

NAB BPAY[®] User Guide

April 2023



[®]Registered to BPAY Pty Ltd ABN 69 079 137 518

Contents

Need help with completing your BPAY Biller Agreement? The numbers in the circles show you which item of the BPAY Biller Agreement Application Form (Schedule 1) each question relates to. For example, ④ indicates item 4 in the BPAY Biller Agreement Application Form (Schedule 1).

Introduction

Introduction	3	Customer Reference Numbers	6
How does BPAY work?	3	What is a Customer Reference Number (CRN) and why	6
Where can I find my legal obligations as a BPAY Biller?	3	is it important?	
What else should I consider as I become a BPAY Biller?	3	What's a Check Digit?®	6
Where can I get regular updates on what's happening with BPAY?	3	How do I know which Check Digit Routine is right for me?®	6
Using BPAY	4	What are my minimum and maximum CRN lengths?⑧	7
Do I have to accept payments from credit cards if I	4	I don't use CRNs at the moment – how do I generate them?	7
offer BPAY?	т	I use existing customer numbers that are already allocated	7
Do I need to have a minimum number of payments received per month to access BPAY?	4	to my customers, but they don't have a Check Digit. Can I use these numbers as my CRNs?	
How much does BPAY cost?	4	I use existing customer numbers with Check Digits that are	7
How will I receive the funds from BPAY Payments?③	4	numbers as my CRNs?	
When will I receive reporting for BPAY payments made by	4	How do I know if my CRN's are going to work?	7
my customers and what happens when my customers pay me on a weekend or public holiday?		What happens if the bill payer inputs an incorrect CRN when making a payment to me?	7
What types of reports are available?⑤	4	Will my accounting software create CRN's for me?	7
How do I receive my reporting?⑤	5	· · ·	_
Will I receive reporting if there are no transactions on a particular day?	5	Invoice set up Why do I need to use the BPAY logo on my invoice?	7 7
What happens if there's a error with a payment?	5	What information do I need to include on my invoice?	7
What happens if I can't identify a received payment?	5	What help is available to me to create or update	7
What if a customer contacts me with a query about	5	my invoice?	7
a bill payment made via BPAY, but I can't find the details in my report?		How can I let my customers know that they can pay with BPAY?	7
Onboarding	6	What are the implications for my business if I don't comply with the BPAY brand guidelines?	8
How do I find out my Biller Code?②	6	Where can I go for more support?	0
Do I need to get a new Biller Code if I have an existing one with another financial institution? ^②	6	Appendix A – Payment Reversal Form	o 9
What are minimum and maximum payment limits?	6	Appendix B – BPAY Remittance Report (BRR)	10
		Appendix C – BPAY Remittance Statement (BRS)	11
		Appendix D – BPAY Remittance File (BRS)	12

Introduction

NAB BPAY Biller offers a convenient way for you to receive and reconcile payments from your customers while receiving cleared funds into your account.

We suggest reading this guide along with the BPAY Biller Agreement. The BPAY Biller Agreement sets out the terms and conditions that apply to your facility.

If you have any questions or need help completing your application form, you can get in touch with us using the details in the **Support and Changes** section.

How does BPAY work?

The NAB BPAY service has five major components:



Payment Lodgement

Your customer must be registered for phone or internet banking with their BPAY participating financial institution.

Payment Authorisation

- The biller code and customer reference numbers entered by your customer are validated against the parameters you've selected for your facility. The payment is only allowed to proceed if the information entered is consistent with the parameters.
- Your customer will only be issued with a receipt number if the payment is authorised.
- Your customer may also confirm payment by reviewing the statement entry on their account the exact description will vary between financial institutions.



Payment Processing

- Payments lodged at all BPAY participating financial institutions are consolidated and distributed by the Central Interchange Processor (CIP).
- Cut-off times vary between financial institutions but are approximately 5.00pm AEST/AEDT. If your customer pays after their financial institution's cut-off time, their payment will be processed the following banking business day.

Funds Collection

When payments are received, your organisation will receive one bulk credit per biller code to your nominated account for each banking business day. For more information, go to **How do I receive the funds from BPAY Payments?**

$\overline{\mathbb{V}}$	

Remittance Delivery

You'll receive reporting to help you with reconciliation. For more information, go to **Will I receive any** reporting for the BPAY payments made by my customers?

Where can I find my legal obligations as a BPAY Biller?

Your obligations as a BPAY Biller are outlined in the terms and conditions within your Letter of Offer, BPAY Biller Agreement and NAB Merchant Agreement.

What else should I consider as I become a BPAY Biller?

Before your organisation becomes an active BPAY biller, it's important that your customer service areas know how BPAY works, your BPAY Biller Code and location of the customer reference number on your invoices.

Where can I get regular updates on what's happening with BPAY?

You can stay up-to-date with the latest BPAY news at www.bpaybanter.com.au.

Using BPAY

Do I have to accept payments from credit cards if I offer BPAY?

No. You can control the payment methods available to your customers and enable them to pay you via savings or cheque accounts only, or both their savings/cheque accounts and their Visa and Mastercard credit card accounts.

Do I need to have a minimum number of payments received per month to access BPAY?

No, there's no minimum number of payments per month. Talk to your NAB specialist to discuss if BPAY is cost effective for your business.

How much does BPAY cost?

Schedule 2 in your Biller Agreement has details of your fee structure.

How will I receive the funds from BPAY Payments?

Your organisation receives one bulk credit to your nominated account per biller code for each banking business day when payments are received. Proceeds will be credited to your NAB account overnight and the value will be dated the same business day the payment was made. These cleared funds will be available for immediate withdrawal.

If your credit account isn't with NAB, there will be at least one additional banking business day's delay in delivery of your funds while the money is transferred to your financial institution.

When will I receive reporting for BPAY payments made by my customers and what happens when my customers pay me on a weekend or public holiday?

We'll provide you with files detailing every transaction each banking business day. The Biller Remittance Report (BRR) and the Biller Remittance File (BRF) contain the detail on each of the transactions, but in two different formats.

Transactions lodged on a Saturday, Sunday, public holiday or after the cut-off time will appear on your BRR and BRF file/report generated the following banking business day. They'll be delivered to you via your chosen electronic channel method on the subsequent banking business day (eg. Saturday, Sunday and Monday transactions will appear together in Monday's BRR and BRF, which are delivered to you electronically Tuesday morning).

What types of reports are available?

Report Name	Description
Biller Remittance Report (BRR)	Provides details of transactions in an easy-to-read report that you can also print.
Biller Remittance File (BRF)	A flat ASCII file suitable for importing into your accounting software.
Biller Remittance Statement (BRS)	In addition to your daily remittance reports, you'll be sent a monthly Biller Remittance Statement. This will act as a tax invoice for the monthly transaction fees associated with this service. The report is suitable for printing.

Here's an example of the type of file name used in the above reports:

NNNNNN_YYMMDD.BRR NNNNNN = Biller code YY = year DD = day of the month MM = month .BRR = Biller Remittance Report .BRF = Biller Remittance File .BRS = Biller Remittance Statement

For example, the files detailing payments made on 10 April 2017 were named NNNNN_100417.BRR and NNNNN_100417. BRF. NAB Connect file names are constructed with the Biller Code, date and file extension.

You can review the file specifications and view sample files at nab.com.au/nabconnectfileformats.

How do I receive my reporting?

All of the reports outlined are available on NAB Connect and NAB Direct Link. However, please discuss with your implementation manager if you'd like to use NAB Transact in conjunction with your BPAY facility, as the file formats are different and the Biller Remittance Statement (.BRS file) isn't available.

Will I receive reporting if there are no transactions on a particular day?

You'll receive a report even if you don't receive a transaction on a particular day. This is known as a 'nil payments report'.

What happens if there's an error with a payment?

There are two types of errors that could occur with BPAY Payments:

1. Error from the bill payer

- In most cases, payer institutions make sure that the payment details are repeated back to your customer for confirmation before the transaction is processed. This is to minimise errors due to payment details being incorrectly entered.
- If your customer has incorrectly entered their customer reference number, BPAY Biller Code or payment amount and the payment is processed, your customer will need to contact their financial institution to arrange for the error to be corrected.
- Once approved, your customer's financial institution will send an instruction for an error correction to reimburse your customer for the error. This will result in an adjustment to your nominated account for the original payment amount.
- Please refer to the BPAY Biller Agreement if there's an error in a payment. You'll receive notice of all error correction instructions passed via your daily biller information file.

2. Error in payment instructions or biller information file

Sometimes, payment instructions may be initiated in error by a payer institution or the Central Interchange Processor (CIP), or included in error by a biller institution in a biller information file. For example:

- A payer institution sends the same file containing payment instructions to the CIP twice.
- The CIP generates and sends a biller institution the same biller details file twice.
- A biller institution generates and sends the biller the same biller information file twice.

For the two types of errors above, the erroneous payment must be corrected through a reversal instruction by the payer or biller institution (as appropriate). Erroneous payment instructions may not necessarily require an adjustment to the payer's bank account. A set of governing terms and conditions have been developed by the BPAY scheme to address such reversals. Please refer to your BPAY Biller Agreement for further details.

What happens if I can't identify a received payment?

If you can't identify a Customer Reference Number, we can reverse the transaction back to the payer institution. To request a reversal, complete the Payment Reversal Form in Appendix A of this document.

What if a customer contacts me with a query about a bill payment made via BPAY, but I can't find the details in my report?

If you can't locate the details of their payment in your reporting, refer your customer to their financial institution where the bill payment was made. The customer's financial institution will locate the cause of the problem (eg. the customer sent the bill payment to the wrong biller) and, where possible, take action to resolve it.

Onboarding

How do I find out my Biller Code?

Your implementation manager will provide you your Biller Code when your facility is approved and established.

Do I need to get a new Biller Code if I have an existing one with another financial institution?

No, you can transfer your existing Biller Code to NAB. We'll ask you to provide us with a Transfer of Sponsorship to allow us to do this.

What are minimum and maximum payment limits?

As part of your BPAY Biller Code setup, you'll need to nominate the minimum and maximum payment amounts that you'd like to accept from your customers. This is a limit per payment, not a limit per day. You can change your set limits at any time.

Some questions to help you decide on the appropriate limits for your business include:

- What's the largest invoice I'd usually send to my customers?
- Do large invoices occur on a regular basis?

Customer Reference Numbers

What is a Customer Reference Number (CRN) and why is it important?

A CRN is a unique number allocated to a customer's invoice that identifies the account to be paid. When your customers make their bill payment via their phone or online banking, they must include a CRN on the transaction. We'll then forward you this information to help with your reconciliation.

The CRN can be the number that your organisation currently uses to uniquely identify each of your customers, such as an invoice number, property number, account number or customer number.

CRNs must be:

- Numeric only (no symbols or alpha characters).
- Have an approved Check Digit (and validation routine, if applicable). Go to What's a Check Digit? for more information.
- A maximum of 20 digits in length. You can choose to reduce the length of your current CRNs to make the bill payment process quicker and easier for your customers.

As part of the registration process, you must provide us with at least six valid CRNs. You can have CRNs of different lengths but at least six valid samples must be provided for each length. Your application can't be approved until these numbers are verified.

What's a Check Digit?

The Check Digit is the last digit of a CRN and is the result of a mathematical formula (a Check Digit Routine) that's calculated using the actual CRN.

There are numerous Check Digit Routines available for your use, but to make things simpler we'll give you access to a CRN Generator Tool that will help you create Check Digits on a Mod10 Version 01 routine.

Example: if you customer's invoice reference is 123456, the Check Digit is 6 (based on a Mod10 Version 01 Check Digit Routine). So your customer will enter 1234566 while making their payment to you.

How do I know which Check Digit Routine is right for me?

There are many acceptable routines available for use, however we'll give you the tools to easily use the Mod10 Version 01 routine if you don't currently use a routine. You can discuss the use of other routines with your implementation manager.

What are my minimum and maximum CRN lengths?

You can tell us what length your CRNs will be and you can ask us to change them at any time, but there are a few things to keep in mind:

- The CRN length includes the Check Digit.
- Before the Check Digit is added, each CRN must be a minimum of 1 digit and a maximum of 19 digits. Once you've added the Check Digit, the CRN will be a minimum of 2 digits and a maximum of 20 digits.
- You can have more than one CRN length.

I don't use CRNs at the moment - how do I generate them?

We'll give you access to a CRN Generator Tool which will help you to create your CRNs and the Check Digit on the end.

I use existing customer numbers that are already allocated to my customers, but they don't have a Check Digit. Can I use these numbers as my CRNs?

You can use the existing customer numbers as long as the reference is numeric only, but you'll need to add a Check Digit to the end of the number. The CRN Tool Generator can help generate the Check Digit.

I use existing customer numbers with Check Digits that are already allocated to my customers. Can I use these numbers as my CRNs?

Yes. As long as the Check Digit Routine you're using is already accepted, you can continue to use these existing references. Your implementation manager can confirm if the routine you're using is acceptable.

How do I know if my CRNs are going to work?

We'll check some sample CRNs for you as part of the implementation process.

What happens if the bill payer inputs an incorrect CRN when making a payment to me?

When a bill payer completes a BPAY transaction, there are two checks completed on the CRN. First, the presence of a correct Check Digit, and second, the length of the CRN. We'll register your Biller Code with your preferred set up on these two parameters with the BPAY Scheme. This means that these checks will be conducted consistently across all financial institutions that allow their customers to make BPAY payments and minimises the risk of incorrect CRNs.

Will my accounting software create CRNs for me?

Some accounting software does have the ability to create CRNs with Check Digits. Check with your provider to see if this applies to you.

Invoice set up

Why do I need to use the BPAY logo on my invoice?

The BPAY logo lets your customers know they can pay using Australia's largest bill payment service. As a BPAY Biller you must display the correct logo on all mediums (invoices, online, applications, etc).

What information do I need to include on my invoice?

As a BPAY Biller, there are key things you need to include on your invoice to meet the BPAY Brand Guidelines.

These are the BPAY logo, the Biller Code and CRN, the associated wording explaining how to use BPAY, the BPAY registered trademark and a reference to the BPAY website. For more information and examples, refer to the preferred bill configurations in the Identity Standards section of your BPAY Biller Agreement.

What help is available to me to create or update my invoice?

During the onboarding process, we'll help you make sure you're meeting the required BPAY Brand Guidelines when you create your invoices.

As a new biller you have two options when creating your new invoices:

- 1. Using your existing invoice template and adding the BPAY information.
- 2. Using one of our template invoices. Your implementation manager can send you the templates.

For more information during this process, refer to the BPAY Payments and Standards Manual in your BPAY Biller Agreement and the BPAY Brand Guidelines (where you can download logos and drag and drop them straight into your invoices).

How can I let my customers know that they can pay with BPAY?

Becoming a BPAY Biller means more of your customers can now pay securely through their own phone or online banking. In addition to adding the BPAY logo and information to your invoices and bills, you may want to let your customers know about this new way to pay. BPAY provides a range of content and marketing support for you to add to your invoices, emails, applications or website. You can access this information on the BPAY website. We're also here to support you through the process.

What are the implications for my business if I don't comply with the BPAY brand guidelines?

Becoming a BPAY Biller means you'll need to comply with the Brand and Identity Standards outlined in your Biller Agreement. BPAY routinely asks us to check that our billers are compliant with the standards. If a check takes place and BPAY finds your business to be in breach of the standards, your business may be asked to withdraw invoices from the marketplace and replace out-dated content at your own cost. This can be a costly and time-consuming exercise.

Where can I go for more support?

During Onboarding

Your dedicated implementation manager will support you during the onboarding process and will be your point of contact until you're established as a NAB BPAY Biller.

After Onboarding

NAB Connect

1300 888 413 (within Australia) or +61 3 8641 9930 (outside Australia)

Monday to Friday 7.30am – 8.00pm (AEST/AEDT) Saturday 9.00am – 2.00pm (AEST/AEDT)

NAB Transact

1300 369 852, Option 3 (within Australia) Monday to Friday 8.00am – 8.00pm (AEST/AEDT) Email: **support@transact.nab.com.au**

NAB Direct Link

1300 888 413 (within Australia) or +61 3 8641 9930 (outside Australia)

Monday to Friday 7.30am – 8.00pm (AEST/AEDT)

Saturday 9.00am - 2.00pm (AEST/AEDT)

Need help with unidentified or disputed payments?

Email your completed Payment Reversal Form to **BPAY.Biller.Return@nab.com.au**. You can find a Payment Reversal Form in Appendix A of this guide.

Appendix A

Payment Reversal Form

You can copy this form and email it to Digitial Disputes BPAY at **BPAY.Biller.Return@nab.com.au**. If you have multiple returns, you can also email this address to request a bulk return sheet.

This form is only for returning payments that have been received to your NAB BPAY Biller Code. To request the reversal of an outbound BPAY payment, call NAB Business Servicing on 13 10 12 from Monday to Friday, 8.00am – 8.00pm (AEST/AEDT), Saturday to Sunday, 9.00am – 6.00pm (AEST/AEDT), or talk to your Banker.

	Digital Disputes BPAY		
	Email: BPAY.Biller.Ret	urn@nab.com.au	
From:	Biller Code:	Biller Name:	
	Contact Name:		
	Phone Number:		
	Email:		
	Request to Reverse a I	BPAY Payment: Customer Reference Number (CRN):	
	/ /		
	Transaction Reference	Number (TRN):	Transaction Amount:
			\$
	Reason for Reversal (1	ick only one):	
	Duplicated Paymen	t	
	Incorrect CRN		
	Incorrect Biller Cod	e	
	Overpayment		
	Partial Refund		

Partial Refund Amount: \$______

Appendix B

BPAY Remittance Report (BRR)

This daily report enables easy identification of individual transactions and provides you with a full summary including transaction reference numbers to assist in reconciliation.

AS AT: 01 DEC 2019 RUN TIME: 15:57:55

Sample *.brr file

 BILLER CODE:
 0000187536

 BILLER:
 SAMPLE BILLER NAME

 A/C TO CREDIT:
 092-009 000999999

Customer Reference Number	Payment Instruction Type	Err Corr Reason*	Payment Amount	Payment Type**	Transaction Ref NBR/ Original Ref NBR	Payment Date	Payment Time	Settlement Date
30677309603	Payment	000	\$100.00	001	NAB201202203052795923	20120608	19:37:02	20120611
30677309603	Payment	000	\$100.00	001	NAB201202203052795923	20120608	19:37:02	20120611
30677309603	Payment	000	\$100.00	001	NAB201202203052795923	20120608	19:37:02	20120611
30677309603	Payment	000	\$100.00	001	NAB201202203052795923	20120608	19:37:02	20120611
30677309603	Payment	000	\$100.00	001	NAB201202203052795923	20120608	19:37:02	20120611
30677309603	Payment	000	\$100.00	001	NAB201202203052795923	20120608	19:37:02	20120611
30677309603	Payment	000	\$100.00	001	NAB201202203052795923	20120608	19:37:02	20120611
30677309603	Error Correction	006	\$100.00DB	001	NAB201202203052795923	20120608	19:37:02	20120611
30677309603	Error Correction	005	\$100.00DB	001	NAB201202203052795923	20120608	19:37:02	20120611
30677309603	Error Correction	004	\$100.00DB	001	NAB201202203052795923	20120608	19:37:02	20120611
30677309603	Error Correction	003	\$100.00DB	001	NAB201202203052795923	20120608	19:37:02	20120611
30677309603	Error Correction	002	\$100.00DB	001	NAB201202203052795923	20120608	19:37:02	20120611

Totals	
Number of Payments	7
Amount of Payments	\$700.00
Number of Error Corrections	5
Amount of Error Corrections	\$500.00DB
Number of Reversals	0
Amount of Reversals	\$0.00
Settlement Amount	\$200.00

Appendix C

BPAY Remittance Statement (BRS)

Sample *.brs file

23-10-2008 PAGE 1 21:34:38

TAX INVOICE

Supplier:	NATIONAL AUSTRALIA BANK LIMITED
	ABN 12 004 044 937

Recipient: LONG BILLER NAME BPAY BILLER CODE: 0000BILCDE ADDRESS LINE ONE ADDRESS LINE TWO CITY STATE PCDE

		=========	==========	==========
STATEMENT TOTAL	20	\$5.91	\$0.59	\$6.50
NATIONAL BPAY CHARGE	20	\$5.91	\$0.59	\$6.50
DESCRIPTION	QTY	NET FEE	PLUS GST	GROSS FEE

AN AMOUNT OF \$6.50 HAS BEEN DEBITED FROM YOUR ACCOUNT 083999-999999999

END OF REPORT

Appendix D

BPAY Remittance File

File Layout - Header Record

Description	Type (Length)	Values / Notes
Record Type	9(2)	A code '00' indicating the header record.
Biller Code	9(10)	The CIP assigned number denoting the Biller, 9 digits followed by a Luhn modulus 10 Check Digit (calculated on the preceding 9 digits).
Biller Short Name	X(20)	The short description for the Biller.
Biller Credit BSB	9(6)	The BSB of the account to be credited for the value of transactions in this file.
Biller Credit Account	9(9)	The account to be credited for the value of transactions in this file.
File Creation Date	9(8)	Format YYYYMMDD. The local date of file creation.
File Creation Time	9(6)	Format HHMMSS. The local time of file creation.
Filler	9(15)	9(158)
TOTAL LENGTH	(219)	

Appendix D (continued)

File Layout - Header Record

Description	Type (Length)	Values / Notes
Record Type	9(2)	A code '50' indicating the header record.
Biller Code	9(10)	The CIP assigned number denoting the Biller, 9 digits followed by a Luhn modulus 10 Check Digit (calculated on the preceding 9 digits).
Customer Reference Number	9(20)	The number by which the Biller identifies the account that is being paid. The last digit is assumed to be a Check Digit. Left justified, space filled.
Payment Instruction Type	9(2)	A code indicating the type of instruction; 05 = Payment, 15 = Error Correction, 25 = Reversal.
Transaction Reference Number	X(21)	A unique reference number generated by the Payer Institution. It's structured so that the first three characters are the Payer Code, the next eight are YYYYMMDD (the date the payment was made), and the next set of characters are the reference number provided to the Payer on completion of a payment. The use of any remaining space in the field is at the discretion of the Payer Institution.
Original Reference Number	X(21)	The unique reference code generated by the Payer Institution for the original Payment instruction (eg. this field indicates the unique Reference Number of a BPAY instruction to be reversed out). This is a mandatory field where an error reference is relevant (ie. Error Corrections, Reversals and any form of re- submission), but the CIP validation won't attempt to match this reference number with the original transaction.
Error Correction Reason	9(3)	For Error Correction Transactions, a code indicating the reason for generating the Error Correction. Code values to be advised. Zero if not an Error Correction.
Amount	9(12)	The amount of the Payment/Error Correction, 2 digits of cents implied (field length aligned with Visa monetary format).
Payment Date	9(8)	The AEST date that the Payment or Error Correction was accepted by the Payer Institution, in YYYYMMDD format.
Payment Time	9(6)	The AEST time that the Payment or Error Correction was accepted by the Payer Institution, in HHMMSS format.
Settlement Date	9(8)	The date on which the Payer Institution expects the Payment to be entered into BPAY Settlement, in YYYYMMDD format.
Filler	X(106)	
TOTAL LENGTH	(219)	

Appendix D (continued)

File Layout - Header Record

Description	Type (Length)	Values / Notes
Record Type	9(2)	A code '99' indicating the trailer record.
Biller Code	9(10)	The CIP assigned number denoting the Biller, 9 digits followed by a Luhn modulus 10 Check Digit (calculated on the preceding 9 digits).
Number of Payments	S9(9)	The number of BPAY instructions in the file.
Amount of Payments	S9(15)	The amount of BPAY instructions in the file.
Number of Error Corrections	S9(9)	The number of Error Correction Instructions in the file.
Amount of Error Corrections	S9(15)	The amount of Error Correction Instructions in the file.
Number of Reversals	S9(9)	The number of Reversals in the file.
Amount of Reversals	S9(15)	The amount of Reversals in the file.
Settlement Amount	S9(15)	Net amount of Payments minus Error Corrections minus Reversals.
Filler	S9(120)	
TOTAL LENGTH	(219)	

The trailer record amount values in the output BRF files can be interpreted as a numeric field followed by a positive or negative sign. Remember that the amount fields have two (2) digit cents implied.

156.78 could be viewed as 00000000015678 on the detail record. However, the amount field in the trailer record is signed and can be interpreted as 00000000015678+, for credit amounts and 0000000015678-, for debit amounts.

The last two (2) characters in the fields, the number followed by the + (plus) or – (minus) sign, can then be viewed as one (1) character:

"0+" = "{" "0-" = "}" "1+" = "A" "1-" = "J" "2+" = "B" "2-" = "K" "3+" = "C" "3-" = "L" "4+" = "D" "4-" = "M" "5+" = "E" "5-" = "N" "6+" = "F" "6-" = "O" "7+" = "G" "7-" = "P" "8+" = "H" "8-" = "Q" "9+" = "I" "9-" = "R"

This means that "0000000001567H" is equal to 0000000015678+, and because of the implied two (2) digit cents, is equal to 156.78 credit.

On the other hand, "0000000001567Q" is equal to 00000000015678-, and because of the implied two (2) digit cents, is equal to 156.78 debit.

The signed field is necessary in the trailer record because the Settlement Amount field may be positive or negative (credit or debit).

Remember, Settlement Amount = Payment amount - Error correction amount - Reversal amount.