



# Promotions XML Feed

## Documentation

Version 5.1

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## 1 Introduction

### 1.1 Overview

This document has been prepared to provide National Rail Enquiries with a documented schema of the Promotions XML feed which will be distributed to existing and prospective users of the XML feeds.

This document contains the following information:

- High level description of XML feed contents
- Information about the XML feed configuration (i.e. how it is accessed and how long it is cached)
- Outline schema (how the feed is structured and what XML tags it contains)
- Description of the XML tags
- High level user guide (how to interpret the XML tags)

### 1.2 Audience

This document is to be used by National Rail Enquiries and existing and prospective users of XML feed. This document will be updated and distributed following any future update of the XML schema.

## 2 High Level Description

### 2.1 Overview

This chapter defines the structure, and provides a high level description, of the Promotions XML tags. The information contained in each XML tag is described.

This feed contains both promotions available to the public and those only available for view by call centre (e.g. IKB) users, how these are differentiated is defined in this section.

Where a tag is marked mandatory, consumers can rely upon the presence of this tag. Tags not marked mandatory are optional, i.e. consumers should not rely on these elements existing. Sub-tags marked as mandatory are only mandatory if their parent tag exists.

Where a tag is marked multiple, this means that this tag can be repeated, tags not marked as multiple will not be repeated (albeit that the legacy schema may define that they can).

Within each table of tags and sub-tags, each grouped set of tags (root tag and its children, or choice options) is marked in the same background colour (which alternate).

Please note that this document does not fully define all data types.

### 2.2 <PromotionList>

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Tags	Sub tags/Values
<Promotion> (multiple)	See 2.3

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## 2.3 <Promotion>

Tags	Sub tags/Values
<ChangeHistory>	<com:ChangedBy>, <com:LastChangedDate>
<com:ChangedBy> (mandatory)	Name
<com:LastChangedDate> (mandatory)	YYYY-MM-DD Thh:mm:sssZ. This is formatted as Zulu (UTC) time but the time is implemented as GMT/BST (at NRE's request - applies to all date times).
<PromotionIdentifier> (mandatory)	Unique key, the unique promotion identifier for the specified promotion generated by the CMS
<PromotionType>	The type of promotion, contains 1 of the following values: 'ordinaryPromotion', 'rangerRover' or 'alternateFare'.
<PromotionName> (mandatory)	Free text promotion name (min. 1 character)
<Summary> (mandatory)	Free text summary details of the promotion (min. 1 character)
<FulfillmentMethod> (mandatory)	Max 16 characters, this is not mapped to a field in the CMS so is currently always output as an empty element.
<OfferDetails>	<Details>
<Details>	Free text details of the promotion.
<ValidityPeriod> (mandatory)	<com:StartDate>, <com:EndDate>
<com:StartDate> (mandatory)	YYYY-MM-DD. Start date for the promotion.
<com:EndDate>	YYYY-MM-DD. End date for the promotion, if omitted then the promotion is available indefinitely.
<ValidityDayAndTime>	See 2.4.2
<EmbargoWindow> (mandatory)	YYYY-MM-DD. This is not mapped to a field in the CMS so is currently always output as '1900-01-01'.
<AvailableFromDate> (mandatory)	<com:StartDate>, <com:EndDate>
<com:StartDate> (mandatory)	YYYY-MM-DD. Date that the promotion can be purchased from. If this value is unknown (e.g. it is never currently defined for Railcards), then the date will be set to '1900-01-01'.

<com:EndDate>	YYYY-MM-DD. Date until which the promotion can be purchased, if omitted then the promotion is available for purchase indefinitely.
<Region> (multiple)	Region code defining regions where the promotion applies. Each element is restricted to 1 of the following values: BM, BS, CB, GB, HL, LDN, LS, MR, NC, NO, NT, OX, PY, SCOTLAND, SO, TW, WALES
<AreaMap>	<Uri>, <Details>
<Uri> (multiple)	URL to a map(s) of the area covered by the promotion.
<Details> (mandatory)	Free text details of the area covered.
<LeadToc>	2 character ATOC code defining the lead TOC for this promotion.
<ApplicableTocs> (mandatory)	<AllTocs>, <TocRef>
Mandatory choice between single <AllTocs/> element or 1 or more <TocRef>elements:	
<AllTocs> (part of mandatory choice)	Presence of the tag (will always be self-closed) Indicates that the promotion applies to all train operating companies.
<TocRef> (multiple, part of mandatory choice)	2 character ATOC code indicating that the promotion applies to a particular TOC.
<ApplicableOriginStationGroups>	<StationGroupRef>
<StationGroupRef> (multiple, mandatory)	Station group description(s), which are valid origins for the promotion.
<ApplicableOrigins>	<StationRef>
<StationRef> (multiple, mandatory)	Station CRS code(s), which are valid origins for the promotion.
<ApplicableDestinationStationGroups>	<StationGroupRef>
<StationGroupRef> (multiple, mandatory)	Station group description(s), which are valid destinations for the promotion.
<ApplicableDestinations>	<StationRef>
<StationRef> (multiple, mandatory)	Station CRS code(s), which are valid destinations for the promotion.
<ApplicableZoneOfStationGroups>	<StationGroupRef>
<StationGroupRef> (multiple, mandatory)	Station zone description(s), to which the promotion applies.

<ApplicableZoneOfStations>	<StationRef>
<StationRef> (multiple, mandatory)	Station CRS code(s), within the zone to which the promotion applies.
<Reversible> (mandatory)	Boolean, is the promotion reversible? Default is false.
<PromotionFlows>	<Exceptions>, <Flows>
<Exceptions> (mandatory)	<Exception>
<Exception> (multiple)	Complex type, see 2.3.1.
<Flows> (mandatory)	<Flow>
<Flow> (multiple)	Complex type, see 2.3.1.
<TicketValidityConditions>	<Details>
<Details>	Free text describing ticket validity conditions.
<BookingConditions>	<Details>
<Details>	Free text describing booking conditions.
<PurchaseDetails>	<Details>
<Details>	Free text describing purchase details.
<PassengerNumberRestrictions>	<MinAdults>, <MaxAdults>, <MinChildren>, <MaxChildren>
<MinAdults>	
<MaxAdults>	Integer defining minimum or maximum number of passengers who can take advantage of the promotion.
<MinChildren>	
<MaxChildren>	
<PromotionalRailCards>	<PromotionalRailCard>
<PromotionalRailCard> (mandatory, multiple)	<RailCardName>, <RailCardRequirement>
<RailCardName> (mandatory)	Name of railcard that can be used with this promotion.
<RailCardRequirement> (mandatory)	'normalDiscounts' or 'noDiscounts'. Defines the discount to be applied where this promotion is used in conjunction with a railcard.
<PromotionCode>	Promotion code, unrestricted string.
<TocContact> (mandatory)	Free text defining TOC contact, minimum 1 character.
<InternalInfo>	<Details>

<Details>	Internal information free text.
<AdultFares>	<Details>
<Details>	Adult fares free text.
<ChildFares>	<Details>
<Details>	Child fares free text.
<FamilyFares>	<Details>
<Details>	Family fares free text.
<ConcessionFares>	<Details>
<Details>	Concession fares free text.
<GroupFares>	<Details>
<Details>	Group fares free text.
<ViewableBy> (mandatory)	'public' or 'internal'. Defines whether this promotion is viewable to the general public or only to internal users (i.e. call centres). If this field is set to 'internal' then the promotion is only shown on the call centres variant of the feed, where it is 'public', it is available in both feeds.

### 2.3.1 <Exception>, <Flow> Promotion Flows and Exceptions

A collection of complex types defining flows or exceptions to the promotion. The root element name of the structure will determine whether this is an exception or a flow.

Tags	Sub tags/Values
<Origin> (mandatory)	CRS code defining origin of flow or exception.
<Destination> (mandatory)	CRS code defining destination of flow or exception.
Reversible (mandatory)	'y' or 'n', is the flow or exception reversible?
<Station>	CRS code defining specific station flow or exception defines.
<Tocs>	<Toc>
<Toc> (multiple)	TOC code(s) to which the exception or flow applies.

## 2.4 Common Tags

### 2.4.1 <com:Annotation>

Tags	Sub tags/Values
<com>Note> (mandatory)	A string containing the note of the annotation.

### 2.4.2 <ValidityDayAndTime> Opening Hours

'Opening' hours defining the availability of a promotion. This complex type is common to several of the other XML feeds. In other feeds the root element is normally named <com:Open> rather than <ValidityDayAndTime>.

Tags	Sub tags/Values
<com:Annotation>	Note on the opening hours. See 2.4.1
<com:DayAndTimeAvailability> (multiple)	Defines opening hours applicable to a particular day or holiday type. <com:DayTypes>, <com:HolidayTypes>, <com:OpeningHours>

Mandatory choice between <com:DayTypes> and <com:HolidayTypes>

<com:DayTypes> (option for mandatory choice)	<com:MondayToFriday>, <com:Weekend>, <com:MondayToSunday>, <com:Monday>, <com:Tuesday>, <com:Wednesday>, <com:Thursday>, <com:Friday>, <com:Saturday>, <com:Sunday>
--	---

Mandatory choice between following 2 groups of options

<com:MondayToFriday>, <com:Weekend>, <com:MondayToSunday> (options for mandatory choice)	Self-closing elements, existence defines the days of the week that the opening hour period defined in this availability instance applies to. 1 only of these options may be set or...
<com:Monday>, <com:Tuesday>, <com:Wednesday>, <com:Thursday>, <com:Friday>, <com:Saturday>, <com:Sunday> (options for mandatory choice)	Self-closing elements, existence defines the days of the week that the opening hour period defined in this availability instance applies to. 1 or more of these options may be set.
<com:HolidayTypes> (option for mandatory choice)	<com:AllBankHolidays>
<com:AllBankHolidays> (mandatory)	Self-closing element, existence indicates that the opening hours period defined in this availability instance apply to bank holidays. NB: This is part of a choice in the schema, but



this is the only holiday type that will ever be set through the current CMS.

<com:OpeningHours> (mandatory)	<com:TwentyFourHours>, <com:OpenPeriod>, <com:Unavailable>
Mandatory choice between <com:TwentyFourHours>, <com:OpenPeriod> and <com:Unavailable>	
<com:TwentyFourHours> (option for mandatory choice)	Self-closing element, existence indicates that on the applicable day(s) or holiday type, this item is available 24 hours.
<com:OpenPeriod> (multiple, option for mandatory choice)	Opening period(s) applicable to the day(s) or holiday type. <com:StartTime>, <com:EndTime>
<com:StartTime> (mandatory)	Hh:mm:ss.mmmZ. Opening time.
<com:EndTime> (mandatory)	Hh:mm:ss.mmmZ. Closing time.
<com:Unavailable> (option for mandatory choice)	Self-closing element, existence indicates that on the applicable day(s) or holiday type, this item is not available (i.e. closed).

## 2.5 Sample XML Feed File

Appendix A shows a sample Promotions XML Feed File

## 3 XML Feed Configuration

### 3.1 Overview

This chapter describes how the XML feeds are configured and the process for changing this configuration.

### 3.2 XML Feed Configuration File

The XML feeds are configured using REST web services utilising Microsoft WCF. The web services are responsible for managing incoming requests for XML Feeds, and replying with the correct response.

WCF configuration determines the URL patterns that can be used to request a particular XML feed. For example the following URL can be used to request the Promotions XML feeds.

#### Public Promotions;

/xml/30/promotions-publics.xml

#### Call Centre Promotions;

/xml/30/promotions-callcentres.xml

Changes to configuration will need to be authorised by National Rail Enquiries and the consumers of the XML feeds will need to be notified of any changes that may affect their current systems.

### 3.3 Restricting Access to the XML Feeds

Access to the XML feeds is controlled by the National Rail Enquiries firewalls which are located at the hosting provider's two sites. If a new client requires access to the XML feeds they must request that their server's IP addresses are added to the firewalls. This request should be made to National Rail Enquiries.

### 3.4 Pulling the XML Feed data

The XML feed is configured to stay in the server cache for 1 minute, after which it is refreshed.

It's entirely up to the site taking the feed to define how often it's polled. Rather than re-querying the entire feed, the Last-Modified response header can be queried to determine if the feed data has been updated.

## 4 Using the XML Feed

### 4.1 Accessing the XML Feeds

The Promotions XML feeds can be accessed by requesting the following URLs;

#### 4.1.1 Public Promotions

The Public Promotions XML feed contain a full list of public facing promotions for all Train Operating Companies;

**Production:**

<http://internal.nationalrail.co.uk/xml/30/promotions-publics.xml>

**Staging:**

<http://int.web.kb.awsre.co.uk/xml/30/promotions-publics.xml>

#### 4.1.2 Public Promotions

The Call Centre Promotions XML feed contains a full list of public facing and internal promotions for all Train Operating Companies;

**Production:**

<http://internal.nationalrail.co.uk/xml/30/promotions-callcentres.xml>

**Staging:**

<http://int.web.kb.awsre.co.uk/xml/30/promotions-callcentres.xml>

## 5 Document Details

### 5.1 Document Version

Version	Date	Author	Comments
1.0	13 January 2009	Laith Habib	Final
2.0	23 July 2009	James Kinley	Final
3.0	02 September 2009	James Kinley	Final
3.1	22 February	Nick Brown	Updated
3.2	19 October 2011	Alistair Warner- Rowley	Updated
3.3	19 October 2011	Andrew Webber	Review Updates
4.0	20 October 2011	Andrew Webber	Issued
5.0	22/07/2013	Neil Fursey	Issued
5.1	05/05/2015	Lindsay Bleakley	Corrected Staging URLs

## Appendix A Sample Promotions XML File

### A.1 Sample Promotions XML File

```
<?xml version="1.0" encoding="utf-8"?>
<PromotionList xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:com="http://nationalrail.co.uk/xml/common"xmlns:apd="http://www.govtalk.gov.uk/people/AddressAndPersonalDetails" xmlns="http://nationalrail.co.uk/xml/promotion">
<Promotion>
  <ChangeHistory>
    <com:ChangedBy>londonoj</com:ChangedBy>
    <com:LastChangedDate>2013-07-18T13:28:00.000Z</com:LastChangedDate>
  </ChangeHistory>
  <PromotionIdentifier>prd359000a04000200b5da61f1e92b72
</PromotionIdentifier>
  <PromotionType>ordinaryPromotion</PromotionType>
  <PromotionName>
  <![CDATA[ 16-25 Railcard ]]>
  </PromotionName>
  <Summary>
  <![CDATA[
Aged 16-25 or a full time student aged 26 or over? Save 1/3 off most
standard class rail fares throughout Great Britain with a 16-25 Railcard.
]]>
  </Summary>
  <FulfilmentMethod/>
  <OfferDetails>
    <Details>
      <![CDATA[
<p class="MsoNormal">A 16-25 Railcard costs £30 and it'll save you
1/3 on rail fares throughout Great Britain for a whole year,
including all Standard and First Class Advance fares. Take a look at
all the <a href="http://www.16-25railcard.co.uk/eligibility-
benefits/tickets-travel-times/">ticket types</a> you can make
savings on with a 16-25 Railcard.</p> <p class="MsoNormal">You are
eligible if you're aged between 16-25, or over the age of 26 and in
full-time education. Please see our eligibility criteria for more
information.</p> <p class="MsoNormal">There are plenty of ways you
can use your Railcard, for both long and short trips. Better still
```

you can use it anytime on weekends, public holidays and during the week. The only restriction is that if you travel between 04:30 and 09:59 Monday to Friday (except during July and August) a minimum fare of £12 will apply. See minimum fares for more details.

Your Railcard also allows you to take advantage of our great partner offers, giving you exclusive discounts across the UK. See our offers section for all the latest partner offers.

Now you can also buy a 3-year 16-25 Railcard, available only online. It's great value at £70, saving you an extra £20 on the cost of renewing your 1-year Railcard for three consecutive years. You can buy this 3-year Railcard up until the day before your 24th birthday.

Please visit the for more information or [click here](https://secure.16-25railcard.co.uk/16-25.do) to buy now.

```
</Details>
</OfferDetails>
<ValidityPeriod>
  <com:StartDate>2008-05-18</com:StartDate>
</ValidityPeriod>
<EmbargoWindow>
  <com:StartDate>1900-01-01</com:StartDate>
</EmbargoWindow>
<AvailableFromDate>
  <com:StartDate>2008-06-25</com:StartDate>
</AvailableFromDate>
<LeadToc>ZN</LeadToc>
<ApplicableTocs>
  <TocRef>AW</TocRef>
  <TocRef>CC</TocRef>
  <TocRef>CH</TocRef>
  <TocRef>XC</TocRef>
  <TocRef>GR</TocRef>
  <TocRef>EM</TocRef>
  <TocRef>FC</TocRef>
  <TocRef>GW</TocRef>
  <TocRef>HT</TocRef>
  <TocRef>TP</TocRef>
  <TocRef>GX</TocRef>
  <TocRef>GC</TocRef>
  <TocRef>LE</TocRef>
  <TocRef>HC</TocRef>
  <TocRef>HX</TocRef>
  <TocRef>IL</TocRef>
  <TocRef>LM</TocRef>
  <TocRef>LO</TocRef>
  <TocRef>ME</TocRef>
  <TocRef>NT</TocRef>
  <TocRef>SR</TocRef>
  <TocRef>SW</TocRef>
  <TocRef>SE</TocRef>
  <TocRef>SN</TocRef>
  <TocRef>SX</TocRef>
  <TocRef>VT</TocRef>
</ApplicableTocs>
<Reversible>>false</Reversible>
<BookingConditions>
  <Details>
    <![CDATA[
      <p>1. Tickets for your journey should be purchased before boarding
        the train. You must have your Railcard (and Photocard/Permit to
```

travel without Photocard if applicable) with you on your journey and always show the valid Railcard and ticket to rail staff at their request. If you do not show both the Railcard and the ticket, you will be required to pay the full price Standard Single fare for your journey as if no ticket was purchased before starting the journey and in some cases a penalty fare. This does not apply if there was no ticket office at the station at which you began your journey or if the ticket office was closed and there was no ticket machine from which you could buy a discounted ticket.

2. Minimum fare applies to both outward and return journeys between 04:30 and 09:59 Mondays to Fridays (except Public Holidays and in July and August). The minimum fare is £12.

3. Discounts are not available in First Class, except with a First Class Advance ticket or in Weekend First accommodation on some train companies, on payment of the appropriate supplement.

4. In the case of some low price tickets the actual discount with a Railcard may be slightly lower than that advertised.

5. The right is reserved to revise these Conditions and availability of the tickets mentioned here. The Train Companies will endeavour to give three months' notice of any changes before they are due to come into effect.

6. Tickets issued to the holder of the Railcard are issued subject to the National Rail Conditions of Carriage and the Conditions listed here. Copies of the National Rail Conditions of Carriage are available from any staffed station ticket office or online at [View the full terms and conditions](http://www.16-25railcard.co.uk/using-your-card/railcard-terms-conditions/).

</Details>  
</BookingConditions>  
<PurchaseDetails>  
<Details>  
<![CDATA[  
<p class="MsoNormal">To buy online, you will need a valid UK driving licence or passport number to prove you are eligible, and have a digital passport style photo saved on your computer. For more information on buying online, please see our FAQ's.</p> <p class="MsoNormal">Please note online purchase is currently not available for mature students. You will need your educational establishment to sign and stamp your Railcard application form to verify you are a full-time student, so must apply at a station. Pick up a leaflet from any staffed station ticket office.</p> <p class="MsoNormal">You can also buy a 16-25 Railcard at a staffed station ticket office or by calling your nearest train company telesales number. For train company telesales numbers, please contact National Rail Enquiries on: <strong>08457 48 49 50</strong> (calls are charged at local rate).</p> <p><strong>PLEASE NOTE:</strong> When planning a journey with our Journey Planner, in the <em>Passengers and Railcards</em> section simply select the number and type of Railcards that you will be travelling with and click 'Add' after each selection. When the fares are displayed, click on one of the prices to see how much money you've saved by using your Railcard!</p> <p><br/></p> ]]>  
</Details>  
</PurchaseDetails>  
<PromotionCode>YNG</PromotionCode>  
<TocContact>  
<![CDATA[ Paula Redman, ATOC Marketing ]]>  
</TocContact>  
<AdultFares>  
<Details>

```
<![CDATA[
  <p>£30 for a whole year of savings</p> <p>£70 for&nbsp;3 whole year
  of savings</p>
]]>
  </Details>
</AdultFares>
  <ViewableBy>public</ViewableBy>
</Promotion>
</PromotionList>
```