

# ***Code of Conduct for the Authentication of Machine-Dispensed Banknotes***

**Consultation Response Document**

**Strategic Cash Group**



**BANK OF ENGLAND**



**Published 22 July 2013**

## Foreword

On behalf of all the members of the Strategic Cash Group, I would like to thank those organisations which responded to our public consultation, which ran from 25 February to 20 May this year. We received responses from all the sectors which would be affected by, or have an interest in, the *Code of Conduct for the Authentication of Machine-Dispensed Banknotes* ('the Code'). It was greatly encouraging to see that so many respondents saw the Code's value in supporting the important objective of maintaining confidence in the currency. The version published today refines and builds on the version sent to consultation as a direct result of the responses received.

In this document, we summarise the key themes raised by respondents during the consultation process and explain how the Strategic Cash Group has amended the Code in light of the feedback. Respondents also provided a number of minor comments, more of a drafting nature, which we have not detailed here, but which have been incorporated into the final version of the Code.

Several respondents raised issues about the future evolution of the Code. In order to ensure that the points are taken into account at the appropriate time, they have been passed on, anonymised, to the Review Group in order to help shape the review of the Code which it will publish in early 2015.

Further comments or feedback on the Code remain welcome at [local.recycling@paymentscouncil.org.uk](mailto:local.recycling@paymentscouncil.org.uk).



Chris Salmon

Chair of Strategic Cash Group

22 July 2013

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## Executive summary

The public consultation commenced with an industry launch event and ran online from 25 February to 20 May 2013. We received twenty-seven responses to the consultation from stakeholders including ATM deployers, cash technology providers, cash in transit firms, wholesale cash processors, retailers and representatives of these stakeholders.

Most respondents were clear that they saw value in continued public confidence in cash and in the *Code of Conduct for the Authentication of Machine-Dispensed Banknotes* ('the Code'). Some indicated that their processes are already broadly compliant. Respondents raised a range of clarifications and suggested amendments which we hope will make the Code as relevant as possible to the organisations which are covered by it.

The greatest changes in the final Code compared to the consultation version are in three areas:

- Suggested transition timeframes (p.9) – these have been extended for some operators on the basis of representations made.
- Guidance on quality (p.11) – we have stressed that quality sorting is not a requirement in the current Code, although it is strongly encouraged where possible, and clarified the guidance provided. The Review Group will consider the inclusion of quality requirements in due course.
- The Review Group (p.16) – the longer-term issues raised by respondents in this consultation will be put forward to the Review Group for its consideration.

While these were the main themes raised, other points were raised by respondents. We have grouped these by theme under the original questions set out in the Consultation Document. Minor drafting clarifications have also been added to the Code, but are not set out here.

We published the Code on 22 July 2013, and implementation has commenced. We continue to welcome feedback on the operation of the Code at [local.recycling@paymentscouncil.org.uk](mailto:local.recycling@paymentscouncil.org.uk). Strategic Cash Group (SCG) plans to publish a review of the Code's implementation in early 2015, details of which are in Appendix 7 of the Code.

## Consultation point A: Scope of the Code

### Questions posed

- A1. How clear is the scope of the Code? Does it sufficiently avoid ambiguity? How could it be clarified if not?
- A2. Is the scope sufficient to ensure, from a public cash acquisition perspective, that the public can remain confident in the authentication of the banknotes they receive through COCDs? Should any other points in the cycle be considered in scope in your view? Please give reasons.
- A3. Please include any other feedback on this section.

### Key response themes

1. **How was the scope of the Code settled? Which specific devices would be in scope (e.g. internally-recycling ATMs, teller-assist devices)?**
2. **Low volume ATMs should not be in scope.** Several respondents have suggested that some ATMs which perform very few transactions would likely be removed from service, to avoid the operators incurring additional costs associated with compliance unless they were taken out of scope. Others noted that merchants locally replenishing ATMs are more likely to use a note authenticator in their regular practices if they deal with high cash volumes.
3. **Non-LINK ATMs should be in scope** in order to prevent the costs of Code compliance being perceived to disadvantage particular schemes.
4. **Why are Scottish and Northern Ireland banknotes not in scope yet?**

### Clarifications

- **[Theme 1]** Everyone should have the opportunity to refuse to accept a banknote which they do not believe is genuine. Customer-Operated Cash Dispenser (COCD) machines do not allow banknotes to be rejected by the recipient. Therefore, it is particularly important that they only issue banknotes that have been reliably machine-authenticated. As ATMs and self-service checkouts represent virtually all the mainstream COCDs currently deployed, the Code is aimed initially at these estates. Further evolution of the UK's COCD estate would change this (for instance, ticket machines could start to dispense banknotes as well as accept them). We will therefore keep the scope of the Code under review, as described under Appendix 7 of the Code, noting that any significant extension or change in scope would require further consultation.
- **[Theme 1]** ATMs and self-service checkouts are in scope including those that recycle customer deposits internally. Teller-assist devices are not in scope: these devices are used at point of sale, but the transaction still occurs person-to-person and a counterfeit banknote can be rejected.
- **[Theme 3]** As the Code seeks to promote an industry-wide standard for banknote authentication, all ATMs are expected to comply with the Code, regardless of whether they are connected to the LINK network (though virtually all UK ATMs are). This has been clarified throughout the Code.
- **[Theme 4]** Issuers of Scottish and Northern Ireland banknotes are currently developing an authentication machine testing framework for their banknotes. This is required before their notes can be integrated into a future version of the Code. As set out in Appendix 7 of the Code, the Review Group already includes the Association of Commercial Banknote Issuers as an observer in order to incorporate commercially-issued notes into the Code in due course.

## Amendments

- **[Theme 2]** It is important that the public can be confident in the authentication behind all notes dispensed by COCD, as set out above. As the public do not distinguish between COCDs by replenishment practice or transaction volume, SCG is keen that the Code is as consistently applied as possible. SCG believes concerns over low-volume ATMs can be addressed by varying the originally-proposed transition policy, as discussed on page 9 of this document, and by reviewing implementation as detailed on page 16.

## Consultation point B: Principles of compliance

### Questions posed

- B1. How well do the principles relate to your organisation's cash operations? If they are not clearly related, how could they be clarified/amended?
- B2. To what extent would your organisation need to adjust its practices to comply with the Code? Please explain the impact of any process changes.
- B3. Would there be any additional costs associated with gaining Code compliance for your organisation? Please provide as thorough breakdown as possible, noting also any financial or other advantages for your business in complying with the Code.
- B4. Please include any other feedback on this section.

### Key response themes

- 1. During a new note launch, should note recyclers refrain from recirculating the older of two note designs when they are both current notes?**
- 2. Most respondents recognised value in the principles of the Code.** Benefits cited included improvement in customer service standards in cash transactions and good alignment with firms' wider cash processes. Some respondents indicated they would want to ensure the authenticity of its machine-dispensed notes with or without the Code.
- 3. Providing note authenticating Machines for third parties.** The responses suggested that Independent ATM Deployers (IADs) were most likely to comply with the Code at their merchant-replenished sites by providing a Code-compliant Machine and adequate guidance for its usage in a Code compliant manner. Some respondents sought guidance on how this relationship should be managed in a Code-compliant manner.
- 4. Software update responsibilities and timeframes.** Some respondents claimed that the timeframes were too ambitious, others that they were achievable. Several wanted further clarity on the responsibility to ensure software updates were completed.
- 5. Some note authenticators do not 'detect counterfeits', but reject notes they cannot authenticate.**

### Clarifications

- [Theme 1]** When there are two note designs for a given denomination, both can be recirculated through COCDs. Only when the older of the two designs has legal tender status removed should it no longer be recirculated to the public. Legally the Bank of England is required to give one month's notice of an intention to withdraw legal tender status.
- [Theme 3]** In order to provide flexibility, no guidance is given on the commercial arrangements under which IADs provide merchants with a Code-compliant device. If the IAD achieves this on an ongoing basis (including software updates and repairs), it has discharged its duties sufficiently to comply with the Code regardless of the commercial or the contractual means applied. Guidance is given in Appendix 4 of the Code to support compliant organisations in checking on-the-ground use of the Machine in compliance with the Code.

### Amendments

- [Theme 4]** The Bank of England's [Framework for the Testing of Automatic Banknote Handling Machines](#) ('Framework') has been updated to include the annual date at which organisations should review whether their software version is still listed. This is the organisation's responsibility under Principle 3.1. Principle 3.2 only applies where an off-cycle test is conducted in response to a new counterfeit. In these instances the

manufacturer will be asked to contact their customers. Organisations should ensure their suppliers have up-to-date contact details for this.

- **[Theme 4]** Ultimately, timely software updates are essential to ensure that new counterfeit banknotes are not recirculated. The Code's requirements now recognise that organisations will have varied testing/roll out processes. The Bank of England is also working to ensure updates are not required under the Code more frequently than necessary (such as retaining old software versions on the Framework where they are still able to outsort 100% of the counterfeit test pack, subject to the manufacturer's consent).
- **[Theme 5]** The Code now reflects the fact that many Machines reject rather than retain non-verified notes (which may or may not be counterfeit). We have also amended references to the incident log to only refer to instances where the counterfeit is retained and a receipt is issued to the individual.

## Consultation point C: Transition timeframes

### Questions posed

- C1. The timeframes above have been drafted so that key stakeholders in cash adopt the Code over broadly similar timeframes, thereby reducing the risk of counterfeiters targeting perceived 'weak spots'. How achievable are the compliance timeframes above for your business (and your sector in general, if you wish to comment)? What would the impact on your business be in moving to adopt the Code under the timeframes above? Please give reference to any financial, contractual or other issues you may encounter.
- C2. Could your organisation achieve compliance in a shorter timeframe than the above? Would a shorter timeframe create additional cost or logistical problems?
- C3. If the timeframes above are not achievable in your view, what timeframe would you suggest and why?
- C4. Please include any other feedback on this section.

### Key response themes

- 1. A phased transition recommendation would be positive for some ATM operators.** Some ATM operators responded that they could comply in a shorter timeframe, or were already broadly compliant with the draft Code. For others, rolling out Code compliance to existing estates would involve new costs and time commitments which they would prefer to spread over several years.
- 2. Mixed responses were received about whether ATM supplier contracts could be amended off-cycle.**
- 3. The cost benefit for the Code makes sense for busier ATMs but is increasingly marginal for the lowest transacting ATMs. These lowest transacting ATMs should be de-scoped as they could be removed from service due to additional compliance costs.**
- 4. The transition timeframe for retailers operating self-service checkout terminals (12 months) is ambitious for some.** Several responses suggested that budget/investment cycles would be an impediment for some organisations.

### Clarifications

- [Theme 4]** While a 12 month timeframe for retailers operating self-service checkouts is ambitious for some, others are able to comply within this timeframe. SCG accepts that retailers may need to work towards compliance over slightly varied timeframes, but there remains an advantage for public confidence, and also to retailers, if all retailers transition to compliance over a similar timeframe, as this preserves the reputation of integrity of the banknotes dispensed by self-service checkout terminals. Full early compliance should still be a central objective, and firms that are unable to comply on time would be expected to demonstrate a clear road map to compliance.

### Amendments

- [Theme 1]** On the strength of the case made by respondents, SCG is varying the recommended transition timeframe for ATM operators, allowing up to three years depending on transaction volumes, compared to the six-to-eighteen months previously proposed. SCG is also recommending that the busier ATMs are prioritised first, as detailed on page 7 of the Code.
- [Themes 1, 2]** The longer ATM transition timeframe should help deal with contract amendments, though SCG appreciates that some contracts, particularly IADs' contracts with merchants, are longer than three years.
- [Theme 3]** SCG is keen to support public access to cash, and the ATM channel is vital to achieve this. We have received information which indicates that Financial Inclusion ATMs are unlikely to be affected by compliance

costs associated with the Code's requirements. However, recognising that the largely-fixed costs of per-ATM compliance would be most effective being targeted at busier ATMs first, as respondents have indicated, we have brought these forward (from up to 18 months in the timeframe proposed in the consultation document), while less busy ATMs have been pushed back. The compliance of the least-frequently-used ATMs, now scheduled for year three, will first be subject to a published review as detailed in Appendix 7 of the Code. This will allow SCG to use real-life compliance cost data to assess whether, given the costs, there is a sufficient benefit to maintaining confidence in the currency to justify the cost of rolling out the Code to these low volume ATMs.

## Consultation point D: Note quality

### Questions posed

- D1. What further direction is needed, if any, to ensure sufficient guidance is given on note quality?
- D2. Are there any other ways in which quality sorting could be encouraged under the Code?
- D3. What existing quality standards does your organisation operate for notes dispensed to the public? How compatible are these with those proposed above?
- D4. Please include any other feedback on this section.

### Key response themes

1. **Any future quality requirements should not render investment made in authentication-only Machines obsolete, and may only be relevant for higher-volume sites.**
2. **Further guidance on quality could be given.**
3. **Quality drivers already exist for COCD note dispense.** Many respondents highlighted that there were already commercial drivers for ensuring banknotes were free from defects (e.g. holes, tears, missing portions) in order to prevent machine jams, standards for which are quantified in some guidance (for instance, the maximum size of holes or tears which a merchant's ATM can handle). Some respondents also noted that they were able to fitness sort using equipment which is already deployed.
4. **Should notes not meeting these guidelines be recirculated by hand?**

### Clarifications

- **[Theme 2]** Respondents asked whether a numerical minimum standard could be included for dye staining or soil, but there is currently no standard industry scale or detection technique, meaning that a numerical standard cannot be provided. However, the Bank of England is working on greater standardisation of soil settings, initially with the wholesale cash providers, and the Review Group will consider whether this guidance can be clarified in a future version of the Code. Therefore in the medium term, it may be possible to incorporate this in the Code's guidance.
- **[Theme 4]** We have clarified that it is preferable that notes not meeting the quality guidelines are banked, in order to be taken out of circulation. As with the wider guidance on quality, this is not a requirement of the current Code, but is encouraged where possible.

### Amendments

- **[Themes 1, 3]** SCG recognises respondents' comments that there are already quality drivers, as above, and that complying with quality requirements would represent an additional cost for some organisations. The Code no longer includes banknote quality as a principle. Appendix 1 now states that formal quality requirements would require a further public consultation, and that they would also not render currently-compliant authentication-only devices obsolete for compliance purposes. More generally, the Code is now clearer on the distinction between requirements and supporting guidance.

## Consultation point E: Clarification of requirements for Code compliance

### Questions posed

- E1. How well does the logic tree above apply to your organisation? Please set out any omissions or conflicts.
- E2. Is the guidance given adequately clear? Is any further guidance necessary?
- E3. Please include any other feedback on this section.

### Key response themes

1. **What happens if a supplier provides non-compliant notes?**
2. **The logic tree is clear but does not fit all operations.** Many respondents related that the logic tree captured and clarified the requirements for their operations well, while others flagged models that did not fit.

### Clarifications

- **[Theme 1]** We have clarified that receiving non-compliant notes from a third-party supplier would be a matter for the organisation and the supplier to address and to put mitigants in place against supplier failure occurring again. A one-off incident would not render an organisation non-compliant.

### Amendments

- **[Theme 2]** We have amended the logic trees in Appendices 2 and 3 to take account of internal CIT services operated by some ATM deployers, mixed replenishment models and in-machine recycling. These are included in the Code as illustrative examples, but are not intended to be exhaustive.

## Consultation point F: Sourcing banknotes from a third party

### Questions posed

- F1. How well does the decision tree above enable ATM Operators and retailers to ensure the banknotes they source from third parties are authenticated in compliance with the Code? Please explain any concerns.
- F2. Please include any other feedback on this section.

### Key response themes

1. **The guidance is clear.**
2. **What would be adequate evidence that a supplier is providing compliant notes?**

### Clarifications

- **[Theme 2]** We have clarified the Code to indicate that a standard letter from the supplier would be adequate evidence that the supplier provides compliant notes.

## Consultation point G: LINK ATM Operator compliance

### Questions posed

- G1. How well does the decision tree above cover current and anticipated ATM replenishment models? Please set out any omissions.
- G2. Do you believe that incorporation within LINK's Network Members Agreement will provide a good mechanism to drive compliance with the Code among ATM Operators? Are there any other options you would like to suggest?
- G3. Would you see value in Payments Council providing a published list of compliant organisations? Would you be content for your organisation to be listed if it is compliant? Please give reasons.
- G4. How onerous would it be for your organisation to detail the number and type of Machines currently in operation and their software versions on an annual basis? A simple spreadsheet template would be provided.
- G5. Please include any other feedback on this section.

### Key response themes

1. **A published list of compliant organisations would have benefits and drawbacks.** Some organisations were content to be listed, while others noted that it could be perverse to adopt a 'name and shame' approach when trying to uphold confidence.
2. **Maintaining a list of Machines deployed could be onerous for some organisations, particularly IADs.** This was particularly true if a merchant bought its own device independently.
3. **Many respondents support the incorporation of the Code into the LINK rules.** Reasons cited include the comparative inflexibility of legislation and the fact that persuasion alone may not be enough to engage all stakeholders.
4. **Several respondents prefer a voluntary approach to a LINK rule.** Several organisations supported an alternative approach to the Code, whereby LINK would collect the compliance data, but the Code itself would be a voluntary arrangement for each LINK member.
5. **What backup practices should be used if a Machine is broken?**

### Clarifications

- **[Theme 2]** It should also be relatively manageable (over the course of the ATM compliance timeframe set out in the Code and thereafter) to confirm whether a merchant-purchased Machine is compliant by phone, email or survey, and then log its software version. On the whole, it would seem better for IADs to source and distribute Machines centrally, then track these Machines, but this is at the discretion of the IAD.
- **[Themes 3, 4]** Amendments to the LINK scheme rules provide virtually all ATM deployers with a consistent framework for Code compliance. It should be advantageous for all ATM operators to be assured that other operators are investing in Code compliance over the same timeframe. We understand that the LINK members have developed a draft amendment to their Network Members Agreement which would be voted on this September and which, if approved, would provide this assurance that the compliance rollout occurs for all deployers over a common timeframe, as outlined on page 7 of the Code. SCG supports the network members' initiative in this area. If such a motion were rejected, we would look to revisit how best to ensure that the Principles of the Code are applied in the context of ATM replenishment.

## Amendments

- **[Theme 1]** Recognising the mixed views on data publication, any published data will be at an aggregate, rather than individual, level.
- **[Theme 5]** The Bank of England provides guidance on note authentication on its website. This is now linked into the Code's guidance on backup note authentication practices.

## Consultation point H: Retailer compliance

### Questions posed

- H1. How well would the compliance regime set out above integrate with retailers' existing audit practices? Would you like to suggest any other approaches to compliance among retailers? What are they?
- H2. Is your external auditor content that the form is adequately clear?
- H3. Is your organisation content to share these data for these purposes?
- H4. Would you see value in Payments Council providing a published list of compliant organisations? Would you be content for your organisation to be listed if it is compliant? Please give reasons.
- H5. How onerous would it be for your organisation to detail the number and type of Machines currently in operation and their software versions on an annual basis? A simple spreadsheet template would be provided.
- H6. Please include any other feedback on this section.

### Key response themes

- 1. External auditors are less familiar with conducting site visits than store compliance or internal audit teams, and such a process would carry additional costs.**
- 2. Non-LINK ATMs should be incorporated in the Code.**

### Amendments

- **[Theme 1]** The guidance on this has been amended in line with the feedback received to centre on using in-house compliance or audit teams.
- **[Theme 2]** The processes for non-LINK ATMs have now been set out in greater detail in this Appendix. As with the LINK compliance process and that for self-service checkouts, some degree of spot checking is expected for these ATMs, but SCG acknowledges that compliance checks of all sites would be disproportionate for many operators.

## Consultation point I: Future reviews of the Code

### Questions posed

11. Are there any other interests you would wish to see represented on the Banknote Authentication Working Group?
12. How well does the frequency of review set out ensure that the Code remains relevant, while also ensuring it does not change overly frequently?
13. Please include any other feedback on this section.

### Key response themes

1. **Addition of representatives to the Review Group. Several respondents wanted to join the Review Group, or nominate a representative.**
2. **There were differing views on the right frequency for the review.** In the initial years of the Code, some respondents wanted six-monthly reviews conducted, while others were content with a biennial process. Some also suggested pausing any rollout while a review is conducted.

### Clarifications

- **[Theme 1]** Initially, the Review Group will consist of representatives of the Bank of England, the British Retail Consortium, Cash Services Group<sup>1</sup>, LINK and Payments Council. The Association of Commercial Banknote Issuers will also join, initially as an observer. These members provide umbrella representation for all organisations which currently deploy ATMs or self-service checkout terminals. Other representatives will be added to the Group as necessary to ensure appropriate stakeholder representation. The Group, chaired by the Bank of England and reporting to SCG, can additionally invite other attendees on an ad hoc basis, and can be contacted via email at [local.recycling@paymentscouncil.org.uk](mailto:local.recycling@paymentscouncil.org.uk).

### Amendments

- **[Theme 2]** The varied responses on review frequency indicate that the review would need to be early enough to be of use to organisations still transitioning to Code compliance when it is published, but conducted when enough data are available to provide useful conclusions. SCG has concluded that the correct timeframe for a public review is after September 2014, by which time by which time ATMs responsible for 97% of LINK ATM cash transactions should be replenished in a Code-compliant manner and retailers should be compliant or have a clear road map to compliance. The review would then be published by early 2015 and would cover the subjects now stipulated in the Code.

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<sup>1</sup> A working level group which reports to SCG.

## About Payments Council

The Payments Council is the organisation that sets the strategy for UK payments.

The Payments Council is the body with responsibility for ensuring that payment services work for all those that use them in the UK. This unique role ensures that we listen to a wide range of stakeholders to drive innovation in payments and implement change so that individuals and businesses have access to payments for their current and future needs. We are, by nature, a collaborative body so we work with the financial institutions in the payments industry as well as listening to the voices of our external stakeholders. The Payments Council has three core objectives: to have a strategic vision for payments and lead the future development of co-operative payment services in the UK; to ensure payment systems are open, accountable and transparent; and to ensure the operational efficiency, effectiveness and integrity of payment services in the UK.

The Payments Council's Cash Services Group provides strategic direction on co-operative (non-commercial) issues for cash.

For more information visit [www.paymentscouncil.org.uk](http://www.paymentscouncil.org.uk).

## About the Strategic Cash Group

The Strategic Cash Group (SCG) is chaired by the Chief Cashier of the Bank of England, Chris Salmon. Secretariat support is provided by UK Payments Administration on behalf of the Payments Council. The members of the SCG are:

- The Association of Commercial Banknote Issuers
- Bank of England
- Barclays Bank plc
- G4S Cash Solutions (UK) Ltd
- HM Treasury
- HSBC Bank plc
- Lloyds Banking Group plc
- National Australia Group
- Nationwide Building Society
- Payments Council
- Post Office Ltd
- The Royal Bank of Scotland plc
- The Royal Mint Ltd
- Santander Ltd
- Vaultex UK Ltd

The aims of the SCG are:

- 1) Sustain reliable, available cash services, so that the public, retail and corporate customers are able to withdraw and deposit notes and coin in the manner to which they are accustomed, and in the manner in which they might need;
- 2) To support issuers in maintaining the integrity of, and confidence in, their currency;
- 3) As far as possible, to ensure neutrality between surplus and deficit players.

## **Members of the SCG Local Recycling Sub-Group**

Bank of England	National Australia Group
Payments Council	Nationwide
Barclays	Post Office
G4S	Royal Bank of Scotland
HSBC	Santander
Lloyds Banking Group	Vaultex

Chair – Victoria Cleland (Head of Notes Division, Bank of England)

## **Members of the Review Group**

Bank of England  
British Retail Consortium  
Cash Services Group  
LINK  
Payments Council  
Association of Commercial Banknote Issuers (observer)

Chair – Victoria Cleland (Head of Notes Division, Bank of England)