RNS Data Feed

Technical Specification

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Contents

1 Service Overview

The RNS Data Feed gives access to RNS announcements as they are released. It is comprised of two key services – the **Announcement API**, a standard HTTP REST API, for authentication and pull-based announcement access, and the **Real-time Feed** using a web socket for push-based real-time announcement delivery.

The Announcement API **provides access to all announcements** and gives a simple implementation via a pull-based polling mechanism. It also allows **recovery** of any announcements missed on the Real-time Feed, in the case of system failure or late startup.

The Real-time Feed web socket provides the **fastest push-based delivery of announcements** immediately upon release, but requires a more complex implementation.

If you choose to integrate with the Real-time Feed, you will be required to complete a simple **conformance test** for your software before you can be granted access to the live feed. This is not required if you are only accessing the Announcement API.

Below are example high-level workflows for both interfaces; detailed information on all messages and endpoints are included in the following sections.

1.1 Example Workflow – Real-time Feed

1. At or slightly before 05:00 UK time, call login endpoint of Announcement API to retrieve an authorisation token, valid for 60 minutes.
   a. Handle authentication errors returned.
   b. Retry indefinitely in the case of non-functional errors (HTTP 500, connectivity) with a short back-off between attempts (we recommend 2-5 seconds).
2. Establish connection to web socket and send AUT authentication message.
3. Handle ATR auth response message:
   a. If not successful, inspect failureReason, return to step 1 above and retry.
   b. If successful, check recoveryRequired – if populated, follow *Example Recovery Logic* below. If unpopulated, dissemination will continue from sequence 1 higher than the sequence you provided in the AUT.
4. Receive SOD message – if you connected at sequence 0, the first message disseminated will be the SOD message indicating the current working date. If you connected with sequence higher than 0 (i.e. a reconnection), this will not be sent.
5. Receive announcements and idle polls throughout day – monitor received messages and disconnect/reconnect if no messages received for (e.g.) 3x the idle poll interval.
6. Receive EOD message – indicates all announcements for the current date now sent.
7. Cleanly disconnect from the web socket once EOD received. If you do not disconnect within 5 seconds, the system will disconnect you.
8. Reset for the next day and return to step 1. We recommend not attempting reconnection until the following working date.

1.2 Example Recovery Logic – Real-time Feed

From the ATR message, the recoveryRequired field advises the sequence number up to which you should recover; call the Announcement endpoint of the Announcement API for each missed announcement. The Real-time Feed will remain connected in this scenario and

begin distribution from the sequence immediately following the value advised in recoveryRequired onwards.

See the "REST API" workflow for recommendations on how to access the announcement endpoint (step 3.b), ensuring you handle HTTP 401 responses in case your access token has expired.

Worked example: Assuming the date is **2020-01-20** and you have processed up to sequence **10**, and the ATR message recoveryRequired stated **32**, you should request from the REST API announcements with **sequences 11 to 32** inclusive, e.g. https://api.test.rns-distribution.com/announcements/2020-01-20/11 then /12 then /13 and so on through to /32. The Real-time feed will have remained connected and you can expect the next sequence seen on the feed to be **33**.

1.3 Example Workflow – Announcement API

1. When you wish to connect, call login endpoint to retrieve an authorisation token, valid for 60 minutes.
    a. Handle authentication errors returned.
    b. Retry indefinitely in the case of non-functional errors (connectivity failures, 500 server errors, etc) with a short back-off between attempts (we recommend 5-10 seconds).
2. Providing the received token in an HTTP header "Authorization: Bearer *token*", call the index endpoint (e.g. https://api.test.rns-distribution.com/announcements/2020-01-20/ to retrieve the current list of available announcements. If an HTTP 401 is received, retrieve a new token as per step 1 and re-try.
3. For each announcement in the list:
    a. If you have already downloaded this announcement sequence for this date, do nothing.
    b. If you have not downloaded this announcement sequence, call the Announcement endpoint (e.g. https://api.test.rns-distribution.com/announcements/2020-01-20/123) including the Authorization header as above. This will return the full NewsML G2 for this announcement.
    c. If an HTTP 401 is received, retrieve a new token as per step 1 and re-try.
4. At a suitable interval, repeat steps 2 and 3. You must ensure that the **minimum interval** between calls to the **index** endpoint is **no less than 5 seconds.** You may call the **announcement** endpoint to retrieve individual announcements as frequently as needed.

You can use this service to retrieve announcements from before the current working date, and we maintain a minimum of 7 days online.

Note, however, that we **do not publish new announcements for dates in the past**, therefore you only need to poll repeatedly for the **current date** in this manner.

2 Authentication & Announcment API

This is provided as an HTTPS REST API, secured using TLS 1.2. The API is available at
`https://api.(environment).rns-distribution.com/`

The API is available 24x7 and hosted using resilient infrastructure across multiple data centres, thus no special handling is required in disaster recovery scenarios.

2.1 Authentication

Endpoint: `POST /login`

Purpose: Request a token to access the service. The provided token will be valid for a minimum of one hour, and can be used to access both the Announcement REST API endpoints and to initiate a connection to the web socket. It is safe to use the same token for both purposes.

Retrieving a new token will **not** invalidate previously issued tokens and will **not** disconnect active connections to the web socket, thus it is safe to retrieve new tokens while connected.

There is no limit imposed by the system on the number of tokens you may request per day.

Request body (text/json):

```
{
  "user": "User ID provided by LSEG",
  "accessKey": "access key provided by LSEG"
}
```

Response body (text/json):

```
{
  "success": true | false,
  "token": "eyJhbGciOiJSUzI1NiIsImtpZCI6ImRlMGJjM2M0L"
}
```

Non-success HTTP response codes:

- **400:** Invalid request – check that your user and accessKey are both populated and the JSON you have provided is valid.
- **500:** A technical error has occurred within our infrastructure, please retry later.

2.2 Announcements - Index

Endpoint: `GET /announcements/yyyy-mm-dd`

Purpose: Retrieve a JSON list of announcements available for the specified date. Announcements will be available for a **minimum** of 7 days from the time of publication via this API.

If using the Announcement API as your primary method of receiving announcements, you must ensure that your system does not poll this endpoint more frequently than **once every 5 seconds**.

Authentication: Requires header "`Authorization: Bearer eyJhbGciOiJSUzI1NiIsImtpZCI6ImRlMGJjM2M0L`", including the token received from the Authentication endpoint.

URL Paramters:

- `yyyy-mm-dd` – Working date

Response body (text/json):

```
{
    "workingDate": "2019-10-07",
    "maxSequenceNumber": 1299,
    "announcements": [
        {
            "workingDate": "2019-10-07",
            "sequenceNumber": 1,
            "received": "2019-10-07T17:38:56+00:00",
            "annId": 11009,
            "headline": "Net Asset Value(s)",
            "company": "CompanyF"
        },
        {
            "workingDate": "2019-10-07",
            "sequenceNumber": 2,
            "received": "2019-10-07T17:38:59+00:00",
            "annId": 11010,
            "headline": "Circ re. new product",
            "company": "CompanyJ"
        },
        ...
    ]
}
```

Non-success HTTP response codes:

- **401:** Unauthorised, retrieve a new token from the Authentication endpoint described above.
- **500:** A technical error has occurred within our infrastructure, please retry later.

2.3 Announcement

Endpoint: `GET /announcements/yyyy-mm-dd/seqNo`

Purpose: Retrieve the content of a single announcement. Announcements will remain available for a minimum of 7 days via this API.

Authentication: Requires header "`Authorization: Bearer eyJhbGciOiJSUzI1NiIsImtpZCI6ImRlMGJjM2M0L`", including the token received from the Authentication endpoint.

URL Paramters:

- `yyyy-mm-dd` – Working date
- `seqNo` – Sequence number to retrieve

Response body (text/xml): The NewsML-G2 payload for this announcement.

Non-success HTTP response codes:

- **401:** Unauthorised, retrieve a new token from the Authentication endpoint described above.
- **404:** Requested announcement sequence does not exist for the requested date.
- **500:** A technical error has occurred within our infrastructure, please retry later.

3 Real-Time Feed

This is implemented as a Websocket (as standardised by RFC-6455) secured using TLS 1.2.

3.1 Daily Life Cycle

The daily life cycle for the websocket follows the normal Regulatory News Service opening hours and days, with functional start of day occurring at 05:00 UK time and functional end of day at 18:30 or shortly thereafter, on London Stock Exchange market open days.

The below table summarises the key events in the daily life cycle. **Note that the API is available 24x7 – this life cycle applies only to the real-time feed**.

Time (UK/London)	Event
04:00	Feed available for connection. Before this time, the feed **may** not be available due to maintenance.
05:00	SOD message and Service Notice / Test Message announcements published.
07:00	Announcement publication starts
18:30 (typically)	Final Announcement and EOD message published. Note that (as per the FIX/FAST feed) this time can be delayed in certain circumstances, and on certain days of the year (such as Christmas Eve) this can occur early. We recommend triggering your EOD processes from receipt of the EOD message rather than at a specific time.
19:30 (typically)	One hour after EOD message publication, the feed is reset ready for the following day. After this time, the feed **may** not be available due to maintenance. You can continue to use the API for replay/recovery (which will retain, at minimum, seven days of announcement history).

After the EOD message is distributed, the connection will be closed. You may re-establish the connection during the one hour period after EOD is distributed – this will cause the solution to re-send the EOD message and re-close the connection.

3.2 Connectivity and Service Reliability

We recommend that you configure your application to point to the top-level service address `wss://feed.(environment).rns-distribution.com/`

When using this address, the service is designed to be resilient against hardware, software and data centre outages without significant interruption to the web socket availability and without manual intervention being required from customers.

Should any disconnection occur, you would be expected to reconnect, and our load balancing will ensure your connection is routed to a healthy instance.

An aspect of this reliability is provided by multiple IP addresses being provided by the top-level feed DNS entry. To minimise latency, we do not route messages to these IP addresses between data centres, thus in certain failure scenarios, there may be a short period during which connectivity to an IP returned by this entry may fail, until the DNS entry is updated (this should take no more than 60 seconds).

Continuing to attempt reconnection, ensuring that you are not caching the DNS entries beyond their stated TTL, is our recommended approach for addressing this situation. You may also wish to configure your application to be aware of multiple IP addresses being returned by the DNS entry and to try all of them if disconnections occur, rather than using the first returned address.

If you wish to maintain multiple connections and ensure that your connections are served by different instances, or wish to manage reliability explicitly yourselves, we can provide a set of alternative feed addresses on request, which point to the same underlying infrastructure but without the automated DNS updates due to health monitoring. If you choose to use these addresses, you must manage (for example) round-robin attempts to connect to each in the case of disconnections. Please contact us if you wish to use these alternative addresses and we will provide the relevant details.

Please note that there is **no performance difference** between connecting to the top-level service address and the individual service addresses.

3.3 Common message format

All messages sent and received over the websocket connections will be encoded as **UTF-8 text**, and have the basic format:

```
MSG
Body
```

… where MSG is a three-character message type, followed by a newline (\r\n) then a body, the format of which will depend on the type of the message.

3.4 Administrative messages

All administrative messages will have a JSON body, the content of which will depend on the message type. Whitespace in the JSON body will be ignored by the solution and should be ignored by customers.

3.4.1 Auth

Required to be sent within five seconds of opening a connection to the service. No message dissemination will start until this is received and verified.

```
AUT
{
  "user": "username",
  "token": " eyJhbGciOiJSUzI1NiIsImtpZCI6ImRlMGJjM2M0L",
  "lastSeenSeq": 0 | 1+
}
```

user is the user ID provided by LSEG.

token is a current access token, retrieved from the REST API Authentication endpoint described above. Tokens retrieved from the REST API are valid for a minimum of one hour, thus you must initiate your connection within this time.

lastSeenSeq indicates which announcement your system has last successfully processed for the current date, where 0 indicates start of day.

If the system has already published announcements with a sequence number higher than the number provided, the auth response will indicate the recovery range required. Should a sequence which is higher than the system knows about be provided, the auth will fail (see Auth Response below).

The system **may** disseminate a limited replay of recent announcements which have sequences higher than lastSeenSeq after authentication, thus if you have been disconnected for a short period, no recovery should be required.

If no auth message is sent within 5 seconds of the websocket connection being established, the system will close the connection without disseminating any messages, with a close reason as defined below.

3.4.2 Auth Response

Will be sent by the solution in response to the auth message. If the authentication details are invalid, success will be false, and the websocket will then be immediately closed by the system.

```
ATR
{
  "success": true|false,
  "failureReason": "InvalidStartSequence" | "InvalidAuth" |
                   "InvalidIP" | "TokenExpired" | "Disabled",
  "workingDate": null | "yyyy-MM-dd",
  "recoveryRequired": null | 1+
}
```

success indictes whether the auth has been successful.

failureReason will be null if *success* is true, otherwise it will be populated with the reason the auth has failed:

- InvalidStartSequence – the start sequence provided is higher than the highest announcement sequence published on the current date. This is to protect against the scenario where a customer connects and provides yesterday's finishing sequence number.
- InvalidAuth – the username and/or token provided is not valid.
- InvalidIP – the username and token are valid, but the connection has been initiated from a source IP address outside the known authorised range for your account.
- TokenExpired – the provided token has expired.

recoveryRequired will be null if the lastSeenSeq provided in the auth message is in sync with the current sequence number for the solution, or if the solution is able to re-send enough recent announcements to cover the required range.

Otherwise, it will be populated with the sequence number of the latest announcement which cannot be re-sent, and the customer should make requests to the REST API to retrieve the previously published announcements (i.e. from sequence number *lastSeenSeq* + 1 to sequence number *recoveryRequired*).

In either case, the connection will remain open and announcements will be received as published.

If success is false, the system will also close the web socket after sending this message, using the close reasons as defined below.

workingDate will be populated with the current working date. If you connect after the EOD reset (one hour after EOD distributed) and before SOD at 05:00, this will be null – the SOD message (see below) will identify the working date when sent.

3.4.3 Start of Day

This will be sent at the start time of the system, before the Service Message and Test Announcement are released. This typically occurs at 05:00 UK time.

It will always be the first message distributed after a log in with *lastSeenSeq* 0. It will indicate the working date for reference. After this message, all subsequent messages will be announcement messages until end of day. If a connection is initiated with a *lastSeenSeq* greater than 0, the SOD will **not** be re-sent.

```
SOD
{ "workingDate": "2019-02-21" }
```

3.4.4 End of Day

This indicates that all news items for the day have now been distributed, and will be sent after the EOD Announcement. This typically occurs between 18:30 and 18:40 UK time. It will indicate the working date for reference.

After this, the customer is expected to respond by closing the connection cleanly. If such a disconnect is not received within five seconds, the system will initiate a connection close.

```
EOD
{ "workingDate": "2019-02-21" }
```

3.4.5 Idle Poll

This will be sent by the system on a periodic basis (approximately every **five seconds**) during periods where no announcements are being distributed. It indicates the last sequence sent by the system, where null indicates SOD has not yet been sent, 0 indicates SOD has been sent but no announcements, and 1+ indicates that announcements have been distributed. This will not be sent after EOD.

If you see no idle polls and no announcement messages for a period of 3x the idle poll interval (i.e. around 15 seconds) we recommend disconnecting and reconnecting.

```
IDL
{ "lastSentSeq": null | 1+ }
```

3.5 Announcement message format

Between SOD and EOD messages, it can be safely assumed that only announcement messages and idle polls will be distributed.

Announcements published by the system will be encoded as UTF-8 and use the following structure (**all new lines are \r\n**):

ANN	
`Seq: 1`	Announcement sequence number, 32-bit int.
`ID: 1234`	Announcement ID, unique for all time, 64-bit int.
`Content-Length: 0`	NewsML length (**bytes**).
`Company: Short Name`	FCA short name of the issuer
`Headline: Headline`	Headline for the announcement
	Empty line (just the newline characters \r\n).
`NewsML Payload`	Body of the announcement.

The announcement sequence number will be unique during the day, will increment by 1 for each announcement **in order**, and the first announcement will always be sequence 1 each day.

Additional header fields may be added to this structure, therefore a new line followed by an empty line (i.e. the string `\r\n\r\n`) must be used to identify the end of the header and the start of the NewsML. The format of the NewsML G2 used in this message is defined in the next section.

For example:

```
ANN
Seq: 321
ID: 123451231
Content-Length: 80
Company: Horse McFarlane Plc
Headline: Test Message

<?xml version="1.0" encoding="UTF-8" ?>
<newsItem guid="urn:newsml:rns.com:20190215:1234X"><!-- dummy ann --></newsItem>
```

3.6 Websocket Close Reasons

The following application-specific close reasons will be sent when the solution closes the websocket:

From Solution to Customer

4000-4099: Expected / normal close

4000: Normal end of day, when system closes connection after EOD message sent.

4100-4199: Unexpected / error close

4100: Invalid token provided.

4102: Invalid start sequence provided in log in message – the sequence number is higher than the highest sequence known by the system.

4103: No auth message received – after opening the web socket, the customer must provide an auth message within 5 seconds.

4104: Invalid message received – the customer provided a message that the solution cannot understand.

4110: Infrastructure problem within RNS Data Feed – the customer should reconnect. This will also be used to close a connection if there is an issue sending a message to your system.

From Customer to Solution

The following application-specific close reasons **may** be used by customers to close the websocket connection cleanly.

4200-4299: Customer-to-solution close

4200: Normal log out – we're happy.

4201: Log out due to system failure on our side – we're unhappy, but it's our problem.

4202: Log out due to being unable to process a message provided – we're unhappy.

These close reasons **may** be interpreted by the solution and provided to our support team to understand why a customer has closed their connection.

4 NewsMLG2 Format

4.1 Basic Concepts

Company metadata within the NewsML-G2 structure is represented as one or more *assert* elements (one for the subject of the announcement then zero or more for any related companies referenced by this announcement). This *assert* defines the company short and long name and any relevant identifiers.

All other parts of the NewsML-G2 reference these company *assert* elements by qcode.

4.2 Header Structure

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<newsItem xmlns="https://iptc.org/standards/newsml-g2/"
        xmlns:xsi="http://www.w3.org/2001/XML-instance"
        xsi:schemaLocation="NewsML-G2.xsd"
        guid="urn:newsml:londonstockexchange.com:20190717:1234A:1"
        version="1"
        standard="NewsML-G2"
        standardversion="2.27"
        conformance="power"
        xml:lang="en-GB">
    <catalogRef href="http://www.iptc.org/std/catalog/catalog.IPTC-G2-Standards_32.xml" />
    <rightsInfo>
        <copyrightHolder uri="http://www.londonstockexchange.com/rns">
            <name>RNS</name>
        </copyrightHolder>
        <copyrightNotice>
            Copyright 2019 Regulatory News Service, all rights reserved
        </copyrightNotice>
        <accountable qcode="RNSComp:12345" />
    </rightsInfo>
```

Field	Meaning
/newsItem/@guid	Unique identifier for this announcement. Maps from FIX/FAST NewsML 1: /NewsML/NewsItem/Identification/ PublicIdentifier
/newsItem/rightsInfo/accountable/@qcode	Reference to the company making this announcement.

4.3 Item Metadata

The itemMeta element allows identification of the service (Regulatory / Non-Regulatory) and whether this announcement is a replacement or not.

Regulatory announcement, which is not a replacement:

```
<itemMeta>
    <itemClass qcode="ninat:text" />
    <provider uri="http://londonstockexchange.com" />
    <service qcode="rnsservice:reg">
        <name>Regulatory News Service - Regulatory</name>
    </service>
    <versionCreated>20190926T165530+0100</versionCreated>
    <pubStatus qcode="stat:usable" />
</itemMeta>
```

For a **non-regulatory** announcement, the service will be indicated as follows:

```
<itemMeta>
    <itemClass qcode="ninat:text" />
    <provider uri="http://londonstockexchange.com" />
    <service qcode="rnsservice:nonreg">
        <name>Regulatory News Service - Non Regulatory</name>
    </service>
    <versionCreated>20190926T165530+0100</versionCreated>
    <pubStatus qcode="stat:usable" />
</itemMeta>
```

If this is a **replacement** of an announcement previously published, this will be identified as follows:

```
<itemMeta>
    <itemClass qcode="ninat:text" />
    <provider uri="http://londonstockexchange.com" />
    <service qcode="rnsservice:reg">
        <name>Regulatory News Service - Regulatory</name>
    </service>
    <versionCreated>20190926T165530+0100</versionCreated>
    <pubStatus qcode="stat:usable" />
    <firstCreated>20190926T135312+0100</firstCreated>
    <signal qcode="sig:correction" />
    <link rel="irel:previousVersion"
        residref="urn:newsml:londonstockexchange.com:20190716:1221A:1"
        altId="1221A" />
</itemMeta>
```

Field	Meaning
/newsItem/itemMeta/service/@qcode	Identifies whether the announcement is regulatory (rnsservice:reg) or non-regulatory (rnsservice:nonreg). Maps from FIX/FAST tag *1473 News Category* Maps from FIX/FAST NewsML 1: /NewsML/NewsEnvelope/NewsProduct/@FormalName
/newsItem/itemMeta/ signal[@qcode='sig:correction']	**For replacements only** The presence of this indicates that this announcement replaces a previously published announcement.

Field	Meaning
	Maps from FIX/FAST tag *1477 NewsRefType* with value 0 in the previous feed.
/newsItem/itemMeta/firstCreated	**For replacements only** Date/time the original announcement was released.
/newsItem/itemMeta/ link[@rel='irel:previousVersion']/@residref	**For replacements only** Guid (see Header Structure above) of the announcement being replaced.
/newsItem/itemMeta/ link[@rel='irel:previousVersion']/@altId	**For replacements only** RNS Number of the announcement being replaced. Maps from FIX/FAST NewsML 1: /NewsML/NewsItem/ NewsComponent/NewsComponent/Metadata/ Property[FormalName='PreviousRNSNUmber']/@Value

4.4 Content Metadata

The contentMeta element identifies the company that is the subject of the announcement, any related companies, the category and type of announcement, and other useful metadata.

```xml
<contentMeta>
    <urgency>4</urgency>
    <altId type="rns:rnsID">1234X</altId>
    <altId type="rns:rnsAnnID">52331315</altId>
    <contentCreated>20190926T165530+0100</contentCreated>
    <contentModified>20190926T165530+0100</contentModified>
    <located type="cptype:city">
        <name>London</name>
    </located>
    <creator type="cpnat:organisation" qcode="RNSComp:12345">
    </creator>
    <infoSource type="cpnat:organisation" qcode="RNSComp:12345" />
    <subject type="cpnat:organisation" qcode="RNSComp:12345">
        <name>Horse McFarlane Plc</name>
    </subject>
    <genre type="rns:anncat" qcode="rnsanncat:ACQ">
        <name>ACQ</name>
        <name xml:lang="en-GB">Acquisition</name>
    </genre>
    <genre type="rns:anntype" qcode="rnsanntype:reg" />
    <subject type="cpnat:abstract" qcode="medtop:04000000" />
    <genre qcode="genre:Press_Release" />
    <headline>The announcements headline</headline>
</contentMeta>
```

OAM Classifications (if specified by the company) will be represented as follows within the *contentMeta* element – note this will be repeated for each relevant OAM:

```
<genre type="rns:oam" qcode="rnsoam:11FY">
    <name>1.1 Annual financial and audit reports</name>
</genre>
```

Related companies associated with the announcement will be represented as follows within the *contentMeta* element – note this will be repeated for each related company (up to a current maximum of four):

```
<related rel="relation:relatedcomp" type="cpnat:organisation" qcode="RNSComp:123">
    <name>FCA short name of the related company</name>
</related>
```

Field	Meaning
/newsItem/contentMeta/ altId[@type='rns:rnsID']	RNS Number for this announcement in the format 0000A. Unique (at minimum) during a working day. Maps from FIX/FAST NewsML 1: /NewsML/NewsItem/Identification/ NewsItemId
/newsItem/contentMeta/ altId[@type='rns:rnsAnnID']	Integer identifier for this announcement, unique for all time.
/newsItem/contentMeta/urgency	4 for regulatory announcements and 8 for non-regulatory announcements Maps from FIX/FAST NewsML 1: /NewsML/NewsItem/NewsManagement/ Urgency/@FormalName
/newsItem/contentMeta/ genre[@type='rns:anncat']/@qcode	Identifies the category of the announcement, in the format "rnsanncat:TLA" where TLA is the three-letter category code for the type of the announcement. For regulatory announcements made under FCA rules, this will be one of the values listed in the FCA handbook *DTR 8 Annex 2 Headline Codes and Categories* – see https://www.handbook.fca.org.uk/handbook/DTR/8/?view=chapter Note that additional announcement categories (for example, announcements made under AIM market regulations) are defined by RNS from time to time, thus the above FCA list is not exhaustive. The possible set of announcement categories are identical to the previous FIX/FAST feed.

Field	Meaning
`/newsItem/contentMeta/` `genre[@type='rns:anncat']/` `name[@xml:lang='en-GB']`	Human-readable announcement category – see above for further details on the possible values of this field. The possible set of announcement categories are identical to the previous FIX/FAST feed. Maps from FIX/FAST NewsML 1: `/NewsML/TopicSet[@FormalName='RNSCategories']/` `Topic/FormalName`
`/newsItem/contentMeta/` `genre[@type='rns:anntype']/@qcod` `e`	Either "rnsanntype:reg" for regulatory announcements or "rnsanntype:nonreg" for non-regulatory announcements Maps from FIX/FAST tag *1473 News Category* Maps from FIX/FAST NewsML 1: `/NewsML/NewsEnvelope/NewsProduct/@FormalName`
`/newsItem/contentMeta/` `subject[@type='cpnat:abstract]`	Fixed value of "medtop:04000000" at this time
`/newsItem/contentMeta/` `genre[@qcode='genre:Press_Releas` `e']`	All announcements have a genre of Press_Release at this time.
`/newsItem/contentMeta/` `genre[@type='rns:oam']`	Where OAM classifications have been provided for an announcement, one or more genres with type 'rns:oam' will be present. The name element contains the type of OAM classification, and the qcode attribute contains a code to identify the type of OAM classification (see example below).
`/newsItem/contentMeta/` `related[@rel='relation:relatedco` `mp']`	Where an announcement references one or more related companies, they are identified by the presence of one or more related elements with rel 'relation:relatedcomp'. The name element specifies the FCA short name of the related company, and the qcode attribute contains a reference to the relevant assert within the document to retrieve the full details of the related company (ISIN, LEI, etc). See example below.

4.5 Company Details

Full company details are provided as one or more *assert* elements, **the first of which will always be the issuer making the announcement**, followed by zero or more additional asserts (one for each related company specified as a `related[@rel="relation:relatedcomp"]` element in the contentMeta):

```
    <assert qcode="RNSComp:1">
        <name>FCA short name of the issuer</name>
        <type qcode="cpnat:organisation" />
        <related rel="crel:comptype" value="Company Type" valuedatatype="xs:string" />
        <related rel="crel:shortname" value="FCA short name of issuer"
valuedatatype="xs:string" />
        <related rel="crel:longname" value="Long name of issuer" valuedatatype="xs:string"
/>
        <related rel="crel:countryOfReg" value="GB" valuedatatype="xs:string"/>
        <related rel="crel:mic" value="M123" valuedatatype="xs:string"/>
        <organisationDetails>
            <hasInstrument symbol="TIDM" type="instrtype:tidm"/>
            <hasInstrument symbol="GB0000000000" type="instrtype:isin"/>
            <hasInstrument symbol="lei" type="instrtype:lei"/>
        </organisationDetails>
    </assert>
    <assert qcode="RNSComp:2">
        <name>Rel Comp Long Name</name>
        <type qcode="cpnat:organisation" />
        <related rel="crel:shortname" value="RelCompShortName" valuedatatype="xs:string" />
        <related rel="crel:longname" value="RelComp Long Name" valuedatatype="xs:string" />
        <related rel="crel:countryOfReg" value="GB" valuedatatype="xs:string"/>
        <related rel="crel:mic" value="M122" valuedatatype="xs:string" />
        <organisationDetails>
            <hasInstrument symbol="TDM2" type="instrtype:tidm" />
            <hasInstrument symbol="GB0000000001" type="instrtype:isin"/>
        </organisationDetails>
    </assert>
```

Field	Meaning
/newsItem/assert/@qcode	Reference used within this document to identify this company
/newsItem/assert/name	FCA short name of the issuer Maps from FIX/FAST tag *6940 News Source* Maps from FIX/FAST NewsML 1: /NewsML/TopicSet[@FormalName='Companies']/ Topic/FormalName[@Scheme='CompanyShortName']
/newsItem/assert/ related[@rel='crel:comptype']/@value	Company's type (not specified for related companies). Maps from FIX/FAST NewsML 1: /NewsML/TopicSet[@FormalName='Companies']/ Topic/Property[@FormalName='CompanyType']
/newsItem/assert/type	Fixed value of cpnat:organisation.
/newsItem/assert/ related[@rel='crel:shortname']/@value	FCA short name of the issuer Maps from FIX/FAST tag *6940 News Source*

Field	Meaning
	Maps from FIX/FAST NewsML 1: `/NewsML/TopicSet[@FormalName='Companies']/ Topic/FormalName[@Scheme='CompanyShortName']`
`/newsItem/assert/ related[@rel='crel:longname']/@value`	Long name of the issuer Maps from FIX/FAST NewsML 1: `/NewsML/TopicSet[@FormalName='Companies']/ Topic/FormalName[@Scheme='CompanyLongName']`
`/newsItem/assert/ related[@rel='crel:countryOfReg']/@value`	Country of register for the issuer. Not specified if crel:comptype is ANG. Maps from FIX/FAST tag *470 Country of Issue*
`/newsItem/assert/ related[@rel='crel:mic']/@value`	Market identifier for the issuer. Not specified if crel:comptype is ANG. Maps from FIX/FAST tag *1301 MarketID*
`/newsItem/assert/ related[@rel='crel:annGroup']/@value`	Code for the Announcer Group. Specified **only** when crel:comptype is ANG. See *Appendix 2 – Announcement Group* Codes for a guide to the values you may see in this field. Maps from FIX/FAST tag *1300 MarketSegmentID*
`/newsItem/assert/related/organisationDetails/ hasInstrument[@type='instrtype:tidm']/@symbol`	TIDM of the issuer. Not specified if crel:comptype is ANG. Maps from FIX/FAST tag *455 SecurityAltID* (with *456 SecurityAltIDSource* = 8) Maps from FIX/FAST NewsML 1: `/NewsML/TopicSet[@FormalName='Companies']/ Topic/FormalName[@Scheme='TIDM']`
`/newsItem/assert/related/organisationDetails/ hasInstrument[@type='instrtype:isin']/@symbol`	ISIN of the issuer. Not specified if crel:comptype is ANG. Maps from FIX/FAST tag *455 SecurityAltID* (with *456 SecurityAltIDSource* = 4)
`/newsItem/assert/related/organisationDetails/ hasInstrument[@type='instrtype:lei']/@symbol`	LEI of the issuer. Not specified for related companies or if crel:comptype is ANG.

Field	Meaning
	Maps from FIX/FAST NewsML 1: /NewsML/TopicSet[@FormalName='Companies']/ Topic/FormalName[@Scheme='LEI']

4.6 Content Set

This contains the full XHTML of the announcement. Maps from FIX/FAST NewsML 1
/NewsML/NewsItem/NewsComponent/NewsComponent/ContentItem/DataContent

```
<contentSet><inlineXML contenttype="application/xhtml" xml:lang="en-GB"><html
xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=us-ascii" />
<title></title>
</head>
<body><div>RNS Number : 0335A</div>  <div>Test One Limited</div>  <div>26 September
2019</div>  <div> </div>
<p>Related companies announcement!</p>
<div style="text-align:center;"><br/>This information is provided by RNS</div><div
style="text-align:center;">The company news service from the London Stock
Exchange</div><div> </div>
END<div> </div><div> </div>ACQEASNKASPNEFF</body>
</html>
</inlineXML>
</contentSet>
```

4.7 Multimedia Content

The following standard HTML tags are supported:

<video>, <audio>, <img>

The source of these tags will point to an AWS Cloudfront url containing the media content

```
<contentSet><inlineXML contenttype="application/xhtml" xml:lang="en-GB"><html
xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=us-ascii" />
<title></title>
</head>
<body><div>RNS Number : 0335A</div>  <div>Test One Limited</div>  <div>28 September
2021</div>  <div> </div>
<p>Related companies announcement!</p>
<p class="a">
<img style="width: 401px;height: 267px;" id="Picture 1"
src="https://dixxh3eame7sx.cloudfront.net/3061/733abf3b-fce2-4a99-a344-32c6295c94cc" />
</p></body>
</html>
</inlineXML>
</contentSet>
```

5 Appendix 1 - Example Announcements

5.1 Normal Announcement

This example shows a fully-populated NewsML-G2 structure for a standard regulatory announcement.

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<newsItem xmlns="https://iptc.org/standards/newsml-g2/"
          xmlns:xsi="http://www.w3.org/2001/XML-instance"
          xsi:schemaLocation="NewsML-G2.xsd"
          guid="urn:newsml:londonstockexchange.com:20191007:0983B:1"
          version="1"
          standard="NewsML-G2"
          standardversion="2.27"
          conformance="power"
          xml:lang="en-GB">
  <catalogRef href="http://www.iptc.org/std/catalog/catalog.IPTC-G2-Standards_32.xml" />
  <rightsInfo>
    <copyrightHolder uri="http://www.londonstockexchange.com/rns">
      <name>RNS</name>
    </copyrightHolder>
    <copyrightNotice>
      Copyright 2019 Regulatory News Service, all rights reserved
    </copyrightNotice>
    <accountable qcode="RNSComp:4" />
  </rightsInfo>
  <itemMeta>
    <itemClass qcode="ninat:text" />
    <provider uri="http://londonstockexchange.com" />
    <service qcode="rnsservice:reg">
      <name>Regulatory News Service - Regulatory</name>
    </service>
    <versionCreated>20191007T180043+0100</versionCreated>
    <pubStatus qcode="stat:usable" />
  </itemMeta>
  <contentMeta>
    <urgency>4</urgency>
    <altId type="rns:rnsID">0983B</altId>
    <altId type="rns:rnsAnnID">10983</altId>
    <contentCreated>20191007T180043+0100</contentCreated>
    <contentModified>20191007T180043+0100</contentModified>
    <located type="cptype:city">
      <name>London</name>
    </located>
    <creator type="cpnat:organisation" qcode="RNSComp:4">
    </creator>
    <infoSource type="cpnat:organisation" qcode="RNSComp:4" />
    <subject type="cpnat:organisation" qcode="RNSComp:4">
      <name>Test One</name>
    </subject>
    <genre type="rns:anncat" qcode="rnsanncat:ACQ">
      <name>ACQ</name>
      <name xml:lang="en-GB">Acquisition</name>
    </genre>
    <genre type="rns:anntype" qcode="rnsanntype:reg" />
```

```xml
      <subject type="cpnat:abstract" qcode="medtop:04000000" />
      <genre qcode="genre:Press_Release" />
      <headline>Acquisition</headline>
    </contentMeta>
    <assert qcode="RNSComp:4">
      <name>Test One</name>
      <type qcode="cpnat:organisation" />
      <related rel="crel:comptype" value="LIS" valuedatatype="xs:string" />
      <related rel="crel:shortname" value="Test One" valuedatatype="xs:string" />
      <related rel="crel:longname" value="Test One Limited" valuedatatype="xs:string" />
      <organisationDetails>
        <hasInstrument symbol="TST1" type="instrtype:tidm"/>
      </organisationDetails>
    </assert>
    <contentSet>
      <inlineXML contenttype="application/xhtml" xml:lang="en-GB">
        <html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
          <head>
            <meta http-equiv="Content-Type" content="text/html; charset=us-ascii" />
            <title></title>
          </head>
          <body>
            <div style="text-align:left;font-family:Arial, Helvetica, sans-serif; font-size: 10pt;">
              <div>RNS Number : 0983B</div>
              <div>Test One Limited</div>
              <div>07 October 2019</div>
              <div> </div>
            </div>
            <p>DataFeed Test - Normal Announcement</p>
            <div style="text-align:left;font-family:Arial, Helvetica, sans-serif; font-size: 10pt;">
              <div>
                <br/>This information is provided by RNS, the news service of the London
Stock Exchange. RNS is approved by the Financial Conduct Authority to act as a Primary
Information Provider in the United Kingdom. Terms and conditions relating to the use and
distribution of this information may apply. For further information, please contact <a
href="mailto:rns@lseg.com">rns@lseg.com</a> or visit <a
href="http://www.rns.com/">www.rns.com</a>.
              </div><div> </div>  END
            </div><div> </div><div> </div>ACQEAKEXESXNFFF
          </body>
        </html>
      </inlineXML>
    </contentSet>
  </newsItem>
```

5.2 Replacement Announcement

This example shows a fully-populated NewsML-G2 structure for a replacement regulatory announcement.

```xml
  <?xml version="1.0" encoding="UTF-8" ?>
  <newsItem xmlns="https://iptc.org/standards/newsml-g2/"
          xmlns:xsi="http://www.w3.org/2001/XML-instance"
          xsi:schemaLocation="NewsML-G2.xsd"
          guid="urn:newsml:londonstockexchange.com:20191007:0990B:2"
          version="1"
          standard="NewsML-G2"
          standardversion="2.27"
          conformance="power"
          xml:lang="en-GB">
    <catalogRef href="http://www.iptc.org/std/catalog/catalog.IPTC-G2-Standards_32.xml" />
```

```xml
<rightsInfo>
  <copyrightHolder uri="http://www.londonstockexchange.com/rns">
    <name>RNS</name>
  </copyrightHolder>
  <copyrightNotice>
    Copyright 2019 Regulatory News Service, all rights reserved
  </copyrightNotice>
  <accountable qcode="RNSComp:4" />
</rightsInfo>
<itemMeta>
  <itemClass qcode="ninat:text" />
  <provider uri="http://londonstockexchange.com" />
  <service qcode="rnsservice:reg">
    <name>Regulatory News Service - Regulatory</name>
  </service>
  <versionCreated>20191007T180512+0100</versionCreated>
  <pubStatus qcode="stat:usable" />
  <firstCreated>20191007T180043+0100</firstCreated>
  <signal qcode="sig:correction" />
  <link rel="irel:previousVersion"
        residref="urn:newsml:londonstockexchange.com:20191007:0983B:2"
        altId="0983B" />
</itemMeta>
<contentMeta>
  <urgency>4</urgency>
  <altId type="rns:rnsID">0990B</altId>
  <altId type="rns:rnsAnnID">10990</altId>
  <contentCreated>20191007T180512+0100</contentCreated>
  <contentModified>20191007T180512+0100</contentModified>
  <located type="cptype:city">
    <name>London</name>
  </located>
  <creator type="cpnat:organisation" qcode="RNSComp:4">
  </creator>
  <infoSource type="cpnat:organisation" qcode="RNSComp:4" />
  <subject type="cpnat:organisation" qcode="RNSComp:4">
    <name>Test One</name>
  </subject>
  <genre type="rns:anncat" qcode="rnsanncat:ACQ">
    <name>ACQ</name>
    <name xml:lang="en-GB">Acquisition</name>
  </genre>
  <genre type="rns:anntype" qcode="rnsanntype:reg" />
  <subject type="cpnat:abstract" qcode="medtop:04000000" />
  <genre qcode="genre:Press_Release" />
  <headline>Acquisition (Replacement)</headline>
</contentMeta>
<assert qcode="RNSComp:4">
  <name>Test One</name>
  <type qcode="cpnat:organisation" />
  <related rel="crel:comptype" value="LIS" valuedatatype="xs:string" />
  <related rel="crel:shortname" value="Test One" valuedatatype="xs:string" />
  <related rel="crel:longname" value="Test One Limited" valuedatatype="xs:string" />
  <organisationDetails>
    <hasInstrument symbol="TST1" type="instrtype:tidm"/>
  </organisationDetails>
</assert>
<contentSet>
  <inlineXML contenttype="application/xhtml" xml:lang="en-GB">
    <html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
      <head>
        <meta http-equiv="Content-Type" content="text/html; charset=us-ascii" />
        <title></title>
```

```
        </head>
        <body>
          <div style="text-align:left;font-family:Arial, Helvetica, sans-serif; font-
size: 10pt;">
            <div>RNS Number : 0990B</div>
            <div>Test One Limited</div>
            <div>07 October 2019</div>
            <div> </div>
          </div>
          <p>DataFeed Test - Replacement Announcement</p>
          <div style="text-align:left;font-family:Arial, Helvetica, sans-serif; font-
size: 10pt;">
            <div>
              <br/>This information is provided by RNS, the news service of the London
Stock Exchange. RNS is approved by the Financial Conduct Authority to act as a Primary
Information Provider in the United Kingdom. Terms and conditions relating to the use and
distribution of this information may apply. For further information, please contact <a
href="mailto:rns@lseg.com">rns@lseg.com</a> or visit <a
href="http://www.rns.com/">www.rns.com</a>.
            </div><div> </div>   END
          </div><div> </div><div> </div>ACQFSLFWWFUSESS
        </body>
      </html>
    </inlineXML>
  </contentSet>
</newsItem>
```

5.3 Announcement with Related Companies

This example shows a fully-populated NewsML-G2 structure for an announcement that
references related companies.

```
<?xml version="1.0" encoding="UTF-8" ?>
<newsItem xmlns="https://iptc.org/standards/newsml-g2/"
          xmlns:xsi="http://www.w3.org/2001/XML-instance"
          xsi:schemaLocation="NewsML-G2.xsd"
          guid="urn:newsml:londonstockexchange.com:20191007:0991B:1"
          version="1"
          standard="NewsML-G2"
          standardversion="2.27"
          conformance="power"
          xml:lang="en-GB">
  <catalogRef href="http://www.iptc.org/std/catalog/catalog.IPTC-G2-Standards_32.xml" />
  <rightsInfo>
    <copyrightHolder uri="http://www.londonstockexchange.com/rns">
      <name>RNS</name>
    </copyrightHolder>
    <copyrightNotice>
      Copyright 2019 Regulatory News Service, all rights reserved
    </copyrightNotice>
    <accountable qcode="RNSComp:4" />
  </rightsInfo>
  <itemMeta>
    <itemClass qcode="ninat:text" />
    <provider uri="http://londonstockexchange.com" />
    <service qcode="rnsservice:reg">
      <name>Regulatory News Service - Regulatory</name>
    </service>
    <versionCreated>20191007T180914+0100</versionCreated>
    <pubStatus qcode="stat:usable" />
  </itemMeta>
  <contentMeta>
    <urgency>4</urgency>
```

```xml
        <altId type="rns:rnsID">0991B</altId>
        <altId type="rns:rnsAnnID">10991</altId>
        <contentCreated>20191007T180914+0100</contentCreated>
        <contentModified>20191007T180914+0100</contentModified>
        <located type="cptype:city">
          <name>London</name>
        </located>
        <creator type="cpnat:organisation" qcode="RNSComp:4">
        </creator>
        <infoSource type="cpnat:organisation" qcode="RNSComp:4" />
        <subject type="cpnat:organisation" qcode="RNSComp:4">
          <name>Test One</name>
          <related rel="relation:relatedcomp" type="cpnat:organisation" qcode="RNSComp:7241">
            <name>CompanyM</name>
          </related>
          <related rel="relation:relatedcomp" type="cpnat:organisation" qcode="RNSComp:7242">
            <name>CompanyN</name>
          </related>
          <related rel="relation:relatedcomp" type="cpnat:organisation" qcode="RNSComp:7243">
            <name>CompanyO</name>
          </related>
        </subject>
        <genre type="rns:anncat" qcode="rnsanncat:ACS">
          <name>ACS</name>
          <name xml:lang="en-GB">Annual Financial Report</name>
        </genre>
        <genre type="rns:anntype" qcode="rnsanntype:reg" />
        <subject type="cpnat:abstract" qcode="medtop:04000000" />
        <genre qcode="genre:Press_Release" />
        <headline>Annual Financial Report</headline>
      </contentMeta>
      <assert qcode="RNSComp:4">
        <name>Test One</name>
        <type qcode="cpnat:organisation" />
        <related rel="crel:comptype" value="LIS" valuedatatype="xs:string" />
        <related rel="crel:shortname" value="Test One" valuedatatype="xs:string" />
        <related rel="crel:longname" value="Test One Limited" valuedatatype="xs:string" />
        <organisationDetails>
          <hasInstrument symbol="TST1" type="instrtype:tidm"/>
        </organisationDetails>
      </assert>
      <assert qcode="RNSComp:7241">
        <name>CompanyM</name>
        <type qcode="cpnat:organisation" />
        <related rel="crel:shortname" value="CompanyM" valuedatatype="xs:string" />
        <related rel="crel:longname" value="CompanyMMMLtd" valuedatatype="xs:string" />
        <related rel="crel:countryOfReg" value="IN" valuedatatype="xs:string"/>
        <related rel="crel:mic" value="XNSE" valuedatatype="xs:string" />
        <organisationDetails>
          <hasInstrument symbol="MER" type="instrtype:tidm" />
          <hasInstrument symbol="IN9023734894" type="instrtype:isin"/>
        </organisationDetails>
      </assert>
      <assert qcode="RNSComp:7242">
        <name>CompanyN</name>
        <type qcode="cpnat:organisation" />
        <related rel="crel:shortname" value="CompanyN" valuedatatype="xs:string" />
        <related rel="crel:longname" value="CompanyNNNLtd" valuedatatype="xs:string" />
        <organisationDetails>
          <hasInstrument symbol="NWQD" type="instrtype:tidm" />
        </organisationDetails>
      </assert>
      <assert qcode="RNSComp:7243">
```

```xml
      <name>CompanyO</name>
      <type qcode="cpnat:organisation" />
      <related rel="crel:shortname" value="CompanyO" valuedatatype="xs:string" />
      <related rel="crel:longname" value="CompanyOOOLtd" valuedatatype="xs:string" />
      <related rel="crel:countryOfReg" value="HK" valuedatatype="xs:string"/>
      <related rel="crel:mic" value="XHKG" valuedatatype="xs:string" />
      <organisationDetails>
        <hasInstrument symbol="TTM" type="instrtype:tidm" />
        <hasInstrument symbol="GR9348380025" type="instrtype:isin"/>
      </organisationDetails>
    </assert>
    <contentSet>
      <inlineXML contenttype="application/xhtml" xml:lang="en-GB">
        <html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
          <head>
            <meta http-equiv="Content-Type" content="text/html; charset=us-ascii" />
            <title></title>
          </head>
          <body>
            <div style="text-align:left;font-family:Arial, Helvetica, sans-serif; font-size: 10pt;">
              <div>RNS Number : 0991B</div>
              <div>Test One Limited</div>
              <div>07 October 2019</div>
              <div> </div>
            </div>
            <p>DataFeed Test - Replacement Announcement</p>
            <div style="text-align:left;font-family:Arial, Helvetica, sans-serif; font-size: 10pt;">
              <div>
                <br/>This information is provided by RNS, the news service of the London
Stock Exchange. RNS is approved by the Financial Conduct Authority to act as a Primary
Information Provider in the United Kingdom. Terms and conditions relating to the use and
distribution of this information may apply. For further information, please contact <a
href="mailto:rns@lseg.com">rns@lseg.com</a> or visit <a
href="http://www.rns.com/">www.rns.com</a>.
              </div><div> </div>  END
            </div><div> </div><div> </div>ACSUBRBRKNARRAA
          </body>
        </html>
      </inlineXML>
    </contentSet>
  </newsItem>
```

5.4 Non-Regulatory Announcement

This example shows a fully-populated NewsML-G2 structure for a non-regulatory announcement.

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<newsItem xmlns="https://iptc.org/standards/newsml-g2/"
        xmlns:xsi="http://www.w3.org/2001/XML-instance"
        xsi:schemaLocation="NewsML-G2.xsd"
        guid="urn:newsml:londonstockexchange.com:20191007:0996B:1"
        version="1"
        standard="NewsML-G2"
        standardversion="2.27"
        conformance="power"
        xml:lang="en-GB">
  <catalogRef href="http://www.iptc.org/std/catalog/catalog.IPTC-G2-Standards_32.xml" />
  <rightsInfo>
    <copyrightHolder uri="http://www.londonstockexchange.com/rns">
      <name>RNS</name>
```

```xml
        </copyrightHolder>
        <copyrightNotice>
          Copyright 2019 Regulatory News Service, all rights reserved
        </copyrightNotice>
        <accountable qcode="RNSComp:7244" />
      </rightsInfo>
      <itemMeta>
        <itemClass qcode="ninat:text" />
        <provider uri="http://londonstockexchange.com" />
        <service qcode="rnsservice:nonreg">
          <name>Regulatory News Service - Non Regulatory</name>
        </service>
        <versionCreated>20191007T181604+0100</versionCreated>
        <pubStatus qcode="stat:usable" />
      </itemMeta>
      <contentMeta>
        <urgency>8</urgency>
        <altId type="rns:rnsID">0996B</altId>
        <altId type="rns:rnsAnnID">10996</altId>
        <contentCreated>20191007T181604+0100</contentCreated>
        <contentModified>20191007T181604+0100</contentModified>
        <located type="cptype:city">
          <name>London</name>
        </located>
        <creator type="cpnat:organisation" qcode="RNSComp:7244">
        </creator>
        <infoSource type="cpnat:organisation" qcode="RNSComp:7244" />
        <subject type="cpnat:organisation" qcode="RNSComp:7244">
          <name>NonRegCont</name>
        </subject>
        <genre type="rns:anncat" qcode="rnsanncat:NRA">
          <name>NRA</name>
          <name xml:lang="en-GB">Non Regulatory (add headline)</name>
        </genre>
        <genre type="rns:anntype" qcode="rnsanntype:nonreg" />
        <subject type="cpnat:abstract" qcode="medtop:04000000" />
        <genre qcode="genre:Press_Release" />
        <headline>Non Regulatory (headline)</headline>
      </contentMeta>
      <assert qcode="RNSComp:7244">
        <name>NonRegCont</name>
        <type qcode="cpnat:organisation" />
        <related rel="crel:comptype" value="IRI" valuedatatype="xs:string" />
        <related rel="crel:shortname" value="NonRegCont" valuedatatype="xs:string" />
        <related rel="crel:longname" value="NonRegContributor" valuedatatype="xs:string" />
        <related rel="crel:countryOfReg" value="GB" valuedatatype="xs:string"/>
        <related rel="crel:mic" value="MIC1" valuedatatype="xs:string"/>
        <organisationDetails>
          <hasInstrument symbol="NRC" type="instrtype:tidm"/>
          <hasInstrument symbol="ISN123456789" type="instrtype:isin"/>
        </organisationDetails>
      </assert>
      <contentSet>
        <inlineXML contenttype="application/xhtml" xml:lang="en-GB">
          <html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
            <head>
              <meta http-equiv="Content-Type" content="text/html; charset=us-ascii" />
              <title></title>
            </head>
            <body>
              <div style="text-align:left;font-family:Arial, Helvetica, sans-serif; font-size: 10pt;">
                <div>RNS Number : 0996B</div>
```

```
            <div>NonRegContributor</div>
            <div>07 October 2019</div>
            <div> </div>
        </div>
        <p>DataFeed Test - Non Regulatory Announcement</p>
        <div style="text-align:left;font-family:Arial, Helvetica, sans-serif; font-
size: 10pt;">
            <div>
                <br/>This information is provided by RNS, the news service of the London
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Information Provider in the United Kingdom. Terms and conditions relating to the use and
distribution of this information may apply. For further information, please contact <a
href="mailto:rns@lseg.com">rns@lseg.com</a> or visit <a
href="http://www.rns.com/">www.rns.com</a>.
            </div><div> </div>  END
        </div><div> </div><div> </div>NRADDLFBKBFFFBX
    </body>
  </html>
 </inlineXML>
 </contentSet>
</newsItem>
```

6 Appendix 2 – Announcement Group Codes

Where an announcement is made by an Announcement Group instead of an issuer, the following list shows the possible values of the related[@rel='crel:annGroup'] field. Note that values can be added to this list between releases of this document, therefore this is provided as a guide only.

Code	Group
ACIT	Association of Investment Trusts
BDM	Board Meeting List
CAA	Civil Aviation Authority
CBI	Confederation of British Industry
DIL	Dividend Information List
DOT	Department of Trade & Industry
DVC	Irish Stock Exchange, Developing Companies Market
EAG	Environment Agency
ETC1	Euro Trading Conversion
EXCH	Exchange
FAC	FT-Actuaries
FRA	Fair Trading Act 1973
GBGB	Gaming Board for Great Britain
GWAV	Gilt Weighted Average
IBA	Independent Broadcasting Authority
IDC	Independent Television Commission
IRSH	Irish Stock Exchange
ITP	Irish Takeover Panel
JSEO	Other
KAM	Commercial Paper/Medium Term Notes
LSE	London Stock Exchange
LYL	Lloyds of London
MMC	Monopolies and Mergers Commission
MRR	Merger (Clearance or Referral)

Code	Group
NAV	Net Asset Value
NOT	AIM (Dealing Notice)
NWI	Flotations/Placings
OFF	O.F.F.E.R.
OFG	O.F.G.A.S.
OFL	O.F.T.E.L.
OFP	Office of the Passenger Rail Franchising Authority
OFR	Office of the Rail Regulator
OFT	Office of Fair Trading
OFW	O.F.W.A.T.
OLR	Office of the National Lottery
OLS	Official List (Dealing Notice)
POST	POSTCOMM
RCM	Radio Communications Agency
RDA	The Radio Authority
RNW	RNS
SFO	Serious Fraud Office
TTM	Test Message
TTP	Takeover Panel
UKG	United Kingdom (Treasury Announcements)