Date: 21-12-2016

Technical & Financial Proposals Evaluation Report		
Supply of Pay Pak Debit Cards		
1	Name of Procuring Agency	Sindh Bank Ltd.
2	Tender Reference No.	SNDB/COK/ADMIN/TD/745/2016
3	Tender Description	Supply of Pay Pak Debit Cards
4	Method of Procurement	Single Stage One Envelop Bidding Procedure
5	Tender Published	SPPRA S. No.30703
6	Total Bid Documents Sold	01
7	Total Bids Received	01
8	Technical Bid Opening Date	20/12/2016
9	Financial Bid Opening Date	20/12/2016
10	No of Bid Technically Qualified	01
11	Bid(s) Rejected	0

S. No.	Name of Company	Cost Offered by Bidder	Ranking in Terms of Cost	Comparison with Estimated Cost (Rs. 500,000/-)	Reason for Acceptance/ Rejection	Remarks
0	1	2	3	4	5	6
1	M/s Infotel Pakistan	Rs.347,500/- @ 34.75 For 10,000 Debit Cards	Qualified Bidder	Rs.152,500/- below with the estimated cost	**Accepted** Being the Qualified Bidder	**Rule 48 has been complied**

Note: M/s. Infotel Pakistan is selected for the Supply of Pay Pak Debit Cards to Sindh Bank Limited being the Qualified Bidder.

Members – Procurement Committee **Signature**

(Anis Iqbal)
Head of I. T. Division

(Saeed Jamal Tariq)
Chief Financial Officer

(Syed Muhammad Aqeel)
Chief Manager (IDBL) Karachi

INFOTEL PAKISTAN

FINANCIAL PROPOSAL

PRICE SCHEDULE

(Applicable for the year 2016)

Tender ID: **SNDB/COK/ADMIN/TD/745/2016 – Supply of PayPak Debit Cards**
Name of Bidder **M/s InfoTel Pakistan (Pvt.) Ltd.**

S.No.:	Item	Unit Cost	Quantity	Total Amount
01	PayPak Debit Cards (Classic Card)	PKR: 34.75/-	5,000	PKR 173,750/-
02	PayPak Debit Cards (Classic Card)	PKR: 34.75/-	5,000	PKR 173,750/-
			Total Amount Inclusive of 17% GST in Pak. Rs.:	PKR 347,500/-

Terms & Conditions – EMV Card Plastic Procurement:

Quotation Validity:	Prices quoted are Ex-Karachi (Sindh Bank Production -Karachi). The Pak. Rs. quoted prices are inclusive of all taxes and valid for 90 days from the date of this response
Lead time:	Electronic Proof within 2-3 days. Sample Card – within 2-3 weeks after the Electronic proof approval from 1-Link Mass Card Delivery: After the sample card approval 2-3 weeks.
Shipment:	Single Shipment
Payment terms:	100% on delivery. 10% will be charged against the cancellation of Purchase order, after one-week cancellation / amendments will not be acceptable.
Quote valid in:	The above quoted prices will be change in case of any additional taxes imposed by the government.

SIGNATURE MEMBERS PC-IT

Head - Fin Div. _____

Head - IT Div. _____

Member-IDBL. _____

Date: _____

M/S Infotel Pakistan

Eligibility Criteria for Paypak Debit Cards

S.No.	Requisite	Evidence Attached	Compliance / Proof	
1	Minimum 03 Years in business in the relevant field	Letter of Incorporation / Company Registration Letter / Letter or Declaration of Commencement of Business / NTN. **(attach as Annexure "A")**	✓ Yes	No
2	Turn Over in last 3 Years should be at least 20 Million	Audit Report / Tax Return **(attach as Annexure "B")**	✓ Yes	No
3	Registration with Income Tax and Sales Tax	NTN & GST Certificates **(attach as Annexure "C")**	✓ Yes	No
4	Office in Karachi is mandatory	Complete address along with PTCL landline numbers **(attach as Annexure "D")**	✓ Yes	No
5	Company should provide Valid Manufacturing Authorization Certificate for Manufacturing of DEBIT CARDS	Certificates from Manufacturer & Provide at least 5 Sample DEBIT Cards **(attach as Annexure "E")**	✓ Yes	No
6	The DEBIT CARD manufacturing facility must be in compliance with PayPak /1 Link and EMV Standards	Attach Certificates **(attach as Annexure "F")**	✓ Yes	No
7	Manufacturer of DEBIT CARDS should be ISO Certified	Attach Certificate **(attach as Annexure-"G")**	✓ Yes	No
8	Company must provide list of clients for Supply of DEBIT CARDS in Pakistan	Attach Purchase Order **(attach as Annexure "H")**	✓ Yes	No
9	Debit Card must be produced by Paypak approved debit card manufacturer	Paypak Certificates from Manufacturer **(attach as Annexure "I")**	✓ Yes	No
10	Company must be Authorized from 1 Link for Manufacture Paypak Debit Cards	Attach Authorized Letter **(attach as Annexure "J")**	✓ Yes	No
		Qualified / Disqualified		

ELIGIBILTY CRITERIA NOTE

1. There can be subsequent clarification to this specific tender for which it is advised to keep yourself abreast with the notification being hoisted on Sindh Bank Ltd & SPPRA websites regularly.
2. Attachment of relevant evidence in eligibility criteria is mandatory. In case of non-provision of evidence in any of the requisite, bidder will be disqualified.

MANDATORY

1. Attachment of Affidavit (specimen attached as Annexure "H") on stamp paper from the owner of the company.
2. Writing of tender reference as given in the NIT on the Envelop, carrying tender document is must or the bank will not be responsible if the documents are not received by the Procurement Committee on time.

DISQUALIFICATION

The bidder will be considered disqualified during technical/financial evaluation process or after award contract if:

1. On black list of SPPRA & Sindh Bank Ltd.
2. Issued with two (2) warning letters/emails by the Sindh Bank Ltd in the past to the bidder for unsatisfactory performances
3. Alternate bid is offered.
4. Non - Attachment of Annexure "A" (With Financial Proposal) & Annexure "B" (With Financial Proposal if Bank Guarantee is going to be submitted as Bid Security).
5. The qualified bidder sublets the contract in any form/stage to any other agency.
6. The tender is deposited without Tender Fee
7. If during verification process of the clienta list the response by any of the bank is un satisfactory on account of previous performance.

Ahsan Ali
AVP/Operations Div.

Dilshad Husain Khan
SVP/Finance Division

M. Saeed Khan
SVP/I.T. Division

SIGNATURE MEMBERS PC-IT

Head - Fin Div. _____

Head - IT Div. _____

Member-IDBL. _____

Date: _____

SINDH BANK
سندھ بینک
POWER TO THE PEOPLE

21-12-2016

Subject: **Certificate**
Compliance of SPPRA Rule 48
TENDER REF NO. SNDB/ADMIN/TD/745/2016

This is to certify that as only one bid was received against the tender, so Rule 48 has been complied with detail as follows.

Current Market Price	Current Tender Price
Rs.374,400/- @ 37.44 for 10,000 Debit Cards	Rs.347,500/- @ 34.75 for 10,000 Debit Cards

M. Rashid Memon
VP/I.T. Division

Signature –Procurement Committee Members

Head of IT

Chief Financial Officer

Chief Manager (IDBL)

oberthur TECHNOLOGIES

Quotation No: KHI/OBERTHUR/MKT/2016/00053

QUOTATION

Customer

Org.	Sindh Bank Ltd.	**Date**	16-11-2016
Name	Mr. Rashid Memon		
Address	Plot No. F/101, Block 7, First Floor,Scheme 5, Block 7, Clifton, Karachi	Ref	Email
		Rep	Muhammad Farooq
Phone	0344-2461169	FOR Prices	Karachi

M.O.Qty	Description	Unit Price PKR Excl. GST	Total (PKR)
50,000	**PayPak Debit Card** 760µ PVC card confirming PayPak standard Size : 85.725 x 53.975 corner radius 3.175 Confirming ISO-7811 standard 4+4 color offset printing 3 tracks HiCo 27500e Magnetic Strip Signature Panel confirming PayPak Standard	24.00	1,200,000.00
10,000	**PayPak Debit Card** Same as Above	32.00	320,000.00
2,000	**PayPak Debit Card** Same as Above	56.00	112,000.00
	NOTE: Sampling cost is 500$ (if physical samples required before bulk production) **Lead time for sampling is 3 to 4 weeks post scheme approval**		

TERMS & CONDITIONS:

1. Art work to be provided by the customer in editable format
2. Delivery time will be 4 weeks post scheme approval.
3. 10% +/- tolerance on quality is allowed.
4. Partial deliveries will be charged additionally to the customer on actual.
5. The prices are subject to change with any PKR variation to US Dollar.
   This quotation is based on today's inter bank exchange rate of $1 = PKR 105
6. Above quoted price is valid for single design and for single shipment.
7. Above quote price is exclusive of 17% GST.
8. Payment would be required on delivery.
9. Quotation is valid for two weeks.
10. Incoterms : DDP Karachi

Accepted By

Name:_____

Stamp:_____

Muhammad Farooq
Assistant Manager Customer Services |Oberthur Technologies Pakistan (Pvt.) Ltd.
Plot # 189 | Sector 23 | Korangi Industrial Area, Karachi.Pakistan
T: +92 21 35064016-17 | F: +92 21 35064078 | M: +92 301 8227848
m.farooq@oberthur.com
www.oberthur.com

SINDH BANK
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POWER TO THE PEOPLE

OPENING OF BID

FINANCIAL PROPOSALS

FOR SELECTION OF Supply of Pay Pak Debit Cards

Date: 20-12-2016

S.No	Company Name	Total Bid Offered		Signature of Company Representative	Remarks
		Announced	Evaluated		
01	INFOTEL	Rs 347,500			

Signature –Procurement Committee Members for IT Infrastructure

Head of IT

Chief Financial Officer

Chief Manager (IDBL)

MINUTES OF THE OPENING OF THE TENDER (TECHNICAL/FINANCIAL PHASE)

TYPE OF PROCUREMENT ADMIN / IT / CONSULTANT / MEDIA

TENDER NAME Supply of Pay Pak Debit Cards

TYPE OF TENDER SINGLE STAGE-ONE ENVELOPE / SINGLE STAGE-TWO ENVELOPE / TWO STAGE /TWO STAGE-TWO ENVELOPE

OPENING DATE _____

OPENING TIME _____

ATTENDANCE (MEMBER PC) HEAD OF I.T.Division

CFO

Chief Manager, IDBL

	NAME	FIRM
ATTENDANCE (REPS. OF BIDDERS)	FAISAL	INFSTEL

TOTAL BIDS ACCEPTED FOR EVALUATION (1)

TOTAL BIDS REJECTED Nil

REMARKS _____

SIGNATURE M R Gul

DATE 20/12/2016

Members – Procurement Committee	Signature
Head of I.T	
Chief Financial Office	
Chief Manager, IDBL	

SINDH BANK
سندھ بینک

SNDB/COK/ADMIN/TD/745/2016
Dated: 30/01/2017

From	IT Division
To	Deputy Director, SPPRA

Subject: **Submission – RULE 50 COMPLIANCE**
Supply of Pay Pak Debit Cards

Dear Sir,

Enclosed please find following documents for submission to SPPRA for Rule 50 Compliance.

S.No.	Documents Attached	SPPRA Sr.#
01	1. Contract Evaluation Form 2. Letter of Award 3. Agreement 4. Scope of Work 5. BER 6. Financial Proposal 7. Minutes of Bid 8. Email Copy	30703

Kindly confirm once it is get holsted on your respective websites and subsequently please release their respective IDs for completion of tender process.

Regards,

Hina Awan
Procurement Officer
30/01/17

SINDH PUBLIC PROCUREMENT REGULATORY AUTHORITY

CONTRACT EVALUATION FORM

TO BE FILLED IN BY ALL PROCURING AGENCIES FOR PUBLIC CONTRACTS OF WORKS, SERVICES & GOODS

1) NAME OF THE ORGANIZATION / DEPTT. SINDH BANK LTD
2) PROVINCIAL / LOCAL GOVT./ OTHER Scheduled Bank
3) TITLE OF CONTRACT Supply of Pay Pak Debit Cards
4) TENDER NUMBER SNDB/COK/ADMIN/TD/745/2016
5) BRIEF DESCRIPTION OF CONTRACT Supply of Pay Pak Debit Cards
6) FORUM THAT APPROVED THE SCHEME Procurement Committee/ Competent Authority
7) TENDER ESTIMATED VALUE 500,000/-
8) ENGINEER'S ESTIMATE (For civil works only)
9) ESTIMATED COMPLETION PERIOD (AS PER CONTRACT) One year
10) TENDER OPENED ON (DATE & TIME) Technical(20/12/2016at 11:00)Financial(20/12/201611:00)
11) NUMBER OF TENDER DOCUMENTS SOLD 01 (Attach list of buyers)
12) NUMBER OF BIDS RECEIVED
13) NUMBER OF BIDDERS PRESENT AT THE TIME OF OPENING OF BIDS 01
14) BID EVALUATION REPORT (Enclose a copy) 15 Dec 2016(Sindh Bank Website)
15) NAME AND ADDRESS OF THE SUCCESSFUL BIDDER M/s Infotel Pakistan
16) CONTRACT AWARD PRICE Rs.347,5[illegible]/-
17) RANKING OF SUCCESSFUL BIDDER IN EVALUATION REPORT (i.e. 1st, 2nd, 3rd EVALUATION BID). M/s Infotel Pakistan

18) METHOD OF PROCUREMENT USED : - (Tick one)

a) SINGLE STAGE – ONE ENVELOPE PROCEDURE ✓ Domestic/ Local
b) SINGLE STAGE – TWO ENVELOPE PROCEDURE
c) TWO STAGE BIDDING PROCEDURE
d) TWO STAGE – TWO ENVELOPE BIDDING PROCEDURE

PLEASE SPECIFY IF ANY OTHER METHOD OF PROCUREMENT WAS ADOPTED i.e. EMERGENCY, DIRECT CONTRACTING ETC. WITH BRIEF REASONS:

SPPRA

Competent Authority

19) APPROVING AUTHORITY FOR AWARD OF CONTRACT _____

20) WHETHER THE PROCUREMENT WAS INCLUDED IN ANNUAL PROCUREMENT PLAN?

Yes	✓	No	

21) ADVERTISEMENT :

i) SPPRA Website
(If yes, give date and SPPRA Identification No.)

Yes	SPPRA S.NO.30703
No	

ii) News Papers
(If yes, give names of newspapers and dates)

Yes	
No	

22) NATURE OF CONTRACT

Domestic/Local	✓	Int.	

23) WHETHER QUALIFICATION CRITERIA WAS INCLUDED IN BIDDING / TENDER DOCUMENTS?
(If yes, enclose a copy)

Yes	✓	No	

24) WHETHER BID EVALUATION CRITERIA WAS INCLUDED IN BIDDING / TENDER DOCUMENTS?
(If yes, enclose a copy)

Yes	✓	No	

25) WHETHER APPROVAL OF COMPETENT AUTHORITY WAS OBTAINED FOR USING A METHOD OTHER THAN OPEN COMPETITIVE BIDDING?

Yes		No	✓

26) WAS BID SECURITY OBTAINED FROM ALL THE BIDDERS?

Yes	✓	No	

27) WHETHER THE SUCCESSFUL BID WAS LOWEST EVALUATED BID / BEST EVALUATED BID (in case of Consultancies)

Yes	✓	No	

28) WHETHER THE SUCCESSFUL BIDDER WAS TECHNICALLY COMPLIANT?

Yes	✓	No	

29) WHETHER NAMES OF THE BIDDERS AND THEIR QUOTED PRICES WERE READ OUT AT THE TIME OF OPENING OF BIDS?

Yes	✓	No	

30) WHETHER EVALUATION REPORT GIVEN TO BIDDERS BEFORE THE AWARD OF CONTRACT?
(Attach copy of the bid evaluation report)

Yes	✓	No	

SPPRA

31) ANY COMPLAINTS RECEIVED
(If yes, result thereof)

Yes	
No	No

32) ANY DEVIATION FROM SPECIFICATIONS GIVEN IN THE TENDER NOTICE / DOCUMENTS
(If yes, give details)

Yes	
No	No

33) WAS THE EXTENSION MADE IN RESPONSE TIME?
(If yes, give reasons)

Yes	
No	No

34) DEVIATION FROM QUALIFICATION CRITERIA
(If yes, give detailed reasons)

Yes	
No	No

35) WAS IT ASSURED BY THE PROCURING AGENCY THAT THE SELECTED FIRM IS NOT BLACK LISTED?

Yes	✓	No	

36) WAS A VISIT MADE BY ANY OFFICER/OFFICIAL OF THE PROCURING AGENCY TO THE SUPPLIER'S PREMISES IN CONNECTION WITH THE PROCUREMENT? IF SO, DETAILS TO BE ASCERTAINED REGARDING FINANCING OF VISIT, IF ABROAD:
(If yes, enclose a copy)

Yes		No	✓

37) WERE PROPER SAFEGUARDS PROVIDED ON MOBILIZATION ADVANCE PAYMENT IN THE CONTRACT (BANK GUARANTEE ETC.)?

Yes	✓	No	

38) SPECIAL CONDITIONS, IF ANY
(If yes, give Brief Description)

Yes	
No	✓

39) Date of Award of Contract: 27-01-2017

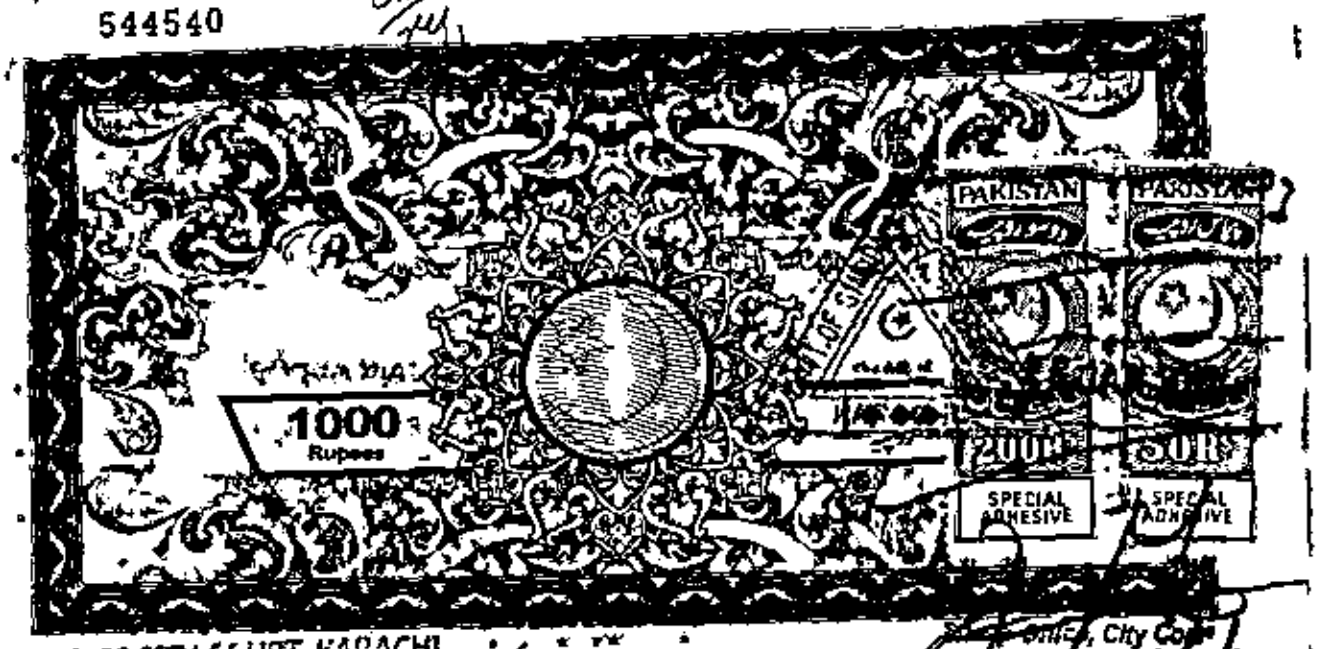
Signature & Official Stamp of
Authorized Officer

M. RASHID MEMON
Vice President
I.T. Division
SINDH BANK LTD.
Head Office, Karachi.

FOR OFFICE USE ONLY

SPPRA

544540



(RUPEES ONE THOUSAND ONLY)

AGREEMENT

26 JAN 2017

This Agreement is made on the 27th day of January, 2017, Between Sindh Bank Limited having its head office at 3rd Floor, Federation House, Clifton, [illegible] (hereinafter called the Purchaser)

And

M/S. InfoTel Pakistan (Pvt.) Ltd. having its registered office at 04, 10th Floor, Jason Trade Centre, Plot No. [illegible], Block 6, PECHS, Shahrah-e-Faisal, Karachi – 75400 (Here in after referred as Vendor).

WHEREAS the Vendor is the dealer/supplier/manufacturer of Magstripe PayPak (Debit cards).

AND WHEREAS the Bank is inclined to purchase the Debit cards as detailed below on the terms and conditions laid down hereinafter for the supply of Debit cards for the BANK of total sum Amounting Rs. 347,500/-.

Detail of Equipment is as follows.

S.No	Product	Unit Price PKR	Quantity	Total Price (PKR)
1	PayPak Debit Cards (Classic Card)	PKR. 34.75/	5,000	PKR 173,750/-
2	PayPak Debit Cards (Gold Card)	PKR: 34.75/-	5,000	PKR 173,750/-
	Total Amount Inclusive of 17% Gst in Pak. Rs			PKR 347,500/-

Terms & Conditions:

1. The vendor will provide the performance security in the form acceptable to the Bank. for the 10% of the order value for the period of one year from the date of Submission of performance security . In case Vendor does not fulfil its commitments the bank reserves the right to enforce the performance security. All terms & condition of the tender documents are part of this agreement.

2. The vendor shall supply of Debit cards as per specifications and upon the recommendations of the Technical / Standardized Committee appointed by the Bank within 8 weeks from the date of receipt of Purchase Order

3. The bank will have the option to enforce the performance bond on happening of any one or all the following events.
a. If the vendor fails to deliver the Debit cards as per agreed Schedule.
b. If the vendor fails to get the Debit cards inspected by the Technical Committee

c. If the Debit cards supplied by the vendor fails to perform as per Banks requirement.

In addition the Bank will have the option to cancel the order and offer the same to the next lowest bidder.

4. The vendor also undertakes to bear all kind of taxes i.e. Stamp duty/ Services Charges/Professional Tax / Sales Tax Invoice, Income Tax, Octroi Tax (if any) and all other incidental charges etc, up to the place of destination.

5. The Bank reserves the right to Test/Check the Debit Cards to ensure that it is provided as per specification in the tender document. For any discrepancies, the Bank reserve the right to forfeit full security deposit/ cancel the order for the supply and bring the vendor on black list of the Bank forever. The decision of the Bank shall be final and binding upon the vendor.

6. In the event of the default on the part of the vendor, in the performance of any condition of the contract and if such default is not remedied within 3 days it shall be lawful for the Bank to enforces full or part of the Earnest money / Performance Security and or cancel the whole part of the supply order with vendor and the decision of the the Bank will be the final and legally binding on the vendor.

7. Proportionate payments against supply of equipment will be made within Thirty days from the equipment delivery date.

8. In case of any dispute at any point the matter will be settled amicably. If the parties do not [illegible] ment the dispute will be referred to the Complaint Redressal Committee for Dispute Resolution.

9. Delivery will be made by the vendor at head office of Sindh Bank Ltd.

10. In case of failure to supply the requisite within 7 working days after the delivery time, as [illegible] under clause no 2 of this agreement, Rs.1,000/- per day may be charged.

11. The term of this agreement shall be for a period of Two Years, commencing from the date of signing of this agreement.

In witnesses hereunder both the parties have set their hands on the day and year above first mentioned.

Termination of Agreement by the Bank:

- If the Supplier, in the judgment of the Bank has engaged in corrupt or fraudulent practices in competing for or in executing the Agreement."
- If, as the result of Force Majeure, the Supplier is unable to perform a material portion of the Services for a period of not less than thirty (30) days; and
- If the Bank, in its sole discretion and for any reason whatsoever, decided to terminate this Agreement.
- If issued two (2) warning letter/emails by Sindh Bank Ltd for its unsatisfactory current performance by the Sindh Bank Ltd to the bidder."

Support Escalation Matrix:

For timely addressing of complaints given support escalation matrix will be utilized/followed:-

LEVEL-1	Name/Designation (support staff)	
First complain if the call is not resolved "within specified response time" (24 hours)	Naqi Imam– Head of Business Development	
	Enaqi@infotelpak.com	
	0300-[illegible]2	
LEVEL-2	Name/Designation (Regional Head/Manager/GM)	
Second complain, if the call is attended within "Specified Response Time" and not attended / or the problem still unresolved even after complaining at Level-1 (48 hours)	Saleem Ahmed – Manager Card Production	
	saleem@infotelpak.com	
	0302 8240671	
LEVEL-3	Riaz Siddiqui / CEO (CEO of the firm)	
Third complain, if the call is attended within "Specified Response Time" and not attended /or the problem still unresolved even after complaining at Level-2	34320008 – 11	
	riaz@infotelpak.com	
	0300 8230293	

Note: Ensure that no column above is left blank

In witnesses hereunder both the parties have set their hands on the day and year above first mentioned.

Sindh Bank Limited

Registered Address:

Name: _____

Signature: _____

Title: _____

Date: _____

ANIS IQBAL
EVP / Head of Information Technology
SINDH BANK LIMITED
Head Office, Karachi

Witness:

Name: M. SAEED ICHAN

Signature: _____

Title: SVP (IT)

Date: _____

InfoTel Pakistan (Pvt.) Ltd.

Registered Address: 4, 10th Floor, Jason Trade Center, 39-A-1, PECHS, Block 6, Karachi

Name: M. FARHAN SIDDIQUI

Signature: _____

Title: Head of Projects

Date: _____

Witness:

Name: Syed Adnan Ali

Signature: _____

Title: Senior Specialist, Technical Support & Services

Date: _____

ATTESTED
S. SHAHMOOD ALI RIZVI
ADVOCATE HIGH COURT
NOTARY PUBLIC
KARACHI-PAKISTAN

26 JAN

Date: 21-12-2016

Technical & Financial Proposals Evaluation Report Supply of Pay Pak Debit Cards		
1	Name of Procuring Agency	Sindh Bank Ltd.
2	Tender Reference No.	SNDB/COK/ADMIN/TD/745/2016
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5	Tender Published	SPPRA S. No.30703
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9	Financial Bid Opening Date	20/12/2016
10	No of Bid Technically Qualified	01
11	Bid(s) Rejected	0

S. No.	Name of Company	Cost Offered by Bidder	Ranking in Terms of Cost	Comparison with Estimated Cost (Rs. 500,000/-)	Reason for Acceptance/ Rejection	Remarks
0	1	2	3	4	5	6
1	M/s Infotel Pakistan	Rs.347,500/- @ 34.75 Per 10,000 Debit Cards	Qualified Bidder	Rs.152,500/- below with the estimated cost	Accepted Being the Qualified Bidder	Rule 48 has been complied

Note: M/s. Infotel Pakistan is selected for the Supply of Pay Pak Debit Cards to Sindh Bank Limited being the Qualified Bidder.

Members – Procurement Committee

Signature

(Anis Iqbal)
Head of I. T. Division

(Saeed Jamal Tariq)
Chief Financial Officer

(Syed Muhammad Aqeel)
Chief Manager (IDBL) Karachi

INFOTEL PAKISTAN

FINANCIAL PROPOSAL

PRICE SCHEDULE

(Applicable for the year 2016)

Tender ID: SNDB/COK/ADMIN/TD/745/2016 – Supply of PayPak Debit Cards
Name of Bidder M/s InfoTel Pakistan (Pvt.) Ltd.

S.No.:	Item	Unit Cost	Quantity	Total Amount
01	PayPak Debit Cards (Classic Card)	PKR: 34.75/-	5,000	PKR 173,750/-
02	PayPak Debit Cards (Classic Card)	PKR: 84.75/-	5,000	PKR 173,750/-
			Total Amount Inclusive of 17% GST in Pak. Rs.:	PKR 347,500/-

Terms & Conditions – EMV Card Plastic Procurement:

Quotation Validity:	Prices quoted are Ex-Karachi (Sindh Bank Production -Karachi). The Pak. Rs. quoted prices are inclusive of all taxes and valid for 90 days from the date of this response
Lead time:	Electronic Proof within 2-3 days. Sample Card – within 2-3 weeks after the Electronic proof approval from 1-Link Mass Card Delivery: After the sample card approval 2-3 weeks.
Shipment:	Single Shipment
Payment terms:	100% on delivery. 10% will be charged against the cancellation of Purchase order, after one-week cancellation / amendments will not be acceptable.
Quote valid in:	The above quoted prices will be change in case of any additional taxes imposed by the government.

SIGNATURE MEMBERS PC-IT

Head - Fin Div.

Head - IT Div.

Member-IDBL

Date:

M/s Infotel Pakistan

Eligibility Criteria for Paypak Debit Cards

S.No.	Requisite	Evidence Attached	Compliance / Proof	
1	Minimum 03 Years in business in the relevant field	Letter of Incorporation / Company Registration Letter / Letter of Declaration of Commencement of Business / NTN. (attach as Annexure "A")	Yes	No
2	Turn Over in last 3 Years should be at least 20 Million	Audit Report / Tax Return (attach as Annexure "B")	Yes	No
3	Registration with Income Tax and Sales Tax	NTN & GST Certificates (attach as Annexure "C")	Yes	No
4	Office in Karachi is mandatory	Complete address along with PTCL landline numbers (attach as Annexure "D")	Yes	No
5	Company should provide Valid Manufacturing Authorization Certificate for Manufacturing of DEBIT CARDS	Certificates from Manufacturer & Provide at least 5 Sample DEBIT Cards (attach as Annexure "E")	Yes	No
6	The DEBIT CARD manufacturing facility must be in compliance with PayPak / 1 Link and EMV Standards	Attach Certificates (attach as Annexure "F")	Yes	No
7	Manufacturer of DEBIT CARDS should be ISO Certified	Attach Certificate (attach as Annexure "G")	Yes	No
8	Company must provide list of clients for Supply of DEBIT CARDS in Pakistan	Attach Purchase Order (attach as Annexure "H")	Yes	No
9	Debit Card must be produced by Paypak approved debit card manufacturer	Paypak Certificate from Manufacturer (attach as Annexure "I")	Yes	No
10	Company must be Authorized from 1 Link for Manufacturing Paypak Debit Cards	Attach Authorized Letter (attach as Annexure "J")	Yes	No
		Qualified / Disqualified		

ELIGIBILITY CRITERIA NOTE

1. There can be subsequent clarifications to this specific tender for which it is advised to keep yourself abreast with the notifications being hosted on Sindh Bank Ltd & SPPRA websites regularly.
2. Attachment of relevant evidences in eligibility criteria is mandatory, in case of non-provision of evidence in any of the requisite, bidder will be disqualified.

MANDATORY

1. Attachment of Affidavit (specimen attached as Annexure "H") on stamp paper from the owner of the company.
2. Writing of tender reference as given in the NIT on the Envelop, carrying tender document & mark on the head will not be responsible if the documents are not received by the Procurement Committee in time.

DISQUALIFICATION

The bidder will be considered disqualified during technical/financial evaluation process or after award contract if:

1. On black list of SPPRA & Sindh Bank Ltd.
2. Issued with two (2) warning letters/emails by the Sindh Bank Ltd in the past to the bidder for unsatisfactory performance.
3. Alternate bid is offered.
4. Bank - Attachment of Annexure "A" (With Financial Proposal) & Annexure "B" (With Technical Proposal) if Bank Guarantee is going to be submitted as Bid Security).
5. The qualified bidder subcontracts the contract in any form/stage to any other agency.
6. The tender is deposited without Tender Fee.
7. If during verification process of the attached bid the response by any of the bank is un-satisfactory on account of previous performance.

Ansar Ali
AVP/Operations Div.

Dilshad Hussain Khan
SVP/Finance Division

M. Saeed Khan
SVP/I.T Division

SIGNATURE MEMBERS PC-IT

Head - Fin Div. _____

Head - IT Div. _____

Member-IDBL. _____

Date: _____

SINDHBANK
سندھ بینک

21-12-2016

Subject: **Certificate**

Compliance of SPPRA Rule 48

TENDER REF NO. SNDB/ADMIN/TD/745/2016

This is to certify that as only one bid was received against the tender, so Rule 48 has been complied with detail as follows.

Current Market Price	Current Tender Price
Rs.374,400/- @ 37.44 for 10,000 Debit Cards	Rs.347,500/- @ 34.75 for 10,000 Debit Cards

M. Rashid Memon
VP/I.T. Division

Signature –Procurement Committee Members

Head of IT

Chief Financial Officer

Chief Manager (IDBL)

oberthur TECHNOLOGIES

Quotation No: KHI/OBERTHUR/MKT/2016/00053

QUOTATION

Customer

Org.	Sindh Bank Ltd	Date	16-11-2016
Name	Mr. Rashid Memon		
Address	Plot No. F/101, Block 7, First Floor,Scheme 5, Block 7. Clifton, Karachi	Ref	Email
		Rep	Muhammad Farooq
Phone	0344-2481169	FOR Prices	Karachi

80,000	PayPak Debit Card 780u PVC card conforming PayPak standard Size : 85.725 x 53.975 corner radius 3.175 Conforming ISO-7811 standard 4+4 color offset printing 3 tracks HiCo 2750Oe Magnetic Strip Signature Panel conforming PayPak Standard	24.00	[redacted]
19,000	PayPak Debit Card Same as Above	32.00	[redacted]
2,000	PayPak Debit Card Same as Above	56.00	112,000.00
	NOTE: Sampling cost is $600 (6 physical samples required before bulk production) Lead time for sampling is 3 to 4 weeks post artwork approval		

TERMS & CONDITIONS:

1. Art work to be provided by the customer in editable format
2. Delivery time will be 4 weeks post scheme approval
3. 10% +/- tolerance on quality is allowed.
4. Partial deliveries will be charged additionally to the customer on actual.
5. The prices are subject to change with any PKR variation to US Dollar.
   This quotation is based on today's inter bank exchange rate of $1 = PKR 105
6. Above quoted price is valid for single design and for single shipment.
7. Above quote price is exclusive of 17% GST.
8. Payment would be required on delivery
9. Quotation is valid for two weeks.
10. Incoterms : DDP Karachi

Accepted By
Name: _____
Stamp: _____

Muhammad Farooq
Assistant Manager Customer Services |Oberthur Technologies Pakistan (Pvt.) Ltd.
Plot # 189 | Sector 23 | Korangi Industrial Area, Karachi Pakistan
T: +92 21 35084016-17 | F: +92 21 35084078 | M: +92 301 8227848
m.farooq@oberthur.com
www.oberthur.com

SINDH BANK
سندھ بینک

OPENING OF BID

FINANCIAL PROPOSALS

FOR SELECTION OF Supply of Pay Pak Debit Cards

Date: 20-12-2016

S.No	Company Name	Total Bid Offered		Signature of Company Representative	Remarks
		Announced	Evaluated		
01	INFOTEL	Rs 347,500			

Signature –Procurement Committee Members for IT Infrastructure

Head of IT

Chief Financial Officer

Chief Manager (IDBL)

MINUTES OF THE OPENING OF THE TENDER (TECHNICAL/FINANCIAL PHASE)

TYPE OF PROCUREMENT: ADMIN / IT / CONSULTANT / MEDIA

TENDER NAME: Supply of Pay Pak Debit Cards

TYPE OF TENDER: SINGLE STAGE-ONE ENVELOPE / SINGLE STAGE-TWO ENVELOPE / TWO STAGE /TWO STAGE-TWO ENVELOPE

OPENING DATE: _____

OPENING TIME: _____

ATTENDANCE (MEMBER PC): HEAD OF I.T.Division

CFO

Chief Manager, IDBL

	NAME	FIRM
ATTENDANCE (REPS. OF BIDDERS)	FAISAL	INFOTEL

TOTAL BIDS ACCEPTED FOR EVALUATION: 1

TOTAL BIDS REJECTED: Nil

REMARKS: _____

SIGNATURE: M R Cal 26/12/2016

DATE: _____

Members – Procurement Committee Signature

Head of I.T: [signature]

Chief Financial Office: [signature]

Chief Manager, IDBL: [signature]

SINDH BANK
سندھ بینک
POWER TO THE PEOPLE

The below revised procurement plan for the year 2016 is required to be hoisted on SPPRA and SNDB websites and is accordingly forwarded for approval of the members of Procurement Committee, please.

S #	Items / Description	Estimated Qty	Estimated Unit Cost	Total Estimated Cost (PKR)	Method of Procurement	Anticipated/ Actual Date of Start	Anticipated/ Actual Date of Completion
1	PAYPAK (DEBIT CARDS)	Gold Cards=5,000 Classic Cards=5,000	Rs.50/-	**Rs.500,000/-**	Single Stage One Envelope	December, 2016	March, 2017

PROCUREMENT COMMITTEE

Name & Designation	Signature
Anis Iqbal Head of I.T.Division	
Saeed Jamal Tariq CFO- Member	
Syed Muhammad Aqeel Chief Manager IDBL Karachi	

SINDH BANK
سندھ بینک
POWER TO THE PEOPLE

PURCHASE ORDER / Contract Award

PO No: 138

Date: 27-01-2017

M/s Infotel Pakistan (Pvt) Ltd,
10th Floor, Jason Trade Centre,
39-A-1, Block 6, PECHS,
Shahrah-e-Faisal,
Karachi.

Subject: **Supply of PAY PAK Debit Cards**

Dear Sir,

With reference to the Tender Bid SNDB/COK/ADMIN/TD/745/2016 dated 05-12-2016 for Supply of **PAY PAK Debit Cards** at Sindh Bank Ltd, submitted by you. After detail review the Sindh Bank Ltd management is pleased to inform that your Tender Bid is accepted.

Further detail is as follows.

1	Pay Pak Debit Cards (Classic)	5,000	34.75	173,750/-
2	Pay Pak Debit Cards (Gold)	5,000	34.75	173,750/-
			Total (Including All Taxes)	**347,500/-**

Terms & Conditions

Payment Terms	100% upon delivery.
Delivery	Within 8 weeks
Taxes/Deduction	Above prices are inclusive of all taxes.

Thanks,

M. Rashid Memon
VP/I.T. Division

M Saeed Khan
SVP/I.T Division

Anis Iqbal
EVP/Head of IT

SINDH BANK LIMITED
HEAD OFFICE:
3rd FLOOR, FEDERATION HOUSE,
ABDULLAH SHAH GHAZI ROAD,
CLIFTON, KARACHI-75600, PAKISTAN

UAN : +92-21-111-333-255
PHONE : +92-21-35829394
FAX : +92-21-35870543
WEB : www.sindhbankltd.com

سندھ بینک لمیٹڈ
ہیڈ آفس، تیسری منزل، فیڈریشن ہاؤس،
عبداللہ شاہ غازی روڈ، کلفٹن، کراچی۔ ۷۵۶۰۰۔ پاکستان

Pay Pak Debit Cards

S.No.	COMPANY NAME	AMOUNT	PO NO	BANK NAME
1	Infotel Pakistan	300	17232655	HBL
Total		**300/-**		

3 SCOPE OF WORK

Card Material

The material used for PayPak card shall meet all technical requirements as specified by ISO/IEC 7810 standards. It could be PVC or PVCA laminated plastic or material, or other materials with the same durability and opacity as PVC/PVCA that are not lower than the ISO/7810 standard and meet the performance and feature requirements for printing of individual identification card as specified by ISO standard.

Card Dimensions

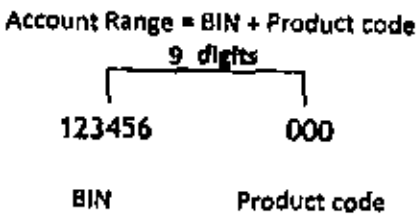
PayPak card dimensions are as follows:

Card Size:		86mm x 54mm x 0.82mm	
Thickness:		0.82mm +/-	
Quality:		High gloss laminated	
Front Side:		4 color printing	
Reverse Side:		4 color printing	
Signature		White Tamper proof	
Magstripe:		HICO	
Standard:		ISO Standard	

PAN (Primary Account Number)

The length of the Primary Account Number (PAN) must be 16 digits. The Institution Identification Number (IIN), also known as Bank Identification Number (BIN) or Interchange Member Descriptor Number (IMD), must be assigned by PayPak.
The IIN must comprise of the first 6 digits of the PAN.

To fully utilize the numeric capacity of each BIN, the Issuer must issue multiple products on the same BIN to maximize use. The 3 digits followed by the BIN will be assigned as the Product code/ type at the Issuer for identifying different products. The first 9 digits of the PAN represents account ranges which contains 6 digits BIN and 3 digits Product code/ type.



Front of Card Design

The Primary Account Number can appear in human readable format on the front of the card. PAN may be embossed or printed on the card and must conform to the ISO 7811 standards.

Back of Card Design

The card must contain a magnetic stripe encoded with Track 1 and Track 2. The location and physical characteristics of the magnetic stripe must conform to the ISO 7811 standards.

Track 1 Data

This section describes PayPak specifications for the contents of Track 1 of the magnetic stripe. PayPak requirements conform to ISO 7811-2 and ISO 7813.

Track 1 Content Requirements

Requirements for the contents of the magnetic stripe conform to ISO 7813.

Magnetic-Stripe Encoding Requirements

- The magnetic stripe on a PayPak card must be encoded on both Track 1 and Track 2, as specified in this manual.
- Magnetic-stripe data encoding must begin in sequence from the right-hand side of the card as viewed from the back, with the encoded tracks at the top.
- Service Code values must be encoded on PayPak card. An issuer must encode Service Code 520 to allow PIN based authorization only.
- The centerline of the first data bit (start sentinel) to be recorded on the magnetic stripe must be 7.44mm ± 0.51mm from the right edge of the PayPak card. The centerline of the last data bit to be recorded on the magnetic stripe must not extend closer than 6.93mm from the left edge of the PayPak card.
- The lead-in to the first data bit and the distance from the last data bit to the end of the magnetic stripe must be clocking bits (i.e., zeroes).
- Data on the magnetic stripe must be encoded at 210 bits per inch on Track 1 and 75 bits per inch on Track 2, and contain at least the required information in the various fields as specified in this manual.

All of the following must conform to ISO 7811-2:

- Physical properties
- Performance characteristics
- Density
- Signal level
- Recording angle tolerances

End Sentinel			
Longitudinal Redundancy Check	1		

Front of Card Design

The Primary Account Number can appear in human readable format on the front of the card. PAN may be embossed or printed on the card and must conform to the ISO 7811 standards.

Back of Card Design

The card must contain a magnetic stripe encoded with Track 1 and Track 2. The location and physical characteristics of the magnetic stripe must conform to the ISO 7811 standards.

Track 1 Data

This section describes PayPak specifications for the contents of Track 1 of the magnetic stripe. PayPak requirements conform to ISO 7811-2 and ISO 7813.

Track 1 Content Requirements

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Magnetic-Stripe Encoding Requirements

- The magnetic stripe on a PayPak card must be encoded on both Track 1 and Track 2, as specified in this manual.
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- The lead-in to the first data bit and the distance from the last data bit to the end of the magnetic stripe must be clocking bits (i.e., zeroes).
- Data on the magnetic stripe must be encoded at 210 bits per inch on Track 1 and 75 bits per inch on Track 2, and contain at least the required information in the various fields as specified in this manual.

All of the following must conform to ISO 7811-2:

- Physical properties
- Performance characteristics
- Density
- Signal level
- Recording angle tolerances

- Error detection
- Permissible surface variation
- Character sets
- Appearance of the magnetic stripe

Record Format

An Issuer must comply with the Track 1 encoding requirements as given below.

Table A-1 lists the Track 1 field names and their length.

Track 1 Format
Following is a recommended format for Track-1.
Table A-1: Track 1 Record Format

Field Name	Length	Contents	
Start Sentinel	1	'%'	
Format Code	1	'B'	
Primary Account Number	16	Numeric	
Field Separator	1	'^'	
Cardholder Name	26	Alphanumeric	
Field Separator	1	'^'	
Expiry Date	4	YYMM	
Service Code	3	'520'	
Discretionary Data	11	PVKI (1 Character) PVV or Offset (4 Characters)	
CVV	3	Numeric	
Reserved	6	'000000'	
End Sentinel	1	'?'	
Longitudinal Redundancy Check	1		

Track 2 Data

This section describes PayPak specifications for the contents of Track 2 of the magnetic stripe. PayPak requirements conform to ISO 811-2 and ISO 7813.

Track 2 Content Requirements

Requirements for the contents of a magnetic stripe conform to ISO 7813.

Magnetic Stripe Encoding Requirements

1. The magnetic stripe on a PayPak card must be encoded on both Track 1 and Track 2, as specified in
2. this manual.
3. Magnetic stripe data encoding must begin in sequence from the right-hand side of the card as
4. viewed from the back, with the encoded tracks at the top.
5. Service Code values must be encoded on PayPak card. An Issuer must encode Service Code 520 to
6. allow PIN based authorization only.
7. The centerline of the first data bit (start sentinel) to be recorded on the magnetic stripe must be
8. 7.44mm ± 0.51mm from the right edge of the PayPak card. The centerline of the last data bit to be recorded on the magnetic stripe must not extend closer than 6.93mm from the left edge of the PayPak card.
9. The lead-in to the first data bit and the distance from the last data bit to the end of the magnetic
10. stripe must be clocking bits (i.e., zeroes).
11. Data on the magnetic stripe must be encoded at 210 bits per inch on Track 1 and 75 bits per inch
12. on Track 2, and contain at least the required information in the various fields as specified in this manual.

All of the following must conform to ISO 7811-2:

- Physical properties
- Performance characteristics
- Density
- Signal level
- Recording angle tolerances

- Error detection
- Permissible surface variation
- Character sets
- Appearance of the magnetic stripe

Record Format
An Issuer must comply with the Track 2 encoding requirements as given below.
Table B-1 displays the Track 2 record format.

Track 2 Format
Following is a recommended format for Track-2.

Table B-1: Track 2 Record Format

Field Name	Length	Contents
Start Sentinel	1	';'
Primary Account Number	16	Numeric
Field Separator	1	'='
Expiry Date	4	YYMM
Service Code	3	'520'
CVV	3	Numeric
End Sentinel	1	'?'
Longitudinal Redundancy Check	1	

Personal Identification Number

A cardholder's identity can be verified through PIN (personal identification number). When a PIN is used, verification is performed by either verifying the PIN data online against the issuer's database or offline using a chip card.

When the PIN is to be verified online, the PIN is entered, encrypted, transmitted, translated, and verified against a reference PIN available only in the issuer's (or agent's) processing centre. If the PINs match, there is a high probability that the cardholder's identity has been verified.

Note: *A Personal Identification Number (PIN) is a personal identification code that authenticates a Cardholder in an authorization request that originates at a terminal with authorization only and/or data capture only capability.*

Requirements to Issue PINs

All PayPak issuers are required to make PINs available to their cardholders. An issuer can assign or issue PINs using the cardholder's selection, derived PINs, randomly generated PINs, or any other method deemed suitable by the issuer. Regardless of the method used, it is important that the PIN values be secured and maintained in a way that only the cardholder knows the PIN or has the capability to access the PIN outside a physically secure device.

PIN Length

All cards must have an associated PIN. The length of the PIN must be at least 4 digits. PayPak supports up to 6 digits PIN.

PIN Block Format

PayPak uses the ISO 9564 Format 0 as its standard PIN block format. The PIN Block is made up of 16 hex digits and is formed as follows:

Position	Description	
1	Control Field. Value should be 0	
2	PIN Length. Value should between 4 to 6	
3-6	PIN digits (1-4)	
7-8	PIN digits (5-6) for a 6 digit PIN or PIN Pad Hex F	
9-16	Pad Hex F	

If cardholder entered PIN is of 4 digits, then position 7 and 8 should contain the PIN Pad character, hex F.

The PIN Block is XORed with the PAN Block and then encrypted with the Zone PIN Key (ZPK) before transmission.

The PAN Block is made of 16 hex digits and is formed as follows:

Position	Description	
1-4	Pad digit Hex 0	
5-16	PAN digits. PAN digits consist of the rightmost	

PIN Security

The value of a PIN as a means of cardholder identification depends on the ability to ensure that the PIN is known only to the cardholder. Issuers must have assurance that PINs will not be compromised when they are used in other clients' equipment or facilities.

The following standards provide for PIN security in interchange transactions processed using the PayPak System. These standards apply only when an interchange PIN is outside the Issuer's equipment and facilities. The techniques, procedures, and standards used by issuers in their own environment are at the issuers' discretion.

- A PIN used in interchange transactions processed using PayPak System must never be in a Comprehensible unencrypted form except within a PCI PIN Transaction Security (PTS) device.

- A PIN used in interchange transactions processed using the PayPak System must be managed using the requirements set forth in the *PCI PIN Security Requirements* document.

Card Verification Value (CVV)

This chapter describes the algorithm used to calculate the Card Verification Value (CVV) that is encoded in the CVV field in Track 1 and Track 2 of the magnetic stripe or the chip magnetic stripe image.

CVV

The CVV provides a cryptographic check on the contents of the magnetic stripe. The CVV is generated using secret keys and the algorithm described in this chapter. The algorithm is implemented in a security module or other facility especially designed for highly secret cryptographic operations.

The prerequisites and algorithm for generating the CVV are the same for Track 1 and Track 2 of the magnetic stripe. CVV must be encoded on Track 1 and Track 2 of the magnetic stripe and on the chip magnetic stripe image.

PayPak requires all cards to be encoded with the CVV.

Note: *The CVV calculation is independent of the length of the PAN.*

DES Algorithm

The CVV computation uses the Data Encryption Standard (DES) algorithm defined by the National Institute of Standards and Technology (NIST). The CVV specification requires a pair of *64-bit cryptographic key; that is, two 64-bit DES keys, each having odd parity and constructed. The two 64-bit DES keys can also be implemented as a single 128-bit TDES keys. For* the purpose of this manual, the rest of the CVV algorithm description uses the terminology of two 64-bit DES keys.

Generating and Verifying the CVV

The CVV computation generates a three-position CVV for Track 1 and Track 2 of the magnetic stripe.

One pair of 64-bit cryptographic keys called Card Verification Keys (CVKs) is used to generate and verify the CVVs for tracks 1 and 2.

PayPak mandates the following security precautions for CVV keys:

Issuers must not use the same verification keys for CVV and CVV2 as those used for PIN Verification values (PVVs). If the common keys were to be compromised, it would affect both the Issuer's PVVs and CVVs.

CVV and CVV2 verification keys should be different from any other DES keys used by the issuer. Because each Issuer has unique keys, a breach of security will be limited to a particular Issuer rather than affecting all Issuers using the CVV.

Note: *Using the same key for CVV, CVV2 is an exception to the general rule against using one key for multiple applications. The exception is allowed because all are variations of the CVV application.*

To create a CVV, the CVK pair is introduced to the DES algorithm with other data. Similar to any DES-based scheme, the security of the output value depends on the secrecy of the DES keys.

The CVK pair must be kept secret and should not be known to anyone. If the unauthorized disclosure of a CVK pair is known or suspected, the CVK pair should be replaced immediately. Cards with CVVs generated using the potentially compromised keys should be reissued as soon as possible. When all such cards have been reissued, the potentially compromised CVK pair should be invalidated.

Computing the CVV

Throughout the CVV computation, the first of the two 64-bit DES keys is referred to as Key A, the second as Key B. The following steps are performed to compute the CVV:

1. Construct a string of bits by concatenating, from left to right, the rightmost four bits of each character of the following data elements:
   - Primary Account Number (PAN)
   - Card Expiration Date
   - Service Code

   For example, a 16-digit PAN with a 4-digit Card Expiration Date and a 3-digit Service Code would produce a 23-character (16 + 4 + 3) string that is 92 bits long (23 * — 4).

2. Type the result from step 1 into a 128-bit field, right-filling the remaining bits with binary zeros. For example, a 16-digit PAN with a 4-digit Card Expiration Date and 3-digit Service Code requires 36 trailing zeroes to complete the 128-bit field.

3. Split the 128-bit field into two 64-bit blocks. The leftmost 64 bits are Block 1, the rightmost 64 bits are Block 2.
4. Encrypt Block 1 using Key A.
5. Exclusive-OR (XOR) the result of step 4 with Block 2. Encrypt this value with Key A.
6. Decrypt the result of step 5 using Key B.
7. Encrypt the result of step 6 using Key A.
8. Use the result of step 7 and, beginning with the leftmost digit, extract all the digits from 0 through 9. Left-justify these digits in a 64-bit field.
9. Use the result of step 7 and, beginning with the leftmost digit, extract the hexadecimal digits from A to F. Then, convert each extracted digit to a decimal digit by subtracting 10.

   When converted, hexadecimal B becomes decimal 1.
   (Hexadecimal B = 11 decimal; 11 - 10 = 1)

10. Concatenate the decimalized digits from step 9 to the right of the result of step 8.
11. Select the three leftmost digits. These digits are the CVV which is encoded on the magnetic stripe.

For the first set of test data for a 16-digit account number, the calculation of the CVV is performed as listed in Table C-1. The values used in the calculation are as follows:

PAN: 4123 4567 8901 2345
Expiration Date: 8701
Service Code: 520

Table C-1: CVV Calculation Example

CVV Calculation Steps	Example	
1. Extract data	4123456789012345 8701 520	
2. Place into 128-bit field padded to the right with	4123456789012345 8701 520 0000 00...0	
3. Split field into two 64-bit blocks	Block 1 = 4123 4567 8901 2345	

Card Verification Value 2 (CVV2)

The Card Verification Value 2 (CVV2) is a card verification tool designed to reduce fraud losses on transactions when the card is not present, such as in Mail Order/Telephone Order (MOTO) and electronic commerce (EC) transactions, and to enhance the effectiveness of voice referrals. In some countries, the CVV2 is also used in card present transactions.

Cardholders performing a MOTO/EC transaction may be requested to enter the CVV2 printed on the back of the card. When a voice referral response is received in response to an authorization request, the clerk at the point of sale (POS) may be instructed to read the CVV2 value printed on the back of the card to the referral operator. The Primary Account Number (PAN) and expiration date are then used to calculate a transaction CVV2 value, which is compared to the reference value printed on the card. A match enhances the probability that the genuine card is present at the point of transaction.

The CVV2 value is computed using the same algorithm for the Card Verification Value (CVV), with the exception of the expiration date which is input using embossed or printed format (MMYY). The CVV2 may also be calculated under the YYMM format;

The Card Verification Key (CVK) pair used for calculating the CVV2 *may* be the same as the one used to calculate the CVV.

Data Components

The following data components are used to compute the algorithm:

- Primary Account Number (PAN)
- Card expiration date as it appears on the front of the card (MMYY)
- Three zeros, which take the place of the Service Code value

These three components are encrypted using the Data Encryption Standard (DES) algorithm and a Card Verification Key (CVK) pair, which result in a three-digit, CVV2 value.

Note:
This is a Single Stage one envelop procedure, therefore 1st lowest bid will be evaluated first. If the 1st lowest bidder is disqualified evaluation criteria, then next lowest bid will be evaluated.

Similarly if 2nd bidder is disqualified, then 3rd lowest bidder will be evaluated and so on.
On qualification of a bidder during this process no further evaluation will be done.

4. Encrypt: Block 1 using Key A	Block 1 = 4123 4567 8901 2345 Key A = 0123 4567 89AB CDEF	
5. XOR the result of step 4 with Block 2, then encrypt the XOR result with Key A	Block 2 = 8701 1010 0000 0000 XOR result = 306B CDDE 71CC C6BE then encrypt the XOR result with Key A Key A =	
6. Decrypt the result of step 5 with Key B	Key B = FEDC BA98 7654 3210	
7. Encrypt the result of step 6 with Key A	Key A = 0123 4567 89AB CDEF	
8. Extract all digits form 0 through 9 from the result	Step 8 result = 5614 9820 397	
9. Extract the hexadecimal digits from the result of step 7 and convert them into numerics by subtracting	Extract hex digits = BECD D Step 9 result = 1423 3	
10. Concatenate the result of step 9 to the result of	Concatenate = 5614 9820 3971 4233	
11. Select the three left most digits as the CVV	CVV = 561	

Encoding the CVV in Tracks 1 and 2

The CVV must be encoded in the CVV field in Track 1 and Track 2 of the magnetic stripe or the chip magnetic stripe image.

Card Verification Value 2 (CVV2)

The Card Verification Value 2 (CVV2) is a card verification tool designed to reduce fraud losses on transactions when the card is not present, such as in Mail Order/Telephone Order (MOTO) and electronic commerce (EC) transactions, and to enhance the effectiveness of voice referrals. In some countries, the CVV2 is also used in card present transactions.

Cardholders performing a MOTO/EC transaction may be requested to enter the CVV2 printed on the back of the card. When a voice referral response is received in response to an authorization request, the clerk at the point of sale (POS) may be instructed to read the CVV2 value printed on the back of the card to the referral operator. The Primary Account Number (PAN) and expiration date are then used to calculate a transaction CVV2 value, which is compared to the reference value printed on the card. A match enhances the probability that the genuine card is present at the point of transaction.

The CVV2 value is computed using the same algorithm for the Card Verification Value (CVV), with the exception of the expiration date which is input using embossed or printed format (MMYY). The CVV2 may also be calculated under the YYMM format;

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The following data components are used to compute the algorithm:

- Primary Account Number (PAN)
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