clearing (on the assumption that acceptable alternatives to cheques have been developed)?

Given the other available options, after the introduction of faster payments in May it seems overly 'generous' to allow a whole decade for people to adapt. Cheques have now been phased out at almost all garages/supermarkets in favour of Chip and PIN, a process that started within a few years, and is already almost complete.

Q4 What sort of education of users is needed to support the migration away from cheques?

Users are already being educated regarding the demise of cheques for face to face purchases in the vast majority of retailers. Discounts for payment by direct debit are also widespread, though greater awareness raising might be useful in this regard.

Q5 Do you agree that, as part of the National Payments Plan, there should be an objective review of the future of the Cheque Guarantee Card Scheme?

There should be a review of the Cheque Guarantee Card Scheme, as it's primary use is fraud.

Q6 What other actions, if any, should there be in the National Payments Plan in relation to cheques?

Q7 Do you agree that, as part of the National Payments Plan, there should be an objective review of the future of the paper credit clearing?

Q8 The Payments Council believes that the National Payments Plan should be developed on the assumption that cash will remain a major payment method for the foreseeable future. Do you agree?

There is no reason to presuppose that cash will remain a major payment method, even within the 2018 timeframe mentioned for cheques, as there are a number of stakeholders who would greatly benefit from it's demise, and a number of technological developments that can be expected to readily replace it.

The advantages for banks of limiting the use of cash are well documented, so I shall not dwell on the obvious cost savings that could be made by moving payments onto other media. The banks own moves into contactless cards are now also taking greater shape, but crucially also taking greater scale. Whilst the death of cash can be likened to the advent of the paperless office in being long-predicted yet still 'just' over the horizon, trials of Mondex to a tens of thousands in Swindon in the mid 1990s do not compare with One Pulse/Oyster in London with over ten million. Whilst it is not technically possible to charge extra for people choosing to pay by another method, it is effectively so by virtue of being able to offer 'loyalty' discounts, just as Oyster has done.

Secondly there is the advent of mobile banking – whilst mobile banking offerings of the past few years were limited to checking balances or topping up phones, pilots are now springing up all over the globe allowing remote transactions to be entered into, and whilst online transactions from PCs currently dominate a mobile phone is both practically and legally a computer, merely with a different mode of transferring data. With the prize for delivering such a cashless payment service peer to peer so great, it is inevitable that there will be a breakthrough in this area within the next few years, moving mobile banking from interesting concept to actual market (and, as an example, our company has patents pending on numerous angles in mobile banking, and patents granted in some coming to market in the next few months).

From a Government or societal perspective there is also much to be gained from the death of cash as a major payment form, and this may prove to be the ultimate tipping point. Estimates of the grey or black economies vary greatly, but from any of these

figures it is almost certain that the cost of cash through false disclosure to the public purse exceeds that of processing it for the banks.

Q9 Should the issues of the supply and quality of notes and coin in circulation be within the scope of the National Payments Plan? If so, how should they be addressed?

Q10 What other actions, if any, should there be in the National Payments Plan in regard to cash?

Explicit reference to the desire to move away from cash as a major payment form.

Q11 What improvements would lead to the greater take-up of direct debits by users?

One-off direct debits would reduce the usage of cheques, but would also necessitate greater requirements for remote authentication (assuming the desire to move away from cheques and on to other payment forms is intended to limit non-automated (be it face to face or telephone) transactions. Therefore the security of authorising transactions will be key.

Q12 Would you support the introduction of a time-limited guarantee for direct debits in place of the current unlimited guarantee?

Q13 If so, what time limit do you think would be appropriate?

Q14 What measures to improve the accuracy and end-to-end delivery of reference information, with internet and telephone banking payments and with other direct credits, could usefully be introduced?

With the adoption of Faster Payments in May, near real-time payments will become possible over internet (and telephone), but this will require an equally real-time security function. Faster Payments, whilst of great use to all users through quicker clearing times, will also provide new opportunities for organised criminals, both through the speed with which they can withdraw funds from compromised accounts, but also by enabling them to effectively launder their ill-gotten gains through multiple transfers (96 transfers being potentially possible within 24 hours).

Q15 Are there any other enhancements you think should be made to direct credits?

Q16 What opportunities would you identify to exploit the ATM infrastructure for non-cash transactions? How should these be reflected in the National Payments Plan?

Assuming cash were abolished (qv), they would make convenient sites to be able to Google local services/restaurants etc. or check email for those (few by then) without mobile access. But I wouldn't have said the NPP has anything to do with this.

Q17 Which other, if any, actions should there be in the National Payments Plan in relation to credit and debit cards and cash machines?

Ability to get mini-statements as well as balance/cash would be useful (therefore able to check recent transactions without recourse to call centres if balance not as expected).

Q18 What improvements should be made to the way in which payments in the wholesale markets are carried out?

Q19 What should the Payments Council do to ensure that users in the UK can take best advantage of SEPA?

Q20 What issues does SEPA raise for your use of payments?

Potential for creation of greater competition in payment space with adoption of Payment Institutions in addition to banks, particularly in the mobile space where operators already have experience of managing pseudopayments.

Q21 What improvements should be made to cross-border payments?

As Q20, cross-border models already exist, such as MPESA UK-Kenya.

Q22 What measures to enhance users' efficiency should be considered by the Payments Council?

See below.

Q23 Do you agree that at the present stage of market development the contactless and prepaid card sectors are best left to initiatives from individual payment service providers and the card schemes?

For prepaid yes, but for contactless there is need for a (minimum) standard to allow interoperability.

Q24 What support, if any, could the National Payments Plan offer to the development of contactless cards? In particular, is further action needed to ensure that the standards for contactless cards meet the needs of all sectors of users?

There is a potential danger that individual schemes will not interact, hindering take-up, to the detriment of all players. Anecdotal evidence already suggests that the differing standards cause conflict, whereby, say, an Oyster card and other contactless standards will interfere with each other and downgrade the performance of both

systems. (We have proposed a single interface to be held on a mobile (device) to prevent this conflict).

Q25 What support, if any, can the National Payments Plan offer to the development of prepaid cards?

Not sure prepaid cards are a significant obstacle.

Q26 What role should the Payments Council play in the development of mobile payment services, including setting the standards for mobile payments?

The Payments Council could play an important role in promoting the use of mobile payment services as a means of hastening the demise of other more expensive payment forms. Standards will be important, but there is not likely to be a requirement for 'new' standards, as the mobile industry is, alongside financial services, perhaps the most advanced industry sector in the adoption of security technologies to protect the user and themselves. Where standards do not exist or need developing, the Payments Council should play a key role in validating that any standard developed is robust and fit for purpose (the Security Ergonomics if you like).

Q27 In particular, do you agree that the National Payments Plan should support the development of mobile payment services between bank accounts?

Yes, it is of clear interest to the Payments Council (and its members) for greater take up of remote operations, be they internet or mobile (legally speaking they are both computer to computer transactions, and one can already make mobile to mobile payments from card to card – it is only the awkward interface of mobile internet access that currently gets in the way (and the current lack of Faster Payments to give the real-time feel)).

Q28 What principal characteristics would users find attractive in a mobile payment service?

I refer to this as the Security Ergonomics of mobile banking. It is already possible to make any transaction by phone, but the interface is far from user friendly (having to manually log in on a mobile internet system (which are from being as user friendly as traditional PC based)), but what is required is a user-friendly interface allowing pseudonymity and peer to peer availability (again all possible at the moment but very awkward to achieve). Pseudonymity also allows for the user to personalise their transactions through their mobile, not only for financial payments, but in allowing other identifying tokens to be placed within a device capable of its own integral security (including PIN/biometrics).

Contactless e-wallet on a mobile for low level items is again already possible (O2 put a trial out before Xmas)

Q29 What role do mobile phone payments potentially play in providing alternatives to traditional forms of payment?

From the above you can probably tell that I am an advocate of mobile payments potentially replacing both card (including contactless) and cash as the primary means of payment (hence patents pending!).

Q30 What other actions, if any, should there be in the National Payments Plan in regard to mobile payments?

Convene mobile payment working group so that Payments Councils members can work in tandem, as the benefits will not accrue to an individual bank without co-operation from others. The possible danger from a lack of concerted effort is that other operators (e.g. the mobile operators) could set up as de facto banks and cut the current banks out of the payments process (as they have no need or requirement to handle cash, and their branch network is a source of income rather than a costly constraint).

Q31 Do you agree that the Payments Council should indicate support for the work of the European Commission Steering Committee on e-invoicing and associated activity, including the development of international standards that facilitate supply chain efficiency?

Yes.

Q32 What role should the National Payments Plan play in moving this agenda forward?

Q33 What other actions should be included in the National Payments Plan?

Q34 What other payment innovations requiring action at industry level should be considered by the Payments Council?

Covered elsewhere.

Q35 What gaps are there in current financial educational initiatives in regard to payment matters?

Generational factors may play a part in moving to new technologies, but these may play into the hands of change, rather than be an obstacle. 'Financial inclusion' is often cited as a reason for retaining cheques as there is a disproportionate amount of cheque use amongst the elderly, who have grown up with cheques. However, whilst the elderly represent a significant proportion of society, the young are also excluded from much of the payments field by virtue of their inability to have credit (or to a lesser degree debit) cards, forcing them to rely on cash.

However, the adoption of mobile banking would effectively enfranchise them by providing children with a payment option that can incorporate both face to face and remote payments with the added benefit of security, removing the need for children to carry cash.

Q36 What role can the Payments Council play in promoting the education of consumers about the choice of payment methods available to them?
What other bodies should it work with to deliver this role?

See above.

Q37 What role can the Payments Council play in promoting financial inclusion?

See above.

Q38 What other bodies should it work with to deliver this role?

HMT etc.

Q39 What are the main challenges to the integrity of payment systems that need to be addressed collaboratively?

To provide complete integrity payment systems will require a full auditable trail of transactions with no areas flying under the radar. This can be achieved through automated processes, but this will require collaborative effort.

Q40 How should consideration of measures against fraud be included in the assessments which the Payments Council makes of proposals for innovation?

No innovation should allow for additional attack angles to arise, nor should they merely displace fraud from one area to another (although from a UK perspective geographical displacement would be allowable, provided it was not London to, say, NE).

The management of fraud should be a key part of any innovation in payments, and innovations should be adopted for the prevention of fraud wherever possible.

Q41 How can the National Payments Plan assist with issues of customer authentication? To what extent do these need to be addressed across the payments sector?

Customer authentication is a requirement to ensure that fraud is eliminated from the payments process, and the ability to authenticate the customer across all payment types, be they face to face by cheque or remote by card should be a key component of the National Payments Plan. If the Plan enables additional fraud or fails to prevent easily remediable fraud, then it will have failed, but if it manages in securing payment transactions in the UK it will be rightly lauded.

Q42 Should minimum standards be introduced for authentication of remote transactions? If so, should a common measure of authentication be recommended/mandated?

Minimum standards for remote authentication could already be said to exist, in that the base level is 'what you know' being the card number/expiry date/address. That this is woefully inadequate is a separate point, but the adoption of additional authentication methods is not only a security issue in the technological sense, but a means of shifting liability when the inevitable successful attack arrives (no system being 100% secure).

As a supplier of remote authentication technology one might be expected to want to mandate our own product, but no product is 100% successful and a range of defensive options is required so that the one appropriate to the individual circumstance can be chosen. The Payments Council does have a role to play in recommending, or rather 'signing off', the efficacy of a given technique, and indeed have done so with APACS' own PIN Sentry standard. This development, incorporating a reader to provide a one time pad when used in conjunction with card and PIN, is an excellent example of how to tackle the displacement from face to face to CNP in the advent of Chip and PIN. However, as is clear from the bulletin boards on Register/ZD Net etc., the implementation of this has not been 100% successful, both with users being upset at 'having to carry an extra device around' to the cutting of corners by some banks in implementing the system (allegedly – tough some of the 'get arounds' posted online suggest that at least one bank has not fully implemented the APACS standard). Other solutions include use of a mobile phone for second channel confirmation (PIN entry being handled through the phone key pad), which is our solution. However, this is most effective for personal banking (as most people have a personal mobile), rather than business use, where PIN Sentry is the more appropriate means.

A combination of both provides even greater security, not just of payment authorisation, but also in helping to prevent procurement fraud, whereby purchases above a certain limit (everything being rules based) can be securely confirmed by Chip and PIN through PIN Sentry (that the card is being used by someone (probably one of the team in finance in reality) who knows the PIN, followed by an SMS message to the necessary directors to authorise that the transaction should go through.

A combination of security measures can be utilised to provide more comprehensive systems

Q43 How should the National Payments Plan address new technologies, such as biometrics, which may contribute to customer security?

Biometrics are one means of multi-factor authentication (being one of the three pillars of identity – what you are (the mugshot), what you know (the PIN), what you have (the card/phone), at its simplest level being the photo on a Chip and PIN payment card. Additional technologies enable more sophisticated models to be used, for example the potential use of iris scanning from mobile phone cameras, fingerprint readers on laptops, face being displayed on screen when card handed to cashier etc.

The National Payment Plan should note the potential importance of these in the fight against fraud.

Q44 What actions, if any, should the National Payments Plan include in regard to data sharing?

Innovative payment methods may entail the storage of more data than at present (particularly when compared with cash), but there should be no need for changes to existing data sharing regulations.

Q45 How can the National Payments Plan help ensure that the burden of fraud prevention is shared equitably across payment service providers and users, including SMEs?

By ensuring that innovations take advantage of existing infrastructure as far as possible, removing the need to add on additional layers of complexity that can cause financial burdens.

Q46 What role should the Payments Council play in raising the profile of fraud and security issues and in lobbying government and the public authorities?

Q47 What should be the role of standards in the National Payments Plan? Are the current principles as agreed by the Board a suitable base from which to start? What role should the Payments Council play in influencing international standards developments?

Q48 What, in particular, should the National Payments Plan say about messaging standards?

Q49 Would you support an initiative, led by the Payments Council, to establish a better understanding of the costs of UK payments? If so, how do you think this should be taken forward? What supporting information do you think would be relevant for such an exercise?