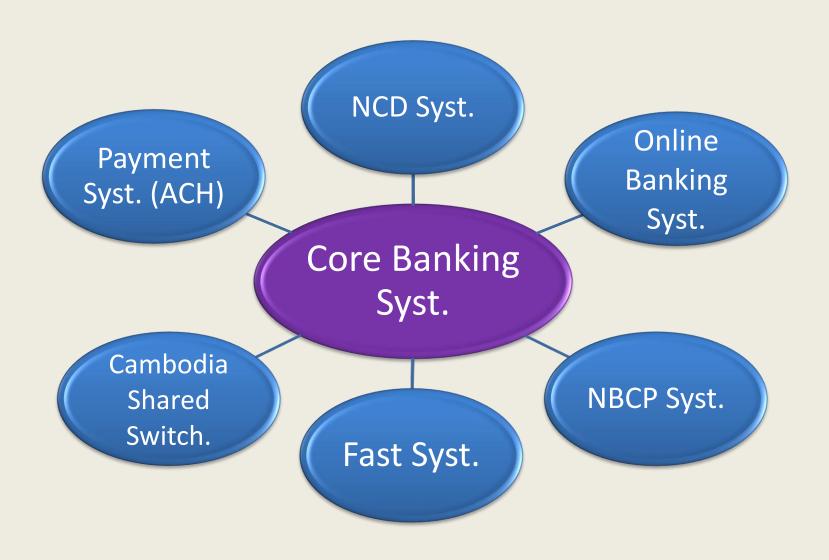


The major Banking services of the National Bank of Cambodia

The banking services provided by the National Bank of Cambodia to Banks and Financial Institutions and governments are:

- I. Management of deposit Account
- II. Transferring of Funds
- III. Issuing Central Bank's bill
- IV. Providing Liquidity
- V. Settlement of payment instruments

Core Banking and its sub-systems



I. The Opening Account

Who should have account at NBC?

- The eligible customers are the entities governed by the NBC and state Institutions.
- NBC does not deal with private.
- Submitted Forms:
 - 1. Application for Opening Account
 - 2. Specimen of signatures
- Required Documents are listed on the application to open account.

Requirement for Opening Account (cont'd)

- 3. Authorized signatories (account holder and authorized persons)
 - Shall get and approval from Board of director resolution (Bank & MFI)
 - Authorized letter by the head of state institution (State institutions)
 - A copy of ID Card/Passport of the signatories

4. Type of Accounts:

- Current account
- Settlement account
- Capital guarantee account
- Reserve Requirement account

II- Fund transferred Services

The Fund transferred Services provided by the NBC can be executed via:

- 1. Overseas fund transfer made by the Core banking system.
- 2. Domestic funds transfer:

The In-house and inter-branch fund transfer can be done by Core banking and Online banking system.

Fund transferred Services charges

Type of TRF	Institution	Charge and Commission				
	Domestic TRF					
Inter - Branches	Banks Fin Inst					
		Overseas TRF				
TRF In	Banks, Fin. Ins.	0.12%, (Min KHR 30,000 & Max KHR 9,000,000)				
TRF Out	Banks, Fin. Inst.	0.12% (Min KHR 30,000) SWIFT: KHR 120,000				

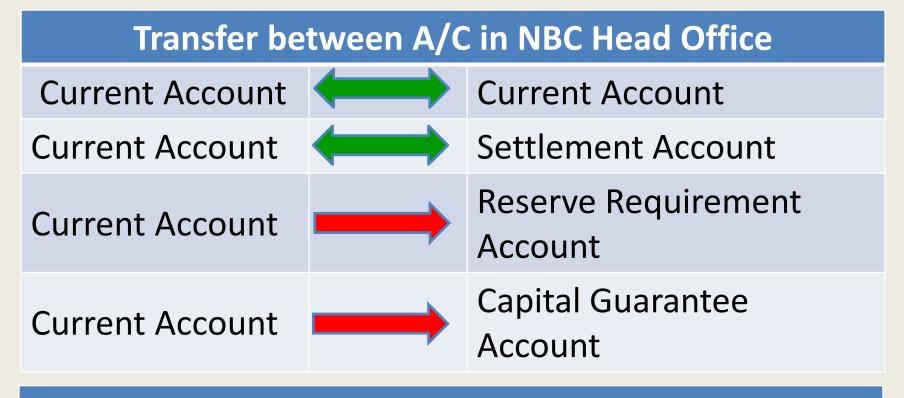
- 1. Eligible customer are entity governed by NBC and state institutions
- 2. Requirements to be a member
 - Submit application for NBC Online Banking System
 - Assigning and submit the list of authorized representatives/designated Users.
 - The copy of valid ID/Passport.

Online Banking system is the means for making payment to creditors or to beneficiaries. How Bank/MFI to register to the online banking system?

- Submit the application for NBC online banking system.
- Signs on the terms and conditions of the online banking system.

- 3. Requirements to use the Online Banking
 - Sign on Term and Condition on Using Online Banking System of National Bank of Cambodia.
 - Signatory/ies shall have an approval from Board of Directors.
- Pro: Cost-effectives, relatively fast transfer, tracking & toping up account balances.
- Con: Required most trusted staff to operate the system.

How does the Online Banking work?



Transfer from A/C at NBC HO to own Branches

Current Account Head Office

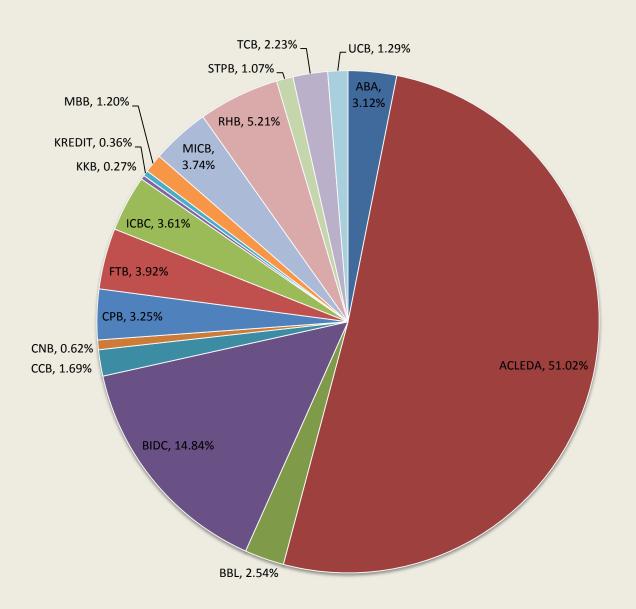


Current Account Branch

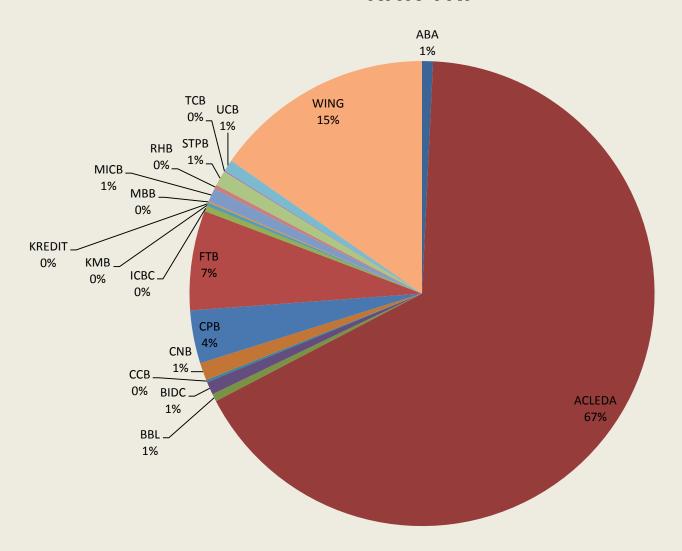
Up to now there are 19 banks and 6 MFIs have registered and used the online banking services.

Transactions TRF in USD in 2017		
In house TRF (H.O)	2,055	
Inter Branch TRF (HO to Branch)	189	
Total USD Transactions	2,244	
Transactions TRF in KHR in 2017		
In house TRF (H.O) 2,!		
Inter Branch TRF (HO to Branch)	417	
Total KHR Transactions. 3,0		

TRF in USD



KHR TRF



III- Issuance of NCD

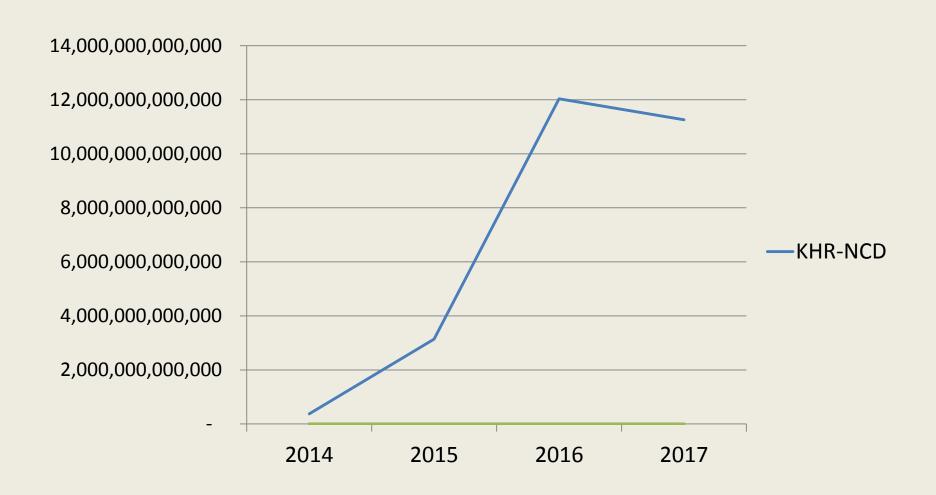
- The NCD is issued on weekly basis and the subscription is on Wednesday while the settlement date is on Thursday.
- After the 02/01/2018 the NBC will not accept a paper base subscription. The electronic subscription for NCD is available from now on through the National Bank of Cambodia's trading platform (NBCP).
- The maturity of both KHR-NCD and USD-NCD is expressed in days (not in week or year) and from 7 to 364 days.

Requirement to open Custodian Account

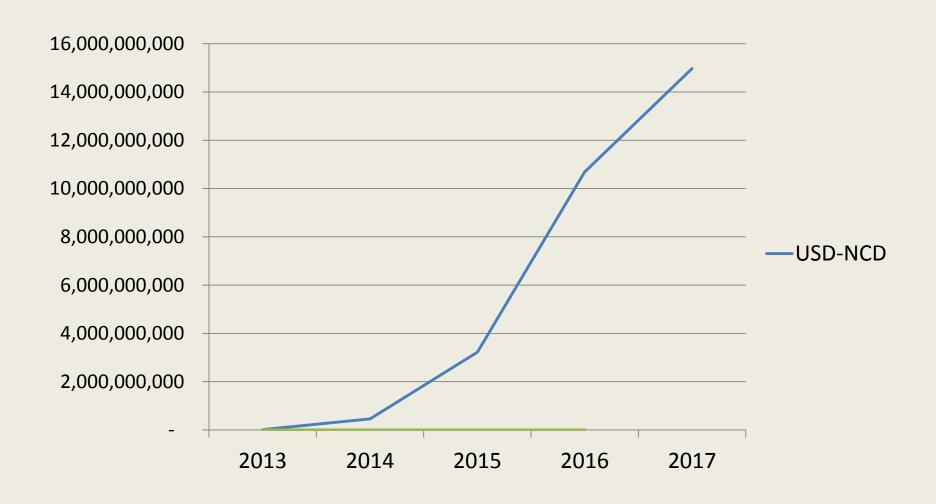
NCD is a dematerialized instrument so it must be deposited in custodian account maintained by NBC. The required documents are:

- Application to pen Custodian Account
- Authorized letter
- 3 Copies of Specimen Signature
- Memorandum and Article of Associations
- License
- National ID/Passport or of Account Holders and Authorized Persons.

KHR-NCD Issuance (From 2013 to Mid-2017)



USD-NCD Issuance (From 2013 to Mid-2017)



IV- The Liquidity providing

- The Liquidity Providing Collateralized
 Operations (LPCO) was launched on October
 2016 with the attempt to reallocate the excess
 resources to those who need them.
- The maturity of LPCO was then 3 months and interest rate 3%, but now it is extended to 364 days and interest rate 3% (unchanged).

The Liquidity providing (Cont'd)

- The auction of LPCO is taken place on Tuesday and the settlement date on Thursday.
- The placement of USD-NCD as collateral to LPCO would be subjected to haircut 5%.
- LPCO is conducted through 2 mechanisms:
 - 1. Liquidity providing through an Auction.
 - 2. Collateral pledging through a Repo.

Requirement to participate in NBC Platform (NBCP)

All entities governed by the NBC would be eligible to participate in the LPCO operation, but they shall:

- 1. Firstly, sign on Master agreement contract with NBC to deal with Repo.
- 2. Sign on general terms and conditions for NBCP, because from 02/01/2018 the bidding will be made via the NBCP.

The Liquidity providing (Cont'd)

How to participate in LPCO?

General info:

- The bidding Amount will be informed one week before the Auction date.
- The minimum bidding price (rate) will be informed on 8:00 pm on the Auction date.

Reference letters:

- Announcement B5-017-415 info on 19/May/2017
- Announcement B1-016-054 spec on 23/Sep/2016
- Prakas, B5-09-229 proko on 19/Oct/2009

How to participate in LPCO (Con'd)

- The auction starts from 8:00 AM to 12:00 PM.
- The bidding can be submitted via E-mail: bod_lpco@nbc.org.kh or via sealed envelop to the Banking Operations Department of the National Bank of Cambodia in case that e-mail is not available.
- The winner will be informed after 02:00 PM on that day.

Auction Schedule

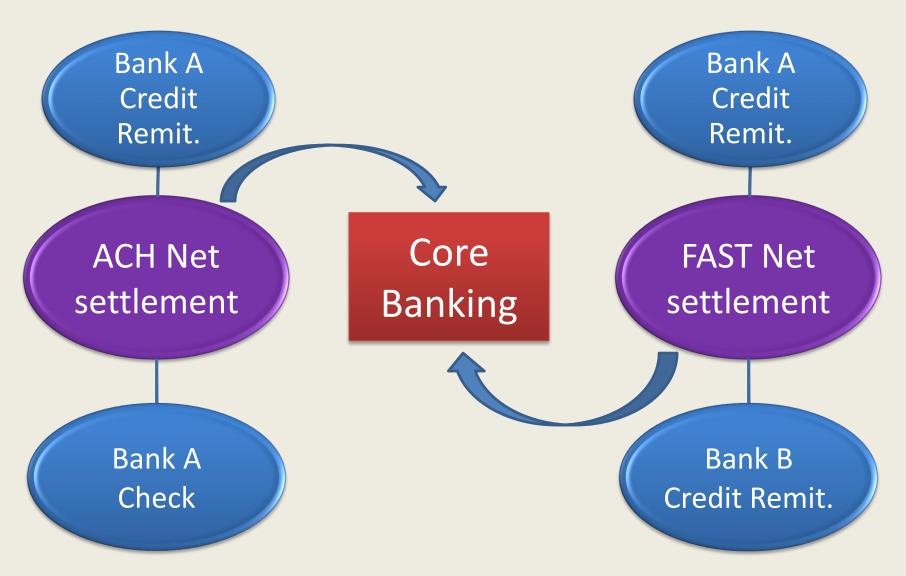
LPCO	Auction Date	Settlement Date	Maturity date
LPCO9	20-Jun-17	22-Jun-17	21-Jun-18
LPCO10	18-Jul-17	20-Jul-17	19-Jul-18
LPCO11	22-Aug-17	24-Aug-17	23-Aug-18
LPCO12	26-Sep-17	28-Sep-17	27-Sep-18
LPCO13	17-Oct-17	19-Oct-17	18-Oct-18
LPCO14	14-Nov-17	16-Nov-17	15-Nov-18
LPCO15	19-Dec-17	21-Dec-17	20-Dec-18

Requirements to get OD

All member of the clearing house are eligible to get overdraft facilities (OD) from the NBC. To get OD members shall:

- Submit a Request for principle approval from NBC for 1 year.
- All members shall review the OD Contracts and Collateral contract every 3 months
- The collateral can be NCDs which is validated at least 3 month

V. Settlement of payment instruments



Membership of ACH

1. Qualifications for Participation

- Banks/MDIs
- Having adequate qualification in issuing payment instrument

2. Admission to be Member

- A. Direct Member shall:
 - Open Settlement account at the NBC
 - Have principle approval on OD from NBC
 - Have adequate operational and technical infrastructure to connect to the National Clearing System and/or Fast System.

Member Ship (Cont'd.)

- Meet all obligations stated in the law and other regulations related to the use of National Clearing House services.
- 4. Admission of A Member
 - **B.** Indirect Member
 - Every indirect member Shall:
 - Sign a contract with selected direct member who (approved by NBC) sponsored for settling all obligations
 - Not required to maintain a settlement account at NBC and other infrastructure to access to National Clearing System and/or Fast System.

Statistics from Jan-2017 to Aug-2017

In KHR of ACH & FAST					
	ACH FAST				
DATE	Checks	Return Chk.	Cred. Remit	Cred Remit	
	Vol.	Vol.	Vol.	Vol.	
Total	25,026	81	2,469	1,541	

In USD of ACH					
		ACH			
Date	Checks Return Chk		Cred Remit		
	Vol.	Vol.	Vol.		
Total	727,990	5,820	82,578		

Related fees of members

Services			Validity	Service Fees and Charge
	Direct member		One time	KHR 20,000,000
Admission to ACH	• To be a sponsor of indirect member		One time	KHR 2,000,000
Admission to Fast System			One time	-
Annual Membership and Maintenance fee	ACH	HQ	Annual	KHR 9,400,000
	Fast		Annual	-
National Clearing House Annual Membership fee at Exchange center	Exchange Center		Annual	KHR 3,000,000
E-Token Cost			1 Unit	KHR 1,400,000

		Validity	Service Fees and Charge	
Services	Instrument KHR		Instrument USD	
Check Processing Fee		1 Checks	KHR 300	KHR 400
Processing Fee for Credit Remit., Direct Credit and Direct Debit ACH		1 Payment Order	KHR 200	KHR 300
Processing Fee for Credit Fast System		1 Payment Order	KHR 200	
Check Returned Item Charge		1 Checks	KHR 20,000	KHR 40,000
Late Input Penalty (Checks)			KHR 2,0	000,000
Late Input Penalty (Electronic Payment Order)			KHR 1,500,000	
Penalty for Absentee Member without notice			KHR 3,0	000,000

Services		Validity	Service Fees and Charge
Penalty for Absentee Member with input data			KHR 2,000,000
Arrangement of Settlement liquidity to meet settlement obligation by NBC			KHR 500,000
Arrangement of Settlement liquidity to meet settlement obligation by NBC Fast System			KHR 2,500,000
Extension of the Cut-Off Time (To 30mins after Settlement schedule)			KHR 2,500,000
Extension of the Cut-Off Time (From 30mn to 60mn after Settlement schedule)			KHR 5,000,000
Unwinding of Clearing			KHR 10,000,000

System	Instrument	Schedule	
ACH	Checks	 Checks Input: 8:00am - 09:30am Exchange of Physical Checks: 10:15am -10:45am Clearing Process: 10:45am - 10:50am Advisory Settlement Positions for Checks: 10:50am - 11:00am 	
		 Returned Checks Input: by 14:30pm Exchange Returned Checks: 15:00pm - 15:15pm Settlement Checks/Returned Checks: 15:15pm - 15:25pm 	
	Credit Remit	 Session 1 Input: by 10:45am Clearing: 10:50am -11:00am Settlement: 11:00am - 11:15am 	
		 Session 2 Input: by 15:00pm Clearing: 15:00pm - 15:15pm Settlement: 15:15pm - 15:25pm 	

System	Instrument	Schedule		
		Transaction	• Session 1 : by 9:45am	
Fast	Credit Remittance		• Session 2 : by 14:30pm	
		Fee Transaction	Cut-Off Time: 14:30pmSettle at 8:30am of next working day	

Thank you for your attention