SWIFT Transactions

– Cause, effects, risk & Audit

NANDA DULAL KUNDU

CISA, CAIIB, PGDCM, LA-27001

What is S.W.I.F.T. ?

▶ The acronym stands for **Society for Worldwide Interbank Financial Telecommunication** (a cooperative society).

▶ Its headquarters are situated in La Hulpe, on the outskirts of Brussels

▶ S.W.I.F.T. was formed when seven Major International Banks met to discuss the limitations of Telex as a means of secure delivery of payment and confirmation information

The Need

▶ Established in 1973

▶ Belgian registered Coop. Society of Banks

▶ Born out of the need for a fast, safe and universal means

  of transferring funds internationally

▶ Live operations in 1977 with 518 customers in 22 countries. Currently in 212 countries with 10K+ financial Institution.

▶ Volume of Transactions $6Tn/day

SWIFT Services

- ▶ SWIFT provide a network that enables Financial institution worldwide to send & receive information about financial transactions in a secure, standardize and reliable environment.

- ▶ SWIFT also sells SW & services to Financial institution

- ▶ It is a messaging network, does not do any fund transfer

- ▶ No clearing or settlement by SWIFT, no account held

- ▶ It is also registration authority of several ISO standards like ISO9362, ISO10383, ISO13616, ISO15022, ISO20022

- ▶ It has 3 DC – US, Netherland & Switzerland

SWIFT Softwares

- ▶ SWIFTNET & Relationship Mgmt Application
- ▶ SWIFT Network Link (SNL)
- ▶ SWIFT Alliance Gateway (SAG)
- ▶ SWIFT Alliance Access (SAA)
- ▶ Alliance Messaging Hub (AMH)
- ▶ SWIFT Alliance Work station (SAW)
- ▶ SWIFT Alliance Messenger (SAM)
- ▶ SWIFT Alliance Web Platform (SWP)
- ▶ Remote Access Host Adapter (RAHA)

Importance of Swift

▶ Most commercial payments are made by an account transfer. That is, the payer transfers an amount from its account at its bank to the payee's account at the payee's bank. The transfer may need to pass through one or more intermediary banks if the payer's bank and the payee's bank do not have a direct correspondent relationship.

▶ Most high-value domestic and international payments are made by credit transfer through electronic message systems such as the Society for Worldwide Interbank Financial Telecommunication (SWIFT), and through national high-value credit-transfer systems such as Fedwire, CHIPS, CHAPS, BOJ-NET, RTGS, NEFT, IMPS etc.

Swift-operations

▶ Swift is a communication system , but not a settlement system like RTGS , or Clearing house.

▶ In case we receive a swift message from a non-correspondent bank (e.g. Barclays bank or BNP Paribas in USD , we cannot act without verification of credit in our USD correspondent account e.g. New York Branch)

▶ In case where we maintain a account with a bank and receive a swift message like MT 103(Customer payment message), we can act, as swift message from correspondent can be treated as settlement message

▶ Bank's reconciliation dept. at Treasury has to verify and reconcile the credit entry in the correspondent account .

Swift- Advantages

▶ The most important advantage of swift is its structured format.

▶ Swift messages are used in various type of financial transactions like Trade related transactions Like Letter of Credit, Payment system for customer payments, bank to bank settlements , Security settlements, Trade or Inter bank confirmations.

▶ It has some defined fields which can be mapped with internal system of banks or corporates.For example , our own FINACLE is generating payments messages for outward remittances, LC.

SWIFT- CODING

▶ SWIFT CODE : a SWIFT code consists of 8 or 11 characters made up of

▶ Following :

▶ 4 characters – bank code :   BARB – Bank of Baroda

▶ 2 characters- Country code- IN - India, US- USA, AE- UAE

▶ 2 Characters- location code- BB- Mumbai, 33- New York, AD- Dubai

(if the second characters is 1 , then it denotes a passive participant in the SWIFT Network)

▶ 3 characters- branch code, optional ('XXX' for primary office) (letters and digits) – BARBINBBXXX, BARBINBBAHM

▶ Where an 8 –character code is given , it may be assumed that it refers to the primary office.

Swift Code

Consists of 8 to 11 characters

ISO 3166-1 alpha-2 country code
(only letters)

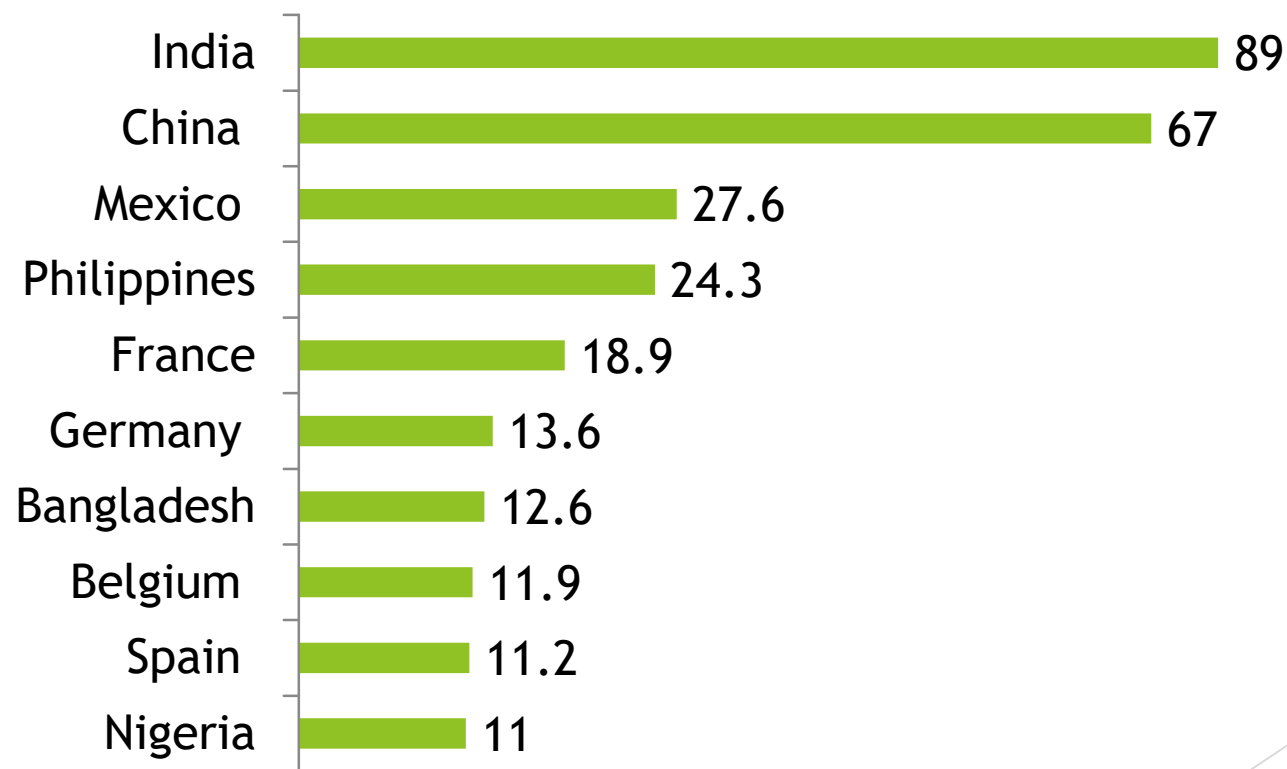**AAAA**   **BB** **CC**   **DDD**

Bank Code
(only letters)

Location Code
(letters and digits)

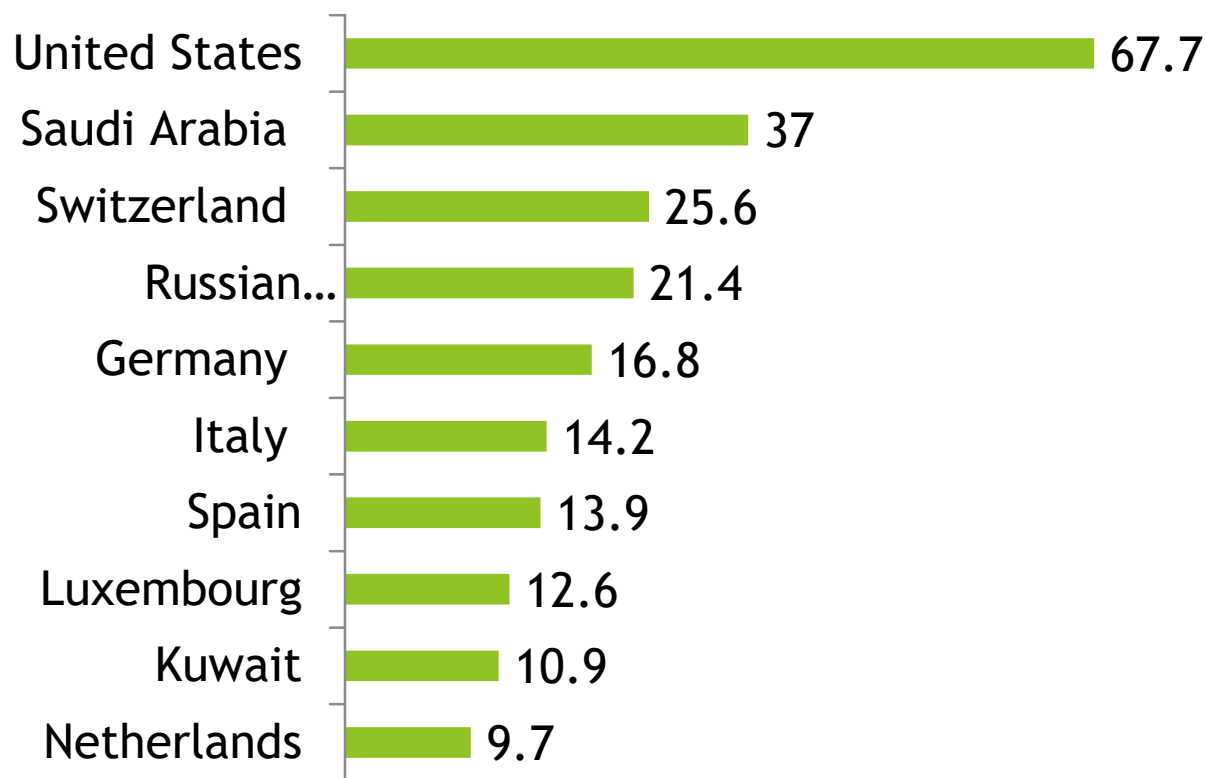Branch Code, optional ('XXX' for primary office)
(letters and digits)

Top Remittance Receiving Countries 2014 US$ billion

Country	US$ billion
India	89
China	67
Mexico	27.6
Philippines	24.3
France	18.9
Germany	13.6
Bangladesh	12.6
Belgium	11.9
Spain	11.2
Nigeria	11

Top Remittance-Sending Countries US$ billion

Country	US$ billion
United States	67.7
Saudi Arabia	37
Switzerland	25.6
Russian...	21.4
Germany	16.8
Italy	14.2
Spain	13.9
Luxembourg	12.6
Kuwait	10.9
Netherlands	9.7

Who uses SWIFT?

Currently the following categories of organisation can access the service:

- Banks
- Trading Institutions
- Money Brokers
- Securities Broker Dealers
- Investment Management Institutions
- Clearing Systems and Central Depositories
- Recognised Exchanges
- Trust and Fiduciary Service Companies
- Subsidiary Providers of Custody and Nominees
- Treasury Counterparties
- Treasury ETC Service Providers

Why SWIFT ?

▶ Global coverage

▶ Based on standard procedures

▶ Structured Messages format

▶ Rapid

▶ Secure

▶ Low Cost

Benefits of SWIFT

▶ Reduced cost

▶ Increased speed - improved flow of information- reduction in business cycle

▶ Improved relations with trading partner

▶ Improves customer service

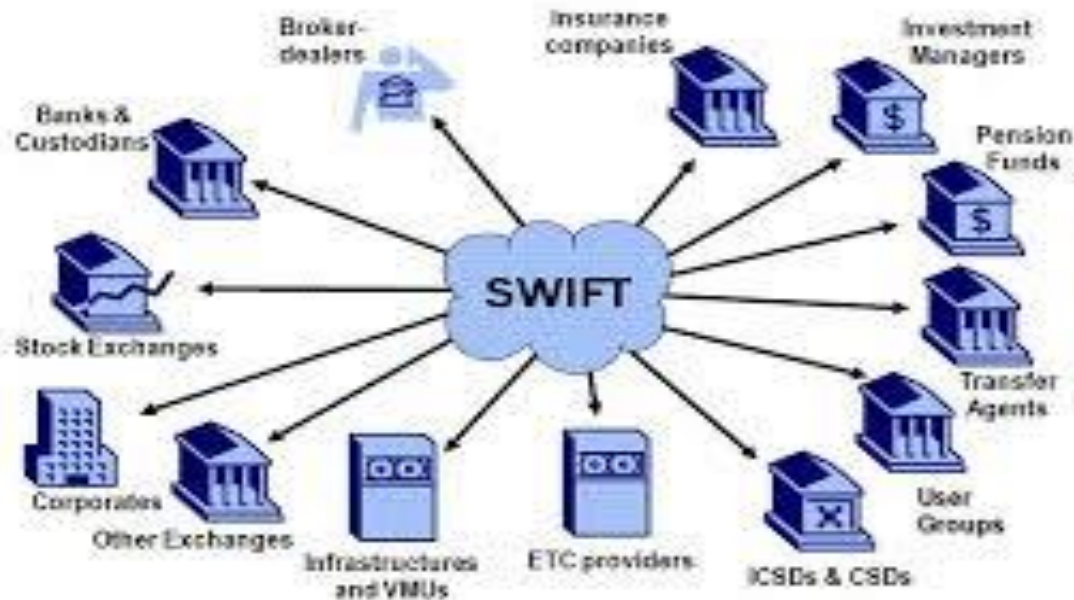▶ Tool for Business Process Re-engineering (BPR)

▶ Provide competitive advantage

SWIFT provides

▶ Various Message and Information processing services

▶ Financial data communication

▶ Interface software for message transmission

SWIFT - Services

▶ Store and Forward message transfer (FIN)

▶ Interbank File Transfer (IFT)

▶ Interactive (INT)

Swift Codes or BIC Codes
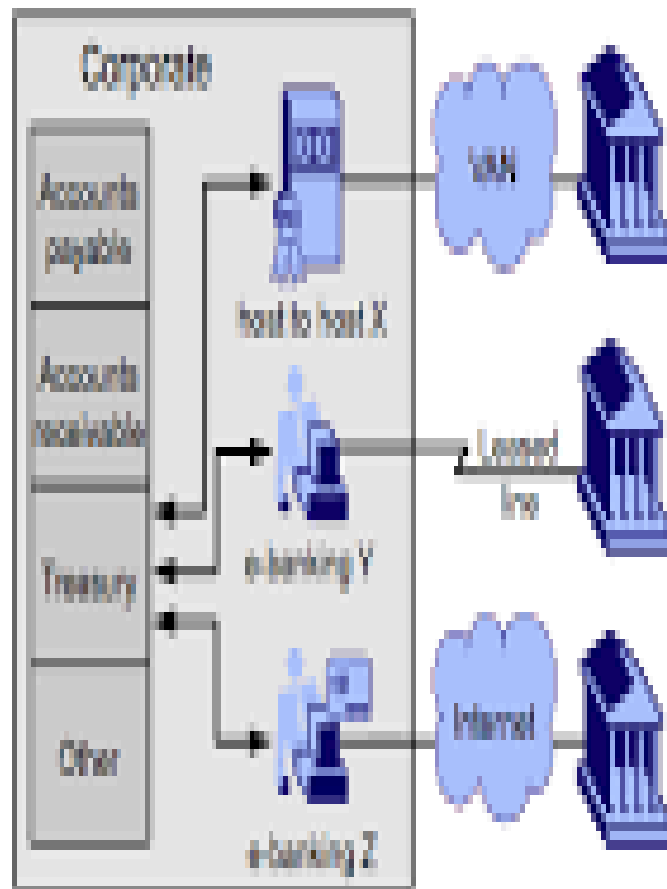
4 DIGIT BANK CODE

2 DIGIT LOCATION CODE

TBNFFR43PAR

2 DIGIT COUNTRY CODE

3 DIGIT BRANCH CODE

banking-queries.blogspot.com

SWIFT Messages

▶ S.W.I.F.T. messages are identified in a consistent manner. They all start with the literal "MT" which denotes Message Type. This is then followed by a 3 digit number. For example: MT103, MT202, MT700 etc

▶ MT0nn - which relates to System Messages

▶ S.W.I.F.T. addresses are used to not only indicate the final destination of the message but to also indicate parties within the individual message.

Multiple bank channels → Single, standardised gateway
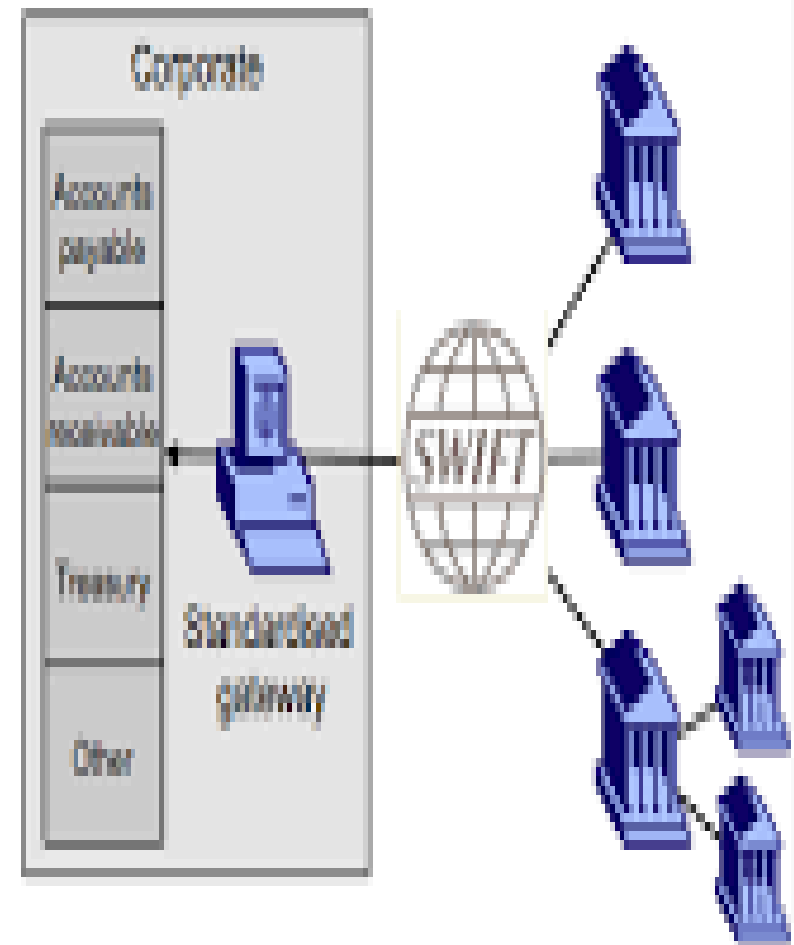
Types of Swift Messages-Swift Series

1 – MT 100 series :Customer Transfers and Cheques

2 – MT 200 series: Financial Institution Transfers

3 – MT 300 Series: Treasury Markets

4 – MT 400 series: Collection & Cash Letters

5 – MT 500 series: Securities

6 –MT 600 series: Precious Metals and Syndications

7 – MT 700 series: Documentary Credits / Guarantees

8 – MT 800 series: Travellers Cheques

9 – MT 900 series: Cash Management & Customer Status

0 - System Messages
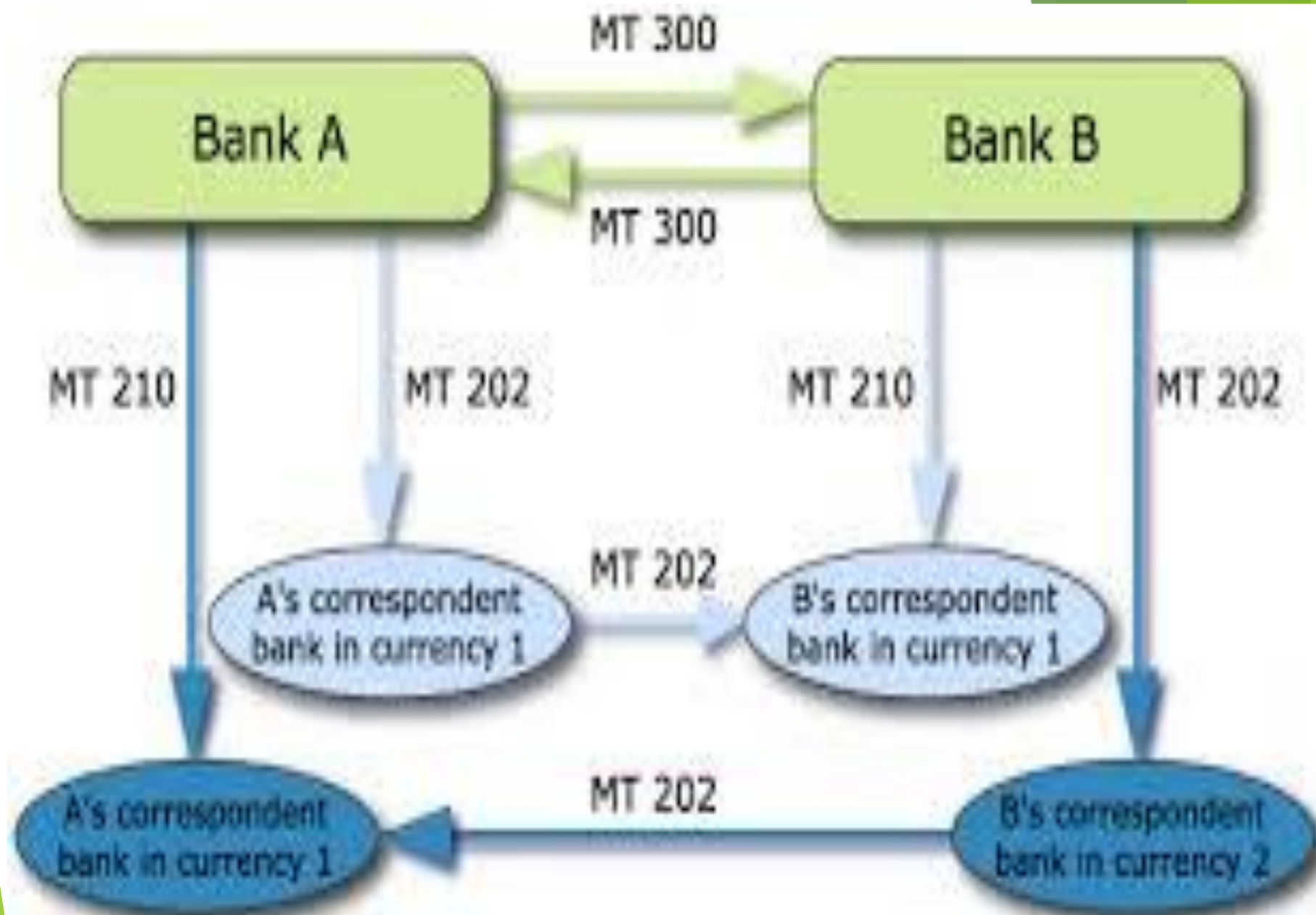
Message Types

▶ **Financial Messages** or User to User Message Categories - 1 to 9

▶ **Service Messages** - These messages, also known as Control Messages, relate either to system commands such as LOGIN, SELECT, QUIT or to acknowledgements.

▶ **System Messages** - These are messages sent by SWIFT system to a user, or vice versa. System messages are category '0' (Zero) messages.

(Message consists of 3 headers-basic,app & user, message content & trailor record)

Forex Operations

▶ Outward remittances/Inward remittances : MT 103, MT202COV

▶ Bills on collection:

- MT410 : Acknowledgement - This message type is sent by a collecting bank to a remitting bank to acknowledge the receipt of a collection.

- MT412 : Advice of Acceptance - This message type is sent by the collecting bank to the remitting bank to inform about the acceptance of one or more drafts under one collection instruction.

- MT400 : Advice of Payment : This message type is sent by the collecting bank to the remitting bank to advise a payment under a collection or a part thereof and may also be used for the settlement of proceeds.

- MT416 : Advice of Non Acceptance : This message type is used to advise of non-payment or non- acceptance of a received collection or part thereof.

- MT202 : General Financial Institutional Transfer : This message type is used to make the payment of a bill and it is sent to correspondent bank to effect the payment to correspondent bank of a remitting bank.

Documents under LC

– MT750 : Advice of Discrepancy - This message is sent by the bank to which documents have been presented, to the issuing bank and is used to advise the Receiver that documents which have been presented are not in accordance with the terms and conditions of the credit.To be advised within 5 working days as per UCPDC.

- MT754 : Advice of Payment / Acceptance : This message is sent by the paying, accepting or negotiating bank, or the bank incurring a deferred payment undertaking, to the issuing bank and is used to advise the Receiver that documents were presented in accordance with the credit terms and are being   forwarded as instructed.

- MT742 : Reimbursement Claim: This message is sent by the paying/negotiating bank to the bank authorized to reimburse the Sender for its payments/negotiations and is used to claim   reimbursement of payment (s) or negotiations) under a documentary credit, as relevant to the reimbursing bank.

Documentary Credits

MT700 : Issue of Documentary Credit: This message is sent by the issuing bank to the advising bank. It is used to indicate the terms and conditions of a documentary credit which has been originated by the Sender (issuing bank).

- MT707 : Amendment to a Documentary Credit : This message is sent by the issuing bank to the advising bank. It may also be sent by an advising bank to another advising bank or by a transferring bank to an advising bank and is used to inform the Receiver about amendments to the terms and conditions of a documentary credit issued by the Sender.

- MT740 : Authorization to Reimburse : This message is sent by the issuing bank to the reimbursing bank and is used to request the Receiver to honor claims for reimbursement of payment(s) or negotiation(s) under a documentary credit.

- MT730 : Acknowledgement of DC: This message is used to acknowledge receipt of any documentary credit message.

Guarantee

MT760 : Guarantee / Standby Letter of Credit : This message is sent between banks involved in the issuance of a guarantee and is used to issue a guarantee or to request the Receiver to issue a guarantee. This message may also be used for Standby Letters of Credit.

- MT767 : Guarantee / Standby Letter of Credit Amendment : This message is sent by a bank which has issued a guarantee to the bank to which the guarantee was issued and is used to amend or request the amendment of the guarantee. This message may also be used for Standby Letters of Credit.

- MT 769: Release of Liability from Guarantee : This message is sent by the Receiver bank to release the issuing Bank of its liability from Guarantee.

MT – Category 1 & 2

1 – <u>Customer Transfers and Cheques</u> – These messages deal with payments, or information about payments, in which the Ordering Customer or the Beneficiary Customer, or both, are not financial institutions. – MT101 – Request for Transfer; MT103 – Single Customer Credit Transfer; MT110 – Advice of Cheque.

2 – <u>Financial Institution Transfers</u> – These messages deal with payments or information about payments, in which all parties in the transaction are financial institutions. – MT200 – Financial Institution Transfers for its own account; - MT202 – General Financial Institution Transfer; MT210 – Notice to Receive.

Customer Transfers :MT 103:Participants

▶ Applicant (Originator) : Field 50

▶ Remitting Bank : Ordering Institution : Field 52

▶ Senders correspondent – Field 53 (In the header of the messages when we send to our correspondent bank , e.g. BARBUS33XXX)

▶ Receivers correspondent/ Intermediary Bank in USA : Field 56 in case of US dollar payment ; field 54 in case of Euro payment ..

▶ Do not use field 54 in US dollar payment.

▶ Beneficiary bank where the beneficiary maintains account : Field 57

▶ Beneficiary : Field 59

▶ Field 70 : Remittance information

▶ Banks collect payment / charges for the service from the sender as well as from the recipient of funds. The sender bank typically collects a fee from the sender separate from the funds being transferred , while the receiving bank and intermediary banks through which the transfer travels deduct fee from the money being transferred so that the recipient receives less than when the sender sent.

MT 103-Basics

Status	Tag	Field Name	Content/Options
M	20	Sender's Reference	16x
M	23B	Bank Operation Code	4!c
O	23E	Instruction Code	4!c[/30x]
M	32A	Value Date/Currency/Interbank Settled Amount	6!n3!a15d (YYMMDD)
M	50K	Ordering Customer	A, K or F
O	52A	Ordering Institution	[/36x] 11c
O	53a	Sender's Correspondent	A or B
O	54A	Receiver's Correspondent (Do not use in USD)	[/36x] 11c
O	56A	Intermediary Institution	[/36x] 11c
O	57A	Account With Institution	[/36x] 11c
M	59a	Beneficiary Customer	A or
O	70	Remittance Information	4*35x
M	71A	Details of Charges (SHA, BEN, OUR)	3!a
O	72	Sender to Receiver Information	6*35x

MT 103-Basics

- **Ordering Customer** :This **mandatory** field should specify the customer ordering the transaction. Account number of the ordering customer must be given here.

- If the ordering customer is Individual or organization then the Field 50k to be used. First line must contain account number of the customer starting with '/'. Should not contain any word describing account type like A/c, NRE SB, Loan etc.

- Option K :(Account) Max 34 Character

- Field 50 K : /08490100000151

-               Rajesh Jain

-               53-B , Suryavansi Society,

-               Ambawadi, Ahmadabad

- **Beneficiary** :This **mandatory** field should specify the Beneficiary customer. Account number of the Beneficiary customer must be given here. First line must contain account number of the customer starting with '/'. Should not contain word describing account type

- Option K (Account no) :Max 34 Character

- Name & Address) :Max 4 lines of 35 Character each. Last two characters at the end of the address must be Country code.

MT 202

Status	Tag	Field Name	Content/Options
M	20	Transaction Reference Number	16x
M	21	Related Reference	16x
O	13C	Time Indicator	/8c/4!n1!s4!n
M	32A	Value Date, Currency Code, Amount	6!n3!a15d
O	52a	Ordering Institution	A or D
O	53a	Sender's Correspondent	A, B or D
O	54a	Receiver's Correspondent	A, B or D
O	56a	Intermediary	A or D
O	57a	Account With Institution	A, B or D
M	58a	Beneficiary Institution	A or D
O	72	Sender to Receiver Information	6*35x

MT 202

▶ Field 20: Transaction Reference Number: The sender's reference number must be entered in this field; this specifies the reference to the entire message. This reference number must be quoted in any related confirmation of statement or enquiry. This field must not start or end with a slash '/' and must not contain two consecutive slashes '//'. For every message this field should be unique.

▶ 21: Related Reference: Place the reference number from the original message or transaction in this field when you are replying for the message. In a cover message, the transaction reference number from the MT 103, MT400 or other instruction or confirmation message is placed in Field 21. In an MT202 payment message, the reference number from the related L/C, collection, money market or other transaction. It is the reference number of beneficiary bank in case of trade related payments.

MT 202COV

MT202COV : General Financial Institutional Transfer: -Earlier the Cover payments of MT 103 were not in the scan of regulators in USA and money moved cross border without hold of Banks . To overcome this MT 202COV was introduced. This message is sent by or on behalf of the ordering institution directly, or through correspondents), to the financial institution of the beneficiary institution. It must only be used to **order the movement of funds related to an underlying customer credit transfer** that was sent with the cover method. The MT 202 COV must not be used for any other interbank transfer. For these transfers the MT 202 must be used. MT 202COV contains two sequences , namely Seq. A and Seq. B . Seq. A is a MT 202 message while Seq B is MT 103 which was sent by the originating bank directly to the bank outside USA.

MT – Category 3 & 4

3 – <u>Treasury Markets</u> – This category consists of messages exchanged between financial institutions, on behalf of themselves, providing information about confirmation and settlement of a variety of Money Market operations – MT300 – Foreign Exchange confirmation; MT320 – Fixed Loan / Deposit confirmation

4 – <u>Collection & Cash Letters</u> – These are exchanged between banks in the handling of documentary and clean collections, as well as cash letters. MT400 – Advice of Payment; MT420 – Tracer; MT430 – Amendment of Instructions.

Swift – Basics Terms

▶ Field 72 :This is Free format field contains 6 lines of 35 character each. The First line should start with character '/' followed by the code given below and '/'. This field is to be used for providing information for receiver by sender. Next line to start with '//'

▶ Information which can be included in another field should not be used in this field.

▶ Following codes are normally used in MT 103/202:

▶ ACC :Instructions following are for the account with institution

▶ INS: The instructing institution which instructed the Sender to execute the transaction

▶ INT: Instructions following are for the intermediary

▶ REC: Instructions following are for the Receiver

Laws Governing Wire Transfer

► UCC ART 4- Uniform Commercial Code governing wire transfers- it provides definitions, cut off time to receive wire transfers by the originating bank, security procedures, erroneous payment order, misdescription of beneficiary,accepatnce and rejection of payment order, value date of payment, obligations and liabilities of receiving bank and sender, payment by beneficiary's bank to the beneficiary , discharge of underlying obligation of Originator, payment of Interest .

SWIFT Platform performance

▶ 19 million messages processed daily on average

▶ 21 million messages process in a peak days

▶ 5+ billion message processed in 2013

0 message lost since inception

99.999 uptime
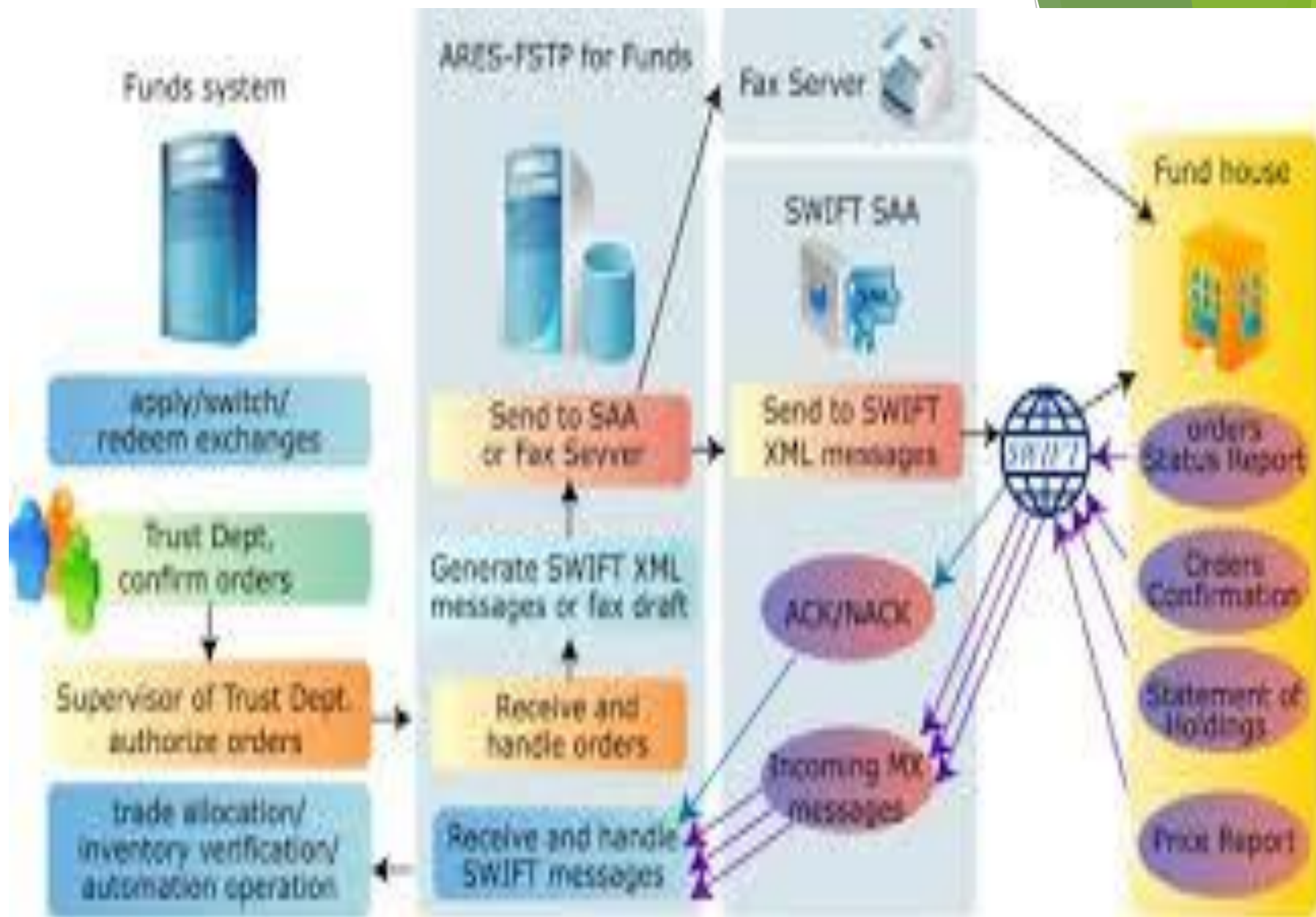
Swift – terms

▶ Fed wire or ABA number: ABA number or Fed wire number pertains to FED payment system in USA. An ABA or Fed wire number is of 9 digits. Our branch in US is having ABA no. as 026005322. We can search/verify Fed Wire number of any bank in US on the FRB (Federal Reserve Bank , USA) website .If we do not have swift code and have only ABA number then the payment should be made be sent with beneficiary bank detail in Field 57 as under :

Field 57 : //FW021000021

JP Morgan Chase

Dallas, Texas

Please note there are 2 types of Fed participants or ABA number . One participates in clearing and others do not participate. This information can be found on FED wire web site and can be informed to the customer , so that they may provide valid ABA number.

▶ Swift code search : We can get swift code of any bank on the XMM /Google .

▶ Intermediary bank : The information on intermediary bank in USA is available on the website of US clearing house www.chips.org

▶ This is a free web site.

▶ IBAN number : IBAN number denotes " International Banking Account Number " . It is used in EU payment system. It consists of Bank details as well as customer account number. Must be used when sending EUR currency payment.

▶ Sort Code: 6 digit number used for banking system in UK .

MT – Category 5 & 6

5 – <u>Securities</u> – These messages are exchanged between financial institutions involved in securities transactions.

MT521 – Receive against payment; MT530 – Confirmation of Receipt Free;

MT553 – Instruction to a Custodian.

6 – <u>Precious Metals and Syndications</u> – they consist of messages of two types – 1) Messages sent to or exchanged between financial institutions involved in precious metal transactions and 2) Syndication messages deal with drawdown or renewal of a facility, setting of the interest / exchange rate of a facility and the payment of principal, interest and / or fees due on a syndication. – MT600 – Precious Metal Trade Confirmation; MT605 – Precious Metal Option to Receive; MT609 – Statement of a Metal account.

Requirement of the BSA/AML Laws and Regulation

▶ According to the BSA/AML Laws and Regulation it is mandatory to fill in full name, address and account number of the sender and receiver.

▶ The incomplete name, address and account number will automatically lead to REPAIR queue and will be processed only after the proper information from the sending branch is received. This will delay the processing of payments.

▶ The branch must provide information in Field 70/ Field 72 for the transaction. Please use appropriate code for providing such information. Absence of proper information will lead to delay in the processing of the information.

▶ **OFAC :** Office of Foreign Asset Control : OFAC administers and enforces economic and trade sanctions based on U.S. foreign policy and national security goals against targeted foreign states, organizations, and individuals

BSA- Banker Secrecy Act and FINCEN (*Financial Crimes Enforcement Network)- Travel Rule*

- ▶ The BSA was enacted to address money laundering and other illegal activity. Specific requirements under the BSA for wire transfer include the procurement and retention of specific information on transactions of $3,000 or more that include:

- ▶ a) The name and, if payment is ordered from an account, the account number of the transmittor;

- ▶ b) The address of the transmittor;

- ▶ c) The amount of the transmittal;

- ▶ d) The execution date of the transmittal;

- ▶ e) The identity of the recipient's financial institution;

- ▶ f) The name and address of the recipient, the account number of the recipient

- ▶ g) Either the name and address or numerical identifier of the transmittor's financial

MT – Category 7, 8 & 9

7 – <u>Documentary Credits / Guarantees</u> – These are exchanged between banks involved in the documentary credit and guarantee business. –

MT700 – Issue of a Documentary Credit;

MT707 – amendment to a Documentary Credit;

MT730 – Acknowledgement, MT760 – Issue of Guarantee,

MT 767 – Amendment to a Guarantee

8 – <u>Travellers Cheques</u> – These are issued between issuers and remitting agents, selling agents, and refund agents in the handling of Travellers Cheques.

9 – <u>Cash management & customer Status</u> – These messages are exchanged between financial institutions, either on behalf of themselves, other financial institutions, or customers. These are: balance reporting messages, netting messages, status messages.

MT900 – Confirmation of Debit; MT910 - Confirmation of Credit;

MT950 – Statement Message

Letter of credit -MT 700

▶ **EXPORT LETTERS OF CREDITCOMMUNICATION AND PAYMENT**

Letters of credit in favuor of exporters are usually sent by **SWIFT** and in a prescribed format. A SWIFT format indicates the issuing bank at the top ("received from") and has numbers at the left for specific information such as:

▶ Field details :

40 A: Form of LC : Irrevocable

20 : Reference
31C: date credit issued

40E : Applicable Rules : UCP latest version
31D: Date and Place of expiry
50: order customer (account party)
59: beneficiary (the exporter - usually customer of the bank)

32B : Currency code , Amount
39B: Maximum Credit Amount (+5% if no specific mention)

41D: available "by payment" or "by negotiation"
42C: tenor of drafts

42D: bank on which drafts are drawn

Letter of credit MT 700

43P : Partial Shipment (Permitted/Not permitted)

43T : Transhipment

44E: shipping dispatch point: place of export

44F: shipping destination point: place of import

44C: latest shipping date (year/month/day)

45A: goods being shipped and terms of trade (FOB, CIF, etc.)

46A: documents required to draw under letter of credit

47A: additional conditions: this is often where it mentions if TT reimbursement is acceptable ("TT" means tested teletransmission)

48: period for presentation of documents (if silent, 21 day maximum after shipping date on bill of lading, but within expiry date; see UCP500, 43a)

MT700-contd..

49: confirmation instructions: requests advising bank to confirm; usually states "without", i.e. no confirmation.
53A: issuing bank's U.S. correspondent who will act as reimbursing bank
71B: who pays for banking charges outside the issuing bank's country? Usually beneficiary pays for charges in India.

57A : Advise through bank: Where beneficiary maintains his account.

MT700 – contd…

▶ 72: bank to bank information: almost always states that the credit is operative and subject to the UCP 600 or latest version. However, the SWIFT convention is that all letters of credit sent by SWIFT are subject to the Uniform Customs and Practices (UCP) for Documentary Credits (Number 600):

▶ 78 : instructions to advising bank: includes information on where documents are to be sent and from which U.S. bank to claim reimbursement and where drafts are to be sent.

Last word

-Do not pass on the credit to beneficiary on the basis of MT 103 received from non- correspondent bank.

- Documents must be verified from LC (export as well as import).

  ▶ Always use Unique reference number for message.

  ▶ Avoid using previously used reference number.

  ▶ Provide Ordering and Beneficiary customer

    ▶ Account number

    ▶ Full Name

    ▶ Address

  ▶ BIC code to be used wherever required.

  ▶ Purpose of remittance to be mentioned in Field 70/72

  ▶ Stop using syntax like

    ▶ "Please debit our Treasury account quoting our reference number"

    ▶ "Do not deduct any charges"

Frauds related to SWIFT

Bangladesh Bank heist

In one of the largest cyber heists in history, hackers ordered the Federal Reserve Bank of New York to transfer $81 million from Bangladesh Bank to accounts in the Philippines

Recent Fraud Cases involving SWIFT

- ▶ PNB -2018, $1.77 Bn since 2011
- ▶ Vietnam Commercial Bank, 2016
- ▶ Equador Bank - $12m - 2015
- ▶ Ukranian Bank, 2017
- ▶ Bangladesh Bank - $81m, Feb, 2016
- ▶ Taiwanese Bank $60mn – 2017
- ▶ Russian Central Bank - $6mn – 2017
- ▶ Switf.net fraud – Brazil – 2016
- ▶ City Union Bank reported attempted fraud of $2 mn on 07/02/18

Mandatory Controls by SWIFT

▶ Restrict internet access

▶ Reduce attack surface & vulnerabilities

▶ Physical security

▶ Prevent compromise of credentials

▶ Manage identities & segregate privileges

▶ Detect anomalous activities

▶ Incident response

16 Mandatory controls

- SWIFT environment protection

- OS privileged a/c control

- Internal dataflow security

- Security updates

- System hardening

- Prevent unauthorized physical access

- Password policy

- Multi-factor authentication

- Logical access control

- Token Management

- Malware protection

- SW integration

- Database integrity

- Logging and Monitoring

- Cyber incidence response and planning

- Security training and awareness

Advisory security controls

▶ Back office data flow security

▶ External transmission data protection

▶ Operator session confidentiality

▶ Vulnerability scanning

▶ Critical activity outsourcing

▶ Transaction business control

▶ Manage identities

▶ Personnel vetting process

▶ Physical & logical password storage

▶ Intrusion detection

▶ Penetration testing

▶ Scenario Risk assessment

SWIFT - Concerns

▶ Whether SWIFT is integrated with payment system?

▶ Whether nostro account reconciliation is up to date?

▶ Whether all free format messages are thoroughly checked and confirmed

▶ Whether three levels of authentication are adhered to?

▶ Bio-metric authentication is introduced?

▶ Regular user movements implemented?

▶ Modus operandi for frauds: attackers obtained valid credentials for operators authorized to create and approve SWIFT messages, then submitted fraudulent messages by impersonating those people.

Question & Answer

▶ THANK YOU