EDI

IPL
An IPL company

Doing data differently

V.2.1

I am pleased to present this manual which covers the manual and software methods we use to validate our data. We strive for 100% accuracy but mistakes unfortunately do happen. Where possible we try to learn from them and adopt procedures to ensure that they do not reoccur. We welcome comment and input from our clients and potential clients as our goal is to be as accurate as possible.

Jonathan Bloch
CEO

Contents

Manual Controls

In today's modern business world, where everything is managed and controlled by specialised software, human involvement cannot be overlooked. In fact, there are lots of data parameters that cannot be left to be controlled by software.

Manual Controls are sets of practices and procedures followed by analysts to ensure that data meets certain predefined rules and to maintain quality.

Below are some of the Manual Controls performed in the processes:

1. Downloading

- Update Frequencies are always checked before download.
- Our program automatically downloads only the latest files of each county from EDI's FTP site.
- A download spreadsheet is maintained to track the files.
- The download spreadsheet is sent to EDI to programmatically verify that what we have downloaded matches their records of uploads.
- A spread sheet is maintained for several master files e.g., ISIN, local codes, industry and shares outstanding to check the receipt of the source as per the set frequency.
- Daily report is sent to EDI for missing files not received from the data provider.

2. Printing

- The Download Spreadsheet is used for printing all the documents and as a cross-verification tool of what has been received and printed by us.
- Some files are reformatted so that they can be printed in a proper manner.
- Before printing headers and footers which identify source - country, date and control features are added to the document.

3. Document Handling and Control

- Printed documents are handed over by the printer to the data editor after taking the initials of the Data Editor from the downloaded spreadsheet. At the end of the day it is reconciled for any missing documents.
- The Data Editor puts their initials on all the documents after processing. The Data Analyst also adds their initials after it is checked. Reconciliation is done for anything that is missed while processing the source.

Rules

- Based on our experience with the country, inputs from providers, our knowledge about the events and systems, changing market conditions etc. we would define/refine general and country specific rules and keep them updated at all times.
- These rules are always referred to while processing Corporate Actions in WCA.
- Manuals and Rules are also maintained and updated in a timely manner.

4. Entries

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Corporate Actions (Equity & Fixed Income)

- While processing, the analyst would look up the system to see if the event is there in WCA. SMF is also referred to while processing the data.
- While processing the event, analysts simultaneously look up SMF for SEDOLTM & ISIN.
- For every event the system prompts the analyst for any 'missing' critical fields. Once the analyst is satisfied that the field is not 'missing' from the document they would proceed. A similar procedure is followed if the securities do not have SEDOLTM/ISIN.
- If an analyst has a query they ask senior analysts for clarifications.
- If there are doubts about the event or there are some new issues, they are discussed with the senior analysts. If a query cannot be resolved internally it is sent to EDI for them to chase up with the providers.
- For every event entered, the system generates a unique ID number, which along with the event type is written on the source documents.
- The data analysts tick individual fields that have been entered and also write their User ID on the document.
- Fixed Income Corporate Actions are also processed from various masters.
- Sometimes websites are searched and checked for future reference.
- A country status file is maintained for Fixed Income Corporate Actions which tracks the dates of source, receipt and processing.

SMF

- The daily SMF updates act as a trigger for 'missing' Equity Corporate Actions.
- Fixed Income securities are created from SMF.

Fixed Income (Reference data)

Procedures followed are similar to those followed for Corporate Actions. In addition:

- Source Websites, Exchange Websites and/or Euroclear Websites are checked for more static information or for resolution of mismatches.
- Call date is not equal to maturity date.
- Based on schedule call/put type is decided.
- Common code is generated and added for XS ISIN.
- WKN is part of DE ISIN.
- USCODE is a part of BM, CA, KY and US ISIN.
- Before creating a new security, we check if the security is already present with critical fields (interest basis, interest rate and maturity date).
- If the issue amount date is equal to outstanding amount date, then issue amount should be equal to outstanding amount and vice versa.
- Interest payment currency and maturity payment currency is the same as issue currency if it is not mentioned otherwise. Same applies to interest commencement date.
- If the interest payment frequency is 'Interest on Maturity' then the first interest payment date is equal to the maturity date.
- If Markup is in negative we add the '–' sign in front of it.
- At the time of a New Issue, credit rating date is equal to the issue date if not specified.

5. Utilities

Certain utilities have been designed by us, which saves considerable time.

- An example is where we get files that are cumulative. We use the utilities to identify the changes in the

files and then proceed to work only with the changes.

- Some providers give us good quality data in a computer readable form. In such cases, programs have been written to load the data automatically. On completion of the load a report is generated which shows the loaded and not-loaded events. The not-loaded events are investigated manually and appropriate action is taken.
- For large volume sources, raw data is loaded into specially designed software to view records in readable format. The analyst then marks the actions taken by them and it is stored in a controlling database for future records and reports.

6. Sample Checks

- The Team Leader sample checks the data that has been entered.
- If they notice a pattern of mistakes they will work with the relevant analyst to improve their understanding and workings of the system so to reduce their mistakes.

7. Systemic reporting

With so many instruments, rules and country specific issues it is impossible for anyone to remember them all. Some mistakes are bound to slip through. Over the years we have identified several such systemic issues which are both difficult manually and cannot be built into the software. For such cases we have defined periodic exception reporting which the editor teams use to rectify problems.
Some examples:

- A report is generated to identify the securities without CUSIP for ISINs starting with BM, CA, KY and US.
- A report is generated to identify the securities without common code for ISINs starting with XS and WKN for DE ISINs.
- A report is generated to identify the securities where Primary Exchange/Listing is missing

Software Validation

Software validation checks and rules are built into the system to minimize manual errors. With experience we keepadding more intelligence into the software.

General Rules

Throughout WCA we have following common checks:

a) Source and Source Date cannot be blank.
b) Source Date cannot be later than today's date.
c) Source Date should be later than 2000.
d) GCACTION is set to DELETED to remove wrongly entered events. Events marked as DELETED cannot be reverted back. They are treated as not in the system.
e) Modification is not allowed if the GCACTION flag is set to DELETION/CANCELLED.
f) Changes to details for inactive securities can be done only by the users having Supervisor Login Access.
g) Date range check validation, e.g., if we have a Start Date and an End Date, the End Date should always be laterthan the Start Date. The same stands true for Minimum and Maximum Price etc.
h) Negative values are not allowed in Numeric fields.
i) All the events driven by a Security will be checked if the SEDOL™ has gone defunct. If SEDOL™ is defunct then the user will be prompted to pass a DEFUNCT entry in the SEDOL™ change module.

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j) In each entry module the moment a user enters key information, the SAVE button is displayed on the screen. Atthis point of time the system also displays the mode in which the user is in (i.e. ADD/MODIFY). The moment theuser saves the information the SAVE button disappears and the user is presented with a blank form. Now the user can select another piece of information.

k) While entering the information, if the user wants to ignore the information being entered, they can press the ESC (escape) button on the keyboard. This will bring them back to the menu or one level up, depending on the module on which the user is working.

Event Specific Rules

8. Agency (REG)
- Registrar Name cannot be blank.

9. Agency Change (AGCHG)
- The Old Registrar and New Registrar names should be different.
- Effective Date cannot be blank.
- New Registrar name cannot be blank.

10. Agency Details Change (REGDT)
- Effective Date cannot be blank.
- New Registrar name cannot be blank.

11. Announcement (ANN)
- Event Type cannot be blank.
- Notification Date cannot be blank.

12. Annual General Meeting (AGM)
- Meeting Date cannot be blank.
- Meeting Type cannot be blank.

13. Arrangement (ARR)
- Valid values in Arrangement can have Cash/Stock/Dissenter's Rights.
- Currency is mandatory if Price is populated.
- If Ratios are populated then Security Type is mandatory.
- Valid values for Withdrawal Rights are Yes, No, Blank.
- Withdrawal Rights TO DATE should always be later than Withdrawal FROM DATE.

14. Assimilation (ASSM)
- Tradable Security Type is not allowed in Assimilation.
- Assimilation Date cannot be blank.
- Offered Security should be different.

15. Bankruptcy (BKRP)
- Notification Date cannot be blank.

16. Basket Warrant Constituent (BSKWC)
- Being called from Basket Warrant Terms.
- Shares in Basket cannot be blank.
- Constituent Issuer Name and Security Name are mandatory.

17. Basket Warrant Constituent Change (BSKCC)
- The Related Event ID cannot be blank if the event is other than CORR, CLEAN, CANCEL or ADD.

- The Old and New shares in Basket cannot have the same value.
- The resultant security cannot be blank and must be different from the original Basket warrant

18. Basket Warrant Terms (BSKWT)

1. Call/Put, Expiry Date cannot be blank. They should match with the security description information.

2. If Strike Price is populated then Currency cannot be blank.

19. Basket Warrant Terms Change (BWCHG)

- Being called from the Basket Warrant Terms Module.
- Call/Put, Expiry Date, Currency, Strike price can be changed.

20. Business Day Convention Center (BDC)

- Being called from the Fixed Income Module.
- Center and Country cannot both be blank.

21. Bonus (BON)

- Security Type cannot be a duplicate.
- Security Type can be blank only if the user is entering a lapse premium.

22. Bonus Rights (BR)

- Closing Date should be later than Opening Date.
- Trading Closing Date should be later than Opening Date.

23. Buyback (BB)

- End Date should be later that Effective (Start) Date.

24. Call (CALL)

- Call Number cannot be blank.

25. Call Put Option (CPOPT):

- If Price is populated then Currency cannot be blank.
- To Date must be later than From Date.
- The notification To Date must be later than notification From Date.

26. Capital reduction (CAPRD)

- If Old Ratio is populated, then New Ratio must be entered.
- If Old Parvalue is populated then New Parvalue has to be entered.
- Rules for Ratios are :
    - If Opv > Npv then ORatio = NRatio = 1
    - If Opv = Npv then ORatio should be greater Nratio and Old Parvalue should be greater than New Parvalue where:
        - Opv = Old Parvalue
        - Npv = New parvalue
        - ORatio= Old Ratio
        - NRatio= New Ratio
- If there is cash back then ratios should not be populated.

27. Certificate of Exchange (CTX)

- End Date should be later than Start Date.

28. Class Actions

- Case Number cannot be blank.
- Period End Date cannot be earlier than Period Start Date.
- Lead Plaintiff Date cannot be earlier than or equal to Period Start Date.

- Proof of Filing Deadline Date cannot be earlier than or equal to Period Start Date.
- Objection Deadline Date cannot be earlier than or equal to Period Start Date.
- Exclusion Deadline Date cannot be earlier than or equal to Period Start Date.

29. Class Action Securities
- Status cannot be blank.

30. Class Action Status
- Status Date cannot be blank.
- Future Date cannot be the same as Status Date.
- Status cannot be blank.

31. Consent (CONST)
1. Currency is mandatory if fee is populated.
- Valid values for Collateral Release are:

    Y = Yes, means security is secured;
    N = No, means security is not secured.

32. Consolidation (CONSD)
- Neither Old nor New Ratio can be blank.
- Old Ratio should be greater than New Ratio.
- New Parvalue should be greater than or equal to New Parvalue.
- Old Parvalue (Old Ratio) should always equal to New Parvalue (New Ratio).

33. Conversion Terms (CONVT)
- Interest Rate must match with Security description.
- Part/Final flag is mandatory.
- Both currencies in Currency Pair cannot be the same.
- 1st part of Currency Code pair not found in our currency master.
- 2nd part of Currency Code pair not found in our currency master.

34. Conversion Terms Change (CTCHG):
- Effective Date cannot be blank.

35. Conversion Event (CONV)
- From Date cannot fall earlier than Fixed Income Issue Date.
- From Date cannot fall earlier than Fixed Income Entry Date in absence of Issue Date.
- From Date cannot fall later than Fixed Income Maturity Date.
- From Date cannot fall later than Fixed Income Issue Date + 100 years in absence of maturity.
- From Date cannot fall later than Fixed Income Entry Date + 100 years in absence of Maturity and Issue Dates.
- To Date should always be later than From Date.
- To Date cannot fall earlier than Fixed Income Issue Date.
- To Date cannot fall earlier than Fixed Income Entry Date in absence of Issue Date.
- To Date cannot fall later than Fixed Income Issue Date + 100 years in absence of Maturity Date.
- To Date cannot fall later than Fixed Income Entry Date + 100 years in absence of Maturity and Issue Date.
- After passing a FINAL Conversion you cannot pass any new entries.
- Part/Final flag is mandatory.
- Currency Pair is always 6 characters long.
- Both currencies in Currency Pair cannot be the same.
- 1st part of Currency Code pair not found in our currency master.

- 2nd part of Currency Code pair not found in our currency master.

36. Covered Warrant Terms (COWAR)
- The Resultant Security cannot be blank.
- The Expiry Date cannot be blank.
- Exercise Style cannot be blank.
- Covered Warrant Type cannot be blank.

37. Covered Warrant Terms Change (CWCHG)
- Notification Date cannot be blank.
- Only one entry is allowed in Future Date.
- If it's an open end Covered Warrant Change then the Expiry Date should be 01/01/9999.

38. Credit Rating (CRDRT)
- Rating Agency cannot be blank.

39. Credit Rating Change (CRCHG)
- Credit Rate Date cannot be blank.

40. Currency Redenomination (CURRD)
- Old Currency Code and New Currency Code should be different.
- New Currency Code cannot be blank.
- Old Currency Code cannot be blank.
- New Parvalue cannot be blank.

41. Depository Receipt (DPRCP)
- Underlying Security cannot be blank.
- Underlying Security and Main Security cannot be the same.

42. Depository Receipt Change (DRCHG)
- New Underlying Security Name cannot be blank.
- Underlying Security and Main Security cannot be the same.
- Effective Date cannot be blank.

43. De-Merger (DMRGR)
- Valid arrangement can be Cash/Stock/Dissenter's Rights.
- Currency is mandatory if Price is populated.
- Valid values for Withdrawal Rights are Yes, No, Blank.
- Withdrawal Rights TO DATE should always be later than Withdrawal FROM DATE.

44. Distribution (DIST)
- Security Type is mandatory if Ratios are populated.
- Valid values for Withdrawal Rights are Yes, No, Blank.
- Withdrawal Rights TO DATE should always be later than Withdrawal FROM DATE.

45. Divestment (DVST)
- Closing Date should be later than Opening Date.

46. Dividend (DIV)
- Dividend Period is mandatory.
- Net Dividend should always be lesser than Gross Dividend.
- Group 2 Gross and Net dividend will only be accepted if the selected security is Unit Trust.
- No other information will be accepted if it's a Nil Dividend.
- Dividend Declared can be of only 4 types:

- o C = Cash;
- o S = Stock;
- o B = Both;
- o = Optional.

47. Drip (DRIP)
- Country cannot be blank.

48. Entitlement (ENT)
- End Subscription Date should be later than Start Subscription Date.
Security Type cannot be blank.

49. Financial Year Change (FYCHG)
- Notification Date cannot be blank.
- New Financial Year Starting Date cannot be blank.
- New Financial Year Ending Date cannot be blank.
- New Financial Year Starting Date must be earlier than New Financial Year Ending Date.
- Old Financial Year Starting Date must be earlier than Old Financial Year Ending Date.

50. Fixed Income Outstanding Change (BOCHG)
- Effective Date cannot be blank.
- Effective Date cannot fall beyond Fixed Income Maturity Date.
- In absence of Maturity Date, Effective Date cannot fall beyond Issue Date + 100 years.
- Effective Date should fall later than Fixed Income Issue Date.

51. Fixed Income Static Change (BSCHG)
- New Currency cannot be blank.
- Fixed Income Type cannot be blank.
- Valid values for Perpetual/Irredeemable/Undated are P/I/U.
- An Undated Fixed Income Security which has Redemption entries cannot be changed to Perpetual/Irredeemable.
- A Perpetual Fixed Income Security which has Redemption entries cannot be changed to Irredeemable/Undated.
- A Fixed Income Security which has a Maturity Date cannot be changed to Perpetual/Irredeemable/Undated.

52. Fixed Income (Bond)

- Type of Fixed Income is mandatory.
- Issue Currency cannot be blank if Issue Amount is mentioned.
- Issue Amount Date cannot be earlier than Issue Date.
- Issue Amount Date should be same as Issue Date.
- Outstanding Amount Date cannot be blank when Outstanding Amount is specified.
- Outstanding Amount Date cannot be earlier than Issue Date.
- Outstanding Amount Date cannot be later than Maturity Date.
- Interest Rate can be ZERO only if the interest type is:
    - a) Floating Rate
    - b) Floating Rate – Zero Coupon
    - c) Available Fund Basis
    - d) Zero Coupon – Floating Rate
- Interest Rate cannot be entered without having Interest Type.
- Interest Commencement Date cannot fall before Issue Date - 7 days.
- Interest Commencement Date cannot fall beyond Maturity Date.
- Interest Commencement Date normally falls within 5 years of Bond Issue Date*.

- First Coupon Date cannot fall beyond Maturity Date.
- First Coupon Date should be later than Issue Date.
- Issue Date cannot be later than the current date + 30 days.
- Issue Date cannot be earlier than the current date - 50 years.
- Interest From Date should be earlier or equal to First Coupon Date.
- For CAPPED type of FRN Minimum Interest Rate will always be ZERO.
- For CAPPED type of FRN the valid Maximum Interest Rate is 1 to 20*.
- For COLLAR type of FRN the valid Minimum Interest Rate is 0 to 20*.
- For COLLAR type of FRN the valid Maximum Interest Rate is 1 to 20*.
- For FLOOR and COLLAR type of FRN the valid Minimum Interest Rate should be greater than ZERO.
- FRN Type cannot be blank when Minimum or Maximum Interest Rate is populated.
- Maturity Date is mandatory for Non Perpetual/Irredeemable type of Fixed Income.
- Maturity Date should always fall after Fixed Income Issue Date.
- Maturity Date entered cannot fall beyond 100 years of its Issue Date*.
- Tap Expiry Date should be later than Issue Date.
- Tap Expiry Date cannot fall beyond Maturity Date.
- Minimum Denomination should not be lesser than Denomination 1.
- For Tranche, Tranche Issue Date cannot be blank.
- Tranche Issue Date should be earlier than Parent Fixed Income Maturity Date.
- Tranche Issue Date should be later than Parent Fixed Income Issue Date.
- Tranche Issue Date should be later than Parent Fixed Income Entry Date in absence of Issue Date.
- Tranche Expiry Date cannot be equal or later than Parent Fixed Income Maturity Date.
- Tranche Expiry Date cannot be later than Parent Fixed Income Issue Date + 100 years
- Tranche Expiry Date cannot be later than Parent Fixed Income Entry Date + 100 years in absence of IssueDate.
- Parent Security is mandatory for Strip and Tranche Type of Fixed Income.
- Duplication of Codes not allowed. (ISIN, CUSIP, VALOREN, WKN, COMMON CODE)
- While adding the above codes, the system also validates the existence of these codes in future effective datesin their respective change modules.
- We don't cover bonds maturing less than 182 days from its Issue Date/Entry Date.
- For non-Perpetual/Irredeemable/Undated type of Fixed Income Security Conversion/Redemption type ismandatory. (E.g. Convertible, Redeemable, Exchangeable, Redeemable-Convertible, Redeemable- Exchangeable).
- Valid maturity structures are R/C/E/V/H:
  o Redemption Terms
  o Conversion Terms
  o Exchangeable Terms
  o Redemption Conversion Terms
  o Redemption Exchangeable Terms
- Rating Date cannot be earlier than Issue Date - 30 days.
- Rating Date should always fall before Maturity Date.
- If Bond Source is PS/PR/OC and if Callable is YES then at least one active CALL entry is mandatory.

53. Franking (FRANK)
- The valid values for Franking are Franked (F), Partially Franked (P), Un-Franked (U) and Not Specified (N)only.

54. FRN Fixing (FRNFX)
o Maximum Interest Rate cannot be less than Minimum Interest Rate.
o Effective Date cannot be blank.

55. Hearings

o Hearing Date cannot be blank.

56. Incorporation Change (INCHG)
- New Country of Incorporation cannot be blank.
- Effective Date cannot be blank.
- Old Country and New Country cannot be same.

57. Interest (INT)
58. The Interest to Date should be greater than the Interest From Date.
59. Option No. cannot be blank.
60. No details to be accepted if Interest is omitted.
61. If Gross Interest is entered then Currency cannot be blank.
62. Net Interest should be less then Gross Interest.

58. Interest Basis Change (INTBC
- Effective Date should fall later than Fixed Income Issue Date.
- Effective Date cannot fall later than Fixed Income Maturity Date.
- Effective Date cannot fall later than the year of (Issue Date/Entry Date) + 100 years.
- Effective Date cannot be earlier than Source Date.
- From and To Interest Basis is mandatory.

59. Interest Frequency Change (IFCHG)
- Notification Date cannot be blank.

60. Interest Rate Change (IRCHG)
- Effective Date cannot be blank.
- Only Current or Future Effective Dates are allowed.
- New Interest Rate cannot be the same as Old Interest Rate.
- Interest Rate cannot be ZERO for Fixed Rate of Interest Type.
- New Interest Rate should be lesser than Old Interest Rate in Step Down Type of Fixed Income Security.
- New Interest Rate should be greater than Old Interest Rate in Step Up Type of Fixed Income Security.

61. International Code Change (ICC)
- Effective Date cannot be blank.
- Event Type cannot be blank.
- Duplication check is performed on New ISIN, USCODE, VALOREN.
- At least one value should be changed to save the entry

62. Initial Public Offer (IPO)
- Being called from security master module.
- IPO status is mandatory.
- Pre and Post Shares Outstanding cannot be same.

63. Issuer (ISSUR)
- Issuer Name cannot be blank.
- When a user tries to enter a name, which is similar to an existing issuer in the table the system will prompt them to take necessary action. The system also checks in the Issuer Name Change file for similar names.
- If an Issuer is marked as DELETED then all the child records i.e., records in Security Master and Security Exchange Link are also marked as DELETED. In the process of above deletion, the ISIN, USCODE, VALOREN, SEDOL™ are released.

64. Issuer Name Change (ISCHG)

- New Issuer Name cannot be blank.
- New and Old Issuer name should be different.

65. Lawsuit (LAWST)
- Effective Date cannot be blank.

66. Liquidation (LIQ)
- Country cannot be blank.

67. Listing Status (LSTAT)
- Notification Date cannot be blank.
- Exchange Code cannot be blank.

68. Local Code Change (LCC)
- Exchange Code cannot be blank.
- LOCAL Code is checked for duplication.
- Effective Date cannot be blank.
- At least one value must change to save the entry.

69. Lot Change (LTCHG)
- Effective Date cannot be blank.
- At least one value must be changed to save the entry.

70. Maturity Change (MTCHG)
- Notification Date cannot be blank.
- Future Notification Date is not allowed.

71. Merger (MRGR)
- Valid values for Merger Status are O = Ongoing, C = Completed.

72. Odd Lot Offer (ODDLT)
- End Date should always be later than Start Date.
- Maximum Acceptance Quantity should always be greater than Minimum Acceptance Quantity.

73. Parvalue Redenomination (PVRD)
- Effective Date cannot be blank if it's a fixed income security.
- If there is a blank Effective Date already passed for non-fixed income securities, then the user will have to first populate the Date for this record and then a new record will be allowed to be added.
- For a fixed income type of security, Entry will only be allowed if the Security Parvalue is the same as Fixed Income Parvalue. The Event in this case will always be CLEAN or CORR.
- Currency cannot be blank.
- Event cannot be blank.

74. Preferential offer (PRF)
- Closing Date should be later than Opening Date.

75. Purchase offer (PO)
- Closing Date should always be later then Opening Date.

76. Reconvention (RCONV)

- Effective Date cannot be blank.
- Only fixed income types of securities can be selected for the change.

77. Record Date (RD)

- Paydate should always be later than Record Date.
- For a Record Date you cannot have both Sub-Division and Consolidation.
- In Sub-Division and Consolidation only the last Record Date can be modified.
- The default gap between two blank Record Dates should be of 90 days, although this may vary from country to country.
- You can have multiple blank dates coming in for the same Issuer-Security (E.g. Sri Lanka).

78. Redemption Event (REDEM)

- Redemption Date cannot be blank.
- Redemption Date with the value 01/01/9999 is considered as a past date entry and should always have Redemption Type as CLEAN.
- You cannot change a past Effective Date to current or future date.
- You cannot pass a Part Redemption after a Final Redemption is passed.
- Final Redemption cannot be before a Part Redemption.
- The total fixed income security balance amount cannot be passed as a Part Redemption.
- The Final Redemption amount should always match the total fixed income security balance amount.
- If the Redemption is optional then display a warning to the user.
- The Redemption event will automatically pass internally bond o/s change entry based on certain conditions.

79. Redemption Terms (REDMT)

- Redemption Terms Date cannot be blank.
- Redemption Terms Date cannot fall earlier than Fixed Income Issue Date. In absence of Issue Date, we consider Fixed Income Entry Date.
- Redemption Terms Date cannot fall beyond Fixed Income Maturity Date. In absence of Maturity Date, we consider Issue Date + 100 years and in absence of Issue Date we consider Fixed Income Entry Date.
- Part/Final flag cannot be blank.
- Currency is mandatory if Price is populated.

80. Redenomination (RDNOM)

- Effective Date cannot be blank.

81. Registered Office Change (ROCHG)

- Change Date cannot be blank.

82. Return of Capital (RCAP)

- Currency cannot be blank.

83. Rights (RTS)

- End Subscription Date should be later than Start Date.
- Trading Closing Date should be later than Opening Date.
- Trading End Date should be earlier than the Subscription End Date.

84. Security (SCMST)

- If Security Type is of type EQS then the word ORDINARY SHARE/REGISTERED SHARE/BEARER SHAREshould always appear in Security Description.
- Security Name cannot be blank.
- Currency Code cannot be blank.
- Security Type cannot be blank.
- If Security Type is TRT then the words TRADEABLE RIGHTS should always appear in Security Description.

- If Security Type is PRF then Security Description should always start with PREFERENCE SHARE.
- If Security Type is PC then the words PARTICIPATING CERTIFICATE should always appear in Security Name.
- Security Name should end with a % sign if it's a PARTICIPATING CERTIFICATE.
- Interest specified in Security Name should always match with interest specified in Preferential Terms.
- You cannot have a Parvalue without having Currency.
- Valid values are :
  - V – Voting
  - N - No Voting
  - L - Limited Voting
  - M - Multiple Voting
- Parent Security & Security Name cannot be same.
- ISIN must be 12 characters long.
- ISIN, USCODE, VALOREN, COMMON CODE, WKN cannot be duplicated.

85. Security Agency (SCAGY)
- Relation cannot be blank.
- Agency Name cannot be blank.

86. Security Agency Change (SACHG)
- Effective Date cannot be blank.
- New Relation Type cannot be blank.
- New Registrar Name cannot be blank.

87. Security Exchange (SCEXH)
- Exchange and Local Code duplication is not allowed.
- A valid SEDOL™ never starts with number 9.
- SEDOL™ cannot be duplicated.
- Once the SEDOL™ or a Local Code is populated the user cannot change it from this module. He has to use theSEDOL™ Change Module for SEDOL™ or the International Code Change module for the Local Code.

88. Security Name Change (SCCHG)
- Change Date cannot be blank.
- Old and New Security Name cannot be the same.
- New Security Name cannot be blank.

89. Security Reclassification (SECRC)
- Effective Date cannot be blank.

90. Security Swap (SCSWP)
- Security Type cannot be blank.
- Resultant Issuer and Security is based on the Rules table. If it says the Parent Issuer and Security can be the same then both will be checked for existence.
- If Old Ratio is there then New Ratio cannot be blank.

91. **SEDOL™ (SEDOL™)**
- Listed Country cannot be blank.
- Registered Country cannot be blank.
- New SEDOL™ cannot be blank.
- New SEDOL™ cannot be a duplicate.

92. SEDOL™ Change (SDCHG)
- Country Code cannot be blank.
- SEDOL™ should never start with number 9.
- Effective Date cannot be blank.
- Event cannot be blank.

93. Selling Restriction (SELRT)
- Country Code cannot be blank.

94. Share Outstanding Change (SHOCH)
- New Share Outstanding cannot be blank.
- Event Type cannot be blank.
- Event ID can only be blank if it's a Correction or a Clean.

95. Sinking Fund (SFUND)
- Called from the Fixed Income module.
- Sinking Fund Date cannot be blank.
- Currency cannot be blank.
- Amount as percentage cannot be more than 100%.

96. Sub-Division (SD)
- Old Currency and New Currency should always be the same.
- If the Old Parvalue is populated then New Parvalue cannot be blank.
- Old Parvalue (Old Ratio) should always be equal to New Parvalue (New Ratio).
- New Parvalue should be less than Old Parvalue.

97. Takeover (TKOVR)
- Offeree Name cannot be blank.
- Offeror selected should be different then the Offeree.
- Close Date should be later than Open Date.
- If there is cash back then ratios should not be populated.

98. Tranche (TRNCH)
- Expiry Date cannot be blank.
- Tranche security will get automatically assimilated into parent, will be delisted from all exchanges, and will be marked as INACTIVE.

99. Umbrella Program (UMPRG)
- Umbrella Program Name cannot be blank.
- Duplication of Umbrella Program Name is not allowed.

100. Umbrella Program Change (UMCHG)
- Effective Date cannot be blank.
- Event Type cannot be blank.
- Duplication of Umbrella Program Name is not allowed.

101. Umbrella Program Transfer (UMTRF)
- Future Effective Date is not allowed.
- Only OEIC type of UNIT security is allowed to be selected.
- New Umbrella Programme Name cannot be the same as Old.
- Old Umbrella Programme Name cannot be blank.
- New Umbrella Programme Name cannot be blank.

102.   Unit Trust (UNTRT)

- Unit Type cannot be blank. The user has to specify whether it's a Unit or an OEIC type of fund.
- Distribution Type cannot be blank. It can either be Accumulation or Income.
- If the fund is of type OEIC and if the user does not specify the Umbrella Program Name, then a warning is displayed to confirm the same.

103.   Unit Trust Conversion (UTCON)

- Effective Date cannot be blank.
- Only Unit Type of Security is allowed for conversion.
- Umbrella Programme Name cannot be blank for OIEC type of security.
- Security selected for conversion should always be a UNIT type of security.
- Old Ratio cannot be blank if New Ratio is populated.
- New Ratio cannot be blank if Old Ratio is populated.

104.   Warrant Exercise (WAREX)

- From Date should be earlier then Warrant Expiry Date.
- Exercise Issuer and Security cannot be blank.
- To Date should be later than From Date and earlier than Warrant Expiry date.
- If Strike Price is specified then the Currency cannot be blank.
- Price per share should equal to Strike price if both the ratio is same.

105.   Warrant Exercise Change (WXCHG)

- Notification Date cannot be blank. It cannot have a future date.
- You cannot have Price Per Share without having Exercise Security Ratio and Strike Price.
- If New Strike Price is entered then Currency cannot be blank.
- New Exercise Security cannot be blank.

106.   Warrant Terms (WARTM)

- Expiry Date is mandatory.
- Exercise Style can only be American or European.

107.   Warrant Terms Change (WTCHG)

- Notification Date cannot be blank.
- Event Type cannot be blank.
- New Expiration Date cannot be blank

Note: SEDOL is a registered trademark of London Stock Exchange plc.

Customization

EDI is proud to offer the most effective and efficient solutions tailored to meet each individual customer's needs. We offer a range of customization options including:

- Delivery-based solutions to complement existing client infrastructure.
- Content provided at the geographical or portfolio holding level.
- Feeds containing particular formats, field content and integrated client level data items.

EDI uses its extensive data research expertise to source, scrub and integrate new client specified data items with existing products and services. For instance, a request from a multinational investment bank to source the DR universe and map it against its underlying share portfolio ultimately led to the development of EDI's successful Depositary Receipt Database.

In addition, EDI was the first vendor to successfully launch an ISO 15022 Corporate Action Messaging feed. This enables customers to reduce costs and increase efficiency by removing the need for multiple feed handlers.

Support

Customer Support

Monday – Friday
Open 24 hours

Saturday
Support Coverage ends 8am (GMT)

Sunday
Support Coverage resumes at 11pm (GMT)

Support Coverage is not available
Saturday 8am to Sunday 11pm

Call +44 207 324 0020

Email: support@exchange-data.com

Customer support is closed Christmas and New Year's Day.

We aim to acknowledge all queries within an hour of receipt and answer queries within 24 hours where possible.

We will send a progress report if a query is not resolved within that time-frame. We resolve around 95% of customer queries within 24 hours.

All queries sent to our Support department are filtered and dispatched to the relevant department. An IT staff member is engaged in the communication process to resolve complicated technical issues.

EDI

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