

# SEDOL MasterFile

## Service & Technical Guide

Version 8.7

January 2022



**London**  
Stock Exchange Group



## Version Control

| Version | Date        | Author                        | Reason for Change  |
|---------|-------------|-------------------------------|--|
| 8.0     | 24/11/2016  | Kristina Sutton               | First Draft  |
| 8.1     | 09/01/2017  | Laura Stanley                 | <ul style="list-style-type: none"> <li>- Page 33 – SecurityEvent Format updated to CHAR (2).</li> <li>- Page 33 – Field Names updated to EmptyField3 and EmptyField4</li> <li>- Page 25, 30 &amp; 33 – AmntOfTransfer1,2,3 and 4 format updated to DEC(18,5)</li> <li>- Page 26, 31 &amp; 33 – StrikePrice Format updated to DEC(18,17)</li> <li>- Page 10 – 6.1 Daily Change Files – Start of day File Name updated to [&lt;start datetime&gt;_&lt;end datetime&gt;_IDC_1_TAB.zip]</li> </ul> |
| 8.1.1   | 03/02/2017  | Kristina Sutton/Laura Stanley | <ul style="list-style-type: none"> <li>- Page 17 – Update to SEDOL code structure to include all legacy lead characters</li> <li>- Page 39 – Domestic Listing Indicator: further defined</li> <li>- Page 36 – File Field Formats; further defined</li> <li>- Page 34 – FISN – Format changed to from VARCHAR (34) to VARCHAR (35)</li> </ul>   |
| 8.2     | 01/07/2017  | Laura Stanley                 | <ul style="list-style-type: none"> <li>- Page 27 – Add new columns to Bulk Upload template</li> <li>- Page 29 – Add new fields to column heading</li> <li>- Page 33 &amp; 34 – Add new columns to Bulk Upload report</li> </ul>  |
| 8.3     | 08/02/2018  | Laura Stanley                 | <ul style="list-style-type: none"> <li>- Page 22 – Added FISN &amp; Update to CFI version to SMF Free user table</li> <li>- Page 13 – Update to Operational Hours</li> </ul>   |
| 8.4     | 15/11/20218 | Laura Stanley                 | - Page 26 – Update Description of Domestic Listing Indicator from “Denotes whether an OPOL is the primary listing for a security. (TRUE or FALSE) to Indicate the home (domestic) quote SEDOL.”  |
| 8.5     | 01/12/2019  | Laura Stanley                 | - Page 34 – Update to Format of ICB Industry from CHAR(4) to CHAR(2)   |
| 8.6     | 01/11/2020  | Laura Stanley                 | <ul style="list-style-type: none"> <li>- Page 5 – Section 2.1</li> <li>- Page 7 – Update to 100 million</li> <li>- Page 11 – Hourly Files addition</li> <li>- Page 14 – SMF Enquiry Line</li> <li>- Page 31 – Update to Security Description field character length</li> <li>- Page 44/45/46 – Additional Field Names</li> </ul>   |

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## Version Control cont.

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|-----|------------|-----------------|--|
| 8.7 | 14/01/2022 | Taranjit Bhogal | <ul style="list-style-type: none"><li>- Page 21, 23 &amp; 28 – Issuer Name &amp; Security Description format updated to VARCHAR (500).</li><li>- Page 23 - IssuerName &amp; AlternatelssuerName updated to VARCHAR (500).</li><li>- Page 28 - AlternatelssuerName updated to VARCHAR (500).Error Code in position 6 replace with the details of Issuer name as accidentally overtyped.</li></ul> |
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## 1.0 PREFACE

This document provides complete technical details on receiving the SEDOL Masterfile (SMF) data download. This document is intended for use by direct subscribers of the service (e.g. data vendors, software houses, banks, developers and reference data administrators).

The Exchange may amend this Service & Technical Guide on at any time by the provision of at least two months' written notice or on less notice in the event that:

1. changes of a technical nature are to be made; or
2. rights owners' of third party data within the Data make a change that affects the provision of such third party data to the Exchange and/or customers of the Exchange; or
3. matters beyond the reasonable control of the Exchange require that a change be made and the provision of two months' notice is not possible or would be detrimental to the Site, service and/or customers of the Exchange (provided always that as much notice as is reasonably practical in the circumstances is given).

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## 2.0 REFERENCES

### 2.1 Documentation

The following documents are available on the Exchange's website: [www.lseg.com/sedol](http://www.lseg.com/sedol)

1. SEDOL Service & Technical Guide (latest version)

### 2.2 Terms

The following terms are used throughout this specification:

| Term     | Description           |
|----------|-----------------------|
| Exchange | London Stock Exchange |
| SMF™     | SEDOL Masterfile™     |

### **3.0 Background**

The SEDOL Masterfile is a central data security master for issuer and instrument data with the SEDOL code contributing to a unique, country level, global instrument identifier. This unique code is intended to improve pricing, clearing and settlement across global markets for subscribing participants.

The current SMF service provides information on over 100 million global multi-asset securities including equities, fixed income and derivatives.

The Exchange provides a 24/7 web based look-up service available to all SEDOL users, as well as allowing permissioned users to request new SEDOL codes in near real-time.

#### **3.1 Document Purpose**

The document presents the specification for the SMF services, providing a description of the SMF interface options, hardware and software configurations, file formats and a service definition.

This document should be read by all SMF licence holders.

#### **3.2 Assumptions**

It is assumed that readers have a good working knowledge of the following technologies:

- Hypertext Transfer Protocol (HTTP)
- Secure Sockets Layer (SSL)

## **4.0 Environment Definition**

### **4.1 Host Server Configuration**

The SMF system has been built on state of the art hardware using the UnaVista platform to meet the demands of its customers.

### **4.2 Customer Hardware Requirements**

Customers are responsible for ensuring that the hardware they commit to receiving the SMF FTP/SFTP download services is capable of processing the supplied data. The choice and implementation of the chosen hardware platform is the responsibility of the customer.

### **4.3 Customer Software Requirements**

To facilitate the most effective transfer mechanism for the download services the following minimum software configuration is recommended for customers implementing a PC platform:

- Microsoft Internet Explorer Version 10 or above (The Internet browser will need Cookies and Javascript Enabled)
- Winzip
- Google Chrome version 9 or above



### 5.0 Processing Details

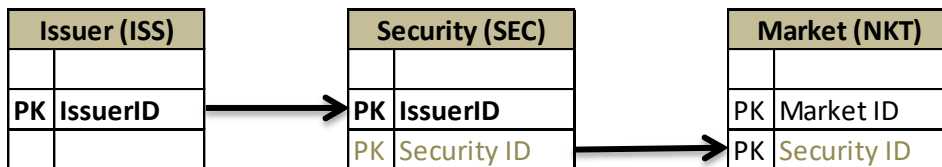
All files in the data download service are provided in a compressed format to reduce download times for download service users. These can be decompressed at the user site using standard decompression software such as Winzip.

Each FTP location contains multiple files, the names of which indicate the service for which the current file was generated. The number of TAB files after decompression is dependent on the service requested. Standard files are available via FTP. Details of the file and folder structure and the times of standard file generation will be released only on subscription to the service.

The SEDOL Masterfile™ functional data model is as follows:

#### File Linkages

IssuerID, SecurityID and MarketID will be unique and permanent and will never be re-used.



\*PK = Primary Key

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### 5.1 Processing Changes Files

The records in the changes files provide a chronological picture of each item in SMF. Each record in a file has an Action identifier to indicate if the row is an **I**nsert, an **U**pdate or a **D**efunct to the database.

Defunct securities are indicated as **U**pdates in the Action Identifier field and the relevant *status* field has a value of 'D'.

Each changes file should be processed in its entirety starting from the first data record in the file. Every file in the changes service must be applied to the database to provide a complete update.

### 5.2 Processing Full Files

Each file contains the full contents of SMF for the associated data table. The files also contain data with an Action Identifier of 'F' for full file. Full file downloads contain a full history of all records for that service, including deletions and defunct records.

Historical data can be provided on a per request basis and a fee is payable.

### 5.3 Customer System Failure Recovery and First Day of Service

Two approaches to customer system failure can be used:

- For general processing failures, the previous days changes file and daily files up to seven days previous are available via standard delivery mechanisms. In addition, a weekly changes file is available up to four weeks previous.
- For more serious failures, or on the first day of the new services, the monthly full file should be applied using the following procedure:
  - All SMF information held on the customer's database should be backed up and discarded
  - The full file and a set of subsequent change files covering the time since the full file was generated should be obtained
  - The full file should be applied to the database followed by the changes file.

This procedure will leave the customer synchronised with the main SMF database and ready to receive subsequent changes.

## 6.0 Download Files Types & Naming Conventions

### 6.1 Daily Change Files

#### Hourly Files

| Module  | Format | File Name                                     |
|---|--------|---|
| All instrument data not including corporate actions                               | TAB    | <start datetime>_<end datetime>_IDC_1_TAB.zip |
| Times: The hourly file will be generated on Module 1 hourly from 00:00 Sunday GMT |        |   |

For standard **start of day** changes the following naming conventions will apply:

| Module  | Format | File Name                                     |
|---|--------|---|
| All instrument data not including UK corporate actions  | TAB    | <start datetime>_<end datetime>_IDC_1_TAB.zip |
| The Start of day file is generated at 06.00 <b>London Local Time</b> each business day (i.e. excluding weekends but includes Bank Holidays) covering changes since the previous <b>end of day</b> change files(Covering 18.00 – 06.00 Local London Time). |        |   |

For standard **intraday** change files the following naming conventions will apply:

| Module  | Format | File Name                                     |
|---|--------|---|
| All instrument data not including UK corporate actions  | TAB    | <start datetime>_<end datetime>_IDC_1_TAB.zip |
| All instrument data including UK corporate actions  | TAB    | <start datetime>_<end datetime>_IDC_4_TAB.zip |
| <b>Times:</b> The intraday file is generated at 12.00 <b>London Local Time</b> each business day (i.e. excluding weekends but includes Bank Holidays) covering changes since the previous <b>end of day</b> change files(Covering 18.00 – 12.00 Local London Time). |        |   |

For standard **end of day** changes the following naming conventions will apply:

| Module   | Format | File Name                                     |
|--|--------|---|
| All instrument data not including UK corporate actions   | TAB    | <start datetime>_<end datetime>_FDC_1_TAB.zip |
| All instrument data including UK corporate actions   | TAB    | <start datetime>_<end datetime>_FDC_4_TAB.zip |
| <b>Times:</b> End of day files is generated at 18.00 <b>London Local Time</b> each business day (i.e. excluding weekends but includes Bank Holidays), covering changes since the previous end of day file generation. (Covering 18.00 to 18.00 <b>Local London Time</b> .) NB This file will contain the changes published in the intraday change files. |        |   |

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### 6.2 Weekly Changes Files

For standard weekly change downloads the following naming conventions will apply:

| Module   | Format | File Name                                     |
|--|--------|---|
| All instrument data not including UK corporate actions   | TAB    | <start datetime>_<end datetime>_FWC_1_TAB.zip |
| All instrument data including UK corporate actions   | TAB    | <start datetime>_<end datetime>_FWC_4_TAB.zip |
| <b>Times:</b> Weekly change files is generated at 09:00 London Local Time each Monday covering changes since the last weekly file was generated. |        |   |

### 6.3 Full File Downloads

For standard full file downloads the following naming conventions will apply:

| Module  | Format | File Name                                   |
|---|--------|---|
| All instrument data not including corporate actions   | TAB    | <000000000000>_<end datetime>_FDD_1_TAB.zip |
| All instrument data including corporate actions   | TAB    | <000000000000>_<end datetime>_FDD_4_TAB.zip |
| <b>Times:</b> The full file will be generated on the 1 <sup>st</sup> day of each month by 09:00 <b>London Local Time</b> providing a snapshot of the current database contents. |        |   |

### 6.4 Consolidated Files

The following naming conventions will be used for files included in the zip where the file format is tab separated.

The entity abbreviation will be inserted between the end date and module abbreviation as in the following example:

<business entity ID>\_<start datetime>\_<end datetime>\_\_**iss**\_fdc\_4.txt

| Entity    | Abbreviation         |
|-----------|----------------------|
| Issuer    | iss                  |
| Security  | sec                  |
| Market    | mkt                  |
| Accrual   | acc ( <i>empty</i> ) |
| CA Detail | dis                  |
| CA Option | ele                  |

The following file extensions will be used for each entity dependent on the file format selected:

| File format | File extension |
|-------------|----------------|
| TAB         | .TXT           |

### 7.0 Service Definition

#### 7.1 SMF License

A Licence is required for companies that are making use of and redistributing the Exchange's SEDOL Masterfile data within their business. Usage by a company includes: Receiving, accessing, extracting, processing, adapting, storing, and/or reproducing the whole or a subset of the Exchange's SEDOL Masterfile database, including SEDOL, whether as a result of access to the database either directly via the Exchange, or indirectly via a third party.

The type of licence required is dependent on the level of SEDOL Masterfile data used within the business. The level of data is determined by the number of SEDOL codes being used by the licensee.

Further information on our pricing and usage policy please see the current SEDOL Masterfile Pricing and Policy Guidelines. <http://www.lseg.com/markets-products-and-services/post-trade-services/unavista/unavista-solutions/data-solutions/sedol/documentation>

#### 7.2 SMF Services

Any Licensed user wishing to access SMF can register at [www.sedol.co.uk](http://www.sedol.co.uk) and can request access to the system.

All clients with an active SEDOL Licence can have access to the SMF web browser, giving them the ability to:

- search the SMF database
- create SEDOL codes in a provisional status (with the exception of London markets)
- request amendments and information via the Update Request functionality
- submit bulk uploads

#### 7.3 Data

SEDOL codes are the intellectual property of the Exchange but all other data unless specified is owned by or subject to rights of third parties.

Customers should be aware that the customer's use of third party data is subject to licencing requirements of third party rights owners which may change from time to time, notice of any such changes will be provided in accordance with section 1 of this document.

#### 7.4 Service Availability

With the exception of unforeseen technical difficulties and emergency maintenance, the SMF website will be a 24/7 operation. It will be necessary to perform some scheduled service outages (e.g. monthly database maintenance) from time to time, which will be communicated to SEDOL subscribers in advance.

Full operational support facilities are available from 02:00 to 22:00 hours, UK time. Contact details are as follows:

SMF Enquiry Line - +44 (0)20 7797 4740

SMF Email Addresses -[smfnewissues@lseg.com](mailto:smfnewissues@lseg.com) (new SEDOL/ requests)

-[smfdb@lseg.com](mailto:smfdb@lseg.com) (database queries)

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The Exchange will make all reasonable efforts to ensure direct subscribers receive timely updates that may affect the SMF service.

### 7.5 Allocation of an Instrument

#### 1. London Listed or Traded Instruments

SEDOL allocation for London listed or London Traded instruments are processed by the Exchange only and cannot be created by external users using the web browser. London listings include all of the London markets.

Requests for SEDOL codes in these cases should be directed to [smfnewissues@lseg.com](mailto:smfnewissues@lseg.com) for set-up.

#### 2. Other Instruments

All other instruments are allocated both proactively by the Exchange and, on a request basis via the web browser.

#### 3. External SEDOL Creation

Requests for SEDOL code creation via our web browser can only be made with an authorised login. This is permissioned by the Exchange and is also subject to the user being a SMF Licence holder. This will ensure that an audit trail is maintained for data entry, and that requestors can be contacted if necessary.

SEDOL requests received by email ([smfnewissues@lseg.com](mailto:smfnewissues@lseg.com)) are processed within 24 business hours and up to 48 hours for Database ([smfdb@lseg.com](mailto:smfdb@lseg.com)) enquiries on a best endeavours basis.

### 7.6 User Responsibility

The customer is responsible for ensuring that any SEDOL codes created via the web browser follow the rules outlined below. Please note that these rules may be amended from time to time.

Any SEDOL Codes created via the web browser by the Customer must:

1. Contain accurate information, up to date at the time of providing the same;
2. Not contain anything in breach of any duty of confidentiality or privacy;
3. Not infringe or prejudice any existing or future intellectual property rights whatsoever of any third party;
4. Not be defamatory, obscene or offensive; and
5. Not infringe any applicable statute, regulation or code of conduct.

### 7.7 Status Flag

Providing mandatory fields are complete with valid information, a system generated SEDOL code is provided automatically with the Security Confirmation flag set to **Provisional**.

This flag will remain as **Provisional** until the SMF Operations are satisfied that there is sufficient information on the instrument to change the flag to **Confirmed**.

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There is no guarantee that the provisional flag will be removed. Any instrument that remains in a provisional state will be reviewed on a regular basis and may potentially be made defunct if its validity cannot be confirmed.

If a SEDOL is made defunct the same code will not be reused.

### 7.8 Bulk Upload

A template is available to download on the website for the submission of bulk SEDOL requests.

This functionality is permissioned and can only be used with an authorised login and users must undergo training by SMF Operations.

Bulk upload requests are subject to the same system validation as required for browser requests and where there is a necessity that mandatory fields be completed. SEDOL codes will remain in a **provisional** status until validated by the SMF Operations.

### 7.9 Customer Validation

SMF Operations will on a reasonable endeavours basis validate the authenticity of the SEDOL code by verification against industry standards, 3<sup>rd</sup> party sources and / or supporting documentation should it be available.

### 7.10 Instrument Maintenance

Changes to instruments due to corporate actions are proactively managed via an external validated corporate actions product. Sufficient data as to the reason for changes to the SMF database will be given, but full corporate action details will not be provided.

### 7.11 Update Request

If a customer wishes to request a change to a SEDOL on the SMF database an 'Update Request' can be generated through the SMF website. Alternatively, customers can email their query to SMF Database team at [smfdb@lseg.com](mailto:smfdb@lseg.com)

### 7.12 Errors/Duplication of an Instrument

Where there is a duplication or a SEDOL has been issued in error, the SEDOL that was issued first will be kept and the duplicate will be made inactive by the SMF team (note that the database will denote these instruments with an Action Identifier D = Inactive).

SMF Operations will check the system for errors on a best endeavours basis and where possible contact persons concerned to minimise the risk of mistakes.

## 8.0 SEDOL Code Structure

### 8.1 Overview

- SEDOL codes are a 7 character alphanumeric code.
- Active 7 character numeric SEDOL codes, created prior to March 2004, also remain in circulation.
- SEDOL codes are allocated on the basis of one per country to represent the place of listing or in the absence of listing place of trade. Additional identification data including the Market Identifier Code (MIC) and ISIN codes are used to increase efficiencies in identifying the market an instrument is traded on.

### 8.2 SEDOL Code Structure

The new SEDOL code will be seven characters alphanumeric with the following structure:

- 1 Alpha
- 2 Alphanumeric
- 3 Alphanumeric
- 4 Alphanumeric
- 5 Alphanumeric
- 6 Alphanumeric
- 7 Numeric check digit

#### Notes:

- Alpha characters are B-Z excluding vowels
- Numeric characters are 0-9
- Alphanumeric characters are 0-9, B-Z excluding vowels
- No SEDOL code will be issued without an alpha first character.

The first six numbers therefore form a unique combination with approximately 600 million codes available.

SEDOL codes will be allocated sequentially and with no inherent meaning for each market an instrument is traded on.

There will be no codes issued with 0,3,2,4,5,6,7 and 9 as the lead character, which allows historic series to be maintained as well as dummy codes by customers.



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### 8.3 SEDOL Check Digit Calculation

The seventh digit of the SEDOL code is a check digit. The check digit calculation will use the same method as previously used for the seven digit numeric number with the alpha characters given a numerical value.

| Character | Value | Character | Value | Character | Value | Character | Value |
|-----------|-------|-----------|-------|-----------|-------|-----------|-------|
| B         | 11    | J         | 19    | Q         | 26    | X         | 33    |
| C         | 12    | K         | 20    | R         | 27    | Y         | 34    |
| D         | 13    | L         | 21    | S         | 28    | Z         | 35    |
| F         | 15    | M         | 22    | T         | 29    |           |       |
| G         | 16    | N         | 23    | V         | 31    |           |       |
| H         | 17    | P         | 25    | W         | 32    |           |       |

To check that a number is reported correctly, each digit is multiplied by a weight and the results are summed. The weight used for each digit is set out as follows:

| Digit                                 | Weight |
|---------------------------------------|--------|
| 1 <sup>st</sup> (alpha)               | 1      |
| 2 <sup>nd</sup> (alpha/numeric)       | 3      |
| 3 <sup>rd</sup> (alpha/numeric)       | 1      |
| 4 <sup>th</sup> (alpha/numeric)       | 7      |
| 5 <sup>th</sup> (alpha/numeric)       | 3      |
| 6 <sup>th</sup> (alpha/numeric)       | 9      |
| 7 <sup>th</sup> (numeric check digit) | 1      |

If the sum of the results is a multiple of ten, the number is taken to be correct. If the sum of the results is not a multiple of ten, there is an error.

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For example:

1) SEDOL Number B1F3M59

| Digit                  | Weight | Product |
|------------------------|--------|---------|
| B (Numerical Value 11) | 1      | 11      |
| 1                      | 3      | 3       |
| F (Numerical Value 15) | 1      | 15      |
| 3                      | 7      | 21      |
| M (Numerical Value 22) | 3      | 66      |
| 5                      | 9      | 45      |

Sum = 161

As the sum is a multiple of ten, the number has been quoted **correctly**.

2) SEDOL Number is reported as B-1H5-4P6

| Digit                  | Weight | Product |
|------------------------|--------|---------|
| B (Numerical Value 11) | 1      | 11      |
| 1                      | 3      | 3       |
| H (Numerical Value 17) | 1      | 17      |
| 5                      | 7      | 35      |
| 4                      | 3      | 12      |
| P (Numerical Value 25) | 9      | 225     |

Sum =309

As the sum is not a multiple of 10, the number has been quoted **incorrectly**.

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### 8.4 Deriving the Check Digit

To derive a check digit for a number, each of the first six digits is multiplied by the corresponding weight. This result is then summed and taken away from the next highest number divisible by 10, as shown in the example below:

For Example:

- 1) SEDOL Number B-123-45?

| Digit  | Weight | Product |
|--------|--------|---------|
| B = 11 | 1      | 11      |
| 1      | 3      | 3       |
| 2      | 1      | 2       |
| 3      | 7      | 21      |
| 4      | 3      | 12      |
| 5      | 9      | 45      |

Sum=94

Therefore 94 taken away from a 100 means a **check digit of 6**.

### 8.5 SEDOL Code Generation

The new SEDOL codes will be generated sequentially as detailed in the table below.

As per section 8.4 Deriving the Check Digit, the first digit is always an alpha and the last digit is the numeric check digit.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| B | 0 | 0 | 0 | 0 | 0 | X |
| B | 0 | 0 | 0 | 0 | 1 | X |
| B | 0 | 0 | 0 | 0 | 2 | X |

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| B | 0 | 0 | 0 | 0 | 9 | X |
| B | 0 | 0 | 0 | 0 | B | X |
| B | 0 | 0 | 0 | 0 | C | X |

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| B | 0 | 0 | 0 | 0 | Z | X |
| B | 0 | 0 | 0 | 1 | 0 | X |

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|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| B | 0 | 0 | 0 | 1 | 1 | X |
| B | 0 | 0 | 0 | 1 | 2 | X |

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| B | 0 | 0 | 0 | 1 | 9 | X |
| B | 0 | 0 | 0 | 1 | B | X |
| B | 0 | 0 | 0 | 1 | C | X |

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| B | 0 | 0 | 0 | Z | Z | X |
| B | 0 | 0 | 1 | 0 | 0 | X |
| B | 0 | 0 | 1 | 0 | 1 | X |

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| B | Z | Z | Z | Z | Z | X |
| C | 0 | 0 | 0 | 0 | 0 | X |
| C | 0 | 0 | 0 | 0 | 1 | X |

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| Z | Z | Z | Z | Z | Z | X |
|---|---|---|---|---|---|---|

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## SEDOL Service & Technical Guide

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### 9.0 SMF Services

External Customers can interact with the SMF service through the custom built website hosting on UnaVista platform [www.sedol.co.uk](http://www.sedol.co.uk).

There are 6 levels of service available:

#### 9.1 SMF Free user access:

ISINs issued by the Exchange are made available to all users free of charge. (This covers Great Britain – GB, Jersey – JE, Guernsey – GG, Isle of Man – IM) This service is available to all customers. Users must register on [www.sedol.co.uk](http://www.sedol.co.uk) to gain access and there is no requirement for the user to hold a SEDOL Licence with the Exchange.

Please note that free user access does not include SEDOL data or access Global SEDOL coverage or Derivatives Data. The data view is limited to the 9 fields shown in the table below:

| Field Name               | Format         | Notes  |
|--------------------------|----------------|--|
| Issuer Name              | VARCHAR (500)  | Legal Issuing Entity Name  |
| Country Of Incorporation | CHAR (Max 49)  | Full Country Name + ISO Country Code (3166).<br>Restricted to:<br>Great Britain – <b>GB</b> , Jersey – <b>JE</b> , Guernsey – <b>GG</b> ,<br>Isle of Man - <b>IM</b> |
| ISIN Code                | VARCHAR (12)   | ISO ISIN Code (6166)   |
| FISN                     | VARCHAR (35)   | ISO FISN Code (18774)  |
| CFI Code                 | VARCHAR (6)    | ISO CFI Code (10962:2015)  |
| Security Type            | CHAR (Max 36)  | Exchange Defined. For further details please refer to the Technical Specifications and User Guide area of our website  |
| Security Description     | VARCHAR (500)  | <b>Unique Summary description of the instrument for this issuer</b>  |
| Country Of Register      | CHAR (Max 49)  | Full Country Name + ISO Country Code (3166):<br><b>The country in which the share holders register is maintained.</b>  |
| Security Form            | CHAR (Up to10) | Exchange Defined:<br><b>Registered, Bearer, Unknown</b>  |
| Security Status          | CHAR (Up to 9) | Exchange Defined Status:<br><b>Coded, Tradeable, Inactive</b>  |

#### 9.2 SMF Look-Up:

This service allows users to query the SMF database via a range of search criteria. This service is available to all licenced SEDOL customers and requires the user to register at [www.sedol.co.uk](http://www.sedol.co.uk). Upon successful registrations users must email [smfnewissues@lseq.com](mailto:smfnewissues@lseq.com) for their permissions to be updated in order to view the complete Global SEDOL dataset and additional fields.

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Registered customers can also generate an Update request for any issuer or instrument within the database through this level of service.

### 9.3 SMF Create:

In addition to the above, this service allows users to create SEDOL codes in real time via web interface. Before this permission is granted users will be required to complete a training session with SEDOL Operations. Please email [smfnewissues@lseg.com](mailto:smfnewissues@lseg.com) for further details.

### 9.4 SMF Bulk Upload:

Customers who require the additional functionality to generate SEDOL codes for large volumes of instruments will have to undergo a training session with SMF Operations in order to receive Bulk Upload permission.

A Bulk Upload template is populated with the relevant security data and which is then subsequently uploaded via the website to facilitate bulk allocation of SEDOL codes. Each file must be saved with the first word as Bulkupload followed by a unique naming convention and must be saved as a Tab Separated File (Text Tab delimited).

This service requires another level of entitlements.

For further details please refer to the Technical Specifications and User Guide area of our website [<here >](#) or email [smfnewissues@lseg.com](mailto:smfnewissues@lseg.com) for further details.

### 9.5 SEDOL Bulk Pre-allocation Service

Clients who issue their own instruments and require a SEDOL code within their own instrument creation workflow can request this service which is at an additional cost.

To facilitate this, batches of reserved codes are provided to the client to use in their internal processes. Once the codes have been allocated to an instrument by the client, the client's must then upload the new instrument information, including SEDOL code, back into the SMF database. This can be manual or via FTP.

For further details please refer to the Technical Specifications and User Guide area of our website [<here >](#) or email [sedol@lseg.com](mailto:sedol@lseg.com) for further details.

### Tab Separated File Specification

*\*Please see [Download File Field Formats](#) for definitions*

| Field Name      | Pos | Format *         | Description                                      |
|-----------------|-----|------------------|--|
| ActionIndicator | 1   | CHAR (3)         | Identifies the action which the customer intends |
| ClientReference | 2   | CHAR (8)         | Optional field identifying this data row         |
| IssuerID        | 3   | INT <sup>1</sup> | Unique numerical internal identifier for issuer  |

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| Field Name             | Pos | Format *      | Description  |
|------------------------|-----|---------------|--|
| IssuerName             | 4   | VARCHAR (500) | The issuing party legal entity name which has to be the exact name as held on SEDOL Masterfile                   |
| AlternatelIssuerName   | 5   | VARCHAR (500) | An alternate name for the same legal entity  |
| CountryOfIncorporation | 6   | CHAR (2)      | ISO 3166 Country Codes in which the issuer is incorporated   |
| SEDOLCode              | 7   | CHAR (7)      | Security Identification Code   |
| SecurityDescription    | 8   | VARCHAR (500) | Unique description of this instrument for this issuer  |
| ShortDescription       | 9   | VARCHAR (18)  | Abbreviated description includes our Issuer Short  |
| ISINCode               | 10  | VARCHAR (12)  | ISO 6166 (ISIN) International Securities Identification Number   |
| ClosingDate            | 11  | DATE          | The expiry/maturity date of the instrument (DD-MM-YYYY)  |
| ClosingDateType        | 12  | CHAR (3)      | The type of Closing date – either EXP or MAT   |
| SecurityForm           | 13  | CHAR (1)      | Indicates the form a security takes e.g. A = Bearer  |
| SecurityType           | 14  | CHAR (2)      | The type of tradable instrument e.g. AA = Ordinary   |
| AmntOfTransfer1        | 15  | DEC (18,5)    | Applicable to debt securities. This relates to the face value of the security the specified denomination amount. |
| AmntOfTransfer2        | 16  | DEC (18,5)    | Applicable to debt securities. This relates to the face value of the security the specified denomination amount. |
| AmntOfTransfer3        | 17  | DEC (18,5)    | Applicable to debt securities. This relates to the face value of the security the specified denomination amount. |
| AmntOfTransfer4        | 18  | DEC (18,5)    | Applicable to debt securities. This relates to the face value of the security the specified denomination amount. |
| CouponInterestRate     | 19  | DEC (11,10)   | The interest rate applicable to that instrument when in coupon form (1000000000.00000000)                        |
| ParValue               | 20  | DEC (18,8)    | The nominal value of the stock (1000000000.00000000)   |
| ParValueCurrency       | 21  | CHAR (3)      | ISO 4217 Currency Code in which the Par Value is shown   |

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\*Please see [Download File Field Formats](#) for definitions

| Field Name                 | Pos       | Format*             | Description  |
|----------------------------|-----------|---------------------|--|
| <b>UnderlyingIssuer</b>    | <b>22</b> | <b>VARCHAR(500)</b> | <b>Name of the underlying Issuer</b>   |
| UnderlyingISIN             | 23        | CHAR (12)           | ISIN code of the underlying instrument   |
| Restrictions               | 24        | VARCHAR (10)        | Code indicating any special regulations surrounding stock trade.   |
| StrikePrice                | 25        | DEC (18,17)         | Price for which an underlying stock can be purchased or sold (1000000000.00000000)   |
| StrikePriceCurrency        | 26        | CHAR (3)            | ISO 4217 Currency Code in which the Strike Price is shown  |
| CFICode                    | 27        | VARCHAR (6)         | ISO 10962:2001 (CFI) Classification of financial instruments, (mandatory for GB, JE, GG & IM ISINs) code used to reflect security characteristics    |
| CountryOfRegister          | 28        | CHAR (2)            | ISO 3166 Country Code in which the share register is maintained  |
| Domestic Listing Indicator | 29        | TRUE or FALSE       | Indicates the home (domestic) quote SEDOL.   |
| SecurityStatus             | 30        | CHAR(1)             | Indicates if the instrument is actually trading (T) , prepared for trading (C), Inactive (D)   |
| OfficialPlaceOfListing     | 31        | VARCHAR (4)         | ISO 10383 (MIC) Market Identification Code for the market on which the instrument is officially listed, or in the absence of listing place of trade. |
| UnitOfQuotationCurrency    | 32        | CHAR (3)            | ISO 4217 Currency Code in which the Unit of Quotation is shown   |
| MIC                        | 33        | VARCHAR (4)         | ISO 10383 (MIC) Market Identification Code for the place in which the instrument is officially listed or traded                                      |
| ActivationDate             | 36        | DATE <sup>2</sup>   | The Activation date of the instrument – i.e., the date it will become Tradable (DD-MM-YYYY)  |
| ExchangeSymbol             | 37        | VARCHAR (50)        | International ticker/exchange/trading code   |
| LocalCode                  | 38        | VARCHAR(50)         | Local trading code   |
| CFICode2015                | 39        | VARCHAR (6)         | ISO CFI Code (10962: 2015 version)   |
| Tranche                    | 40        | VARCHAR(12)         | Debt / Equities / Other  |
| Series                     | 41        | VARCHAR(12)         | Debt / Equities / Other  |
| Class                      | 42        | VARCHAR(12)         | Debt / Equities / Other  |



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| Field Name         | Pos | Format*       | Description  |
|--------------------|-----|---------------|--|
| Tenor              | 43  | VARCHAR(12)   | Only applicable to Cross Rates   |
| BondSeniority      | 44  | VARCHAR(12)   | Senior / Mezzanine / Subordinated / Junior Debt                        |
| OptnExSty          | 45  | VARCHAR(12)   | Option Exercise Style - American / European / Bermudan / Asian / Other |
| GreenBondIndicator | 46  | TRUE or FALSE |  |
| FISN               | 47  | VARCHAR(35)   | ISO 18774 Financial Issuer Short Name                                  |

### How to use the Bulk Upload TAB Template

Users with Bulk Upload permission can download the Bulk Upload template via the website browser at [www.sedol.co.uk](http://www.sedol.co.uk). Files must be saved with the prefix "BulkUpload" and saved as tab delimited (.txt), only files formatted as tab delimited will be imported and upload successfully.

**Note:** Column headings are mandatory. The column heading must be as displayed in the Tab Separated File Specification above.

- Populate the spreadsheet based on the mandatory field requirements for each security type. Use the Action Indicator field to determine the allocation process for each row of data. If you wish to perform multiple actions, add the second action on the next row and the same for the third, fourth etc. The Action Indicators defined in the table below are available to the user.
- Additional features include the ability to add multiple securities to a new or existing issuer as well as create multiple OPOLs. This is performed by using an existing SEDOL but with the new OPOL/ market information.

| Action Indicator | Description of Event  |
|------------------|---|
| ISR              | Creates a new issuer together with a new SEDOL for that issuer                        |
| SEC              | Creates a new SEDOL an existing issuer  |
| COR              | Creates a new SEDOL with a different Country of Registration for an existing security |
| OPL              | Creates a new OPOL (Official Place of Listing) for an existing security               |

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### Column Headings

The headings below will be present in the first row of the template which will be available to download from the website. *DATE* - The date format which is accepted within a Bulk Upload template is DD-MM-YYYY or DD/MM/YYYY

| Column Heading             | Pos |
|----------------------------|-----|
| ActionIndicator            | 1   |
| ClientReference            | 2   |
| IssuerID                   | 3   |
| IssuerName                 | 4   |
| AlternateIssuerName        | 5   |
| CountryOfIncorporation     | 6   |
| SEDOLCode                  | 7   |
| SecurityDescription        | 8   |
| ShortDescription           | 9   |
| ISINCode                   | 10  |
| ClosingDate                | 11  |
| ClosingDateType            | 12  |
| SecurityForm               | 13  |
| SecurityType               | 14  |
| AmntOfTransfer1            | 15  |
| AmntOfTransfer2            | 16  |
| AmntOfTransfer3            | 17  |
| AmntOfTransfer4            | 18  |
| CouponInterestRate         | 19  |
| ParValue                   | 20  |
| ParValueCurrency           | 21  |
| UnderlyingIssuer           | 22  |
| UnderlyingISIN             | 23  |
| Restrictions               | 24  |
| StrikePrice                | 25  |
| StrikePriceCurrency        | 26  |
| CFICode                    | 27  |
| CountryOfRegister          | 28  |
| Domestic Listing Indicator | 29  |
| SecurityStatus             | 30  |
| OfficialPlaceOfListing     | 31  |
| UnitOfQuotationCurrency    | 32  |
| MIC                        | 33  |
| ActivationDate             | 34  |
| ExchangeSymbol             | 35  |
| LocalCode                  | 36  |
| CFICode2015                | 37  |
| Tranche                    | 38  |
| Series                     | 39  |
| Class                      | 40  |
| Tenor                      | 41  |
| BondSeniority              | 42  |
| OptnExSty                  | 43  |
| GreenBondIndicator         | 44  |
| FISN                       | 45  |

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### **Mandatory & Optional Fields**

There are a number of mandatory fields that must be populated for certain security types, in addition to some optional fields. Once the relevant Security Sub Group and Security type are selected the system will give an indication of which fields are required and if you hover over the field itself it will indicate whether it is mandatory or not. The Long and Short descriptions will, in a number of scenarios, be system generated however, where data is manually entered into these fields it will supersede the standard descriptions.

Further details on mandatory data fields please visit:

<http://www.lseg.com/markets-products-and-services/post-trade-services/unavista/unavista-solutions/data-solutions/sedol/documentation>

### **SEDOL Masterfile Reference Data Dictionary**

Where possible SEDOL Masterfile supports industry standard ISO formats e.g. MIC Code, CFI Code, Currency Code and Date Information etc, alongside a number of Exchange predefined enumerated values. The user must use these values, where applicable to prevent a validation error.

Further details on our dictionaries please visit:

<http://www.lseg.com/markets-products-and-services/post-trade-services/unavista/unavista-solutions/data-solutions/sedol/documentation>

Additionally, registered users can access this information once logged into the web interface in the Reference Data folder.

## SEDOL Service & Technical Guide

### System Generated Fields & Bulk Upload File Report

Email confirmation containing an overview will be sent to the user when upload processing has been completed. A detailed report will be also available from the bulk upload screen with error messages for any rejected rows. The returned file will display the original data along with the system generated fields. The SEDOL Code will be populated on successfully executed records. The file will be available for exporting using the 'Export View' function.

Please see user guide for more detailed information

The download report that is returned to the requestor is as follows:

*\*Please see [Download File Field Formats](#) for definitions*

| Field Name             | Format*       | Pos | Value Returned  |
|------------------------|---------------|-----|---|
| ErrorCode              |               | 1   | System generated  |
| ErrorDescription       |               | 2   | System generated  |
| ActionIndicator        | CHAR (3)      | 3   | As entered by user  |
| ClientReference        | CHAR (8)      | 4   | As entered by user  |
| IssuerID               | INT           | 5   | System generated where ISR is Action Indicator  |
| IssuerName             | VARCHAR (500) | 6   | As entered by user  |
| AlternatelIssuerName   | VARCHAR (500) | 7   | As entered by user  |
| CountryOfIncorporation | CHAR (2)      | 8   | As entered by user  |
| SEDOLCode              | CHAR (7)      | 9   | System generated  |
| SecurityDescription    | VARCHAR (500) | 10  | System generated except for the security types noted in Mandatory Fields for Bulk Uploads document. |
| ShortDescription       | VARCHAR (18)  | 11  | System generated  |
| ISINCode               | VARCHAR (12)  | 12  | As entered by user  |
| ClosingDate            | DATE          | 13  | As entered by user  |
| ClosingDateType        | CHAR (3)      | 14  | As entered by user  |
| SecurityForm           | CHAR (1)      | 15  | As entered by user  |
| SecurityType           | CHAR (2)      | 16  | As entered by user  |
| AmntOfTransfer1        | DEC (18,5)    | 17  | As entered by user  |
| AmntOfTransfer2        | DEC (18,5)    | 18  | As entered by user  |
| AmntOfTransfer3        | DEC (18,5)    | 19  | As entered by user  |
| AmntOfTransfer4        | DEC (18,5)    | 20  | As entered by user  |
| CouponInterestRate     | DEC (11,10)   | 21  | As entered by user  |
| ParValue               | DEC (18,8)    | 22  | As entered by user  |
| ParValueCurrency       | CHAR (3)      | 23  | As entered by user  |
| UnderlyingIssuer       | VARCHAR (500) | 24  | As entered by user  |
| UnderlyingISIN         | CHAR (18)     | 25  | As entered by user  |
| Restrictions           | VARCHAR (10)  | 26  | As entered by user  |

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| Field Name                 | Format*       | Pos | Value Returned  |
|----------------------------|---------------|-----|---|
| StrikePrice                | DEC (18,17)   | 27  | As entered by user  |
| StrikePriceCurrency        | CHAR (3)      | 28  | As entered by user  |
| CFICode                    | VARCHAR (6)   | 29  | As entered by user  |
| CountryOfRegister          | CHAR (2)      | 30  | As entered by user  |
| Domestic Listing Indicator | TRUE or FALSE | 31  | As entered by user  |
| SecurityStatus             | CHAR (1)      | 32  | As entered by user  |
| OfficialPlaceOfListing     | VARCHAR (4)   | 33  | As entered by user  |
| UnitOfQuotationCurrency    | CHAR (3)      | 34  | As entered by user  |
| MIC                        | VARCHAR (4)   | 35  | As entered by user  |
| ActivationDate             | DATE          | 36  | As entered by user  |
| ExchangeSymbol             | VARCHAR (50)  | 37  | As entered by user  |
| LocalCode                  | VARCHAR (50)  | 38  | As entered by user  |
| CFICode2015                | VARCHAR (6)   | 39  | ISO CFI Code (10962: 2015 version)                          |
| Tranche                    | VARCHAR(12)   | 40  | As entered by user  |
| Series                     | VARCHAR(12)   | 41  | As entered by user  |
| Class                      | VARCHAR(12)   | 42  | As entered by user  |
| Tenor                      | VARCHAR(12)   | 43  | As entered by user  |
| BondSeniority              | VARCHAR(12)   | 44  | As entered by user  |
| OptnExSty                  | VARCHAR(12)   | 45  | As entered by user  |
| GreenBondIndicator         | TRUE or FALSE | 46  | As entered by user  |
| FISN                       | VARCHAR(35)   | 47  | System generated -<br>ISO 18774 Financial Issuer Short Name |

### Error Generation

For a complete list of the possible Error Codes and their descriptions please refer to the Bulk Upload Error List filed located under SEDOL Masterfile Dictionary of the SEDOL documentation area of our website [<here >](#)

**Note:** Technical errors will be reported to the user on screen using standard website error management.

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### 9.6 Download File Formats - Introduction

Disseminated separated tab files are compressed into a single windows compatible, zip format, archive file.

#### Module 1: Core tables (Issuer, Security, Market)

The following tables define the data output from the system in tab separated file format. The following primary information is disseminated in all services:

- ISSUER
- SECURITY
- MARKET

### 9.7 Download File Specification

Data field descriptions including those which appear in the TAB separated download files detailed below.

\*Please see [Download File Field Formats](#) for definitions

| ISSUER (ISS)           |               |   |
|------------------------|---------------|---|
| Field Name             | Format*       | Notes   |
| ActionIdentifier       | CHAR (1)      | Exchange Defined Action                             |
| LastActionTimestamp    | DATETIME      | ISO Date Time (8601)                                |
| IssuerID               | INT           | Unique Internal Identifier of the Issuer            |
| IssuerName             | VARCHAR (500) |   |
| AlternateIssuerName    | VARCHAR (500) |   |
| CountryOfIncorporation | CHAR (2)      | ISO Country Code (3166)                             |
| ICB Industry           | CHAR (2)      | ICB Industry Code                                   |
| ICB Supersector        | CHAR (4)      | ICB Supersector Code                                |
| Previous Issuer        | VARCHAR(500)  | Previous Issuer Name                                |
| Subsequent Issuer      | VARCHAR(500)  | Subsequent Issuer Name following a Corporate Action |
| IssuerComment          | VARCHAR (300) |   |
| IssuerStatus           | CHAR (1)      | Exchange Defined Status                             |
| IssuerConfirmation     | CHAR (1)      | Exchange Defined Confirmation                       |
| LEI                    | CHAR (20)     | ISO 17442   |
| CreateDate             | DATETIME      | ISO Date Time (8601)                                |

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| <b>SECURITY (SEC)</b>      |                      |  |
|----------------------------|----------------------|--|
| <b>Field Name</b>          | <b>Format*</b>       | <b>Notes</b>                                   |
| ActionIdentifier           | CHAR (1)             | Exchange Defined Action                        |
| LastActionTimestamp        | DATETIME             | ISO Date Time (8601)                           |
| SecurityID                 | INT                  | Unique Internal Identifier of the Security     |
| PrevSEDOLCode              | CHAR (7)             |  |
| IssuerID                   | INT                  | Unique Internal Identifier of the Issuer       |
| SEDOLCode                  | CHAR (7)             |  |
| ISINCode                   | VARCHAR (12)         | ISO ISIN Code (6166)                           |
| CountryOfRegister          | CHAR (2)             | ISO Country Code (3166)                        |
| CouponInterestRate         | DEC (11,10)          |  |
| ParValue                   | DEC (18,8)           |  |
| ParValueCurrency           | CHAR (3)             | ISO Currency Code (4217)                       |
| UnderlyingISIN             | CHAR (12)            |  |
| <b>UnderlyingIssuer</b>    | <b>VARCHAR (500)</b> |  |
| StrikePrice                | DEC (18,17)          |  |
| StrikePriceCurrency        | CHAR (3)             | ISO Currency Code (4217)                       |
| SecurityForm               | CHAR (1)             | Exchange Defined Form                          |
| SecurityType               | CHAR (2)             | Exchange Defined Type                          |
| AmntOfTransfer1            | DEC (18,5)           |  |
| AmntOfTransfer2            | DEC (18,5)           |  |
| AmntOfTransfer3            | DEC (18,5)           |  |
| AmntOfTransfer4            | DEC (18,5)           |  |
| UnitOfQuotation            | DEC (18,8)           |  |
| UnitOfQuotationCurrency    | CHAR (3)             | ISO Currency Code (4217)                       |
| CFICode                    | CHAR (6)             | ISO CFI Code (10962 – 2011 version)            |
| ClosingDate                | DATE                 |  |
| ClosingDateType            | VARCHAR (8)          | Exchange Defined Type – ‘EXPIry’ or ‘MATurity’ |
| Restrictions               | VARCHAR (10)         |  |
| OfficialPlaceOfListing     | VARCHAR (4)          |  |
| Domestic Listing Indicator | BIT                  | ‘1’ or ‘0’                                     |
| ActivationDate             | DATE                 |  |
| <b>SecurityDescription</b> | <b>VARCHAR (500)</b> |  |
| ShortDescription           | VARCHAR (18)         |  |
| SecurityBackground         | VARCHAR (100)        |  |
| GREEN Bond Indicator       | TRUE or FALSE        |  |
| CFI Code 2015              | VARCHAR (6)          | ISO CFI Code (10962: 2015 version)             |

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|                         |                     |                                       |
|-------------------------|---------------------|---------------------------------------|
| SecurityEvent           | CHAR (2)            | Exchange Defined Status               |
| SecurityEventTimestamp  | DATETIME            | ISO Date Time (8601)                  |
| SecurityStatus          | CHAR (1)            | Exchange Defined Status               |
| SecurityConfirmation    | CHAR (1)            | Exchange Defined Confirmation         |
| FISN                    | VARCHAR(35)         | ISO 18774 Financial Issuer Short Name |
| <i>CreateDate</i>       | <i>DATETIME</i>     | <i>ISO Date Time (8601)</i>           |
| <i>SecurityGroup</i>    | <i>CHAR (1)</i>     |                                       |
| <i>SecuritySubGroup</i> | <i>VARCHAR (30)</i> |                                       |
| <i>Class</i>            | <i>VARCHAR (12)</i> |                                       |
| <i>Series</i>           | <i>VARCHAR (12)</i> | <i>Equities/Debt/Other</i>            |
| <i>Tranche</i>          | <i>VARCHAR (12)</i> | <i>Equities/Debt/Other</i>            |
| <i>LocalCode</i>        | <i>VARCHAR(50)</i>  | <i>Local trading code</i>             |
| <i>FutureUpdate</i>     | <i>DATETIME</i>     | <i>ISO Date Time (8601)</i>           |
| <i>LEI</i>              | <i>CHAR (20)</i>    | <i>ISO 17442</i>                      |
| <i>CountryOfOPOL</i>    | <i>CHAR (2)</i>     |                                       |

| <b>MARKET SECURITY (MKT)</b> |                |  |
|------------------------------|----------------|--|
| <b>Field Name</b>            | <b>Format*</b> | <b>Notes</b>                               |
| ActionIdentifier             | CHAR (1)       | Exchange Defined Action                    |
| LastActionTimestamp          | DATETIME       | ISO Date Time (8601)                       |
| MarketID                     | INT            | Unique Internal Identifier of the Segment  |
| SecurityID                   | INT            | Unique Internal Identifier of the Security |
| MIC                          | VARCHAR (4)    | ISO Market Information Code (10383)        |
| TIDisplayMnemonic            | VARCHAR (4)    |  |
| ExchangeSymbol               | VARCHAR (50)   |  |
| MarketStatus                 | CHAR (1)       | Exchange Defined Status                    |
| MarketConfirmation           | CHAR (1)       | Exchange Defined Confirmation              |
| SecurityEvent                | CHAR (2)       | Exchange Defined Event Code                |
| SecurityEventTimestamp       | DATETIME       | ISO Date Time (8601)                       |
| SecurityStatus               | CHAR (1)       | Exchange Defined Status                    |
| EmptyField1                  |                |  |
| EmptyField2                  |                |  |



## SEDOL Service & Technical Guide

### Download File Field Formats

The following table details the field formats that are present in the download files:

| Format      | Description  |
|-------------|--|
| INT         | Integer. The maximum value that can be held by an integer is $(2^{32})/2 = 2147483647$ (the divide by 2 is because it can be positive or negative and the -1 is because 0 is one of the possible values). This gives 10 digits plus another one for the sign (e.g. -2147483647) which makes 11 characters. |
| VARCHAR (X) | Values in VARCHAR columns are variable-length strings. In contrast to CHAR, VARCHAR values are stored using only as many characters as are needed. Values are not padded; instead, trailing spaces are removed when values are stored.   |
| DATE        | The date format which is accepted within a Bulk Upload template is DD-MM-YYYY – UK Format  |
| DEC (x,y)   | Maximum y decimal places with (x-y) preceding digits.<br>Total numeric characters DEC (18,17) = 18, up to 17 can proceed the decimal point.(In database terms field is set to DEC (35,17).<br>Examples:<br>12345.6789012345678<br>1.23456789012345678<br>12345678901234567.8                               |
| DATETIME    | YYYY-MM-DDTHH:MM:SS.SSSZ   |
| CHAR (X)    | The length of a CHAR column is fixed to a specified length (X). When CHAR values are stored, they are right-padded with spaces to the specified length (X).  |
| BIT         | Binary digit - Either of the two numbers (1 and 0)   |

### Header and Trailer Records for Tab Delimited Download Files

Each uncompressed tab delimited file will contain 1 header and 1 trailer record to enable recovery, verification and identification.

#### Header Record

| Field                 | Type      | Description   | Example   |
|-----------------------|-----------|---|---|
| Header record version | char (3)  | Identifies the version of the header record                               | H11   |
| Timestamp             | timestamp | start date time and end date time of range of changes covered by the file | YYYYMMDDHHMMSSYYYYMMDDHHMMSS                                    |
| Entity Abbreviation   | char (3)  | <filetype> as used in the filename  | ISSUER = "ISS";<br>SECURITY = "SEC";<br>MARKETSECURITY = "MKT"; |

#### Example

```
H11YYYYMMDDHHMMSSYYYYMMDDHHMMSSXXX
H011969010100000020031230000000DIS
```

---

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### Trailer Record

| Field                  | Type     | Description   | Example    |
|------------------------|----------|---|------------|
| Trailer record version | char (3) | Identifies the version of the trailer record  | T11        |
| Record count           | int      | Checksum for the number of data records in file (i.e. excluding header and trailer records) leading zero padded to 10 characters. | 0000007865 |

### Example

T010000000003

## **10.0 ISO15022MT 564 Corporate Action Messaging via SWIFT**

The Exchange disseminates ISO15022 MT564 corporate action messages via the SWIFT Network or via flat file FTP. For more information regarding this service please email [Sedol@lseg.com](mailto:Sedol@lseg.com).

## 11.0 Appendix A – Field Description & Glossary

This table is provided as a reference to fields held within the SEDOL Masterfile™ system.

For details of the fields and the positions in which they appear in the TAB downloads, see the following sections of this document.

### TAB SEPERATED FILE DEFINITION (Downloads)

| Field Name                 | Description  |
|----------------------------|--|
| ActionIdentifier           | Identifies Updates (U), Inserts (I), Deletions (D) = Inactive  |
| ActivationDate             | SEDOL Activation Date  |
| AlternateIssuerName        | An alternate name for the issuing entity   |
| AmntOfTransfer1            | Applicable to debt securities. This relates to the face value of the security the specified denomination amount.             |
| AmntOfTransfer2            | As above – second amount   |
| AmntOfTransfer3            | As above – third amount  |
| AmntOfTransfer4            | As above – fourth amount   |
| CFICode                    | ISO10962 2011 - Classification of financial instruments, ISO standard code used to reflect characteristics of the security – |
| CFI Code 2015              | ISO10962:2015  |
| Class                      | The specific class of Debt/Equity/Other where applicable   |
| ClosingDate                | The date of expiry or maturity of the instrument   |
| ClosingDateType            | The type of date e.g. expiry or maturity   |
| CountryOfIncorporation     | The country in which the issuer is incorporated/legally registered   |
| CountryOfOPOL              | The country of the Official place of Listing for the specific SEDOL  |
| CountryOfRegister          | The country in which the share register is maintained. ISO 3166 - Country Code   |
| CouponInterestRate         | The instrument rate applicable to that instrument when in coupon form  |
| CreateDate                 | SEDOL creation date  |
| Domestic Listing Indicator | Indicates the home (domestic) quote SEDOL.   |

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| Field Name             | Description  |
|------------------------|--|
| Exchange Symbol        | International ticker/exchange/trading code   |
| FISN                   | ISO 18774 - Financial Instrument Short Name  |
| Future Update          | DD MMM YYYY HH:MM  |
| Green Bond Indicator   | <p>Green bonds are any type of bond instrument where the proceeds will be exclusively applied to finance or re-finance in part or in full new and/or existing eligible Green Projects and which are aligned with the four core components of the Green Bond Principles.</p> <p>The key feature of green bonds is the use of proceeds, which are described in the bond's legal documentation, separately managed within the company, as well as monitored and reported throughout the life of the instrument.</p> |
| ICB Industry           | ICB Industry classification code   |
| ICB Supersector        | ICB Supersector classification code  |
| ISIN                   | International Securities Identification Number - ISO 6166  |
| IssuerComment          | Supplementary Comments   |
| IssuerConfirmation     | Indicates if the Issuer details is <b>C</b> onfirmed or in <b>P</b> rovisional status.   |
| IssuerID               | Unique Internal Identifier of the Issuer   |
| IssuerName             | The legal entity name of the issuing Entity  |
| IssuerStatus           | Indicates if the issuer is active or inactive  |
| LastActionTimestamp    | Time of last change on this record   |
| LEI                    | ISO 17442  |
| Local Code             | Exchange defined numerical code  |
| MarketConfirmation     | Indicates if the market details is <b>C</b> onfirmed or in <b>P</b> rovisional status.   |
| MarketID               | Unique Internal Identifier at a Segment level  |
| MarketStatus           | Indicates if the security is active or inactive  |
| MIC                    | Segment MIC as per ISO10383: Market Identification Code for the market/venue on which this instrument is traded  |
| OfficialPlaceOfListing | "OPOL" The market on which the instrument is officially listed. ISO 10383 Market Identification Code (MIC)   |

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| Field Name             | Description   |
|------------------------|---|
| ParValue               | The nominal value of the share e.g. 100 pence or NPV for Nil Par Value  |
| ParValueCurrency       | ISO 4217 - currency code for the par value  |
| Previous Issuer        | The legal entity name of the previous issuer following a corporate action   |
| Restrictions           | Code indicating any special regulations surrounding stock trade.  |
| SecurityBackground     | Details, if available, on the background of this security   |
| SecurityConfirmation   | Indicates if the instrument details is <b>Confirmed</b> or in <b>Provisional</b> status.  |
| SecurityDescription    | Unique Summary description of the instrument  |
| SecurityEvent          | Identifies the last event relevant to the security  |
| SecurityEventTimestamp | Time stamp of the last event  |
| SecurityForm           | Indicates the form the security takes - Exchange defined data e.g. Registered (A), Bearer (P)   |
| SecurityGroup          | Security Group – Equity(1), Debt(2), Other (3), Entitlements(4), (Collective Investment Vehicles (5), Structured Instruments (6), Referential Instruments (7) Derivatives (8)* not included in non-derivative change file, Digital Assets (9) |
| SecuritySubGroup       | See Excel Tech Spec   |
| SecurityID             | Unique Internal Identifier for a security record  |
| SecurityStatus         | Indicates the activity status of the security – Exchange defined data Coded (C), Traded (T) or Defunct (D)  |
| SecurityType           | Indicates the type of tradable instrument e.g. Ordinary Equity  |
| SEDOL                  | Security Identification Code, unique for an instrument listed in a particular country - Exchange defined data   |
| Series                 | The specific Series of Debt/Equity/Other where applicable   |
| ShortDescription       | Abbreviated Issuer name & description   |
| StrikePrice            | The price at which the security can be exercised  |
| StrikePriceCurrency    | ISO 4217 - currency code in which the strike price is shown   |
| Subsequent Issuer      | Subsequent Legal Entity name following a corporate action   |

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| <b>Field Name</b>       | <b>Description</b>  |
|-------------------------|---|
| TIDisplayMnemonic       | Display Mnemonic for this security, only applicable to the London Market - Exchange defined data  |
| Tranche                 | The specific Tranche of Debt/Other where applicable   |
| UnderlyingISIN          | ISIN Code of the underlying instrument  |
| UnderlyingIssuer        | Name of the underlying issuing party  |
| UnitOfQuotation         | Shows the number of shares/stocks that the price represents Value = (Unit of Quotation/100)*Price |
| UnitOfQuotationCurrency | ISO 4217 - Currency Code in which the Unit of Quotation is shown                                  |

## 12.0 Appendix B – Corporate Action Effects on SEDOLs

A Corporate Action will normally have the following effect on the underlying SEDOL of the affected security:

| <b>EVENT</b>                          | <b>DEFINITION</b>  | <b>ACTION</b>  |
|---------------------------------------|--|--|
| Capital Reorganisation                | Any type of reorganisation that increases or decreases the number of shares in issue.              | A new SEDOL will be allocated if this results in an increase.  |
| Capital Repayment                     | Distribution of cash by the company.   | The existing SEDOL will be retained.   |
| Change of country domicile            | A company changes its country of incorporation.  | The existing SEDOL will be retained.   |
| Change of Security Form               | Register to Bearer or vice versa.  | The existing SEDOL will be retained.   |
| Consolidation or reverse Stock Split  | Reduction in the number of outstanding shares in a company.  | A new SEDOL will be required as the number of shares in existence will have changed.                       |
| Depository Receipts                   |  | A new SEDOL will only be allocated if new certificates have been issued.                                   |
| Interest Rate Change                  | Fixed interest security changes its interest rate.   | The existing SEDOL will be retained.   |
| Merger                                | Merger by absorption: One of the two companies incorporates the other(s) which legally disappear   | SEDOL of shares of former companies must become inactive after a certain period.                           |
|                                       | Merger by amalgamation: The two companies merge to form a new legal entity after a certain period. | Where two companies merge to form a new company a new SEDOL will be required.                              |
| Name Change                           | Company changes its name.  | If the number of shares in existence remains unchanged the same SEDOL will be retained.                    |
| Par Value Change                      | Change to the par value of a company where the number of shares in existence remains unchanged.    | The existing SEDOL will be retained.   |
| Redemptions, Bankruptcy, Liquidations | Security ceases to exist.  | Will all result in the existing SEDOL becoming inactive.   |
| Redenomination                        | The nominal amount of a security changes from one currency to another.                             | If a straight redenomination where the number of shares remains unchanged the same SEDOL will be retained. |



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| <b>EVENT</b>              | <b>DEFINITION</b>   | <b>ACTION</b>   |
|---------------------------|---|---|
| Renominalisation          | The nominal amount of a security changes from one currency to another together with a further corporate action. | Will result in a new SEDOL, as the number of shares in existence will have changed.   |
| Subdivision / Stock Split | An increase in the number of outstanding shares of a company.   | A new SEDOL will be required, as the number of shares in existence will have changed. |

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