# MQ Series Interface Messages

## Message Header

For each of the MQ Message, there is a MQ system level header, which is managed by MQSeries itself and the data content which consists of the application data.

The data content is further separated into 3 parts: (i) Communication Header (ii) Application message header & (iii) Application data.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Communication Header | | | | | | |
| Item | Field Name | Description | Format | Length | Occur | Mandatory |
| 1 | SNDID | Sender Application ID | X(03) | 3 | 1 | Y |
|  |  | Remarks: Could be any code to denote the sender system. In general, the prefix of the application ID is as follows:  ‘F’ – Front End System  ‘H’ – Host Application System | | | | |
| 2 | RCVID | Receiver Application ID | X(03) | 3 | 1 | Y |
|  |  | Remarks: Could be any code to denote the receiver system. | | | | |
| 3 | ORGID | Originator ID | X(03) | 3 | 1 | Y |
|  |  | Remarks: The system ID of the system which create the message | | | | |
| 4 | ORGREF | Originator Reference | X(14) | 14 | 1 | Y |
|  |  | Remarks: A Unique key assigned at message creation to identify the message | | | | |
| 5 | MSGCD | Message Code | X(04) | 4 | 1 | Y |
|  |  | Remarks: Message Code of the request | | | | |
| 6 | MSGTY | Message Type | X(01) | 1 | 1 | Y |
|  |  | Remarks: Message Type:-  ‘Q’ – Request  ‘I’ – Inform Message  ‘A’ – Acceptance Reply  ‘J’ – Rejection Reply | | | | |
| 7 | COMTY | Communication Type | X(01) | 1 | 1 | Y |
|  |  | Remarks: ‘A’ – Asynchronous communication  ‘S’ – Synchronous communication | | | | |
| 8 | PDMFG | Possible Duplicate Message Flag | X(01) | 1 | 1 | Y |
|  |  | Remarks: ‘Y’ – when this message is resent  ‘N’ – Otherwise  (Note: No message resent can be handled in this moment, this field is added for future use) | | | | |
| 9 | DTETME | Message Creation Date and Time | X(18) | 18 | 1 | Y |
|  |  | Remarks: yyyy-mm-ddhh:mm:ss | | | | |
| 10 | PRSCD | Processing Return Code | X(04) | 4 | 1 | Y |
|  |  | Remarks: The return code from receiving application system  0000 – Normal | | | | |
| 11 | TRMCD | Transmission Return Code | X(04) | 4 | 1 | Y |
|  |  | Remarks: The return code from host communication interface to indicate all kinds of communication error  0000 – Normal | | | | |
| 12 | TMEOUT | Time Out | 9(06) | 6 | 1 | Y |
|  |  | Remarks: Time Out Interval in format hhmmss | | | | |
| 13 | MSGLEN | Message Length | 9(04) | 4 | 1 | Y |
|  |  | Remarks: Length of the ***Application*** Message Body | | | | |
| 14 | SUMIND | Get message summary information indicator | X(01) | 1 | 1 | Y |
|  |  | Remarks: ‘N’ – No message information will be provided  ‘Y’ – Get message summary and detail from GB log  ‘C’ – Get message summary from GB log  Get message detail from related system | | | | |
| 15 | REFNUM | Host reference number | X(08) | 8 | 1 | Y |
|  |  | Remarks: Transaction reference number generated by host system | | | | |
| 16 | SUBHDR | Sub header Indicator | X(01) | 1 | 1 | Y |
|  |  | Remarks: ‘Y’ – with sub header appended, ‘N’ – without sub header | | | | |
| 17 | CHKSUM | Checksum | X(08) | 8 | 1 | Y |
|  |  | Remarks: Implement WLB provided Checksum algorithm to generate message digest for MQ message checksum and apply checksum algorithm to output final checksum | | | | |
| 18 | TERMID | Terminal ID | X(12) | 12 | 1 | Y |
|  |  | Remarks: UNIX server machine name | | | | |
| 19 | OPTRID | Operator ID  (function requester ID) | X(16) | 16 | 1 | Y |
| 20 | APPHEADER | Application Header Area | X(38) | 38 | 1 | N |
|  |  | Remarks: Different Applications can create their own header fields specified for an application system. | | | | |

Note:

* 1. Both the communication and application headers are in fix length.

(ii) The request message from UNIX server and reply message from Host have same function code and ITS Function ID.

(iii) MsgLen is the total no. of bytes in all headers and data.

(iv) Checksum calculation is based on all data of the message excluding checksum

### Header Values from ITS to Host

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Items | Field Name | Field Description | ITS to Host Values | Host return Values | Remark |
| 1 | SNDID | Sender Application ID | FSH | HSH |  |
| 2 | RCVID | Receiver Application ID | HSH | FSH |  |
| 3 | ORGID | Originator ID | FSH | FSH |  |
| 4 | ORGREF | Originator Reference | Blank | A unique value | Host will generate a unique value |
| 5 | MSGCD | Message Code | Will have different values for different message | The same as request message id |  |
| 6 | MSGTY | Message Type | Q | A or J |  |
| 7 | COMTY | Communication Type | A | A |  |
| 8 | PDMFG | Possible Duplicate Message | N | N |  |
| 9 | DTETME | Message Creation Date and Time | Creation date and time in format yyyy-mm-ddhh:mm:ss | Same value as request message |  |
| 10 | PRSCD | Processing Return Code | 0000 | 0000 for accept, a 4-digit value for rejection |  |
| 11 | TRMCD | Transmission Return Code | 0000 | 0000 for accept, a 4-digit value for rejection |  |
| 12 | TMEOUT | Time Out | A predefined value | No change |  |
| 13 | MSGLEN | Message Length | Message length of request body | Message length of reply (accept or reject) body |  |
| 14 | SUMIND | Get message summary information indicator | Y | Y |  |
| 15 | REFNUM | Host reference number | Blank | ‘SH’ + 6 digits | Host will generate this number |
| 16 | SUBHDR | Sub header Indicator | N | N |  |
| 17 | CHKSUM | Check Sum | Check Sum value for request message | Check Sum value for reply message |  |
| 18 | TERMID | Terminal ID | Blank | No change |  |
| 19 | OPTRID | Operator ID | Blank | No change |  |
| 20 | APPHEADER | Application Header Area | No application header area up to this moment |  |  |

### Header Values from Host to ITS

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Items | Field Name | Field Description | Host to ITS Values | ITS return Values | Remark |
| 1 | SNDID | Sender Application ID | HSH | FSH |  |
| 2 | RCVID | Receiver Application ID | FSH | HSH |  |
| 3 | ORGID | Originator ID | HSH | HSH |  |
| 4 | ORGREF | Originator Reference | A unique value | The same value as host | Host will generate a unique value to ITS and ITS just return the same value |
| 5 | MSGCD | Message Code | Will have different values for different message | The same as request message id |  |
| 6 | MSGTY | Message Type | Q | A or J |  |
| 7 | COMTY | Communication Type | A | A |  |
| 8 | PDMFG | Possible Duplicate Message | N | N |  |
| 9 | DTETME | Message Creation Date and Time | Creation date and time in format yyyy-mm-ddhh:mm:ss | Same value as request message |  |
| 10 | PRSCD | Processing Return Code | 0000 | 0000 for accept, a 4-digit value for rejection |  |
| 11 | TRMCD | Transmission Return Code | 0000 | 0000 for accept, a 4-digit value for rejection |  |
| 12 | TMEOUT | Time Out | A predefined value | No change |  |
| 13 | MSGLEN | Message Length | Message length of request body | Message length of reply(accept or reject) body |  |
| 14 | SUMIND | Get message summary information indicator | Y | Y |  |
| 15 | REFNUM | Host reference number | ‘SH’ + 6 digits | Blank | Host will generate this number |
| 16 | SUBHDR | Sub header Indicator | N | N |  |
| 17 | CHKSUM | Check Sum | Check Sum value for request message | Check Sum value for reply message |  |
| 18 | TERMID | Terminal ID | Host initiator’s terminal ID | No change |  |
| 19 | OPTRID | Operator ID | Host initiator’s Operator ID | No change |  |
| 20 | APPHEADER | Application Header Area | No application header area up to this moment |  |  |

## MQ Message Application Data:

### Order Hold Fund

#### Order Hold Fund Request

Function Code : DAHF

ITS Function ID : HOLDFUND

Msg Desc : Order Hold Fund Request (InterTrade 🡪 Host)

Systems : STD

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Key | Field Name | Description | Format | Length | Occur | Mandatory | Remark |
| 1 | PTX-CD | Parent ITS Function ID | X(6) | 6 | 1 | Y | 063030 – Place Hold Fund |
| 2 | BRANCH-ID | Branch ID | X(3) | 3 | 1 | Y | 601 |
| 3 | DEPT-ID | Department ID | X(2) | 2 | 1 | Y | 08 |
| 4 | TLR-ID | Teller ID | X(8) | 8 | 1 | Y | Cannot be spaces |
| 5 | TERM-ID | Terminal ID | X(4) | 4 | 1 | Y | Cannot be spaces |
| 6 | AC-NO | Money Settlement Account No. | X(11) | 11 | 1 | Y |  |
| 7 | Filler |  | X(47) | 47 | 1 | Y |  |
| 8 | RMK | Remark | X(50) | 50 | 1 | N |  |
| 9 | Filler |  | X(18) | 18 | 1 | Y |  |
| 10 | HLD-CCY-CD | Hold Fund Currency Code | X(3) | 3 | 1 | Y |  |
| 11 | HLD-AMT | Hold Fund Amount | 9(13)V99 | 15 | 1 | Y | > 0 |
| 12 | HLD-AMT-SIGN | Hold Fund Amount Sign | X | 1 | 1 | Y | + or - |
| 13 | HLD-RLS-DT | Hold Fund Release Date | X(10) | 10 | 1 | N | yyyy-mm-dd |
| 14 | HLD-RSON-CD | Hold Fund Reason Code | X(3) | 3 | 1 | N | ‘008’ |

#### 

#### Order Hold Fund Reply

Function Code : DAHF

ITS Function ID : HOLDFUND

Msg Desc : Order Hold Fund Reply (Host 🡪 InterTrade)

Systems : STD

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Key | Field Name | Description | Format | Length | Occur | Mandatory | Remark |
| 1 | PROD-TP-CD | Product Type Code | X(3) | 3 | 1 | Y |  |
| 2 | PROD-CAT-CD | Product Category Code | X(3) | 3 | 1 | Y |  |
| 3 | PROD-CD | Product Code | X(5) | 5 | 1 | Y |  |
| 4 | PROD-PLAN | Product Plan | X(2) | 2 | 1 | Y |  |
| 5 | ACCT-SNAME | Account Short Name | X(20) | 20 | 1 | Y |  |
| 6 | ACCT-STS | Account Status | X(1) | 1 | 1 | Y |  |
| 7 | LSTFIN-DT | Last Financial Date | X(10) | 10 | 1 | Y | yyyy-mm-dd |
|  |  |  |  |  |  |  |  |
| 8 | BAL-DTL-CNT | # of Balance Entries | 9(2) | 2 | 1 | Y | Max. 20 |
| 9 | CCY-CD | CCY Code | X(3) | 3 | 20 | Y |  |
| 10 | LEDG-BAL | Ledger Balance | 9(13)V99 | 15 | 20 | Y |  |
| 11 | LEDG-BAL-SIGN | Ledger Balance Sign | X | 1 | 20 | Y | + or - |
| 12 | AVAIL-BAL | Available Balance | 9(13)V99 | 15 | 20 | Y |  |
| 13 | AVAIL-BAL-SIGN | Available Balance Sign | X | 1 | 20 | Y | + or - |
| 14 | TTL-FLT-AMT | Total Float Amount | 9(13)V99 | 15 | 20 | Y |  |
| 15 | TTL-FLT-AMT-SIGN | Total Float Amount Sign | X | 1 | 20 | Y | + or - |
| 16 | TTL-HLD-AMT | Total Hold Amount | 9(13)V99 | 15 | 20 | Y |  |
| 17 | TTL-HLD-AMT-SIGN | Total Hold Amount Sign | X | 1 | 20 | Y | + or - |
| 18 | CR-LMT | CR Limit | 9(13)V99 | 15 | 20 | Y |  |
| 19 | CR-LMT-SIGN | CR Limit Sign | X | 1 | 20 | Y | + or - |
| 20 | HLD-PLC-DT | Hold Place Date | X(10) | 10 | 1 | Y | Return the current business date when place hold fund transaction is performed |
| 21 | FILLER | Filler | X(17) | 17 | 1 | Y | Filler |
| 22 | MSG-INDEX | # of Returned Messages | 9(2) | 2 | 1 | Y | Max. 10 |
| 23 | MSG-TYPE | Message Type | X(1) | 1 | 10 | Y | Host Message Type.  Not to be used by ITS. |
| 24 | MSG-CODE | Message Code | X(6) | 6 | 10 | Y |  |
| 25 | MSG-TEXT |  | X(55) | 55 | 10 | N |  |
| 26 | MSG-REF |  | X(20) | 20 | 10 | N |  |
| 27 | MSG-OVRD-LVL1 |  | X(2) | 2 | 10 | N |  |
| 28 | MSG-OVRD-LVL2 |  | X(2) | 2 | 10 | N |  |
| 29 | MSG-OVRD-TYPE |  | X(1) | 1 | 10 | N |  |
| 30 | MSG-PRIORITY |  | X(3) | 3 | 10 | N |  |
| 31 | MSG-LMT-AMT |  | 9(13)V99 | 15 | 10 | N |  |
| 32 | MSG-LMT-AMT-SIGN |  | X | 1 | 10 | N | + or - |
| 33 | MSG-LMT-TP |  | X(2) | 2 | 10 | N |  |
| 34 | MSG-AUTH-TP1 |  | X(1) | 1 | 10 | N |  |
| 35 | MSG-AUTH-TP2 |  | X(1) | 1 | 10 | N |  |
| 36 | MSG-EXMSG-CD |  | X(6) | 1 | 10 | N |  |
| 37 | MSG-PRD-CD |  | X(1) | 1 | 10 | N |  |

#### 

#### Order Hold Fund Reply Message Codes

|  |  |  |  |
| --- | --- | --- | --- |
|  | Message Code | Description | Remark |
| 1 | DA0001 | Input Invalid Value |  |
| 2 | DA0005 | Invalid Account Number |  |
| 3 | DA0010 | Account Number ??? not found |  |
| 4 | DA0011 | Account is Closed |  |
| 5 | DA0012 | Account is Deleted |  |
| 6 | DA0017 | The CCY ??? is not supported by this Product |  |
| 7 | DA0034 | Account Balance Record Not Found |  |
| 8 | DA0185 | Insufficient Hold Fund Amount |  |

### Order Release Fund

#### Order Release Fund Request

Function Code : DARF

ITS Function ID : RELSFUND

Msg Desc : Order Release Fund Request (InterTrade 🡪 Host)

Systems : STD

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Key | Field Name | Description | Format | Length | Occur | Mandatory | Remark |
| 1 | PTX-CD | Parent ITS Function ID | X(6) | 6 | 1 | Y | 063031 – Remove Hold Fund  063032 – Remove Hold Fund with unique ref |
| 2 | BRANCH-ID | Branch ID | X(3) | 3 | 1 | Y | 601 |
| 3 | DEPT-ID | Department ID | X(2) | 2 | 1 | Y | 08 |
| 4 | TLR-ID | Teller ID | X(8) | 8 | 1 | Y | Cannot be spaces |
| 5 | TERM-ID | Terminal ID | X(4) | 4 | 1 | Y | Cannot be spaces |
| 6 | AC-NO | Money Settlement Account No. | X(11) | 11 | 1 | Y |  |
| 7 | Filler |  | X(47) | 47 | 1 | Y |  |
| 8 | RMK | Remark | X(50) | 50 | 1 | N |  |
| 9 | Filler |  | X(18) | 18 | 1 | Y |  |
| 10 | RV-HLD-CCY-CD | Remove Hold Fund Currency Code | X(3) | 3 | 1 | Y |  |
| 11 | RV-HLD-AMT | Remove Hold Fund Amount | 9(13)V99 | 15 | 1 | Y | > 0 |
| 12 | RV-HLD-AMT-SIGN | Remove Hold Fund Amount Sign | X | 1 | 1 | Y | + or - |
| 13 | RV-HLD-RLS-DT | Remove Hold Fund Release Date | X(10) | 10 | 1 | N | yyyy-mm-dd |
| 14 | RV-HLD-RSON-CD | Hold Fund Reason Code | X(3) | 3 | 1 | N | ‘008’ |
| 15 | TX-DT | TXN Date | X(10) | 10 | 1 | Y | yyyy-mm-dd |
| 16 | PLC-BR | Placing Branch | X(3) | 3 | 1 | Y | 601 |
| 17 | PLC-DP | Placing Department | X(2) | 2 | 1 | Y | 08 |

#### Order Release Fund Reply

Function Code : DARF

ITS Function ID : RELSFUND

Msg Desc : Order Release Fund Reply (Host 🡪 InterTrade)

Systems : STD

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Key | Field Name | Description | Format | Length | Occur | Mandatory | Remark |
| 1 | PROD-TP-CD | Product Type Code | X(3) | 3 | 1 | Y |  |
| 2 | PROD-CAT-CD | Product Category Code | X(3) | 3 | 1 | Y |  |
| 3 | PROD-CD | Product Code | X(5) | 5 | 1 | Y |  |
| 4 | PROD-PLAN | Product Plan | X(2) | 2 | 1 | Y |  |
| 5 | ACCT-SNAME | Account Short Name | X(20) | 20 | 1 | Y |  |
| 6 | ACCT-STS | Account Status | X(1) | 1 | 1 | Y |  |
| 7 | LSTFIN-DT | Last Financial Date | X(10) | 10 | 1 | Y | yyyy-mm-dd |
|  |  |  |  |  |  |  |  |
| 8 | BAL-DTL-CNT | # of Balance Entries | 9(2) | 2 | 1 | Y | Max. 20 |
| 9 | CCY-CD | CCY Code | X(3) | 3 | 20 | Y |  |
| 10 | LEDG-BAL | Ledger Balance | 9(13)V99 | 15 | 20 | Y |  |
| 11 | LEDG-BAL-SIGN | Ledger Balance Sign | X | 1 | 20 | Y | + or - |
| 12 | AVAIL-BAL | Available Balance | 9(13)V99 | 15 | 20 | Y |  |
| 13 | AVAIL-BAL-SIGN | Available Balance Sign | X | 1 | 20 | Y | + or - |
| 14 | TTL-FLT-AMT | Total Float Amount | 9(13)V99 | 15 | 20 | Y |  |
| 15 | TTL-FLT-AMT-SIGN | Total Float Amount Sign | X | 1 | 20 | Y | + or - |
| 16 | TTL-HLD-AMT | Total Hold Amount | 9(13)V99 | 15 | 20 | Y |  |
| 17 | TTL-HLD-AMT-SIGN | Total Hold Amount Sign | X | 1 | 20 | Y | + or - |
| 18 | CR-LMT | CR Limit | 9(13)V99 | 15 | 20 | Y |  |
| 19 | CR-LMT-SIGN | CR Limit Sign | X | 1 | 20 | Y | + or - |
| 20 | HLD-PLC-DT | Hold Place Date | X(10) | 10 | 1 | Y | Return the current business date when place hold fund transaction is performed |
| 21 | FILLER | Filler | X(17) | 17 | 1 | Y | Filler |
| 22 | MSG-INDEX | # of Returned Messages | 9(2) | 2 | 1 | Y | Max. 10 |
| 23 | MSG-TYPE | Message Type | X(1) | 1 | 10 | Y | Host Message Type.  Not to be used by ITS. |
| 24 | MSG-CODE | Message Code | X(6) | 6 | 10 | Y |  |
| 25 | MSG-TEXT |  | X(55) | 55 | 10 | N |  |
| 26 | MSG-REF |  | X(20) | 20 | 10 | N |  |
| 27 | MSG-OVRD-LVL1 |  | X(2) | 2 | 10 | N |  |
| 28 | MSG-OVRD-LVL2 |  | X(2) | 2 | 10 | N |  |
| 29 | MSG-OVRD-TYPE |  | X(1) | 1 | 10 | N |  |
| 30 | MSG-PRIORITY |  | X(3) | 3 | 10 | N |  |
| 31 | MSG-LMT-AMT |  | 9(13)V99 | 15 | 10 | N |  |
| 32 | MSG-LMT-AMT-SIGN |  | X | 1 | 10 | N | + or - |
| 33 | MSG-LMT-TP |  | X(2) | 2 | 10 | N |  |
| 34 | MSG-AUTH-TP1 |  | X(1) | 1 | 10 | N |  |
| 35 | MSG-AUTH-TP2 |  | X(1) | 1 | 10 | N |  |
| 36 | MSG-EXMSG-CD |  | X(6) | 1 | 10 | N |  |
| 37 | MSG-PRD-CD |  | X(1) | 1 | 10 | N |  |