Enforcement Operations Agreement

Schedule 2

Appendix 13 ï
Finance Best Practice

tfl_scp_000555

Congestion Charging
Transport for London
4th Floor, Palestra
197 Blackfriars Road
Southwark London SE1 8NJ

Copies of the Finance Best Practice documents and associated guides referenced and contained in Appendix 13 are the most current versions available at the date of issue of this Agreement. Any and all subsequent revisions to these documents will supersede the current versions contained in Appendix 13.

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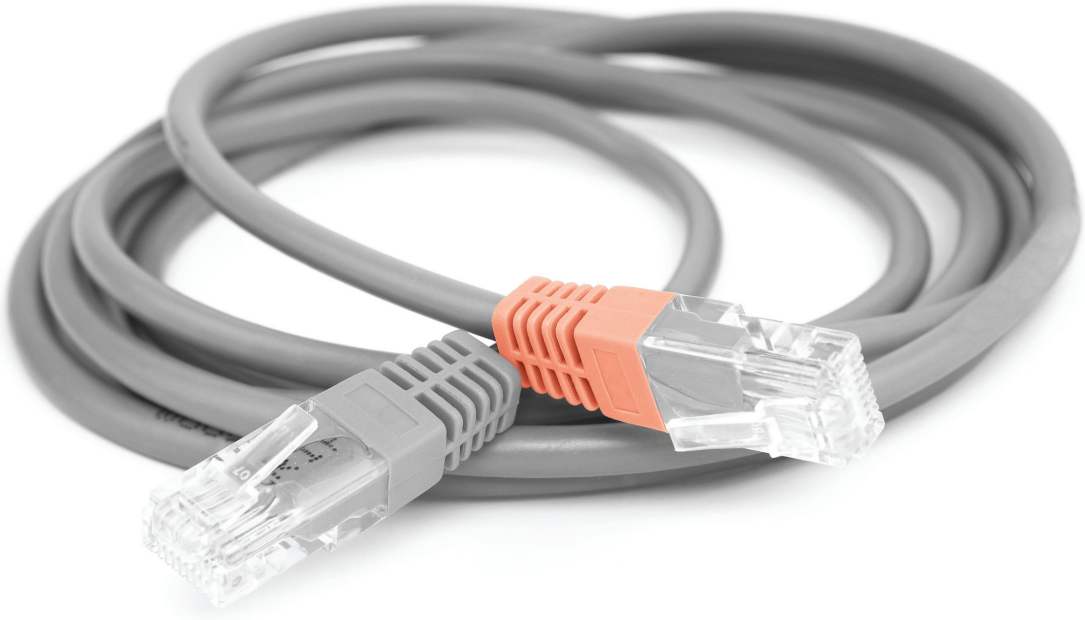
bacs

AUDDIS

Automated Direct Debit Instruction Service



Contents

Introduction

Making Direct Debit even easier and more cost-effective

Direct Debit is one of the most widely used and accepted payment methods in the country. It saves time for everyone – consumers, businesses, utilities, charities, banks and building societies.

It's simpler for your customers, too, and is increasingly recognised by the consumer as being the 'easiest way to pay'.

AUDDIS – the Automated Direct Debit Instruction Service – automates the transfer of Direct Debit Instructions (DDIs) between you and the bank. Quite simply it makes the processing of DDIs easier, faster, more efficient and cost-effective than ever before.

Increasing the benefits of Direct Debit

AUDDIS benefits everyone involved in a Direct Debit payment.

For service users:

- Lowers postage and set up costs for DDIs
- Provides faster identification of invalid account information significantly reducing unpaid Direct Debits
- Allows a reduction in the time between lodgement, when the bank receives and accepts the DDI, and the collection of the first payment
- Enables you to provide a better quality of service through reduced processing delays and fewer manual steps
- Provides more accurate identification of a DDI through a mandatory reference
- Offers greater uniformity and ease of DDI processing
- Reduces the potential for re-keying errors, further improving the quality of service.

For banks it:

- Reduces processing time
- Reduces the potential for error
- Minimises paperwork and manual input
- Takes paper out of the banking system – and is now the accepted standard throughout the banking industry.

For consumers it:

- Increases efficiency of the Direct Debit service/product offered.

AUDDIS – the benefits

A small change with major benefits

Practically, AUDDIS has only one primary change from conventional DDI processing: the original paper Instruction is retained by you, not the bank.

You simply enter the customer's details into your own system and send them electronically via the Bacstel-IP service to the customer's bank.

It might seem a small change, but it brings major additional advantages for you.

Earlier collection of first payment

A major benefit which AUDDIS brings is the advantage of allowing collection of the first Direct Debit, two working days after the lodgement of the AUDDIS DDI with the bank, provided the customer has received advance notice. It is however, recommended that 5 working days are left before the first collection to ensure that no lodgement rejections are received.

Reduced paperwork

As Direct Debits become the preferred payment option, the amount of paperwork will continue to increase, which is expensive for all concerned and can also result in processing errors and delays.

AUDDIS significantly reduces the amount of paper passed between you and the banks.

Fewer errors

The current system of double keying information from a DDI by both you and the bank increases the possibility of input errors. These, in turn, waste time and money for everyone, and reduce the consumer's confidence in service users and banks, and ultimately the Direct Debit itself. AUDDIS reduces the opportunity for input errors by only requiring the information to be keyed in once.

Time savings

Add to these benefits a reduction in time in processing an AUDDIS Instruction, as well as the improvement in quality resulting in fewer customer queries, and the strength of the business case for changing to AUDDIS becomes even more compelling.

First step towards Paperless Direct Debit

With ongoing rapid growth of direct marketing, telesales, e-commerce and the internet, the importance of Paperless Direct Debit – which is only available to AUDDIS users – cannot be over emphasised.

With Paperless Direct Debit DDIs can be set up over the telephone or internet, via telephone keypad or face-to-face without the customer having to sign a paper Instruction.

- Direct Debit sign up at 'point of sale' eliminates much of the paperwork and postage associated with setting up Direct Debits
- First payments can be collected earlier as you don't need to wait for the customer to complete and return the DDI

- Bank details can be checked at 'point of contact', eliminating administration problems later
- Telesales techniques can help increase conversion of sales opportunities.

The customer also benefits from the certain knowledge that a letter confirming all the details of the paperless sign up will be sent to them.

Getting it right first time

The earlier in the process that discrepancies are detected, the less chance of error when Direct Debit payments are processed. Indeed, AUDDIS service users have reduced the number of unpaids due to the reference and modulus checking processes introduced by AUDDIS.

Core reference

All AUDDIS Instructions must contain a core reference which is quoted on subsequent payments. This results in a more accurate matching of payments with Instructions.

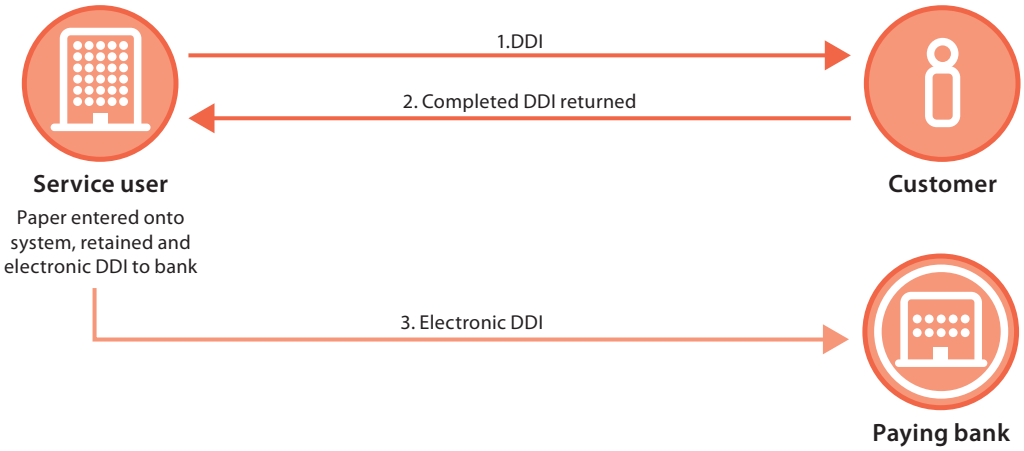
Modulus checking

It is all too easy for customers to provide incorrect details when giving their sort code or account number, which delay setting up and collecting payments. AUDDIS guards against this through modulus checking which ensures the account number is valid for the sort code.

Modulus checking is a core part of the AUDDIS service, you can enhance your progress by incorporating modulus checking in your own systems. This ensures that the customers account details are checked at the time of input, identifying any discrepancies at the outset. All Bacs Approved Software Solutions will supply modulus checking routines as part of standard AUDDIS solutions.

Increased customer satisfaction

AUDDIS means customers will notice an improvement in your customer service, even though the operational changes are invisible to the consumer.



Direct Debit Guarantee

The Direct Debit Guarantee protects customers in the event of an error by you or the paying bank. AUDDIS, does not affect the Guarantee. In fact AUDDIS makes the Guarantee easier to implement by reducing manual involvement and therefore the risks of error and indemnity claims.

In the event of an error the customer's bank still remains responsible for making an immediate refund to the customer. If the error is caused by you the bank will reclaim the amount from you.

How to get AUDDIS working for you

Time to switch to AUDDIS

AUDDIS is standard throughout the banking industry. All banks accept AUDDIS Instructions, so it does not matter who your customers bank with, you can expect the same level of service.

There has never been a better time to switch to the simpler way of managing your Direct Debits.

How to start

Contact your bank who will assess the benefits that AUDDIS will bring to your Direct Debit operations and your ability to satisfy the AUDDIS criteria. If you both agree that AUDDIS is suitable for your organisation, the next steps are:

- Complete and submit an AUDDIS application form
- Prepare your systems, including software, to accept the new submission and message formats
- Complete the AUDDIS testing procedures
- Go live on AUDDIS.

Don't delay, contact your bank today. They will provide you with the best available support to ensure a smooth transfer over to AUDDIS.

Full details on switching to AUDDIS are covered in the 'AUDDIS Service Definition' and 'AUDDIS Migration Guide', both of which are available from your bank.

Are you overlooking the benefits of ADDACS?

ADDACS, the Automated Direct Debit Amendment and Cancellation Service, is another valuable enhancement to the Direct Debit service. It improves the speed of processing DDI amendment and cancellation information between you and the bank.

Customers notify their bank of any changes or cancellations to their DDIs. The paying bank consolidates all amendment and cancellation details and passes the information to you using ADDACS. This is sent electronically and offers a wide range of benefits.

- DDI amendments and cancellations are applied faster and more accurately

- There are no postal or handling delays. Details of your amendments and cancellations are accessible from 8.30am onwards the working day after they have been input by the paying bank
- Administrative and problem resolving costs associated with re-keying errors are virtually eliminated as you can feed the amendment and cancellation information automatically into your DDI database
- Your customer service is improved, as your systems can be adapted to generate standard letters, in accordance with the reason code, to keep your customers informed.

More information

To find out more about using AUDDIS and other services to improve the speed and efficiency of your Direct Debit scheme, contact your bank or visit www.bacs.co.uk/businesses

www.bacs.co.uk/usingdirectdebit

Bacs Payment Schemes Limited 3rd Floor Livingstone House
12 Finsbury Square London EC2A 1AS

M1284/09/09

Electronic Business Guide

Version 3.0 January 2006

Establishment Services

Contents

Introduction

This Electronic Business Guide (EBG) is designed to provide the information required by Merchants and Vendors in the UK to enable acceptance, processing and submission of American Express card transactions. It will also enable you to certify:

- your POS system for on-line authorisation, both single transaction and batch
- your file transmission method
- your submission file format

This guide contains all the information you should need, but if you have any further queries please get in touch with your Network Development contact direct or call the number below.

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Glossary of Terms

Term	Meaning
AAC	Application Authentication Cryptogram
AEIPS	American Express ICC Payment Specification
AC	Application Cryptogram (ICC term)
Agent	A third party bureau responsible for processing and submitting transactions on behalf of a Service Establishment.
AID	Application Identifier (ICC term)
AIP	Application Interchange Profile (ICC term)
ARPC	Authorisation Response Cryptogram (ICC term)
ARQC	Authorisation Request Cryptogram (ICC term)
AVS	Address Verification Service; the use of Cardmember address and postcode numerics to provide additional security information in authorisation requests.
CAPK	Certification Authority Public Key (ICC term)
CID	Card Identifier Digits; the four digits (unembossed) found on the front of an American Express card. They equate to the Card Security Code.
CNP	Cardmember Not Present: any transaction environment where the Cardmember is not physically at the POS. Includes mail order, telephone-order and internet.
DDA	Dynamic Data Authentication (ICC term)
EBG	Electronic Business Guide – this document
EMV	An acronym for Europay Mastercard Visa, the cardschemes responsible for establishing the standard relating to chip and PIN transactions.
Floor Limit	The transaction amount threshold above which all transactions must seek authorisation; Amex sets a floor limit of zero for most Merchants, thus ensuring that all transactions seek approval.
IAC	Issuer Action Code (ICC term)
ICC	Integrated Circuit Card, also known as a Chip Card or Smart Card.
Merchant	See Service Establishment.
NUA	Network User Address.
NUI	Network User Interface.
PAN	Primary Account Number; the account number embossed on the card
POS System	Point of Sale System. Refers to any electronic equipment used at the point of sale to capture card data. In the context of this Guide the term 'POS system' covers stand-alone terminals and integrated systems.
ROC	Record of Charge; a single transaction either electronic or on paper.
SDA	Static Data Authentication (ICC term)
SE (Service Establishment)	The company or organisation which is contracted with American Express to accept the American Express card as a method of payment. Also known as the Merchant.
SOC	Summary of Charge; a record used in settlement files to summarise batches of ROCs (transactions), detailing the number and value of debit and credit transactions.
Submitter	The Service Establishment or agent responsible for submitting settlement files to American Express on the Service Establishment's behalf.
TC	Transaction Certificate (ICC term)
Vendor	Software company producing POS software on a commercial basis.

General Information

This section of the Electronic Business Guide provides general information about card acceptance testing procedures for American Express.

Card Acceptance for American Express

Before starting to accept transactions from American Express Cardmembers and submitting the details for processing, you must obtain approval for:

- the authorisation interface
- the authorisation message format
- the settlement file transmission method
- the settlement file format

Support from American Express

The Network Development team within American Express provides consultancy and support for POS system certifications and manages the POS system approval process.

Notice Periods and Certification Timescales

You should allow the following periods for completion of testing:

- Four weeks for POS system authorisations testing of APACS 30 POS systems
- Six weeks for testing submissions.

How to request Certification

For **magstripe** authorisations or submissions testing please complete the Request for Certification Form in Appendix A. If you require test cards or account numbers please also complete and sign the Indemnity in Appendix B and send to us by post of fax.

For **EMV** testing please download an EMV Certification Request Form from our website, www.americanexpress.co.uk/merchant/chipandpin or contact Network Development.

General Information

Card Formats

American Express requires that you are able to process cards with magnetic stripes encoded to both ANSI and ISO standards. More information regarding track layouts is given in Appendix I.

American Express also issue Chip (ICC) cards verified by both PIN and signature. Formal EMV accreditation of your POS equipment is required if you wish to accept American Express Chip cards. Please contact Network Development to discuss our EMV accreditation procedure.

Validating Transaction Details

The POS system must be capable of validating the following, regardless of input method:

- Cardmember number (see Appendix H)
- Expiry date. Expired cards should be declined in line with industry practice
- The transaction value. Transactions for zero amounts are invalid; the POS system should prevent all such transactions being submitted to American Express.

The POS system must also prompt the operator to confirm that for Cardmember-present magstripe transactions the Cardmember signature is acceptable.

BIN ranges

American Express does not issue detailed ('refined') BIN ranges; any account number starting with 34 or 37 should be accepted as an American Express card. If a 6-digit BIN range is required please use:

340000 - 349999
370000 - 379999

Keyed Input

The operator may need to key card details in a Cardmember Not Present (CNP) environment, or if a swipe or chip read has failed. The following information should be keyed:

- Card account number, as embossed in the middle of the front of the card
- Expiry date, as embossed on the lower left-hand side of the front of the card

The start / effective date is **not** required.

Cancelling (Reversing) Transactions

The POS system must be capable of cancelling a transaction before completion, either at the request of the Cardmember or Service Establishment, or because it has been declined after referral to American Express. Reversals should be performed locally and should **not** be sent online.

Details of the transaction and the cancellation / reversal should be kept by the POS system for audit trail purposes, but should not be submitted for settlement to American Express.

Audit and Traceback Requirements

A paper record/receipt must be produced for every transaction at an attended POS system. It must contain all the information necessary to provide a full audit trail capable of resolving queries from our Cardmembers. Appendix C covers receipt requirements, layouts and checklists for use when magstripe testing. An audit trail is also essential for transactions on Unattended and Cardmember Not Present POS systems, although a paper receipt is not – see Appendices C3 and C4 for more details.

Receipt Requirements for EMV transactions are given in Appendix K.

General Information

File Acknowledgements

Our two file acknowledgement products offer a simple way of confirming electronically that your direct submissions to American Express have been received and processed.

The file 'Echo' provides confirmation that a submission has been received, and is available in plain text format 30 minutes after the file has been submitted.

The 'Enhanced File Acknowledgement' provides information at a Service Establishment level and details the status of data, accepted or rejected, 90 minutes after whichever of our three daily processing runs the data is processed in (see the section on Submissions, later in this document). It is available in fixed-length or delimited formats which can be imported and manipulated as required.

These reports are only available to Service Establishments that submit directly to American Express and we would recommend that you are set up for the 'Echo' report as a minimum. Please speak to your Network Development contact for further information and Technical Specifications.

Electronic Payment Advice (EPA)

Standard paper-based statements are sent by post, subject to a possible fee. It may be preferable to receive our electronic version of statements, the EPA, for which no charge is made. The EPA is a detailed report of transactions for which a Merchant is to be paid, and acts as a useful reconciliation tool. The file is available electronically, in fixed and delimited formats, to Merchants with direct connectivity to American Express. EPA is not available to, or via, Third Parties. Please speak to your Network Development contact for further information and Technical Specifications.

Online Merchant Services (OMS)

Where EPA is not appropriate we offer this comprehensive, free, reconciliation tool. More information and self-enrolment is available at www.americanexpress.co.uk/oms.

Euro and Multi-Currency Processing

If you have a requirement to offer transaction currencies other than sterling please contact Network Development to request the **Multi-currency Addendum** to this Guide.

Authorisations

This section covers the certification of POS systems for APACS 30 version 18 for on-line authorisation.

If you are a terminal provider and wish to certify APACS 30 or APACS 40 stand-alone devices, please contact us for details.

Certification of Electronic Authorisations

POS systems must be certified before they can be used to process electronic authorisations for American Express. American Express currently makes no charge for this certification service.

Approval for Commercial POS Systems

If you are a vendor developing software commercially, you can obtain full approval for your POS system or software before selling it to third parties and distributors. The third party or distributor may also obtain approval on behalf of the customer, if required.

Scope of the Tests - POS system Types

Test scripts are given in Appendix C. Most of the scripts contain tests for both keyed and swiped transactions. If the POS system you are testing only uses one of the entry methods, you only need to carry out the tests for the method applicable. If both methods are available to POS users, even if one is preferred over the other, all tests in the appropriate test script should be completed.

Transaction Types

Your POS system must be capable of processing sale and refund transactions for both ISO and ANSI card formats. Tests for both transaction types are included in the scripts.

Floor Limits

A merchant must seek authorisation from American Express if a transaction amount is over the mandated floor limit.

The scripts include tests for sale transactions which are below and above your set floor limit. If, as is normally required, the floor limit for your Service Establishment is set to zero, you do not need to carry out any tests on below floor limit values; this should be indicated on your completed test script.

Methods of Authorisation

American Express supports authorisation requests from the following types of device. Scripts (in brackets below) to test each of these are provided in Appendix C.

- Attended (C2): eg. retail or restaurant
- Unattended (C3): eg. car park payment terminal or self-service ticket machine
- Cardmember not Present (C4): eg. telephone order, mail order , internet
- Batch Authorisation (C4): eg. mail order

Refunds and Reversals

The American Express authorisation system is not set up to handle refund or APACS 30 reversal authorisation requests. Neither message type should be sent online; POS systems must be capable of processing refunds and reversals locally.

CID & AVS

The American Express product for Card Security Code and Address checking is known as CID (**C**ard **I**dentifier **D**igits) and AVS (**A**ddress **V**erification **S**ervice). Testing is required if you wish to implement this for American Express transactions; please contact Network Development for more information.

Authorisations

Requests for Certification

In order to request Authorisation certification, please complete the following forms provided in the appendices and return them to Network Development by post or fax, together with a covering request on company headed paper.

- *Request for Certification Form*
- *Indemnity and Request for Test Details*

Our address and fax number are given at the front of this document.

Test Cards

A standard set of test cards for testing attended POS systems contains 4 cards:

- one valid ANSI card
- one expired ANSI card
- two valid ISO 7813 cards

Test cards for testing unattended POS systems are slightly different – some are configured for particular transactions. A set comprises 7 cards:

- two valid ISO cards set up to authorise £1
- one valid ANSI card set up to authorise £1
- one valid ISO card set up to decline £1
- one valid ISO card set up to retain card £1
- one expired ISO card
- one valid ISO card set up to refer £1

Please do not use ordinary personal cards to carry out your tests or use the test cards to attempt to submit real transactions. Please ensure that transactions using the test card number are **not** submitted along with live data to American Express. Any transactions that are accidentally submitted on a live merchant number must be refunded.

Testing without Cards

If you are testing for Cardmember Not Present (CNP) transactions you do not require plastic test cards; we will contact you with test account details.

Sending the Results for Approval

The following documentation must be submitted to American Express before approval can be given.

- the completed test script(s)
- the receipts / vouchers / prints
- the completed receipt checklist

The Review Process

On receipt of all the testing documentation, American Express will review the results. Please allow two weeks for this review to take place.

Once the POS system has successfully fulfilled the requirements of all the tests, a certification letter from American Express will be issued approving its technical functionality. This letter will also contain live connectivity details.

It is important that live connectivity details are substituted for test details once testing is complete, otherwise the American Express authorisation service cannot be guaranteed.

Authorisations

Summary of the APACS Standard 30 Testing Process

	Merchant or Software Vendor	American Express Network Development	American Express Authorisation Testing Dept.
1	Contacts Amex to discuss certification.	Consultancy provided; Electronic Business Guide (this document) issued.	
2	Submits the Certification Request Form (by fax or e-mail) and Indemnity (by fax) to Network Development.	Project raised.	
3			Contacts merchant to arrange testing slot; issues test cards / test account number.
4	Agrees testing slot.		
5	Contacts Authorisation testing Dept. at agreed slot.		Starts authorisation trace.
6	Completes authorisation test script/s and submits results and receipts to Authorisation Testing Dept. for review.		
7			Reviews test scripts and receipts. Results approved or retest(s) required.
8			Testing completed. Approval letter issued.
9	Merchant proceeds to Submissions testing (if required) or 'go live'.		

Authorisations

Referrals and Exception Codes in the live environment

In the live environment American Express may return a referral in response to an authorisation request, and the POS device should be capable of displaying a code indicating the reason for the referral.

The following codes may be present in field 10 of the authorisation response message:

Code	Meaning
E1	Invalid Service Establishment number
E2	Invalid Cardmember number
E3	Invalid amount
E4	Card has expired
E5	Card is not yet valid
E6	Invalid POS system type
E7	Invalid message type
E8	Invalid format
E9	Timeout

If a referral of this kind is received in the live environment the transaction should not proceed until a manual Authorisation code has been obtained from American Express. The voice referral telephone number is

020 8551 1111

Submissions

This section documents the procedures for certifying both the file submission method and the format of the settlement file sent to American Express.

Submitting Data to American Express

The following certification must be completed before transmissions of live data can take place:

- File Submission Connectivity
- Data and File Format

American Express currently makes no charge for the certification service.

Testing Timescales

Please allow up to six weeks for testing submissions.

File Format Data Certification

APACS Standard 29 v.18 ('APACS 29') is the standard format for submitting transactions to American Express for processing. Please see Appendix E for our APACS 29 Technical Specification and Appendix L for a sample APACS 29 file layout.

If you wish to submit airline or car rental itinerary data, or submit via one of American Express's proprietary formats, please contact Network Development for further information.

Submission via Third Parties

If you plan to submit transactions via a Third Party please contact Network Development to discuss the options available and the testing required.

Communication Links

Chosen communication and connectivity protocols may depend on the following:

- CPU hardware and operating system
- preferred / available line type
- available communications protocols
- estimated traffic volumes

The American Express primary file Transmission platform is an IBM AS/400. We support the following:

Physical Links

- PSTN
- ISDN
- X.25 – TNS / BT
- Internet / VPN

Communications Applications

- FTP (File Transfer Protocol)
- C:D Connect Direct
- SIFT (Secure Internet File Transfer)
- XCOM 6.2

Protocols

- TCP / IP (Transmission Control Protocol / Internet Protocol)
- SNA (Systems Network Architecture)

Please contact us if your requirements are not met by the above.

Submissions

Summary of the File Submission Certification Process

	Merchant or Software Vendor	American Express Network Development	American Express Submissions Testing Dept.
1 *	Contacts Amex to discuss File Submission.	Consultancy provided; Electronic Business Guide (this document) issued.	
2 *	Submits Certification Request Form (by fax or e-mail) and Indemnity (by fax) to Network Development.	Project raised and ongoing consultancy provided.	
3			Contacts Merchant / Vendor to agree connectivity solution.
4	Configures system and builds test file.		Configures Amex system to receive test file.
5	Test file sent.		Test file received and reviewed.
6			Approved or retest required.
7	Submit retests as required.		
8	Second 'approved' test file submitted to prove connectivity and format.		Approval given to Merchant / Vendor via e-mail. Support documentation for live submissions issued.
9	Advise Amex when live submissions will start.		Set to live on Amex systems.

* If as part of your certification with us you have performed Authorisations testing, steps 1 and 2 above may have taken place as part of that process.

Submissions

Submitting Test Files

The first submission should contain:

- a minimum of 15 transaction
- a minimum of 2 batches
- A mixture of debit and credit transactions

All fields must be populated as detailed in the APACS file format specification in appendix E.

A list of test Cardmember and test Service Establishment (SE) numbers to create dummy transactions are given in Appendices F and G. Please advise which SE numbers you will be using in the submissions file.

Please allow two working days for processing and approval of each test file. When two test files have been successfully submitted and processed approval will be given. You will be advised when you can begin submitting live files.

Live Submissions during Testing

If you currently submit live data to us continue to use your existing live submission method until approval is given.

Adding New Service Establishments

If you wish to add new Service Establishment numbers after going live please contact American Express New Business on 0800 339911.

Details to be Obtained Before You Go Live

Before you begin the submission of live settlement files please provide American Express with details of a nominated contact for dealing with any submission-related issues.

Sending Live Settlement Files

You may submit a file at any time, every day of the year. Files are processed throughout the day.

Processing Times

Processing of settlement data takes place at fixed times as detailed below. **These times are for information only and subject to change without notice.**

Live

Monday to Friday	11:30 14:30 19.00 hrs
Saturday	16:00
Sunday	21:00

Test

Monday to Friday	11.00 13:00 15.00 17.00

Ongoing Support

If you experience problems submitting data once live please contact our Technologies Helpdesk on 01273 576040.

File Acknowledgements

Please see page 7 for information about our File Acknowledgement products and other ways to assist your data reconciliation.

Nil Return (empty) files

If your system automatically generates and transmits submissions files, even if there is no transaction data to submit, to avoid unnecessary rejection notifications please ensure it contains the following seven records:

VOL1
HDR1
HDR2
UHL1
EOF1
EOF2
UTL1

Submissions

Preparing Submissions

The following details must be provided for each transaction contained in the submission:

- The Service Establishment number, name and abbreviated address for each branch
- The Cardmember number, transaction amount, transaction date and transaction reference
- A brief, meaningful description of the goods or services supplied, to appear on Cardmembers' monthly statements. This will differ depending on the type of outlet, as defined in Segment 3 of the transaction details. See page 16 for more details on this Descriptive Data.

General Rules

- A batch must only contain one Service Establishment number
- The only limit to the number of transactions which may be included in a Net Summary is that the total net amount expressed in pence must not exceed 11 digits in length
- Sales and refunds may be included in a single batch, or divided between batches.

Data Validation

Before submitting the transactions, you must:

- Ensure that the Service Establishment number corresponds to the branch where the transaction took place
- Validate the check digit of every Service Establishment. Please see Appendix H
- Ensure that only American Express Transactions are contained in the file. All American Express Cardmember numbers start with **34** or **37**
- Validate the check digit of Cardmember numbers. Please see Appendix H
- Remove all invalid Cardmember numbers and zero-value transactions from the submission.

Data Reconciliation

- Each batch of transaction records (n1/n2) must be aggregated into a Net Summary Record
- All Net Summary Records (n4/n5) must reconcile by value and number with the preceding batch
- Net Summary Records must be aggregated into a Net Claim Record *
- The Net Claim Record (n7/n8) must reconcile by value and number with the preceding Net Summary Records
- The UTL1 Trailer Record must reconcile with the Net Claim Record.

Any file that does not self-reconcile will be rejected.

** If the file is multi-currency there must be one Net Claim Record per Net Summary Record.*

Duplicate Data

Please refer to Appendix J if you think you have submitted duplicate transactions to American Express.

Submissions

Submission Records

Most records within an APACS29 submission file are the same for all industry types.

There is, however, some variation within the transaction record segment 3 (positions 174 - 380). This is because some industries require different levels of descriptive information to be returned to the customer. The descriptive information from the transaction records of these charge formats appears on our Cardmembers' monthly statements. Statement examples are given on the following page.

Retail Format and **General** Format are the charge formats currently available within the APACS 29 file standard.

A full Technical Specification of the contents and format of the fields in segment 3 is provided in Appendix E.

Retail Format

This format has been designed to meet the needs of Retail establishments and contains the following:

- Tax and discount fields are available on the transaction record and appear on our Cardmembers' statements, enabling them to view net tax and any discount on items bought

- Up to six purchases may be itemized by quantity, department and value. At least one set of purchase details must be included for each transaction, to appear on the Cardmember statement.

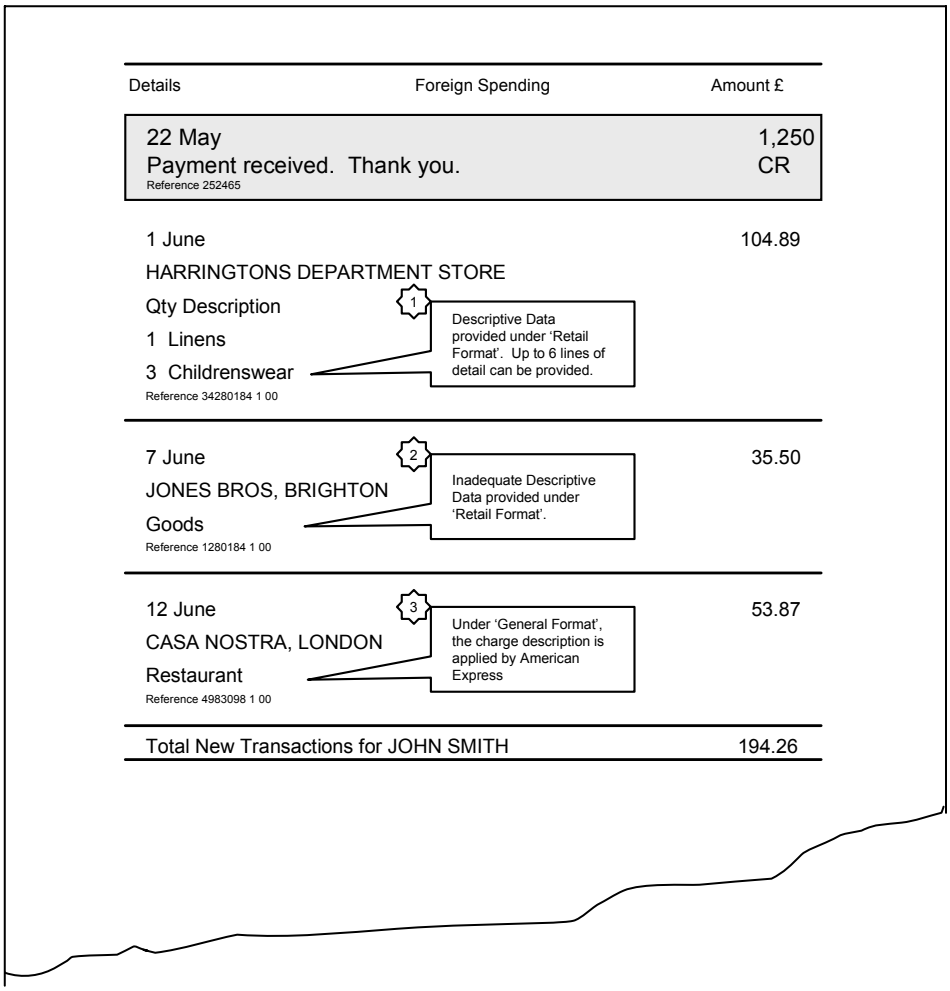
See transaction number 1 in the following statement, for an example of suitable descriptive data which shows useful information about the purchase. Transaction number 2 shows how insufficient descriptive data can cause confusion to Cardmembers and increase the likelihood of queries and chargebacks.

General Format

This format has been designed to provide detailed records for Service Establishments who do not fall into the 'Retail' category.

The descriptive information that appears on Cardmembers' statements is applied by American Express (transaction 3 in sample statement) and is **not** picked up from the file. Although it will not appear on the statement, we will be unable to process your file unless some basic descriptive information is provided.

Example Cardmember Statement



Details	Foreign Spending	Amount £
22 May Payment received. Thank you. Reference 252465		1,250 CR
1 June HARRINGTONS DEPARTMENT STORE Qty Description 1 Linens 3 Childrenswear Reference 34280184 1 00		104.89
7 June JONES BROS, BRIGHTON Goods Reference 1280184 1 00		35.50
12 June CASA NOSTRA, LONDON Restaurant Reference 4983098 1 00		53.87
Total New Transactions for JOHN SMITH		194.26

List of Appendices

A Request for certification – non EMV

Please complete and return to your Network Development contact by e-mail or fax (01273 525833).

Company Name	
Merchant / Establishment number (10 digits)	
Address (for test card despatch)	

Technical contact name		Telephone number		E-mail address	
Software supplier contact		Telephone number		E-mail address	

Certification Type Requested (please tick as appropriate):

Authorisation		Submission Connectivity		Submission File Data	
Approximate target live date					

Authorisation Testing:
NB: If you are conducting Authorisation Testing, you will need either Test Cards or a Test Account Number. Please complete the ***Indemnity and Request for non-EMV Test Details*** in the next appendix and send in addition to this request.

Card member Present (script C2)	Yes / No
Unattended (script C3)	Yes / No
Batch Authorisation (script C4)	Yes / No
Cardmember not present (script C4)	Yes / No
Continuous Authority	Yes / No
Proposed auths connectivity (eg: ISDN, PSTN, X25, Paknet)	

Submission File Connectivity:

Are you currently sending electronic submissions to American express?	Yes / No
If yes, do you **currently** submit to us direct or via a third party (eg Bank acquirer, payment solution provider) ?	Direct / other (give details)
What is your **proposed** submission route (that to be tested / certified ?)	Direct / other (give details)
Proposed File Transmission Software	
Proposed connectivity (eg: ISDN, PSTN, X25, Paknet)	

Submission File Data Certification:

What Submission format will you use ? (eg AMEX 8, AMEX 11, APACS29 / IBRO, AFIA)	
Which File format will you use (if known) ? (General, Retail, Car Rental, Airline, Telecom)	

Do you wish to test for currencies other than £ Sterling ?	Yes / No
If *yes* please give details (eg EUR, USD etc)	

B Indemnity & Request for Test Details – non EMV

This Indemnity Form is an undertaking of responsibility for the treatment and use of American Express test account numbers. The form should be completed and returned to us, by **fax or post** as detailed at the beginning of this guide, together with an additional request on your company's letterhead paper.

If you are developing equipment or software for a specific client, American Express requires a copy of the Indemnity Form signed by the person who will take responsibility for the account number. This could be the person carrying out the testing, or the tester's client.

On receipt of the completed and signed indemnity form American Express will arrange to issue the test cards or test account number to you.

In consideration of American Express Europe Limited ("American Express") supplying to you the following for use by you in POS system testing:

- One set of four white test American Express Cards for use when testing *attended* POS systems and / or
- One set of seven white test American Express Cards for use when testing *unattended* POS systems and / or
- Test Card account number for use when testing *Cardmember not Present* POS systems

the undersigned agrees:

- That while the test Cards / Card account number are/is not in active use, to keep them/it in maximum security in a safe;
- To control access to the test Card(s)/Card account number, and to appoint one or more specifically named individuals to assume responsibility for control of same;
- To pay American Express and be responsible for any charges improperly incurred on the test Card(s)/Card account number, acknowledging that, although the Card account numbers are not valid, it is not always within the power of American Express to prevent transactions being effected;
- To immediately notify American Express of the theft or loss of the test Cards / Card account number, or disclosure of same to any unauthorised third party;
- To return the test Cards / Card account number to American Express on demand, or to destroy them/it upon instructions of American Express;
- To retain as confidential any information obtained about the American Express Card service which is not a matter of public record and not to disclose the same to any third party without the express written permission of American Express; and
- To ensure that all your employees, agents or sub-contractors who have access to the Test Cards / Card account number comply fully with the terms of this letter.

Accepted on behalf of: …….
Full legal name of Service Establishment

Signature: ……
Person responsible for the control of the Test Cards / Account number

Name: ……..……
Name printed

Position held: …..…….. Date: ……

C Authorisation Test Scripts

Completing the Tests

Take the following steps to complete the tests required to certify your system:

Step	Action	Complete ?
1	Schedule testing with American Express Authorisation Testing Team.	
2	Set up the POS system, as described in this appendix.	
3	Copy/print the POS System Detail Form (appendix C1) and complete it.	
4	Select the appropriate test script(s), copy/print and complete it.	
5	Record the actual results obtained during testing on the script in the **Actual Text Received** or appropriate column, and add any comments which may be needed to clarify test results, eg. if the test floor limits were used.	
6	Collate all receipts/vouchers/prints produced during testing, numbering each one with the test script number of the test that produced it.	
7	Attach them to the test script(s).	
8	Complete the appropriate Receipt Checklist for Cardmember-present and unattended systems.	
9	Submit all documentation to the American Express Authorisation Testing Area.	

C Authorisation Test Scripts

The table below details the authorisation test scripts in this appendix.

You will only have to complete those applicable to your set-up, but all testers must complete Form C1 – POS System Detail Form, plus at least one of the following scripts - C2, C3 or C4.

All Cardmember-present testers must, in addition, complete a **Receipt Checklist** (see this appendix).

Code	Script Title	Function
C1	POS System Detail Form	Form identifying your POS system type (appendix C1). **Must be completed by all testers.**
C2	Functionality Script for Attended POS systems	Test used for all attended POS systems with on-line authorisation facility where the Cardmember is present, e.g. retail, restaurant environment. Includes **receipt checklist**.
C3	Functionality Script for Unattended POS systems	To be used only for POS systems that are Cardmember operated and not attended by Merchant staff, e.g. card-operated petrol pumps, car-park payment. Includes **receipt checklist**.
C4	Functionality Script for Cardmember Not Present POS systems	To be used for any scenario where the Cardmember is not present as the transaction takes place, e.g. telephone/mail/internet ordering. This script can also be used to test Batch Authorisation functionality.

Glossary of terms used in this appendix:

Test Details	Determines what should be entered at the point of sale. It is important to enter the test transaction exactly as specified to generate the correct response from Amex.
Request Message Type	The request message type, which should be sent to American Express, as detailed in the APACS specification.
Expected Response Message Type	The response message type that American Express will return, as detailed in the APACS specification.
Expected Amex Response Code	The code which will be returned by American Express in response to the sent message.
Expected Amex Response Text	The text that will be sent as part of the response message.
Text received	The actual text received at the point of sale.
Transaction sequence number	Generated by the POS system and submitted to American Express. Will be returned in the same format in the response message.
Transaction receipt number	The number printed on the receipt, or audit print. Created by the POS system.
Receipt date and time	The details printed on the receipt, or audit print. Created by the POS system.

C Authorisation: POS Configurations

POS System configuration for APACS30 testing:

Test Merchant Number	942 582 173 3
Default Voice Referral Number	020 8551 1111

PSTN	**Test Telephone Number 300 bps**	0800 3855072
	Test Telephone Number 2400 bps	0800 3855272
	Test NUA	72

ISDN	**Primary Telephone Number**	0800 3855406
	Test NUA	77770000000503

BT X.25	**Test NUA primary**	23423230012805
	Test NUA secondary	23423230013005

TNS (PSINET) X.25	**Test NUA**	77770000000503

Batch Authorisation PSTN	**Primary Telephone Number**	0800 3855222
	Test NUA	77772222122

Batch Authorisation ISDN	**Primary Telephone Number**	0800 3855422
	Test NUA	77772222122

Non-0800 Users: if you are unable to use any of these connections please contact Network Development.

Test Values

American Express test accounts are set up to generate standard responses to the following specific values. If you use values other than these you will not get the correct responses when testing.

Test floor limit *	**£5.00**
Test amount for values below floor limit	£4.00
Test amount for approvals	£8.00
Test amount for voice referral	£10.00
Test amount for deny response	£11.00
Test amount for pick-up card response	£12.00

* If the floor limit for your Service Establishment is set to zero you do not need to carry out any tests on below floor limit values; please indicate this on the test script.

C1 POS System Detail Form

Please complete this form to identify your POS system type and return to us with your test results:

	Please complete this column with details for the POS system.
POS system type	
Model	
Software version	
Method of authorisation (ie PSTN, Paknet, ISDN, X.25)	
Details (Attended/Unattended/ Cardmember Not Present/ Batch Authorisation etc)	
Tested by	
Company	
Signature	
Date	
Comments:	

C2 Script for Attended POS Systems

This script should be used where an Operator makes single authorisation transactions from a POS system at which the card is presented.

If your floor limit is zero you will not need to complete the below floor limit tests. Please indicate this on the test script.

Note: Remember to zero balance all transactions after each test.

For these tests the floor limit should be set to £5.00.

SWIPED TESTS – ANSI CARDS

Test No	Test Details	Request Message	Expected Response Message from Amex	Expected Amex Response Code	Expected Amex Response Text	Actual Text Received	Transaction Sequence Number	Receipt Number	Receipt Date and Time
1	Swipe valid ANSI card for transaction amount below your floor limit. Sale: £4	Not sent on-line	-	-	Locally generated by POS system – approved.				
2	Swipe valid ANSI card for transaction amount above your floor limit. Sale: £8	10	12	00	"AUTH CODE: NN"				
3	Swipe valid ANSI card for reversal. Reversal: £8	Not sent on-line	-	-	Locally generated by POS system – reversal approved.				

C2 Script for Attended POS Systems

4	Swipe valid ANSI card for a voice referral. Sale: £10	10	12	02	"CALL AMEX: NNNN" - A 4 digit reference which should be quoted when the operator calls the Amex authorisation number 020 8 551 1111.				
5	Swipe valid ANSI card for a "deny" response. Sale: £11	10	12	05	"DECLINE"				
6	Swipe valid ANSI card for a "deny and pick up" response. Sale: £12	10	12	05	"PICK UP CARD"				
7	Swipe expired ANSI card for transaction amount above your floor limit. Sale: £8	Not sent on-line	-	-	Locally generated by POS system – "Card Expired" or similar displayed.				
8	Swipe valid ANSI card for refund, value above your floor limit. Refund: £8	Not sent on-line	-	-	Locally generated by POS system by POS system – refund approved.				
9	Swipe valid ANSI card for refund reversal, value above your floor limit. Refund reversal: £8	Not sent on-line	-	-	Locally generated by POS system by POS system – refund reversal approved.				

C2 Script for Attended POS Systems

SWIPED TESTS – ISO CARDS

Test No	Test Details	Request Message	Expected Response Message from Amex	Expected Amex Response Code	Expected Amex Response Text	Actual Text Received	Transaction Sequence Number	Receipt Number	Receipt Date and Time
10	Swipe valid ISO card one for transaction amount below your floor limit. Sale: £4	Not sent on-line	-	-	Locally generated by POS system by POS system – approved.				
11	Swipe valid ISO card one for transaction amount above your floor limit. Sale: £8	10	12	00	"AUTH CODE: NN"				
12	Swipe valid ISO card one for reversal. Reversal: £8	Not sent on-line	-	-	Locally generated by POS system by POS system – reversal approved.				
13	Swipe valid ISO card one for a voice referral. Sale: £10	10	12	02	"CALL AMEX: NNNN" A 4 digit reference which should be quoted when the operator calls the Amex authorisation number 0181 551 1111.				

C2 Script for Attended POS Systems

Test No	Test Details	Request Message	Expected Response Message from Amex	Expected Amex Response Code	Expected Amex Response Text	Actual Text Received	Transaction Sequence Number	Receipt Number	Receipt Date and Time
14	Swipe valid ISO card one for a "deny" response. Sale: £11	10	12	05	"DECLINE"				
15	Swipe valid ISO card one for a "deny and pick up" response. Sale: £12	10	12	05	"PICK UP CARD"				
16	Swipe valid ISO card one for refund, value above your floor limit. Refund: £8	Not sent on-line	-	-	Locally generated by POS system by POS system – refund approved.				
17	Swipe valid ISO card one for refund reversal, value above your floor limit. Refund reversal: £8	Not sent on-line	-	-	Locally generated by POS system by POS system – refund reversal approved.				
18	Swipe valid ISO card two for transaction amount above your floor limit. Sale £8	10	12	00	"AUTH CODE: NN"				
19	Swipe valid ISO card two for reversal. Reversal: £8	Not sent on-line	-	-	Locally generated by POS system by POS system – reversal approved.				

C2 Script for Attended POS Systems

KEYED TESTS – ANSI CARDS

Test No	Test Details	Request Message	Expected Response Message from Amex	Expected Amex Response Code	Expected Amex Response Text	Actual Text Received	Transaction Sequence Number	Receipt Number	Receipt Date and Time
20	Swipe valid ISO card two for refund, value above your floor limit. Refund: £8	Not sent on-line	-	-	Locally generated by POS system by POS system – refund approved.				
21	Key valid ANSI card for transaction amount below your floor limit. Sale: £4	Not sent on-line	-	-	Locally generated by POS system by POS system – approved.				
22	Key valid ANSI card for transaction amount above your floor limit. Sale: £8	20	12	00	"AUTH CODE: NN"				
23	Key valid ANSI card for reversal. Reversal: £8	Not sent on-line	-	-	Locally generated by POS system by POS system – reversal approved.				
24	Key valid ANSI card for a voice referral. Sale: £10	20	12	02	"CALL AMEX: NN"				
25	Key valid ANSI card for a "deny" response. Sale: £11	20	12	05	"DECLINE"				

C2 Script for Attended POS Systems

Test No	Test Details	Request Message	Expected Response Message from Amex	Expected Amex Response Code	Expected Amex Response Text	Actual Text Received	Transaction Sequence Number	Receipt Number	Receipt Date and Time
26	Key valid ANSI card for a "deny and pick up" response. Sale: £12	20	12	05	"Declined. Pick up card"				
27	Key expired ANSI card for transaction amount above your floor limit. Sale: £8	Not sent on-line	-	-	Locally generated by POS system – "Card Expired" or similar displayed.				
28	Key valid ANSI card for refund, value above your floor limit. Refund: £8	Not sent on-line	-	-	Locally generated by POS system by POS system – refund accepted.				
29	Key valid ANSI card for refund reversal, value above your floor limit. Refund reversal: £8	Not sent on-line	-	-	Locally generated by POS system – refund reversal approved.				

C2 Script for Attended POS Systems

RETRY TESTS

The configuration needs to be reset before completing these tests:

PSTN	Primary	Secondary
300 Baud	0800 3844006	0800 3855072
2400 Baud	0800 676233	0800 3855272

NUA - 72

ISDN	Primary	Secondary
	0800 211246	0800 211245

SWIPED RETRY TESTS

30	Sale retry. Swipe ANSI card for £8.00	16	12	00	"AUTH CODE: NN"				
31	Sale retry. Swipe ISO card for £8.00	16	12	00	"AUTH CODE: NN"				

KEYED RETRY TESTS

32	Sale retry. Key ANSI card for £8.00	26	12	00	"AUTH CODE: NN"				

C2 Receipt Checklist for Attended POS Systems

The following details are **mandatory** on every receipt produced at an attended POS system.
Please complete the checklist before returning the test results to American Express.

Please attach your vouchers/receipts to the checklist, marking each receipt/voucher with the number of the test which generated it.

Mandatory requirements	**Please tick**
American Express Merchant number	
Service Establishment/Outlet name	
Service Establishment/Outlet address	
Transaction type, displayed as "Sale" or "Refund"	
Card scheme name (American Express)	
Cardmember number (PAN)	
Expiry date of the card (MMYY)	
Date of transaction	
Time of transaction	
POS system identifier / Terminal ID	
Transaction number	
Transaction response, e.g. authorisation code	
Value of transaction	
Request for signature	
Space for signature	
Indicator of keyed entry, e.g. "K" or "Keyed"	

Optional information	**Please tick**
Diagnostic message	
VAT registration number	
Retention reminder	
Courtesy message	
Receipt number	

Tandem Printing Requirements

Many POS systems and electronic imprinters do not print multi-part receipts. They use single-ply paper and print the Service Establishment copy first, and then the Cardmember copy.

The details listed in the previous section must appear on both copies, with the exception of the following which must appear on the Service Establishment's copy but are not required on the Cardmember's copy:

- Request for Cardmember signature
- Space for Cardmember signature.

The retention reminder must appear on the Cardmember's copy but is not required on the Service Establishment's copy.

C3 Script for Unattended POS Systems

Unattended POS system Requirements

Based on agreed UK industry guidelines, American Express requires the following standards to be met in the functionality of unattended POS systems:

- A separate Unattended POS system Agreement must be signed
- Zero floor limit and full on-line authorisation to be used
- The POS system type must be flagged as 'unattended' in the authorisation request
- Motorised card readers with card-capture facility to be used
- Petrol pumps:
  - Pre-authorisation amount £1
  - Maximum transaction amount £50, unless otherwise agreed with American Express
- All other unattended POS system types:
  - Authorise full transaction value up to agreed ceiling
  eg.Self service ticket machines - £300, Car parks - £130.

Procedures identified as Best Practice:

- Velocity checking
- Receipt offered, not mandatory.

The POS system type must be flagged as 'unattended' in the authorisation request message.

C3 Script for Unattended POS Systems

Test No	Test Details	Request Message	Expected Response Message from Amex	Expected Amex Response Code	Expected Amex Response Text	Actual Text Received	Transaction Sequence Number	Receipt Number	Receipt Date and Time
1	Swipe Card 1 for authorisation Transaction value: £1	10	12	00	"AUTH CODE: NN" "Transaction processed" or similar displayed.				
2	Swipe Card 2 for authorisation Transaction value: £1	10	12	00	"AUTH CODE: NN" "Transaction processed" or similar displayed.				
3	Swipe Card 3 for authorisation Transaction value: £1	10	12	05	"AUTH CODE:NN" "Transaction processed", or similar displayed.				
4	Swipe Card 4 for a decline response. Transaction value: £1	10	12	05	"DECLINE" "Please pay at kiosk", or similar message displayed.				
5	Swipe Card 5 for a deny and pick up response. Transaction value: £1	10	12	04	Card retained by POS system. "Card retained" or similar displayed.				
6	Swipe Card 6 – expired card. Transaction value: £1	Non sent on-line	-	-	Locally generated by POS system. "Card Expired" or similar displayed.				
7	Swipe Card 7 for a referral. Transaction value: £1	10	12	02	Transaction referred. "Please pay at kiosk" or similar displayed.				

C3 Receipt Checklist for Unattended POS systems

The following details are mandatory on any receipt produced from an Unattended POS system. Please complete the checklist before returning the test results to American Express. The production of a receipt should be offered to the Cardmember, rather than being automatically produced.

Please attach your vouchers/receipts to the checklist, marking each receipt/voucher with the number of the test which generated it.

Mandatory requirements	**Please tick**
American Express Merchant number	
Service Establishment/Outlet name	
Service Establishment/Outlet address	
Transaction type, displayed as "Sale" or "Refund"	
Card scheme name (American Express)	
Cardmember number (PAN)	
Expiry date of the card (MMYY)	
Date of transaction	
Time of transaction	
POS system identifier	
Transaction number	
Transaction response, e.g. authorisation code	
Value of transaction	

Optional information	**Please tick**
VAT registration number	
Retention reminder	
Diagnostic message	

C4 CNP POS systems & Batch Authorisation

This script should be used where an Operator makes single authorisation transactions from a POS system at which the Cardmember is not present (CNP - mail / telephone order, internet).

For these tests, please use a floor limit of £5.00. If your 'live' floor limit is zero you will not need to complete the below floor limit tests. Please indicate this on the test script.

Note: Remember to zero balance all transactions after each test.

Keyed Tests

Since the card is never presented, no swiped tests are required.

Batch Authorisation

This script may also be used to test Batch Authorisation functionality. Please see the instructions at the end of the script.

Test No	Test Details	Request Message	Expected Response Message from Amex	Expected Amex Response Code	Expected Amex Response Text	Actual Text Received	Transaction Sequence Number	Receipt Number	Receipt Date and Time
1	Key valid card details for transaction. Sale: £8	09	12	00	"AUTH CODE: NN"				
2	Key valid card details for reversal. Reversal: £8	Not sent on-line	-	-	Locally generated by POS system – reversal approved.				
3	Key valid card details for a voice referral. Sale: £10	09	12	02	"CALL AMEX: NN"				
4	Key valid card details for a "deny" response. Sale: £11	09	12	05	"DECLINE"				
5	Key valid card details for a "deny and pick up" response. Sale: £12	09	12	05	Message is "PICK UP CARD". POS system should interpret as "Declined"				

6	Key expired card details for transaction. Sale: £8	Not sent on-line	-	-	Locally generated by POS system. "Card Expired" or similar displayed.				
7	Key valid card details for refund. Refund: £8	Not sent on-line.	-	-	Locally generated by POS system – refund approved.				
8	Key valid card details for refund reversal. Refund reversal: £8	Not sent on-line	-	-	Locally generated by POS system – refund reversal approved.				

RETRY TESTS

The configuration needs to be reset before completing these tests:

PSTN	Primary	Secondary
300 Baud	0800 3844006	0800 3855072
2400 Baud	0800 676233	0800 3855272

NUA - 72

ISDN	Primary	Secondary
	0800 3844006	0800 3855422

10	Sale retry Cardmember not present. Key ANSI card for £8.00	45	12	00	"AUTH CODE: NN"				

Batch Authorisation

If you wish to use this script to test Batch Authorisation functionality you may repeat the tests above as many times as you require. Please ensure that your system is configured according to the communications set-up as follows:

PSTN 0800 3855222 NUA = 77772222122

ISDN 0800 3855422 NUA = 77772222122

D APACS 30 Authorisation Request

APACS Standard 30 v.18 - Authorisation Request Message

- The American Express host will accept authorisation requests in ASCII 7-bit even or ASCII 8-bit no parity characters. However, the response will always be in ASCII 7-bit even parity.
  Note: All POS systems operate in even parity.

- There are no security provisions in APACS Standard 30. Messages are transmitted un-encrypted .

Key:

F = Fixed length field
V = Variable length field
FS = Field Separator character
US = Unit Separator character

Field	Field Name & Description	Size	Format	Requirement
0	**DIAL INDICATOR** - The number of attempts made to establish contact with the American Express host.	1	F	Required
1	**POS SYSTEM IDENTITY** - The unique fixed terminal identity number.	8	F	Required
2	**MESSAGE NUMBER** - The four digit message sequence number generated by the client when the request was sent, starting at 0000, where 9999 + 1 = 0000.	4	F	Required
3	**POS SYSTEM TYPE** - A four digit code defining the POS system attributes: Digit 1 - Indicates whether the POS system has a magnetic stripe reader. It is assumed that all POS systems are merchant operated. 1 = ICC Chip card reader 2 = Magnetic stripe reader 3 = Both Magnetic Stripe and ICC readers 4 = No card reader Digit 2 - The number of 16 character lines to be displayed or printed. 1 = One line 2 = Two lines 3 = Three lines 4 = Four lines 5 = Five lines	4	F	Required

D APACS 30 Authorisation Request

<table>
<tr><th>Field</th><th>Field Name & Description</th><th>Size</th><th>Format</th><th>Requirement</th></tr>
<tr><td>3</td><td>Digit 3: Indicates POS ability to process response messages
<table>
<tr><th>Digit</th><th>Online Download Of Tel No.</th><th>Hold Capability</th><th>On line Download Of Date & Floor Limit</th><th>AVS Functionality</th></tr>
<tr><td>0</td><td colspan="4">No Special Features</td></tr>
<tr><td>1</td><td>Yes</td><td>No</td><td>No</td><td>No</td></tr>
<tr><td>2</td><td>No</td><td>Yes</td><td>No</td><td>No</td></tr>
<tr><td>3</td><td>Yes</td><td>Yes</td><td>No</td><td>No</td></tr>
<tr><td>4</td><td>No</td><td>No</td><td>Yes</td><td>No</td></tr>
<tr><td>5</td><td>Yes</td><td>No</td><td>Yes</td><td>No</td></tr>
<tr><td>6</td><td>No</td><td>Yes</td><td>Yes</td><td>No</td></tr>
<tr><td>7</td><td>Yes</td><td>Yes</td><td>Yes</td><td>No</td></tr>
<tr><td>8</td><td>No</td><td>No</td><td>No</td><td>Yes</td></tr>
<tr><td>9</td><td>Yes</td><td>No</td><td>No</td><td>Yes</td></tr>
<tr><td>A</td><td>No</td><td>Yes</td><td>No</td><td>Yes</td></tr>
<tr><td>B</td><td>Yes</td><td>Yes</td><td>No</td><td>Yes</td></tr>
<tr><td>C</td><td>No</td><td>No</td><td>Yes</td><td>Yes</td></tr>
</table>
Digit 4: indicates additional device features and capabilities
<table>
<tr><th>Value</th><th>Unattended Device</th><th>PIN Pad available</th><th>POS system able to capture cards</th></tr>
<tr><td>0</td><td colspan="3">No additional information available</td></tr>
<tr><td>1</td><td>Yes</td><td>No</td><td>No</td></tr>
<tr><td>2</td><td>No</td><td>Yes</td><td>No</td></tr>
<tr><td>3</td><td>Yes</td><td>Yes</td><td>No</td></tr>
<tr><td>4</td><td>No</td><td>No</td><td>Yes</td></tr>
<tr><td>5</td><td>Yes</td><td>No</td><td>Yes</td></tr>
<tr><td>6</td><td>No</td><td>Yes</td><td>Yes</td></tr>
<tr><td>7</td><td>Yes</td><td>Yes</td><td>Yes</td></tr>
<tr><td>8</td><td>No</td><td>No</td><td>No</td></tr>
</table></td><td>4</td><td>F</td><td>Required</td></tr>
<tr><td>4</td><td>MESSAGE TYPE - Two digit indicator of the message type.
10 = Swiped sale first attempt
16 = Swiped sale retry
20 = Keyed sale first attempt
26 = Keyed sale retry
09 = Keyed sale first attempt – Cardmember not present
45 = Keyed sale retry – Cardmember not present
A0 = Continuous Authority first attempt
A1 = Continuous Authority retry
A8 = Sale (E-com) Card first attempt
A9 = Sale (E-com) Card retry
B2 = Sale (E-com) keyed first attempt
B3 = Sale (E-com) keyed retry

There are no special requirements for EMV transactions.</td><td>2</td><td>F</td><td>Required</td></tr>
</table>

D APACS 30 Authorisation Request

<table>
<tr><th>Field</th><th>Field Name & Description</th><th>Size</th><th>Format</th><th>Requirement</th></tr>
<tr><td>5</td><td>SERVICE ESTABLISHMENT NUMBER</td><td>15</td><td>V</td><td>Required</td></tr>
<tr><td>6</td><td>FS</td><td>1</td><td>F</td><td>Required</td></tr>
<tr><td>7</td><td>CARD DETAILS – All characters from the track 2 image on the chip</td><td>40</td><td>V</td><td>Required</td></tr>
<tr><td>8</td><td>FS</td><td>1</td><td>F</td><td>Required</td></tr>
<tr><td>9</td><td>AMOUNT - In pence. Minimum of 2 digits.</td><td>11</td><td>V</td><td>Required</td></tr>
<tr><td>10</td><td>FS</td><td>1</td><td>F</td><td>Required</td></tr>
<tr><td>11</td><td>DESCRIPTIVE ADDRESS DATA (please request our CID & AVS addendum to this guide if you use Address and Card Security Code checking)</td><td>16</td><td>V</td><td>Optional</td></tr>
<tr><td>12</td><td>FS</td><td>1</td><td>F</td><td>Required</td></tr>
<tr><td>13</td><td>Reserved</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>14</td><td>FS</td><td>1</td><td>F</td><td>Required</td></tr>
<tr><td>15</td><td>Reserved</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>16</td><td>FS</td><td>1</td><td>F</td><td>Required</td></tr>
<tr><td>17</td><td>CASH AMOUNT</td><td>11</td><td>V</td><td>Optional</td></tr>
<tr><td>18</td><td>FS</td><td>1</td><td>F</td><td>Required</td></tr>
<tr><td>19</td><td>TRANSACTION DATE & TIME (YYMMDDhhmm)</td><td>10</td><td>F</td><td>Required</td></tr>
<tr><td>20</td><td>FS</td><td>1</td><td>F</td><td>Required</td></tr>
<tr><td>21</td><td>EMV TERMINAL TYPE – Two digit code specified in EMV specifications for EMV terminals and specified in APACS for e-commerce transactions
<table>
<tr><th rowspan="2">Environment</th><th colspan="3">Operational Control provided by:</th></tr>
<tr><th>Financial Institution</th><th>Merchant</th><th>Cardholder</th></tr>
<tr><td>Attended</td><td></td><td></td><td></td></tr>
<tr><td>Online only</td><td>11</td><td>21</td><td>-</td></tr>
<tr><td>Offline with online capability</td><td>12</td><td>22</td><td>-</td></tr>
<tr><td>Offline only</td><td>13</td><td>23</td><td>-</td></tr>
<tr><td>Unattended</td><td></td><td></td><td></td></tr>
<tr><td>Online only</td><td>14</td><td>24</td><td>34</td></tr>
<tr><td>Offline with online capability</td><td>15</td><td>25</td><td>35</td></tr>
<tr><td>Offline only</td><td>16</td><td>26</td><td>36</td></tr>
</table></td><td>2</td><td>F</td><td>Required for ICC and e-commerce transactions</td></tr>
<tr><td>22</td><td>FS</td><td>1</td><td>F</td><td>Required</td></tr>
<tr><td>23</td><td>TERMINAL COUNTRY CODE: the ISO code for the country where the transaction originated.</td><td>3</td><td>F</td><td>Required for ICC</td></tr>
<tr><td>24</td><td>FS</td><td>1</td><td>F</td><td>Required</td></tr>
</table>

D APACS 30 Authorisation Request

Field	Field Name & Description	Size	Format	Requirement
25	**TRANSACTION CURRENCY CODE**: the ISO currency of the authorisation transaction. '826' in the UK only. Request our Multi-currency addendum for other currency codes.	3	F	Required
26	FS	1	F	Required
27	**REASON ON-LINE CODE (EMV)** Used by the acquirer to determine if stand in authorisation would be an appropriate action for the transaction (ie: ICC or Card Accepting Device requiring online authorisation.) Values from ' 00' - '11'	2	F	Required
28	FS	1	F	Required
29	**EMV AUTHORISATION REQUEST DATA**	156	V	Required
29.1	Authorisation request cryptogram (ARQC)	16	F	Required
29.2	Application interchange profile (AIP)	4	F	Required
29.3	Application transaction counter (ATC)	4	F	Required
29.4	Unpredictable number	8	F	Required
29.5	Terminal verification results (TVR)	10	F	Required
29.6	Cryptogram transaction type	2	F	Required
29.7	Issuer application data	64	V	Required
29.8	US	1	F	Required
29.9	Application identifier (AID)	32	V	Required
29.10	US	1	F	Required
29.11	Application version number	4	F	Required
29.12	US	1	F	Required
29.13	Cryptogram information Data	2	F	Required
29.14	US	1	F	Required
29.15	CVM Results	6	F	Required
30	FS	1	F	Required

D APACS 30 Authorisation Response / Hold

- A response or hold message is given in response to an authorisation request.

Field	Field Name & Description	Size	Format	Requirement
0	DIAL INDICATOR – The number of attempts made to establish contact with the American Express host.	1	F	Required
1	POS SYSTEM IDENTITY – The unique fixed Terminal Identity number (TID).	8	F	Required
2	MESSAGE NUMBER – The four digit message sequence number generated by the client when the request was sent, starting at 0000, where 9999 + 1 = 0000.	4	F	Required
3	MESSAGE TYPE – Two digit indicator of the message type: 12 = Auth response 81 = Hold	2	F	Required
4	ACQUIRER RESPONSE CODE	2	F	Required

	Response Code	Message	Interpretation
	00	AUTH CODE:nn	The transaction is authorised. American Express responds with a two digit authorisation code.
	02	HOLD FOR AMEX (for auto-dial POS systems) or PLEASE CALL nnnn (for POS systems without auto-dial)	A voice referral is required. If American Express cannot supply an authorised or declined code within 20 seconds, a referral code is given. If the POS system has an auto-dial facility, it dials American Express. A unit separator (hex 1f) on its own is downloaded to make the POS system dial its internal default number. This should be 0208 551 1111, the number for the American Express Authorisations Centre. If no auto-dial facility is available, American Express sends a four digit code to the POS system. The operator must contact American Express manually and quote the code. If the charge is authorised, American Express gives a code to be manually input into the POS system.
	05	DECLINE or PICK UP CARD	The transaction is declined. The message text displayed on the POS system may request that the branch retain the card.
	04	PICK UP CARD (for unattended POS systems only)	The transaction is declined. The POS system retains the card. This will only be used when the POS system has identified itself as 'unattended'.
	30	EXCEPTION	A voice referral is required, due to invalid or insufficient details.

D APACS 30 Authorisation Response / Hold

Field	Field Name & Description	Size	Format	Requirement
5	CONFIRMATION REQUEST	1	F	Required
6	AUTHORISATION CODE	9	V	Optional
7	FIELD SEPARATOR (FS)	1	F	Required
8	AMOUNT – In pence. Minimum of 2 digits.	11	V	Optional
9	FS	1	F	Required
10	MESSAGE – This may include a referral queue number. Includes authorisation code, if given.	80	V	Required
11	FS	1	F	Required
12	REFERRAL TELEPHONE NUMBER – The number that should be called by the Service Establishment in the case of a referral.	16	V	Optional
13	FS	-	F	Optional
14	FLOOR LIMIT - A set amount, above which transactions must go on-line for authorisation. Assigned for each Service Establishment.	3	V	Optional
15	FS	1	F	Optional
16	DATE – In format YYMM.	4	F	Optional
17	FS	1	F	Optional
18	EMV Response Data	83	V	Required
18.1	Issuer Authentication Data	32	V	Required
a	Application Response Cryptogram (ARPC)	16	F	Required
b	Optional Additional Data	16	V	Optional
18.2	US	1	F	Required
18.3	Issuer Script Data	256	V	Optional
19	FS	1	F	Optional
20	Response Additional Data	6	F	Optional
21	FS	1	F	Optional

D APACS 40 Authorisation Request

APACS Standard 40 v.18 - Authorisation Request Message

- The American Express host will accept authorisation requests in ASCII 7-bit even or ASCII 8-bit no parity characters. However, the response will always be in ASCII 7-bit even parity.
  Note: All POS systems operate in even parity.

Key:

F = Fixed length field
V = Variable length field
FS = Field Separator character
US = Unit Separator character

Field	Field Name & Description	Size	Format	Requirement
0	DIAL INDICATOR - The number of attempts made to establish contact with the American Express host.	1	F	Required
1	POS SYSTEM IDENTITY - The unique fixed terminal identity number.	8	F	Required
2	MESSAGE NUMBER - The four digit message sequence number generated by the client when the request was sent, starting at 0000, where 9999 + 1 = 0000.	4	F	Required
3	POS SYSTEM TYPE - A four digit code defining the POS system attributes: Digit 1 - Indicates whether the POS system has a magnetic stripe reader. It is assumed that all POS systems are merchant operated. For information on Cardmember Activated POS systems, please see Section 3. 1 = EMV Chip card reader 2 = Magnetic stripe reader 3 = Both Magnetic Stripe and EMV readers 4 = No card reader Digit 2 - The number of 16 character lines to be displayed or printed. 1 = One line 2 = Two lines 3 = Three lines 4 = Four lines 5 = Five lines	4	F	Required

D APACS 40 Authorisation Request

<table>
<tr><th>Field</th><th>Field Name & Description</th><th>Size</th><th>Format</th><th>Requirement</th></tr>
<tr><td>3</td><td>Digit 3 - Indicates the POS system’s ability to process response messages</td><td></td><td></td><td></td></tr>
<tr><td>3</td><td>
<table>
<tr><th>Digit</th><th>Online Download Of Tel No.</th><th>Hold Capability</th><th>On line Download Of Date & Floor Limit</th><th>AVS Functionality</th></tr>
<tr><td>0</td><td colspan="4">No Special Features</td></tr>
<tr><td>1</td><td>Yes</td><td>No</td><td>No</td><td>No</td></tr>
<tr><td>2</td><td>No</td><td>Yes</td><td>No</td><td>No</td></tr>
<tr><td>3</td><td>Yes</td><td>Yes</td><td>No</td><td>No</td></tr>
<tr><td>4</td><td>No</td><td>No</td><td>Yes</td><td>No</td></tr>
<tr><td>5</td><td>Yes</td><td>No</td><td>Yes</td><td>No</td></tr>
<tr><td>6</td><td>No</td><td>Yes</td><td>Yes</td><td>No</td></tr>
<tr><td>7</td><td>Yes</td><td>Yes</td><td>Yes</td><td>No</td></tr>
<tr><td>8</td><td>No</td><td>No</td><td>No</td><td>Yes</td></tr>
<tr><td>9</td><td>Yes</td><td>No</td><td>No</td><td>Yes</td></tr>
<tr><td>A</td><td>No</td><td>Yes</td><td>No</td><td>Yes</td></tr>
<tr><td>B</td><td>Yes</td><td>Yes</td><td>No</td><td>Yes</td></tr>
<tr><td>C</td><td>No</td><td>No</td><td>Yes</td><td>Yes</td></tr>
</table>

Digit 4 - Used to indicate additional features and capabilities of the authorisation device.

<table>
<tr><th>Value</th><th>Unattended Device</th><th>PIN Pad Available</th><th>POS system able to capture cards</th></tr>
<tr><td>0</td><td colspan="3">No additional information available</td></tr>
<tr><td>1</td><td>Yes</td><td>No</td><td>No</td></tr>
<tr><td>2</td><td>No</td><td>Yes</td><td>No</td></tr>
<tr><td>3</td><td>Yes</td><td>Yes</td><td>No</td></tr>
<tr><td>4</td><td>No</td><td>No</td><td>Yes</td></tr>
<tr><td>5</td><td>Yes</td><td>No</td><td>Yes</td></tr>
<tr><td>6</td><td>No</td><td>Yes</td><td>Yes</td></tr>
<tr><td>7</td><td>Yes</td><td>Yes</td><td>Yes</td></tr>
<tr><td>8</td><td>No</td><td>No</td><td>No</td></tr>
</table>
</td><td></td><td></td><td></td></tr>
<tr><td>4</td><td>MESSAGE TYPE: two digit indicator of the message type – please see APACS 30 format guide.</td><td>2</td><td>F</td><td>Required</td></tr>
<tr><td>5</td><td>SERVICE ESTABLISHMENT NUMBER</td><td>15</td><td>V</td><td>Required</td></tr>
<tr><td>6</td><td>FIELD SEPARATOR (FS)</td><td>1</td><td>F</td><td>Required</td></tr>
<tr><td>7</td><td>CARD DETAILS – All characters from the track 2 image on the chip</td><td>40</td><td>V</td><td>Required</td></tr>
<tr><td>8</td><td>FS</td><td>1</td><td>F</td><td>Required</td></tr>
<tr><td>9</td><td>AMOUNT - In pence. Minimum of 2 digits.</td><td>11</td><td>V</td><td>Required</td></tr>
<tr><td>10</td><td>FS</td><td>1</td><td>F</td><td>Required</td></tr>
<tr><td>11</td><td>DESCRIPTIVE ADDRESS DATA</td><td>16</td><td>V</td><td>Required</td></tr>
<tr><td>12</td><td>FS</td><td>1</td><td>F</td><td>Required</td></tr>
</table>

D APACS 40 Authorisation Request

<table>
<tr><th>Field</th><th>Field Name & Description</th><th>Size</th><th>Format</th><th>Requirement</th></tr>
<tr><td>13</td><td>CONFIRMATION CODE
An indication of whether the transaction amount has been accumulated or disregarded by the host subject to certain conditions. Values:
0: confirmed/accumulated,
1: failed to complete/discarded
2: acquirer declined/discarded
3:Cancelled at terminal/discarded
4: Accepted after Voice Referral/Accumulated
5: Declined after voice referral/discarded
6: Voice referral requested by acquirer, cannot complete/discarded.
7:First EFT after initialisation/N/A
8:PIN retry in progress/N/A
9:Void/discarded</td><td>1</td><td>F</td><td>Required</td></tr>
<tr><td>14</td><td>BALANCE CODE
Indicator of whether transaction totals are in balance between terminal and host. Values:
0: not checked
1: Balance confirmed
2:Out of balance (1st time)
3:Out of balance (subsequent occurrence
4:In balance and totals reset to zero (REC only)
5: Out of balance but totals reset to zero (REC only)</td><td>1</td><td>F</td><td>Required</td></tr>
<tr><td>15</td><td>Reserved</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>16</td><td>FS</td><td>1</td><td>F</td><td>Required</td></tr>
<tr><td>17</td><td>CASH AMOUNT</td><td>11</td><td>V</td><td>Optional</td></tr>
<tr><td>18</td><td>FS</td><td>1</td><td>F</td><td>Required</td></tr>
<tr><td>19</td><td>TRANSACTION DATE & TIME (YYMMDDhhmm)</td><td>10</td><td>F</td><td>Required</td></tr>
<tr><td>20</td><td>FS</td><td>1</td><td>F</td><td>Required</td></tr>
<tr><td>21</td><td>EMV TERMINAL TYPE – Two digit code specified in EMV specifications for EMV terminals and specified in APACS for e-commerce transactions
<table>
<tr><td rowspan="2">Environment</td><td colspan="3">Operational Control provided by:</td><td rowspan="2">2</td></tr>
<tr><td>Financial Institution</td><td>Merchant</td><td>Cardholder</td></tr>
<tr><td colspan="4">Attended</td><td></td></tr>
<tr><td>Online only</td><td>11</td><td>21</td><td>-</td><td></td></tr>
<tr><td>Offline with online capability</td><td>12</td><td>22</td><td>-</td><td></td></tr>
<tr><td>Offline only</td><td>13</td><td>23</td><td>-</td><td></td></tr>
<tr><td colspan="4">Unattended</td><td></td></tr>
<tr><td>Online only</td><td>14</td><td>24</td><td>34</td><td></td></tr>
<tr><td>Offline with online capability</td><td>15</td><td>25</td><td>35</td><td></td></tr>
<tr><td>Offline only</td><td>16</td><td>26</td><td>36</td><td></td></tr>
</table></td><td></td><td>F</td><td>Required for ICC and e-commerce transactions</td></tr>
</table>

D APACS 40 Authorisation Request

Field	Field Name & Description	Size	Format	Requirement
22	FS	1	F	Required
23	TERMINAL COUNTRY CODE The ISO code for the country where the transaction was originated.	3	F	Required
24	FS	1	F	Required
25	TRANSACTION CURRENCY CODE The ISO currency of the authorisation transaction. ‘826’ in the UK only .	3	F	Required
26	FS	1	F	Required
27	REASON ON-LINE CODE (EMV) Used by the acquirer to determine if stand-in authorisation would be an appropriate action for the transaction (ie; ICC or CAD requiring online authorisation.) Values from ‘ 00’ - ‘11’	2	F	Required
28	FS	1	F	Required
29	EMV FINANCIAL TRANSACTION REQUEST DATA	156	V	Required
29.1	*Authorisation request cryptogram (ARQC)*	*16*	*F*	*Required*
29.2	*Application interchange profile (AIP)*	*4*	*F*	*Required*
29.3	*Application transaction counter (ATC)*	*4*	*F*	*Required*
29.4	*Unpredictable number*	*8*	*F*	*Required*
29.5	*Terminal verification results (TVR)*	*10*	*F*	*Required*
29.6	*Cryptogram transaction type*	*2*	*F*	*Required*
29.7	*Issuer application data*	*64*	*V*	*Required*
29.8	*US*	*1*	*F*	*Required*
29.9	*Application identifier (AID)*	*32*	*V*	*Required*
29.10	*US*	*1*	*F*	*Required*
29.11	*Application version number*	*4*	*F*	*Required*
29.12	*US*	*1*	*F*	*Required*
29.13	*Cryptogram information Data*	*2*	*F*	*Required*
29.14	*US*	*1*	*F*	*Required*
29.15	*CVM Results*	*6*	*F*	*Required*
29.16	*US*	*1*	*F*	*Required*
29.17	*Application Usage Control*	*4*	*F*	*Required*
29.18	*US*	*1*	*F*	*Required*
29.19	*Issuer Action Codes – Default/Denial/Online*	*30*	*F*	*Required*
30	*FS*	*1*	*F*	*Required*
31	*Cipher Block*	*16*	*F*	*Optional*
32	*MAC Key*	*8*	*F*	*Required*

D APACS 40 Authorisation Response / Hold

- A response or hold message is given in response to an authorisation request.

Field	Field Name & Description	Size	Format	Requirement
0	DIAL INDICATOR	1	F	Required
1	POS SYSTEM IDENTITY	8	F	Required
2	MESSAGE NUMBER	4	F	Required
3	MESSAGE TYPE	2	F	Required
4	ACQUIRER RESPONSE	2	F	Required
5	CONFIRMATION REQUEST	1	F	Required
6	AUTHORISATION CODE	9	V	Optional
7	FIELD SEPARATOR (FS)	1	F	Required
8	AMOUNT – In pence. Minimum of 2 digits.	11	V	Optional
9	FS	1	F	Required
10	MESSAGE	80	V	Required
11	FS	1	F	Required
12	REFERRAL TELEPHONE NUMBER	16	V	Optional
13	FS	-	F	Optional
14	FLOOR LIMIT	3	V	Optional
15	FS	1	F	Optional
16	DATE – In format YYMM.	4	F	Optional
17	FS	1	F	Optional
18	EMV RESPONSE DATA	83	V	Required
18.1	Issuer Authentication Data	32	V	Required
a	Application Response Cryptogram (ARPC)	16	F	Required
b	Optional Additional Data	16	V	Optional
18.2	US	1	F	Required
18.3	Issuer Script Data	256	V	Optional
19	FS	1	F	Optional
20	RESPONSE ADDITIONAL DATA	6	F	Optional
21	FS	1	F	Optional
22	CIPHER BLOCK	16	F	Optional
23	MAC KEY	8	F	Required

E APACS 29 file format specification

Files must be produced using fixed-length records in either EBCDIC or ASCII. EBCDIC is not suitable for transmissions by FTP.

Label	Contents and function
VOL1 Volume Label	Because of the restriction to EBCDIC character coding, American Express supports two versions of the VOL1 header label for APACS 29 submissions (both 80 characters unblocked): ● Option 1 is the ISO version 3 label. ● Option 2 is the IBM standard label, which differs in the location of the Agent Reference Code and the content of the label standard version.
HDR1 Header Label	HDR1 contains operating system and device-dependent data relating to the submission.
HDR2 Header Label	HDR2 contains other characteristics of the submission.
UHL1 User Header Label	This contains user-specified data used in processing. It identifies American Express as the file recipient.
Submission Records	One record for each transaction (also known as 'Record of Charge').
Net Summary Record	One per batch of transactions (also known as 'Summary of Charge').
Net Claim Record	One per file **unless the file is multi-currency**, in which case one for each Net Summary Record
EOF1 End of File Label	One per file; format similar to the HDR1
EOF2 End of File Label	One per file; format similar to the HDR2
UTL1 User Trailer Label	Control data, such as accumulated totals and record counts, and is used for data reconciliation and file integrity-checking. 80 characters unblocked.

Notes

- Transactions should be batched and summarised by SE number; a batch cannot contain more than one SE number
- If a submission contains one or more records with EMV data then all non-EMV records should be padded with spaces to a record length of 636 bytes
- There must be only one logical file per submission
- Optional fields must be space-filled if not populated

TRANSACTION CODES ('n')

Transaction Record (n1 / n2)
n = J – 3 Segment record (380 bytes) for magstripe transactions in a magstripe-only batch
n = K – 3 Segment record (padded to 636 bytes) for magstripe txns in mixed ICC / magstripe batch
n = Q – 4 Segment record (636 bytes) for all ICC transactions

Net Summary Record (n4 / n5)
n = J – for a batch containing only magstripe data (no ICC data)
n = K – for a batch containing one or more ICC transactions

Net Claim Record (n7 / n8)
n = J – for a claim record summarising only J4 and J5s (magstripe only data)
n = K – for a claim record summarising one or more K4 or K5s (one or more ICC transactions)

FORMAT KEY

N indicates a numeric field that must be Right-justified with leading zeros
A indicates an alphanumeric field that must be Left-justified with trailing spaces
AB indicates a binary field

E APACS 29 file format specification

The illustrations in this section show only the financial data records and specifically omit any file transmission records and / or character strings associated with the underlying communications protocol(s).

Header Label Specifications

APACS 29 allows for either an IBM or ISO format Volume Header. The format used is dictated by the merchant; typically a mainframe system would use the IBM option, A PC-based solution the ISO option.

Volume Header Label - ISO Option

Position	Size	Format	Field name and description	Requirement
1-4	4	A	LABEL IDENTIFIER - always 'VOL1'	Required
5-10	6	A	VOLUME IDENTIFIER – File Number. Must start with at least one alphabetic character and must increment by one for each new file submitted. Example: A00001, A00002 up to A99999. Do not use 'AMEX' or 'AMX'	Required
11-37	27	space	Space-filled	Optional
38-47	10	A	OWNER IDENTIFICATION or AGENT REFERENCE – unique reference assigned by American Express, eg MERCHANT42	Required
48	1	N	FILE CURRENCY INDICATOR – 0 = Not used 1 = Single currency in file (eg GBP) 2 = More than one currency in the file	Required
49-79	31	space	Space-filled	Optional
80	1	N	LABEL STANDARD VERSION - always '3' for ISO header	Required

Volume Header Label - IBM Option

Position	Size	Format	Field name and description	Requirement
1-4	4	A	LABEL IDENTIFIER – always 'VOL1'	Required
5-10	6	A	VOLUME IDENTIFIER – File Number. Must start with at least one alphabetic character and must increment by one for each new file submitted. Example: A00001, A00002 up to A99999. Do not use 'AMEX' or 'AMX'	Required
11-41	31	space	Space-filled	Optional
42-51	10	A	OWNER IDENTIFICATION or AGENT REFERENCE – unique reference assigned by American Express, eg MERCHANT42	Required
52	1	N	FILE CURRENCY INDICATOR – 0 = Not used 1 = Single currency in file (eg GBP) 2 = More than one currency in the file	Required
53-79	27	space	Space-filled.	Optional
80	1	space	LABEL STANDARD VERSION – Must be blank	Optional

E APACS 29 file format specification

First File Header Label (HDR1)

HDR1 contains operating system and device-dependent data that relates to the submission.

Position	Size	Format	Field name and description	Requirement
1-4	4	A	LABEL IDENTIFIER – always 'HDR1'	Required
5-14	10	A	SOURCE IDENTIFIER OF ORIGINATOR – 'IBRO' followed by merchant name, abbreviated if necessary eg IBROJONES	Required
15	1	A	RECORD TYPE IDENTIFIER: J if no ICC records in file (fixed length records) Z if one or more ICC records in file (variable length records)	Required
16-17	2	space	Space-filled	Optional
18	1	N	FILE CURRENCY INDICATOR – 0 = Not used 1 = Single currency in file (eg GBP) 2 = More than one currency in the file	Required
19-21	3	space	Space-filled	Optional
22-27	6	A	VOLUME IDENTIFIER – File Number. Must be the same as in VOL1 Header Label positions 5-10 eg A00001 and incrementing	Required
28-31	4	N	FILE SECTION NUMBER - always '0001'	Required
32-35	4	N	FILE SEQUENCE NUMBER - always '0001'	Required
36-42	7	space	Space-filled	Optional
43-47	5	N	CREATION DATE - the year and day (Julian format YYDDD) on which the file was written	Required
48	1	space	Space-filled.	Optional
49-53	5	N	EXPIRY DATE - the year and day (in Julian format YYDDD) after which the file must not be processed. This may be up to 40 days after the creation date, but cannot be before the day on which the file is received for processing.	Required
54	1	space	ACCESSIBILITY – space-filled	Optional
55-60	6	N	BLOCK COUNT – zero-filled	Required
61-73	13	space	SYSTEM CODE – space-filled	Optional
74-80	7	space	Space-filled	Optional

E APACS 29 file format specification

Second File Header Label (HDR2)

Position	Size	Format	Field name and description	Requirement
1-4	4	A	**LABEL IDENTIFIER** – always 'HDR2'	Required
5	1	A	RECORD FORMAT: F if no ICC records in file (fixed length records) D if one or more ICC records in file (variable length records)	Required
6-10	5	N	BLOCK LENGTH - must be any exact multiple of 380 (magstripe) or 636 (ICC) to a maximum of 31920. We suggest: 03800 for file with no ICC transactions 06360 for file with one or more ICC txns	Required
11-15	5	N	RECORD LENGTH: 00380 = only J records in file (fixed) 00636 = ICC records in file (fixed) 00640 = ICC records in file (variable-blocked)	Required
16-50	35	space	Space-filled	Optional
51-52	2	N	BUFFER OFFSET – zero-filled	Required
53-80	28	space	Space-filled	Optional

User Header Label (UHL1)

UHL1 contains user-specified data used in processing. It identifies American Express as the file recipient.

Position	Size	Format	Field name and description	Requirement
1-4	4	A	LABEL IDENTIFIER – always 'UHL1'	Required
5-10	6	N	PROCESSING DATE format: spaceYYDDD	Optional
11-20	10	N	RECIPIENT IDENTIFIER: always '3700000007'	Required
21-28	8	N	COUNTRY CODE ISO country code followed by zeros eg 82600000 for a UK Submitter	Required for multi-currency
29-37	9	A	WORK CODE - space-filled	Optional
38-40	3	N	FILE NUMBER – space-filled	Optional
41-54	14	space	Space-filled	Optional
55-80	26	space	Space-filled	Optional

E APACS 29 file format specification

Transaction Record Format

n = J – 3 Segment record (380 bytes) for magstripe transactions in a magstripe-only batch
n = K – 3 Segment record (380 bytes) for magstripe transactions in a mixed ICC / magstripe batch
n = Q – 4 Segment record (636 bytes) for all ICC transactions

Segment 1

Position	Size	Format	Field name and description	Requirement
1-19	19	N	CARDMEMBER NUMBER – 15-digit card account number with 4 leading zeros and no embedded spaces. Must start with either 37 or 34 and have a valid Luhn check digit	Required
20-21	2	A	TRANSACTION CODE: • n1 - debit transaction (purchase) • n2 - credit transaction (refund) – see above for 'n' value	Required
22-32	11	N	SERVICE ESTABLISHMENT NUMBER – your 10-digit Amex Service Establishment number with a leading zero and no embedded spaces	Required
33-36	4	N	CARD EXPIRY DATE – if present, must be valid YYMM or MMYY format	Optional
37-47	11	N	TRANSACTION AMOUNT – must be numeric and non-zero. Do not use + or -	Required
48-53	6	N	TRANSACTION DATE – must be a valid date, in 'spaceYYDDD' or 'YYMMDD' format	Required
54-59	6	N	TRANSACTION TIME – must be valid 'HHMMSS' format, or zero-filled	Required
60-67	8	N	AUTHORISATION CODE – American Express authorisation codes are usually two digits long	Optional
68-79	12	A	ORIGINATOR'S TRANSACTION REF: a reference code whereby American Express can request Service Establishment support for a charge. This reference must be supplied by the merchant or agent and should be an index to the Service Establishment's records so that the original document can be readily retrieved (Terminal ID, EFT Sequence Number etc)	Required
80	1	N	Zero-filled	Required
81	1	N	ATM/POS TYPE Non-Euro transaction currency: 0 – Unspecified terminal capabilities 1 – EMV reader only 2 – Magnetic stripe only 3 – EMV / Magnetic Stripe 4 – No card reader Euro transaction currency: 5 – Unspecified terminal capabilities 6 – EMV reader only 7 – Magnetic stripe only 8 – EMV / Magnetic Stripe 9 – No card reader	Required

E APACS 29 file format specification

Position	Size	Format	Field name and description	Requirement
82	1	N	CARD SEQUENCE NUMBER - zero-filled	Required
83	1	A	CUSTOMER INSTRUCTIONS: 0 – Signed 1 – Mail / telephone order 2 – Continuous Authority 3 – PIN verified – online 4 – PIN verified – offline 5 – Signed – magnetic stripe captured 6 – Signed – Keyed at POS 7 – Unattended device without PIN 8 – PIN-verified, recovered after sale 9 – Signed voucher, recovered after sale B – Fallback to signature-verified, ICC C – Signature-verified, ICC D – Downgraded ICC transaction (track 2) F – EMV fallback to magnetic stripe	Required
84-90	7	N	SEQUENCE NUMBER – must be a valid number starting with 1 for the first transaction record on the file and incrementing by 1 on subsequent data records, *including Net Summary and Net Claim records*	Required
91-116	26	A	ESTABLISHMENT NAME - must be the name of the Service Establishment where the transaction took place, corresponding to the Service Establishment number in 22-32 above. Please provide text in UPPER CASE. Only the first 25 characters may be used on the Cardmember statement	Required
117-142	26	A	ESTABLISHMENT ADDRESS - abbreviated establishment address. Normally the name of the town is sufficient. Please provide text in UPPER CASE. Only the first 25 characters may be used on the Cardmember statement	Required
143-145	3	A	ESTABLISHMENT TYPE	Optional
146-171	26	A	CARDMEMBER NAME	Optional
172-173	2	N	FORMAT TYPE - must be one of the following, depending on the format of segment 3: 01 - Retail format 04 – General format	Required

Segment 3 - Retail

This table contains the fields for Retail format i.e. when the format type (positions 172-173) is 01.

Position	Size	Format	Field name and description	Requirement
174-341	168 (28x6) (3) (15) (10)	A N A N	PURCHASE DETAILS for six purchases, including: Purchase quantity Purchase description (UPPER CASE) Purchase amount	Required
342-361	20	A	TAX or DISCOUNT CAPTION - explanation of tax or discount changes to total value. If used, either discount or tax amount may be present, but not both. Must be filled if DISCOUNT or TAX is used. Otherwise space-filled.	Required if DISCOUNT or TAX is present
362-370	9	A	DISCOUNT – discount amount if applicable. Otherwise space-filled.	Required, as before
371-379	9	A	TAX - tax amount if applicable. Otherwise, fill with spaces.	Required, as before
380	1	space	Space-filled	Required

Segment 3 - General

This table contains the fields for General format i.e. when the format type (positions 172-173) is 04.

At least one entry of purchase details is required, for example GOODS or MERCHANDISE. Unused entries are filled with spaces.

Position	Size	Format	Field name and description	Requirement
174-213	40	A	CHARGE DESCRIPTION LINE 1 - the first description line to appear on the Record of Charge.	Required
214-253	40	A	CHARGE DESCRIPTION LINE 2 - the second description line to appear on the Record of Charge.	Optional
254-293	40	A	CHARGE DESCRIPTION LINE 3 - the third description line to appear on the Record of Charge.	Optional
294-333	40	A	CHARGE DESCRIPTION LINE 4 - the fourth description line to appear on the Record of Charge.	Optional
334-373	40	A	CHARGE DESCRIPTION LINE 5 - the fifth description line to appear on the Record of Charge.	Optional
374-380	7	space	Reserved - to be space-filled.	Required

Segment 4 - ICC Data

Position	Size	Format	Field name and description	Requirement
381-382	2	A	APPLICATION PAN SEQUENCE NUMBER – Identifies and differentiates between Cards with the same PAN (Primary Account Number)	Required
383-384	2	A	AUTHORISATION RESPONSE CODE	Required
385-395	11	N	CRYPTOGRAM TRANSACTION AMOUNT – Amount, Authorised (EMV Tag 9F02) as input to cryptogram generation	Required
396-397	2	N	CRYPTOGRAM TRANSACTION TYPE – Indicates the type of transaction (Debit, Credit) supplied by the POS system as input to the cryptogram generation: Value 00 = Debits 20 = Credits	Required
398-403	6	N	TERMINAL TRANSACTION DATE -(YYMMDD) The date supplied by the POS system as input to the cryptogram generation	Required
404-406	3	N	TRANSACTION CURRENCY CODE The ISO currency code of the transaction as input to the cryptogram generation For example 826 where the transaction is in GBP	Required
407-409	3	N	TERMINAL COUNTRY CODE – The ISO code designating where the POS system is operating. UK will be ‘826’	Required
410-425	16	AB	TRANSACTION CRYPTOGRAM - Transaction Certificate (TC), Authorisation Request Cryptogram (ARQC) or Application Authentication Cryptogram (AAC)	Required
426-429	4	AB	APPLICATION INTERCHANGE PROFILE (AIP) – Indicates the capabilities of the Card to support specific functions in the application	Required
430-433	4	AB	APPLICATION TRANSACTION COUNTER (ATC) – Counter maintained by the application in the ICC (Incrementing the ATC is managed by the ICC)	Required
434-441	8	AB	UNPREDICTABLE NUMBER – Unpredictable Number input to cryptogram generation	Required
442-451	10	AB	TERMINAL VERIFICATION RESULT (TVR) – Terminal Verification Results input to cryptogram generation	Required
452-515	64	AB	ISSUER APPLICATION DATA (IAD) - Contains proprietary application data for transmission to the user in an on-line transaction. Provided by the card at the time of the Transaction Cryptogram generation.	Required
516-519	4	AB	APPLICATION USAGE CONTROL	Required

E APACS 29 file format specification

Position	Size	Format	Field name and content	Requirement
520-521	2	AB	CRYPTOGRAM INFORMATION DATA - Indicates the type of cryptogram (TC, ARQC or AAC) returned by the card	Required
522-527	6	AB	CARDMEMBER VERIFICATION METHOD (CVM) RESULTS - Indicates the results of the last CVM performed	Required
528-559	32	AB	APPLICATION IDENTIFIER – (AID) or DF name, whichever is longer.	Required
560-563	4	AB	APPLICATION VERSION NUMBER - Version number associated with the Application Identifier	Required
564-567	4	AB	TRANSACTION STATUS INFORMATION – An indication of the terminal functions performed during the Transaction	Required
568-569	2	AB	EMV TERMINAL TYPE	Required
570-575	6	AB	EMV TERMINAL CAPABILITIES	Required

Position	size	Source (POS or Card)	Format	Field name and content	Requirement
576-577	2	POS system	A	POS ENTRY MODE DIGIT 1 (Card Transaction Info.) 0 = Not used with APACS 50 1 = Swipe 2 = Keyed 3 = EMV 4 = Recovered data, keyed 5 = Recovered data, electronic 6 = Information advice 7 = Downgraded EMV transaction 8 = Swipe EMV failure 9 = Reserved for future use DIGIT 2 (Card member verification, if any) 0 = Not used with APACS 50 1 = Customer present, signature 2 = Customer present, PIN 3 = Customer present, alternate CVM 4 = Customer present, UPT no CVM 5 = Customer present, UPT, PIN 6 = Customer present, UPT, alternate CVM 7 = Customer not present 8 = No verification 9 = Reserved for future use	Required
578-603	26	Card	A	OTHER CARD DATA - All the data from track 2 after and including the field separator, padded with trailing spaces. The card data will be read from the magnetic stripe or the track 2 equivalent on EMV cards and will be padded with trailing spaces if required.	Optional
604-636	33	-	space	Reserved for Future Use. Space-filled	Optional

Net Summary Record – n4 or n5

n = J – for a batch containing only magstripe data (no ICC data)
n = K – for a batch containing one or more ICC transactions

Position	Size	Format	Field name and content	Requirement
1-19	19	N	Filled with zeros.	Required
20-21	2	A	TRANSACTION CODE: n4 – if value of debits (n1) > credits (n2) n4 – if value of debits (n1) = credits (n2) n5 – if value of credits (n2) > debits (n1) – see above for 'n' value	Required
22-32	11	N	SERVICE ESTABLISHMENT NUMBER – the Service Establishment number for the preceding financial transaction record.	Required
33-35	3	A	CURRENCY INDICATOR – Use ISO Currency Code (eg 826 for £ Sterling)	Required
36	1	space	Space-filled	Required
37-47	11	N	NET AMOUNT - net value of preceding n1 and n2 records. Do not use + or -	Required
48-58	11	N	VALUE OF DEBIT ITEMS Value of preceding n1 records (debits)	Required
59-69	11	N	VALUE OF CREDIT ITEMS Value of preceding n2 records (credits)	Required
70-76	7	N	COUNT OF DEBIT ITEMS Number of preceding n1 records (debits)	Required
77-83	7	N	COUNT OF CREDIT ITEMS Number of preceding n2 records (credits)	Required
84-90	7	N	SEQUENCE NUMBER – must be one more than the sequence number of the preceding financial transaction record	Required
91-93	3	A	SOC REF NO INDICATOR – always 'YES'	Required
94-99	6	N	SOC REFERENCE NUMBER – a number (eg date) that will appear on payment advices or other reporting. Recommended to facilitate payment reconciliation. NB - for third party processors polling offline POS systems, it is requested that transactions are batched by end-of-day function, with the date of the first transaction as the SOC reference.	Required
100-380	281	N	Reserved for future use - zero-filled	Required

E APACS 29 file format specification

Net Claim Record – n7 or n8

n = J – for a batch containing only magstripe data (no ICC data)
n = K – for a batch containing one or more ICC transactions

If the file is multi-currency (ie contains more than one currency) there must be one Net Claim Record (n7/8) for each Net Summary Record (n4/5).

Position	Size	Format	Field name and content	Requirement
1-6	6	N	SORTING CODE – zero-filled	Required
7-14	8	N	ACCOUNT NUMBER – zero-filled	Required
15	1	N	TYPE OF ACCOUNT CODE – zero-filled	Required
16-19	4	N	Zero-filled	Required
20-21	2	A	TRANSACTION CODE: n8 – if value of debits (n4) > credits (n5) n8 – if value of debits (n4) = credits (n5) n7 – if value of credits (n5) > debits (n4) – see above for 'n' value	Required
22-32	11	N	ACCOUNTING UNIT NUMBER zero-filled	Required
33-35	3	A	CURRENCY INDICATOR - Use ISO Currency Code (eg 826 for £ Sterling)	Required
36	1	Space	Space-filled	Required
37-47	11	N	NET AMOUNT - net value of preceding n4 and n5 records. Do not use + or -	Required
48-58	11	N	VALUE OF DEBIT ITEMS - value of preceding n4 records (debit summaries)	Required
59-69	11	N	VALUE OF CREDIT ITEMS - value of preceding n5 records (credit summaries)	Required
70-76	7	N	COUNT OF DEBIT ITEMS - number of preceding n4 records (debit summaries)	Required
77-83	7	N	COUNT OF CREDIT ITEMS - number of preceding n5 records (credit summaries)	Required
84-90	7	N	SEQUENCE NUMBER – must be one greater than the sequence number of the preceding net summary record.	Required
91-380	290	N	Zero-filled	Required

E APACS 29 file format specification

Trailer Label Specifications

First End of File Label (EOF1)

Position	Size	Format	Field name and content	Requirement
1-4	4	A	LABEL IDENTIFIER - always 'EOF1'	Required
5-14	10	A	SOURCE IDENTIFIER OF ORIGINATOR - same as HDR1 label positions 5-14. 'IBRO' followed by merchant name, abbreviated if necessary eg IBROJONES	Required
15	1	A	RECORD TYPE IDENTIFIER – same as HDR1 label position 15. J - if no ICC records in the file (fixed length records) Z - if one or more ICC records in the file (variable length records)	Required
16-21	6		Space-filled	Required
22-27	6	A	VOLUME IDENTIFIER – File Number. Must be the same as in VOL1 Header Label positions 5-10 eg A00001 and incrementing	Required
28-31	4	N	FILE SECTION NUMBER - always '0001'	Required
32-35	4	N	FILE SEQUENCE NUMBER – always '0001'	Required
36-42	7	space	Space-filled	Required
43-47	5	A	CREATION DATE - same as HDR1 label	Required
48	1	space	Space-filled	Required
49-53	5	A	EXPIRY DATE - same as HDR1 label	Required
54	1	space	Space-filled	Required
55-60	6	N	Zero-filled	Required
61-80	20	space	Space-filled.	Required

Second End of File Label (EOF2)

Position	Size	Format	Field name and content	Requirement
1-4	4	A	LABEL IDENTIFIER - always 'EOF2'	Required
5	1	A	RECORD FORMAT – same as HDR2 label	Required
6-10	5	N	BLOCK LENGTH - same as HDR2 label	Required
11-15	5	N	RECORD LENGTH – same as HDR2 label	Required
16-50	35	N	Zero-filled	Required
51-52	2	N	Zero-filled	Required
53-80	28	N	Zero-filled	Required

E APACS 29 file format specification

User Trailer Label (UTL1)

Position	Size	Format	Field name and content	Requirement
1-4	4	A	LABEL IDENTIFIER – always 'UTL1'	Required
5-17	13	N	VALUE OF DEBIT ITEMS – total value of preceding n8 records (debit claims)	Required
18-30	13	N	VALUE OF CREDIT ITEMS – total value of preceding n7 records (credit claims)	Required
31-37	7	N	COUNT OF DEBIT ITEMS - number of preceding n8 records (debit claims)	Required
38-44	7	N	COUNT OF CREDIT ITEMS - number of preceding n7 records (credit claims)	Required
45-54	10	N	RECORD COUNT – the number of data records on the file. This *excludes* VOL1, HDR1, HDR2, EOF1, EOF2, and UTL1. Must be the same as the sequence number of the last Net Claim Record (n7 or n8)	Required
55-80	26	space	Space-filled	Required

F Card Numbers for Submissions testing

The following Card numbers should be used for sending test transactions to American Express. Please note those in the table below must be used for Submission file testing only.

Please use a minimum of 15 transactions per batch in your test file. You may use the same card number or a variety of card numbers. Please use a mixture of debit and credit transactions.

These Card numbers can be used under any test merchant number.

• 3741 010121 80018 • 3742 510187 20018 • 3742 510210 90003 • 3742 510243 60015 • 3742 510276 30000 • 3742 510298 12002 • 3742 510321 82013 • 3742 510354 52009 • 3742 810410 92002 • 3745 810565 42019 • 3745 810598 12005 • 3745 810621 82016 • 3745 810654 52002 • 3741 010076 31009 • 3741 010132 71006 • 3742 510165 41010 • 3742 510221 81017 • 3742 510287 21014	• 3742 510309 00010 • 3742 510332 70007 • 3745 810632 70000 • 3741 010087 22013 • 3741 010110 92008 • 3741 010143 62010 • 3742 510176 32008 • 3742 510209 02018 • 3742 510232 72005 • 3742 510265 42016 • 3742 510298 12002 • 3742 510310 91009 • 3742 510343 61011 • 3742 910465 41010 • 3742 910521 81016 • 3745 810587 21017 • 3745 810610 91002 • 3745 810643 61014

EMV testing

If you are testing for EMV accreditation you will have been issued the following card number by our EMV Certification Unit:

3742 454554 xxxxx (for security it is shown here truncated).

This card number should be used in EMV submission file testing.

G Test Service Establishment numbers

The following test Service Establishment (SE) numbers may be used for sending UK Sterling * test transactions to American Express; those in the table must be used for Submission file testing only.

Please submit a minimum of two batches.

• 942 469 0485 • 942 469 0493 • 942 469 0501 • 942 469 0519 • 942 469 0527 • 942 469 0535 • 942 249 9392 • 942 249 9459 • 942 249 9517	• 942 249 9574 • 942 488 8253 • 942 488 8261 • 942 488 8279 • 942 488 8287 • 942 249 9152 • 942 249 9210 • 942 249 9277 • 942 249 9335

If you have previously completed authorisation testing for EMV or magstripe, you will have been issued the following test Service Establishment number:

942 582 1733

This number can be used for EMV and magstripe submission file testing in addition to those listed above.

In certain circumstances it may be appropriate to use you live SE number for testing; please contact us for further information.

* If you wish to certify for currencies other than GBP please ask us for the Multicurrency addendum to this guide.

H Validating Card and SE numbers

American Express **Cardmember numbers** are always 15 digits long, starting with "34" or "37".

All Cardmember numbers use the LUHN formula for the modulus 10 check digit. The check digit is the last (fifteenth) digit of the card number, and is validated as described in the table below.

In this illustration the following card number is validated: **3742 5103 2182 013**

Column No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Cardmember No.	3	7	4	2	5	1	0	3	2	1	8	2	0	1	3
Multiply each **even** column by two.		**14**		4		2		6		2		4		2	
If result is >9, add the two digits. (e.g. 7x2=14, 1+4=5)		**5**		4		2		6		2		4		2	
Carry down each digit in the odd-numbered columns.	3	5	4	4	5	2	0	6	2	2	8	4	0	2	3
Add all digits together.	3 + 5 + 4 + 4 + 5 + 2 + 0 + 6 + 2 + 2 + 8 + 4 + 0 + 2 + 3 = 50														
If the result is a multiple of 10, the Cardmember number is valid.	50 divided by 10 = 5. Cardmember number is valid.														

American Express **Service Establishment (SE) numbers** are 10 digits long, starting with "9".

All Cardmember numbers use the LUHN formula for the modulus 10 check digit. The check digit is the last (tenth) digit of the card number, and is validated as described in the table below.

In this illustration the following Service Establishment number is validated: **942 469 048 5**

Column No.	1	2	3	4	5	6	7	8	9	10
Service Establishment No.	9	4	2	4	6	9	0	4	8	5
Ensure first digit is "9" then disregard.	9									
Carry down digits in the odd columns.			2		6		0		8	
Multiply each odd column by two.			4		**12**		0		16	
If result is >9, add the two digits together. (e.g. 6x2=12, 1+2=3)					**3**				7	
Carry down all of the digits.		4	4	4	3	9	0	4	7	5
Add all of the digits together.	4 + 4 + 4 + 3 + 9 + 0 + 4 + 7 + 5 = 40									
If the result is a multiple of 10, the Service Establishment number is valid.	40 / 10 = 4. Service Establishment number is valid.									

I Magnetic Stripe Layout – ISO and ANSI

Magnetic Stripe Layout

This Appendix documents the two different magnetic stripe layouts, American National Standards Institute (ANSI) and International Standards Organisation (ISO), that are encoded on American Express cards.

These two formats can be distinguished by using the track 2 length. For ANSI-formatted cards the length is 32 digits whilst for ISO-formatted cards the length is 40 digits.

Implications for card acceptance and testing

If you request cards for testing you will automatically be provided with both ISO and ANSI standard test cards. Tests using these cards form part of our required scripts for APACS Standard 30 authorisation testing.

Position 22 on the magnetic stripe track 2 identifies different information depending on format. On an ANSI card it is the start date whilst on an ISO card it is the interchange designator, which identifies whether the card has a chip on it. We have to ensure that American Express Cards issued in both formats can be recognised by POS terminals and processed accordingly.

Please note that the start date is no longer embossed on the front of American Express cards and for this reason Start (effective) date checking must be switched off.

I Magnetic Stripe Layout – ANSI

The ANSI format for the magnetic stripe is as follows:

Field name	Length	Position
TRACK 1		
Start sentinel	1	1
Format code = B	1	2
Cardmember number	17	3
Field separator	1	20
Cardmember name	26	21
Field separator	1	47
Expiration date (YYMM)	4	48
Effective date (YYMM)	4	52
Security code	5	56
End sentinel	1	61
LRC 1	1	62
TRACK 2		
Start sentinel	1	1
Cardmember number	15	2
Field separator	1	17
Expiration date (YYMM)	4	18
Effective date (YYMM)	4	22
Security code	5	26
End sentinel	1	31
LRC	1	32

I Magnetic Stripe Layout – ISO

The ISO 7813 format for the magnetic stripe is as follows*:

Field name	Length	Position
TRACK 1		
Start sentinel	1	1
Format code = B	1	2
Cardmember number	17	3
Field separator	1	20
Cardmember name	26	21
Field separator	1	47
Expiration date (YYMM)	4	48
Interchange designator	**1**	**52**
Service code	**2**	**53**
Effective date (YYMM)	4	55
Security code	5	59
Zeros	**12**	**64**
Language code	**2**	**76**
End sentinel	1	78
LRC 1	1	79
TRACK 2		
Start sentinel	1	1
Cardmember number	15	2
Field separator	1	17
Expiration date (YYMM)	4	18
Interchange designator	**1**	**22**
Service code	**2**	**23**
Effective date (YYMM)	4	25
Security code	5	29
Zeros	**3**	**34**
Language code	**2**	**37**
End sentinel	1	39
LRC	1	40

(* The differences between ISO and the ANSI format are highlighted in bold)

J Submissions Management and Error Handling

Once you start submitting to American Express in the 'live' environment your submissions are monitored by our Submissions Management team. We ask that you provide us with a point of contact so that we can inform you if we are unable to process any of the data that you submit.

Data Errors

File processing errors are classified into three types:

- **Charge errors**, affecting a single financial transaction eg. an invalid Cardmember number, a zero amount
- **Batch errors**, affecting all transactions for a given branch eg. an invalid Service Establishment number, an out-of-balance net summary record
- **Submission errors,** affecting the whole file eg. invalid headers or trailers

Full or Partial File Rejection

If Charge or Batch errors are encountered either (1) the valid transactions can be processed or (2) the entire submission can be rejected (this is the default setting). You may request a change to your rejection settings by contacting Submissions Management.

A submission error results in the entire submission being rejected.

Notification of Data Errors

If we are unable to process any data that you send to us Submissions Management will contact you to advise on the corrective action required.

Data Recovery and re-submission

Your system must be capable of storing and/or re-creating files sent to American Express. If a submission contains errors which prevent processing, you should correct or remove the errors and resubmit the file. If any valid transactions have already been processed, to avoid duplication these valid transactions must be removed from the file before it is re-submitted.

Data Duplication

American Express checks submission files for duplicate batches and may take action to reverse these transactions. **If you think you have submitted duplicate batches / transactions please do not attempt to cancel these out by submitting refund transactions without first contacting Submissions Management.**

Contact

You may contact Submissions Management at submissionsmanagementeurope@aexp.com.

The submitter is responsible for re-creating and re-submitting any file that fails to reach American Express or proves to be unreadable for any reason.

American Express cannot be held responsible for any delays in payment resulting from the failure of a Service Establishment to submit a file in a readable condition nor can American Express undertake to process charges submitted in any manner other than on the Record of Charge forms, listings, or in files conforming to the specifications defined in this Guide.

K EMV Receipt Requirements

Element	Mandatory / Optional
Retailer name	M
Retailer address	M
Retail identification / location	M
VAT registration number	O
Cardscheme name	M
Date (DDMMYY) and time (HHMM- 24hr)	M (date only)
Receipt number	O
Terminal identifier (TID)	M
Transaction type (purchase, refund)	M
Transaction amount	M
EFT sequence number (transaction number)	M
Authorisation code	M
Indication of whether ICC, magstripe or PKE transaction	O
Goods amount	O (with currency symbol)
Goods description	O
VAT rate	O
PAN (masked on cardmember copy)	M
Expiry date (magstripe-read and PKE only)	M
AID (Application ID)	M
Application effective date	O
Application expiration date	M
Application PAN sequence number	M
Space for cardmember signature	M where applicable
Cardmember declaration wording (variable)	M
Thank you message (variable)	O
Cardmember PIN-verified / signature-verified message	M where applicable
Cryptogram type and value	O
Merchant ID	M
Customer copy / store copy text (retention reminder)	M
Request for signature	M where applicable

L Sample APACS 29 file layout

Please note only positions 1 to 60 are shown

a) Non-ICC file containing two transactions; one debit of £105.35, one credit of £5.11, ISO header, General Format.

1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
V	O	L	1	J	N	S	B	0	1																					J	O	N	E	S	B	R	O	0	1	1									
H	R	D	1	I	B	R	O	J	O	N	E	S	B	J			1				J	N	S	B	0	1	0	0	0	1	0	0	0	1							9	9	2	5	1		9	9	2	7	1		0	0	0	0	0	0
H	D	R	2	F	0	1	9	0	0	0	0	3	8	0																																	0	0						
U	H	L	1	9	9	9	2	5	1	3	7	0	0	0	0	0	0	0	7	8	2	6	0	0	0	0	0												0	0	0											
0	0	0	0	3	7	4	2	4	5	4	5	2	2	0	0	0	0	1	J	1	0	9	4	2	5	8	2	1	7	3	3	0	1	1	2	0	0	0	0	0	0	1	0	5	3	5		9	9	2	4	9	1	0	3	7	5	4	0
0	0	0	0	3	7	4	1	2	3	4	5	6	7	0	0	0	0	3	J	2	0	9	4	2	5	8	2	1	7	3	3	0	2	1	1	0	0	0	0	0	0	0	0	5	1	1		9	9	2	4	9	1	0	5	2	3	4	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	J	4	0	9	4	2	5	8	2	1	7	3	3	8	2	6		0	0	0	0	0	0	1	0	0	2	4	0	0	0	0	0	0	1	0	5	3	5	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	J	8	0	0	0	0	0	0	0	0	0	0	0	8	2	6		0	0	0	0	0	0	1	0	0	2	4	0	0	0	0	0	0	1	0	5	3	5	0	0
E	O	F	1	I	B	R	O	J	O	N	E	S	B	J							J	N	S	B	0	1	0	0	0	1	0	0	0	1							9	9	2	5	1		9	9	2	7	1		0	0	0	0	0	0
E	O	F	2	F	0	1	9	0	0	0	0	3	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U	T	L	1	0	0	0	0	0	0	0	0	1	0	5	3	5	0	0	0	0	0	0	0	0	0	0	5	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	4					

b) ICC file containing two transactions; one debit of £105.35, one credit of £5.11, ISO header, General Format (ICC-specific data highlighted in red)

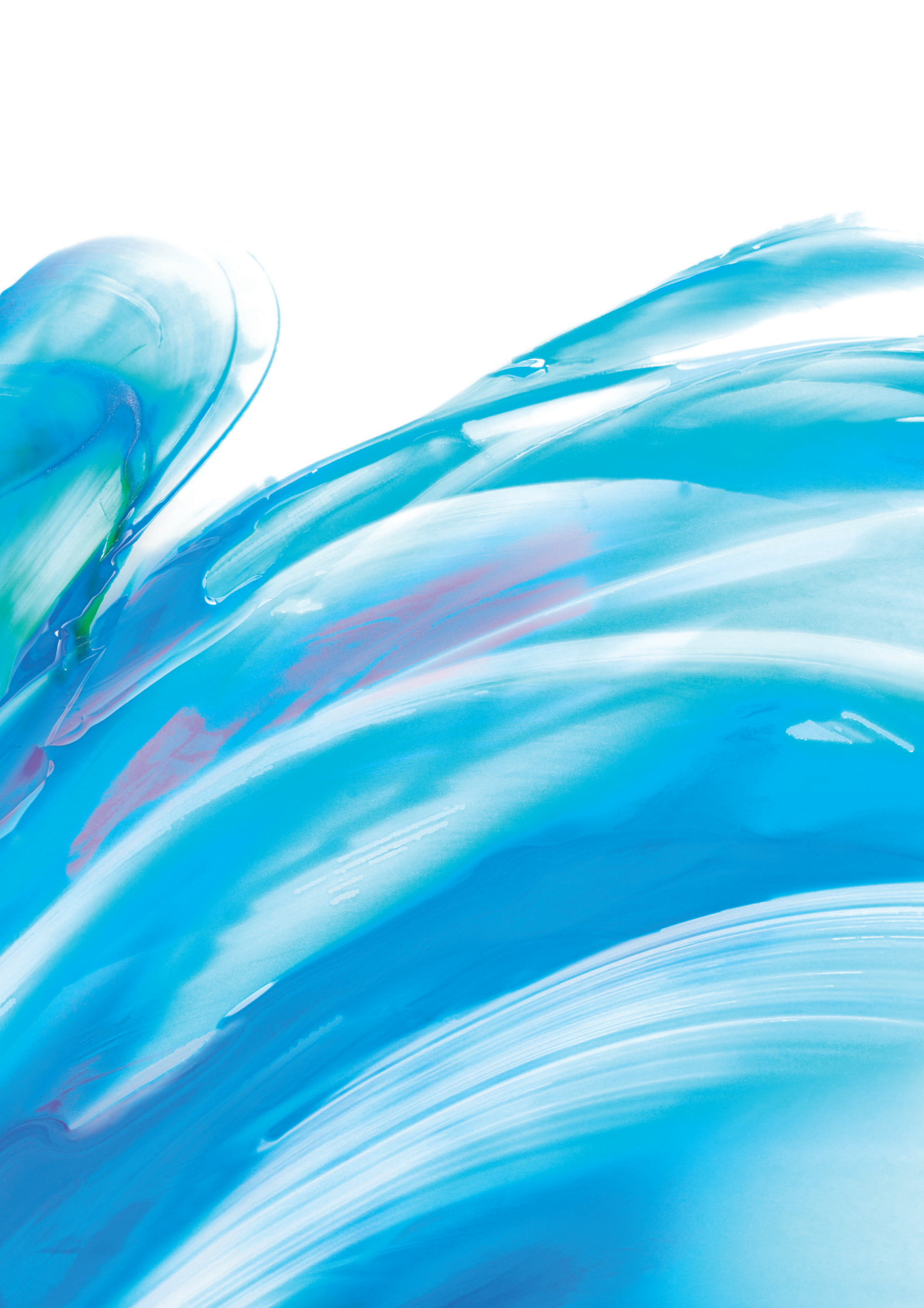
1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
V	O	L	1	J	N	S	B	0	1																					J	O	N	E	S	B	R	O	0	1	1									
H	R	D	1	I	B	R	O	J	O	N	E	S	B	Z			1				J	N	S	B	0	1	0	0	0	1	0	0	0	1							9	9	2	5	1		9	9	2	7	1		0	0	0	0	0	0
H	D	R	2	D	0	1	9	0	0	0	0	6	4	0																																	0	0						
U	H	L	1	9	9	9	2	5	1	3	7	0	0	0	0	0	0	0	7	8	2	6	0	0	0	0	0												0	0	0											
0	0	0	0	3	7	4	2	4	5	4	5	2	2	0	0	0	0	1	Q	1	0	9	4	2	5	8	2	1	7	3	3	0	1	1	2	0	0	0	0	0	0	1	0	5	3	5		9	9	2	4	9	1	0	3	7	5	4	0
0	0	0	0	3	7	4	1	2	3	4	5	6	7	0	0	0	0	3	Q	2	0	9	4	2	5	8	2	1	7	3	3	0	2	1	1	0	0	0	0	0	0	0	0	5	1	1		9	9	2	4	9	1	0	5	2	3	4	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	K	4	0	9	4	2	5	8	2	1	7	3	3	8	2	6		0	0	0	0	0	0	1	0	0	2	4	0	0	0	0	0	0	1	0	5	3	5	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	K	8	0	0	0	0	0	0	0	0	0	0	0	8	2	6		0	0	0	0	0	0	1	0	0	2	4	0	0	0	0	0	0	1	0	5	3	5	0	0
E	O	F	1	I	B	R	O	J	O	N	E	S	B	Z							J	N	S	B	0	1	0	0	0	1	0	0	0	1							9	9	2	5	1		9	9	2	7	1		0	0	0	0	0	0
E	O	F	2	D	0	1	9	0	0	0	0	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
U	T	L	1	0	0	0	0	0	0	0	0	1	0	5	3	5	0	0	0	0	0	0	0	0	0	0	5	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	4					

procedure guide

For a smoother operation

payment acceptance

barclaycard



welcome

This procedure guide forms part of your Agreement with Barclaycard and replaces all previous editions of the procedure guide with immediate effect. These procedures must be followed so that your business can enjoy the full benefit of accepting payment by cards, including prompt payment to your bank account.

Your procedure guide should be kept in a safe place, easily accessible to your employees, but out of reach of your customers. Speed, efficiency and security are essential to credit and debit card acceptance today. To help you and your staff gain the maximum benefit from processing with us, your procedure guide contains all the information you need for your business to accept payments by card, whether by a PDQ terminal owned by Barclaycard and leased to you, or by your own terminals.

Change of business type

You will need to notify us if you significantly change the type of goods or services that your original Merchant Agreement applies to (for example if you start trading on the internet or if you start accepting mail or telephone order transactions and you previously advised us that you only accept face-to-face transactions in your retail outlet) or if you change the nature of your business (for example from a partnership to a limited company) or if you change the actual name of your business.

Telephone contacts

You will be advised in various sections of this guide to contact one or more departments. There's a full list of the telephone numbers in Section 7.

Barclaycard outlet number

For ease when you contact Barclaycard, please have your Merchant number ready. You can keep a record of it here:

contents

1. things you need to know before you accept card payments

1.1 Card recognition

It is important to point out that card details and procedures do vary depending on the card type. We have set out a clear guide to each card type, to help you and your staff to become familiar with card recognition practices and acceptance procedures.

The following pages provide a quick reference guide for security checks. For Chip and PIN transactions you are not required to perform visual checks of the card, as the cardholder may retain control of the card while the transaction is performed, however for other transaction types it is important to remember to check each card carefully to ensure it is genuine. Carrying out these visual checks each time will help to minimise card fraud.

Please remember: With PDQ terminals or your own electronic point of sale equipment, always ensure that the cardholder number presented matches the number printed on the receipt. If it does not, ring Authorisation on 0844 822 2000.* Once connected to the automated Authorisation system, advise that you have a Code 10 call (or press 9) at the transaction type prompt. Your call will then be transferred to a customer service advisor and you should tell them, "I have a card number mismatch."

Please be aware that Maestro and V PAY are an exception to this, as the number printed on the front of the card may in fact be the bank account number.

1.1.1 Visa Credit

Acceptable for electronic and paper fallback transactions.

If you are suspicious about a card, a card presenter or the circumstances surrounding a card transaction, please call Authorisation on **0870 24 24 240**.*

Card pictured is a sample issued by Barclaycard.

Chip
Most cards carry an embedded microchip.

Card Validity Dates
Cards should not be accepted if they are not in date.

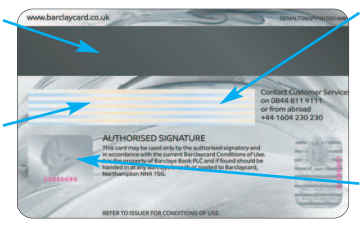
Cardholder Name
Name of cardholder is embossed. Title may also be embossed.

Cardholder Number
16-digit account number with first 4 digits printed below.

Card Type Identification
Letter 'V' tilted to the right after the expiry date is now an optional feature.

Symbol/Logo
Gold and blue 'Visa' on white background.

Contactless Acceptance Mark
Card is capable of undertaking contactless transactions. This is optional.



Magnetic Stripe

Signature Strip
'Visa' repeated in pattern.

Cardholder Signature
Card must be signed.

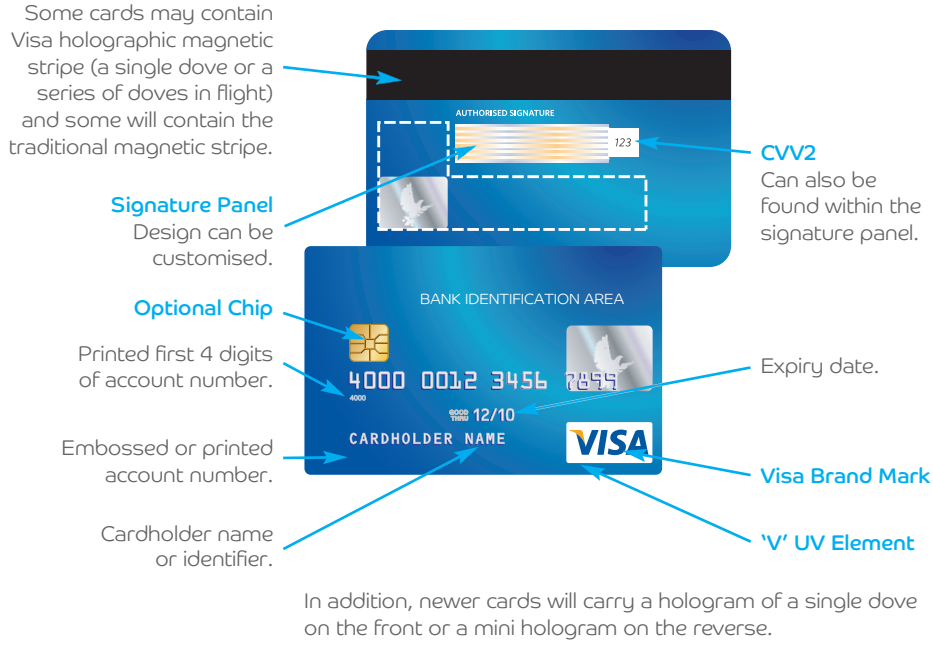
Hologram
Plain, silver or gold background. Dove appears to fly and change colour when tilted.

1.1.2 New Visa card design

Acceptable for electronic and paper fallback transactions.

If you are suspicious about a card, a card presenter or the circumstances surrounding a card transaction, please call Authorisation on **0844 822 2000**.*

Cards shown for visual purposes only – not actual cards.



In addition, newer cards will carry a hologram of a single dove on the front or a mini hologram on the reverse.

New Visa card design variations. The new Visa card designs allow issuers to display the card information in a variety of ways (see below).

1.1.3 MasterCard

Acceptable for electronic transactions. Paper fallback is acceptable for embossed cards only.

If you are suspicious about a card, a card presenter or the circumstances surrounding a card transaction, please call Authorisation on **0844 822 2000**.*

Card pictured is a sample issued by Barclaycard.

Card Validity Dates
Retailers can accept an expired/prevalid card provided they seek and obtain online authorisation from the issuer and the authorisation message carries the correct expiry date on the card. Cards with an unembossed cardholder number will have an unembossed validity date.

Chip
Most cards carry an embedded microchip.

Card Type Identification
Letters 'MC' tilted to the right after the expiry date is now an optional feature.

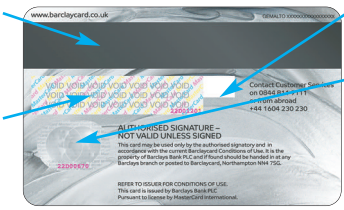
Symbol/Logo
Linked circles in red and orange with 'MasterCard' printed across the centre of the symbol.

Cardholder Name
Name of cardholder is embossed. Title may also be embossed.

Cardholder Number
16-digit account number with first 4 digits printed below. This may or may not be embossed.

Magnetic Stripe

Signature Strip
'MasterCard' repeated in pattern.



Cardholder Signature
Card must be signed.

Hologram
'MasterCard' repeated across background with picture of globe in front. This can appear anywhere on the card back as long as that placement does not impact any other design element or the chip. Hologram changes colour when card is tilted.

1.1.4 Alternative MasterCard

Acceptable for electronic and paper fallback transactions.

If you are suspicious about a card, a card presenter or the circumstances surrounding a card transaction, please call Authorisation on **0844 822 2000**.*

The 'MC' security character is no longer permitted on newly issued cards (effective June 1st 2006) but may continue to appear on old cards until June 2010.

Account Number
The account number must be clear and uniform in size and spacing and must appear on one line. This may or may not be embossed.

The 16-digit account number must start with 5, and the first four digits must be the same as the ones printed directly below.

Brand Mark Areas
These must include a hologram unless the hologram or HoloMag tape appears on the back of the card.

Brand Mark
Cards must include a full-colour MasterCard brand mark, which may be below or above the global or debit hologram.

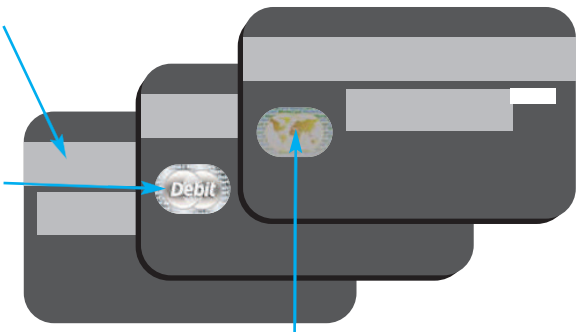
Chip may be present on card.

An additional line of unembossed information may be imprinted directly beneath the cardholder name. This will be the same typeface, size and colour as the cardholder name.

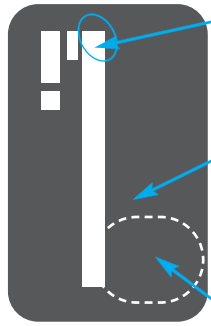
Expiry Date
The card must include a valid expiry date. Cards with an unembossed cardholder number will have an unembossed expiry date.

HoloMag Tape
May be used in place of the traditional magnetic tape.

Debit Hologram
This can appear anywhere on the card back as long as that placement does not impact any other design element or the chip.



Global Hologram
On back next to the signature panel.



First four digits of the account number must be the same digits as those printed directly below.

Card Design
and MasterCard brand mark may be orientated vertically.

Brand Mark Area

New MasterCard unembossed card design variations. The new MasterCard designs allow issuers to display the card information in a variety of ways.

1.1.5 New V PAY card

V PAY is a new European chip only card acceptable for electronic transactions.

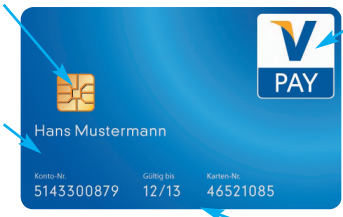
If you are suspicious about a card, a card presenter or the circumstances surrounding a card transaction, please call Authorisation on **0844 822 2000**.*

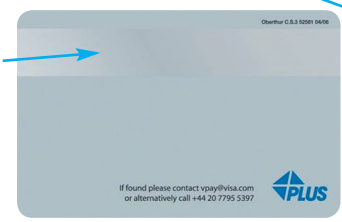
Cards shown for visual purposes only – not actual cards.

Chip
A chip must appear on the front of the card.

Ultraviolet "V" element
When placed under an ultraviolet light, a "V" printed in ultraviolet ink will be visible over the V PAY logo.

Magnetic Stripe
Use of the Visa holographic magnetic stripe with doves in flight is optional. You may see this magnetic stripe or a traditional one on a V PAY card.





V PAY logo
The V PAY logo appears on the front of the card. Alternative logo placement options and vertical orientation of the card and logo are possible.

Unembossed Card
Unlike other Visa cards, the cardholder name, account number and expiry date may be printed on either the front or back of the card, not embossed.

1.1.6 Visa Debit

Acceptable for electronic and paper fallback transactions.

If you are suspicious about a card, a card presenter or the circumstances surrounding a card transaction, please call Authorisation on **0844 822 2000**.*

Cards shown for visual purposes only – not actual cards.

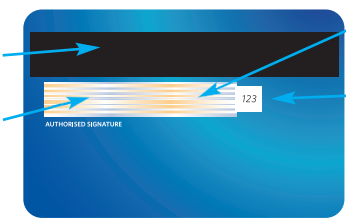
Chip
Most cards carry an embedded microchip.

Cardholder Number
16-digit account number with first 4 digits of the account number printed below.

Cardholder Name
Name of cardholder is embossed. Title may also be embossed.

Visa Brand Mark
This could be displayed top right or top left as well.

Card Validity Dates
Cards should not be accepted if they are not in date.



Magnetic Stripe

Signature Strip
The reverse of some Visa debit cards may look similar or identical to the reverse of a Visa credit card.

Cardholder Signature
Card must be signed.

CVV2 Mark

Some card issuers may include an optional 'link' logo and/or a 'cheque guarantee' hologram.

1.1.7 Visa Electron

Acceptable for electronic transactions only. Please remember: The full card number, cardholder name and 'valid from' date may not appear on the front of all cards. The three-digit Card Security Code, which can be found on the signature panel, will only be present if the full card number appears on the front of the card.

Cards shown for visual purposes only – not actual cards.

Cardholder Number
16-digit account number with first 4 digits of the account number printed below. Full account number may not appear on all cards.

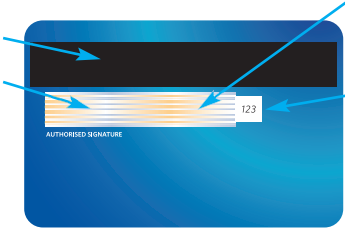
Cardholder Name
Printed or embossed, shows front or back. Title may also show. Cardholder name may not appear on all cards.

Hologram
Dove appears to fly and change colour when card is tilted (optional). May appear on front or back of the card.

Card Validity Dates
Cards should not be accepted if they are not in date.

Symbol/Logo
Visa logo and the word 'Electron'.

Card Type Identification
'Electronic use only' may appear on some cards.



Magnetic Stripe

Signature Strip

The reverse of some Visa debit cards may look similar or identical to the reverse of a Visa credit card.

Cardholder Signature
Card must be signed.

CVV2 Mark

In addition, card could carry a hologram on the reverse.

1.1.8 Solo

Acceptable for electronic transactions only.

Cards shown for visual purposes only – not actual cards.

Chip
Card may carry a chip.

Cardholder Name
Name of cardholder is embossed.

Card Identification
Issue number: this will not appear on all cards.

Card Validity Dates
Cards should not be accepted if they are not in date.

Symbol/Logo
Solo logo on either front or back.

Hologram
Most cards carry a hologram.

Magnetic Stripe

Cardholder Signature
Card must be signed.

1.1.9 Maestro

Acceptable for electronic transactions only.

Cards shown for visual purposes only – not actual cards.

Chip
Some cards carry an embedded microchip.

Cardholder Number
May not appear on all cards. Cards may have a 12 – 19-digit account number printed or embossed. This may be the bank account number not the card number.

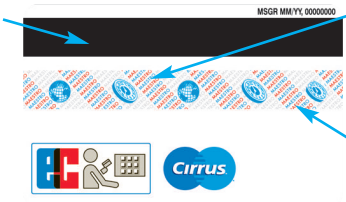
Cardholder Name
The cardholder's name may not always appear on the card.

Symbol/Logo
Blue and red interlocking circles with 'Maestro' printed across centre of symbol in white.

Hologram
May not appear on all cards.

Card Validity Dates
Cards should not be accepted if they are not in date. The expiry date may not appear on the card, however, if it does, the card should not be accepted if it has expired.

Magnetic Stripe
This will include the Maestro card account number which will be printed on the transaction receipt. This may differ from the embossed card number on the front of the card.



Cardholder Signature
Card must be signed.

Signature Strip
May have the word 'Maestro' repeated in pattern.

1.1.10 JCB

Acceptable for both electronic and paper fallback transactions.

Cards shown for visual purposes only – not actual cards.

Cardholder Number
Embossed 15 or 16-digit number, with first 4 digits printed above or below.

Card Validity Dates
Cards should not be accepted if they are not in date.

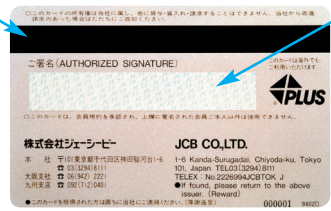
Cardholder Name
Name of cardholder is embossed. Title may also be embossed.

Symbol/Logo
JCB logo appears in right-hand corner.

Hologram
A sun, moon and JCB characters appear when card is tilted.

Card Type Identification
'JCB' embossed after expiry date. A gold card will show 'JCB G'.

Magnetic Stripe



Cardholder Signature
Card must be signed.

1.1.11 Holograms

Check that the hologram moves as you tilt the card back and forth. Many counterfeit cards use poor reproductions and even with a quick glance you can spot a fake. Holograms will contain the following designs:

- Visa – a flying dove
- MasterCard – a globe which will change colour
- JCB – a globe and rising sun
- UK Maestro – own logo
- Visa Electron – a flying dove
- Cheque Guarantee – own logo
- Solo – own logo.

Visa – flying dove optional for Visa Electron

MasterCard

JCB

UK Maestro

Solo

Cheque Guarantee

See Section 1.4.1.3 Holograms for more details.

1.1.12 Ultraviolet motifs

If the ultraviolet motifs do not appear when checked under a UV detector, the card may be forged. A dove will appear on an old style Visa card, while the letters 'MC' will appear on a MasterCard. UK Maestro and Solo cards will show their respective symbols. Take care, as some Electron cards do not have a UV motif.

New Design Cards

Visa and Visa Electron – the Visa brand mark will appear more sleek in design than the current standard card Visa brand mark. There will be an ultraviolet 'V' visible over the Visa brand mark when placed under an ultraviolet light.

V PAY – a 'V' printed in ultraviolet ink will be visible over the V PAY logo.

MasterCard – MasterCard UV markings will remain the same.

Maestro – The word 'Maestro' appears on the bottom left-hand side of the card.

You can obtain a UV detector from the following supplier, who will give a price upon request:

LMN Office Furnishings Limited,
Telephone: **01642 468587**,
Fax: **0870 264 1721**,
email: lmnoffice@supanet.com

PLEASE BE AWARE THAT THIS IS NOT AN ALTERNATIVE NUMBER TO CALL FOR NAME AND ADDRESS CHECKS OR CODE 10 CALLS.

American Express

Visa
(On newly issued cards, the letter 'V' on the Visa logo will appear as an ultraviolet mark.)

MasterCard

Solo

Maestro

1.2 Additional card recognition

1.2.1 Visa Credit and MasterCard

- Many cards will carry a shortened signature strip
- The last 4 digits of the card number, together with a 3-digit Card Security Code will appear on the left-hand side. On the new design Visa cards, the 3-digit Card Security Code will appear on the signature panel or in a white box beside the signature panel. MasterCard have now mandated the 3-digit Card Security Code to appear in a white box adjacent to the signature panel
- Some older cards in circulation may show the whole account number with the 3-digit Card Security Code
- Some foreign cards may carry a message on the signature strip and will not be signed. Please ask for identification such as a passport or driving licence, and carry out a Code 10 call (Authorisation). Refer to Authorisation and Code 10 calls (Section 2.1.9).

1.2.2 Visa Debit

- The last 4 digits of the account number, plus a 3-digit Card Security Code, will appear on the signature strip. The new Visa Debit cards will carry the 3-digit Card Security Code in a white box beside the signature panel
- Some older cards in circulation may show the whole account number with the 3-digit Card Security Code.

1.2.3 Visa Electron

- The last 4 digits of the account number, plus a 3-digit Card Security Code, will appear on all UK-issued cards, but may not be on some foreign cards. The new Visa Electron cards will carry the 3-digit Card Security Code in a white box beside the signature panel
- Some older cards in circulation may show the whole account number with the 3-digit Card Security Code
- Some Visa Electron cards are for use in their own country only. If the card is marked with this information, do not accept the card.

1.2.4 UK Maestro and Solo

- The cardholder number and the 3-digit Card Security Code will appear on the signature strip. Most cards carry a pattern showing the word 'signature' in red
- Some UK Maestro and Solo cards serve additional functions. They may carry cheque guarantee details or branding for an ATM network. The branding may be on the front or the back of the card.

1.2.5 Maestro

- A cardholder photograph and signature may appear on the front of the card.

1.2.6 JCB

- The signature strip will show the 3-digit Card Security Code
- Some cards will carry a microchip.

1.2.7 Visa and Visa Electron mini cards with mini dove design hologram

These are a miniaturised version of a Visa or Visa Electron card.

Mini card design elements

Visa brand mark. The Visa brand mark is the stylised word 'Visa'. On cards the Visa brand mark appears in Visa Blue and Visa Gold and is shown on a standardised white background.

Visa brand mark with the ELECTRON identifier. The Visa brand mark with the ELECTRON identifier is the stylised word 'Visa' in Visa Blue and Visa Gold shown on a standardised white background with the word 'ELECTRON' underneath.

For a Visa or Visa Electron mini card, reduced sizes of the Visa brand mark and the Visa brand mark with the ELECTRON identifier have been created. The mark appears in the upper- or lower-right position.

Use of the mini dove design hologram on a Visa mini card is required. Use of the mini dove design hologram on a mini Visa Electron card is optional. Issuers have the option of placing either a mini dove design hologram on the front of the card or on the back of the card.

Signature panel

A signature panel will appear on the back of the card.

Magnetic stripe

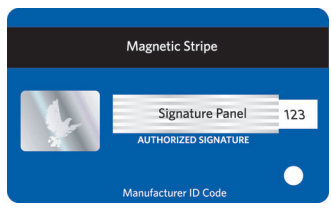
The magnetic stripe will appear on the back of the card.

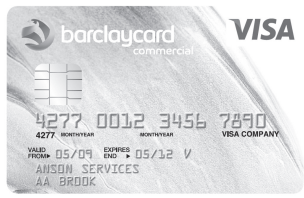
Card Security Code

A 3-digit Card Security Code number will be indent-printed or laser-engraved on the back of the card in a standardised location, either the white area next to the signature panel, or directly onto the signature panel.

Cardholder photograph and signature

A photograph of the cardholder may appear on either the front or back of the card.





1.3 Commercial cards

There are 3 main types of card available:

Business card

- Gives small businesses a business payment method, an expense control mechanism and a cash management tool
- Ideal for paying for everything a small business needs – travel and entertainment, office supplies, stationery, computers etc
- Available as charge and credit cards.

Corporate card

- For travel and entertainment for mid-sized to large multi-national companies
- Allows streamlined administration of all expenses, saving time and money by reducing cash advances and paper-based payment methods
- Management information is available, making it easier to control expenditure and to manage and develop expense policies.

Purchasing card

- Used by large businesses, Government departments and public sector bodies
- Enables monitoring and control of expenditure and the provision of information to help to improve cost efficiency
- Allows VAT reclamation
- Removes paper-based processes, through electronic invoicing with detailed breakdowns of expenditure
- Card can be used face-to-face, online, by phone or embedded into customer ordering systems.

Barclaycard Hotel Tracker

- Is a Corporate card account where no plastic cards are issued, aimed at hoteliers and hotel booking agents (see Section 2.2 Card-not-present transactions for further details).

For more information and for other card types, go to **www.mastercard.co.uk** or **www.visa.com**

Benefits you can help to deliver to your customers

Monitor and control spending
Card Issuers are able to provide your customers with management information relating to their purchasing spend which can include summary level reports or detailed breakdowns of expenditure which is then analysed or used with accounting packages.

Claiming back VAT
If you accept purchasing cards and you are equipped to support electronic VAT invoices, then your customers will be able to reclaim the VAT on expenditure using the 'Evidence for VAT Deductions' report which is accredited by HM Revenue and Customs.

Contact Barclaycard Customer Services Department on 0844 811 6666* for help with accepting these cards and providing your customers with the appropriate information to help them to run their businesses.

For information or help with taxation we suggest you contact Her Majesty's Revenue and Customs or seek specialist tax advice.

1.4 Fighting fraud

We have focussed on areas of fraud prevention that our customers seek advice on. We have also included information on how we can work together to minimise the risks.

Authorisation only confirms that the issuer of the card agrees there are enough funds to pay for the goods and to confirm the card has not been reported lost or stolen. Authorisation does not guarantee payment.

1.4.1 Preventing and detecting fraudulent card-present transactions

To prevent fraudulent transactions being charged back at a later date, any chip and PIN-enabled cards should be used with a chip and PIN-enabled POS terminal. Likewise, you must ensure you obtain Authorisation on any transaction where the card details are not captured using the chip (eg when presented with a magnetic stripe card transaction) to avoid the risk of loss to card fraud.

If your terminal is chip and PIN-enabled you could be presented with a number of different scenarios, all of which you can accept:

- magnetic stripe and signature verification (eg from an overseas customer where the country has yet to upgrade to chip and PIN technology)
- chip and signature verification (eg from a disabled customer who is unable to use PIN technology)
- chip and PIN verification.

If your terminal has contactless reader, you will also be able to accept contactless transactions with no verification (Section 2.1.6).

In addition, you may wish to undertake occasional mail or telephone order transactions. We strongly recommend you read Card-not-present transactions (Section 2.2) and Chargebacks and retrieval requests (Section 4). If the majority of the transactions you are accepting are mail, telephone or internet transactions, it is essential that you advise us that you are doing so, as we have a range of products and services that may help you to reduce the risk of transactions being charged back at a later date.

If your customer does not remember their PIN, the transaction must be authorised by the issuer. If you rent a PDQ terminal from Barclaycard, the terminal will automatically do this for you. Please ensure you carefully follow the terminal prompts and refer to your Terminal Operating guide if necessary. Please be aware that it may be declined and therefore you may need to ask your customer for payment by other means. If you use your own or a third party supplier's terminal, it is your own responsibility to ensure your terminal seeks Authorisation when required to do so.

In these instances, provided your terminal is chip and PIN-capable, you will be protected against potential counterfeit, lost and stolen, and intercepted card fraud.

Card fraud statistics show there is increased fraud with non-PIN cards. Be aware of the security checks you should make to minimise card deception:

- Keep hold of the card at all times
- Keep the goods out of reach of the customer
- Check the card against any warning notices you have received from us
- Check the 'valid from' date. If the card is newly issued, be extra vigilant
- Watch out for hesitancy when the customer signs and make sure that the signature they give matches the signature on the card
- Be careful not to be distracted during a transaction. Fraudsters may try to hurry you, or draw your attention away from making card checks
- Check the name on the card and compare against the presenter
- Be sure not to process transactions on behalf of anyone else. This is a breach of your Merchant Agreement and could lead to transactions being charged back to you.

1.4.1.1 Counterfeit cards

Due to the increase in quality of fraudulent cards being produced recently, changes in design for both Visa and MasterCard have been introduced. This is the first significant change in nearly 30 years.

The new designs along with the current design will both be in circulation over the next four years. The current designs will be phased out by 2010.

When checking the card, current card designs have several features that may not be present on a Visa or MasterCard:

- On current design Visa cards it is now only optional to carry an embossed 'V' tilted to the right, next to the expiry date (see New Visa card design in Section 1.1.2)

- On current design MasterCard it is now only optional to carry the embossed letters 'MC' tilted to the right to form an unusual 'M' next to the expiry date (see MasterCard in Section 1.1.3)

- The first 4 digits of the embossed card number should be printed below the card number. Check that the numbers match.

1.4.1.2 New card designs for Visa and MasterCard

The repeat of the first 4 embossed digits printed below the card number will remain on the new designs.

However, you need to be aware that on the new designed cards for both Visa and MasterCard the unique embossed symbols 'V' or 'MC' will be removed. Since many fraudsters have mastered the art of copying this feature it is considered less secure than when first introduced.

If you are suspicious about a card, a card presenter or the circumstances surrounding a card transaction, please call Authorisation on **0844 822 2000**.*

1.4.1.3 Holograms

Current card design

Check that the hologram moves as you tilt the card back and forth. Many counterfeit cards use poor reproductions and even with a quick glance you can spot a fake. Holograms will contain the following designs:

- Visa – a flying dove
- MasterCard – a globe which will change colour
- JCB – a globe and rising sun
- UK Maestro – Globe or APACS cheque guarantee symbol
- Visa Electron – flying dove is optional.

Also see Section 1.1.10 for more details.

New card design

With the new design cards both Visa and MasterCard will allow the hologram to appear on the front or the back of the card.

Visa – the dove hologram will appear on the front of the card. Or a mini dove hologram may be on the back of the card.

MasterCard – the redesigned MasterCard globe hologram is integrated with the magnetic stripe as a hologram stripe or will show the standard hologram symbol, on the front or back of the card.

1.4.1.4 Ultraviolet motifs

Current card design

If the ultraviolet motifs do not appear when checked under a UV detector, the card may be forged. A dove will appear on a Visa card, while the letters 'MC' will appear on a MasterCard. Maestro and Solo cards will show their respective symbols. Take care, as some Electron cards do not have a UV motif. Also see Section 1.1.6 for more details.

New design cards

Visa and Electron – the Visa brand mark will appear more sleek in design than the current standard card Visa brand mark. There will be an ultraviolet 'V' visible over the Visa brand mark when placed under an ultraviolet light.

V PAY – a 'V' printed in ultraviolet ink will be visible over the V PAY logo.

MasterCard – MasterCard UV markings will remain the same.

Maestro – The word 'Maestro' appears on the bottom left-hand side of the card.

You can obtain a UV detector from the following supplier, who will give a price upon request:

LMN Office Furnishings Limited,
Telephone: **01642 468587**,
Fax: **0870 264 1721**,
email: lmnoffice@supanet.com

PLEASE BE AWARE THAT THIS IS NOT AN ALTERNATIVE NUMBER TO CALL FOR NAME AND ADDRESS CHECKS OR CODE 10 CALLS.

1.4.1.5 Card chip-read/swipe failure

The following information will help you and your company reduce losses through counterfeit fraud. The vast majority of your card transactions are chip-read or swiped through your electronic Point of Sale (POS) terminal with no problems. However, on occasions when your terminal is unable to read the chip or magnetic stripe on the card, your staff need to manually enter the card number embossed on the front of the card using the terminal keys.

If you have a chip-enabled terminal you should find chip cards will not usually fail to dip. You may find, if you key enter or revert to the magnetic stripe swipe on a chip card, that the issuer may decline the card. This is for increased security. If this is the case, follow the terminal prompts, which may include you having to speak to our Authorisation Department. Please ensure you follow their instructions. Only give the card back to the customer if you are not asked to retain the card.

When a card transaction is processed in this way a number of very important security checks, usually undertaken by the electronic terminal, are bypassed. It is evident that some fraudsters are aware of this situation and are exploiting the opportunities. Under Visa and MasterCard Card Scheme Regulations, a Card Issuer has the right to request sight of an imprinted verification voucher signed by the cardholder. Failure to provide this gives the Card Issuer the right to charge the transaction back to you.

To protect your business from losses and reduce the risk of chargebacks when a card fails to be read by your electronic processing equipment, you should:

- enter the card number embossed on the front of the card using the terminal keys and seek Authorisation
- in addition to manually entering the card number into the terminal, imprint a sales voucher and fully complete the verification voucher. This must be signed by the customer. The words 'For verification only – this voucher is not for banking' should be written on the voucher. Pass the customer copy to the customer along with the terminal receipt. If you need a supply of preprinted verification vouchers please call **0845 600 6766***
- please do not bank the verification (or sales) voucher, as your terminal will still process the transaction in the usual way
- banking the verification or sales voucher will cause the cardholder's account to be debited twice. The voucher is simply your proof that the card was present at the point of sale. It can be used to prove the validity of the transaction if the customer subsequently disputes it

- the merchant copy of the terminal receipt and the verification (or sales) voucher should be kept together in case of any future query. Failure to provide copies in the event of a query from a Card Issuer could result in a chargeback and losses to your business. Your verification vouchers should be fully completed including full details of the goods/services purchased. Do not write just 'Goods'. Ensure you write the Authorisation code provided by the Authorisation Department.

1.4.1.6 UK Maestro and Solo cards

If a UK Maestro or Solo card fails to swipe through your terminal you should carry out all of the actions as detailed above as well as contacting Authorisation for a Code 10. In order to defend this type of chargeback we MUST have a record of a Code 10 being approved by the Card Issuer.

1.4.1.7 Maestro cards (issued outside the UK)

Maestro transactions must be captured by swiping the magnetic stripe or reading the chip. There is no manual key entry permitted. If a card fails to chip-read or swipe through, you should ask your customer for another form of payment as there is no chargeback defence in the event of a card swipe failure.

1.4.1.8 Visa Electron cards

The majority of Visa Electron cards and all V PAY cards are not embossed and therefore Visa Electron transactions MUST be processed electronically. If a card fails to chip-read or swipe through your terminal you should ask your customer for another form of payment as there is no chargeback defence in the event of card-swipe failure.

1.4.1.9 Returning wanted or recovered cards

If our Authorisation operator asks you to destroy a card and return it to us, please follow the procedure described below. You should politely inform your customer of the decision, without putting any other customers or yourself at risk.

1. To preserve fingerprints and other forensic evidence, handle the card as little as possible and only by the edges.
2. With the card facing you, cut off only the bottom left-hand corner.
3. Make sure the signature strip, magnetic stripe, chip and hologram are intact.
4. You will find your first recovered card form in your welcome pack.

Further recovered card forms may be obtained by calling our Customer Services Department on **0844 811 6666**.*

- The form must be completed in full and the cut-off slip of the completed form should be retained in your files
- The top section of the form and both pieces of the card should be sent to:

  Recovered Card Services, Barclaycard, Department RC, Northampton NN4 7SG.

If you are returning a Visa Electron card, please also enclose a copy of the terminal declined receipt.

1.4.1.10 Reward scheme

A £50 reward may be paid to your business for the return of a wanted card and it is at the discretion of the business owner whether reward payments are passed on to the person recovering the card.

In the event of the police needing to retain a wanted card or sales voucher for investigation (for example, if a stolen card is presented) you will need to keep certain details in the event of a query. Please ensure you have a copy of the sales voucher (a good photocopy will be acceptable) as well as the following information:

- the card number
- the expiry date
- the name embossed on the card
- UK Maestro/Solo card issue number (if applicable)
- date card recovered
- the crime reference number
- details of the officer and police station dealing with the case.

A reward can still be claimed if the police take the card for evidence.

1.4.1.11 Cheque guarantee

For 24-hour-a-day validation of a Barclays Bank cheque, guaranteed by a Barclays Connect card, Barclaycard Visa card or a Barclays Premier card, call **0800 515 788**.*

Please remember: Company cheques cannot be guaranteed by any card.

If you are suspicious of the cheque, the cheque guarantee card or the presenter, you need to inform the Authorisation operator on **0800 515 788*** (and follow their instructions). Start your conversation by saying, "This is a Code 10 call."

1.4.1.12 Fraud prevention advice

Transaction laundering

If you are approached with a proposal to buy card transactions or process other business transactions through your number, please contact us on **01604 252773**.* This is called laundering and is contrary to the terms of your Agreement.

Bogus/phishing emails

If you receive an email from somebody claiming to be a bank or an official business asking for transaction details of all cards recently accepted for payment, you should be wary. This is a fraud tactic to obtain card details. A bank or any other official business would never make contact in this way to request card information.

Be aware some fraudsters may make attempts to mirror your website to gain genuine information from cardholders.

To report any of these instances contact **internetsecurity@barclays.com**

1.4.2 Preventing and detecting fraudulent card-not-present transactions

Card-not-present (CNP) fraud takes place because neither the cardholder nor the card are present at the point of sale when a transaction is made. Examples of CNP transactions are orders made over the internet or by phone, mail order or fax. Such transactions mean that:

- you are unable to physically check that the card being used for payment is genuine
- it is not possible to verify whether the identity given by the individual is correct
- a PIN is unable to be entered or checked to ensure the card is authentic.

Card-not-present (CNP) fraud is a growing problem in the UK and elsewhere as criminals turn their attention to CNP fraud.

Extra care needs to be taken when taking transactions online, over the phone, or by mail order and fax. You need to consider the risks before accepting payment:

- A CNP transaction means that a cardholder and a card are not present. Unlike a normal face-to-face situation a retailer is unable to check that the card is genuine – and that the 'customer' is not just using a stolen card number. In these situations, the genuine cardholder may not be aware that their card number has been compromised eg a fraudster has taken the card details from a customer's discarded receipt
- Only online transactions can be authenticated by the cardholder to prove they are a genuine customer, when you use Verified by Visa and MasterCard SecureCode – this is comparative to PIN at point of sale. If a retailer is unable to prove that the cardholder is genuine they are unable to guarantee that the card information provided relates to the genuine cardholder
- Authorisation only confirms the issuer of the card agrees there are enough funds to pay for the goods and to confirm the card has not been reported lost or stolen. **Authorisation does not guarantee payment**
- Never release goods to a third party. Always ensure that goods are sent to the named person on the card
- If a cardholder comes to collect the goods in person, cancel the CNP payment and process as a card-present transaction.

Questions you need to ask yourself before accepting the transactions:

- Why has this customer come to me?
- Is the sale too easy, is the customer uninterested in the price or details of the goods and are they a new customer?
- Are the goods high value or easily resaleable?
- Is the transaction out of character compared to your usual orders or is the customer ordering many different items and do they seem unlike your usual customer?
- Is the customer reluctant to give a landline phone number or only prepared to give a mobile number?
- Does the address provided seem suspicious or has the delivery address been used before with different customer details?
- Is the customer being prompted by a third party whilst on the phone?
- Is the customer attempting to use more than one card in order to split the value of the sale?
- Does the customer seem to lack knowledge of their account? Are they providing details of someone else's card (eg that of a client or family member)?
- Does the customer seem to have a problem remembering their home address or phone number or do they sound as if they are referring to their notes?

Use fraud monitoring tools recommended by the card schemes. The most common examples of these tools are: Card Security Code and Address Verification Service (CSC/AVS) fraud screening.

1.4.2.1 Velocity checking and fraud screening

Use of Rule Based and Neural Networks as additional tools can be beneficial and help to check the validity of transactions. A system which enables you to crosscheck the name, address, telephone numbers, card details, email address, IP address with past and daily records could help you to reduce risk to your business.

Crosschecking this type of information continually will identify any duplication of information which may indicate other attempts to use similar details by a possible fraudster.

For example they may quote different card numbers but use the same name or address or may quote entirely different details but still be seen to come from the same IP address.

Any such instance of duplication should be rejected and checked further before accepting the order or request.

There are a series of third party solutions providers available to provide this additional tool and assist with checking the authenticity of customer information:

Further advice for internet transactions
To add to existing velocity checks:

- check for sequential card numbers
- review orders made using non-UK issued cards
- review orders where IP address does not match delivery address (country)
- review orders going to/coming from same customer – name/address/card number
- review/decline all/new orders going to a different delivery address
- review/decline duplicate purchases
- review/decline if postal code does not match
- decline if CSC does not match
- decline new orders with an invalid expiry date.

Use the 'chargeback data' you receive to:

- highlight potential problem names/addresses/IP addresses
- always ensure that you respond promptly to 'request for information letters'; you may be able to prevent the chargeback
- also use Internet Authentication (3D Secure) and CSC/AVS for added security.

Check **www.cardwatch.co.uk** and **www.barclaycard.co.uk/paymentacceptance** for additional information. Fraud Literature for staff awareness and training is also available.

1.4.2.2 Card Security Code and Address Verification Service (CSC/AVS)

Barclaycard and the UK card industry have worked together to develop a service to reduce card-not-present fraud, simply by requesting a small amount of additional information from the cardholder. This information is comprised of:

- the Card Security Code (the last 3 numbers on the signature strip on the card or the 3 digits in a white box adjacent to the signature panel)
- the numbers in the cardholder's postcode
- up to the first 5 numbers of the cardholder's full statement address.

The Card Security Code must not be stored after the transaction has been authorised.

This service is available for customers processing transactions via our PDQ and ePDQ products. Please contact us on **0844 811 6666*** for further information.

If you are processing transactions through your own electronic point of sale equipment, you can take action now by contacting your electronic point of sale equipment supplier for information about development requirements and the timescales needed to implement the service.

1.4.2.3 Authentication or 3D Secure

Authentication is an industry-wide initiative to help combat fraud and protect businesses trading over the internet. Visa, Maestro and MasterCard cardholders buying online can verify their identity with a password that automatically authenticates the cardholder, so you can safely accept their order.

Benefits for you

- **Increased sales and profits** – customers prefer to buy from websites that offer the reassurance of Authentication
- **Greater security** – increased protection against fraud
- **Cost savings** – thanks to the reduced risk of transactions being charged back
- **Convenience** – Authentication is quick and easy for your staff to use
- **Time savings** – spend less time on dealing with transactions that have been charged back.

Benefits for your customers

- **Peace of mind** – because if their card is stolen it's more difficult for the fraudster to use it on websites that include Authentication
- **Convenience** – it's quick and easy for your customers to enter their password, and their payment will be authorised in seconds
- **Reassurance** – customers will know you have invested in these safeguards, so they can safely trust you with their card details.

How Internet Authentication makes online transactions safer

1. A customer browsing on the internet decides to buy from you with a Visa, MasterCard or Maestro*.
2. Your payment pages eg ePDQ Card Payment Interface (CPI), communicate with the Visa/MasterCard Directory, which then contacts the Card Issuer.
3. The Card Issuer confirms whether the customer has registered for Internet Authentication.
4. If the Card Issuer supports Internet Authentication, a 'pop-up' or 'in-line' web window appears on the customer's screen. If not, the transaction proceeds to Authorisation detailed in point 7 below.
5. The Card Issuer asks for the customer's Internet Authentication password and accepts or rejects it.
6. If the password is correct, the payment process continues (if incorrect, the transaction may be stopped).
7. Your payment software eg ePDQ, authorises the payment details and passes them to the acquirers eg Barclaycard, for settlement.

*Provided your internet site supports Verified by Visa and MasterCard SecureCode.

Which cards are covered?

- All standard issued Visa, Maestro and MasterCard cards are included for Authentication except internationally issued commercial cards which are only covered if the transaction is fully authenticated ie the cardholder successfully inputs the correct password. Visa cash cards are excluded.

Visa and MasterCard regularly review and amend the types of card and regions of the world that are covered by Internet Authentication. Please refer to the current version of the Internet Authentication Procedure guide for full details.

How Authentication works with various systems and providers
Authentication is available with our ePDQ service or stand-alone with other software.

If you have the ePDQ Cardholder Payment Interface (CPI)
Authentication works best with our cost-effective ePDQ CPI. It's straightforward to use, and whenever new software or security measures become available we'll upgrade you automatically – saving you time, technical resources and money. The ePDQ CPI includes a co-branded payment page, to reassure your customers that they're dealing with a trusted brand.

If you have the ePDQ Merchant Payment Interface (MPI)
You can also benefit from Authentication, as it will work with your own website and can be integrated using our software development kit. You should allow several days for installation – time you could save by upgrading to our CPI.

If you use a payment service provider other than ePDQ
They may not offer Authentication. However, they could install it with our software development kit, but they may charge you for this service.

If you have your own software for internet transactions
You can install Authentication with our software development kit.

If Barclaycard processes your transactions and you are using Authentication from another provider
It must be approved by us and registered by Barclaycard with Visa and MasterCard.

If you are using Authentication from another provider
It must be approved by us and registered by Barclaycard with Visa and MasterCard.

For more information about Authentication, please visit **www.barclaycard.co.uk/paymentacceptance** or call **0844 811 6666**.*

1.5 Card scheme requirements

As a member of the card schemes we require you to comply with the Payment Card Industry Data Security Standard (PCI DSS) and a Maestro Mandate which dictates how you accept Maestro cards. This section sets out the obligations you must comply with to achieve these standards.

1.5.1 Payment Card Industry Data Security Standard (PCI DSS)

What is PCI DSS?
It is an auditable set of standards designed to ensure that certain card data is stored securely by your company and any third party which stores, transmits or processes such card data on your behalf.

What information must be securely stored?
Any information that is necessary to process card transactions correctly including any information which is recorded electromechanically or otherwise on any payment card and includes, although is not limited to, the following:

- any information that is used to authenticate a card payment including but not limited to the card number, expiry date, issue number, passwords, pass phrases and any other unique data supplied as part of the card payment
- any information that could identify individual cardholders and their purchases. This includes name, address, purchase description, amount and other details of the card payment.

This shall be referred to as Cardholder Data in the rest of this section.

What information must not be stored at any time?
You must not store any of the following information at any time:

- the contents of the magnetic stripe also known as Track 2 Data
- the Card Verification Value or CVV contained in the magnetic stripe
- the Card Verification Value contained in the magnetic stripe image in a chip known as the iCVV
- the Card Security Code also known as CVV2 printed on the back of the card in or next to the signature panel
- the PIN Verification Value or PVV which is contained in the magnetic stripe.

What must you do to comply with PCI DSS?
PCI DSS sets out a number of requirements which you must comply with to ensure that Cardholder Data is securely stored. You must:

1 install and maintain a firewall configuration to protect data
2 not use vendor-supplied defaults for password or other security parameters
3 protect stored Cardholder Data
4 encrypt the transmissions of Cardholder Data and sensitive information across public networks
5 use and regularly update anti-virus software
6 develop and maintain secure systems and applications
7 restrict access to Cardholder Data by business need-to-know
8 assign a unique ID to each person with computer access
9 restrict physical access to network resources and Cardholder Data
10 track and monitor all access to network resources and Cardholder Data
11 regularly test security systems and processes
12 maintain a policy that addresses information security.

In complying with the requirements as set out above you must meet the standards as specified by the PCI Standard Security Council (PCI SSC) and mandated by the Card Schemes. The current standards that you must adhere to in meeting the above requirements are as set out in 'The Payment Card Industry (PCI) Data Security Standards', version 1.2, October 2008.

This is available for download from the PCI Security Standards Council website and can be currently downloaded from the following website address:
https://www.pcisecuritystandards.org

For more information and useful tools to help you on your journey towards compliance, please access the Barclaycard PCI DSS website at:
http://www.barclaycardbusiness.co.uk/pcidss/

If you are unable to access the standards for any reason whatsoever you must contact us and we will advise you how you can obtain a copy of these documents.

Demonstrating compliance with PCI DSS
We need you to demonstrate that you are complying with PCI DSS and the method by which we require you to do this will differ depending upon the type and volume of card transactions that we process on your behalf. To decide which obligations you must comply with you must first determine what type of Merchant you are (Merchant Level).

For the purposes of PCI DSS, Merchants are classified as follows:

Merchant Level	Definition
Level One Merchant	• A Merchant which processes more than 6 million card transactions per year for any Card Scheme (for example more than 6 million Visa card transactions per year or more than 6 million MasterCard transactions per year); • or a Merchant that has suffered a compromise. (see details below regarding data compromises).
Level Two Merchant	A Merchant which processes between 1 million and 6 million card transactions per year for any Card Scheme (for example 2 million Visa card transactions per year).
Level Three Merchant	A Merchant which processes between 20,000 and 1 million e-commerce card transactions per year for any Card Scheme (for example 35,000 e-commerce MasterCard card transactions per year).
Level Four Merchant	• Any merchant processing less than 20,000 Visa or MasterCard e-commerce transactions per year, • and all other merchants processing up to 1 million Visa or MasterCard transactions per year.

We may from time to time audit your type and volume of card transactions. We may as a result of such audit, or if we are instructed to do so by a Card Scheme, notify you which type of Merchant you are for the purposes of PCI DSS and you agree that you will comply with the obligations of that level of Merchant as detailed below.

What you must do to demonstrate compliance with PCI DSS

When you have determined which type of Merchant you are for the purposes of PCI DSS, you will need to comply with the following obligations depending upon your Merchant Level:

Merchant Level	What you must do
Level One Merchant	If you are a Level One Merchant you must: • engage a Card Scheme Approved Qualified Security Assessor (see below for details) to complete an annual on-site audit; • provide us with a copy of the Qualified Security Assessor (QSA) Report On Compliance (executive summary only). This must be less than 12 months old; • if you have any card payment systems connected to the Internet, either directly or indirectly, contract the services of a Card Scheme Approved Scan Vendor (see below for details) to conduct quarterly network vulnerability scans; AND • provide us with a copy of the latest scan report (summary only). This must be less than 3 months old.
Level Two Merchant	If you are a Level Two Merchant you must: • engage a Card Scheme Approved Qualified Security Assessor (see below for details) to complete an annual on-site audit; • provide us with a copy of the Qualified Security Assessor (QSA) Report On Compliance (executive summary only). This must be less than 12 months old; • if you have any card payment systems connected to the Internet, either directly or indirectly, contract the services of a Card Scheme Approved Scan Vendor (see below for details) to conduct quarterly network vulnerability scans; AND • provide us with a copy of the latest scan report (summary only). This must be less than 3 months old.

Merchant Level	What you must do
Level Three Merchant	If you are a Level Three Merchant you must: • complete and provide us with an annual Card Scheme Approved Self-assessment Questionnaire and signed Attestation of Compliance, which demonstrates that you comply with PCI DSS. This must be less than 12 months old; you may want to contract the services of a Card Scheme Approved Qualified Security Assessor (see below for details) to validate this exercise; AND • if you have any card payment systems connected to the Internet, either directly or indirectly, contract the services of a Card Scheme Approved Scan Vendor (see below for details) to conduct quarterly network vulnerability scans and provide us with a copy of the latest scan report (summary only). This must be less than 3 months old.
Level Four Merchant	If you are a Level Four Merchant you must: • complete and provide us with an annual Card Scheme Approved Self-assessment Questionnaire and signed Attestation of Compliance, which demonstrates that you comply with PCI DSS. This must be less than 12 months old; you may want to contract the services of a Card Scheme Approved Qualified Security Assessor (see below for details) to validate this exercise; AND • if you have any card payment systems connected to the Internet, either directly or indirectly, contract the services of a Card Scheme Approved Scan Vendor (see below for details) to conduct quarterly network vulnerability scans and provide us with a copy of the latest scan report (summary only). This must be less than 3 months old.

Copies of all reports required to be provided as specified in the table above should be sent to:

The PCI DSS Compliance Manager
Barclaycard
Payment Acceptance
1234 Pavilion Drive
Northampton
NN4 7SG

Card Scheme Approved Qualified Security Assessor
The specialist organisations which are qualified to conduct on-site annual audits of a Merchant compliance with PCI DSS are those advised by the card schemes from time to time. Details of the current card scheme approved specialist organisations can be found at:
https://www.pcisecuritystandards.org/pdfs/pci_qsa_list.pdf

If you are unable to access the list for any reason whatsoever, you must contact us and we will advise you how you can obtain a copy.

Card Scheme Approved Scan Vendors
The specialist organisations which are qualified to conduct network vulnerability scans are those advised by the card schemes from time to time. Details of the current card scheme approved specialist organisations can be found at:
https://www.pcisecuritystandards.org/pdfs/asv_report.html

If you are unable to access the list for any reason whatsoever, you must contact us and we will advise you how you can obtain a copy.

Self-assessment Questionnaire
The PCI Standard Security Council has published a set of Self Assessment Questionnaires (A, B, C or D) depending on your type of business. You can find Instructions for completing a Self Assessment Questionnaire (version 1.2) on the PCI Standard Security Council website at
https://www.pcisecuritystandards.org/saq/index.shtml

If you are unable to access any of these documents for any reason whatsoever, you must contact us and we will advise you how you can obtain a copy.

Further action you may need to take
We may, as a consequence of considering any report that you must submit to demonstrate compliance with PCI DSS (as set out above):

- notify you that you are a different Merchant Level (for example a Level One Merchant rather than a Level Two Merchant) and you agree that you will comply with the obligations of that Merchant Level going forwards, or
- require that you take additional security measures to ensure compliance with PCI DSS within an agreed period of time. Barclaycard are not unique in requiring their merchants to become PCI DSS compliant; all card acquirers have the same responsibility to the Card Schemes (eg Visa and MasterCard).

Data compromises
If any unauthorised person obtains access to any Cardholder Data, or Cardholder Data is lost, or you suspect that either has happened, you must immediately notify us of this data compromise.

Consequences of a data compromise
If we are notified that you have suffered any data compromise or suspected data comprise (whether you notify us or any Card Scheme) you will be required to instruct a Qualified Forensics Investigator (QFI) to undertake a forensic investigation at your company in relation to the data compromise. The QFI will review the whole end-to-end process of handling Cardholder Data and will deliver a report on their findings, and set out recommendations for a remedial action.

Should you suffer a data compromise you will be required to pay the costs of the QFI engaged as a result of any data compromise.

If you suffer a data compromise we may notify you that you are to be reclassified as a Level One Merchant and that you will comply with the obligations of such Merchant Level.

You can find a list of QFIs at
http://www.visaeurope.com/aboutvisa/security/ais/resourcesanddownloads.jsp

If customer data, which you or your third parties have handled, is proven to have been compromised, stolen, used fraudulently etc. and your business is non compliant with PCI DSS, you may incur potentially substantial associated costs (eg forensic investigations, Card Scheme compromise fines, issuer losses, reputational damage). The Card Schemes may decide to levy further fines for non-compliance and storage of sensitive authentication data.

Third Parties that store, transmit or process your Cardholder Data
The PCI DSS standard applies to all merchants and their third parties that store, process or transmit cardholder data. The standard applies equally to manual processing and storage of cardholder information (eg PDQ terminals and imprinters) as well as to electronic methods of storage (eg EPOS, PC).

PCI DSS compliance applies to a merchant's overall environment, including any third parties used by the merchant that would store, process or transmit cardholder data. A merchant can only reach compliance if its affected third parties are also compliant and PCI DSS compliance must be re-validated annually.

Third Parties include, but are not limited to:

- Resellers
- Till vendors
- EPOS vendors
- Software Application Providers
- Payment Service Providers
- Payment Processing Bureaux
- Data Storage Providers
- Web Hosting Providers
- Shopping Cart Providers
- Software Vendors

Barclaycard requires merchants to notify them of the third parties they use that store, process or transmit cardholder data.

1.5.2 Maestro mandate – compulsory changes to the way you accept Maestro card payment

What is the Maestro mandate?
An industry-wide Maestro mandate came into force from 1st July 2007, requiring compulsory changes to the way Maestro cards are accepted. All of your businesses which accept Maestro as a form of payment are impacted by this mandatory change. It is important for you to ensure that all businesses under your control are aware of the requirements. If you do not comply with these mandatory changes, you may be liable to Card Scheme fines.

The compulsory changes
Unless otherwise informed in writing by your Acquirer, from 1st July 2007 if you want to continue accepting Maestro as payment you must:

- Remove all Switch branding from all points of sale and replace with Maestro logos. The 'What must you do to comply with the Maestro mandate' section tells you where you can get the new logos from
- Recognise and accept all Maestro cards – UK and international
- Implement SecureCode for all Maestro e-commerce transactions. This will help your business to defend against rising online fraud and to avoid potential card scheme fines of up to $25,000 US per month.

Whether or not you are already using Authentication for Visa or MasterCard, to avoid potential scheme non-compliance fines, it is important that you make the Maestro developments listed in the 'What must you do to comply with the Maestro mandate' section.

Why is it important to be compliant?

- To allow your business to maximise income by accepting a wider range of cards
- To make all your online transactions even more secure, reducing fraud losses and providing additional confidence to your customers
- To help you avoid heavy scheme fines of up to $25,000 per month being issued.

What must you do to comply with the Maestro mandate?

The Maestro mandate sets out a number of requirements which you must comply with when accepting Maestro card payments. It is important that you comply with each of the following requirements:

1. If a third party is used to facilitate e-commerce payments, such as a Payment Service Provider, if you have not done so already, you must contact them immediately and instruct them to:
   - Extend the use of or implement SecureCode to cover Maestro e-commerce transactions
   - Remove any Switch logos from your point of sale and web payment pages and replace them with the Maestro logo. The Maestro logo can be downloaded from the Information Zone at **www.barclaycard.co.uk/paymentacceptance**
2. If your business hosts their own internet service or front pages for accepting card payments, you will need to make the above technical and branding changes listed in point 1 yourself. As normal, once you have completed the changes, your solution will need an updated accreditation from Barclaycard.

1.5.3 If you fail to comply with PCI DSS or the Maestro mandate

If you fail to comply with PCI DSS or the Maestro mandate, or any of the obligations as set out in section 1 of the Operating Instructions and Procedures guide, you will be in breach of your Agreement with us and:

- we have the right to recover any penalties, fees or fines imposed by any Card Scheme in accordance with our Agreement with you (of which this Operating Instructions and Procedures guide forms part); and/or
- this will be considered a material breach of your Agreement and we may exercise all rights at our disposal in accordance with our Agreement with you;
- we may suspend your Acquiring facilities until such time as you can prove compliance with PCI DSS or the Maestro mandate to our reasonable satisfaction.

1.6 Protecting cardholder information

In addition to complying with PCI DSS in accordance with Section 1.5.1 above, you must comply with the following requirements to safeguard cardholder information.

1.6.1 Thermal paper

If you are using thermal paper to process transactions, extra care is needed when storing transaction copies to ensure they do not fade.

- Do not store in direct sunlight. Wrap transaction copies in paper or store in brown envelopes
- Do not store close to heaters
- Store in a cool, dark and dry environment
- Maintain an even temperature and humidity. Ideally these are a temperature of 20-23 degrees and a relative humidity of 45-55 per cent. Do not store in PVC wallets.

For a supply of our pre-paid envelopes, call our Customer Services Department on **0844 811 6666**.*

1.6.2 Storing your records

Original retailer copies of transactions must be retained in an accessible place for a minimum period of 6 months. We also advise you to keep copies of transactions for a further 12 months from that date, although this can be on microfilm or similar media. In the event that a cardholder disputes a transaction, or another query arises, you may be required to provide the necessary documentation. This can happen up to 6 years after the date of the transaction.

If we need to send a retrieval request we will give you the cardholder's name wherever possible. However, the Card Issuer does not have to give us this information so we may be unable to tell you. Transactions should therefore be stored by card number or transaction date and not by cardholder name. It is important that all copy vouchers and till rolls are kept in a secure place, to prevent any fraudulent use of the information.

2. accepting card payments

2.1 Card-present transactions

2.1.1 Installation

Most PDQ terminals are easily installed by our customers, who then follow simple instructions to activate the system. However, our Customer Services Department will be able to help you in the unlikely event of any queries.
Please call **0844 811 6666**.*

2.1.2 Insurance

The value of each Barclaycard PDQ terminal is approximately £400 and it is your responsibility to meet the costs of any necessary repair work unless the fault is of a technical nature which has not been caused by you or your employees. It is your responsibility to insure the PDQ terminal(s) under your business policy, with cover for accidental damage, fire and loss.

2.1.3 Care of your bank-owned PDQ terminal(s)

The information in the Operating guide supplied with your PDQ terminal should be followed by all members of your staff. It is important to look after your PDQ terminal(s). Please ensure that liquids, including cleaning agents and water, are not spilt on the PDQ terminal. This could cause damage and, as a result, you would not be able to use your PDQ terminal until it has been repaired. This may also have an adverse impact on your business.

2.1.4 Using your own or third party-supplied terminal

Whilst you may use your own terminal or one supplied by a third party, you are responsible for maintaining the terminal and ensuring all transaction receipts produced are clear and legible.

Please remember to change your till rolls when they are running low as we may sometimes need you to supply a clear and legible copy of the transaction receipt. If you are unable to do so, this may result in a transaction being charged back to you. Please refer to Storing your records (Section 1.6.2) for further information. When photocopies of the vouchers are taken that have the red reminder strip present, they are often illegible.

2.1.5 Using your point of sale terminal

This section is relevant if you are using a PDQ terminal, your own terminal, or one supplied by a third party supplier.

1. Follow the procedure set out in your PDQ terminal Operating guide.
2. If the card carries a chip and you are using a chip-enabled terminal you will be able to process the transaction via the chip card reader. If the terminal rejects a chip card, please take extra care when dealing with the transaction (refer to Section 1.4.1.5). If the terminal is unable to read the chip, you may process the transaction by swiping the magnetic stripe through your terminal and ensuring Authorisation is obtained. If Authorisation is declined, do not proceed with the transaction, ask for an alternative method of payment. Do not key-enter the card details.
3. If the card does not carry a chip or your terminal is not a chip-enabled terminal, you will need to swipe the card through the terminal magnetic stripe reader. As an additional security check, the terminal may prompt you to key in the last 4 digits of the embossed card number. Please note that if you are not using a chip-enabled terminal and the card has a chip, you will be liable for any subsequent chargeback should the transaction later turn out to be fraudulent (refer to Section 4 of this guide).
4. Ensure that the card is valid and in date by referring to the recognition guide in Section 1.1 of this guide. Remember to rub your thumb over the signature strip (it should be smooth and flush with the surface of the card) and also check that no part of the card has been damaged or tampered with.
5. If you have an online terminal, your terminal will automatically go online and obtain an Authorisation code. If you have an offline terminal, your terminal will automatically check the Hot Card Warning Notice. For retailer-owned terminals, you may need to check the Hot Card Warning Notice manually. Please refer to your terminal user instructions.
6. If the cardholder is instructed to sign the transaction receipt, check that the cardholder's signature matches that shown on the back of the card. If the cardholder is requested to enter a PIN, ensure that they enter a PIN without hesitation.
7. Check that the cardholder number printed on the receipt matches the number embossed on the front of the card. If it does not, you must ring Authorisation and say, "I have a card number mismatch." If you are unable to speak freely, just say, "I have a Code 10 call."
8. Check that the spelling of the signature (if legible) corresponds with that of the name embossed on the card and that the title of the cardholder matches the presenter (if it appears on the card). If a title is shown on the card, ensure that the presenter of the card matches the title eg if 'Mr' is printed, ensure the presenter is male.

9. When you have completed the transaction, hand the goods to the customer together with the cardholder's copy of the receipt and the card.
10. You must retain original copies of all transactions for a minimum of 6 months. Please refer to Section 1.6.2 for further advice and guidance.
11. All unembossed Visa Electron, VPay, Mastercard and Maestro (issued outside the UK) transactions must be processed electronically and must be authorised. In the event of terminal failure, or if the card reader does not read the required details, return the card to the customer and ask for an alternative method of payment.
12. Remember that an Electron card number must never be key-entered for a sale transaction.

2.1.6 Contactless transactions

2.1.6.1 What is a contactless transaction?

A contactless transaction is a transaction that is processed utilising wireless technology, where the payment instructions are securely exchanged between a chip card and a specially adapted card point of sale terminal. The value of any single transaction is limited to a certain amount (currently £10 – as at April 2009). Any change in this amount would be communicated separately.

2.1.6.2 Accepting contactless card payments

Sales – a single contactless transaction is permitted only for an amount under a predefined limit (as at April 2009, set to £10). Any change in this amount will be communicated to you.

Refunds – these are prohibited. All refunds should be undertaken as chip and PIN transactions.

Fallback transactions – any transaction unable to be processed as a contactless transaction should be processed as a normal contact transaction (ie chip and PIN).

Fall up transactions – as part of security measures, on a periodic basis a contactless transaction may be requested to be processed as a chip and PIN transaction. This is to ensure that the correct user is in possession of the correct card.

Receipts – cardholder copies of receipts are optional. Barclaycard contactless terminals have been configured not to print a copy of the receipt. For further information please refer to your Terminal Operating guide.

2.1.7 Manual entry for card-present transactions (card swipe failure)

Please remember: You cannot carry out manual key entry for Visa Electron and Maestro (issued outside the UK) transactions.

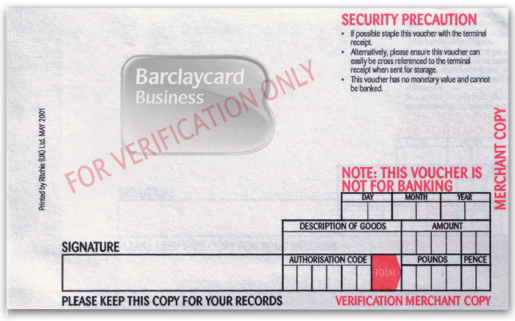
Please follow the Operating guide for your terminal for full instructions on how to process a transaction if a chip card fails to read or a magnetic stripe card fails to swipe. In addition, please ensure:

- If the card presented for payment has a chip and the chip does not read: You may swipe the magnetic stripe through your terminal. Your terminal will automatically prompt you to confirm that the chip cannot be read and then to go online to seek Authorisation. We strongly recommend that you do not progress with the transaction if Authorisation is not obtained, as we will not be able to defend you if the transaction is charged back at a later date;
- If the card presented for payment has a magnetic stripe and fails to swipe through your terminal, please ensure you follow the procedure as detailed in Card chip-read/swipe failure in Section 1.4.1.5 of this guide. Your copies of the terminal receipt and the voucher should then be stored together in case of future query. The voucher should not be banked, as your bank account will be credited via your terminal.

Please remember: A Code 10 Authorisation call must be obtained for Solo and UK Maestro card transactions in all circumstances where the card fails to be accepted by your electronic terminal.

Manual key entry should also be used when a card fails to chip-read or swipe during a refund transaction.

For all **failed electronic transactions**, you must take an imprint of the card on a verification voucher to prove that the card was present at the time of the transaction. Failure to provide an imprinted voucher at a later date could result in the transaction being charged back to your business. An imprinted voucher, however, does not protect you from a chargeback for UK Maestro and Solo transactions. If a transaction fails to swipe, you should make a Code 10 call as an anti-fraud measure. A record of an approved Code 10 Authorisation will protect you from chargebacks.



2.1.8 Fallback paper voucher processing

Processing transactions using an imprinter

If your terminal is not functioning correctly, or if you have a power or telephone network failure, you may have to use your imprinter as a backup and complete the transaction using a sales voucher. If you rent a PDQ terminal from us, you must report all faults to our Customer Services Department on **0844 811 6666**.*

Please remember: An unembossed Visa Electron, VPay, MasterCard and Maestro (issued outside the UK) card transaction can only be processed electronically and must not be taken on paper vouchers.

UK Maestro and Solo transactions can only be processed using an imprinter if the terminal is not functioning correctly. Vouchers should be stored for at least 6 months. Please see Section 1.6.2 for further information.

2.1.8.1 Making a transaction when the customer is present

1. Carry out all normal checks of the card. Please refer to the card recognition section of this guide.
2. Place the card face up on the imprinter.
3. Place the sales voucher, face up, over the card and operate the imprinter.
4. Remove the sales voucher and card from the imprinter.
5. Using a ballpoint pen and writing clearly, please note the following necessary details:
   - the date
   - the amount of each item
   - the transaction total
   - details of what was purchased. Please do not just write 'Goods' as this is not acceptable.

If the customer is using a purchasing card, they may require a customer reference number to be recorded in the relevant boxes on the sales voucher. If you are selling fuel, use the 'For Merchant Use Only' boxes on the sales voucher to record the vehicle registration number.

Please remember: Altered vouchers are not acceptable. If you make a mistake when entering the details of a transaction, you must destroy the incorrect voucher and start again. It is essential that vouchers are not pinned, stapled, folded or damaged as this may cause processing problems.

6. Ask the cardholder to sign the sales voucher in the box indicated. Hold the card and watch while the voucher is being signed. Rub your thumb lightly over the signature strip on the card – it should be smooth and flush with the surface of the card.
7. Check that the signature on the sales voucher matches the signature on the reverse of the card.
8. Check that the spelling of the signature (if legible) corresponds with that of the name embossed on the card and check that the card is in date. If a title is shown on the card, ensure that the presenter of the card matches the title eg if 'Mr' is printed, ensure the presenter is male.
9. Check the signature strip to ensure that no attempt has been made to disguise the original signature.

Please remember: If you are suspicious of the card, the presenter or the circumstances of the transaction, you must follow the Code 10 procedure.

10. You must seek voice Authorisation by calling Authorisations on **0844 822 2000**.* You must not split a sale. Split sales are at your own risk and could be charged back if disputed. Please refer to Section 3.2.3 for further information on split sales.
11. You will be prompted for the following information when calling for Authorisation:
    - your outlet number
    - transaction type – you should say "Standard Authorisation"
    - the card number embossed on the customer's card
    - the expiry date of the card
    - the issue number if applicable (UK Maestro and Solo cards only)
    - the amount of the transaction (whole pounds only).
12. If the transaction is authorised, you will be given an Authorisation code by a voice response service, which may include numbers and letters. Write the code in the appropriate box on the sales voucher. Detach the cardholder copy of the sales voucher and hand it to the customer with their card and goods.
13. If the request is refused, no reason will be given and you should return the card to the customer – unless instructed otherwise by the operator – and ask for payment by other means.
14. If the transaction is referred to an operator, you should follow their instructions. Be prepared – the operator may in fact wish to speak to the cardholder.
15. Once the procedure has been completed to your satisfaction and all the required checks have been carried out, you must ensure that the necessary details of the transaction have been clearly recorded on all copies of the sales voucher. You should then detach the cardholder copy of the voucher and hand it to the customer with his or her card and their goods.
16. Key in the transaction when your terminal is working again. Take care when keying the card details to ensure that they are correct. If at a later date, the transaction is charged back due to invalid details being input, your company may be debited with a chargeback.
17. If the transaction is accepted, file the sales voucher in case of a subsequent dispute. Do not bank the voucher as your bank account will be credited via your terminal.

18. If, when key-entering the transaction, you receive a 'Declined Authorisation' message, bank the sales voucher for processing. Refer to Sales and refund vouchers, Section 3.1.2. Transactions may be honoured as long as you have obtained Authorisation where required (ie at the time the transaction was undertaken with the cardholder present, followed all the procedures correctly and reported the fault to us, so that it shows on our log reports).
19. Pay the vouchers into your bank account within 2 days (refer to Sales and refund vouchers, Section 3.1.2).

2.1.9 Authorisation and Code 10 calls

2.1.9.1 Definition of Authorisation

When you seek Authorisation for a card payment, we check with the Card Issuer whether they will approve payment. **Authorisation from the Card Issuer is not a guarantee of payment** nor does it confirm that the person who presents the card is the genuine cardholder. The Card Issuer can charge the card payment back to you even if it has been authorised – particularly where the correct procedures have not been followed.

If you are undertaking a transaction where the cardholder is not present, our Authorisation Department is unable to check whether the presenter of the card is the genuine cardholder or not.

2.1.9.2 Referrals

On occasions, when processing transactions, the card issuing company may generate a referral and you will be prompted by your terminal to call for Authorisation.

A referral occurs when the Card Issuer requests Barclaycard to contact them before releasing a decision. Examples of why referrals are generated are an unusual pattern of spending, or a large transaction value which has triggered the fraud detection methods which are in operation. Our aim is to process the referral in a quick and efficient manner to minimise the time spent processing the transaction.

On most occasions we will ask you to put the cardholder on the phone. Simply follow our customer service advisor's instructions, and once we have spoken to the presenter of the card and the Card Issuer, we will give you a decision.

2.1.9.3 Automated Authorisation System

Our Authorisation department operates an automated Authorisation facility, which is designed to speed up your transaction processing by answering your call within one ring, avoiding unnecessary delays at your point of sale.

The system is easy to use and offers you straightforward menu options to ensure your calls are processed correctly. The system incorporates voice recognition and touch tone technology, to allow you to input the information in the way that suits you best.To allow you to speed up your transaction processing, the system incorporates a barge-in facility. For example, you can wait for the system to ask for the 'transaction type' and respond with 'mail order'.

You do not have to wait for the system to list the available options if you know what your input will be.

If the system has not understood your input, you will be asked to repeat your information. If you continue to experience difficulties, your call will be routed to a customer service advisor who will handle your enquiry.

When the system has captured all the transaction data, you will be advised of the decision. If the transaction is a referral, your call, along with the transaction data, will be transferred to a customer service advisor.

Please ensure you have the following information to hand before calling:

- your outlet number
- card number
- expiry date
- amount
- issue number (if applicable).

2.1.9.4 Code 10 calls for card-present transactions

- If you or your staff are in any way suspicious of a card, its presenter or the circumstances surrounding a transaction, you must call Authorisation on **0844 822 2000***
- You will be prompted for your Merchant number and then for the transaction type. If you are suspicious and unable to speak freely, you will be given the option to say, "This is a Code 10 call" or press 9 to avoid possible confrontation
- You will be asked for the card number, followed by the expiry date and the issue number (if applicable) and will be given options to choose from depending on the type of call you are making
- After this, you will be connected to an operator who will ask a series of questions which require a yes or no answer
- Remember to keep the card and the goods out of reach of the customer
- Activate any surveillance equipment you may have
- If the operator asks you to keep the card, inform the customer politely, again without putting others or yourself at risk.

Please note: Code 10 is only available for card-present transactions where we may ask to speak to the cardholder. It is not available for transactions where the cardholder is not present such as mail, telephone and internet transactions. In such circumstances we are unable to guarantee that the person undertaking the transaction is the genuine cardholder.

2.2 Card-not-present transactions (terminal or ePDQ-Lite)

2.2.1 Definition of card-not-present

A card-not-present transaction is when the card is not at the point of sale. Mail order, telephone order, internet and recurring transactions are examples of card-not-present transactions. You must advise Barclaycard if the majority of your transactions are card-not-present.

Please note: International Maestro cards cannot be accepted for mail or telephone orders.

Please note: Card-not-present transactions are prone to fraud and therefore may be charged back to your business if at a later date the genuine cardholder denies participating in the transaction. You are not obliged to accept card-not-present transactions, but in doing so you must accept the risks involved. Barclaycard will be unable to defend you from disputed card-not-present transactions, refer to Preventing and detecting fraudulent card-not-present orders (Section 1.4.2).

2.2.2 Advertising

If you advertise the availability of mail, telephone or internet ordering services, your advertising should comply with the requirements of the British Codes of Advertising and Sales Promotion. Contact the Committee of Advertising Practice Copy Advisory Team by calling **0207 580 4100** or by fax on **0207 580 4072** for further information, or visit **www.cap.org.uk**

2.2.3 Processing card-not-present orders

For a card-not-present transaction to be processed you must obtain the following details:

- the card number
- the card expiry date
- Card Security Code
- the cardholder's full name and address, as held by the Card Issuer, including the postcode and telephone number
- the gross amount (including postage and packaging) of the transaction
- for UK Maestro or Solo cards, issue number or start date*
- for mail orders, the signature
- for telephone orders, an immediate written record of all the above including date/time of conversation
- for mail and telephone orders, the delivery address and name of the recipient if different from that of the cardholder
- the customer reference number (if quoted) for a Visa purchasing card transaction.
- **Authorisation does not guarantee payment**. It merely confirms that there are sufficient funds available on the account and that the card has not been reported lost or stolen. We are unable to guarantee that the person presenting the card details is the genuine cardholder
- There are increased risks of chargebacks for card-not-present transactions, because the customer and card are not present
- You must not release goods to a third party or anyone claiming to have been sent by the cardholder (eg a taxi driver) to collect the goods
- Where a cardholder places a mail or telephone order and collects the goods later, you should cancel the card-not-present transaction and perform a new card-present transaction. Ensure you also carry out the full card-present procedures. Refer to Using your own or third party-supplied terminal (Section 2.1.4)
- Beware of unusual one-off high-value transactions, especially if you do not normally operate in this manner.

Then follow the procedures set out in your Terminal Operating guide.

***Please remember: Some UK Maestro and Solo cards do not carry an issue number. If they do not, take details of the start date when making a transaction.**

2.2.4 Pre-authorisation

Visa and MasterCard permit Pre-authorisation for hotel, car rental, internet and mail order/telephone order retailers only. Please refer to Section 5 for details of how and when you can perform Pre-authorisation for car rental and hotel accommodation bookings.

2.2.5 Visa authorisation rules for MOTO and internet

For goods to be shipped, a mail/telephone order or an Electronic Commerce Merchant may obtain Authorisation on any day up to 7 calendar days prior to the transaction date. The transaction date is the date the merchandise is shipped. This Authorisation is valid if the transaction amount is within 15% of the authorised amount, provided that the additional amount represents shipping costs.

2.2.6 MasterCard authorisation rules for MOTO and internet

For goods to be shipped, a mail order or Electronic Commerce Merchant should obtain Authorisation on the day the cardholder contacts them to place the order. When the goods/services are ready to be delivered, they should process the transaction. This should not be for more than the original Authorisation amount.

The date the merchant ships the goods or renders the service is considered the transaction date. Solo and Maestro do not allow Pre-authorisation for MOTO, internet, hotels or car rental transactions.

If shipping goods more than 7 days after the original authorisation request, we recommend you obtain a second authorisation. When presenting the transaction for processing please quote the original authorisation code, but keep the second one for dispute resolution purposes.

2.2.7 Recurring transactions

A recurring transaction is one for which a cardholder grants permission, through writing or electronically, to a merchant to periodically bill their account for recurring goods or services delivered over a period of time (not to exceed one year between transactions). Examples of this are vehicle recovery services, insurance, memberships and subscriptions.

If you wish to accept this type of transaction, please contact our Sales Centre on **0800 61 61 61*** quoting your existing outlet or chain number. We may allocate you an additional outlet number and will advise you of the procedures you will need to follow. However, please remember that this type of transaction must not be undertaken with UK Maestro, Maestro or Solo cards.

2.2.8 What about chargebacks?

In the event of a dispute involving a card-not-present transaction we will do all we can to prevent the transaction being debited back to you (known as a 'chargeback'). A chargeback usually occurs when a cardholder disputes a transaction shown on their statement or you process a transaction outside the terms of your Merchant Agreement. The cardholder may claim that the goods were never received or were defective, or that the card number had been used fraudulently. It is your responsibility to investigate the matter and recover the goods or the payment by some other means. Please refer to Chargebacks and retrieval requests (Section 4).

Barclaycard has a dedicated Chargeback Education Team that can provide you with bespoke advice on the steps you can take to reduce the risk of transactions being charged back. If you wish to receive free advice, please contact our dedicated team on **01604 614012**.*

2.2.9 Telephone orders

- Please keep a record of the cardholder's name and address in case of any future query
- It is your responsibility to check the card upon collection or delivery. You should make sure that the card number and the expiry date quoted agree with the card presented
- It is also your responsibility to obtain a signature and ensure the signature on the card matches that obtained from your customer
- If an order is to be collected, you must cancel the original transaction and start a new one as a card-present transaction. Refer to the card-not-present procedures and how to minimise chargebacks in Section 1.4.2.

Please remember: A customer must still be supplied with a transaction receipt. We recommend that the cardholder copy must display only the last four digits of the card number. For MasterCard transactions the expiry date must not be quoted.

2.2.10 Barclaycard Hotel Tracker

Barclaycard Hotel Tracker is a Visa corporate charge card account where no plastic cards are issued. As such the booking agent will not be able to provide photocopies of the front and back of the card. It has been developed as a simple payment method for companies who are booking and paying for hotel accommodation on behalf of their employees, particularly where companies do not provide individuals with their own company card. It removes the need for hotels to operate manual invoicing/bill back procedures and provides swift payment to the hotel on guest departure. The Visa card number quoted in the reservation should be charged by carrying out a card-not-present transaction. The booking agent stores the Barclaycard Hotel Tracker account details in an audited approved computer system which means that the card details are totally secure and are only revealed to the hotel/property that has been instructed to charge them. On check-out the Visa account is charged and the management information and transactional charges are combined and sent to the customer to create a detailed monthly statement.

2.3 Internet transactions

2.3.1 E-commerce

Our ePDQ service provides quick and secure transaction processing. Your customers simply browse your website, select their order(s) and enter their card details as directed.

2.3.2 Options

ePDQ Cardholder Payment Interface (CPI) is our end-to-end solution for accepting card payments online. A world-class, secure service for card payment Authorisation and settlement that lets you trade online, fast, easily and safely. It's flexible, reliable and straightforward to integrate.

If you prefer to control the whole card capture process and host your own payment pages, opt for our ePDQ Merchant Payment Interface (MPI). You can integrate the MPI, which enables you to take full responsibility for collecting cardholder details and allows your website to communicate with our ePDQ payment engine.

2.3.3 e-PDQ

ePDQ is a secure online service from Barclaycard for card payment Authorisation and settlement. It enables you to accept and process card transactions from your website 24 hours a day, 365 days a year. Please contact our Sales Centre on **0800 61 61 61*** or visit **www.barclaycard.co.uk/paymentacceptance** for further information. When you use the ePDQ CPI you can rely on us to meet and maintain all security and transaction processing software standards, including full compliance with the new Payment Card Industry Data Security Standard (PCI DSS).

If you choose not to use a Barclays-owned submission product, you must correctly flag every transaction by using the correct level of APACS software. You must maintain the level of software in accordance with APACS standards. If you fail to adhere to this condition, you will be liable for any Card Scheme fines or penalties, which may result from non-compliance.

2.3.4 Requirements for merchants not using the ePDQ CPI

Security and custody of card data

You must adopt minimum security measures before processing card transactions from an internet site.

These requirements apply regardless of whether the site is:

- maintained solely by our merchant customer
- maintained solely by a third party provider, which is receiving and processing card payment transactions on behalf of our merchant customer
- a combination of the two above.

Minimum security measures

1. All transactions containing card information should be transmitted over the internet in an encrypted form using either:
   - the Secure Socket Layer (SSL) protocol, currently with a minimum effective symmetric key length of 128 bits

   or
   - a protocol employing similar encryption algorithms and key lengths which provide similar or greater strength to SSL.

Measures should be adopted not only when the transaction details are being passed from the cardholder to the web-server, but also from the web-server to the merchant if this takes place directly over the internet.

2. Any servers involved in processing transactions containing card information and originating from the internet should not be exposed directly to the internet.
   - These servers should be placed in a secure domain by means of internal network partitioning with connectivity to the internet protected by firewall technology.
3. Additional internal network partitioning should be provided:
   - between the server(s) involved in processing transactions containing card information and connectivity to the Barclaycard host, where automated settlement and/or Authorisation transactions are to be generated.

You are responsible for protecting card data and may be liable for card scheme fines or penalties which result from breach of your security.

2.3.5 Internet Payment Service Providers (PSPs)

We can accept your internet card payments from a recognised third party Payment Service Provider (PSP). However, you must ensure that the PSP meets the minimum security measures detailed in this procedure guide and that they can offer the necessary communication links to Barclaycard. It is important to stress that you have the responsibility for complying with the Internet Merchant Procedures within this procedure guide for internet card payment transaction acceptance as Barclaycard will not enter into any contract with the PSP on your behalf.

2.3.6 Modulus 10 Check

The payment page should be designed to incorporate a Modulus 10 Check Digit Algorithm for verifying the card number. To obtain copies of the Modulus 10 Check Digit Algorithm, card scheme or Barclaycard logos, via the business online section of our website at **www.barclaycard.co.uk/paymentacceptance**

2.3.7 Website information

Your website must contain the following details:

- your company name, address, telephone number, fax number and email address
- your company registration number and VAT number (where applicable)
- a complete description and price of all goods and services, clearly stated, including all additional costs such as taxes, delivery costs and export restrictions
- Your purchase terms and conditions, displayed to the cardholder during the order process either:
  - On the same screen used as the checkout screen indicating the total transaction amount or
  - Within the sequence of web pages accessed by the Cardholder prior to the final checkout
- clear information on your company's delivery, refund and cancellation policies
- A 'click to accept' button, or other acknowledgement, evidencing that the cardholder has accepted the delivery, refund and cancellation policies
- a statement to describe the type of transaction security that is supported
- a privacy statement
- transaction currency
- disclosure of the merchant outlet country at the time of presenting payment options to the cardholder
- the scheme logos of the cards you accept
- your delivery policy
- export restrictions.

The Barclaycard name and logo may not be displayed on your internet site without prior registration and agreement from us.

2.3.8 Transaction receipts

Your customers must be supplied with a transaction receipt as part of an order confirmation notice at the time of the purchase. The receipt must include:

- an instruction to print or keep the receipt for any future query
- your company name, address and telephone number to enable customer contact
- your website address
- the total cost of the purchase and the currency
- transaction date and type (sale or refund)
- a unique transaction order reference number
- the name of the purchaser
- the Authorisation code
- a complete description of all goods and services purchased
- clear information on Terms and Conditions, cancellation, return and refund policy (if restricted)
- exact date any free trial period ends, if offered.

Please remember: The receipt must only include the last four digits and not the full card number. For MasterCard transactions the expiry date must not be quoted.

3. general procedures and banking

3.1 Everyday procedures

3.1.1 Banking procedures

Please ensure that you follow the end-of-day banking procedure (as detailed in your Terminal Operating guide) to ensure you receive payment for all transactions. It is essential that all transactions are submitted for payment within 2 working days of being accepted. Please note that if a transaction is submitted after 2 working days, the card issuer may reject the transaction resulting in it being charged back. Barclaycard will be unable to defend you from such chargebacks.

If your terminal is not working, please ensure that you follow the procedure in Section 2.1.7 in order to receive payment. To bank any voucher that cannot be processed by your terminal, please follow the procedures below:

- Complete the three-part Merchant Voucher Summary (MVS) before handing the bank copy of your sales and refund vouchers into any branch of Barclays Bank
- Each batch of vouchers must be accompanied by part three (the white copy) of the completed MVS. No more than 20 vouchers should accompany each MVS.

3.1.2 Sales and refund vouchers

In the event of your terminal not working, please ensure you follow the procedure in Section 2.1.7.

These vouchers provide 3 copies of the sale or refund details, one for your own use, one for the bank to process and one for the cardholder.

- **Merchant copy** – The top copy of the completed sales or refund voucher is your record of the transaction
- **Bank processing copy** – The middle copy of the sales or refund voucher should be handed in to your local branch of Barclays Bank. Vouchers should be handed in on the day of the transaction and no more than 2 banking days afterwards
- **Cardholder copy** – The bottom copy must be given to the cardholder for his or her records or, in the case of a mail or telephone order, it must be posted to the cardholder.

3.1.3 Completing your Merchant Voucher Summary (MVS)

- Write your Merchant name and number (this is normally shown on the top line of your imprinter plate) clearly on the MVS, with the paying-in date
- List the value of each sales voucher and refund voucher on the reverse of the MVS in the boxes indicated
- Write the total of each column in the boxes at the bottom
- Write the total number and value of both sales vouchers and refund vouchers on the front of the MVS
- If possible, vouchers should be deposited on the day of the transaction and no more than 2 banking days afterwards
- Any queries about the credit to your bank account should be made by calling our Customer Services Department on **0844 811 6666**.*

3.1.4 Posting vouchers

If you are located in a remote area and are unable to get to a branch of Barclays Bank, you may post your vouchers to us for processing. The MVS bank processing copies of your sales and refund vouchers should be sent to:

Barclaycard Financial Exceptions, Dept FX, Barclaycard House, 1234 Pavilion Drive, Brackmills, Northampton NN4 7SG.

For a supply of our pre-paid envelopes, call our Customer Services Department on **0844 811 6666**.*

3.1.5 Monthly statements

3.1.5.1 Understanding your monthly statement

Your Merchant invoice/statement explains the status of your account, including transactions, other charges where applicable, and the total amount due.

barclaycard

Registered in London, England, Reg No 1026167
Reg. Office: 1 Churchill Place, London E14 5HP

MERCHANT INVOICE/STATEMENT
Barclaycard Payment services (Dept CSD) Northampton NN4 7SG
If you have any queries please call Customer Services
Department 0844 811 6666

Sample Name PLC
Sample Street
Sample Town
Sampleshire
ZZ9 1AA

Period | Outlet No. | Invoice No. | Account
VAT Reg. No. | Tax Point

INVOICE THIS PERIOD		Charge £	VAT £	Total £
£189.80	42 Visa Credit	4.75		
£190.70	39 Visa Premium Credit & All Others	4.76		
£7758.46	1717 MasterCard Credit	170.69		
£5522.00	1522 Mastercard Premium Credit & All Others	121.84		
£80.80	11 JCB	1.78		
£2807.00	455 UK Visa Delta	113.75		
£3244.00	375 UK Visa Electron	93.75		
£245.50	56 International Visa Debit	5.40		
£1245	96 UK MasterCard Debit	27.39		
£100.40	3 International MasterCard Debit	2.20		
£8986.00	11025 UK Maestro	256.25		
£5348.00	876 UK Solo	219.00		
£567.00	42 International Maestro	10.50		
£326.70	14 Visa Commercial	8.16		
£845.65	26 MasterCard Commercial	18.60		
£350.75 cr	12 Refund Transactions	6.00		
£37807.76	**Sub Total**	1064.82		1064.82

Other Charges
(Standard Rate VAT 17.5%)

1 epdq Management fee		25.00		
1 pdq Classic contactless		10.00		
	Sub Total	35.00	6.12	41.12
	INVOICE TOTAL	1099.82	6.12	1105.94

STATEMENT OF ACCOUNT

Balance brought forward from last period	31.38
Payment – Thank You	31.38 cr
Invoice Total (from above)	1105.94
TOTAL AMOUNT DUE	**1105.94**

This amount will be debited to:
Bank Account 11-11-11 12345678 on or after 01 January 2008

Pre Pay Details

£80.00	cr	4	Pre Pay T-Mobile @ 3.45%	2.76 cr
£60.00	cr	4	Pre Pay Orange @ 3.45%	2.07 cr
£50.00	cr	4	Pre Pay O2 @ 3.45%	1.72 cr
£30.00	cr	4	Pre Pay Vodafone @ 3.45%	1.03 cr
£30.00	cr	4	Pre Pay Virgin Mobile @ 3.45%	1.03 cr
£250.00			**Total 1**	**4.67 cr**

Summary of your credit/debit card transaction details listed for all outlets

Summary of your account

Summary of your E-Top Up commission earned

Your E-Top Up commission inclusive of VAT

barclaycard

Registered in London, England, Reg No 1026167
Reg. Office: 1 Churchill Place, London E14 5HP

SERVICE CHARGE DETAIL ADVICE
This is not a VAT Invoice
Barclaycard (Dept CSD) Northampton NN4 7SG
If you have any queries call Customer Services Department 0870 600 600
8.00-20.00 Mon/Sat or 08.00 – 18.00 Sun.
Please quote your Chain No.

Sample Name PLC
Sample Street
Sample Town
Sampleshire
ZZ9 1AA

				Your Ref	VAT Reg No.	Tax Point
LONDON			Charge £	VAT £	Total £	
Ref: 1234567 020						
Transaction Charges						
(Vat Exempt)						
£95.00		12 JCB @ 3%		2.85		
£95.00		12 MasterCard Credit @ 2.75%		2.61		
£95.00		12 Visa Credit @ 2.75%		2.61		
£285.00		**Sub Total**		**8.07**		**8.07**
Commission						
(Commission Rates Shown net of VAT 17.5%)						
£50.00	cr 2	Pre Pay T-Mobile @ 5%		2.50 cr		
£10.00	cr 2	Pre Pay Orange @ 5%		0.50 cr		
£30.00	cr 2	Pre Pay O2 @ 5%		1.50 cr		
£20.00	cr 2	Pre Pay Vodafone @ 5%		1.00 cr		
£20.00	cr 2	Virgin Mobile @ 5%		1.00 cr		
			Sub Total	**6.50 cr**	**1.13 cr**	**7.63 cr**
	OUTLET TOTAL			**1.57**	**1.13 cr**	**0.44**
MILTON KEYNES						
Ref: 2223333 010						
Transaction Charges						
(VAT Exempt)						
£95.00		12 JCB @ 3%		2.85		
£95.00		12 MasterCard Credit @ 2.75%		2.61		
£95.00		12 Visa Credit @ 2.75 %		2.61		
£285.00			**Sub Total**	**8.07**		**8.07**
Commission						
(Commission Rates Shown net of VAT 17.5%)						
£30.00	cr 2	Pre Pay T-Mobile @ 5%		1.50 cr		
£50.00	cr 2	Pre Pay Orange @ 5%		2.50 cr		
£20.00	cr 2	Pre Pay O2 @ 5%		1.00 cr		
£10.00	cr 2	Pre Pay Vodafone @ 5%		0.50 cr		
£10.00	cr 2	Virgin Mobile @ 5%		0.50 cr		
			Sub Total	**6.00 cr**	**1.05 cr**	**7.05**
	OUTLET TOTAL			**2.07**		**1.02**

This figure is the credit/ debit card transaction charges less the E-Top Up commission earned

Total VAT payable on E-Top Up commission listed by outlet

3.1.5.2 What you will receive

If you have requested statements to be sent to your head office, your outlets will usually receive nothing. Your head office will receive:

- Merchant invoice/statement
- Transaction payment advice
- Service charge detail advice.

If you are a single outlet, or you have requested that we send separate statements to each outlet, you will receive:

- Merchant invoice/statement
- Transaction payment advice.

3.1.5.3 Queries

If you have a query about a Merchant invoice/statement you have received, please contact our Customer Services Department on **0844 811 6666**,* quoting your Outlet or Chain Head Office number. Remember to check that all transactions have been processed and show on both your Merchant and bank statements. You are required to reconcile your monthly Service charge statement against your bank statement on a regular basis. If you do not do this, you may be liable for subsequent chargebacks for late presentation of transactions.

Any queries should be directed to our Customer Services Department on **0844 811 6666**.*

3.1.5.4 Merchant invoice/statement

This is both a VAT invoice and a statement. Each page number and the total number of pages are shown in the top right-hand corner. There are 3 main headings:

- Transactions and other charges where applicable
- Statement of account (including any adjustments)
- Total amount due.

3.1.5.5 Transaction payment advice

Provides itemised details of payments made to you with the dates the transactions were processed by us and the payment reference.

3.1.5.6 Periodic settlement

If you have chosen to be paid periodically (for example weekly, or twice weekly) please remember that the figure, Total payments this period, may not agree with the transaction charges on page 1 of your statement, as they cover different accounting periods. Payment for any dates not showing will appear on your next statement.

3.1.5.7 Service charge detail advice

This shows a breakdown of the invoice for each outlet and includes customer reference. PDQ terminal rental charges are shown, detailing the number of PDQ terminals per outlet and the total charge. This page will only be sent to chain head offices.

3.2 Exceptional procedures

3.2.1 Can I pass charges to my customer?

In the United Kingdom, you are entitled to add a surcharge to any transaction made by card. However, if you decide to do so, there are several procedures you must follow and a number of legal requirements that apply. These are the Payment Services Regulations 2009 and the Price Indications (Method of Payment) Regulations 1991 (if you sell motor spirit, the relevant regulations are contained in the Price Marking (Petrol) (Amendment) Order 1991). Breach of some of these requirements is an offence. (Please note if you accept payments outside the United Kingdom, other legal requirements may apply. You must check these yourself.)

The combined effects of these requirements are that you must make certain that your customers are informed of any surcharges before the initiation of the transaction.

- *For all payments*, you must ensure that your advertising makes clear that any prices you state are for payments other than by card.
- *For all payments made in store or by phone*, you must inform the customer the amount of the charge before he or she authorises the card payment.
- *For payments in store*, you must clearly display information regarding your surcharges at the entrance to your premises and, at the point of payment, display how much extra you charge for payment by card.
- *For payments made by mail, telephone or online*, you must display information regarding your surcharges in your catalogues, advertisements and the order form itself.

Copies of the Payment Services Regulations 2009, the Price Indications (Method of Payment) Regulations 1991 and the Price Marking (Petrol) (Amendment) Order 1991 and other applicable regulations are not available from Barclaycard Business. Please contact your local Trading Standards Office or equivalent body if you need further information.

In other countries, you must charge the customer the same price as if he or she were paying cash unless you are accepting Cards in any country where you are entitled to charge customers for using a Card under national legislation. You must comply with any relevant legal requirements limiting the amount you can charge and what you must tell customers about the charge. It is your responsibility to check these requirements yourself.

3.2.2 Minimum charging

You may not set any minimum limit on credit and debit card transactions – purchases by card must be treated in exactly the same way as cash purchases.

3.2.3 Split sales

Sometimes, a cardholder will ask to split the payment of a purchase between several cards, or between a card and cash or a cheque.

It is important that you follow the instructions below to ensure you understand when you can and when you cannot split a transaction as instructions vary by each possible scenario.

1. If several cardholders request you split a transaction amount into smaller amounts in order that they all pay a proportion of a bill, this is permitted. For example, in a group booking in a restaurant, each person requests to pay either their own bill or a proportion of the total bill: you are permitted to split the total bill between each cardholder. To prevent future disputes, always ensure each cardholder agrees the amount they will pay by ensuring that you process separate transactions for each card. Each transaction must be verified by the cardholder's PIN/signature as prompted by your terminal. Please ensure each cardholder receives a copy of the transaction receipt applicable to the agreed amount which may or may not include a gratuity as agreed by the cardholder.
2. If one cardholder asks you to split a transaction amount between several cards (possibly issued by different Card Issuers) you may proceed as follows:

- Only proceed if you are not suspicious of the transaction/presenter of the card
- Ensure each card is issued in the same cardholder name (if the name appears on each card)
- Follow normal card acceptance procedures as detailed in Section 2 of this guide.

This may typically occur when accepting large value transactions where the cardholder may not have sufficient credit available on one card. The cardholder may request to pay part of the total amount by cash and/or cheque. Ensure any cheque payment is also issued in the cardholder's name. We recommend you only permit a cardholder to split a transaction over more than one card when:

- the cardholder and card are present. We strongly recommend you do not split a sale on several cards for any telephone, mail order or internet transaction
- you ensure that each card presented is either issued by a different bank or is a different card type from the same bank. It is unlikely that a cardholder will have more than one card issued by the same bank and be the same card type (eg it is unlikely that a cardholder will have two Visa credit cards issued by Barclaycard but may have a Visa credit card and a Visa debit card issued by Barclays Bank)
- each transaction is processed as either chip-read or magnetic stripe (as per the terminal prompts). Refer to Section 2 on how to accept card payments
- each transaction is verified by PIN or signature (as requested by the terminal)
- each transaction is authorised (regardless of any floor limit you may operate)
- the cardholder clearly agrees to what amount is charged to each card and is given a copy of each transaction receipt that clearly shows what has been charged to each card.

3. Do not split transaction amounts for the same cardholder into smaller amounts eg if Authorisation is declined on a transaction do not split the transaction into smaller amounts in an attempt to get Authorisation. The purchase of more than one item in any one day must be totalled as one amount and Authorisation sought for the total only. If you attempt to split a sale, any transaction may be charged back. Barclaycard will be unable to defend you from such chargebacks.

3.2.4 Double charges

- Please take extra care when a bill is split between your customers
- Ensure that the correct amounts are charged to the appropriate cards to avoid queries at a later date.

3.2.5 Alteration of amounts

- Please do not adjust a transaction amount without the cardholder's consent
- If you have the gratuity facility on your terminal, ensure that the cardholder has signed for any gratuity added to the bill.

3.2.6 Exchanges

- No additional procedure is required if a cardholder exchanges a purchase for goods of the same value
- When the value of the new purchase is less than that of the original, complete a refund transaction for the difference of the cost. Refunds should be processed on the same card as the original sale. If the original card has been lost/stolen the refund can be applied to the new account. For any other type of card closure you must still refund to the card number used in the original transaction.
- When the value of the new purchase exceeds that of the original, complete a sale for the difference in cost, seeking Authorisation even if the amount is below your floor limit.

Please remember: Refunds cannot be made by cash or cheque.

4. chargebacks and retrieval requests

4.1 Retrieval requests

A retrieval request or Request for Information (RFI) is when a cardholder asks for a copy of the transaction details. This is usually because they don't recognise a transaction on their statement or need more details for their records (eg an expenses claim or tax return).

One of the main reasons cardholders ask for a copy of the transaction receipt is because the description shown on their statement does not match the name of your company. So, if you seem to be getting a lot of retrievals, check what is being shown on the cardholder statements. You can change the description by contacting our Customer Services Department on **0844 811 6666**.*

It is a requirement of Visa and MasterCard that, if you are predominantly undertaking mail or telephone order transactions, a contact number rather than location should be included within the description: for instance, 'The E Shop, London', should be shown as 'The E Shop, 01207 123 4568'. This encourages people simply to call you to identify their transaction, rather than disputing this with their Card Issuer. Likewise, if you are undertaking internet transactions, you are required to display your internet website address and/or email address on cardholders' statements so that customers can contact you.

As you are simply providing information, there is no loss to your business. However, if you don't supply a clear and legible copy of the transaction within the time requested (usually 14 days), the Card Issuer may charge the transaction back to us. We will then pass the cost on to you in the form of a chargeback.

If a transaction is charged back this will result in you being debited and therefore becomes a loss to your business.

Chargebacks can cause you hassle and cost your business time and money. Following the correct procedures in this guide will help you avoid chargebacks, so you can gain the full sales benefits of accepting payments by card.

4.2 Why chargebacks occur

Chargebacks result when a transaction is deemed invalid – for example, where a cardholder queries a transaction shown on their statement and the Card Issuer, after investigation, agrees to refund the amount. Chargebacks also occur for technical issues such as duplications and no Authorisation.

The most common reasons for chargebacks are:

- a fraudulent mail, telephone or internet transaction. Please refer to Section 1.4.2 for further information and guidance on how to avoid these types of chargebacks
- you did not respond in time to a request for a copy of a transaction (retrieval request)
- the card was not valid when the transaction was made ie the transaction was made before the valid from date or after the expiry date
- you accepted a card payment where the card is subject to a Hot Card Warning Notice/Card Recovery Bulletin and your terminal either did not seek Authorisation or the terminal did not check the card against the Hot Card Warning Notice/Card Recovery Bulletin
- the amount of the sale exceeds your floor limit and Authorisation was not sought, for whatever reason
- the signature on the terminal receipt or sales voucher does not match the signature shown on the card itself
- a transaction was taken on a card that should only be used in an Automated Teller Machine (ATM)
- you accepted a card that should have been verified by the PIN after being initiated by the chip; however, you do not have a terminal capable of undertaking these checks
- if two or more card transactions have been completed for one sale over the floor limit (split sale) and Authorisation was not obtained
- the goods or services provided were defective, not as described, or not received
- a transaction was processed on behalf of a third party who could not process the transaction themselves. This is called laundering and is a breach of your Merchant Agreement.

Since the 1st January 2005, if you take a card-present transaction and your point of sale terminal is not chip and PIN-enabled, you will be liable for any fraudulent transactions and these will be charged back to you. Please note that all Barclaycard contactless terminals are chip and PIN-enabled.

Please remember: You may also receive a chargeback if any of the terms of the Agreement between you and Barclaycard, including any of the instructions in this Procedure guide, have not been followed.

4.3 Responding to retrieval requests and chargeback letters

- Please ensure we receive a reply by the date quoted, either by fax or by post, as not responding within these timescales will usually result in a chargeback
- Please remember to send all relevant documentation that supports the transaction ie Terms and Conditions and details of Authorisation codes, dates and times, where appropriate
- Remember, transaction copies and all details provided need to be clear, as chargebacks can also occur when transaction copies are illegible
- Please ask for details of our Faxlink service, which provides a quick and simple way of dealing with retrieval and chargeback letters via a fax machine (see Section 4.4)
- If you are already registered and using the Faxlink service, templates are available for you to use. To request a copy of the template relevant to your business, please contact **01604 614 012**.*

4.4 Faxlink service

This service lets you send and receive all chargeback and retrieval information by fax, avoiding postal delays and speeding up the process. There are no extra charges for utilising this service.

Should you have any queries about chargebacks, retrievals or Faxlink, please call our dedicated team on **01604 614 012**.*

4.5 To help reduce the risk of chargebacks

- Use a chip and PIN-enabled terminal to help protect your business against fraud. Using chip and PIN helps establish that a card is genuine and that the person using it is the true owner. The chip makes it difficult to counterfeit or copy the card while the PIN makes it harder for a criminal to use a lost or stolen card. And because, instead of signing, the customer authorises the transaction by keying in a 4-digit PIN known only to them, the risk from forgery is reduced. For contactless transactions, provided you process transactions in accordance to card scheme regulations and follow the procedures laid out in this guide, we will offer you the same level of protection.
- Ensure that all transactions are correctly processed according to card type
- Ensure you only accept cards which you have an Agreement to process, as some cards perform several functions
- Do not accept mail, telephone or internet transactions unless you are aware of the possible risks surrounding this type of transaction. If you see an increase in this type of transaction, please notify us to ensure you have the correct Agreement in place
- Follow your instincts – if something about a card, card presenter or the transaction itself does not seem genuine, make a Code 10 call to our Authorisation Department. **Please remember that Authorisation is not a guarantee of payment and Code 10 calls are only for card-present transactions**
- Retain copies of all transaction records. In order to settle any dispute, you may be asked to provide evidence of a transaction. Failure to do so may result in a chargeback to your business. You must keep all receipts for a minimum of 6 months
- Remember to display a limited returns policy on your receipts and at the point of sale, to avoid disputes which could lead to a chargeback.

4.6 Timescales to chargebacks

A disputed transaction is normally charged back because either:

- the cardholder does not recognise the transaction (eg they claim their card details have been used fraudulently) or
- the transaction has been processed outside of your Merchant Agreement (eg Authorisation was not obtained when required).

The vast majority of disputes are raised because the genuine cardholder disputes the transaction on their statement. As cardholders are only sent card statements once a month, it can be up to one month before a cardholder will receive their statement and therefore dispute the transaction with their Card Issuer (eg MBNA, Capital One, NatWest, Barclaycard etc.).

In cases where the cardholder claims neither to have participated in nor authorised a transaction, the Card Issuer will ask the cardholder to complete and sign a 'disclaimer'. This is a legal document whereby the cardholder declares they did not undertake the transaction. Typically the cardholder will be given 14 days to complete and return this documentation.

The Card Issuer does not notify Barclaycard of the dispute until it has received all necessary documentation from the cardholder. Visa and MasterCard have strict time limits in which Card Issuers must notify us of any dispute along with rules for what documentation must be provided. Barclaycard will automatically protect you from a dispute if the correct documentation is supplied or if the correct time limits are adhered to.

As soon as Barclaycard receives notification of the disputed transaction, we will notify you. Analysis has shown that the typical disputed transaction is notified to us approximately 50 days after the date the transaction was undertaken. Sometimes it may be less but often it can be more, especially in cases where the cardholder is based outside of the UK. Actual time limits vary depending on the reason for dispute and what part of the world the card was issued in (cards issued overseas have longer time limits to allow for postal delays). The maximum time allowed is 120 days from the date of the transaction. For transactions relating to delayed travel (eg holidays), the time limit is calculated from the date of travel and not the date of the transaction.

Notification of the chargebacks will either be by letter or, if you have signed up to our Faxlink service, by fax. For disputes where it is likely that you will have additional information that may enable us to defend the dispute, you will have 14 days after receipt of this notification to supply the information. For disputes where it is unlikely you will be able to defend the dispute eg if Authorisation was not obtained, then you may be debited at this time. If you disagree with the dispute it is important that you notify us with your reasons in writing within 14 days. If you fail to respond within the 14 days, or your reply is unclear or illegible, then we may not be able to defend you from the chargeback.

Our Chargeback Education Team can provide bespoke advice as to when you should be replying and with what. They can also provide general advice on all matters relating to chargebacks. For tailored advice for your own business, please call us on **01604 614 012*** (available 9.00am – 5.00pm Monday to Friday. Closed Bank Holidays). Or email us at **chargeback.education@barclaycardbusiness.co.uk** and we will get back to you within 48 hours. Please provide your contact details and Barclaycard Merchant number (found on your statement).

5. vehicle rental reservation service

5.1 Vehicle rental companies

Best Practice for minimising chargebacks
At Barclaycard we understand that chargebacks are an ongoing concern. We know that certain types of chargebacks occur more frequently amongst vehicle rental providers. To support you we have created this Best Practice guide to detail the correct procedures to deal with chargebacks and provide advice on how to reduce the cost to your business.

Although it is in your best interests to authorise every transaction, please remember that AUTHORISATION DOES NOT GUARANTEE PAYMENT – it only confirms that:

1. the card has not been reported lost or stolen at the time of the transaction
2. there are sufficient funds available at the time of the transaction.

Except for contactless transactions, you will still be liable for any transactions if the genuine cardholder later states that they did not participate in or authorise a transaction.

Card-not-present transactions are particularly prone to chargebacks at a later date.

Please remember: Any transactions processed without the card being present may result in a chargeback should they be disputed at a later date. It is in your own interests, where possible, to process transactions with the card present and ensure the cardholder is verified by their PIN or a signature is obtained (if the card is not PIN-enabled).

5.1.1 Tips on taking telephone reservations

As telephone reservations are card-not-present transactions, we recommend you take the precaution of asking for as many details as possible in order to verify the authenticity of the unseen cardholder:

- the name of the caller
- their direct dial telephone number (NOT a mobile telephone number)
- the name of the person(s) requiring the vehicle (if not the caller)
- their expected collection date and time
- the number of days they are expected to hire the vehicle
- the card number of the card to be used for the charges
- the card valid from date
- the card expiry date
- the cardholder's name
- the cardholder's billing address
- the Card Security Code (the last 3 digits on the signature strip on the back of the card or the 3 digits in the box adjacent to the signature panel).†

†If your vehicle reservation system allows you to check the Card Security Code given at the time of the reservation then it should be entered. However, if you are using a POS terminal that is unable to check the Card Security Code then it should still be asked for as this may deter potential fraudsters. However, you must not keep or store the CSC code.

Additionally, you should discuss and agree the hire rate and obtain the caller's consent to your cancellation policy. The cancellation policy must be clearly explained to the customer. Once you have confirmed acceptance of their order, please ensure you send a copy of your Terms and Conditions together with the cancellation policy to the cardholder.

5.1.2 Taking reservations by fax or mail

Like the tips on telephone reservations, we recommend requesting as many details as possible from the unseen cardholder – as listed above. And when taking orders from company cardholders, we advise you to check that the fax or letter looks genuine eg that it's on genuine company headed paper. Obvious questions to ask are:

- Does it contain a company logo?
- Does it contain the correct corporate colours?
- Does it show a switchboard telephone number? Check by calling the sender; the switchboard operator would normally announce the company
- Does it contain a registered address for 'Ltd' and 'PLC' companies?
- Is it signed by someone in authority?

Faxes and mail bookings should contain the same details required for telephone reservations – except for the Card Security Code. It should also confirm acceptance of your cancellation policy. And we recommend calling the sender for confirmation of the reservation, the card details and the Card Security Code.

Ideally you would also reply with your acceptance of the reservation in writing (fax or mail), together with a copy of your Terms and Conditions, including your cancellation policy.

5.1.3 Taking reservations over the internet

Transactions via the internet are effectively card-not-present transactions and are prone to being disputed and charged back. It is in your own interests to process transactions with the card present wherever possible.

When taking bookings over the internet we advise that you take the same procedures and precautions as those taken by telephone. This includes ensuring that cardholders can confirm acceptance of your Terms and Conditions eg in a tick box.

We strongly recommend that your website uses 'Internet Authentication'. (Refer to Authentication Section 1.4.2.3 for further details.) Available from Barclaycard, this service allows you to confirm that reservations are being made by genuine cardholders. We can provide this service as part of your existing website or you can use our own ePDQ product as your Payment Service Provider (PSP).
For more details on ePDQ, simply click onto our website at **www.barclaycard.co.uk/paymentacceptance**

5.1.4 Extra tips for verifying genuine customers

- Set up your reservation system (or a stand-alone PC solution) to check the billing and company address by comparing it to the Royal Mail address. See **www.royalmail.com** or call Royal Mail Postcode Products on **0845 603 9038**. Alternatively, you can invest in PC software that uses a postcode address to verify addresses. Find out more at these websites:
  - **www.streetmap.co.uk**
  - **http://uk2.multimap.com**
- Check the electoral roll. Companies like Equifax do this, and will charge for the service (**0845 600 1772** or **www.equifax.co.uk**). Alternatively, you can buy and install electoral roll software
- Check the Yellow Pages or BT Telephone Directory for the customer's listing. Then call and ask for the person who sent the fax
- Barclaycard provides an ePDQ product, with inbuilt velocity checking, with parameters that you can determine. The fraud screening options are controlled and set by you.

5.1.5 Your cancellation policy

Please note that whilst you may have a cancellation policy within your Terms and Conditions (which must be clearly communicated to your customer), you may not charge any cancellation fee to the card used for reservation. If you do make a charge to the card, Barclaycard will be unable to defend you from any subsequent chargeback.

5.1.6 No show

If a cardholder doesn't turn up, having failed to cancel their hire vehicle, your Terms and Conditions may entitle you to charge the customer. However, you must not charge the No show amount to the card used for reservation. If you do charge the card, then Barclaycard will be unable to defend you from any subsequent chargeback.

5.1.7 Vehicle collection

Ask to see the customer's card and ask them to read your Terms and Conditions and sign the Rental Agreement. Then carry out the usual visual checks to ensure the card is genuine eg the hologram, and that the signature strip has not been tampered with.

You must not ask the cardholder to sign a blank transaction receipt in case there are any additional or delayed charges. The cardholder must give their expressed consent to be charged additional or delayed charges.

If possible obtain payment by processing a card-present transaction (refer to Section 2.1). If payment has already been obtained, ensure an imprint of the card is obtained on the Car Rental Agreement as proof that the cardholder consented to pay by card.

If a specialised vehicle was requested (ie a vehicle that forms less than 10% of your fleet or one that you have obtained specifically for the customer to hire) and it then becomes unavailable, you must provide the following services at no extra charge:

- a comparable vehicle at another car rental establishment for the reservation period
- transportation to the alternative outlet.

5.1.8 Estimated Authorisation

Estimated Authorisation lets you estimate the final transaction amount, get Authorisation and reserve the payment while the vehicle is still on hire. Base your estimate on:

- the cardholder's intended rental period
- the rental rate and applicable tax
- mileage rates.

You cannot use Estimated Authorisation with UK Maestro, Maestro or Solo cards, and it does not apply to potential vehicle damage or other insurance-deductible amounts.

Estimated Authorisations are valid for the length of the rental. However, for extended hire we recommend you close the customer's account after 14 days and bill them fortnightly.

The Operating guide for your terminal includes instructions for Estimated Authorisations, including chip and PIN card transactions, when the hirer will need to enter their PIN number to confirm they are the genuine cardholder.

You can update estimates as often as you need, up to and including the date the vehicle is returned. When you issue a new estimate, make sure it does not include amounts which have already been authorised.

5.1.9 Estimated Authorisation – useful tips

- Make sure your transaction receipt always includes the details of the Authorisation code, the dates and the amount(s)
- Always tell the hirer how much you have estimated, as it will reduce the funds available on their card. Explain that they have not yet been charged, and that their final bill is unlikely to be exactly the same as the estimate
- If your customer unexpectedly decides to reduce the hire period, simply provide the appropriate refund. Refunds must always be applied to the same card used for the original payment.

5.1.10 Estimated Authorisation – end of hire

If the final bill is within 15% of the estimated amount, you can use the code provided during Estimated Authorisation. However, you will need a final Authorisation code if:

- the final transaction amount is above your floor limit and you have not obtained a previous Authorisation
- there is more than 15% difference between the final bill and the Pre-authorisation amount
- the hirer is paying by Visa Electron and the final bill is more than the sum of all the Estimated Authorisations you've already obtained for their hire period.

5.1.11 Handling Pre-authorisation

Pre-authorisation allows you to estimate the final transaction amount and receive Authorisation before the vehicle is returned – allowing you to reserve the funds on the card while the vehicle is still on hire. However, this is not supported on UK Maestro, Maestro or Solo cards. Instead we recommend you obtain full payment upon vehicle collection, for the expected hire value. If the customer unexpectedly decides to reduce the length of hire, you can then simply provide the appropriate refund.

The value should be based on the cardholder's intended rental period, the rental rate with applicable tax and the mileage rates. You can update the estimates as often as you need, up to and including the date the vehicle is returned. Each additional Pre-authorisation request must not include previously authorised amounts. And you may not attempt to gain Pre-authorisation for potential vehicle damages or the insurance deductible amount.

The Authorisation remains valid for the length of the rental. However, we recommend that you close the customer's account after two weeks and bill the customer every two weeks.

- The Operating guide for your terminal contains instructions for performing Pre-authorisation. This can include undertaking a Pre-authorisation using a chip and PIN-compliant card. The cardholder will be required to input their PIN number at the time of the Pre-authorisation to confirm they are the genuine cardholder
- Estimate the final amount and obtain Authorisation
- Do advise the hirer how much you have pre-authorised, as this will reduce the funds they have available on the card. Explain to the hirer that no charge has actually been made at this point, and that it is unlikely that the final bill will be exactly the same as the pre-authorised amount.

5.1.12 Pre-authorisation – end of hire

If the final bill is within 15% of the pre-authorised amount, you can process the transaction by using the code provided during Pre-authorisation.

If there is a difference of more than 15% between the final bill and the pre-authorised amount, please call **0870 24 24 240*** and ask for another Authorisation code for the difference.

Tip

Make sure you keep accurate records of the hirer's charges, including dates and amounts.

5.1.13 Accident or collision

In the event of an accident/collision, you may charge Visa cardholders for the damage to the vehicle. An estimate of the cost must also be obtained from an organisation which can legally provide such services. Alternatively, an itemised repair bill may be produced. Either of these should always be forwarded to the cardholder where a charge for damage is made. The following conditions also apply:

- The cardholder must have consented in writing to pay such charges by Visa card (this consent should make up part of your Rental Agreement). It is critical that your Car Rental Agreement clearly states that any additional or collision charges will be charged to the Visa card used for payment to hire the car. The cardholder must sign to agree that they accept this Term and Condition. The cardholder's signature must be on the same page of the Car Rental Agreement as the condition. If the cardholder's signature is on a separate page we may be unable to defend you from a subsequent chargeback should the cardholder claim that they never agreed to their Visa card being charged for any additional charges
- The charge must be submitted within 90 calendar days of the date of the transaction
- There is a bigger risk of chargeback if the cardholder is not notified.

Note about MasterCard: To apply additional charges to a MasterCard, a separate cardholder signed authority must be obtained by processing a card-present transaction (refer to Section 2.1). If the charge is disputed later, this will be required as proof that the cardholder authorised the additional charge.

5.1.14 Procedure for transacting delayed charges

In order for you to process a delayed charge (such as damage, fuel, insurance fee, parking tickets, excessive mileage, additional rental etc.) the cardholder must have consented by signing the Rental Agreement and agreeing to the Terms and Conditions. These state their liability for late charges to be debited to the card number used in the original transaction. The cardholder's signature must be on the same page of the Car Rental Agreement as the Term and Condition that allows you to charge for delayed charges. If the cardholder's signature is on a separate page, we may be unable to defend you from a subsequent chargeback should the cardholder claim that they never agreed to their card being charged for any delayed charges.

Any such charges must be processed within 90 days of the original transaction date – and you must obtain further Authorisation. The charge must be submitted as a separate transaction, with the words 'Signature on file' clearly visible. You are required to notify the cardholder in writing of any delayed charges – sent to the address on the Rental Agreement.

Also, you must supply them with any additional documentation to support the charge eg if the customer was responsible for a traffic violation, send them:

- a copy of the rental agreement
- documentation of the violation
- the licence number of the rental vehicle
- the statute/law violated and (if applicable) a copy of the Civil Authority's accident report
- notice of the amount to be charged.

5.1.15 Accepting split sales

Occasionally, customers ask to split payments between cards, cash or cheques, sometimes in order to share costs between partners. Although these transactions are acceptable, a high number of chargebacks result from them. So Authorisation must always be obtained regardless of your floor limit – and always inform the Authorisation Operator at the start of the call that the transaction is part of a split sale. Process only one transaction per card.

5.1.16 Your refund policy

If you operate a No Refund policy this must be made clear to the cardholder at reservation.

If you do agree to refunds, beware of any opportunities for fraudsters. All refunds must be credited to the same card used to make the booking. Where a charge is made to a card in error, the reversal must be applied to the card within 30 calendar days. Under no circumstances refund by cash, cheque or other payment means as this is likely to result in chargebacks.

Contactless refunds are prohibited. All refunds for contactless transactions should be undertaken as chip and PIN transactions on the same card.

5.1.17 Extended hire

We strongly recommend that you do not allow your customer to hire the vehicle for more than two weeks without settling their bill. Ask hirers wishing to extend the lease for more than two weeks to pay the current total due – ideally by the cardholder in person. Failing that, by using the card details provided at the original booking (although there is a risk that this amount could be disputed at a later date if no signature or PIN is obtained). If the current bill is more than 15% over the pre-authorised amount obtained at the original transaction, you need to get a further Pre-authorisation code for the remainder of the rental period.

5.1.18 Disputed transactions

If a transaction is later disputed, it is vital to show that the card was present and authorised (where required). Except for contactless transactions, if no signature or PIN was obtained or if Authorisation was not given then we will be unable to defend you from a chargeback. Where possible and except for contactless transactions, it is in your interest to process transactions with the card present and obtain a signature or PIN.

The most common reasons why disputed transactions are charged back for vehicle rental are:

1. **Hire reservations made using a card obtained by a fraudster who never arrives**. Often this is because the fraudster is only using your reservation system to check that the card is valid and funds are available. They will then use the card to obtain goods from other establishments fraudulently. The first time the genuine cardholder will be aware that their card has been used fraudulently is when they receive their card statement and they see they have been charged your No show charge.

Tip

To try to prevent taking reservations from fraudsters we strongly recommend the best practices detailed in this Procedure guide.

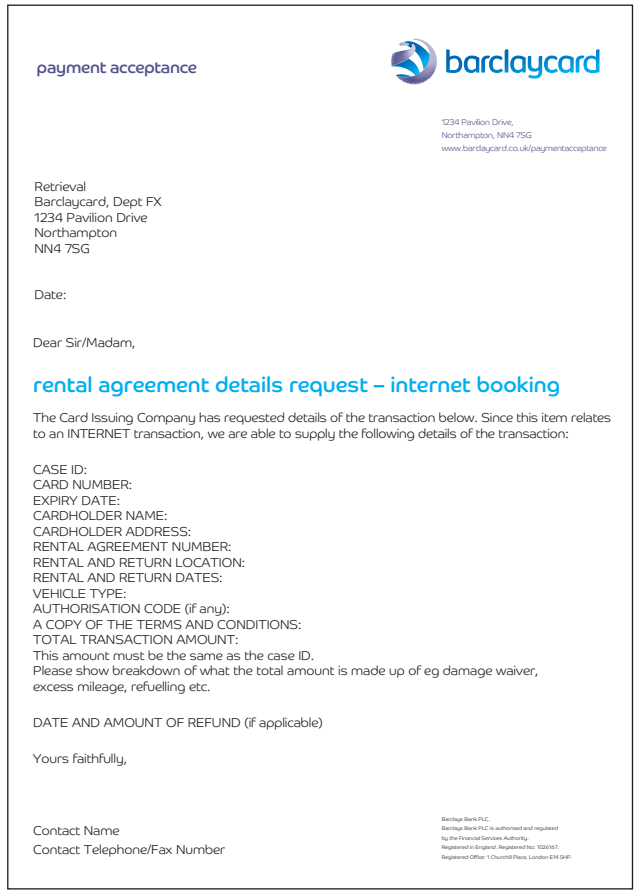
2. **Not replying to requests for information**. Under card scheme rules, the Card Issuer is entitled to request details of any transaction. In most instances, they only need a copy of the final transaction receipt, showing the card was present at the transaction and, except for contactless transactions, was authenticated by the cardholder – either by a signature or PIN. Sometimes, however, the Card Issuer may require a full breakdown of the charge. The Request for Information from Barclaycard will give details of what is required. Please ensure you reply within 14 days – failure may result in the Card Issuer making a chargeback.

For more information on preventing chargebacks, please go to our website at **www.barclaycard.co.uk/information zone/chargebacks**

Or alternatively call our dedicated Chargeback Telephone Team on **01604 614 012*** and ask to speak to our Chargeback Education Team.

5.1.19 Sample retrieval letter – internet transactions

This is an example of a letter you might receive from us asking for details of a queried online transaction. You simply need to check the transaction details are correct, find the sales voucher and send it back to us with the letter.



payment acceptance

barclaycard

1234 Pavilion Drive,
Northampton, NN4 7SG
www.barclaycard.co.uk/paymentacceptance

Retrieval
Barclaycard, Dept FX
1234 Pavilion Drive
Northampton
NN4 7SG

Date:

Dear Sir/Madam,

rental agreement details request – internet booking

The Card Issuing Company has requested details of the transaction below. Since this item relates to an INTERNET transaction, we are able to supply the following details of the transaction:

CASE ID:
CARD NUMBER:
EXPIRY DATE:
CARDHOLDER NAME:
CARDHOLDER ADDRESS:
RENTAL AGREEMENT NUMBER:
RENTAL AND RETURN LOCATION:
RENTAL AND RETURN DATES:
VEHICLE TYPE:
AUTHORISATION CODE (if any):
A COPY OF THE TERMS AND CONDITIONS:
TOTAL TRANSACTION AMOUNT:
This amount must be the same as the case ID.
Please show breakdown of what the total amount is made up of eg damage waiver, excess mileage, refuelling etc.

DATE AND AMOUNT OF REFUND (if applicable)

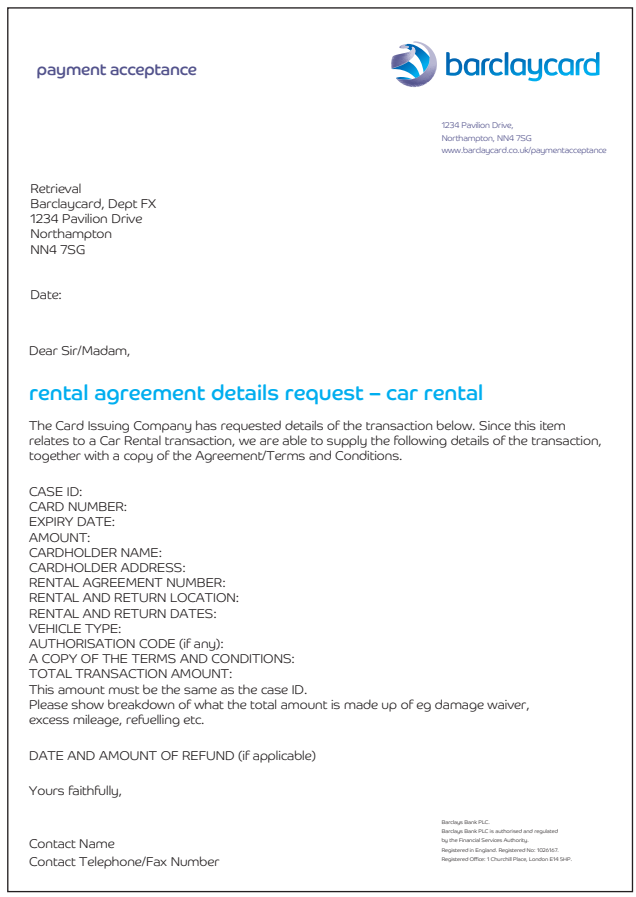
Yours faithfully,

Contact Name
Contact Telephone/Fax Number

Barclays Bank PLC.
Barclays Bank PLC is authorised and regulated by the Financial Services Authority.
Registered in England. Registered No: 1026167.
Registered Office: 1 Churchill Place, London E14 5HP.

5.1.19 Sample retrieval letter – telephone and mail order transactions

This is an example of a letter you might receive from us asking for details of a queried telephone or mail order transaction. You simply need to check the transaction details are correct, find the sales voucher and send it back to us with the letter.



payment acceptance

barclaycard

1234 Pavilion Drive,
Northampton, NN4 7SG
www.barclaycard.co.uk/paymentacceptance

Retrieval
Barclaycard, Dept FX
1234 Pavilion Drive
Northampton
NN4 7SG

Date:

Dear Sir/Madam,

rental agreement details request – car rental

The Card Issuing Company has requested details of the transaction below. Since this item relates to a Car Rental transaction, we are able to supply the following details of the transaction, together with a copy of the Agreement/Terms and Conditions.

CASE ID:
CARD NUMBER:
EXPIRY DATE:
AMOUNT:
CARDHOLDER NAME:
CARDHOLDER ADDRESS:
RENTAL AGREEMENT NUMBER:
RENTAL AND RETURN LOCATION:
RENTAL AND RETURN DATES:
VEHICLE TYPE:
AUTHORISATION CODE (if any):
A COPY OF THE TERMS AND CONDITIONS:
TOTAL TRANSACTION AMOUNT:
This amount must be the same as the case ID.
Please show breakdown of what the total amount is made up of eg damage waiver, excess mileage, refuelling etc.

DATE AND AMOUNT OF REFUND (if applicable)

Yours faithfully,

Contact Name
Contact Telephone/Fax Number

Barclays Bank PLC.
Barclays Bank PLC is authorised and regulated by the Financial Services Authority.
Registered in England. Registered No: 1026167.
Registered Office: 1 Churchill Place, London E14 5HP.

5.2 Additional rules for the Visa Vehicle Rental Reservation Service

Visa Vehicle Rental

A Vehicle Rental Company or its third-party booking agent that accepts European issued Visa Cards or Visa Electron Cards must offer a guaranteed car rental reservation and adhere to the following requirements.

In return you may optionally charge a No show fee where a Visa Europe cardholder has not cancelled a reservation in accordance with your terms and conditions.

1 You or your third-party booking agent must obtain the cardholder name, account number and expiration date as displayed on the Visa Card or Visa Electron Card

2 You or your third-party booking must communicate your cancellation policy and procedures to the cardholder when making the reservation.

3 You or your third-party booking agent must inform the cardholder, in writing, of all the following:

- Reserved car rental rate
- Currency of the transaction
- Exact name and physical address of the location from where the car is to be collected.

4. You or your third-party booking agent must provide written confirmation of the reservation to the cardholder by mail, fax or e-mail.

5. You or your third-party booking agent must inform the cardholder that a No-show Transaction up to the value of one day's rental at the reserved car rental rate will be billed if the cardholder has neither:

- Collected the vehicle within the 24 hours of the collection time nor
- Properly cancelled the reservation in accordance with your communicated cancellation policy.

6. If you wish to bill a No-show Transaction, you or your third-party booking agent must confirm, in writing, as part of the reservation confirmation, the value and currency of the fee that will be billed to the cardholder.

7. You or your third-party booking agent must also provide written confirmation containing the following information:

- Cardholder name, account number (truncated to only display four digits) and card expiration date as displayed on the Visa Card or Visa Electron Card.
- Confirmation code which the cardholder must retain in the event of a dispute.
- Exact physical address of the location from where the car is to be collected.
- Hours of operation of the collection and return outlet.
- Cancellation policy procedures.

8. You or your third-party booking agent must not require cancellation notification of more than 72 hours prior to the schedule collection time of the booking without penalty.

9. If the cardholder makes a reservation within 72 hours of the scheduled pick up date, the cancellation deadline must be no earlier than 18:00 at the physical location of the vehicle rental company on the scheduled pick up date.

10. You or your third-party booking agent must provide to the cardholder with cancellation code (if the reservation is properly cancelled in accordance with the communicated cancellation policy that relates to the Vehicle Rental Reservation Services) and advise the cardholder to retain it in case of dispute.

11. You or your third-party booking agent must send written confirmation of the cancellation to the cardholder within 5 business*days of the cancellation date.

12. If a cardholder has not claimed or cancelled the car rental by the specified time, you or your third-party booking agent must keep the car available according to the reservation for 24 hours from the collection time. If the car remains unclaimed by the cardholder, you may process a No-show Transaction.

13. If the Vehicle Reservation Service guaranteed vehicle is unavailable, you must provide the cardholder with an equivalent or higher group car at no extra charge.

14. You must ensure that the cardholder is advised at the time of making the reservation that a confirmation receipt is available during the hours of operation of the outlet on return of the rented vehicle. This confirmation receipt confirms the mutually agreed condition of the rented car upon return.

15. You must provide the cardholder with written confirmation of the cardholder decision of whether or not to request a confirmation receipt as part of the reservation confirmation.

16. You must provide the cardholder with written confirmation of all of the following:

- The visible damage status of the rented car upon return. If there is no visible damage, this must be clearly stated on the written confirmation and you must not process a delayed or amended charge transaction for any visible damage to the rented car.
- The fuel status of the rented car upon return. If there is no extra fuel charge, this must be clearly stated on the written confirmation and you must not process a delayed or amended charge transaction for extra fuel.
- The date and time of the return. If there are no extra rental charges as a result of extended time frames, this must be clearly stated on the written confirmation and you must delayed or amended charge transaction for the extra day's rental.

17. If the cardholder returns the car using an express drop-off facility, the written confirmation receipt must be sent to the cardholder within 5 business days of the return date of the rented car. You should advise the cardholder to retain the confirmation receipt in case of a dispute.

18. You may only process a delayed or amended charge transaction if the cardholder has given their prior consent to incur such delayed or amended charge transaction.

19. For delayed or amended charge transactions related to damages, you must provide a written confirmation containing the details of the damage, the cost of the damage and the currency in which the cost of the damage will be charged to the cardholder within 10 business days of the return date of the rented car.

20. For delayed or amended charge transactions relating to damages where you have written to the cardholder, the cardholder may, at no cost to you, provide written confirmation of an alternative estimate of cost of the damage within 10 business days of receipt of original written confirmation detailing the cost of the damage from your company.

21. You and the cardholder may come to an agreement on the cost of the damage before processing the delayed or amended charge transaction. If agreement is not reached between you and the cardholder for the cost of the damage, and if you process the delayed or amended charge transaction, the cardholder retains the right to dispute the charge.

22. You must wait 20 business days from the date of the confirmation receipt provided to the cardholder before processing a charge for damages.

***A business day is understood to be Monday through Friday 09h00-17h00 excluding Saturday and Sunday and public holidays.**

6. lodging and accommodation

Best Practice for minimising chargebacks
At Barclaycard we understand that chargebacks are an ongoing concern. We know that certain types of chargebacks occur more frequently amongst hotel, lodging and accommodation providers. To support you, we have created this Best Practice guide to help you understand the correct procedures for dealing with chargebacks and provide advice on how to reduce the cost to your business.

Though it is in your best interests to authorise every transaction, please remember that **AUTHORISATION DOES NOT GUARANTEE PAYMENT** – it confirms only that:

1. the card has not been reported lost or stolen at the time of the transaction
2. there are sufficient funds available at the time of the transaction.

As the rules stand, except for contactless transactions, you will still be liable for any transactions should the genuine cardholder later state that they did not participate in or authorise a transaction. Card-not-present transactions are particularly prone to chargebacks at a later date.

Please remember: If there is no signature on the final bill, we may be unable to defend you in the event of any chargeback. There is still an element of risk if the guest is allowed to check out using the Priority Checkout Service.

6.1 Taking advance reservations

Wherever possible, the person requiring accommodation/lodging should be asked to make the reservation themselves. Of course, for practical reasons you may need to accept reservations from third parties, such as secretaries acting on behalf of their bosses.

6.2 Tips on taking telephone reservations

As telephone reservations are card-not-present transactions, we recommend you take the precaution of asking for as many details as possible in order to verify the authenticity of the unseen cardholder:

- the name of the caller
- their direct dial telephone number (NOT a mobile telephone number)
- the name of the person(s) requiring the accommodation/lodging (if not the caller)
- their expected arrival date and time
- the number of nights they are expected to stay
- the card number of the card to be used for the charges
- the card expiry date
- the cardholder's name
- the cardholder's billing address (may not be the company address)
- the Card Security Code (the last three digits on the signature strip on the back of the card or the 3 digits in the box adjacent to the signature panel).*

In addition, if the booking is for corporate purposes:

- the caller's name and position in the company/organisation
- the name of the company/organisation
- the company/organisation switchboard telephone number.

*If your reservation system allows you to check the Card Security Code given at the time of the reservation then do enter it. Even if you use a POS terminal that is unable to check the Card Security Code, still ask for it as this may deter fraudsters.

Also, you should take care to discuss and agree the room rate and the hotel cancellation policy. You must seek the caller's consent in accepting the cancellation policy. Once the caller has accepted you can then issue a reservation code.

If the reservation is made through a third party, a Travel Agent for example, ensure they advise the customer of your Terms and Conditions. You should then ask the caller to confirm the reservation in writing (either by fax or mail – see below).

Tip

When taking the reservation listen for suspicious activity, such as long pauses to any questions where the answer would be obvious to a genuine caller.

6.3 Taking reservations by fax or mail

Double check that the fax or letter looks genuine eg that it's on genuine company headed paper. Obvious questions to ask are:

- Does it contain a company logo and show correct corporate colours?
- Does it show a switchboard telephone number? Check by calling the sender; the switchboard operator would normally announce the company
- Does it contain a registered address for 'Ltd' and 'PLC' companies?
- Is it signed by someone in authority?

Faxes and mail bookings should contain the same details required for telephone reservations – except for the Card Security Code. They should also confirm acceptance of your cancellation policy. And we recommend calling the sender for confirmation of the reservation, the card details and the Card Security Code. Ideally you would also reply with your acceptance of the reservation in writing (fax or mail), together with a copy of your Terms and Conditions, including your cancellation policy.

6.4 Taking reservations over the internet

Transactions via the internet are effectively card-not-present transactions, so are more likely to result in a chargeback. It is in your own interests to process transactions with the card present, whenever possible.

When taking bookings over the internet we advise that you take the same procedures and precautions as those taken by telephone. This includes ensuring that cardholders can confirm acceptance of your Terms and Conditions eg in a tick box. We strongly recommend that your website allows 'Internet Authentication'. Available from Barclaycard, this service allows you to confirm that reservations are being made by genuine cardholders. We can provide this service as part of your existing website or you can use our own ePDQ product as your Payment Service Provider (PSP). For more details on ePDQ, visit **www.barclaycard.co.uk/paymentacceptance**

6.5 Extra tips for verifying genuine customers

- Set up your reservation system (or a stand-alone PC solution) to check the billing and company address by comparing it to the Royal Mail address. See **www.royalmail.com** or call Royal Mail Postcode Products on **0845 603 9038**. Alternatively you can invest in PC software that uses a postcode address to verify addresses. Find out more at these websites:
  - **www.streetmap.co.uk**
  - **http://uk2.multimap.com**

- Check the electoral roll. Companies like Equifax do this, and will charge for the service (**0845 600 1772** or **www.equifax.co.uk**). Alternatively you can buy and install electoral roll software
- Check the Yellow Pages or BT Telephone Directory for the customer's listing. Then call and ask for the person who sent the fax
- Barclaycard provides an ePDQ product, with inbuilt velocity checking, with parameters that you can determine. The fraud screening options are controlled and set by you.

6.6 Taking advanced lodging deposits

If you take advanced lodging deposits under the Visa and MasterCard rules, this is the only amount you are allowed to debit the customer. You will also forfeit your right to charge one night's No Show payment. If you operate a No Refund policy you must make it perfectly clear to the cardholder at the time of the reservation. And any refunds you agree to must be made to the card used for the original booking. Under no circumstances should you refund by cash, cheque or other means. Maestro cards are acceptable only when the cardholder is present, as the card must be processed electronically using the magnetic stripe or embedded chip.

6.7 Your cancellation policy

Any cancellation policy your establishment has must be clearly understood at the time of the reservation ie the customer must be asked whether they accept the policy and to confirm this is so. And the cancellation deadline should be no earlier than 72 hours before the guest is expected.

If a reservation has been made within 72 hours of the expected arrival time, the cancellation deadline will be 6.00pm on the arrival date. If you require cancellation before 6.00pm, you must mail your cancellation policy to the cardholder.

Should the cardholder cancel the reservation within the time frame detailed in your cancellation policy, issue them with a cancellation code for their records and yours.

Note:

i) If your cancellation policy differs from the above, you do risk receiving chargebacks.

ii) You can only enforce the cancellation policy when the customer pays by Visa, MasterCard or JCB card. (Maestro and Solo cards do not allow charges to be made for hotel cancellation charges.)

Tips

Check that the signature on the registration form matches that on the reverse of the card. Also check the hologram, and make sure the signature strip has not been tampered with. You can now go through the Pre-authorisation procedures below.

6.8 Guest arrivals/check-in

When your guests arrive, ask to see the card on which the booking was made, and ask them to complete a registration form. If you allow additional items (newspapers, restaurant bills etc.) to be charged to guests' rooms, your registration form should clearly show this.

6.9 No show

If a cardholder doesn't turn up, having failed to cancel their reservation, you are then entitled to charge one night's stay at the normal check-out time the following day. You can simply charge the card given at reservation.

Send a copy of the transaction receipt and a copy of your Terms and Conditions to the cardholder at their billing address. 'No Show' must be clearly written in the space where the cardholder would normally sign the transaction receipt. The transaction receipt should also clearly show the card number, expiry date and cardholder's name.

However, if the genuine cardholder later claims that they never made the original reservation then the transaction may still be charged back. We would be unable to defend a chargeback in this case. Note about Maestro/Solo cards: You may offer to reserve accommodation for UK Maestro, Maestro or Solo card customers – but be aware that you cannot debit the card for one night's lodging if the customer does not arrive.

6.10 Pre-authorisation

Pre-authorisation allows you to estimate the final bill and reserve those funds on the card account while the guest is staying with you. But this is not supported on UK Maestro, Maestro or Solo cards. Instead we recommend you obtain full payment upon check-in for the expected number of nights' stay. If the customer decides to check out early, simply provide a refund.

- The Operating guide for your terminal contains instructions on performing Pre-authorisation. This can include undertaking a Pre-authorisation using a chip and PIN-compliant card.

The cardholder will be required to input their PIN number at the time of the Pre-authorisation to confirm they are the genuine cardholder.

- Estimate the final amount and obtain Authorisation
- Do advise your guest how much you have pre-authorised, as this will reduce the funds they have available on the card. Explain to the guest that no charge has actually been made at this point, and that it is unlikely that the final bill will be exactly the same as the pre-authorised amount.

6.11 Departures/check-out

If the final bill is within 15% of the pre-authorised amount, you can process the transaction by using the code given at Pre-authorisation.

But if the final bill is more than 15% above the pre-authorised amount, you will need to obtain another Authorisation code for the difference.

Tip

Make sure you keep accurate records of guests' Authorisation codes, including dates and amounts.

6.12 Express/priority check-out service

If you operate an express check-out service, please be warned that we may be unable to defend you from a chargeback should cardholders later deny any transactions.

6.13 Extended stays

We strongly recommend that you do not allow stays of more than two weeks without asking guests to settle their bill. Those requiring longer stays should be asked to pay the current total due. Ideally, ask for their card, or you can use the card details provided at check-in (although there is a risk that this amount could be disputed at a later date if no signature or PIN is obtained). If the bill is more than 15% above the pre-authorised amount at check-in, you are required to obtain a further Pre-authorisation code for the remainder of the stay.

Please remember: If the transaction was undertaken on UK Maestro, Solo or MasterCard and additional charges have been incurred, a separate signed and swiped voucher or imprinted document must be raised as proof that the cardholder authorised these charges to debit their account.

6.14 Disputed transactions

If a transaction is later disputed, it is vital to show that the card was present and authorised (where required). Except for contactless transactions, if no signature or PIN was obtained or if Authorisation was not given then we will be unable to defend you from a chargeback. Where possible and except for contactless transactions, it is in your interest to process transactions with the card present and obtain a signature or PIN.

The most common reasons why disputed transactions are charged back for lodging or accommodation are:

1. **Reservations made using a card obtained by a fraudster who never arrives at the hotel**. Often this is because the fraudster is using your reservation system only to check that the card is valid and funds are available. They will then use the card to obtain goods from other retailers fraudulently. The first time the genuine cardholder will be aware that their card has been used fraudulently is when they receive their card statement and they see they have been charged your No Show charge.

Tip

To try to prevent taking reservations from fraudsters we strongly recommend the best practices detailed in this document.

2. **Not replying to requests for information**. Under card scheme rules, the Card Issuer is entitled to request details of any transaction. In most instances, they require only a copy of the final transaction receipt, showing the card was present at the transaction and was authenticated by the cardholder – either by a signature or PIN. Sometimes, however, the Card Issuer may require a full breakdown of the charge. The Request for Information from Barclaycard will give details of what is required. Please ensure you reply within 14 days – failure may result in the Card Issuer making a chargeback.

6.15 Replying to requests for information and notification of chargebacks

If Barclaycard advises that a cardholder is disputing a charge, always ensure you supply the correct information to help us defend the dispute.

6.16 No show charges

For No show charges please send us a copy of the transaction receipt/invoice clearly showing the card details and 'No Show' written on the signature box of any receipt. We also need proof that the cardholder was informed of – and accepted – your Terms and Conditions.

6.17 Express/priority check-out charges

If the dispute was over an express/priority check-out where no signature was obtained, please send:

- a copy of the transaction receipt captured at check-in proving the card was present and a Pre-authorisation carried out
- a copy of the hotel registration showing the cardholder's signature and acceptance of the charge for the agreed length of stay etc.

6.18 Additional charges

If the dispute was over charges levied since the cardholder checked out (eg minibar charges, breakfast on the last day etc.) please send a copy of the transaction receipt with the words 'Signature on file' in the cardholder signature box. Also, please send a copy of the hotel registration card showing the cardholder's signature and that they accepted that additional charges may be made to their account.

For more information on preventing chargebacks, please click onto our website at **www.barclaycard.co.uk/informationzone/chargebacks**

7. contact numbers

Customer Services Department

Please call us on **0844 811 6666*** when you:

- require additional PDQ terminals
- have a query about your statement
- need to order more procedural literature or point of sale materials
- require information on products and services
- wish to advise us of a change in your details eg change of address or change of bank or if you significantly change the type of goods or services that your original Merchant Agreement applies to
- need assistance with any other query or problem.

PDQ Helpdesk

Please call us on **0844 811 6666*** when you:

- need to report a fault with a PDQ terminal, supplied by us
- have any query relating to transactions processed through your PDQ terminal
- have any other PDQ-related query.

Opening hours

Customer Services Department and PDQ Helpdesk.

Monday to Sunday: **8.00am to 12.00 midnight**.

Bank Holidays: **9.00am to 6.00pm**.

Christmas Day: **Closed**.

Authorisation

Please call us on **0844 822 2000*** when you:

- require Authorisation for a transaction over your floor limit (in the event of a PDQ terminal or power failure)
- are suspicious about a card, a card presenter or the circumstances surrounding a card transaction
- are concerned about the validity of a card
- are prompted to do so by your PDQ terminal.

Multiple mail and telephone order transactions

Please call us on **0844 811 4470*** for:

- Authorisation of more than one mail or telephone order transaction at a time.

Opening hours

Authorisation Department, multiple mail and telephone order transactions and cheque validation/guarantee.

Open **24 hours a day, 7 days a week** (including Christmas Day).

Cheque validation/guarantee

Please call us on **0800 515 788*** for:

- 24-hour-a-day validation of Barclays Bank cheques guaranteed by a Barclays Connect card, Barclaycard Visa card or a Barclays Premier card.

Sales Centre

Please call us on **0800 61 61 61*** if you are planning to extend your existing business by opening additional branches or offices in other locations, or by trading over the internet, or you intend to move into a completely new business. Our Sales Centre will assist you to ensure that the necessary approval, documentation and systems are in place. You should also tell us if your business is going through a change of ownership or legal entity.

Opening hours

Monday to Friday: **8.30am to 6.00pm**.

Saturdays, Sundays and Bank Holidays: **Closed**.

Chargeback Department

Please call us on **01604 614 012*** whenever you have a question about chargebacks or retrievals.

Please quote your case-ID when calling. This is always quoted at the top of our letters. It is made up of several digits followed by a dash and then a shortened form of a month, along with two more digits eg 1234-01JAN05. This is the unique reference that is assigned to each retrieval or chargeback.

Alternatively, you can email your query to us at **chargeback.queries@barclaycard.co.uk**. Our chargeback department can also provide bespoke advice on the steps you can take to prevent transactions being charged back to you, as well as help you understand why disputes occur. For advice tailored to your business, please call us on the above number or email us at **chargeback.education@barclaycard.co.uk**

E-commerce Team

Please call us on **0844 822 2099*** if:

- you need information or assistance about trading over the internet.

Opening hours

Chargeback Department and eCommerce Team.

Monday to Sunday: **8.00am to 12.00 midnight.**

Bank Holidays: **Closed.**

Christmas Day: **Closed.**

Complaints handling

We want to hear from you if you feel unhappy about the service you have received from us. Letting us know your concerns gives us the opportunity to put matters right for you and improve our service to all our customers. You can complain in person by visiting our Barclaycard Head Office in Northampton, in writing, by email or by telephone. Details of our complaint handling procedures are available from our Customer Services Department by contacting them by telephone on **0844 811 6666*** or at **www.barclaycard.co.uk/paymentacceptance**

8. glossary

Some of the terms used in the card processing business are unique to the industry.

These brief explanations will help you understand the way in which we work.

Card acquirer

Like Barclaycard, a bank or financial institution which is a member of card schemes such as Visa or MasterCard. Acquirers enter into Agreements with Merchants to process card transactions on their behalf and arrange settlement.

Card-not-present

This refers to card transactions undertaken when the card is not present at the point of sale eg mail order.

Card Issuer

A Card Issuer is a bank, building society or financial institution that issues payment cards.

Card Security Code and Address Verification Service

A service which helps to reduce mail, telephone and internet fraud.

Card schemes

A card scheme is a payment card body, for example Visa. Visa is a card scheme with member banks issuing Visa payment products. For example Visa Credit, Visa Debit and Visa Electron cards.

Other card schemes include MasterCard, whose members issue MasterCard and Maestro (debit) cards.

Each of the card schemes has their own infrastructures and product offerings and member banks choose which scheme and which product they wish to provide their banking customers with.

Card types

There are different types of card:

- Credit card – cardholders can spend up to limits agreed with their card issuer
- Debit card – which is debited to the cardholder's bank account
- Charge card – cardholder spend has to be repaid monthly
- Business card – issued mainly to employees of small and medium-sized companies for miscellaneous business expenditure
- Corporate card – usually issued to employees of large, blue-chip companies and Government Departments, for travel and entertainment, as well as some other types of business purchase
- Purchasing card – often used by large companies and Government Departments for business supplies, such as company stationery and agency staff
- Fleet card – used by large companies to cover motoring expenses incurred by their employees.

Card processing options

You can accept these cards for both electronic and paper transactions:

- Visa Credit
- MasterCard
- Visa Debit
- Commercial cards
- JCB.

These cards are for electronic transactions only:

- Visa Electron
- Maestro
- Any unembossed cards
- Non-UK cards.

Chargebacks

Chargebacks can be initiated by the cardholder or Card Issuer. Occasionally, a cardholder will dispute a transaction shown on his or her statement with the Card Issuer. If the cardholder's complaint is valid, the amount of the transaction may be charged back to the retailer.

Chip cards

These are the normal bank payment cards but with a computer microchip built into them. The microchip provides a means of securely storing cardholder information.

Chip and PIN

The cardholder enters a unique 4-digit PIN instead of signing a receipt.

This new technology has been rolled out across the UK and will eventually be worldwide. The main objective is to reduce fraudulent transactions which cost businesses and the banking industry millions of pounds each year.

Code 10 calls

When a card or a card presenter arouses your suspicions, you must ring our Authorisation Department immediately on **0844 822 2000**.* If you cannot speak freely because the customer is nearby, tell the operator that you are making a Code 10 call. You will then be asked various questions and instructed as to what steps are necessary.

Compromised card numbers (card number mismatch)

Compromised card numbers are those illegally copied from genuinely held cards.

Fraudsters are currently encoding these numbers into the black magnetic stripe on the back of stolen cards, to produce what appears to be a valid card. Invariably, the embossed number will differ from the magnetic stripe details and this will show on the terminal receipt. These details must be compared when a transaction is undertaken.

Contactless

A contactless transaction is a transaction that is processed utilising wireless technology, where the payment instructions are securely exchanged between a chip card and a specially adapted point of sale terminal. The value of any single transaction is limited to a certain amount (currently £10 – as at April 2009). Any change in this amount would be communicated separately.

ePDQ

Our secure online service for card payment Authorisation and settlement (available as Cardholder Payment Interface (CPI) and Merchant Payment Interface (MPI)).

ePDQ-Lite

Our payment processing system for mail, phone and fax orders, as well as non-automated internet shopping.

Encryption

The process of converting a message so that it is unreadable.

Fall up

As a routine security check, contactless transactions are periodically required to be undertaken as chip and PIN transactions. This checks that the person using the card is the genuine cardholder and is known as a Fall up transaction. Your terminal will advise you when this is the case.

File Transfer Protocol (FTP)

A common method of transferring files across the internet.

Firewall

Computer hardware, software and physical measures which protect confidential information whilst it is on a web-server.

Floor limit

Floor limits are set by us and the card schemes. When a transaction is above your floor limit you must obtain Authorisation.

Home page

The opening page of your website.

Hot Card Warning Notice

Hot cards are those which, due to fraudulent use or cardholder overspending, the Card Issuer has decided to prohibit from further transactions. When records show a hot card has been used in a certain outlet, a Warning Notice is issued to the retailer in question. A reward of £50 is generally paid to anyone recovering and returning a card that is subject to a Hot Card Warning Notice.

Internet transaction

Any payment transaction made by a cardholder, via an electronic network, when the Merchant is not present.

Issue number

A feature of some UK Maestro and Solo cards.

Merchant Voucher Summary (MVS)

The summary voucher which must accompany any sales and refund vouchers when they are paid into a Barclays branch or posted to FDI for processing.

Payment Service Providers (PSPs)

PSPs are companies who offer transaction routing facilities to businesses wishing to trade over the internet.

PDQ

PDQ is the brand name of the electronic processing system developed by us.

PIN

Personal Identification Number. A unique 4-digit number a cardholder will use to verify that they are the true cardholder.

Polling

During the night, and provided you have completed the end-of-day procedure correctly, details of card payments will be collected from the equipment through a phone line. This process is known as polling, and relates to off-line PDQ terminals only.

Pre-authorisation

Pre-authorisation allows you to estimate the final bill and reserve those funds on the card number while the customer is with you.

Recurring transactions

Regular card payments for goods or services such as insurance premiums. These cannot be made with Solo or Maestro cards.

Retrieval

This is a request from a Card Issuer for a copy of a transaction. In the case of a mail or telephone order this will be details of the cardholder's authority to debit their account, together with a copy of the sales voucher or terminal receipt.

SecureCode

A MasterCard approved authentication product designed to allow Maestro and MasterCard to authenticate individual Maestro and MasterCard electronic commerce payments.

Secure Sockets Layer (SSL)

An accepted protocol, which enables secure card payment transactions to be made over the internet.

Server

A central computer that makes services and data available.

Split sale

A transaction which is split between more than one card, or a combination of card, cash or cheque.

Supervisor card

A plastic card which will be supplied with your PDQ terminal and may be required to process a refund electronically or during the end-of-day banking procedure.

Transaction laundering

This is the unacceptable practice of processing someone else's card transactions via your Merchant number.

Us/We

This refers to Barclaycard.

You

This means you as an individual Merchant, or you as a representative of your company.

Various useful telephone numbers are listed throughout this guide. Calls to some of the numbers are charged at national rate and may be monitored or recorded in order to maintain high levels of security and quality of service.

useful numbers

Authorisation: **0844 8222000**
Chargebacks: **01604 614012**
E-Commerce Team: **0844 8222099**
Mobile Top Up Service: **0844 8114414**
Name and Address Check Service: **0844 8114440**
PDQ Helpdesk/Customer Services: **0844 8116666**
Sales Centre: **0800 616161**
Summary VAT: **0844 8222060**
UK Paper Rolls: **0844 8222044**

This information is also available in large print, Braille and audio format by calling **0844 811 6666***.

*Calls may be monitored or recorded in order to maintain high levels of security and quality of service. Calls to 0800 numbers are free if made from a UK landline. Calls to 01604 numbers will cost no more than 4p per minute, minimum call charge 5.5p (current at August 2009) for BT customers. Calls to 0844 811/822 numbers will cost no more than 5p per minute, minimum call charge 5.9p (current at November 2010). Calls to 0870 numbers will cost no more than 8p per minute, minimum call charge 5.9p (current at August 2009) for BT customers. The price on non-BT lines may be different.

www.barclaycard.co.uk/paymentacceptance

Verified by Visa:
Merchant Deployment Best Practices Factsheet

The rollout of Verified by Visa (VbV) is gathering momentum across the globe. By September 2005 29,000 merchants across Europe were using the service and this number is growing quickly.

Introduction

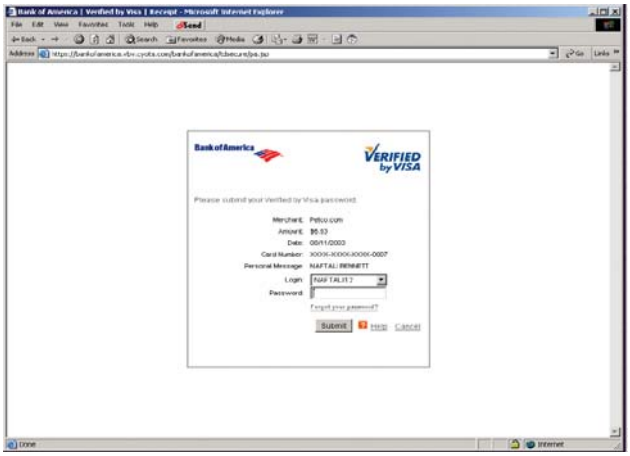
As VbV evolves some very valuable lessons can be learned from the marketplace.

This Factsheet provides details of the way that the service should be configured and provides useful best practices information - for those merchants already using VbV, and for those who are about to deploy it.

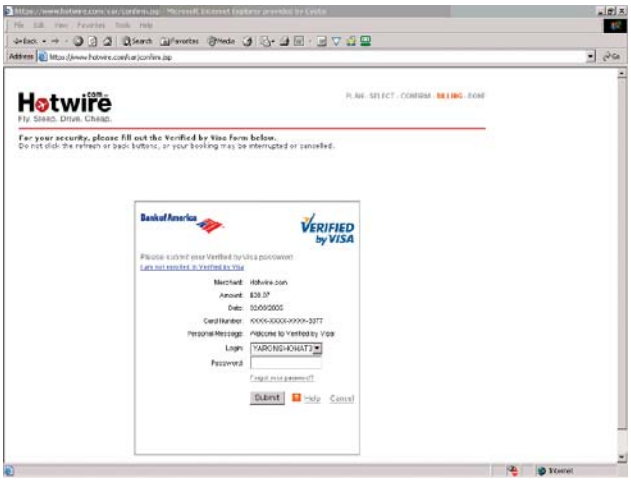
Mandate: Inline Authentication Window

When implementing VbV, merchants have traditionally had two options in the way they configure the authentication windows - that is, pop-up windows or in-line windows.

With the pop-up authentication windows, research has shown that cardholders often mistake a new window as an advertising message, and will often close it without checking. In addition, cardholders with slower connections to the Internet are even more likely to close pop-up windows, often doing so before the window has completed loading in the browser.



Full Inline



Frame Inline

Closing a pop-up authentication window in this way impact the authentication process, cause unpredictable results and adversely affect the cardholder experience. One of the key lessons learned is that the window closure rates are substantially less with the inline authentication window.

In addition, as the rate of pop-up advertising has increased, pop-up suppression software (sometimes referred to as "pop-up killers") has gained increased market awareness and usage. Such software does not only occur in stand-alone applications, but some browsers and online service providers have begun to incorporate pop-up suppression as a standard feature of their service.

Visa strongly recommends that existing VbV merchants reconfigure the authentication page as inline windows, rather than pop-ups. New merchant deployment of VbV should only be implemented with inline windows.

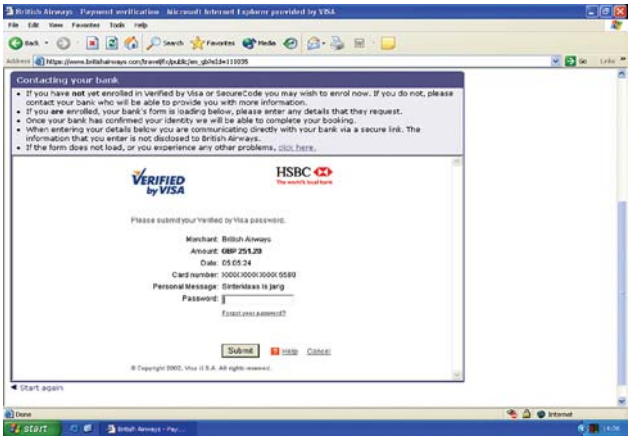
There are two possible options for deploying inline authentication windows:

Important aspects to consider when deciding on frame inline or full inline:

- Full inline has the benefit of a simpler implementation and less scope for misunderstandings and mistakes.
- Frame inline displays the VbV authentication page in the merchant's main window with the merchant's header. Therefore, VbV is seen as a natural part of the purchase process. It is recommended that the top frame include the merchant's standard branding in a short and concise manner and keep the cardholder within the same look and feel of the checkout process.
- Frame inline implementation must also:
  - Provide enough screen space for the window to fit in. The recommendation is to use a top frame only in order to have a less "crowded" screen.
  - Ensure that the VbV authentication window is not pushed out of the viewable area for low-resolution screens.
  - Ensure that the frame does not include any other links or exit points that may distract the user from completing the VbV authentication process (such as "search" options, standard navigation menu, etc.).
  - Avoid using the HTML element iframe which can cause compatibility issues.
  - Ensure that all frames must be of HTTPS type. Avoid mixing HTTP and HTTPS.
  - Provide simple and correct instructions and allow cardholders with an easy way to go back.

Best Practice: 'Pre-message' Notification

Pre-message increases cardholder awareness and prepares the cardholder for the next screen to be displayed. It is best to include generic text and not to make any assumptions that might confuse cardholders.



'Pre-message' Notification

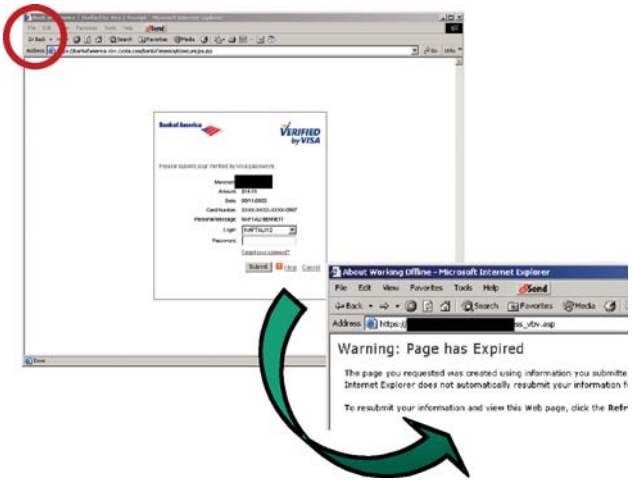
Best Practice: VbV Logo

Research has shown that the VbV process is more successful and flows more smoothly when merchants include the VbV logo on the site and particularly at the checkout page.

VbV logo

Best Practice: "Back" Button Functionality

Where the policy of the merchant allows the use of the 'back' button, verify that it functions properly and test it thoroughly. Analysis has shown that some inline deployments do not function properly when a cardholder clicks the "Back" button. In some cases, when the "Back" button is clicked an alert is presented warning that the previous page has expired. Seeing this message some cardholders may close the window. Merchants should ensure that their inline deployment responds accordingly when cardholders click "Back". This feature should also be fully tested.



"Back" Button Functionality

Best Practice: Merchant Plug-In (MPI) configuration

In terms of configuring the MPI to connect to the Visa Directory Server (DS), Visa's strong recommendation is to:

- Use Uniform Resource Locator (URL) for routing messages to the Visa DS (and not straight IP addresses)
- Enable automatic "failover" to the alternative DS URL if receiving a network failure from the primary center.

The following table contains the Visa DS URLs for merchants based in Europe:

	URL
OCC DS	dsw.visa3dsecure.com/DSMsgServlet
OCE DS	ds.visa3dsecure.com/DSMsgServlet

Best Practice: VbV for cardholders only

Visa recommends that the use of VbV should be restricted to web-using customers.

Some early experience has shown that some multi-channel merchants operate a "sales rep zone", whereby sales representatives use the website infrastructure to process telephone order transactions. They will therefore key customer orders into the website when speaking to the cardholder on the telephone.

It is recommended that merchants should avoid deploying VbV at these zones.

Further information

For further generic information on VbV, merchants should contact their acquiring bank or visit **www.visaeurope.com**.

EU03-0236-E-0905-BD-SO

strength through knowledge

Your introduction to chargebacks and retrievals

payment acceptance

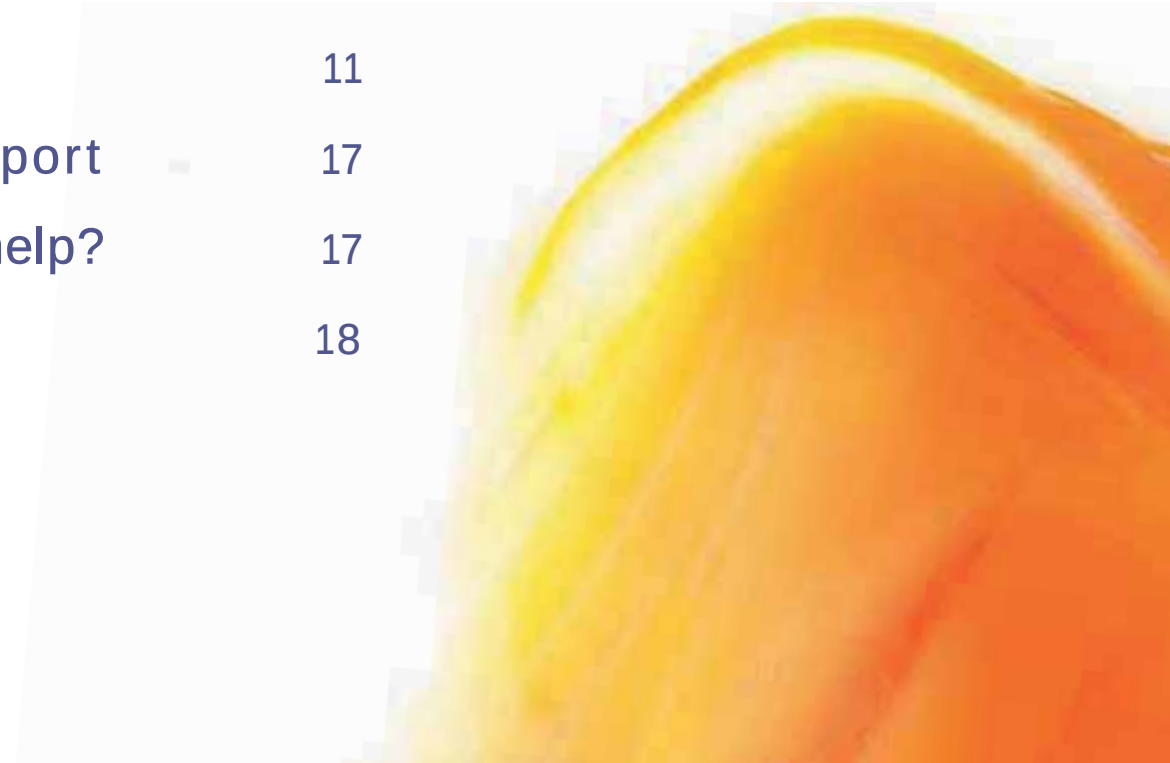
barclaycard

strength through knowledge

We know that chargebacks can be a real problem for your business, and costly too. If a transaction is charged back you could lose both the payment and the goods or services that you've provided – plus any time spent on administration, selling or delivering the 'sale'.

This guide will help you better understand both chargebacks and retrieval requests. It also tells you how you can help us defend chargebacks on your behalf – with the right evidence and information, we may be able to stop you from losing out on the payment.

contents



retrieval requests

What is a retrieval request?

A retrieval request, sometimes called a request for information (RFI), is simply us asking you for information about a transaction at the request of a card issuing company. This happens when a cardholder queries a transaction with the card issuing company because they don't recognise it and would like further information to help jog their memory and identify if it is genuine or fraudulent.

Under the Card Scheme regulations we must respond to the card issuing company's retrieval request with information about the transaction. This means we'll need you to provide detailed information about the transaction for us to send back to them so that they can share it with their cardholder.

A retrieval request itself is not a chargeback and your account will not be debited the disputed amount – you can find out more about chargebacks on page 5.

How will I be contacted?

When we have a retrieval request for a transaction you've processed, we'll send you a retrieval schedule (international) or retrieval letter (sterling) detailing the transactions that have been queried. You'll receive these either in the post or by fax.

Example of a retrieval schedule (international)

Card number	Curr amt	Txn date	Mrch ref	Case ID	Merch no	Merchant
1111222233334444	95.83/EUR	85.93/GBP	565656ABC	1234-01JUN09	1234567	Merchant name
4444333332222111	675.00/EUR	631.62/GBP	454545CAB	4567-01JUN09	1234567	Merchant name

Example of a retrieval letter (sterling)

PLEASE FAX BACK TO 01604256661
REF CASE ID 1234-01JUN09/LDTA 30-JUN-09

THE MANAGER
COMPANY
CONTACT NAME
ADDRESS
ADDRESS
ADDRESS

RETRIEVAL
PAYMENT ACCEPTANCE
DEPT FX, 1234 Pavilion Drive
Northampton NN4 7SG
FAX: (01604) 256661

(POTENTIAL FRAUDULENT TRANSACTION)

PLEASE FAX YOUR REPLY TO (01604) 256661 OR POST TO THE ABOVE ADDRESS

CARD NUMBER	: 1111222233334444		
CARD NUMBER	: 1111222233334444	TRANS DATE	: 03-MAY-09
EXPIRY DATE	: 10-OCT-12		
RETAILER REF	: 1234ABCD	OUTLET	: 1234567
TERMINAL NUMBER	: 1234567		
SEQUENCE NUMBER	: 000000000111		
TERMINAL TYPE	: PDQ		
TRAN AMOUNT	: £100.00	STORE REF	: 1234567
KEYING INDICATOR	: SWIPED		

Dear <name>

PLEASE SUPPLY A CLEAR AND LEGIBLE COPY OF THE SIGNED VOUCHER/DETAILS RELATING TO THE ABOVE TRANSACTION BY 15 JUNE 2009.

PLEASE BE ASSURED WE WILL DO EVERYTHING WE CAN TO PREVENT A CHARGEBACK TO YOUR ACCOUNT. HOWEVER, THE CARD ISSUER MAY STILL PROCESS A DEBIT FOR A LATE REPLY OR OTHER REASON AT A LATER DATE. To ensure we action your reply as soon as possible please fax your reply to (01604) 256661.

CUSTOMER SERVICE – CHARGEBACKS

PLACE YOUR VOUCHER/DETAILS HERE

TO FIND OUT MORE INFORMATION ON HOW TO REDUCE THE RISK OF CHARGEBACKS AND RETRIEVALS IN THE FUTURE, PLEASE REFER TO YOUR PROCEDURE GUIDE OR VISIT
www.barclaycard.co.uk/business/existing-customers/chargebacks

How long do I have to reply to a retrieval request?

Your documentation must be received by us within 14 calendar days from the date that we first notified you of the retrieval request.

Where should I fax my retrieval reply to?

Fax your multicurrency (or international) retrievals to 0044 (0) 1604 253195.

Fax your sterling retrievals to 0044 (0) 1604 256661.

What happens if I don't respond to the retrieval request in time?

Failure to respond to a retrieval request within the set time frame could result in a chargeback being raised that we won't be able to defend on your behalf. And that means it's highly likely that your account would be debited for the disputed amount. So it's in your interests to make sure we receive your documentation within 14 days.

If I respond to the retrieval request, can a chargeback still be raised?

A retrieval request can be closely followed by a chargeback if the Card Issuing Company doesn't receive sufficient information about the transaction. That's why it's important you send as much information as possible in your reply to the retrieval request.

Unfortunately, some retrieval requests can still lead to a chargeback even when all the correct information on the transaction has been supplied. Once the Card Issuing Company has raised a chargeback case you're at risk of being debited for the disputed amount. Please refer to the chargebacks section for further information.

chargebacks

What is a chargeback?

A chargeback is a transaction where you may have initially received payment but the transaction is subsequently rejected by the cardholder or the Card Issuing Company and your account is debited with the disputed amount.

We don't raise chargebacks – the Card Issuing Company does, usually on behalf of their cardholder. Please be assured that we'll do everything possible to defend the chargeback on your behalf. However, the nature of the dispute and the type of chargeback will greatly affect what actions we're able to take under the Card Scheme rules as well as the outcome of the defence claims.

How will I know that I have been charged back?

If you've received a chargeback, we'll let you know by notification letter (see example opposite), fax or schedule, telling you why. In some cases, depending on the nature of the chargeback, this communication will advise you that we're 'pending' or putting the chargeback debit on hold for 14 days, while we wait for the requested response (or in other words, a reply to a retrieval request) from you.

What reasons are given for a disputed transaction?

The most common reasons include:

- transaction not recognised
- not responding in time to a request for a copy of a transaction (a retrieval request)
- the transaction is duplicated – so the cardholder was charged more than once
- the transaction wasn't authorised
- the goods or services haven't been received.

Full lists of the chargeback codes and reasons, as set by the Card Scheme Regulators, are provided in the 'reason codes' section starting on page 8.

Example of a chargeback notification letter

payment acceptance

barclaycard

January 29 2009
TEL: 01604 614012

REF: CASE ID 1187-26JAN09/DOYLA/M63
YOUR REF: PRIOR CASE ID: 1234-28DEC08

THE MANAGER
COMPANY
CONTACT NAME
ADDRESS
ADDRESS
ADDRESS

FINANCIAL EXCEPTIONS
PAYMENT ACCEPTANCE
1234 Pavilion Drive
Northampton NN4 7SG

Reason Code of chargeback case

PLEASE FAX YOUR REPLY TO (01604) 256661 OR POST TO THE ABOVE ADDRESS

OUTLET/MERCHANT: 1234567 RETAILER REF : 2222 333333
CARDHOLDER : NAME NOT GIVEN BY CARD ISSUER
CARD NUMBER : 1111222233334444
TAPE SERIAL : AABBCC TRANS DATE : 03-JAN-09
TRAN AMOUNT : £178.16
DISPUTED AMOUNT: £178.16
TERMINAL TYPE : POS KEY IND: CONTINUOUS AUTH

Exact amount disputed by the Cardholder

Dear Sir/Madam,

CARDHOLDER DOES NOT RECOGNISE TRANSACTION

We regret to inform you that the Card Issuing Company has advised us their cardholder does not recognise the above transaction.

As part of our commitment to provide excellent customer service, Barclaycard will endeavour to assist you in resolving this matter. To enable us to pursue this case on your behalf and to give the cardholder every opportunity to recognise the transaction, we require the following information:

FOR CARD PRESENT TRANSACTIONS

- A full description of the Goods or Services provided
- A delivery address if applicable
- A legible signed/swiped (not keyed) Sales receipt
- A legible signed and imprinted verification voucher.

If you are unable to reply to us by 12.00pm noon on the 12 February 2009, arrangements will be made to debit you. Should you accept this Chargeback, there is no need to contact us. To ensure that we action your reply as soon as possible, please fax your reply quoting case ID 1187-26JAN09 to (01604) 253385.

How long do I have to respond to a chargeback notification letter?

Chargeback rules and time restrictions are set by the Card Scheme Regulators and are very stringent. It's therefore absolutely essential that if you're able to provide compelling evidence to help us to defend your chargeback, you reply within 14 days from the date of our chargeback notification letter.

Why do I need to reply?

Because in certain circumstances and with the necessary defending evidence, we may be able to defend the chargeback for you, even if your chargeback notification advises that you've already been debited.

Where should I send my reply to?

Your chargeback notification letter will advise you of the correct postal address that should be used to send your response back to us. Or you can fax your reply to us.

Fax your multicurrency (or international) chargeback replies to 0044 (0) 1604 253195.

Fax your sterling chargeback replies to 0044 (0) 1604 253385.

Should I refund my customer for the disputed transaction?

No. It's important that you don't refund the cardholder because this could result in your account being debited twice. If a refund has already been processed to the cardholder's account, please provide us with full details so we can defend the case on your behalf.

Reason codes

Visa, MasterCard and UK Debit Maestro each have their own set of reason codes for chargeback cases. These denote the reason why the transaction is disputed and each reason code has its own regulations set by the relevant card scheme.

Code	Name and description
V30	Services not provided or merchandise not received – the cardholder is stating that they did not receive the services or goods that they paid for.
V41	Cancelled recurring transaction.
V53	Not as described or defective merchandise – the cardholder is stating that the service/goods that they received were either defective or not what was originally described to them by the merchant.
V57	Fraudulent multiple transactions – the cardholder acknowledges participation in one transaction with the merchant. However, they deny authorisation of any further charges.
V60	Illegible fulfilment (of retrieval case) – the Card Issuing Company received the merchant's transaction information from the retrieval case but the documents are illegible/incorrect.
V62	Counterfeit transaction – the cardholder denies authorising or participating in the disputed transaction. A counterfeit card may have been used.
V70	Card recovery bulletin or exception file.
V71	Declined authorisation – the Card Issuing Company is stating that the merchant processed the transaction despite having obtained a Decline authorisation response.
V72	No authorisation – the Card Issuing Company is stating that an authorisation code was required for the transaction but that it was not obtained.
V73	Expired card – the Card Issuing Company is stating that the transaction was processed with an expired card.
V74	Late presentment – the Card Issuing Company is stating that the transaction was not processed within the required time frame for settlement.

Code	Name and description
V75	Transaction not recognised – the cardholder is claiming that they do not recognise the transaction on their statement.
V76	Incorrect currency or transaction code – the Card Issuing Company is stating that the transaction was not processed in the correct currency.
V77	Non-matching or invalid account number – the Card Issuing Company is stating that an incorrect card number was charged for the transaction.
V78	Service code violation – the Card Issuing Company is stating that an authorisation code was not obtained.
V80	Incorrect transaction amount or account number – the cardholder is stating that the amount of the transaction is higher than the amount that they agreed to be charged for or were quoted for.
V81	Fraud – 'card present' environment – the cardholder denies participating in or authorising the transaction that was undertaken in a 'card present' environment.
V82	Duplicate processing – the cardholder is stating that the same transaction was processed more than once to their account.
V83	Fraud – 'card absent' environment – the cardholder denies participating in or authorising the transaction that was undertaken in a 'card absent' environment.
V85	Credit not processed – the cardholder is stating that the refund due to them has not been processed.
V86	Paid by other means – the cardholder is stating that the transaction was paid for by other means and has provided evidence to support the alternative payment.
V90	Non-receipt of cash or load transaction value at ATM or load device.
V93	Risk identification service.
V96	Transaction exceeds limit amount.

Code	Name and description
M01	Requested transaction receipt not received – the cardholder is claiming that they do not recognise the transaction on their statement and the retrieval request raised prior to the chargeback was not fulfilled.
M02	Requested transaction receipt illegible – the Card Issuing Company received the transaction information from the retrieval case but the documents are illegible or missing.
M07	Card recovery bulletin.
M08	Transaction not authorised – the Card Issuing Company is stating that an authorisation code was required for the transaction but that it was not obtained.
M12	Non-matching account number – the Card Issuing Company is stating that an incorrect card number was charged for the transaction.
M31	Transaction amount differs – the cardholder is stating that the amount of the transaction is higher than the amount that they agreed to be charged for or were quoted for or that they paid for the transactions by other means.
M34	Transaction duplication – the cardholder is stating that the same transaction was processed more than once to their account.
M35	Expired card – the Card Issuing Company is stating that the transaction was processed with an expired card.
M37	Fraudulent transaction – the cardholder denies participating in or authorising the card present/card not present transaction.
M40	Fraudulent processing of transactions – the cardholder acknowledges participation in one transaction with the merchant. However, they deny authorisation of any further charges with the same merchant.
M41	Cancelled recurring transaction.
M42	Late presentment – the Card Issuing Company is stating that the transaction was not processed within the required time frame for settlement.
M46	Correct transaction currency not provided – the Card Issuing Company is stating that the transaction was not processed in the correct currency.
M47	Exceeds floor limit, not authorised and fraudulent transaction – the cardholder denies participating in or authorising the transaction and the Card Issuing Company is stating that an authorisation code was required for the transaction and was not obtained.
M49	Questionable merchant activity.
M50	Credit posted as a purchase – the cardholder states that their account was due to be credited; however, the transaction was posted as a debit.

Code	Name and description
M53	Not as described – the cardholder is stating that the service/goods that they received were either defective or not what was originally described to them by the merchant.
M55	Goods or services not provided – the cardholder is stating that they did not receive the services or goods that they paid for.
M57	Credit card activated telephone transaction.
M59	Addendum, no-show or ATM dispute. Various specific reasons within this reason code – these are the most frequently used:
	RS3 ATM dispute.
	RS5 Guaranteed Reservation Service – the cardholder cancelled the reservation, or the merchant did not meet the terms of the booking as agreed to at the time of booking (see MasterCard regulations for full list).
	RS6 Payment transaction – local law, restrictions or other legislative constraints prevent the Issuer from accepting the transaction.
	RS7 Addendum dispute – the cardholder is stating that they did not authorise an addendum charge to their original transaction.
M60	Credit not posted – the cardholder is stating that the refund due to them has not been processed.
M62	Counterfeit transaction – the cardholder denies authorising or participating in the disputed transaction; a counterfeit card may have been used.
M63	Cardholder does not recognise transaction on their statement.
M70	Chip liability shift – the cardholder denies authorising or participating in the disputed transaction; a counterfeit card may have been used at a non-Chip-capable terminal.
M71	Chip/PIN liability shift.

Code	Name and description UK Debit Maestro
01	Split Sale – when a transaction is split down into smaller amounts so full amount can be processed. Original transaction will be over floor limit.
02	Cardholder did not perform a cardholder present PIN keyed entry transaction.
03	Transaction submitted after authorisation not approved.
04	Transaction not authorised.
05	Card expired.
06	Late transaction entry.
07	Transaction duplication.
08	Credit not processed.
09	Cardholder disputes transaction amount.
10	Non-fulfilment of documentation requested by the Issuer from the acquirer.
11	Requested supporting documentation illegible/missing required data/contains incorrect data.
12	Hot card – card number that was listed on one of the hot card files and was not referred to when it should have been.
13	Fraudulent transaction at non-PIN-capable cardholder-activated Terminal Outlet.
14	Invalid Card – a transaction which has not been authorised by the Issuer.
15	Non-existent account – not authorised by the Issuer.
16	Transaction at cardholder-activated terminal outlet is above ceiling limit.
18	Invalid transaction.
19	Invalid signature.
20	Missing signature.
21	Violated card – fraud chargeback, transaction performed with a lost or stolen card.
22	Cardholder not present – transaction not initiated by bona fide cardholder.
24	Secondary identification not recorded/ not cardholder's.
25	Old transaction – transaction date of the point of sale is more than 180 days old prior to the processing date.
26	Pre-valid S2 card standard card.

Code	Name and description UK Debit Maestro
27	Fraudulent magnetic stripe – transaction has been authorised.
28	Fraudulent mobile phone pre-payment – CNP.
29	Invalid IIN and goods or services not delivered – (electronic commerce transactions only).
32	Fraud transaction at non-Chip/PIN-capable semi-attended cardholder-activated terminal (SACAT).
33	Transaction performed at non-Chip-capable terminal with counterfeit magnetic stripe.
34	Chip transaction not declined, referred or sent online when required by card or issuer.
35	Fraudulent unidentified fallback transaction performed with Chip at Chip-capable terminal.
36	Transaction performed at non-PIN-capable terminal with lost or stolen PIN-capable card.
99	Inter-member agreement chargeback has been agreed by authorised staff.

Defences

Chargeback defences vary by reason code. Chargeback reason codes can be divided into six main dispute groups:

- Cardholder does not recognise
- Fraud
- Authorisation
- Processing error
- Cancelled/returned
- Non-receipt of goods/services

The next few pages will give you an idea of what you can provide in defence when you receive a chargeback falling into one of these groups.

Cardholder does not recognise

Why would this type of chargeback be raised?

This type of chargeback would typically be raised because the cardholder doesn't recognise a transaction on their statement, or can't recall the value of the transaction processed.

What can you provide in defence?

The minimum requirement in accordance with the Card Scheme rules to defend these reason codes is additional information about the transaction that may not appear on the cardholder's statement.

We'd simply ask you to provide all the details and information that you have on record for the transaction, including a full description of the merchandise or services provided/purchased. We'd also advise you to respond to all chargebacks received under these reason codes because, as long as you respond within the set deadlines, there's a very good chance we'll be able to represent the case for you.

Fraud

Why would these types of chargebacks be raised?

Typically, a fraud chargeback will be raised because the cardholder claims that they neither participated in nor authorised a transaction that has been processed to their account.

For these reason codes the cardholder must sign a disclaimer confirming that they didn't authorise the disputed transactions.

To defend fraudulent chargebacks you must prove that the genuine cardholder of the account charged participated in or authorised the disputed transaction(s).

The defence mechanisms available to you will depend on your industry type and the sales method used to accept the transaction.

What can you provide in defence?

- Fully completed and signed verification voucher.
- Signed delivery receipt at the cardholder's address.
- Compelling evidence to prove that the genuine cardholder participated in the transaction.
- Any documentation that you may have which proves the transaction was undertaken by the genuine cardholder.

Authorisation

Why would these types of chargebacks be raised?

Typically, an authorisation chargeback is raised because the Card Issuing Company is stating that an approval code and valid authorisation code was needed but not obtained for a transaction. Sometimes the cardholder's account is out of order or closed.

What can you provide in defence?

If we granted authorisation we'll defend this type of chargeback using our information from our internal systems or Visa/MasterCard online logs – so we'll only contact you if further information is needed.

If authorisation is received via a third party, a copy of the authorisation log proving that the full amount of the transaction was approved and an authorisation code was obtained will be needed to defend the case.

Processing error

Why would these types of chargebacks be raised?

Usually these types of chargebacks are raised when the cardholder believes that an incorrect charge has been processed by the merchant or there's been a processing error.

Different reason codes in this dispute group will need different information from you to defend the chargeback. We'll explain the reason for the chargeback in the notification letter we send you.

What can you provide in defence?

- Evidence to show that the transaction was processed within the time frames stipulated by the Card Schemes should be provided – such as a transaction receipt or screen shot showing the date that the transaction took place.
- Proof that the transaction was properly processed with the correct currency code which was quoted to the cardholder at the time of the transaction.
- A copy of a legible transaction receipt or booking record showing the card number quoted by the cardholder. This proves that the transaction was processed to the correct card number.
- Proof that, if the amount of the transaction processed was altered from the original quote, the amendment is in accordance with your terms and conditions and that the cardholder agreed to the altered amount.
- Evidence that all transactions processed to the cardholder's account are valid transactions and that no duplication has occurred. For example, you could provide copies of invoices, tickets, transaction receipts or screen prints of bookings.
- Documentation to show that you didn't receive payment by other means such as cash, cheque or an alternative credit card.
- Documentation to show that the transaction was a valid debit and that no credits are due to the cardholder.

Cancelled/returned

Why would these types of chargebacks be raised?

Chargebacks can be raised under these reason codes because:

- the cardholder has stated that they returned the goods to you but haven't yet received a refund
- the cardholder has stated that they cancelled a booking or reservation but haven't received a refund
- a recurring transaction can no longer be processed to a cardholder's account
- goods or services were defective or not as described.

For these reason codes the cardholder must have attempted to resolve the dispute with you before their Card Issuing Company would raise a chargeback. If a cancellation was made, they would also have to provide their cancellation reference.

What can you provide in defence?

You should provide any information or documentation that would help to prove that the cardholder is not due a refund in accordance with your terms and conditions. If goods were received by the cardholder or the services rendered were used by the cardholder, proof of this should be provided (see 'Non-receipt of goods/services' for further guidance).

Non-receipt goods/services

Why would these types of chargebacks be raised?

Typically a chargeback will be raised under these reason codes when a cardholder believes that they didn't receive the goods or services that they purchased. Often:

- the cardholder may have misunderstood their purchase e.g. the cardholder believes they purchased a six month service when it is actually only for three
- you may have failed to deliver goods, or only partly delivered goods
- or the services may have been only partly rendered, or not at all.

What can you provide in defence?

If goods were delivered, you should provide evidence that they were received at the cardholder's address, such as:

- a signed delivery receipt by the genuine cardholder or tracking documentation from the courier
- any additional information or evidence you have to show that the cardholder received the goods, such as emails received from the cardholder.

If services were provided, you need to have evidence that the cardholder received them. This could be one of the following examples:

- a signed car rental agreement at the pick-up of the vehicle
- a signed transaction receipt proving that the cardholder was present to receive the services
- signed check-in documentation for a hotel stay or evidence that the cardholder used other hotel services such as the mini-bar, restaurant etc
- a copy of the invoice for the services provided
- proof that the services were offered/accessible but the cardholder chose not to use them.

dedicated support

We hope you've found this introduction useful, but it really is just the start of how we can help you. Because we recognise that chargebacks are an ongoing concern, we have a dedicated Portfolio Manager for each business sector to help reduce your exposure to chargebacks – and challenge them on your behalf whenever we can.

For more information on the type of support your business can expect to receive, please contact a member of the chargeback team on 01604 614012* or by email to ChargebackTeamPortfolio.Managers@barclaycard.co.uk

need further help?

This guide is just one in the series we've developed to help you better understand what chargebacks are, why they occur and what you can do to reduce their impact on your business. More detailed guides are available.

Other guides available include:

- "don't lose out" – A guide to preventing chargebacks on Cardholder present transactions
- "be prepared"– A guide to preventing chargebacks on card not present transactions
- A series of sector-specific guides on best practice for avoiding chargebacks, codes and defences including:

  - Airline
  - Car rental
  - Hotel
  - Internet gaming.

Together we can help your business build stronger defences.

glossary

Listed below is a summary of the terminology which you may hear or see quoted in documentation.

Acquirer

The financial institution that provides card processing services to the merchant.

Cardholder

The owner of the card used to make a purchase.

Card Issuing Company/Issuer

The financial institution that issued the credit or debit card to the cardholder.

Card Scheme

A network such as Visa, MasterCard, Amex, Maestro etc that acts as a gateway between the acquirer and card issuer for authorising and funding transactions.

Card Scheme Rules/Regulations

Rules set by the Card Schemes, that all card issuers and acquirers must adhere to.

Merchant

The business accepting credit or debit card payments for products or services sold to the cardholder.

Representment

The process used by the acquirer to return the chargeback to the card issuer with information to defend the dispute.

This document is available in large print, Braille and audio by calling 0844 811 6666.*

*For BT business customers, calls will cost no more than 5p per minute, minimum call charge 5.9p (current at April 2010). The price on non-BT phone lines may be different. Calls may be recorded and/or monitored.

www.barclaycard.co.uk/business/existing-customers/chargebacks

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Visa Account Updater For Issuers

Increase Revenue, Enhance Cardholder Convenience and Lower Customer Service Costs

Issuer Benefits

- Maintains continuity of payment relationships by reducing the opportunity to switch payment method or cancel the service when account information changes.
- Helps achieve deeper penetration into the account-on-file segment, including the $2.2 trillion* bill payment segment.
- Improves customer service by minimizing declined transactions and increasing authorization approvals.
- Can increase revenue by minimizing customer switching of payment choice, thereby saving the revenue stream from recurring transactions.
- Helps decrease expenses by avoiding extra cost of processing declines, chargebacks and customer service.
- Helps reduce impact of card upgrades and helps to retain customers by making payments with Visa more convenient.

Visa® Account Updater (VAU) enables the electronic exchange of updated account information among participating merchants, acquirers and Visa card issuers.

Serving as an automated, dedicated and secure clearinghouse, VAU delivers updated cardholder account information in a timely, efficient and cost-effective manner, benefiting acquirers, merchants, issuers and cardholders.

VAU makes it easier for issuers to retain cardholders by maintaining continuity in the payment relationship after account information changes occur. Using a secure protocol, issuers submit updated information to VAU. The updates are made available to acquirers quickly and cost-effectively. Acquirers request account information on behalf of their enrolled merchants, then forward it on to them.

For merchants that maintain customer account information on file—like recurring and auto bill payment providers, subscription services, certain online merchants and preferred customer travel and entertainment programs—VAU makes accepting Visa an even more attractive option. At the same time, it increases the authorization approval rates while decreasing costs caused by outdated account information.

The Value of VAU

VAU helps avoid disruption in customer relationships and recurring payments due to Visa account information changes. Account-on-file cardholders are among an issuer's most valuable customers. By committing to use their accounts regularly, they provide an issuer with a dependable revenue stream, and are less likely to close their accounts over time.

On average, 30 percent of accounts incur a change to an account number or expiration date, or they are closed every year. When cardholders are inconvenienced—especially by unpredictable changes such as product upgrades and lost or stolen card replacements—they may not update all of the merchants with whom they have ongoing relationships. Consequently, account-on-file merchants continue to bill using out-of-date information, resulting in declined transactions and extra costs. In addition, when they contact the cardholder for updated information, they run the risk of payment switching or service cancellation.

* See back for details.

Continued on next page >

Cardholder Benefits

- Offers a seamless account update process.
- Provides uninterrupted service from participating merchants.
- Reduces negative experiences caused by declines.
- Does not require cardholder action to communicate changes to participating merchants.

For More Information

- Contact your Visa Account Executive; or
- Call Visa Customer Service at **1-888-847-2242**; or
- Email the Visa Account Updater Product Office at **updater@visa.com**.
- Issuers and acquirers can visit Visa Online at **www.us.visaonline.com** in the U.S. or **www.visainfo.ca** in Canada.

VAU provides updated account information to merchants so that recurring transactions can continue without interruption. It is used prior to an authorization attempt and does NOT replace or alter normal authorization rules. The service simply enables higher probability of authorization approvals for non-credit-related decline reasons.

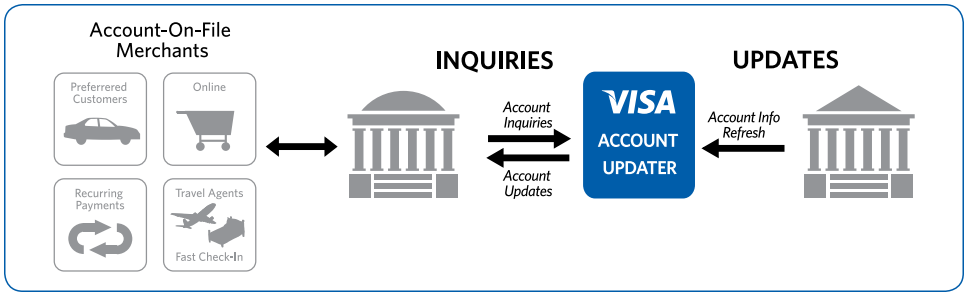
VAU creates value for all parties in the payment process.

How VAU Works

Issuers and acquirers must meet VAU service participation requirements. Acquirers can only enroll merchants who have been individually evaluated and qualified by Visa.

Issuers submit electronic updates to VAU when a cardholder's account information changes due to a product upgrade, a portfolio conversion, card expiration, loss or theft, account closure or other reasons, such as combining accounts after marriage. VAU handles any risk or unique privacy situations using a "contact cardholder" notice.

Through their acquirers, enrolled merchants submit inquiries regarding accounts with which they have ongoing relationships. VAU processes inquiries against its database and provides responses to the acquirer. Visa will only respond to specific data elements within an inquiry file from a preregistered merchant. Responses include account number or expiration date updates, closed account advices and contact cardholder advices. The acquirer forwards the responses to the requesting merchants, who must then update on-file accounts *before* requesting an authorization.



All VAU data is transmitted through a secure direct connection between the endpoint and Visa via Open File Delivery (a component of Visa's Direct Exchange) or the Visa File Exchange Service. VAU information is stored in a database inside Visa's firewall, and browsing access is not allowed.

VAU provides daily and monthly management reports to both issuers and acquirers. Report delivery and access varies by each region. See the VAU Implementation Guide for details.

* Size of U.S. opportunity. Edgar Dunn & Company, Bill Payment Market Assessment Study, June 2009.

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