WAMZ CHEQUE STANDARD

Working Paper

Version 1.0

West African Monetary Institute

TIMETABLE FOR IMPLEMENTATION OF WAMZ CHEQUE STANDARD

The implementation start date shall be 20TH CTOBER 2008.

- All cheques ordered after 1st January 2009 must conform to the new standard.
- By 1st JULY 2009 only cheques that conform to this standard will be allowed in the WAMZ cheque clearing system.

Banks should consider very carefully placing cheque orders for only one year at a time so that any alterations to the standard can be accommodated at an earlier date.

Existing stocks of old cheques may be used up until the deadline date before a new design is introduced. However, it is in the interest of each bank to have an independent analysis completed on its old cheque. This will allow the bank to understand fully:

- That the specifications laid down in this standard are being met.
- That the security printed onto the cheque protects each single character of infill.
- That the bank and its customers are protected against fraudulent alteration, cloning and counterfeiting of cheques.

Table of Contents

DEFINITIONS

- 1. CHEQUE PAPER: Clearing Bank Specification 1 (CBS1)
 - 1.1. CBS1 Paper
 - 1.2. CBS1 Dandy Roll
- 2. CHEQUE LAYOUT
 - 2.1. Main elements of a cheque
 - 2.2. Cheque dimensions, reference edge and tolerances
 - 2.2.1 Cheque Dimensions
 - 2.2.2 Reference Edge as basis for Measurements
 - 2.2.3 Tolerances
 - 2.2.4 Paper Features
 - 2.2.4.1 Perforations and Trimming
 - 2.2.4.2 Continuous Stationery
 - 2.2.4.3 Cut Sheet
 - 2.2.4.4 Tear off Vouchers
 - 2.3. Clear band
 - 2.4. Restraint area
 - 2.4.1 Courtesy Amount Read (CAR) Box and Surrounding Border
 - 2.4.2 ESymbol
 - 2.4.3 Drawer Account Name Personalisation
 - 2.4.4 Drawer Signature area
 - 2.4.5 Date Line
 - 2.5 Body of the cheque
 - 2.5.1 Bank name/Logo, Branch Title, Address, Registered Co. (RC) No
 - 2.5.2 Payee Name & Amount in Words
 - 2.5.2.1 Payee Name
 - 2.5.2.2 Amount in Words
 - 2.6 Customer Name and Logo
 - 2.7 Crossing
 - 2.8 Stamp duty symbol
 - 2.9 Audit/Control number
 - 2.10 Identification of Printer
 - 2.11 Reverse of Voucher

- 2.12 Security Features
- 2.13 Hologram
 - 2.13.1 Characteristics of hologram
 - 2.13.1.1 Location
 - 2.13.1.2 Size and Shape
- 2.14 Microtext
- 2.15 Penetrating Ink

3. SECURITY INK FEATURES

- 3.1 Primary ink features
 - 3.1.1 Aquafuge ink (mandatory)
 - 3.1.2 Solvent Sensitive ink (mandatory)
 - 3.1.3 Invisible UV fluorescent ink (mandatory)
 - 3.1.4 Tri-Thermochromic ink (mandatory)
- 3.2 Security design guidelines
 - 3.2.1 Intricate Fine Line Design (mandatory)
- 3.3 Image requirements Security Tablet and CAR Box
- 3.4 Summary of security features
- 3.5 Assessment of cheque security
- 4. MICR E-13B FONT
 - 4.1. Layout regulations
 - 4.1.1. Font to be used
 - 4.1.2. Ink to be used
 - 4.1.3. Field Separators
 - 4.1.4. MICR Codeline Positioning Tolerances
 - 4.2. Layout specifications
 - 4.2.1. Amount Field
 - 4.2.2. Transaction code field
 - 4.2.3. Account number field
 - 4.2.4. Sorting code field
 - 4.2.5. Reference field
 - 4.3 MICR codeline security

Appendix 1

- 1. Physical characteristics of CBS1 paper
 - 1.1 Spots and Fibre Contamination
 - 1.2 Chemical Sensitivity

Appendix 2

- 1. Cheque layout schematics
 - 1.1 Personal Cheque
 - 1.2 Corporate Cheque

DEFINITIONS

ABR - Average Background Reflectance – A calculation of the reflectance of the cheque background to ensure that there is sufficient contrast with the written/printed information in the body of the instrument.

Amount field – The character positions within the MICR line of a cheque which contain the amount of the cheque.

Amount Symbol – Special MICR character used to separate the amount field from the adjacent field

BRE - Bottom Reference Edge - Vertical dimensions measured from the bottom edge of the instrument

 \mathbf{CAR} - Courtesy Amount Read - The amount box on a cheque. The application of the Intelligent Character Recognition, to locate and recognise the written/printed characters in the Courtesy Amount area.

CBS1 – Cheque Book Standard 1 – Paper specified by the Reader Sorter manufacturers on which all debit instruments are printed, and is pre conditioned by the Paper Mills.

Cheque digit – A digit, usually positioned as a suffix, that can be computed from the other digits in a field by a mathematical formula. The cheque digit is used to check the validity of the total field.

Clear Band – A horizontal band measured from the aligning edge of the document, parallel to that edge, and extending the length of the document. It is reserved for the printing of MICR characters. Also called MICR Clear Band

DANDY ROLL – A metal roll which bears a design, and is used by Paper Mills to incorporate a watermark design feature into the wet paper.

ENDORSEMENT – Information printed on the reverse of the instrument by the Presenting and Paying banks reader sorter equipment.

Field – A specified portion of the MICR line that is limited to set of one or more characters that may be treated as a unit of information.

ICR – Intelligent Character Recognition – In an image based system, algorithms may be used to provide character or symbol recognition from the captured image.

IMAGING – A system of capturing a monochrome image of the instrument and removing data redundancy, followed by compression and storage of the image data.

ISO- International Organization for Standardization

MICR – Magnetic Ink Character Recognition – The common machine language specified for paper based payment transfer systems. It consists of magnetic ink printed characters of a special design, called E-13-B font.

Symbol – An E.13B character separating the fields or separating digits within a field

OCR - Optical Character Recognition - High speed process to convert machine numerals/letters into computer processable information by an optical scanning system.

PCS – Print Contrast Signal – The percentage of the print contrast of a particular printed point with respect to the reflectance of the background.

 $UV\ INK-Ultra\ Violet\ ink$ - Ink that react (fluoresce) under illumination from a $UV\ lamp$ source.

VRE – Vertical Reference Edge - Horizontal dimensions measured from the right-hand edge of the instrument.

INTRODUCTION

The Convergence Council has introduced codified cheque standard to promote a sound regional payments system to further economic integration within the West African Monetary Zone. The major objectives include to provide standards that maintain a very high level of security features and appropriate code-line specification, promote greater efficiency in the clearing and settlement system and interoperability within the zone, eliminate as far as possible, risks from clearing and settlement systems, facilitate image technology and archiving and encourage the use of cheques in the zone to reduce the cash intensity and enhance the WAMZ monetary policy implementation.

Paper-based cheques, apart from cash, are currently the most visible and significant mode of payment in the zone. In view of the importance of cheque to the retail segment, Magnetic Ink Character Recognition (MICR) technology has been introduced by some of the member countries. MICR technology has enabled the banking system to provide faster and efficient clearing services to customers and to do straight through processing using MICR data. At the same time, Equipment specifications have imposed restrictions on the size and layout of the documents to be handled as well as the quality of the paper for printing payment instruments

As the common standards will form the basis of printing and processing of financial instruments in the zone, the National Central Banks are required to ensure that Cheque Printers Accreditation Scheme is in place so that the technical aspects of the cheque are met in full, and the personalization and printing of the MICR code-line are to specification.

The common standards contained in this document is influenced by the need to have a robust and efficient payments system, which is essential for a sustainable monetary union. It is, therefore, important that the National Central Banks, banks and security cheque printers adhere to the common standards and requirements as specified in this document.

As introducing the common standards entails a cost to the banks who have already printed large number of cheques and the withdrawal of old cheques is a time consuming process, all cheques ordered after 1st January 2009 must conform to the new standard, and by 1st July, 2009

only cheques that conform to this standard will be allowed in the WAMZ cheque clearing system.

1. CHEQUE PAPER: CLEARING BANK SPECIFICATION 1 (CBS1)

1.1 CBS1 CHEQUE PAPER

The paper on which debit instruments are printed must conform to CBS1 (Cheque Book Specification 1), and is pre conditioned by the paper mills, and must have a good all over watermark (wallpaper) printed in the paper.

To enhance the handling qualities of the paper it is recommended that preference should be given to long grain.

1.2 CBS1 DANDY ROLL

Banks that desire to have their own bespoke watermarked paper for the production of their cheques should endeavour to ensure that ownership of the dandy roll belongs to them. To achieve this the bank must arrange for the production of the dandy roll with the paper mill, and bear the cost. The bank must give a written authority to the accredited printer for the procurement of the watermarked paper from the Paper mill for the production of the cheques. This will allow the ownership of the dandy roll to remain with the bank in the event that the bank decides to change their accredited printer.

Technical Notes:

- a. The Regulatory Body for British Banks, the Association for Payment Clearing Services (APACS) paper specification as described in Appendix 1 is used as reference in the development of the WAMZ Cheque Standard.
- b. The CBS1 paper should be completely free from extraneous visible fibre, fibre contamination and UV spot.
- c. The paper must be sensitised to acids, alkalis, bleach and polar organic solvents.
- d. The paper must be UV Dull.
- e. The paper grammage must be 95.0 gm (+5%)

2. CHEQUE LAYOUT

This section covers the basic structure of a cheque. For the purposes of this standard a cheque can be divided into three major sections: -

- a. The Clear Band which is the $\frac{5}{8}$ inch (16mm) strip along the bottom of the cheque containing the MICR codeline.
- b. **The Restraint Area** which is the right hand 2inches (51mm) above the Clear Band
- c. **The Body of the Cheque**. This is the rest of the cheque above the Clear Band and to the left of the Restraint Area.

2.1 MAIN ELEMENTS OF A CHEQUE

Within the above sections are a number of areas that provide fixed and variable information.

Fixed areas are: -

Within the Restraint area: -

- a. Courtesy Amount read (CAR) Box
- b. **E** Symbol
- c. Drawer Signature (s)
- d. Date

Within the Body of the cheque: -

- a. Bank name/Logo, Branch Title, Address and Registered Company (RC) number
- b. Account name & personalisation
- c. Name and Accreditation number of the cheque printer

Variable areas within the Body of the Cheque are: -

- a. Customer name/logo
- b. Payee name
- c. Amount in Words
- d. Crossing
- e. Stamp Duty symbol
- f. Audit/Control Number (Mandatory)
- g. Hologram (Optional)
- h. Wording such as "Please do not write below this line or fold this voucher" may be added above the Clear Band area.

2.2 CHEQUE DIMENSIONS, REFERENCE EDGES AND TOLERANCES

2.2.1 Cheque dimensions

Only four sizes of cheque are allowed. A small cheque (Personal Cheque), and two sizes of large cheque for Manager's Cheques, Drafts, Corporate Cheques, Interest Warrants, Dividend Warrants, Debit Notes, and Direct Debits for either computer infill or manual infill. A fourth size of cheque accommodates flow line cheques. Appendix 2 shows a diagrammatic view of each instrument type and the preferable position of the security features and personalisation.

		Length	Height
Small		$*6^{7}/_{8}$ inches (174.6mm) $?$	$12^{7}/8$ inches (73mm)
Personal (Cheque		
Large	(Computer infill)	81/4 inches (210mm) x 3	⁷ / ₈ inches (99mm)
	(Manual infill)	$*6^{7}/_{8}$ inches (174.6mm) x	$3^{7}/_{8}$ inches (99mm)

Manager's/Bank Cheque

Bank Draft

Bankers Payment Corporate Cheque Dividend Warrant Interest Warrant Debit Note Direct Debit

Technical notes:

- a. *The above measurements excludes a cheque counterfoil.
- b. For the production of Flow Line (continuous) cheques, a maximum height of 4 inches (101mm) x 9 inches (229mm) in length (inclusive of sprocket holes on each Vertical Reference Edge) is permitted to facilitate the ¹/₆ inch (4.2mm) measurement used in this type of printing.

2.2.2 Reference Edge as Basis for Measurements

Vertical Reference Edge (**VRE**) - Horizontal dimensions measured from the right-hand edge of the instrument.

Bottom Reference Edge (BRE) - Vertical dimensions measured from the bottom edge of the instrument

2.2.3 Tolerances

It is not possible to maintain absolute position during printing, the following tolerances are acceptable: -

 $\pm^{1/16}$ inch (1.6mm) vertically and $\pm^{1/16}$ inch (1.3mm) horizontally.

2.2.4 Paper Features

2.2.4.1 Perforations and Trimming

Perforations must be able to give a clean tear and provide adequate retention of the instrument.

Technical Notes:

- a. This may be achieved by using a slit or knife perforation with 6-9 ties to the inch (25mm), and with the retaining web of approximately 30 thousandth of an inch (0.75mm).
- b. The body of the instrument MUST NOT contain perforations, holes or any other incisions/cuts.

2.2.4.2 Continuous Stationery

Cutting devices used for the removal of sprocket holes and for document separation must allow for correct positioning of encoding in relation to the reference edges of the document and give clean edges. Where the continuous form is not perforated, guide marks must be provided to indicate the correct guillotining position. Only slit perforations or microperforations are permissible on any edge of the instrument.

Incorrect cutting will result in the codeline being moved too far to the left or right of the instrument or positioned too low or high. This may cause the codeline information to misread or rejected.

Perforations are permissible on any edge of the instrument. It is of paramount importance that there is a clean tear if they are on the reference edge of the instrument. All forms of sprocket holes, pinwheel feed perforations, counterfoils must be removed and all cheque instruments separated.

2.2.4.3 Cut Sheet

There must be no increase in paper stack height at the area of the perforation, and printing must not breach any perforation.

Technical note:

A clear area of $\frac{1}{16}$ inch (1.6mm) MUST be left each side of any perforation. Gauge marks MUST NOT encroach into the clear band area.

2.2.4.4 Tear off Vouchers

To preserve the reference edge of the instrument that is used to align the documents in the automated reader sorter systems paper feed mechanisms, the counterfoil must be to the left or above the instrument.

2.3 CLEAR BAND

Only the MICR code line and the invisible UV security feature are allowed within the Clear Band area.

All debit instruments are to contain a clear band, and located:

- a. Vertically, of height $\frac{5}{8}$ inch (16mm) measured from the BRE and,
- b. Horizontally, the whole length from the right-hand VRE to the left-hand edge of the instrument.

2.4 RESTRAINT AREA

This is an imaginary rectangle 2 inches (51mm) from the VRE in which only those items specified in this standard are permitted.

Within the Restraint Area the location of fields are specified in relation to the BRE. This location is fixed for the small cheque, and is the preferred location for the large cheque. However, in the case of *large cheques*, fields may be fixed at a location equal to $\frac{3}{8}$ inch (10mm) further from the BRE. Where this applies the alternative position of each field is given in italics.

Technical Note:

Any pre-printed characters in this area MUST be printed in a colour with a Print Contrast Signal (PCS) of greater than 0.6 (60%).

2.4.1 Courtesy Amount Read (CAR) Box and Surrounding Border (Mandatory)

The amount box is positioned within the Restraint Area with the lower edge of the box $1^3/_8$ inches (35mm); and the upper edge of the box $1^3/_4$ inches (44.5mm) from the BRE of the instrument. The left hand edge of the box is $1^4/_5$ inches (46mm) from the VRE with the right hand edge of the amount box $1/_5$ inch (5mm) from the VRE. This is the preferred location.

For large Cheques the box may be located with its lower edge at $1\frac{3}{4}$ inches (44.5mm), and its upper edge at $2\frac{1}{8}$ inches (54mm) from the BRE. The left and right hand edges are to be as specified in the previous paragraph.

For image processing, the amount box area is to be printed to give an Average Background Reflectance (ABR) value of 55% or greater and must have disappeared by 50%.

- a. The amount box area is to be $1^{3}/_{5}$ inches (41mm) wide and $1^{3}/_{8}$ inch (9.5mm) deep (height).
- b. The PCS of the low contrast border immediately outside the amount box area must be less than 0.3 (30%).
- c. The Border must be a maximum of $\frac{1}{16}$ inch (1.6mm) wide.

Technical Notes:

- a. References to the amount box, or amount box area, and its dimensions exclude any surrounding border.
- b. In order to make the amount box visible a low contrast border consisting of unprinted CBS1 paper (i.e. white paper) must surround the outside of the amount box area.
- c. It is Mandatory that Microtext is printed in the CAR box to make fraudulent alteration difficult to re-instate (see 2.14 Microtext for information).

2.4.2 EcoSymbol (Mandatory)

The \blacksquare symbol MUST be printed in a colour with a Print Contrast Signal of greater than 0.6 (60%). It is to conform to the OCR-B character style with a height of 4mm **outside** the amount box to the left of and centred vertically on the box. The space between the right hand edge of the \blacksquare symbol and the left hand edge of the amount box area is to be no greater than 1/25 inch (1mm). The \blacksquare symbol will thus be partially within the left hand vertical border, if present, or no more than 1/25 inch (1mm) to the left of the left hand edge of the amount box area, i.e. the measurement is to be taken from the inside of the left hand vertical border, if present, or the left hand edge of the amount box area.

The right hand side of the $\frac{1}{8}$ symbol will be 1 $\frac{7}{8}$ inches (46.5mm) from the VRE.

Technical Note:

The Eco symbol must conform to OCR-B character style with a height of 4mm (16.5pts). The line measurements are 0.5pt stroke, 4mm in length, and must be 0.725mm apart. The lines must be centred horizontally and vertically over the Ecoa symbol.

2.4.3 Drawer Account Name Personalisation

If within the Restraint area the personalisation printing is to be in the space below the amount box and above the clear band.

Technical Note:

Any pre-printed characters in this area MUST be printed in a colour with a PCS of greater than 0.6 (60%).

2.4.4 Drawer Signature Area

The space for the signature is normally between the personalisation printing and the Clear Band. Where more than one signature is required and cannot be accommodated then the area for signatures may extend into the body of the cheque.

2.4.5 Date line

The base of the horizontal line is to be positioned at $2^{1/8}$ inches (54mm) from the BRE. The right hand edge of the date line is to be positioned at 1/5 inch (5mm) from the VRE.

For large cheques the alternative location for the base of the horizontal line, if in the Restraint Area, is to be $2\frac{1}{2}$ inches (64mm) from the BRE.

Technical Note:

Any pre-printed characters in this area MUST be printed in a colour with a PCS of greater than 0.6 (60%).

2.5 BODY OF THE CHEQUE

2.5.1 Bank Name/Logo, Branch Title, Address, Registered Company (RC) number (Mandatory)

Bank name/logo, branch title, address and RC number must always be shown clearly outside the Restraint Area and must be printed in the top half of the instrument.

2.5.2 Payee Name & Amount in words
2.5.2.1 Payee name
The payee name must be below drawer bank name and must be above or before the amount in words. At the right end of the payee name the words Or order must be printed.
PayOr order_
Where the legend is not printed then the following applies: Payee name Line Restraint:
Pay
The line restraint must be no closer than $^{1}/_{10}$ inch (2.5mm) to the Restraint Area, i.e. $2^{1}/_{10}$ inches (53mm) from the VRE. The height of the restraint line is to be between $^{1}/_{8}$ inch (3.2mm) and $^{1}/_{4}$ inch (6.3mm).
Technical Notes:
a. Any pre-printed characters in this area MUST be printed in a colour with a PCS of greater than 0.6 (60%).
b. The right end limit of the payee name and amount in words is shown as a vertical line known as the restraint line.
c. Long payee name may continue on the next line followed directly by the amount in words.
d. A security feature can be applied in the form of miniature Microtext (see 2.14 Security Features) for more information.
e. The space between the payee line and the amount in words line must be between $^3/_8$ inch (10mm) and $^7/_{16}$ inch (11mm) wide.
2.5.2.2 Amount in Words
The amount in words must be below the payee name. Lines or a box should be used to indicate the area for completion. The words 'The sum of ' may be printed at the left hand side of the cheque.
The sum of

The line restraints or the right hand side of the box are to be no closer than $2^{1/10}$ inches (53mm) to the VRE. The height of the restraint line is to be between 1/8 inch (3.2mm) and 1/4 inch (6.3mm).

Technical Notes:

- a. Any pre-printed characters in this area MUST be printed in a colour with a PCS of greater than 0.6 (60%).
- b. A security feature can be applied in the form of miniature Microtext (see 2.14 Security Features for more information).
- c. The space between the payee line the amount in words lines may be between $\frac{3}{8}$ inch (10mm) and $\frac{7}{16}$ inch (11mm) wide.

2.6 CUSTOMER NAME & LOGO (Optional)

The customer name/logo, if printed, must be positioned at the top left hand corner of the instrument.

Technical notes:

- a. The customer name and logo MUST NOT be bigger than the bank name but may share equal prominence.
- b. The customer name and logo MUST be printed in a colour with a PCS of greater than 0.6 (60%).

2.7 CROSSING (Optional)

The crossing shall consist of two parallel lines, printed bolder than any adjacent lines on the instrument and preferably placed vertically or diagonally across the centre of the cheque. Any wording associated with the crossing is to be placed between the parallel lines.

Technical note:

The crossing and any associated wording MUST be printed in a colour with a PCS of greater than 0.6 (60%).

2.8 STAMP DUTY SYMBOL (Mandatory)

The stamp duty roundel symbol must be located outside of the restraint area of the cheque and be printed preferably at the bottom of the cheque above the clear band area.

Technical Notes:

- a. The stamp duty symbol MUST be printed on most cheque instruments with the following exceptions: Bankers Payments, Debit Notes, Direct Debits and Interest Warrants.
- b. The stamp duty symbol MUST be printed in a colour with a PCS of greater than 0.6 (60%).

2.9 AUDIT /CONTROL NUMBER (Mandatory)

The number must be printed visibly and invisibly and be identical, and should **NOT** be the serial number of the cheque. The visible number must be printed on the face of the cheque and placed outside of the restraint area but within the coloured security tablet. The invisible number must be printed in invisible UV ink and must be printed adjacent to, or just below the visible number, to allow security checking of the two identical numbers, and must be readable when a UV light source is applied.

Technical Note:

It is optional that in addition to the visible number being printed in the body of the cheque, it may also be printed on the cheque stub.

2.10 IDENTIFICATION OF THE PRINTER (Mandatory)

The name of the accredited cheque printer and their accreditation number must be printed on the face of the cheque in a vertical line on the furthest left hand portion of the cheque in a legible font.

Technical Note:

The identification of the printer MUST be printed in a colour with a PCS of greater than 0.6 (60%).

2.11 REVERSE OF CHEQUE

The reverse of the item must be kept free of any printing in the following areas: -

- a. There must be no printing behind the Clear Band Area.
- b. There must be no printing in the banks endorsement positions. This extends the whole length of the cheque and is a height of 1½ inches (38mm) from the BRE.

2.12 SECURITY FEATURES

To protect the cheque against fraudulent alteration, cloning and counterfeiting the security features listed below are either anti-amendment or verification to confirm that the cheque is genuine. Section 3.5 gives a full list of the vulnerable areas of the cheque and how they must be protected.

Banks must agree with the Director, Banking Operations Department, (NCB) any new security feature that is not covered in this standard before printing such instruments for use.

2.13 HOLOGRAM (Optional) – Verification Feature

Banks wishing to use cheques incorporating holograms must ensure that the hologram is applied correctly. Holograms must be purchased from recognised manufacturers or their agents. The hologram attachment must meet the required characteristics as specified in 2.13.1.

2.13.1 Characteristics of Hologram

2.13.1.1 Location

It is important that the location of the hologram does not interfere with the automated cheque clearing process. Therefore it must be positioned in the top half of the cheque, be outside of the restraint area and must be positioned 2 inches (51mm) or more from the BRE.

2.13.1.2 Size and Shape

The hologram is to be no greater than $^{3/}_{4}$ inch (20mm) length x $^{9/}_{16}$ inch (15mm) height. The shape can be circular, rectangular, square or of cutout appearance.

Technical notes:

- a. It is highly recommended that the hologram is overprinted with the bank/customer logo/name.
- b. Holograms MUST be applied by hot stamping or similar process.
- c. There should be no evidence of embossment and never greater than 5 microns for the transfer layer.
- d. The process of application MUST NOT leave any evidence of distortion to the paper.

2.14 MICROTEXT (Mandatory) – Anti-Amendment Feature

It is mandatory that visible microtext be printed into the CAR box. It is highly recommended that other vulnerable areas of the cheque may be printed with microtext to act as a visible deterrent to the fraudster as it is difficult to re-instate.

Microtext can also be printed in miniature format that can be easily read with a magnifying glass, but which can appear to the untrained eye to be a dashed or solid line. Microtext printed in miniature is difficult to re-instate.

Technical Note:

The line weight of .0275mm is preferable for CAR box printing.

2.15 PENETRATING INK (Optional)

Penetrating ink may be used as an optional additional security feature in the protection of the MICR codeline and cheque personalisation. The use of this ink will not affect the invisible UV feature, which must be printed to protect in full the security tablet and the MICR codeline.

Technical Notes:

- a. Penetrating Ink is NOT an alternative feature to any other security feature.
- b. The only colour allowed is RED Penetrating Ink.

3. SECURITY INKS

3.1 Primary Security Inks

To protect the cheque against fraudulent alteration, cloning and counterfeiting all cheques must be printed with single ink workings of aquafuge, solvent sensitive ink and a separate invisible Ultra Violet (UV) feature. The whole area of the cheque excluding the ⁵/₈inch clear band must be protected by all three ink workings.

In addition, the invisible UV feature must be printed in the ⁵/₈ inch (16mm) Clear band to protect the MICR codeline.

The vulnerable areas of the cheque are:

- a. CAR box
- b. Payee name
- c. Amount in words
- d. Signature area
- e. Drawer name
- f. Branch title and address
- g. Audit/Control number
- h. MICR codeline

Technical Notes:

- a. All security inks printed onto cheques must be purchased from recognised security ink manufacturers or their agents.
- b. Non Security Inks MUST NOT BE USED to protect in part or all of the cheque's security tablet.

3.1.1 Aquafuge ink (Mandatory)

Provides a visual alert, where the ink reacts by completely dissolving and/or the design smudging if water and/or water-based chemicals are applied.

Technical Note:

The ink must be applied as an all over wash to the entire cheques surface including the CAR box area but with the exclusion of its surrounding low contrast border and the $\frac{5}{8}$ inch (16mm) clear band of the cheque.

3.1.2 Solvent Sensitive Ink (Mandatory)

Provides a visual alert, where the ink reacts by dissolving and the design blotches if an organic solvent is applied.

Technical Notes:

a. The ink must be applied using Fine Line Techniques as described in 3.2.1 and cover the entire cheques surface including the CAR box area but with the exclusion of its surrounding low contrast border and the $^{5}/_{8}$ of an inch (16mm) clear band area of the

cheque. (See 3.2.1 Technical Notes a and b for minimum and maximum fine line weight and distance between lines). The Printing within the CAR box area must be a continuation of the fine line pattern but printed as Microtext to enhance security and present a visual deterrent.

b. Erasable Solvent Sensitive inks MUST NOT to be used as some banks or their customers use non-impact printers to personalise or infill data, which may reduce the effectiveness of laser toner.

3.1.3 Invisible UV Fluorescent Ink (Mandatory)

The ink fluoresces under UV light. The UV feature must be printed as a separate working, and be printed to cover the whole cheques surface including the CAR box area to protect all the vulnerable areas of the cheque, and the MICR codeline.

Technical Notes:

- a. The ink must be applied using fine line techniques as described in 3.2.1 and cover the entire cheque surface security tablet including the CAR box area but excluding its surrounding low contrast border, and must protect in full the MICR codeline within the ⁵/₈ inch (16mm) clear band of the cheque.
- b. The bank name and logo must be printed as a 3D image in the security tablet (see 3.2.1).
- c. A band of invisible UV ink must protect the MICR codeline characters and be printed across the whole length of the cheque in the clear band area. The bottom of the band must be positioned $^{3}/_{16}$ inch (5mm) from the BRE of the instrument and be $^{1}/_{4}$ inch (6mm) in height.
- d. Invisible blue UV MUST NOT be used.
- e. The feature MUST NOT be of a block design that can be more readily re-instated.
- f. Erasable Invisible UV ink MUST NOT to be used as some banks or their customers may use non-impact printers to personalise or infill data, which will reduce the effectiveness of laser toner.

3.1.4 Tri-Thermochromic ink (Mandatory)

To authenticate a genuine cheque, the ink has three colours and changes colour twice, and works at two temperatures. The colour of the ink is mandatory, and changes from brown at room temperature, to orange at 25°C to yellow at 35°C, and is very accommodating in a climate where the temperature varies. The colour will re-appear immediately when the heat dissipates.

Technical Notes.

- a. The shape can be $\frac{3}{8}$ inch (9.5mm) square or be circular with $\frac{3}{8}$ inch (9.5mm) diameter.
- b. The colour change is not to be permanent.
- c. The ink is to be printed preferably in the restraint area of the cheque in an area, which is above the CAR Box, and in the Right Hand Corner of the cheque. This will allow for easier authentication of the ink to be made.

d. The inks Average Background Reflectance (ABR) may be difficult to measure as its properties are such that when ABR is calculated by the image qualifier there is a tendency for the ink to change colour, with the result that accurate readings will not be possible.

3.2 SECURITY DESIGN GUIDELINES

The security design features must protect each single character of infill and must be sensitive to all solvent based reagents, water based reagents, adhesive, picking and eraser attack. The guidelines for the design of the security tablet should be that it must facilitate the ease of detection of fraudulent activity with the naked eye and by use of a UV lamp.

Fine line techniques such as numismatic (3.2.1) designs or similar banknote software packages that allows a relief 3D effect image to be created of fine lines are the only acceptable design software allowed. These are difficult to re-instate and in some instances cannot be accurately scanned or reproduced.

Technical Notes:

- a. Long and narrow straight lines in the cheque design MUST NOT be printed, as these can be more readily re-instated.
- b. The printing of separate boxes for the amount value is NOT RECOMMENDED, as they are vulnerable to fraudulent alteration. The value of the amount in words should be printed in full, as this will present more difficulty to alter.
- c. Pictorials MUST NOT be printed onto cheques, as they are not compatible with image-based automated systems, as dark colours will normally reproduce as black and may mask the written and/or printed text.
- d. Guilloche designs are not acceptable. The patterns can confuse and the converging lines allow hot spots to be image unfriendly.
- e. Appendix 3 gives a full specification for image verification.

The rules for good cheque design are:

A. Anti counterfeit -

Security tablet invisible UV design which is extremely <u>difficult to accurately</u> <u>scan and/or be reproduced.</u>

B. Fraudulent alteration -

- a. **Protection** The cheque design and security inks must **protect every character** of personalisation, infill and MICR codeline.
- b. **Detection** Cheque design and security inks must be <u>easy for the eve</u> to detect damage.

- c. **Re-instatement** Damaged cheque designs and security inks must be **difficult** to reinstate.
- d. **Toner adhesion** The cheque design and security inks must <u>facilitate laser</u> toner adhesion.

3.2.1 Intricate Fine Line Security Designs

Bank note software such as numismatics or a similar bank note package, which can produce intricate fine line design must only be used in the design features of all cheques, and must be printed as patterns of fine lines, which allow a relief 3D effect image to be created. The design of the cheque must include the name and logo of the bank to be printed as a 3D image in invisible UV ink in the security tablet of the cheque. The software must be capable of multiple base modulated line shapes and patterns with the ability to make numismatic 3D effects from any graphic or text and to have control over all lines parameters. Fine lines are difficult to copy or scan and should be printed in lighter/pastel shades. The lines are to be printed as fine as possible so that they cannot be accurately scanned, reproduced or accurately re-instated.

Technical Notes:

- a. Fine line weight must be a minimum of 0.0424mm to a maximum .15 mm.
- b. The distance between lines must be a minimum of .25mm and a maximum .75mm.
- c. Conversion from Point size to mm:

.5pt = .1764mm 1pt = .3528mm 1.5pt = .52915mm 2pt = .70555mm

3.3 IMAGE REQUIREMENTS – SECURITY TABLET AND CAR BOX

The security tablet background printing must be printed in pastel shades, and have an Average Background Reflectance (ABR) of 55% or greater. As ABR is an average then printing will have some darker and some lighter parts. The colours must have disappeared by 50% (Appendix 3 gives a full specification for image verification).

Technical Notes:

- a. All over colours of Yellow and Grey are physically unfriendly and MUST NOT be printed as one colour in the security tablet and the CAR box.
- b. Colours such as Red, Purple, Pinks and Browns can be used in the production of the security tablet, but when printed will be of a pale soft colour to ensure image specifications are met.
- c. Pale solid colours MUST NOT be printed, as these are relatively easy to re-instate.
- d. Colours such as Green and Blue (without Black) are image friendly and are recommended.

3.4 SUMMARY OF SECURITY FEATURES

The security features for the protection of a cheque are listed below in tabular form. For ease of reference they have been put into two categories as anti-amendment as these allow protection against fraudulent alteration/cloning and verification features which protect against counterfeiting.

	Mandatory/Optional	Anti-	Verification
		Amendment	
Aquafuge ink	Mandatory	Y	X
Solvent Sensitive ink	Mandatory	Y	X
UV fluorescent ink	Mandatory	Y	Y
Tri Thermochromic ink	Mandatory X		Y
CBS1 watermarked paper	Mandatory	Mandatory Y	
Microtext in CAR box	Mandatory Y		X
Microtext in security	Optional	Y	X
tablet			
Hologram	Optional	X	Y
Penetrating Ink	Optional	Y	X

X = Not for that purpose

Y = For that purpose

Banks must agree with the Director, Banking Operations Department, (NCB) any new security feature that is not covered in this standard before printing such instruments for use.

3.5 ASSESSMENT OF CHEQUE SECURITY

This checklist has been designed so that you may assess your current cheques security features to ensure that it protects the cheque against fraudulent alteration and counterfeiting. cheques must be printed with an aquafuge ink working and a solvent sensitive ink working. In addition a separate invisible Ultra Violet (UV) feature must be printed and must protect every single character of infill in all the vulnerable areas of the cheque including the MICR codeline.

Section	Торіс	Protection
2.4.1, 3.1	Courtesy Amount Read (CAR) box	Intricate UV pattern
		Security inks
		microtext
2.9, 3.1	Audit/Control number	Visible number
		Invisible UV number
2.5.2, 3.1	Payee name	Security inks
2.5.2.2, 3.1	Amount in words	Security inks
2.4.4, 3.1	Drawer signature area	Security inks
2.4,3, 2.10, 3.1	Drawer name	*Penetrating ink
		Security inks
2.5.1, 3.1	Branch name and address	*Penetrating ink
		Security inks
4.3	MICR codeline	Invisible UV
		*Penetrating ink
Anti counterfeit	Security tablet design which is difficult to	
	accurately scan and/or be reproduced	
	Security features include:	
	Watermarked CBS1 paper	
	• Microtext	
	• Security inks:	
	o Aquafuge	
	o Solvent Sensitive	
	o Invisible UV	
	o Tri Thermochromic	
	• *Hologram	
E 11.4	*Penetrating ink The state of the stat	
Fraudulent	The cheque design must protect every	
alteration & Cloning	character of personalisation, infill & MICR codeline.	
	Cheque design must be easy for the eye to	
	detect damage.	
	Damaged cheque designs must be difficult to reinstate.	
	The cheque design must facilitate laser toner adhesion	
Vov	toner aunesion	

Key:

^{*} Optional security features

4. MAGNETIC INK CHARACTER RECOGNITION (MICR) E-13B FONT

All interbank cheques must bear a standard Magnetic Ink Character Recognition (MICR) codeline in E-13B font. All debit instruments produced by security cheque printers must be submitted to the account holding bank for approval of the layout and codeline prior to printing.

Appendix 3 provides the full MICR specification.

The clear band of the cheque is reserved for the MICR codeline.

4.1 LAYOUT REGULATIONS

4.1.1 Font to be used

The approved font is E-13B.

4.1.2 Ink to be used

All E-13B characters must be printed in magnetic ink.

4.1.3 Field Separators

Each field must be closed by the appropriate closing symbol or by the opening symbol of the following field.

4.1.4 MICR Codeline Positioning Tolerances

To allow the MICR read system to recognise the start and end of the codeline the following tolerances must be adhered to:

- a. The opening symbol of the amount field must commence printing after a space of $^{5}/_{16}$ inch (8mm) to the Right Hand VRE of the trimmed edge.
- b. The closing symbol of the serial number field must leave as a minimum $^{5}/_{16}$ inch (8mm) to the Left Hand VRE of the trimmed instrument.
- c. Fields of information may be printed to a horizontal tolerance of $\pm \frac{1}{16}$ inch (1.6mm)

Failure to observe these tolerances will result in rejected items.

4.2 LAYOUT SPECIFICATION

Starting from the right-hand edge of the instrument, the field content specifications are:

4.2.1 Amount Field

Amount Opening/Closing Symbol - Symbol 11 in Positions 1 & 13

Content: Eleven digits in Positions 2-12 (Non significant digits zero filled)

4.2.2 Transaction Code Field

Content: Two digit transaction code in Positions 15 and 16.

Permitted codes for inter bank debit instruments must be allocated from the ranges: 01-20.

Code	Item	Code	Item	Code	Item
01	Personal Cheque	09	Returnable Cheque Voucher	13	Direct Debit
02	Corporate Cheque	10	Debit Note	14	Travellers cheque
03	Bank Draft	11	Dividend/ Interest Warrant	15	Commission Voucher
04	Bankers payment	12	Unpaid Cheque Voucher	20	Batch Control Voucher
				24	Carrier envelop
				99	Test cheque

4.2.3 Account Number Field

On-Us Symbol
- Symbol 12 in Position 17

Symbol 12 in Position 17 is part of the account number field and will normally only be encoded at the same time as the account number. If a transaction code is present, however, Symbol 12 must, in any case, be encoded.

Content: Account Number identification in Positions 18 - 27

4.2.4 Sorting Code Field

Transit Symbol 10 in Position 28

Structure of Sortcode:

Check digit in Position 29

Branch sortcode in Positions 30-32

State code in Positions 33 & 34

Bank code in Positions 35-37

Country code 38-39

Technical Note:

The covert check digit algorithm used to complete character position 29 must be kept by the Director, Banking Operations NCB, and the Chief Inspector/Auditor of member banks.

4.2.5 Reference Field (Cheque Serial Number)

On-Us Opening/Closing Symbol
- Symbol 12 in Positions 40 & 49

Content: Eight digits in Positions 41-48

4.3 MICR CODELINE SECURITY

The MICR codeline must be protected against fraudulent alteration and cloning.

Each character of the MICR codeline must be protected in full by an invisible UV feature. Under a UV light source, the UV feature must show that the MICR character has been removed/altered by fraudulent methods.

Appendix 1

1. Physical Characteristics of CBS1 Paper

Grammage	BS ISO 536 : 1995
	95.0 g/m ² (± 5%)
	BS EN 20534 : 1993
Thickness	Minimum 105 micrometres
	Maximum 130 micrometres
Bendtsen Roughness	BS 4420 : 1990 (1995)(ISO 8791-2)
Denutsen Roughness	Both surfaces:- Maximum 150 ml/min
	Both surfaces Maximum 150 mi/mm
	BS 3748:1992 (ISO 2493)
* Stiffness	MD : Min. 7.9 mN
	CD: Min. 3.1 mN
	DG (500 0 100F (100F) (700 F (0 (15)
Air Desistance (Curley)	BS 6538-3 : 1987 (1995) (ISO 5636/5)
Air Resistance (Gurley)	Min: 27 s/100 ml
Or	BS 6538-2 : 1992 (ISO 5636/3)
	Max: 450 ml/min
Air Permeance (Bendtsen)	Max. 130 mil mil
, ,	
	BS EN 21974: 1994
Internal Tearing Resistance	Both directions
Thermal rearing resistance	Min. 705 mN
	Wiii. 703 iii.
D. C.	The reflectance of the paper should be constantly
Reflectance	high, ideally around 78-80%.
	CBS1 paper must be UV Dull. It shall exhibit little
UV Dull	or no fluorescence when illuminated by a UV light.
	, , ,

^{*}Note: The following stiffness values, obtained using alternative test methods, can be considered equivalent to the above.

TABER method using 10mm test length - MD: min. 3.3 Taber units: CD: min. 1.3 Taber units: CLARK method TAPPI T451pm 74 - MD: min. 124 Clark flexing resistance units: CD: min. 50 Clark flexing resistance units

1.1 Spots and Fibre Contamination

Ideally CBS1 paper should be completely free from extraneous visible fibre and UV spot and fibre contamination. However it is accepted that, particularly in the case of UV spots and fibres, this may be very difficult to achieve. The level of UV spots and fibre contamination must be well below that which would mask damage to the printed UV feature caused by a fraudulent alteration on a cheque.

Visible fibre contamination must be below the level that could cause misreading, for example, of an amount should a visible fibre be "attached" to a figure in the amount box.

1.2 Chemical Sensitivity

The chemical sensitivities, for which the results of testing are specified below, are the minimum expected. Sensitivity to other likely chemical attacks to remove infilling may be added.

The paper must be sensitised to acids, alkalis, bleach and polar organic solvents in such a way as to give the following results: -

Chemical "fa	amily"	Test chemical	Test area	ΔΕ				
Acid		H ₂ SO ₄ 5% by volume	Ø 20mm	>3.0				
Alkali		NaOH 5% by weight	Ø 20mm	>5.0				
Oxidiser		NaOCl at ¹ / ₆ dilution (12%-14% free chlorine)		>4.5				
Polar solvent	Organic	С2Н5ОН	Ø 20mm	>2.0				

The chemical is to be applied, left for 5 minutes, then blotted to remove any surplus and the paper left to dry under normal room conditions. The ΔE values must still be achieved after one month.

The difference between the plain paper and the coloured areas is to be measured using an infinite thickness, according to CIELAB, using the following formula:-

$$\Delta E = \sqrt{\Delta L^2 + \Delta a^2 + \Delta b^2}$$

where L = brightnessa = red/green

b = yellow/blue

Appendix 2

CHEQUE SCHEMATICS

The following set of schematics depicts the cheque instruments that may be allowed into the WAMZ Cheque Clearing System. These drawings are not to scale and the printer must consult this standard for guidance to understand the dimensions that are allowed, and the required specifications for each debit instrument.

The following are provided for:

- 1.1. Personal Cheque
- 1.2. Corporate Cheque (Computer Infill)
- 1.3. Corporate Cheque (Manual Infill)
- 1.4. Bank Draft (Computer Infill)
- 1.5. Bank Draft (Manual Infill)
- 1.6. Manager's/Bank Cheque (Computer Infill)
- 1.7. Manager's/Bank Cheque (Manual Infill)
- 1.8. Bankers Payment
- 1.9. Debit Note (Manual Infill)
- 1.10. Dividend Warrant
- 1.11. Interest Warrant
- 1.12. Direct Debit

1.1 Personal Cheque

Dimensions 6% inches (174mm) x 2% inches (73mm)

Note. This is an example only and the dimensions must be taken from the text.

Bank Name/Logo & RC No. Branch Title/Address	Hologram	050004	Restraint Area Date			
Pay Payee Name		or Order				
The Sum of Amount in Words			=			
			Drawer Name			
Stamp Duty			Drawer Signature			
MICR CODELINE						

1.2 Corporate Cheque (Computer infill); for alternate computer infill design see schematic design 1.5

Dimensions $8\frac{1}{4}$ inches (210mm) x $3\frac{7}{8}$ inches (99mm)

Note. This is an example only and the dimensions must be taken from the text.

Bank Name/Logo &RC No. Branch Title/Address Company Name/Logo Hologram							050004	•	Restraint Area
Company Name/Logo Pay Payee Name ************************************							Date _		
AMOUNT OF NAIRA IN WORDS – KOBO IN FIGURES Stamp Duty						Authorised Signature Authorised Signature	Drawer Name		
MICR CODELINE									

Notes on Corporate Cheque:

Amount boxes printed by accredited printers must represent the customers' maximum cheque infill NOT maximum amount value.

Amount boxes that are blank must be infilled with the word ZERO not NIL.

Amount in boxes to be preceded and followed by two asterisks.

The payee name to be completed with asterisks at the end of the name.

1.3 Corporate Cheque (Manual infill)

Dimensions 6% inches (174mm) x 3% inches (99mm)

Note. This is an example only and the dimensions must be taken from the text.

Bank Name/Logo & RC No. Branch Title/Address Company Name/Logo	Hologram	050004	Restraint Area
Pay Payee Name ****************** The Sum of Stamp Duty	*******	******	Date Drawer Name Authorised Signature Authorised Signature
MIC	R CODELINE		

Notes on Corporate Cheque:

The payee name to be completed with two straight lines at the end of the name.

1.4 Bank Draft (Computer infill); for alternate computer infill design see schematic design 1.5

Dimensions 81/4 inches (210mm) x 37/8 inches (99mm)

Note. This is an example only and the dimensions must be taken from the text.

Bank Name/Logo & RC No. Branch Title/Address Hologram BANK DRAFT					Date _	Restraint Area				
Pay Payee Name ************************************										
	N 1000000	N 100000	₩10000	¥ 1000	₩100	N 10	N 1	Kobo	 	
	Stamp	AMOUNT OF N	NAIRA IN WORDS	S – KOBO IN FIG	URES				Authorised Signature	
	Duty					· · · · · ·			Authorised Signature	
	MICR CODELINE									

Notes on Bank Drafts:

Amount boxes printed by accredited printers must represent the customers' maximum cheque infill NOT maximum amount value.

Amount boxes that are blank must be infilled with the word ZERO not NIL.

Amount in boxes to be preceded and followed by two asterisks.

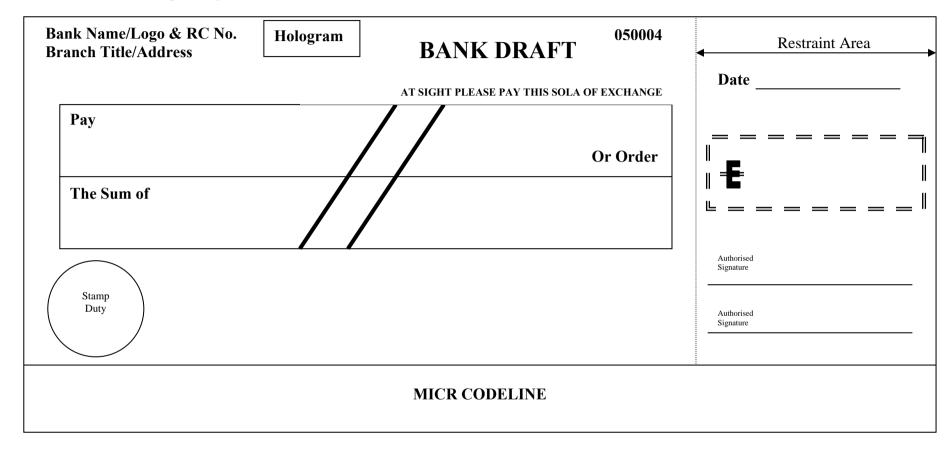
The payee name to be completed with asterisks at the end of the name.

Any wording i.e. AT SIGHT PLEASE PAY THIS SOLA OF EXCHANGE must be printed in the body of the cheque.

1.5 Bank Draft (Manual or Computer infill)

Dimensions 6% inches (174mm) x 3% inches (99mm)

Note. This is an example only and the dimensions must be taken from the text.



Notes on Bank Draft:

The payee name to be completed with two straight lines at the end of the name.

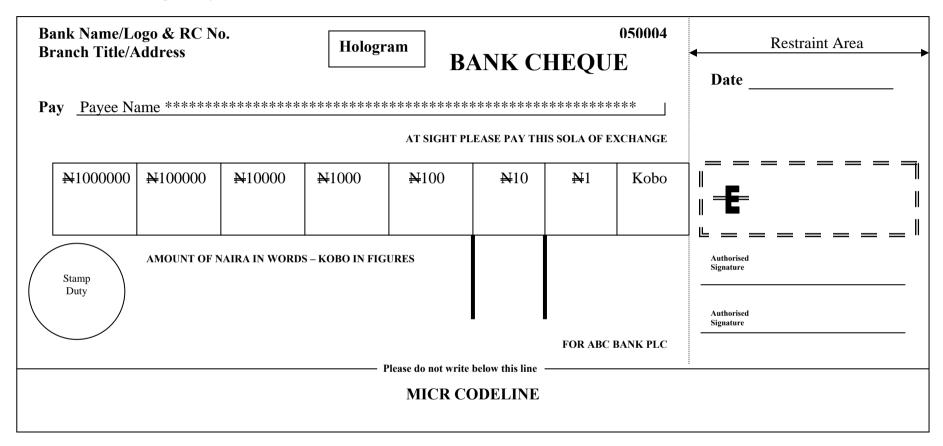
Any wording e.g. AT SIGHT PLEASE PAY THIS SOLA OF EXCHANGE must be printed in the body of the cheque and must be outside the restraint area.

The word BANK DRAFT must be printed in the top half of the cheque and must be outside the restraint area.

1.6 Manager's/Bank Cheque (Computer infill); for alternate computer infill design see schematic design 1.5

Dimensions $8\frac{1}{4}$ inches (210mm) x $3\frac{7}{8}$ inches (99mm)

Note. This is an example only and the dimensions must be taken from the text.



Notes on Manager's/Bank Cheque:

Amount boxes printed by accredited printers must represent the customers' maximum cheque infill NOT maximum amount value.

Amount boxes that are blank must be infilled with the word ZERO not NIL.

Amount in boxes to be preceded and followed by two asterisks.

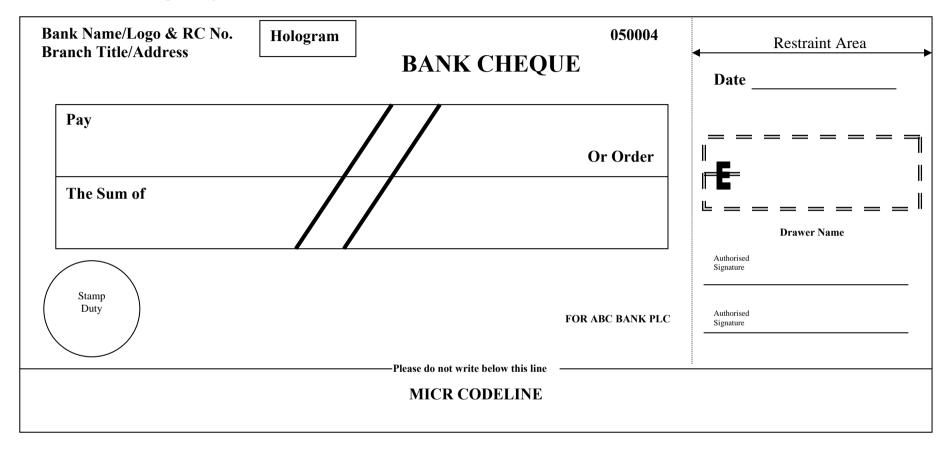
The payee name to be completed with asterisks at the end of the name.

Any wording e.g. AT SIGHT PLEASE PAY THIS SOLA OF EXCHANGE or FOR ABC BANK PLC must be printed in the body of the cheque.

1.7 Managers/Bank Cheque (Manual or Computer infill)

Dimensions 6% inches (174mm) x 3% inches (99mm)

Note. This is an example only and the dimensions must be taken from the text.



Notes on Manager's/Bank Cheque:

The payee name to be completed with two straight lines at the end of the name.

Any wording i.e. FOR ABC BANK PLC must be printed in the body of the cheque and must be outside the restraint area.

The word BANK CHEQUE must be printed in the top half of the cheque and must be outside the restraint area.

1.8 Bankers Payment (Manual or Computer infill)

Dimensions 6% inches (174mm) x 3% inches (99mm)

Note. This is an example only and the dimensions must be taken from the text.

Bank Name/Logo & RC No. Branch Title/Address	BANKERS PAYMENT B. PAYT. No.	050004	Restraint Area Date
We shall credit you through the cl	learing on presentation of this		
Bankers Payment with the sum of			
On Account of			Authorised Signature
Pa	nying Bank Name & Address		Authorised Signature
	Please do not write below this line —		
	MICR CODELINE		

Notes on Bankers Payment:

No Stamp Duty symbol is required.

Any wording must be printed in the body of the instrument and must be outside the restraint area.

The word BANKERS PAYMENT must be printed in the top half of the instrument and must be outside the restraint area.

1.9 Debit Note (Manual infill)

Dimensions 6% inches (174mm) x 3% inches (99mm)

Note. This is an example only and the dimensions must be taken from the text.

Bank Name Branch Title/Address	DEBIT NOTE	050004	Restraint Area
			Date
DEBIT			_ = = = = = = = =
We debit you through the clearing	with the sum of		
Bank Cashiers On A	Account of		
Stamp			Authorised Signature
	Please do not write below this line MICR CODELINE		

Notes on Debit Note:

No Stamp Duty symbol is required.

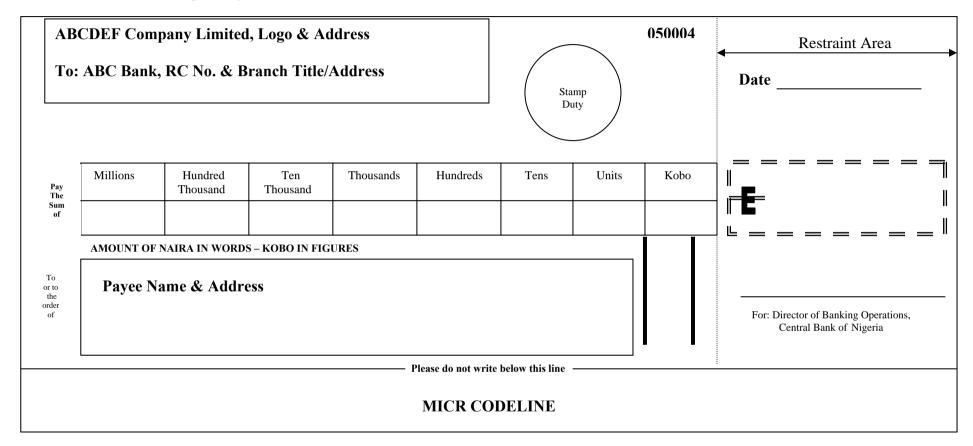
Any wording must be printed in the body of the instrument and must be outside the restraint area.

The word DEBIT NOTE must be printed in the top half of the instrument and must be outside the restraint area.

1.10 Dividend Warrant (Computer infill)

Dimensions 81/4 inches (210mm) x 37/8 inches (99mm)

Note. This is an example only and the dimensions must be taken from the text.



Notes on Dividend Warrant:

Amount boxes that are blank must be infilled with the word ZERO not NIL.

Amount in boxes to be preceded and followed by two asterisks.

Any wording must be placed in the body of the cheque and NOT in the restraint area.

Any wording associated with the crossing i.e. Not Negotiable must be printed between the two crossing lines.

1.11 Interest Warrant (Computer infill)

Dimensions $8\frac{1}{4}$ inches (210mm) x $3\frac{7}{8}$ inches (99mm)

Note. This is an example only and the dimensions must be taken from the text.

Hothes	ABCDEF BOND OF Warrant for half yearly interest due						050004	Restraint Area Date		
	Millions	Hundred Thousand	Ten Thousand	Thousands	Hundreds	Tens	Units	Kobo] -#E-	
PAY To T Orc	ler	For: Director of Banking Operations,								
MICR CODELINE										

Notes on Interest Warrant:

Amount boxes that are blank must be infilled with the word ZERO not NIL.

Amount in boxes to be preceded and followed by two asterisks.

Any wording must be placed in the body of the cheque and NOT in the restraint area.

Any wording associated with the crossing i.e. Not Negotiable & Co must be printed between the two crossing lines.

The Stamp Duty symbol is not required

1.12 Direct Debit (Computer infill)

Dimensions 6% inches (174mm) x 3% inches (99mm)

Note. This is an example only and the dimensions must be taken from the text.

Name & Logo of Assurance Company To: ABC Bank Plc, Branch Title/Address			DIRECT DEBIT		050004	← Date	Restraint Area			
	AMOUNT OI	F NAIRA IN WORL	OS – KOBO IN FIG	GURES						
Name Account Number Premium Date Ref. Number Policy Number If Unpaid, please return to: ABC Bank & Address				Hundreds Tens Units Kobo Branch Stamp		Kobo				
					MICR CO	DELINE			:	

Notes on Direct Debit:

Amount boxes that are blank must be infilled with the word ZERO not NIL.

Amount in boxes to be preceded and followed by two asterisks.

Any wording must be placed in the body of the instrument and NOT in the restraint area.

The name of the Assurance Company must NOT take precedence over the Bank name.

The Stamp Duty symbol is not required

