

## CERT-In Advisory CIAD-2016-0080

### USSD based mobile banking

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#### Description

National Unified USSD (Unstructured Supplementary Service Data) Platform is a mobile banking service provided by NPCI (National Payment Cooperation of India) which works on the USSD technology. Customers can avail this mobile banking from their mobile phone, irrespective of the telecom service provider, mobile handset capability or the need for a mobile internet plan.

USSD (Unstructured Supplementary Service Data) is a session based transmission protocol used by GSM cellular telephones to communicate with the Telecom Service Providers (TSP). USSD messages however create a real-time connection which remains open, allowing a two-way exchange of data.

USSD widely employed by the mobile network operators for providing variety of services such as recharge, booking and mobile payment and banking, which is currently available on 11 Multi-lingual language (i.e. Hindi, Tamil, Telugu etc).

#### How it works

- The service can be availed by dialing \*99# from any GSM mobile phone.
- As a pre-requisite, the customer is required to register his/her mobile number with his bank for the mobile banking services.
- The customers already using mobile banking will be able to use this service without any additional registration by dialing \*99# from their GSM mobile handset.
- The customers not registered for mobile banking service will have to contact their respective banks for mobile banking registration. Services

#### Financial Services

- Fund Transfer using Mobile Number and MMID - User can transfer fund using MMID and Mobile number of the Beneficiary.
- Fund Transfer using IFSC and Account Number - User can transfer fund using IFS Code and Account number of the Beneficiary.
- Fund Transfer using Aadhaar Number - User can transfer fund using Aadhaar number of the Beneficiary.

#### Non- Financial Services

- Balance Enquiry - User can check available balance of the bank account linked to his/her mobile number.
- Mini Statement - User can generate mini account statement for the bank account linked to his/her mobile number.
- Know MMID\* (Mobile Money Identifier) - User can know their MMID which was allotted to him/her by bank during mobile banking registration.
- Generate MPIN - User can Generate or Set his/her MPIN. MPIN or Mobile PIN is like a password and used for authenticating financial transactions.
- Change MPIN - User can change his/her MPIN. MPIN or Mobile PIN is like a password and used for authenticating financial transactions.
- Generate OTP - User can generate One Time Password (OTP) which can be used for different transactions as a second factor of authentication.

#### Value Added Service

QSAM (Query Service on Aadhaar Mapper) - This service helps user in knowing their Aadhaar Seeding status with their bank account. This service can be availed by dialing \*99\*21# to know whether his/her Aadhaar number is seeded/linked to any bank account number or not.

#### Security Measures

- Keep strong passwords for your phone as well as for your mobile banking app.
- Do not share MPIN with anybody (not even with bank), and be suspicious of unknown callers claiming to be from your bank.
- Try to update/change your MPIN or passwords on a regular basis.
- Try to generate OTP for every transaction as it gives another factor of authentication.
- Use biometric authentication if possible.
- In case if your phone is stolen or lost, Please inform your bank at the earliest to deactivate Mobile banking services.
- Update your mobile OS and applications as often as possible to be secured from vulnerabilities.
- It is advisable for users to enable encryption, remote wipe abilities and anti-virus software on the phone.
- Keep your SIM card locked with a Pin to avoid misuse. In case of loss or theft of the mobile device, contact your subscriber to block the subscription of the SIM card.

#### References

##### NPCI

<http://www.npci.org.in/documents/FAQs-NUUP.pdf>

##### SBI

[https://www.sbi.co.in/portal/documents/25328/29531/1322134339329\\_USER\\_MANUAL\\_FOR\\_MBS\\_OVER\\_USSD/](https://www.sbi.co.in/portal/documents/25328/29531/1322134339329_USER_MANUAL_FOR_MBS_OVER_USSD/)

[https://freedom.onlinesbi.com/sbfstaticweb/sbf/nuup\\_faq.html](https://freedom.onlinesbi.com/sbfstaticweb/sbf/nuup_faq.html)

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