

# Barcode Quality Program Guidelines Manual

Welcome to the Barcode Quality Program (BQP) Guidelines manual version 3.0 issue 1.1. This document covers the objectives, policies and procedures of the BQP.

The following major services are available

- 1. Statement of Capability program for the generation of the data Content that forms the Barcode;
- 2. Statement of Capability program for the Printing of Barcodes.
- 3. Preliminary barcode check; and
- 4. Technical and general support services.

Australia Post offers BQP as a voluntary service. It is not a prerequisite for customers to obtain postage discounts, nor will it provide right of passage for mail lodged from a BQP capable organisation.



# Introduction

Barcoded mail is the key to a broader Quality Addressing program, the primary benefits of which is an improvement in the efficiency of mail processing and delivery and a reduction in postage prices.

The purpose of this document is to describe all the rules and obligations of generating the numerical content for the barcodes and/or printing barcodes in accordance with Australia Post's current barcode standards — hence the Barcode Quality Program (BQP).

The key numbers used to create barcodes are known as Delivery Point Identifiers (DPIDs) and are assigned uniquely to each address by Australia Post. DPIDs can only be obtained through the associated Address Matching Approval System (AMAS) software products and program which matches customer addresses to obtain the corresponding DPID which then form part of the printed barcode

The following documents published by Australia Post will further assist customers in their production of correct barcodes:

- Customer Barcoding Technical Specifications
- A Guide To Printing the 4-State Barcode

Copies of these documents may be obtained by sending an email to: <a href="mailto:bqp.help@auspost.com.au">bqp.help@auspost.com.au</a>
or Download from our web site: <a href="http://auspost.com.au/business/barcode-quality-program.html">http://auspost.com.au/business/barcode-quality-program.html</a>

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# 1 Contact Information

Our contact details are as follows:

Email: <a href="mailto:bqp.help@auspost.com.au">bqp.help@auspost.com.au</a>

Web: www.auspost.com.au or http://auspost.com.au/business/barcode-quality-program.html

Mail:

BARCODE QUALITY PROGRAM AUSTRALIA POST GPO BOX 1777 MELBOURNE VIC 3001

# 2 Vision, Mission and Objectives Statements

#### 2.1 Vision Statement

Through a world's best practice barcode quality assurance program, all 4-state barcodes on mail meet the Australia Post Customer Barcoding Technical Specifications.

## 2.2 Mission Statement

To facilitate and encourage the use of the Barcode Quality Program to promote

- the quality of the 4-state barcodes; and
- the ongoing development of 4-state barcode solutions

# 2.3 BQP Objectives

The objectives of the BQP are to:

- Provide an environment which encourages and supports participation in BQP;
- Ensure that all BQP activities are performed in a consistent manner;
- Test the capability of equipment to correctly generate and print barcodes; and
- Support mail houses, aggregators and mail generators to self test their production of barcoded mail as part of their standard production processes.

# 3 Quality Policy Statement

A goal of the BQP is to ensure that all BQP activities are performed in a suitably consistent and repeatable manner leading to predictable outcomes.

To achieve this quality goal, the BQP will:

- satisfy customers by providing capability testing and supporting services that are:
  - suitable to the needs of BQP participants;
  - o provided equally to all participants without favour;
  - o of predictable quality; and
  - o provided in a timely manner.
- be open to ideas and concerns of BQP participants;
- be committed to continually improving our processes; and
- provide all staff with the opportunity to accept responsibility for quality and continuous improvement.



# 4 The Barcode Quality Program

# 4.1 The Scope of the BQP Guidelines Manual

The BQP Guidelines manual has been designed to assist organisations that wish to validate their capability to correctly —

- Generate the numeric content that makes up the barcode; and
- Print the barcodes to specifications.

These Guidelines describe the rules and obligations for attaining your formal Statement of Capability, as well as the technical and general support services that are available from the BQP

Further information on BQP can be obtained by contacting the Technical Support Centre, details listed in the "Contact Information" chapter of these guidelines.

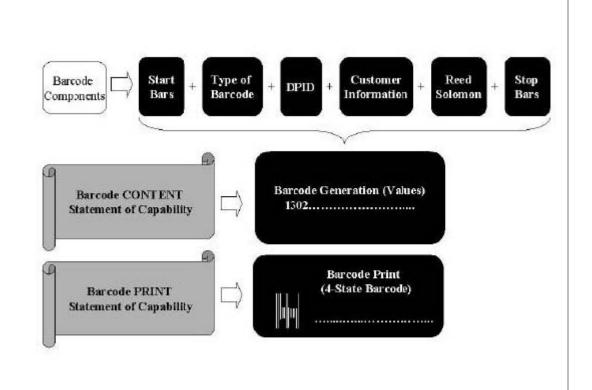
Additionally, information is also available on –

- The Assignment of the DPIDs (through the Address Matching Approval program (AMAS),
- The alternative assignment and printing of DPIDs through AMAS for MLOCRs; and
- The procedures for lodging mail.



# 4.2 BQP Statements of Capability Overview

The key objective of BQP is to ensure barcodes presented during lodgement meet Australia Post's 4State customer barcode acceptance specifications.



# 4.3 Barcode Statements of Capability

BQP offers a Statement of Capability process to evaluate the ability of software to generate barcodes, and printers to print them in accordance with POSTs specifications, so that they are capable of passing Australia Post's lodgement acceptance checks and ultimately be read accurately by the Multi Line Optical Character Recognition (MLOCR) and Barcode Sorter (BCS) equipment.

The two separate BQP Statement of Capability tests are:

- 1. Barcode Content. Tests the accuracy of numerical information that becomes the barcode translated from the DPID and customer information (if applicable), and other input parameters; and
- 2. Barcode Print Tests that barcodes printed by specific printing equipment are capable of meeting Australia Post standards.

Participants are issued with the relevant certificate upon successful completion.



# 4.4 Gaining a BQP Statement of Capability

You may join the Barcode Quality Program by completing a Registration Form.

Registration can be for one or both of the –

- CONTENT or
- 2. PRINT services.

For the CONTENT program only, you will be issued with a small Self Test File for your own self assessment of readiness.

When you are ready to proceed, you can request POST to issue you with either one or both of the —

- 1. CONTENT Test File, or the
- 2. PRINT Test File.

The results of your test will then be scored by POST and if successful, your corresponding Statement of Capability will be issued.

#### 4.5 Other BQP Services

The key objective of BQP is to ensure barcodes presented during lodgement meet Australia Post's 4-State customer barcode specifications.

# 4.6 Self Test Barcode Quality Tools

Barcode quality tools have been developed to check barcode quality at lodgement acceptance (e.g. overlays, hand held scanners). The plastic overlay (Customer Barcode Check Template) is commercially available to customers for self use during mail print production.

Note: The current software tools are available to BMP (Bulk Mail Partners) participants only, please contact the Barcode Quality Program for requirements and costs if required.

## 4.7 BQP Operational Policies

Australia Post has chosen to provide the BQP at no cost to participants and as a voluntary service. It is not a prerequisite for customers to obtain postage discounts, nor will it provide right of passage for mail lodged from a BQP capable organisation.

There will be no requirement for BQP participants to reapply annually. However, capability testing will apply only to a specific software / font / printer configuration. Any changes to barcode generating software, fonts or printers may render the existing Statement of Capability obsolete.

Upon any revision of the 4-State Customer Barcode Technical Specifications, Australia Post will contact and inform all BQP participants of impending changes. These changes to the specifications may render the existing Statement of Capability obsolete.

The BQP process is free honesty based process; the value in this program will be gained by those that take advantage of the assistance available from Australia Post.

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### 4.8 Barcode Components Overview

The key component of the barcode is the Delivery Point Identifier (DPID), a unique 8 digit number, representing the physical delivery address. It is this number that forms the key component of the barcode. The DPID can only be appended to address records using software approved by the Australia Post - Address Matching Approval System (AMAS) program. The DPID and other information is then used to generate a string with all the barcode components represented as one of the 4-state values. As a final step, this string of bar state values is sent to a printer and converted into their associated barcode symbols.

The 4-State barcode comprises four types of bars (the four "states"), each of which has a distinct name, value and barcode symbol.

The 4-State barcode was selected because of the following advantages:

- Ease of readability through envelope window faces
- Barcodes can be printed on various printers used in the mailing industry (e.g. Laser, ink jet, etc
- Extensive error correction functionality (expanded below)
- The 4-State barcode is more compact relative to other barcode types

Besides the encoding of the DPID, a number of other elements are added to the customer barcode.

Each barcode contains the following bars and fields:

- Start bars
- Format Control Code (FCC) Field
- DPID
- Filler Bar (standard customer barcodes only)
- Customer Information Field (type 2 & 3 customer barcodes only)
- Reed Solomon Error Correction Bars
- Stop Bars

A special feature of the barcode is the Reed Solomon error correction algorithm to improve robustness.

Reed Solomon parity is a particular implementation of error correction that has found widespread application, and it is the system used by Australia Post to maximise the read rate of barcoded address information.

By using the error correction bars, unreadable bars representing the DPID, FCC or Customer Information can be regenerated.

# 5 **BQP Registration**

# 5.1 How do I obtain a registration form?

BQP Registration Forms can be found either in the following locations:

- Appendix 1, or
- Web site , or
- contact POST as per the "Contact Information" chapter of this document.

# 5.2 What's in the registration form?

The BQP registration form requests your company and product details. These details are recorded by Australia Post as part of the BQP quality management procedures.

On the back of your registration form are the Terms & Conditions for the Australia Post Barcode Quality Program, which can also be found in *Appendix 2*.

Please note that by lodging the BQP registration form, the BQP applicant accepts the terms and conditions of the program as advised on the reverse side of the form and detailed on the AUSTRALIA POST Website.

## 5.3 Where do I send the completed Registration form?

When you have read and accepted the BQP Terms & Conditions please sign the BQP registration form and send it to the address listed in the "Contact Information" chapter of these guidelines.

# 5.4 How do I obtain copy of the BQP Guidelines Manual?

A copy of the BQP Guidelines Manual (in PDF format) can be downloaded from the AUSTRALIA POST Web Site <a href="http://auspost.com.au/business/barcode-quality-program.html">http://auspost.com.au/business/barcode-quality-program.html</a>

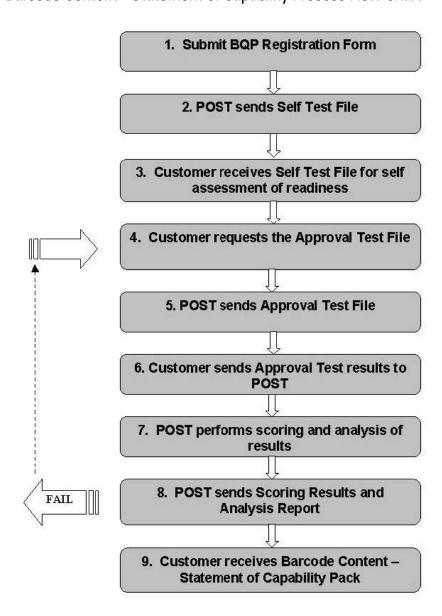


# 6 BQP Barcode Content - Statement of Capability

BQP offers a Barcode Content - Statement of Capability process to test that, for a range of participant products, the accuracy of information contained within the barcode has been correctly translated from the DPID, customer information (if applicable) and other input parameters.

The diagram below shows the sequential steps associated with obtaining the BQP Barcode Content - Statement of Capability. Detailed explanations of each step follow.

# 6.1 Barcode Content - Statement of Capability Process Flow Chart





# 6.2 Step 1 – Submit BQP Registration Form

For further detailed information regarding the registration form, please refer to the "BQP Registration" chapter in these guidelines.

What happens after I have sent the Registration Form?

Once Australia Post has received your completed and signed registration form for Barcode Content – Statement of Capability, you will receive the Self Test File (STF).

## 6.3 Step 2 – Post sends Self Test File

It will be provided to participants by e-mail

#### 6.4 Step 3 — Receipt of the Self Test File

# 6.4.1 What is the purpose of the Self Test File?

The Self Test File is designed to assist product developers in the development of barcode content logic. As a product developer, the Self Test File will enable you to measure and diagnose the capability of your product to generate, from the DPID and other input parameters, correctly translated bar state values (i.e. the 0,1,2,3's that are later converted into associated barcode characters).

The Self Test File contains:

- sample addresses that simulate customer "input details" records;
- The DPID associated with each sample address;
- The Format Control Code (FCC) which defines the length of the barcode;
- Customer Information field (for customer barcodes type 2 and 3)
- "Answer Details", being expected bar state values generated from the Format Control Code, DPID and Free Form information fields. Note that correct Reed Solomon Error Co-efficients are included in these bar state values.

The Self Test File will supply the "answer details" where a valid barcode can be generated from information provided, or "no details" where no valid barcode can be generated. "No details" is defined as one ASCII space character.

Along with the Self Test File you will also receive an Error Types file which provides an error description for each record where a barcode could not be generated in the Self Test File. The Error Types file contains two fields, the record number from the Self Test File and an error description.

In this way, you can use the Self Test File to self assess your product for its ability to translate Format Control Codes, DPIDs and Customer Information fields to their associated bar state values in accordance with the BQP Barcode Content Generation Rules.

The Self Test File is for your internal use and self-assessment. Australia Post will not score your Self Test File results.

It is important to remember that passing the Self Test File does not warrant a pass in the Barcode Content - Statement of Capability Test.

## 6.4.2 What is the structure of the Self Test File?

All BQP participants will receive the same information within the Self Test File. It will contain a number of test cases with corresponding answers. A full description of the structure of the Self Test File can be found in *Appendix 3 "Files Structures"*.

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#### 6.4.3 How frequently will Australia Post release versions of the Self Test File?

Australia Post will release new versions of the Self Test File at the start of each BQP cycle (ie each calender) and when a revision is made to the 4-State Customer Barcode Technical Specifications.

If a revision is made to the 4-State Customer Barcode Technical Specifications, all existing BQP participants would be informed of such an impending change and invited to resubmit for BQP capability testing and apply for an STF.

### 6.4.4 What categories of test will the Self Test File contain?

The Self Test File will contain two categories of tests. These are:

- Valid: where the generation of bar state values is expected
- Invalid: where no generation of bar state values is allowed

The ability of your software to correctly generate bar state values can be checked against the expected outcomes provided in the Self Test File.

For further detailed information regarding the barcode generation rules used in the Self Test File, please refer to the "Barcode Content Generation Rules" chapter in these guidelines.

#### 6.4.5 Where can I go for help?

All queries relating to the Self Test File should be directed to the Technical Support Centre (TSC). Please refer to the "Contact Information" chapter in these guidelines.

# 6.5 Step 4 – Requesting the Approval Test File

#### 6.5.1 What do I do when I am ready for the Content Test?

Once you have used the Self Test File to ascertain your own compliance you are then ready to request the Barcode Content - Statement of Capability testing. Please email to <a href="mailto:bqp.help@auspost.com.au">bqp.help@auspost.com.au</a> and request an Approval Test File (ATF). An Approval Test File will then be forwarded to you.

#### 6.5.2 What is the purpose of the Approval Test File?

The Approval Test File enables product developers to demonstrate, to Australia Post, that the accuracy of information contained within the barcode is correctly translated into bar state values. This is required in order to gain a Barcode Content - Statement of Capability.

### 6.5.3 What categories of tests will the Approval Test File contain?

The Approval Test File contains test categories that require answers to be provided by the barcode generation software. BQP will use the answers provided for scoring purposes.

The Approval Test File will contain two categories of tests. They are: Valid: where the generation of bar state values is expected Invalid: where no generation of bar state values is allowed

You will note that these categories are the same as for the Self Test File.



#### 6.5.4 What is the structure of the Approval Test File?

All BQP participants will receive unique ATF. A full description of the structure of the Approval Test File can be found in Appendix 3 "Files Structures".

Unlike the Self Test File, the Approval Test File does not contain any corresponding answers; instead it provides an empty field where you are required to insert your answers.

#### 6.5.5 How many Tests must I complete?

A Test in the BQP must be completed for each separate product version and hardware platform family. For example, if your product runs on MVS and Unix, then you are required to submit two Content Tests. However, BQP limits testing to families of platforms, Please refer to *Appendix 1* for further details.

Please refer to "Step 7 - Scoring, Results and Analysis Report" in these guidelines, for details on how BQP will score your Content Test.

# 6.5.6 Where can I go for help?

All queries relating to the Approval Test File should be directed to the Technical Support Centre (TSC). Please refer to the "Contact Information" chapter in these guidelines.

## 6.6 Step 5 – Post Sends the Approval Test File

It will be provided to participants by e-mail.

# 6.7 Step 6 – Send Content Results

What do I need to do after I receive the Approval Test File?

Upon receiving the Approval Test File, you must use your barcode generation product to:

- append the appropriate bar state values where valid barcode input fields are provided
- append a "space" where any invalid barcode input fields are found
- write them into the EXPECTED BAR VALUE STRING field

Please refer to *Appendix 3 "Files Structures"* for more details.

Please note that as part of its quality assurance processes, Australia Post may choose to have a representative present when you are running your Content Test.

When you have completed the Approval Test File process you are required to return it within 10 working days from the date of receipt of the Approval Test File.

Failure to return the above within the specified time frame will result in the attempt being voided. If this occurs, you will be able to re-apply for another Approval Test File.

Please note that the deadline for participants located outside Australia will be subject to individual negotiation to take into account delivery logistics.

# 6.8 Step 7 - Scoring, Results and Analysis Report

# 6.8.1 What happens after the ATF has been returned to Australia Post?

Upon receiving your Approval Test File, it will take up to 10 working days for Australia Post to score the tests and provide the results back to you.

### 6.8.2 What scoring system does Australia Post use?

The scoring of your returned Approval Test File is performed using software specifically developed by Australia Post in accordance with barcode generation rules. (see the "Barcode Content Generation Rules" chapter of these guidelines )

The scoring system provides the final results of the major tests undertaken in this stage.

### 6.8.3 What test types are available?

There are two test type categories:

- Valid Test Category
- Invalid Test Category

Each test type category has associated scoring rules that are numbered sequentially in each category.

#### 6.8.4 What are the testing criteria?

The Approval Test File consists of variable (and unknown to BQP participants) numbers of "Valid" and "Invalid" test addresses. The scoring rules for each test category are described in the following sections.

#### 6.8.5 Content Valid Test Scoring (CVS) Category Rule

CVS Rule 1 Return the expected bar state values string for 100% of the records comprising valid test cases.

#### 6.8.6 Content Invalid Test Scoring (CIS) Category Rule

CIS Rule 1 Return a blank (one ASCII "space" character) bar state value string for 100% of the records comprising invalid test cases.

#### 6.8.7 How does the scoring system work?

For the Content Valid Test Scoring (CVS) Category The scoring system will compare the bar state
values supplied by the BQP participant with the expected bar state values generated by internal
Australia Post scoring software.

If the bar state values supplied by the BQP participant agree with the expected bar state values, then the scoring system will mark the record as correct.

Conversely, if the bar state values supplied by the BQP participant disagree with the expected bar state values, then the scoring system will mark the record as incorrect.



 For the Content Invalid Test Scoring (CIS) Category For the Invalid Test Category, you are required to return one blank (ASCII "space" character) in the bar state value string.

If you return a blank (ASCII "space" character) bar state value, it will be scored as correct. If you return a non blank (non ASCII "space" character) bar state value, it will be scored as incorrect.

## 6.8.8 What score do I need to pass?

To pass the Barcode Content - Statement of Capability testing, 100% of test records must be scored as correct. This is because the barcode generation rules test a product algorithm. If the algorithm is correct, the bar state values for all test records will be generated correctly.

#### 6.8.9 What if I fail the Content Test?

You can re-apply for and resubmit the content test.

# 6.9 Step 8 – Send Scoring Results and Analysis Report

What do I receive after Australia Post scores my Approval Test File?

Having completed the scoring of your Approval Test File, Australia Post will send you a Performance Summary Report which details the overall evaluation of the returned Approval Test File.

# 6.10 Step 9 – BQP Barcode Content Statement of Capability

#### 6.10.1 What happens when I pass the Content Test?

You will receive, from Australia Post, a Barcode Content - Statement of Capability pack, which includes:

- The Barcode Content Statement of Capability document; and
- Access to technical support.

# 6.10.2 What is the BQP Barcode Content – Statement of Capability document?

The Barcode Content - Statement of Capability provides you with evidence that your product has passed Statement of Capability testing. You will note that your product details are displayed on the document. A sample Barcode Content - Statement of Capability document is shown in Appendix 4.

# 6.10.3 What technical and marketing material support will I receive?

Please refer to the "BQP Marketing Support Material" and "Technical Support Centre (TSC)" chapters in these guidelines for more information.

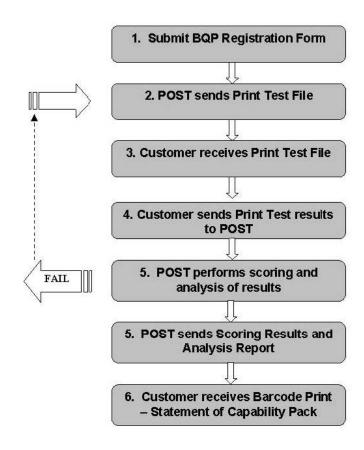
# 7 BQP Barcode Print - Statement of Capability

BQP offers a Barcode Print - Statement of Capability process to test that the quality of barcodes printed for a specified printer/ font combination is capable of passing Australia Post's customer barcoding acceptance criteria.

It should also be noted that, although passing Barcode Print Statement of Capability testing, Australia Post does not guarantee acceptance of barcoded letters at lodgement.

The diagram below shows the sequential steps for gaining BQP Barcode Print -Statement of Capability. Detailed explanations of each step follow.

# 7.1 BQP Barcode Print – Statement of Capability Process Flow Chart



# 7.2 Step 1 – Submit BQP Registration Form

For further detailed information regarding the registration form, please refer to the "BQP Registration" chapter in these guidelines.

What happens after I have sent the Registration Form?

Once Australia Post has received your completed and signed registration agreement, you will receive the Print Test File (PTF).

# 7.3 Step 2 – Post sends Print Test File

The file will be provided to participants by e-mail.

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# 7.4 Step 3 - Receipt of the Print Test File

# 7.4.1 What is the purpose of the Print Test File?

The Print Test File enables Barcode Print customers/printer vendors to demonstrate, to Australia Post, that a specified printer/font combination accurately translates and prints bar state values as their associated barcode characters and that the quality of barcodes printed is capable of passing Australia Post's customer barcoding acceptance criteria.

#### 7.4.2 What categories of tests will the Print Test File contain?

The Print Test File will only contain valid records.

Each Print Test File is unique and contains 30 test cases. Unlike the Self Test File and the Approval Test File, the Print Test File contains no answer field as scoring is based upon the physical attributes of the barcode printed from the information provided.

# 7.4.3 How many Print Tests must I complete?

A Print Test must be completed for each separate printer/font combination. For example, if you have a Windows True Type software font and your organisation has five printer models which it would like tested, then you would be required to submit five Print Tests.

Please refer to "Step 5 Scoring, Results and Analysis Report" in these guidelines, for details on how BQP will score your Print Test.

#### 7.4.4 What is the structure of the Print Test File?

A full description of the structure of the Approval Test File can be found in Appendix 3 "Files Structures".

#### 7.4.5 Where can I go for help?

All queries relating to the Print Test File should be directed to the Barcode Quality Program (BQP). Please refer to the "Contact Information" chapter in these guidelines.



# 7.5 Step 4 – Send Print Test Results

What do I need to do after I receive the Print Test File?

Upon receiving the Print Test File, you must use your barcode print equipment configuration to print the 30 records supplied. The records will include:

- Standard Barcodes;
- Customer Barcode Type 2; and
- Customer Barcode Type 3.

Please note that as part of its quality assurance processes, Australia Post may choose to have a representative present when you are running your Print Test File.

When you have completed the Print Test File process, you are required to return the following items within 10 working days from the date of receipt of the Print Test File:

30 Print Test File records printed either:

- Directly on the outside of an envelope;
- On a label which is adhered to an envelope; or
- On an insert that is sealed within a window faced envelope.

The medium used in printing the Print Test File should mirror the usual stock used by the printer. Note also that the speed of the printer should also reflect normal operating conditions.

The following rules should be followed for substrates used in the testing process:

- Envelopes should be plain white and range between the minimum and maximum small letter sizes as defined by Australia Post:
  - o Minimum 88 mm x 138mm
  - o Maximum 130 mm x 240 mm.
- Inserts must be plain white and use stock with a density of at least 60 gsm
- All spoils should be discarded and reprinted before the full test deck is returned to Australia Post

Failure to return the above items within the specified time frame will result in the statement of capability being voided. If this occurs, you will be able to re-apply for a Print Test File.

Please note that the deadline for participants located outside Australia will be subject to individual negotiation to take into account delivery logistics.



# 7.6 Step 5 - Scoring, Results and Analysis Report

Upon receiving your Print Test File, it will take up to 10 working days for Australia Post to score the tests and provide the results back to you.

#### 7.6.1 What scoring system does Australia Post use?

The scoring of your returned Print Test File is performed using software specifically developed by Australia Post in accordance with the Customer Barcoding Technical Specifications.

# 7.6.2 What tests are performed and what is the acceptance criteria?

There are a number of tests performed, as described below:

- That all components of the Barcode are printed
- That the Barcode printed is for the address printed on the envelope
- That the Bar Density of the Barcode printed conforms to Australia Post's published Customer Barcoding Technical Specifications
- That the skew tolerance (Code, Bar, Combined) for the Barcode printed conforms to Australia Post's published Customer Barcoding Technical Specifications.
- That the "quiet zone" around the barcode conform to Australia Post's published Customer Barcoding Technical Specifications
- That the physical dimensions of each of the four types of bars conform to Australia Post's published Customer Barcoding Technical Specifications
- That the physical dimensions of bar gaps conform to Australia Post's published Customer Barcoding Technical Specifications
- That the physical dimensions of bar widths conform to Australia Post's published Customer Barcoding Technical Specifications
- That the reflectance of the printed Barcode conforms to Australia Post's published Customer Barcoding Technical Specifications

Each category of scoring will be scored in accordance with the Customer Barcoding Technical Specification document.

# 7.6.3 What score do I need to pass?

To pass the Barcode Print Statement of Capability testing, all printed items must be scored as correct.

## 7.6.4 What if I fail the Print Test?

You can apply for and resubmit the print test.

# 7.7 Step 6 – Send Scoring Results and Analysis Report

What do I receive after Australia Post scores my Print Test File? Having completed the scoring of your Print Test File, Australia Post will send you a Performance Summary Report which details the overall evaluation of the returned Print Test File.

# 7.8 Step 7 - BQP Barcode Print - Statement of Capability

# 7.8.1 What happens when I pass Content Test?

You will receive, from Australia Post, a Barcode Print - Statement of Capability pack, which includes:

- The Barcode Print -Statement of Capability document; and
- Access to technical support.

### 7.8.2 What is the BQP Barcode Print – Statement of Capability document?

The Barcode Print - Statement of Capability document provides you with evidence that your printer/font configuration has passed Statement of Capability testing. You will note that your product details are displayed on the document. A sample Barcode Print - Statement of Capability document is shown in Appendix 5.

Note. The readability of a barcode can be adversely influenced by many extraneous factors specific to a particular printing job. These factors may include the nature of the substrate, printing skew, type of ink, barcode position, speed of printer, printer settings and the condition of the equipment. Therefore, the Barcode Print Statement of Capability relates only to the sample that has been provided.

## 7.8.3 What technical and marketing support material will I receive?

Please refer to the "BQP Marketing Support Material" chapters in these guidelines for more information, or you may visit the Australia Post Barcode Quality Program Web page for other technical material.



# 8 Barcode Content Generation Rules

The 4-State barcode is comprised of the following components:

- 1. Start Bars
- 2. Format Control Code
- 3. DPID
- 4. Customer Information (Customer Barcodes 2 & 3 only)
- 5. Reed Solomon Error Co-efficients
- 6. Stop Bars

The above tests are applied to ascertain the correct generation of barcode content.

The STF and ATF, used in Barcode Content — Statement of Capability testing, will contain records having both valid and invalid instances of these rules.

Test No. Barcode Component		Description		
1	Barcode Length	That the barcode length is consistent with the format control code		
2	Start Bars	That the Start Bar State Values are "13"		
3	Format Control Code	That the value of Format Control Code is either 11,59 or 62		
4	Format Control Code	That the FCC Bar State Values equate to the FCC		
5	DPID	That the DPID is not less than 8 characters		
6	DPID	That the DPID is not greater than 8 characters		
7	DPID	That the DPID does not contain an invalid character		
8	DPID	That the DPID Bar State Values equates to the DPID provided in the test record		
9	Customer information	That the Customer Information contains no invalid characters		
10	Customer information	That the length of the Customer Information, for a customer type 2 barcode, using C encoding table, is not greater than 5		
11	Customer information	That the length of the Customer Information, for a customer type 2 barcode, using the N encoding table, is not greater than 8		
12	Customer information	That the length of the Customer Information, for a customer type 3 barcode using the C encoding table, is not greater than 10		
13	Customer information	That the length of the Customer Information, for a customer type 3 barcode, using the N encoding table, is not greater than 15.		
14	Reed Solomon	That the 4 Error co-efficients are correct for the provided FCC, DPID and Customer Information.		
	Error Correction			
15	Stop Bars	That the Stop Bar State Values are "13"		



# 9 Self Test Barcode Quality Tools

Barcode quality assurance tools are used by Australia Post to check barcode quality at lodgement. Similar tools are available commercially to Self Test during mail print production. Australia Post will supply the necessary self test tools but any hardware required (eg computers, scanners) will need to be supplied by the user. Further details on these tools can be obtained through the Barcode Quality Program - please refer to the "Contact Information" chapter of these guidelines.

Note: The current software tools are available to BMP (Bulk Mail Partners) participants only, please contact the Barcode Quality Program for requirements and costs if required.



# 10 BQP Marketing Support Material

Key marketing material is defined in the following sections.

# 10.1 BQP Logo

Once your product achieves Statement of Capability by Australia Post, you are permitted to use the BQP Logo as represented below.



#### Conditions of Use.

The BQP logo signifies that your barcode generation/print product has passed the quality assurance standards of Australia Post.

The Trade Marks may only be used to promote your barcode generation/ print product that has demonstrated capability under the BQP. You are prohibited from using the Trade Marks for the promotion of itself, or any other product or service it offers.

The BQP logo and the words BQP are registered Trade Marks of Australia Post. Therefore, you must always indicate the Trade Mark(s) is a trade mark of Australia Post by using ®.

You must maintain adequate control in respect of the manufacture, packaging and labelling of your barcode generation/ print product so as to comply with the BQP Agreement and all Australian laws.

You shall not alter, deface, make addition to, remove, erase or obliterate wholly or partly, any of the Trade Marks that are applied to the BQP approved product and nor shall you give permission to any other person to do so.

You may not grant sub-licences to use one or more of the Trade Marks.



You may only use the following language in your promotional material ("the BQP language"):

For Barcode Content - Statement of Capability:

"Based on the sample records provided, [company name] has demonstrated the capability of generating 4-State barcode content, using [the specified product], which meet Australia Post's current requirements as defined in the Customer Barcoding Technical Specifications document."

For Barcode Print - Statement of Capability:

"Based on the sample envelopes provided, [company name] has demonstrated the capability of printing 4-State barcodes, using [the specified printer/ font combination], which meet Australia Post's current requirements as defined in the Customer Barcoding Technical Specifications document."

Please note that you are prohibited from stating that your company is approved by BQP. The BQP only approves barcode generation/ print products that have undergone the Statement of Capability testing. It does not approve the company or organisation producing that product.

Should you wish to vary the BQP language, you must obtain prior written approval from Australia Post's Customer Connections unit for the proposed amendments, before making and/ or publishing any such amendments.

Australia Post will not permit the use of promotional language such as:

- "We exceed Australia Post's expectation."
- "Our company has gained approval from BQP."
- "A BQP accredited company."

# 10.2 BQP Statement of Capability Product List

Australia Post will publish a BQP Statement of Capability Product List. The list will be distributed to organisations looking for products that have gained Barcode Content — Statement of Capability and/or Barcode Print — Statement of Capability.

As a product developer, you may want to complete Appendix 6 "BQP Statement of Capability Product List", so that Australia Post can publish your information.

Once completed, please return the form to the address listed in the "Contact Information" chapter of these guidelines.

The BQP Statement of Capability Product List will be included on the official Australia Post web site: www.auspost.com.au or http://auspost.com.au/business/barcode-quality-program.html

# 10.3 Promotions

Australia Post will conduct ongoing promotion of barcoding and associated discounts that will generate demand for BQP Barcode Content - Statement of Capability and BQP Barcode Print - Statement of Capability products.

# 11 The Barcode Quality Program contacts (BQP)

# 11.1 What is the purpose of the Barcod Quality Program?

The Technical Support Centre (TSC) is a specifically focused technical help facility for the support of customer mail barcoding participants.

The BQP, to provide support for:

- The interpretation and actioning of the BQP processes; and
- The investigation of the quality of customer barcodes.

The Program's commitment to meeting its responsibilities for the development and implementation of all the facilities required to support the ongoing and efficient operation of the Program.

Australia Post has anticipated that BQP participants will require occasional assistance in order to meet the quality standards required during Statement of Capability processes, and with ongoing issues of a technical nature.

#### 11.2 Who is able to use the services of the BQP?

The services of the BQP are for Registered organisations and those with products that have gained BQP Statement of Capability. Generally these will be:

- software developers;
- bureau service providers;
- printer vendors;
- mail houses; and
- individual organisations who generate mail.

# 11.3 The BQP offers a preliminary barcode checking process?

A preliminary barcode process is offered within all BQP processes.

What is offered;

- Alleviating any concerns with print and construction of the source code (0, 1, 2 & 3's) contained within a 4-State Barcode.
- Allow for quick testing processes before certification processes are undertaken.
- Checking before large mail lodgements are created ensuring that the barcodes printed/structure is correct before mailing.

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The major BQP contacts within Australia Post are:

- the other members of the BQP team;
- the members of the AMAS Program team;
- the computer staff of Australia Post related to BQP software support and development; and
- the related sections of Australia Post dealing with:
  - o lodgment of barcoded mail;
  - o lodgment validation of barcodes; and
  - o Multi Line Optical Character Recognition (MLOCR) and Barcode Sort (BCS) equipment.

# 11.4 How do I contact the BQP?

You can contact the BQP by email to <a href="mailto:bqp.help@auspost.com.au">bqp.help@auspost.com.au</a>

When logging your problem or query, please be sure to include:

- your company name;
- your name;
- your contact details;
- an indication of the impact and urgency of the problem or query;
- a separate listing of each issue.



# 11.5 What type of detailed queries are supported?

Technical support as required for support of the program and the interpretation of the BQP processes, more detailed type queries can include:

- queries on specific aspects of the BQP processes, e.g. the contents of the Self Test File;
- specific technical queries on barcode generation rules or file formatting;
- requests for Test Files to be provided;
- questions of the Customer Barcoding Technical Specifications;
- general BQP queries for example, how to gain BQP Statement of Capability for a new product, or after having modified your current product;
- requests to register for BQP, or to terminate membership; and
- other general queries concerning related Australia Post initiatives for example, the barcoding programs.

# 11.6 How does the BQP manage and progress queries and problems?

The following are the type of activities performed from receipt of a query or problem through to its resolution:

- receive the email, postal mail, data, facsimile, or answer the phone call;
- log the query into a central register;
- assign the query to an individual;
- contact the originating participant;
- search for related previous queries;
- record progress and actions;
- resolve the issue, or conclude it unresolved;
- agree to the outcome with the participant; and.
- close the call.

### Additional general activities include:

- monitoring the progress of queries and the attainment of the service goals;
- monitoring call trends and problems areas; and
- instigating continual improvements as required.



# 12 Appendix 1 BQP Registration Form

AUSTRALIA POST

bqp <b>POST</b>	BARCODE QU REGISTRATIO	Jality Program (BQF DN FORM	P)	
Please print with block letters. Legal Name of Company:				
Head Office:				
Branch Office(s):				
Mailing Address: (Number & Street Name/PO Box) (Suburb, State, Post Code)				
Primary Contact:	Responsible for all BQI	correspondence, policies, procedures.		
Name of Signing Authority:				
Title:				
Telephone:		Facsimile	e:	
Email:				
Technical Contact:	Responsible for all BQI programming issues/cl	Ptechnical correspondence, evaluation, in hanges.	information/inquiries, log	gic rules and
Name:				
Title:				
Telephone:		Facsimile	):	
Email:				
What time of Statement of (	Canability are you an	plying for? (Please tick the relevant bo	w/ haveal	
Barcode Content	Sapability are you ap	Barcode P		
For Barcode Content — State Please detail the name, version and Product	platform of the product t	hat you plan to have approved by BQP? ersion	Platform	
Please note each version and platfo – Win&NT, UNIX&Solaris&Linux, A		ough separate BQP Statement of Capabi	lity Tests. The current '1	families' of platform are
For Barcode Print — Stateme Please detail the printer, model, for Printer			t	Version
Please note each font/printer comb	ination needs to go throug	gh separate BQP Statement of Capability	Tests.	
By the lodgement of this reg Program.	istration form, I agre	ee to the Terms and Conditions fo	or the provision of t	he Barcode Quality
Print Name		Signature to approve registration		Date

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#### **BQP** Registration Form

# Terms & Conditions for the Provision of the Barcode Quality Program (BQP) Terms

Australia Post agrees to provide the BQP Service to BQP Participants pursuant to these terms.

#### Interpretation

For the purposes of these terms, except insofar as the context or subject matter otherwise indicates or requires:

"Australia Post" means the Australian Postal Corporation;

"4-State Customer Barcode Acceptance Criteria" means the acceptance criteria for customer barcodes as defined by Australia Post in the Customer Barcoding Technical Specifications document issued June,

"BQP Participant" means the recipient of the BQP Service, being the party having completed Australia Post's registration form for the Service;

"BQP Testing Material" means a test file of randomise business addresses, associated DPIDs, customer business information and customer barcode formats which has been supplied by Australia Post to the BQP Participant for the purpose of testing the BQP Participant's product in accordance with the BQP Testing process;

"BQP Testing" means the testing performed by the BQP Participant using the BQP Testing Material in order to gain either a Barcode Content – Statement of Capability or a Barcode Print – Statement of Capability;

"A Barcode Content – Statement of Capability" means that, based on the sample records provided to the BQP Participant, the BQP Participant's product has demonstrated the capability of generating 4-State barcode content, which meets Australia Post's current requirements as defined in the Customer Barcoding Technical Specifications document issued June, 1998;

"A Barcode Print – Statement of Capability" means that, based on the sample envelopes provided by the BQP Participant, the BQP Participant's product has demonstrated the capability of printing 4-State barcodes, using the specified printer/ font combination, which meets Australia Post's current requirements as defined in the Customer Barcoding Technical Specifications document issued June, 1998;

"Service" means the BQP program;

"Terms" means these Terms and Conditions of Service.

The words or phrases used in these Terms have the same meaning given to them in the Glossary of Terms situated at Appendix 7 of the Barcode Quality Program Guidelines ("the Guidelines").

#### 1 General

1.1 The Terms and Conditions are subject to change at Australia Post's discretion.

1.2 BQP Participants will be provided with a two month notice period of these

changes.

1.3 A Barcode Content – Statement of
Capability or a Barcode Print – Statement
of Capability is valid from the date of issue
and remains valid unless the 4-State
Customer Barcode Technical
specifications are changed.

#### 2 Limitations

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2.1 The BQP Barcode Content – Statement of Capability tests whether the accuracy of information contained within the barcode has been correctly translated from the DPID and other input parameters.

2.2 The Barcode Content – Statement of Capability relates specifically to the BQP Participant's software/firmware product that has been BQP tested. The BQP Participant's product is tested against Australia Post's 4-State Barcode Acceptance Criteria. If there are changes to the BQP Participant's product or the 4State Barcode Acceptance Criteria, Australia Post may require the BQP Participant to reapply for a Barcode Content – Statement of Capability.

2.3 The BQP Barcode Print – Statement of Capability tests whether the quality of barcodes printed by specific printing equipment configurations is capable of meeting Australia Post's 4-State Barcode Acceptance Criteria.

2.4 The Barcode Print – Statement of Capability relates specifically to the BQP Participant's printer/font configuration that has been BQP tested. The BQP Participant's product is tested against Australia Post's 4-State Barcode Acceptance Criteria. If there are changes to the printers or fonts or the 4-State Barcode Acceptance Criteria, Australia Post may require the BQP Participant to reapply for a Barcode Print — Statement of Capability

- Statement of Capability. 2.5 It is important to bear in mind that the readability of a barcode can be adversely influenced by many extraneous factors that arise specific to a particular printing job. These factors may include the nature of the substrate, printing skew, type of ink, barcode position error, speed of printer, printer settings and the condition of the equipment. Therefore, the Barcode Print -Statement of Capability relates only to the sample that has been provided by the BQP Participant 2.6 It should also be noted that, although passing Barcode Print - Statement of Capability testing procedures, Australia Post cannot warrant that barcoded letters generated by specific printer/font configurations will be guaranteed of acceptance by Australia Post at lodgement. 3 Intellectual Property Rights

3.1 All intellectual property rights in the BQP Testing Material are and shall remain the property of Australia Post. Nothing in these Terms and Conditions shall operate as an assignment of any copyright or any other intellectual property that exists in the BQP Testing.
3.2 The BQP Participant shall notify

3.2 The BQP Participant shall notify Australia Post immediately if it becomes aware of any infringement, suspected infringement or alleged infringement of the intellectual property rights of Australia Post in the BQP Testing Material or if it becomes aware of any claim that the BQP Participant or its use by any BQP Participant infringes the intellectual property rights of any person.

3.3 To the extent permitted by law, Australia Post hereby excludes all liability and warranties in relation to the provision by Australia Post of and the BQP Participant's use, reproduction or other dealing with the BQP Testing including without limitation, all liability relating to any claim that the BQP Testing Material infringes any intellectual property rights of any person. The BQP Participant acknowledges that Australia Post provides no warranty with respect to the accuracy or operation of the BQP Testing Material or to them being virus free or year 2000 compliant.

4 Indemnity and Disclaimer of Liability

4.1 To the extent permitted by law, Australia Post its employees, agents and subcontractors will not be liable o the BQP Participant for any loss or damage whatsoever suffered, or that may be suffered (including but not limited to direct and consequential loss) as a result of any act or omission by Australia Post, whether negligent or otherwise, in the performance of any duty, obligation or function under this Agreement or in any way arising out of it being a party to this Agreement, and the BQP Participant hereby



releases Australia Post from any claim for any such loss or damage.

4.2 The BQP Participant indemnifies Australia Post, its employees, agents and subcontractors from and against all actions, claims and demands (including the cost of defending or settling any action, claim or demand) which may be instituted against Australia Post arising out of or in any way connected with a breach of these Terms and Conditions by the BQP Participant or any person whose acts or omissions the BQP Participant is vicariously liable.

4.3 The BQP Participant indemnifies Australia Post against any action, claim or demand by the BQP Participant, its employees, agents or contractors or personal representatives or dependents arising out of or in any way connected with the performance of these

#### 5 No Reliance

5.1 The BQP Participant warrants that it has not relied on any representation made by Australia Post (particularly in relation to any part of the BQP Testing capability) or upon any descriptions or illustrations or specifications contained in any document supplied by Australia Post.

5.2 The BQP Participant acknowledges and accepts that the BQP Testing Material may contain errors. The BQP Participant warrants that it does not rely on the BQP Testing Material being complete or error free.
5.3 If any provision of these Terms is held invalid, unenforceable or illegal for any reason, the Terms shall remain otherwise in full force apart from such provisions which shall be deemed deleted.
5.4 These Terms will be governed and

5.4 These Terms will be governed and construed according to the law of the jurisdiction specified in Victoria.



# 13 Appendix 2 Terms & Conditions for the Provision of the Barcode Quality Program (BQP)

Terms

Australia Post agrees to provide the BQP Service to BQP Participants pursuant to these terms.

#### Interpretation

For the purposes of these terms, except insofar as the context or subject matter otherwise indicates or requires:

"Australia Post" means the Australian Postal Corporation;

"4-State Customer Barcode Acceptance Criteria" means the acceptance criteria for customer barcodes as defined by Australia Post in the Customer Barcoding Technical Specifications document

"BQP Participant" means the recipient of the BQP Service, being the party having completed Australia Post's registration form for the Service;

"BQP Testing Material" means a test file of randomise business addresses, associated DPIDs, customer business information and customer barcode formats which has been supplied by Australia Post to the BQP Participant for the purpose of testing the BQP Participant's product in accordance with the BQP Testing process;

"BQP Testing" means the testing performed by the BQP Participant using the BQP Testing Material in order to gain either a Barcode Content — Statement of Capability or a Barcode Print — Statement of Capability;

"A Barcode Content — Statement of Capability" means that, based on the sample records provided to the BQP Participant, the BQP Participant's product has demonstrated the capability of generating 4-State barcode content, which meets Australia Post's current requirements as defined in the Customer Barcoding Technical Specifications document;

"A Barcode Print — Statement of Capability" means that, based on the sample envelopes provided by the BQP Participant, the BQP Participant's product has demonstrated the capability of printing 4-State barcodes, using the specified printer/font combination, which meets Australia Post's current requirements as defined in the Customer Barcoding Technical Specifications document;

"Service" means the BQP program;

"Terms" means these Terms and Conditions of Service.

The words or phrases used in these Terms have the same meaning given to them in the Glossary of Terms situated at Appendix 7 of the Barcode Quality Program Guidelines ("the Guidelines").



#### 1. General

- 1.1 The Terms and Conditions are subject to change at Australia Post's discretion.
- 1.2 BQP Participants will be provided with a two month notice period of these changes.
- 1.3 A Barcode Content Statement of Capability or a Barcode Print Statement of Capability is valid from the date of issue and remains valid unless the 4-State Customer Barcode Technical specifications are changed.

#### 2. Limitations

- 2.1 The BQP Barcode Content Statement of Capability tests whether the accuracy of information contained within the barcode has been correctly translated from the DPID and other input parameters.
- 2.2 The Barcode Content Statement of Capability relates specifically to the BQP Participant's software/firmware product that has been BQP tested. The BQP Participant's product is tested against Australia Post's 4-State Barcode Acceptance Criteria. If there are changes to the BQP Participant's product or the 4-State Barcode Acceptance Criteria, Australia Post may require the BQP Participant to reapply for a Barcode Content Statement of Capability.
- 2.3 The BQP Barcode Print Statement of Capability tests whether the quality of barcodes printed by specific printing equipment configurations is capable of meeting Australia Post's 4-State Barcode Acceptance Criteria.
- 2.4 The Barcode Print Statement of Capability relates specifically to the BQP Participant's printer/font configuration that has been BQP tested. The BQP Participant's product is tested against Australia Post's 4-State Barcode Acceptance Criteria. If there are changes to the printers or fonts or the 4-State Barcode Acceptance Criteria, Australia Post may require the BQP Participant to reapply for a Barcode Print Statement of Capability.
- 2.5 It is important to bear in mind that the readability of a barcode can be adversely influenced by many extraneous factors that arise specific to a particular printing job. These factors may include the nature of the substrate, printing skew, type of ink, barcode position error, speed of printer, printer settings and the condition of the equipment. Therefore, the Barcode Print Statement of Capability relates only to the sample that has been provided by the BQP Participant.
- 2.6 It should also be noted that, although passing Barcode Print Statement of Capability testing procedures, Australia Post cannot warrant that barcoded letters generated by specific printer/font configurations will be guaranteed of acceptance by Australia Post at lodgement.



#### 3. Intellectual Property Rights

- 3.1 All intellectual property rights in the BQP Testing Material are and shall remain the property of Australia Post. Nothing in these Terms and Conditions shall operate as an assignment of any copyright or any other intellectual property that exists in the BQP Testing.
- 3.2 The BQP Participant shall notify Australia Post immediately if it becomes aware of any infringement, suspected infringement or alleged infringement of the intellectual property rights of Australia Post in the BQP Testing Material or if it becomes aware of any claim that the BQP Participant or its use by any BQP Participant infringes the intellectual property rights of any person.
- 3.3 To the extent permitted by law, Australia Post hereby excludes all liability and warranties in relation to the provision by Australia Post of and the BQP Participant's use, reproduction or other dealing with the BQP Testing including without limitation, all liability relating to any claim that the BQP Testing Material infringes any intellectual property rights of any person. The BQP Participant acknowledges that Australia Post provides no warranty with respect to the accuracy or operation of the BQP Testing Material or to them being virus free or year 2000 compliant.

### 4. Indemnity and Disclaimer of Liability

- 4.1 To the extent permitted by law, Australia Post, its employees, agents and subcontractors will not be liable to the BQP Participant for any loss or damage whatsoever suffered, or that may be suffered (including but not limited to direct and consequential loss) as a result of any act or omission by Australia Post, whether negligent or otherwise, in the performance of any duty, obligation or function under this Agreement or in any way arising out of it being a party to this Agreement, and the BQP Participant hereby releases Australia Post from any claim for any such loss or damage.
- 4.2 The BQP Participant indemnifies Australia Post, its employees, agents and subcontractors from and against all actions, claims and demands (including the cost of defending or settling any action, claim or demand) which may be instituted against Australia Post arising out of or in any way connected with a breach of these Terms and Conditions by the BQP Participant or any person whose acts or omissions the BQP Participant is vicariously liable.
- 4.3 The BQP Participant indemnifies Australia Post against any action, claim or demand by the BQP Participant, its employees, agents or contractors or personal representatives or dependents arising out of or in any way connected with the performance of these Terms.

# 5. No Reliance

- 5.1 The BQP Participant warrants that it has not relied on any representation made by Australia Post (particularly in relation to any part of the BQP Testing capability) or upon any descriptions or illustrations or specifications contained in any document supplied by Australia Post.
- 5.2 The BQP Participant acknowledges and accepts that the BQP Testing Material may contain errors. The BQP Participant warrants that it does not rely on the BQP Testing Material being complete or error free.
- 5.3 If any provision of these Terms is held invalid, unenforceable or illegal for any reason, the Terms shall remain otherwise in full force apart from such provisions which shall be deemed deleted.
- 5.4 These Terms will be governed and construed according to the law of the jurisdiction specified in Victoria.

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# 14 Appendix 3 BQP File Structures

This appendix contains details of the following file structures:

- 1) Self Test File (STF) for the Barcode Content Statement of Capability;
- 2) Approval Test File (ATF) for the Barcode Content Statement of Capability.
- 3) Print Test File (PTF) for the Barcode Print Statement of Capability.

# 14.1 Barcode Content - Self Test File (STF) Structure

#### 14.1.1 General Information

Number of Records: 3000 test cases

#### 14.1.2 General Structure

- The first line of the file contains the header record.
- The last line of the file contains the trailer record.
- The rest are the detail records. There are 3,000 detail records in a STF, each consists of the test address, associated DPID, Customer Information and expected bar state values.

#### 14.1.3 Conventions

The conventions used in the following tables are:

- X indicates alphanumeric character;
- 9 indicates numeric digit only (0-9);
- The length of each field is specified as an integer within parentheses in the Size column;
- All character fields are left aligned;
- The extended ASCII character set is used;
- Date fields are expressed in the format "YYYYMMDD", that is, 8 bytes;
- Numeric characters (integers) are ASCII characters representing the number;
- Each field in each record will be comma delimited and contained within a pair of double quotes;
- Fields containing a NULL value will be represented by a double quote;
- Each record in the file will be identified by a unique sequential number (record id);
- Field type convention is as follows:
  - o X indicates an alphanumeric character; and
  - o 9 indicates a numeric digit only (0-9).



# 14.1.4 STF Header

Field	Description	Size	Sample
RECORD_TYPE	A single character to indicate header record.	X(1)	Н
COPYRIGHT_SYMBOL	Copy right of Australia Post.	X(18)	©Australia Post
FILE CREATION DATE	Date file created in YYYYMMDD format.	X(8)	20011231
FILE_TYPE	File type.	X(3)	STF
FILE_NBR	An 8 digit number to uniquely identify the file.	9(8)	·
	Not applicable for STF – set as blanks		

# 14.1.5 STF Detail

Field	Description	Size	Sample
RECORD TYPE	A single character to indicate detail record.	X(1)	D
RECORD ID	Sequential record identifier	9(7)	123456
FORMAT_CONTROL_CODE	Australia Post FCC	9(2)	11
DELIVERY_POINT_ID	Australia Post DPID	9(8)	12345678
ADDRESS_1	Test address line 1.	X(25)	Test Mail – Do Not Mail
ADDRESS_2	Test address line 2.	X(25)	99 Smith St
ADDRESS_3	Test address line 3.	X(25)	Smithtown VIC 3777
CUSTOMER_INFORMATION_F2	Format 2 barcode customer information	X(10)	AA123
CUSTOMER_INFORMATION_F3	Format 3 barcode customer information	X(16)	AB245
EXPECTED_BAR_VALUE_STRING	ASCII representation of Australia Post bar value.	X(67)	12201110300101010000 01000003322331012100 0331
DECODE_TYPE	Type of encoding table used for Customers Information	X(1)	N or C

# 14.1.6 STF Trailer

Field	Description	Size	Sample
RECORD TYPE	A single character to indicate trailer record.	X(1)	T



# 14.2 Barcode Content - Approval Test File (ATF) Structure

#### 14.2.1 General Information

Number of Records: 6000 test cases

#### 14.2.2 General Structure

- The first line of the file contains the header record.
- The last line of the file contains the trailer record.
- The rest are the detail records. There are 6,000 detail records in an ATF, each consists of the test address, associated DPID, Customer Information and expected bar state values.

# 14.2.3 Conventions

The conventions used in the following tables are:

- X indicates alphanumeric character;
- 9 indicates numeric digit only (0-9);
- The length of each field is specified as an integer within parentheses in the Size column;
- All character fields are left aligned;
- The extended ASCII character set is used;
- Date fields are expressed in the format "YYYYMMDD", that is, 8 bytes;
- Numeric characters (integers) are ASCII characters representing the number;
- Each field in each record will be comma delimited and contained within a pair of double quotes;
- Fields containing a NULL value will be represented by a double quote;
- Each record in the file will be identified by a unique sequential number (record id);
- Field type convention is as follows:
  - o X indicates an alphanumeric character; and
  - o 9 indicates a numeric digit only (0-9).

When returning answer address, you should:

- fill the expected bar state value identifier for valid records; and
- set the expected bar state value identifier to the ASCII space character for invalid records.



# 14.2.4 ATF Header

Field	Description	Size	Sample
RECORD_TYPE	A single character to indicate header record.	X(1)	Н
COPYRIGHT_SYMBOL	Copy right of Australia Post.	X(18)	©Australia Post
FILE CREATION DATE	Date file created in YYYYMMDD format.	X(8)	20011231
FILE_TYPE	File type.	X(3)	ATF
FILE_NBR	An 8 digit number to uniquely identify the file.	9(8)	00000300
CUSTOMER_ID	An 8 digit number to uniquely identify the BQP	9(8)	00001234
_	customer.		

# 14.2.5 ATF Detail

Field	Description	Size	Sample
RECORD TYPE	A single character to indicate detail record.	X(1)	D
RECORD ID	Sequential record identifier	9(7)	123456
FORMAT_CONTROL_CODE	Australia Post FCC	9(2)	11
DELIVERY_POINT_ID	Australia Post DPID	9(8)	12345678
ADDRESS_1	Test address line 1. Used for printing address	X(25)	Test Mail – Do Not Mail
_	text together with barcode.		
ADDRESS_2	Test address line 2.	X(25)	99 SMITH ST
ADDRESS_3	Test address line 3.	X(25)	SMITHTOWN VIC 3777
CUSTOMER_INFORMATION_F2	Format 2 barcode customer information	X(10)	AA123
CUSTOMER INFORMATION F3	Format 3 barcode customer information	X(16)	AB245
EXPECTED BAR_VALUE_STRING	ASCII representation of Australia Post bar value.	X(67)	12201110300101010000
			01000003322331012100
			0331
DECODE_TYPE	Type of encoding table used for Customer	X(1)	N or C
	Information		

# 14.2.6 ATF Trailer

Field	Description	Size	Sample
RECORD_TYPE	A single character to indicate trailer record.	X(1)	T
FILE_RECORD_COUNT	Count of number of detail records in the file.	9(8)	6000

# 14.3 Barcode Print - Print Test File (PTF) Structure

#### 14.3.1 General Information

Number of Records: 30 test cases

#### 14.3.2 General Structure

- The first line of the file contains the header record.
- The last line of the file contains the trailer record.
- The rest are the detail records. There are 30 detail records in the PTF, each consisting of the BQP test address and associated bar state values.

#### 14.3.3 Conventions

The conventions used in the following tables are:

- X indicates alphanumeric character;
- 9 indicates numeric digit only (0-9);
- The length of each field is specified as an integer within parentheses in the Size column;
- All character fields are left aligned;
- The extended ASCII character set is used;
- Date fields are expressed in the format "YYYYMMDD", that is, 8 bytes;
- Numeric characters (integers) are ASCII characters representing the number;
- Each field in each record will be comma delimited and contained within a pair of double quotes;
- Fields containing a NULL value will be represented by a double quote;
- Each record in the file will be identified by a unique sequential number (record id);
- Field type convention is as follows:
  - o X indicates an alphanumeric character; and
  - o 9 indicates a numeric digit only (0-9).



# 14.3.4 PTF Header

Field	Description	Size	Sample
RECORD_TYPE	A single character to indicate header record.	X(1)	Н
COPYRIGHT_SYMBOL	Copy right of Australia Post.	X(18)	©Australia Post
FILE_CREATION_DATE	Date file created in YYYYMMDD format.	X(8)	20011231
FILE_TYPE	File type.	X(3)	PTF
FILE NBR	An 8 digit number to uniquely identify the file.	9(8)	00000300
CUSTOMER_ID	An 8 digit number to uniquely identify the BQP	9(8)	00001234
_	customer.		

# 14.3.5 PTF Detail

Field	Description	Size	Sample
RECORD TYPE	A single character to indicate detail record.	X(1)	D
RECORD ID	Sequential record identifier	9(7)	123456
ADDRESS_1	Test address line 1. Used for printing address	X(25)	Test Mail — Do Not Mail
_	text together with barcode.		
ADDRESS_2	Test address line 2.	X(25)	99 SMITH ST
ADDRESS 3	Test address line 3.	X(25)	SMITHTOWN VIC 3777
CUSTOMER_INFORMATION_F2	Format 2 barcode customer information	X(10)	AA123
CUSTOMER INFORMATION F3	Format 3 barcode customer information	X(16)	AB245
EXPECTED BAR VALUE STRING	ASCII representation of Australia Post bar value.	X(67)	12201110300101010000
			01000003322331012100
			0331

# 14.3.6 PTF Trailer

Field	Description	Size	Sample
RECORD_TYPE	A single character to indicate trailer record.	X(1)	T
FILE_RECORD_COUNT	Count of number of detail records in the file.	9(8)	00100221



# 15 Appendix 4 Barcode Content – Statement of Capability document



# **Barcode Content Statement of Capability**

# **Barcode Quality Program**

BASED ON THE SAMPLE RECORDS PROVIDED TO AUSTRALIA POST, THE FOLLOWING SPECIFIED PRODUCT:		
PRODUCT		
VERSION		
PLATFORM		
DEVELOPED BY		
HAS DEMONSTRATED THE CAPABILITY OF GENERATING 4-STATE BARCODE CONTENT, WHICH MEETS AUSTRALIA POST'S CURRENT REQUIREMENTS AS DEFINED IN THE CUSTOMER BARCODING TECHNICA SPECIFICATIONS DOCUMENT ISSUED JUNE 1998.		
CAPABILITY NO		
DATE OF ISSUE		
SIGNED		
NAME		
THIS BARCODE CONTENT – STATEMENT OF CAPABILITY IS VALID FROM THE DATE OF ISSUE AND REN VALID FOR THE SPECIFIED PRODUCT/VERSION/PLATFORM UNLESS THE 4-STATE CUSTOMER BARCOD TECHNICAL SPECIFICATIONS ARE CHANGED BY AUSTRALIA POST.		



# 16 Appendix 5 Barcode Print – Statement of Capability document



# **Barcode Print Statement of Capability**

# **Barcode Quality Program**

BASED ON THE SAMPLE RECORDS PROVIDED TO AUSTRALIA POST, THE FOLLOWING SPECIFIED PRINTER / FONT COMBINATION:

PRINTER

MODEL

**FONT** 

**OPERATED BY** 

HAS DEMONSTRATED THE CAPABILITY OF PRINTING 4-STATE BARCODES WHICH MEET AUSTRALIA POST'S CURRENT REQUIREMENTS AS DEFINED IN THE CUSTOMER BARCODING TECHNICAL SPECIFICATIONS DOCUMENT ISSUED JUNE 1998.

IT IS IMPORTANT TO BEAR IN MIND THAT THE READABILITY OF A BARCODE CAN BE ADVERSELY INFLUENCED BY MANY EXTRANEOUS FACTORS THAT ARISE SPECIFIC TO A PARTICULAR PRINTING JOB. THESE FACTORS MAY INCLUDE THE NATURE OF THE SUBSTRATE, PRINTING SKEW, TYPE OF INK, BARCODE POSITION ERROR, SPEED OF PRINTER, PRINTER SETTINGS AND THE CONDITION OF THE EQUIPMENT. THEREFORE, THE CONCLUSION REACHED ABOVE RELATES ONLY TO THE SAMPLE THAT HAS BEEN PROVIDED BY THE BQP PARTICIPANT.

ALTHOUGH PASSING CAPABILITY TESTING PROCEDURES, AUSTRALIA POST CANNOT WARRANT THAT BARCODED LETTERS PRODUCED USING THE ABOVE SPECIFIED PRINTER / FONT COMBINATION WILL BE GUARENTEED OF ACCEPTANCE BY AUSTRALIA POST AT LODGEMENT.

**CAPABILITY NO** 

DATE OF ISSUE

SIGNED

NAME TITLE

THIS BARCODE PRINT – STATEMENT OF CAPABILITY IS VALID FROM THE DATE OF ISSUE AND REMAINS VALID FOR THE SPECIFIED PRINTER / MODEL / FONT UNLESS THE 4-STATE CUSTOMER BARCODE TECHNICAL SPECIFICATIONS ARE CHANGED BY AUSTRALIA POST.



# 17 Appendix 6 BQP Statement of Capability Product List



The purpose of this form is to provide you with an advertising opportunity. Australia Post will publish the information you provide about your product in booklet form and also post it on the Internet. This will provide your product broad exposure to all potential end users.

Do you Yes	wish to have your p □	roduct pub No	lished in	the BQP Statement of Capability Product List via booklet and Internet? (please go to the signature section)
ls your Yes	oroduct commercial	lly available No	e? □	(please go to the signature section)
	pose of this informa			following guidelines: nunicate platform information, environment information and status of the
	rmation has to be provided below, or a		_	htforward, simple and neutral manner, and be no longer than 120 words in th
Signatu	re Section			
Name (	Please print):			
Title:				
Compar	ny:			
Date:				Signature:

# 18 Appendix 7 Barcode Quality Program (BQP) — Glossary of Terms

Terms	Description
AMAS	Australia Post's Address Matching Approval System (documented in the AMAS Handbook) which is a system that evaluates and approves software based on it's ability to validate, match and append the correct DPID for any given address. The DPIDs are subsequently used to form part of the values for the Barcode.
Approval Test File	A file that is designed to assist product developers to demonstrate the accuracy of their barcode generation logic in order to gain Barcode Content – Statement of Capability
ASCII file	American Standard Code of Information interchange File. It is used for internal representation of storing databases.
Barcode	A series of vertical lines of various lengths, used to represent numerical and alphabetical characters.
BQP	The Barcode Quality Program (BQP) provides customers generating and printing barcodes the capability to measure the quality of their barcodes against Australia Post's 4-State customer barcode acceptance specifications.
BQP Guidelines	The Australia Post BQP document which describes BQP and is subject to change from time to time by Australia Post.
BQP Logo	A logo that represents the BQP. It signifies the participants' barcode generation/ print product has passed the quality assurance standards of Australia Post.
Content	Barcode Content refers to BQP activites to asses the numerical values that become the barcode.
Content Test	Testing to demonstrate the accuracy of BQP participant barcode generation logic in order to gain Barcode Content – Statement of Capability
Delivery Point Identifier (DPID)	An eight-character code developed by Australia Post which enables each delivery point in Australia to be uniquely identified.
GSM	Grams per Square Meter – weight of the paper.
Mail Houses	Organisations that prepare bulk mail preparation and lodgment services.
MLOCR	Multi Line Optical Character Recognition (MLOCR) are machines that can read and interpret addresses from printed envelopes and subsequently perform the DPID assignment and print the Barcode on the mail piece.
Participants	Organisations who have registered for the BQP.