National Roads Authority

DATEX 2 V1.0

SUBSCRIBER GUIDE

JUNE 2013

DOCUMENT CONTROL

Client:	National Roads Authority	
Project:	DATEX 2 v1.0	31999 - 05
Report:	Subscriber Guide	
Date of Issue:	June 2013	
Version:	2.1	
File Reference:	31999 05 MTCC DATEX2 v1.0 Subscriber Guide v2.1.docx	
Originator:	Caz Thomson, Robin Williams, Paul Redfern	
Reviewed by:	Paul Redfern	
Authorised by:	Duncan Elder 	
Circulation:	To File David Laoide-Kemp, NRA Kevin O'Sullivan, ERTO	
Document History:	V2.0 issued 03/07/2008 V2.1 Issued 19/07/2013	
Quality Certification:	ISO9001:2008 certification	

TABLE OF CONTENTS

1. INTRODUCTION

1.1 Scope of Document

This document is intended to provide enough information regarding Datex2 publications to allow subscribers to set up receiver applications with which the publications can be received and processed. Detailed information regarding how the publication templates are built up and examples of the data they may contain are laid out within the document for this purpose.

1.2 Intended Audience

This document is intended to be a guide for all potential subscribers to the Datex2 publications feed.

1.3 Document Structure

The structure of this document is as follows:

- Section 1, this section, details the document scope and structure
- Section 2 lists all of the publications that can be made available via the Publisher application if the underlying data exists to do so.
- Section 3 explains the general format of Datex publications, the method by which they are published and their locations.
- Section 4 describes all of the publications in detail, including the templates upon which each one is based.
- Section 5 outlines XML examples of each of the publications relevant to the NRA Datex feed.

1.4 Document References

The following documents are referred to:

- http://www.DATEX II.eu/DATEX-model/index.htm - the DATEX 2 Data Model Version 1.0.
- http://www.DATEX II.eu/files/DATEXIISchema_1_0_1_0.zip – the DATEX 2 XML Schema Version 1.0
- http://www.DATEX II.eu/files/DATEXIIv1.0-ExchangePSM_v1.0.zip - the DATEX 2 Exchange Platform Specific Model (PSM) Version 1.0.

All of the above documents are publicly available on the official Datex website.

2. PUBLICATIONS

The following table contains a list of all the publications can be made available via the Datex2 feed. The publications that are applicable to the NRA Datex2 publisher application are marked as such.

2.1 Publication Types

There are two types of Datex publications - Dynamic and Static.

Dynamic Publications contain data that changes frequently (e.g. Travel Time Data), whereas Static Publications, represent data that does not (e.g. Travel Time Sites).

The content of both publications is checked approximately every five minutes to see whether the underlying data has changed (see section 3.2.1).

2.2 Publications

Publication Name	Description	Datex Publication Payload	Static/ Dynamic	Applicable?
Current Planned Events	Current (active) planned events. Can include Roadworks and events such as sports and concerts.	SituationPublication	Dynamic	Yes
Future Planned Events	Future planned events. Can include Roadworks and events such as sports and concerts.	SituationPublication	Dynamic	Yes
Unplanned Events	Incidents, roadworks and road conditions that are unplanned.	SituationPublication	Dynamic	Yes
Current Roadworks	Current (active) planned roadworks.	SituationPublication	Dynamic	No
Future Roadworks	Future planned roadworks.	SituationPublication	Dynamic	No
Travel Time Data	Travel times/Journey times.	MeasuredDataPublication	Dynamic	Yes
Traffic Status Data	Data related to the state of traffic flow at the time of publication.	MeasureDataPublication	Dynamic	No
VDS Data	Data from Vehicle Detector Stations.	MeasuredDataPublication	Dynamic	Yes
VMS Settings	Current settings on Variable Message Signs.	SituationPublication	Dynamic	Yes
Weather Data	Readings from weather stations.	MeasureDataPublication	Dynamic	Yes
Travel Time Sites	Details of travel time links.	MeasurementSiteTable	Static	Yes

		Publication		
Traffic Status Sites	Details of the sites at which Traffic Status data are recorded.	MeasurementSiteTable Publication	Static	No
VDS Sites	Details of vehicle Detector Stations.	MeasurementSiteTable Publication	Static	Yes
VMS Locations	Locations of Variable Message Signs.	PredefinedLocations Publication	Static	Yes
Weather Sites	Details of weather detector sites.	MeasurementSiteTable Publication	Static	Yes

3. PUBLICATION FORMAT, LOCATION & METHOD

3.1 Introduction

This section describes the manner in which the data is published and from where it is available.

3.2 Location

Individual publications can be accessed via their sub-directories within the Datex site. The general format of the Datex publication URLs is:

http://datex2.nratraffic.ie/publications/<publication>/content.xml

Example: http://datex2.nratraffic.ie/publications/VDSData/content.xml

For convenience the site includes an index page which provides links to metadata and content for all publications at http://www.n7.ie/d2/publications

For further information regarding the NRA Datex feed, contact WebFeedback@nra.ie.

Each publication comprises 2 files:

- content.xml
- metadata.xml

3.2.1 CONTENT.XML

This file contains the "payload" information – the actual data associated with the publication. It is checked approximately every 5 minutes and is updated every time the underlying source data is changed.

The publication payload of each content.xml file is enclosed in a wrapper which is common to all of the publications. This wrapper template is laid out in the following format for all of the publication content files:

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 {actual payload information for publication}
</d2LogicalModel>
```

The Datex specification stipulates that publications may be enclosed in a SOAP (a protocol for exchanging XML-based messages via HTTP/HTTPS) envelope. This example, and all the templates throughout this document are shown without the SOAP envelope. When a SOAP envelope is used, the template has the format below:

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
```

```
                  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                          xmlns:xsd="http://www.w3.org/2001/XMLSchema">
<soapenv:Body>

<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                        xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"

      xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </supplierIdentification>
 </exchange>
{actual payload information for publication}
</d2LogicalModel>

</soapenv:Body>
</soapenv:Envelope>
```

Publications for NRA Datex **DO NOT** currently utilize SOAP envelopes.

3.2.2 METADATA.XML

This file enables a user of the data to check whether the data has been updated or not (and therefore precludes the necessity of downloading a large file if the content has not changed). It is updated approximately every minute and contains 2 timestamps:

- confirmedTime – the time the content.xml file was last updated.
- confirmationTime – the time the metadata.xml file was last updated. This also serves as a “heartbeat” to enable data users to know whether or not the system is functioning.

3.3 Mechanism

The main features of the publication mechanism are:

- The web server uses the HTTP 1.1 protocol to serve the DATEX 2 Publications to TIH Receivers via the internet via either GET or POST requests, which will both be responded to in the same manner.
- Basic authentication is required to access the publications.
- Gzip and Deflate methods are employed and must be requested via HTTP. An HTTP response of 400 or 406 (Bad Request) will result if this is not the case.
- The publisher uses the Client Pull “Simple HTTP Server” profile and provides both content and metadata files as specified.
- The web server only contains valid data - generated files are validated against the DATEX 2 1.0 Schema (see Section 1.4) before being transferred to the web server.
- The exchange mechanism complies with the DATEX 2 Exchange Platform Specific Model (PSM) Version 1.0.

- The format of the published files complies with the DATEX 2 Data Model Version 1.0 (see Section 1.4).

4. PUBLICATION TEMPLATES

4.1 Introduction

This section provides a detailed description of the publications currently available via the full IBI Datex 2 service, which comprises a generic set of templates on which the publications are built.

4.2 Structure of this Section

Within this section the publications are discussed in terms of the templates that make each of them up.

Each template is laid out in its XML format, with the key replacement tokens outlined in bold text and usually as values within curly braces; e.g. **{FromX}**. Thereafter follows a table of these tokens and their possible replacement values within the context of generic data or per specific publication as might be the case. Where templates are nested, as is the case with location-based templates, a top-down approach is used so that the containing template is described prior to any nested templates within it.

4.3 Template Usage

The templates in this document include entries which are optional. Where there is no data available for any particular record, the relevant part of the publication described by the template will not be present.

4.4 Location Templates

The content described in these templates is nested within other templates where it is necessary to detail the locations affected by the data being published. The TPEG Point Location template is used by the VDS Sites, VMS Locations and Weather Sites publications, the TPEG Linear Location template by the Travel Time Sites and Traffic Status Sites publications, while the Event publications may make use of both.

Certain fields within these templates are mandatory, while others may be optional. Please see the DATEX 2 Data Model Version 1.0 for details of which fields are of which type.

Please also note that some of the Datex elements are only used for certain types of point (TPEGSimplePoint.point, TPEGLinearLocation.to or TPEGLinearLocation.from). The DATEX elements junctionName, tpegILCName1, tpegILCName2, tpegILCName3 and intersectionName are only applicable to points with a tpegLocationType of TPEGJunction. The DATEX elements linkName and nonLinkedPointName are only applicable to points with a tpegLocationType of TPEGNonJunctionPoint.

4.4.1 TPEG POINT LOCATION

```
<tpegpointLocation xsi:type="TPEGSimplePoint">
 <tpegDirection>{FromTPEGDirection}</tpegDirection>
 <tpegLocationType>{FromTPEGLocationType}</tpegLocationType>
 <point xsi:type="{FromTPEGPointType}">
  <pointCoordinates>
   <latitude>{FromY}</latitude>
   <longitude>{FromX}</longitude>
  </pointCoordinates>
  <name>
   <descriptor>
    <value lang="en">{FromJunction}</value>
```

```
    </descriptor>
    <tpegDescriptorType>junctionName</tpegDescriptorType>
   </name>
   <ilc>
    <descriptor>
     <value lang="en">{FromRoad}</value>
    </descriptor>
    <tpegDescriptorType>tpegILCName1</tpegDescriptorType>
   </ilc>
   <ilc>
    <descriptor>
     <value lang="en">{FromIntersectingRoad}</value>
    </descriptor>
    <tpegDescriptorType>tpegILCName2</tpegDescriptorType>
   </ilc>
   <ilc>
    <descriptor>
     <value lang="en">{FromIntersectingRoad2}</value>
    </descriptor>
    <tpegDescriptorType>tpegILCName3</tpegDescriptorType>
   </ilc>
   <otherName>
    <descriptor>
     <value lang="en">{FromPointName}</value>
    </descriptor>
    <tpegDescriptorType>intersectionName</tpegDescriptorType>
   </otherName>
   <name>
    <descriptor>
     <value lang="en">{FromRoad}</value>
    </descriptor>
    <tpegDescriptorType>linkName</tpegDescriptorType>
   </name>
   <name>
    <descriptor>
     <value lang="en">{FromPointName}</value>
    </descriptor>
    <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
   </name>
  </point>
</tpegpointLocation>
```

Token	Value
{FromTPEGDirection}	This is a Datex **TPEGLoc02DirectionTypeEnum**. See the DATEX 2 Data Model Version 1.0 for details of this enumeration.
{FromTPEGLocationType}	The is a Datex **TPEGLoc01SimplePointLocationSubtypeEnum**. See the DATEX 2 Data Model Version 1.0 for details of this enumeration.
{FromTPEGPointType}	See the DATEX 2 Data Model Version 1.0 for details of these classes.
{FromY}	The latitude of the point as a wgs84 co-ordinate.
{FromX}	The longitude of the point as a wgs84 co-ordinate.

{FromJunction}	The value is the number of the junction. This is a string value and may contain letters e.g. **J5**.
{FromRoad}	This value is the road number, for example. This is a string value and will probably contain letters, e.g. **A80, M9, N1**.
{FromIntersectingRoad}	This value is the road number, for example. This is a string value and will probably contain letters, e.g. **A80, M9, N1**.
{FromIntersectingRoad2}	This value is the road number, for example. This is a string value and will probably contain letters, e.g. **A80, M9, N1**.
{FromPointName}	This value contains the point name. This is a string value.

4.4.2 TPEG LINEAR LOCATION

```
<tpeglinearLocation>
 <tpegDirection>{FromTPEGDirection}</tpegDirection>
 <tpegLocationType>segment</tpegLocationType>
 <to xsi:type="{ToTPEGPointType}">
  <pointCoordinates>
   <latitude>{ToY}</latitude>
   <longitude>{ToX}</longitude>
  </pointCoordinates>
  <name>
   <descriptor>
    <value lang="en">{ToJunction}</value>
   </descriptor>
   <tpegDescriptorType>junctionName</tpegDescriptorType>
  </name>
  <ilc>
   <descriptor>
    <value lang="en">{ToRoad}</value>
   </descriptor>
   <tpegDescriptorType>tpegILCName1</tpegDescriptorType>
  </ilc>
  <ilc>
   <descriptor>
    <value lang="en">{ToIntersectingRoad}</value>
   </descriptor>
   <tpegDescriptorType>tpegILCName2</tpegDescriptorType>
  </ilc>
  <ilc>
   <descriptor>
    <value lang="en">{ToIntersectingRoad2}</value>
   </descriptor>
   <tpegDescriptorType>tpegILCName3</tpegDescriptorType>
  </ilc>
  <otherName>
   <descriptor>
    <value lang="en">{ToPointName}</value>
   </descriptor>
   <tpegDescriptorType>intersectionName</tpegDescriptorType>
  </otherName>
  <name>
   <descriptor>
    <value lang="en">{ToRoad}</value>
```

```
    </descriptor>
    <tpegDescriptorType>linkName</tpegDescriptorType>
   </name>
   <name>
    <descriptor>
     <value lang="en">{ToPointName}</value>
    </descriptor>
    <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
   </name>
  </to>
  <from xsi:type="{FromTPEGPointType}">
   <pointCoordinates>
    <latitude>{FromY}</latitude>
    <longitude>{FromX}</longitude>
   </pointCoordinates>
   <name>
    <descriptor>
     <value lang="en">{FromJunction}</value>
    </descriptor>
    <tpegDescriptorType>junctionName</tpegDescriptorType>
   </name>
   <ilc>
    <descriptor>
     <value lang="en">{FromRoad}</value>
    </descriptor>
    <tpegDescriptorType>tpegILCName1</tpegDescriptorType>
   </ilc>
   <ilc>
    <descriptor>
     <value lang="en">{FromIntersectingRoad}</value>
    </descriptor>
    <tpegDescriptorType>tpegILCName2</tpegDescriptorType>
   </ilc>
   <ilc>
    <descriptor>
     <value lang="en">{FromIntersectingRoad2}</value>
    </descriptor>
    <tpegDescriptorType>tpegILCName3</tpegDescriptorType>
   </ilc>
   <otherName>
    <descriptor>
     <value lang="en">{FromPointName}</value>
    </descriptor>
    <tpegDescriptorType>intersectionName</tpegDescriptorType>
   </otherName>
   <name>
    <descriptor>
     <value lang="en">{FromRoad}</value>
    </descriptor>
    <tpegDescriptorType>linkName</tpegDescriptorType>
   </name>
   <name>
    <descriptor>
     <value lang="en">{FromPointName}</value>
    </descriptor>
    <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
   </name>
  </from>
</tpeglinearLocation>
```

Token	Value
{FromTPEGDirection}	This is a Datex **TPEGLoc02DirectionTypeEnum**. See the DATEX 2 Data Model Version 1.0 for details of this enumeration.
{ToTPEGPointType}	See the DATEX 2 Data Model Version 1.0 for details of these classes.
{ToY}	The latitude of the point as a wgs84 co-ordinate.
{ToX}	The latitude of the point as a wgs84 co-ordinate.
{ToJunction}	The value is the number of the junction. This is a string value and may contain letters e.g. **J5**.
{ToRoad}	This value is the road number, for example. This is a string value and will probably contain letters, e.g. **A80, M9, N1**.
{ToIntersectingRoad}	This value is the road number, for example. This is a string value and will probably contain letters, e.g. **A80, M9, N1**.
{ToIntersectingRoad2}	This value is the road number, for example. This is a string value and will probably contain letters, e.g. **A80, M9, N1**.
{ToPointName}	This value contains the point name. This is a string value.
{FromTPEGPointType}	As for **{ToTPEGPointType}**.
{FromJunction}	As for **{ToJunction}**.
{FromRoad}	As for **{ToRoad}**.
{FromIntersectingRoad}	As for **{ToIntersectingRoad}**.
{FromIntersectingRoad2}	As for **{ToIntersectingRoad2}**.
{FromPointName}	As for **{ToPointName}**.

4.5 Publication Templates

These templates detail all of the possible data that may be output for the various publications. As with the Location templates above, certain fields within the templates will be mandatory, while others may be optional. The templates are designed to capture the largest data set available to each publication and it is therefore very likely that the NRA Datex feed does not output every field. In the underlying tables below each publication the fields that are in use for each template have been indicated.

The availability column in the following tables indicates whether the fields are available within the NRA publication. If all the fields are marked as unavailable then the publication itself is not available as part of the current NRA Datex2 feed.

4.5.1 CURRENT PLANNED EVENTS

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="SituationPublication" lang="eng">
  <publicationTime>{TIMESTAMP}</publicationTime>
  <publicationCreator>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </publicationCreator>

  <situation id="{SituationRecordId}_S">
   <overallImpact>{OverallImpact}</overallImpact>
   <headerInformation>
    <confidentiality>noRestriction</confidentiality>
    <informationStatus>real</informationStatus>
   </headerInformation>
   <situationRecord xsi:type="{SituationRecordType}"
id="{SituationRecordId}">

<situationRecordCreationReference>{SituationRecordId}</situationRecordCreat
ionReference>

<situationRecordCreationTime>{CreationTime}</situationRecordCreationTime>
    <situationRecordVersion>{Version}</situationRecordVersion>
    <situationRecordVersionTime>{VersionTime}</situationRecordVersionTime>

<situationRecordFirstSupplierVersionTime>{VersionTime}</situationRecordFirs
tSupplierVersionTime>

<probabilityOfOccurrence>{ProbabilityOfOccurrence}</probabilityOfOccurrence
>
    <sourceInformation>
     <sourceIdentification>{NATIONAL_IDENTIFIER}</sourceIdentification>
     <sourceName>
      <value lang="en">{NATIONAL_IDENTIFIER}</value>
     </sourceName>
     <sourceType>roadAuthorities</sourceType>
    </sourceInformation>
    <validity>
     <validityStatus>{ValidityStatus}</validityStatus>
     <validityTimeSpecification>
      <overallStartTime>{OverallStartTime}</overallStartTime>
      <overallEndTime>{OverallEndTime}</overallEndTime>
     </validityTimeSpecification>
    </validity>
    <impact>
     <impactOnTraffic>{ImpactOnTraffic}</impactOnTraffic>
     <impactDetails>

<numberOfLanesRestricted>{NumberOfLanesRestricted}</numberOfLanesRestricted
>

<numberOfOperationalLanes>{NumberOfOperationalLanes}</numberOfOperationalLa
nes>
```

```
<trafficRestrictionType>{TrafficRestrictionType}</trafficRestrictionType>
     </impactDetails>
     <delays>
      <delayCoded>{DelayCoded}</delayCoded>
      <delaysType>{DelaysType}</delaysType>
     </delays>
    </impact>
    <cause xsi:type="NonManagedCause">
     <causeDescription>
      <value lang="en">{CauseDescription}</value>
     </causeDescription>
    </cause>
    <generalPublicComment>
     <comment>
      <value lang="en">{GeneralPublicComment}</value>
     </comment>
    </generalPublicComment>
    <groupOfLocations>
     <locationContainedInGroup xsi:type="Point">
      <supplementaryPositionalDescription>
       <lanes>{HardShoulderAffected}</lanes>
       <lanes>{Lane1Affected}</lanes>
       <lanes>{Lane2Affected}</lanes>
       <lanes>{Lane3Affected}</lanes>
       <lanes>{Lane4Affected}</lanes>
       <lanes>{Lane5Affected}</lanes>
       <lanes>{Lane6Affected}</lanes>
       <lanes>{AllLanesAffected}</lanes>
       <locationDescriptor>{LocationDescriptor}</locationDescriptor>
      </supplementaryPositionalDescription>
      {TPEG_POINT_LOCATION}
     </locationContainedInGroup>
     <locationContainedInGroup xsi:type="Linear">
      <supplementaryPositionalDescription>
       <lanes>{HardShoulderAffected}</lanes>
       <lanes>{Lane1Affected}</lanes>
       <lanes>{Lane2Affected}</lanes>
       <lanes>{Lane3Affected}</lanes>
       <lanes>{Lane4Affected}</lanes>
       <lanes>{Lane5Affected}</lanes>
       <lanes>{Lane6Affected}</lanes>
       <lanes>{AllLanesAffected}</lanes>
       <locationDescriptor>{LocationDescriptor}</locationDescriptor>
      </supplementaryPositionalDescription>
      {TPEG_LINEAR_LOCATION}
     </locationContainedInGroup>
    </groupOfLocations>
    <operatorActionStatus>{OperatorActionStatus}</operatorActionStatus>
    <effectOnRoadLayout>{EffectOnRoadLayout}</effectOnRoadLayout>
    <effectOnRoadLayout>{CarriagewayClosures}</effectOnRoadLayout>
    <effectOnRoadLayout>{Contraflow}</effectOnRoadLayout>
    <effectOnRoadLayout>{LaneClosures}</effectOnRoadLayout>
    <effectOnRoadLayout>{NarrowLanes}</effectOnRoadLayout>
    <effectOnRoadLayout>{RoadLayoutUnchanged}</effectOnRoadLayout>
    <effectOnRoadLayout>{TemporaryTrafficLights}</effectOnRoadLayout>
     <urgentRoadworks>{UrgentRoadworks}</urgentRoadworks>
    <{DatexEnumType}>{DatexEnumValue}</{DatexEnumType}>
   </situationRecord>
  </situation>

 </payloadPublication>
```

```
</d2LogicalModel>
```

Token	Value	Available?
{COUNTRY}	This is the country from which the Datex publication originates.	Yes
{NATIONAL_IDENTIFIER}	The identifier that describes the national organisation from which the Datex publication originates.	Yes
{TIMESTAMP}	The timestamp of the publication. The format is as the following example: **2008-06-13T14:55:01+01:00**	Yes
{SituationRecordId}	Derived id of the format: *Alpha Character_Alphanumeric String.*	Yes
{OverallImpact}	The overall assessment of the impact (in terms of severity) that the situation as a whole is having, or will have, on the traffic flow as perceived by the supplier. Uses the Datex **OverallImpactEnum**. See the DATEX 2 Data Model Version 1.0 for details of this enumeration	Yes
{SituationRecordType}	See the DATEX 2 Data Model Version 1.0 for details of these classes.	Yes
{CreationTime}	The value of **CreationTime**. This is the date and time that the publication was created.	Yes
{Version}	This is the version number of the individual event within the publication and is a numeric, integer value.	Yes
{VersionTime}	The value of **VersionTime**. This is the date and time that the specific event version was created.	Yes
{ProbabilityOfOccurrence}	Uses the Datex **ProbablityOfOccurrenceEnum**. See the DATEX 2 Data Model Version 1.0 for details of this enumeration.	Yes
{ValidityStatus}	Specification of validity, either explicitly overriding the validity time specification or confirming it. Uses the Datex **ValidityStatusEnum**. See the DATEX 2 Data Model Version 1.0 for details of this enumeration.	Yes
{OverallStartTime}	The date and overall start time of the event.	Yes

{OverallEndTime}	The date and overall end time of the event.	Yes
{ImpactOnTraffic}	Uses the Datex **TrafficStatusEnum**. See the DATEX 2 Data Model Version 1.0 for details of this enumeration.	No
{NumberOfLanesRestricted}	Numeric value to represent the lanes affected.	Yes
{NumberOfOperationalLanes}	Numeric value to represent the operational lanes.	Yes
{TrafficRestrictionType}	Datex **TrafficRestrictionTypeEnum.** See the DATEX 2 Data Model Version 1.0 for details of this enumeration.	Yes
{DelayCoded}	Datex **DelayCodeEnum**. See the DATEX 2 Data Model Version 1.0 for details of this enumeration.	No
{DelaysType}	Datex **DelaysTypeEnum**. See the DATEX 2 Data Model Version 1.0 for details of this enumeration.	No
{CauseDescription}	Description of a cause which is not managed by the operator (e.g. an off network cause).	Yes
{GeneralPublicComment}	Free text description of the event.	Yes
{HardShoulderAffected}	If this is non-null it will correspond to the Datex **LanesEnum** value of **hardShoulder** to indicate that this has been affected by the event. See the DATEX 2 Data Model Version 1.0 for details of this enumeration.	Yes
{Lane1Affected}..{Lane6Affected}	If any of these are non-null they will correspond to the Datex **LanesEnum** values of **lane1** to **lane6** to indicate that the lane affected by the event. See the DATEX 2 Data Model Version 1.0 for details of this enumeration.	Yes
{AllLanesAffected}	If this is not null then will respond to the Datex LanesEnum value of **allLanesCompleteCarriageway**. . See the DATEX 2 Data Model Version 1.0 for details of this enumeration.	Yes
{LocationDescriptor}	Specifies a descriptor which helps to identify the specific location. This uses the Datex **LocationDescriptorEnum.** See the DATEX 2 Data Model Version 1.0 for details of this enumeration.	Yes

{TPEG_POINT_LOCATION}	See 4.4.1.	Yes. See XML example in section 5.1 for nested template field usage.
{OperatorActionStatus}	The Status of the defined operator action. Uses the Datex **OperatorActionStatusEnum**. See the DATEX 2 Data Model Version 1.0 for details of this enumeration.	Yes
{EffectOnRoadLayout}	The effect which roadworks have or are expected to have on the road. This value can be used to correspond to one of the Datex **EffectOnRoadLayoutEnum** values that are not specifically indicated in the template. See the DATEX 2 Data Model Version 1.0 for details of this enumeration.	Yes
{CarriagewayClosures}	If this is non-null then it corresponds to the **EffectonRoadLayoutEnum** value of **carriagewayClosures**.	No
{Contraflow}	If this is non-null then it corresponds to the **EffectonRoadLayoutEnum** value of **contraflow**.	No
{LaneClosures}	If this is non-null then it corresponds to the **EffectonRoadLayoutEnum** value of **laneClosures**.	No
{NarrowLanes}	If this is non-null then it corresponds to the **EffectonRoadLayoutEnum** value of **narrowLanes**.	No
{RoadLayoutUnchanged}	If this is non-null then it corresponds to the **EffectonRoadLayoutEnum** value of **roadLayoutUnchanged**.	No
{TemporaryTrafficLights}	If this is non-null then it corresponds to the **EffectonRoadLayoutEnum** value of **temporaryTrafficLights.**	No
{UrgentRoadworks}	Applicable to roadworks events. Boolean value.	No
{DatexEnumType}	Represents the name of the tag containing the "sub-type" enumeration for the Situation Record. See the DATEX 2 Data Model Version 1.0 for details of these enumerations.	Yes
{DatexEnumValue}	Represents the value of the	Yes

	DatexEnumType tag.	

4.5.2 FUTURE PLANNED EVENTS

Please refer to the template for Current Planned Events for the description of each token. The following table indicates only whether the fields are available within the NRA publication.

Token	Available?
{COUNTRY}	Yes
{NATIONAL_IDENTIFIER}	Yes
{TIMESTAMP}	Yes
{SituationRecordId}	Yes
{OverallImpact}	Yes
{SituationRecordType}	Yes
{CreationTime}	Yes
{Version}	Yes
{VersionTime}	Yes
{ProbabilityOfOccurrence}	Yes
{ValidityStatus}	Yes
{OverallStartTime}	Yes
{OverallEndTime}	Yes
{ImpactOnTraffic}	No
{NumberOfLanesRestricted}	Yes
{NumberOfOperationalLanes}	Yes
{TrafficRestrictionType}	Yes
{DelayCoded}	No
{DelaysType}	No
{CauseDescription}	Yes
{GeneralPublicComment}	Yes
{HardShoulderAffected}	Yes
{Lane1Affected}..{Lane6Affected}	Yes
{AllLanesAffected}	Yes

{LocationDescriptor}	Yes
{TPEG_POINT_LOCATION}	Yes. See XML example in section 5.2 for nested template field usage.
{OperatorActionStatus}	Yes
{EffectOnRoadLayout}	Yes
{CarriagewayClosures}	No
{Contraflow}	No
{LaneClosures}	No
{NarrowLanes}	No
{RoadLayoutUnchanged}	No
{TemporaryTrafficLights}	No
{UrgentRoadworks}	No
{DatexEnumType}	Yes
{DatexEnumValue}	Yes

4.5.3 UNPLANNED EVENTS

Please refer to the template for Current Planned Events for the description of each token. The following table indicates only whether the fields are available within the NRA publication.

Token	Available?
{COUNTRY}	Yes
{NATIONAL_IDENTIFIER}	Yes
{TIMESTAMP}	Yes
{SituationRecordId}	Yes
{OverallImpact}	Yes
{SituationRecordType}	Yes
{CreationTime}	Yes
{Version}	Yes
{VersionTime}	Yes
{ProbabilityOfOccurrence}	Yes

{ValidityStatus}	Yes
{OverallStartTime}	Yes
{OverallEndTime}	No
{ImpactOnTraffic}	No
{NumberOfLanesRestricted}	Yes
{NumberOfOperationalLanes}	Yes
{TrafficRestrictionType}	Yes
{DelayCoded}	No
{DelaysType}	No
{CauseDescription}	Yes
{GeneralPublicComment}	Yes
{HardShoulderAffected}	Yes
{Lane1Affected}..{Lane6Affected}	Yes
{AllLanesAffected}	Yes
{LocationDescriptor}	Yes
{TPEG_POINT_LOCATION}	Yes. See XML example in section 5.3 for nested template field usage.
{OperatorActionStatus}	Yes
{EffectOnRoadLayout}	Yes
{CarriagewayClosures}	No
{Contraflow}	No
{LaneClosures}	No
{NarrowLanes}	No
{RoadLayoutUnchanged}	No
{TemporaryTrafficLights}	No
{UrgentRoadworks}	No
{DatexEnumType}	Yes
{DatexEnumValue}	Yes

4.5.4 CURRENT ROADWORKS

Please refer to the template for Current Planned Events for the description of each token. This publication is not available as part of the current NRA Datex feed.

4.5.5 FUTURE ROADWORKS

Please refer to the template for Current Planned Events for the description of each token. This publication is not available as part of the current NRA Datex feed.

4.5.6 TRAVEL TIME DATA

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="MeasuredDataPublication" lang="eng">
  <publicationTime>{TIMESTAMP}</publicationTime>
  <publicationCreator>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </publicationCreator>

<measurementSiteTableReference>TravelTimeSites</measurementSiteTableReferen
ce>
  <headerInformation>
   <confidentiality>noRestriction</confidentiality>
   <informationStatus>real</informationStatus>
  </headerInformation>

  <siteMeasurements>

<measurementSiteReference>{MeasurementSiteReference}</measurementSiteRefere
nce>

<measurementTimeDefault>{MeasurementTimeDefault}</measurementTimeDefault>
   <measuredValue index="1">
    <basicDataValue xsi:type="TravelTimeValue">
     <fault>{Fault}</fault>
     <faultReason>
      <value lang="en">{FaultReason}</value>
     </faultReason>

<numberOfIncompleteInputs>{NumberOfIncompleteInputs}</numberOfIncompleteInp
uts>

<numberOfInputValuesUsed>{NumberOfInputValuesUsed}</numberOfInputValuesUsed
>
     <period>{Period}</period>

<supplierCalculatedDataQuality>{SupplierCalculatedDataQuality}</supplierCal
culatedDataQuality>
     <travelTime>{TravelTime}</travelTime>
```

```
     <freeFlowSpeed>{FreeFlowSpeed}</freeFlowSpeed>
     <freeFlowTravelTime>{FreeFlowTravelTime}</freeFlowTravelTime>

<normallyExpectedTravelTime>{NormallyExpectedTravelTime}</normallyExpectedT
ravelTime>
    </basicDataValue>
   </measuredValue>
  </siteMeasurements>

 </payloadPublication>
</d2LogicalModel>
```

Token	Value	Available?
{COUNTRY}	This is the country from which the Datex publication originates.	Yes
{NATIONAL_IDENTIFIER}	The identifier that describes the national organisation from which the Datex publication originates.	Yes
{TIMESTAMP}	The timestamp of the publication. The format is as the following example: **2008-06-13T14:55:01+01:00**	Yes
{MeasurementSiteReference}	This is a unique id created for each record at the time of publication. Alphanumeric.	Yes
{MeasurementTimeDefault}	This is set to the current date and time at which the publication is produced.	Yes
{Fault}	Boolean value. Indication of whether the value is deemed to be faulty by the supplier. If not present then the data value is assumed to be correct. This may be used when automatic fault detection information relating to sensors is available.	Yes
{FaultReason}	The reason why the value is deemed to be faulty by the supplier.	Yes
{NumberOfIncompleteInputs}	The number of inputs detected but not completed during the sampling or measurement period. E.g. vehicles detected entering but not exiting the detection zone. Numeric integer value (non-negative).	No
{NumberOfInputValuesUsed}	The number of input values used in the sampling or measurement period to determine the data value. Numeric integer value (non-negative).	No
{Period}	The elapsed time between the beginning and the end of the sampling or measurement period in seconds.	Yes

{SupplierCalculatedDataQuality}	A measure (percentage value) of data quality assigned to the value by the supplier. 100% equates to ideal/perfect quality.	No
{TravelTime}	Travel time between the measurement site locations in seconds.	Yes
{FreeFlowSpeed}	The free flow speed in kilometres expected under ideal conditions, corresponding to the **{FreeFlowTravelTime}**.	Yes
{FreeFlowTravelTime}	The travel time, in seconds, which would be expected under ideal free flow conditions.	Yes
{NormallyExpectedTravelTime}	The travel time, in seconds, which is expected for the given **{Period}** and any known quasi-static conditions (e.g. long-term roadworks). This value is derived from historical analysis.	Yes

4.5.7 TRAFFIC STATUS DATA

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="MeasuredDataPublication" lang="eng">
  <publicationTime>{TIMESTAMP}</publicationTime>
  <publicationCreator>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </publicationCreator>

<measurementSiteTableReference>TrafficStatusSites</measurementSiteTableRefe
rence>
  <headerInformation>
   <confidentiality>noRestriction</confidentiality>
   <informationStatus>real</informationStatus>
  </headerInformation>

  <siteMeasurements>

<measurementSiteReference>{MeasurementSiteReference}</measurementSiteRefere
nce>

<measurementTimeDefault>{MeasurementTimeDefault}</measurementTimeDefault>
   <measuredValue index="1">
```

```
    <basicDataValue xsi:type="TrafficStatusValue">
     <fault>{Fault}</fault>
     <faultReason>
      <value lang="en">{FaultReason}</value>
     </faultReason>

<numberOfIncompleteInputs>{NumberOfIncompleteInputs}</numberOfIncompleteInp
uts>

<numberOfInputValuesUsed>{NumberOfInputValuesUsed}</numberOfInputValuesUsed
>
     <period>{Period}</period>

<supplierCalculatedDataQuality>{SupplierCalculatedDataQuality}</supplierCal
culatedDataQuality>
     <trafficStatus>{TrafficStatus}</trafficStatus>
    </basicDataValue>
   </measuredValue>
  </siteMeasurements>

 </payloadPublication>
</d2LogicalModel>
```

Token	Value	Available?
{COUNTRY}	This is the country from which the Datex publication originates.	No
{NATIONAL_IDENTIFIER}	The identifier that describes the national organisation from which the Datex publication originates.	No
{TIMESTAMP}	The timestamp of the publication. The format is as the following example: **2008-06-13T14:55:01+01:00**	No
{MeasurementSiteReference}	This is a unique id created for each record at the time of publication. Alphanumeric.	No
{MeasurementTimeDefault}	This is set to the current date and time at which the publication is produced.	No
{Fault}	Boolean value. Indication of whether the value is deemed to be faulty by the supplier. If not present then the data value is assumed to be correct. This may be used when automatic fault detection information relating to sensors is available.	No
{FaultReason}	The reason why the value is deemed to be faulty by the supplier.	No
{NumberOfIncompleteInputs}	The number of inputs detected but not completed during the sampling or measurement period. E.g. vehicles detected entering but not exiting the	No

	detection zone. Numeric integer value (non-negative).	
{NumberOfInputValuesUsed}	The number of input values used in the sampling or measurement period to determine the data value. Numeric integer value (non-negative).	No
{Period}	The elapsed time between the beginning and the end of the sampling or measurement period in seconds.	No
{SupplierCalculatedDataQuality}	A measure (percentage value) of data quality assigned to the value by the supplier. 100% equates to ideal/perfect quality.	No
{TrafficStatus}	Datex **TrafficStatusEnum**. See the DATEX 2 Data Model Version 1.0 for details of this enumeration.	No

4.5.8 VDSDATA

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="MeasuredDataPublication" lang="eng">
  <publicationTime>{TIMESTAMP}</publicationTime>
  <publicationCreator>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </publicationCreator>
  <measurementSiteTableReference>VDSSites</measurementSiteTableReference>
  <headerInformation>
   <confidentiality>noRestriction</confidentiality>
   <informationStatus>real</informationStatus>
  </headerInformation>

  <siteMeasurements>

<measurementSiteReference>{MeasurementSiteReference}</measurementSiteRefere
nce>

<measurementTimeDefault>{MeasurementTimeDefault}</measurementTimeDefault>
   <measuredValue index="1">
    <basicDataValue xsi:type="TrafficFlow">
     <fault>{Fault}</fault>
     <faultReason>
      <value lang="en">{FaultReason}</value>
     </faultReason>
```

```
<numberOfIncompleteInputs>{NumberOfIncompleteInputs}</numberOfIncompleteInp
uts>

<numberOfInputValuesUsed>{NumberOfInputValuesUsed}</numberOfInputValuesUsed
>
     <period>{Period}</period>

<supplierCalculatedDataQuality>{SupplierCalculatedDataQuality}</supplierCal
culatedDataQuality>
     <vehicleFlow>{VehicleFlow}</vehicleFlow>
    </basicDataValue>
   </measuredValue>
   <measuredValue index="2">
    <basicDataValue xsi:type="TrafficConcentration">
     <fault>{Fault}</fault>
     <faultReason>
      <value lang="en">{FaultReason}</value>
     </faultReason>

<numberOfIncompleteInputs>{NumberOfIncompleteInputs}</numberOfIncompleteInp
uts>

<numberOfInputValuesUsed>{NumberOfInputValuesUsed}</numberOfInputValuesUsed
>
     <period>{Period}</period>

<supplierCalculatedDataQuality>{SupplierCalculatedDataQuality}</supplierCal
culatedDataQuality>
     <occupancy>{Occupancy}</occupancy>
    </basicDataValue>
   </measuredValue>
   <measuredValue index="3">
    <basicDataValue xsi:type="TrafficSpeed">
     <fault>{Fault}</fault>
     <faultReason>
      <value lang="en">{FaultReason}</value>
     </faultReason>

<numberOfIncompleteInputs>{NumberOfIncompleteInputs}</numberOfIncompleteInp
uts>

<numberOfInputValuesUsed>{NumberOfInputValuesUsed}</numberOfInputValuesUsed
>
     <period>{Period}</period>

<supplierCalculatedDataQuality>{SupplierCalculatedDataQuality}</supplierCal
culatedDataQuality>
     <averageVehicleSpeed>{AverageVehicleSpeed}</averageVehicleSpeed>
    </basicDataValue>
   </measuredValue>
  </siteMeasurements>

 </payloadPublication>
</d2LogicalModel>
```

Token	Value	Available?
{COUNTRY}	This is the country from which the Datex	Yes

	publication originates.	
{NATIONAL_IDENTIFIER}	The identifier that describes the national organisation from which the Datex publication originates.	Yes
{TIMESTAMP}	The timestamp of the publication. The format is as the following example: **2008-06-13T14:55:01+01:00**	Yes
{MeasurementSiteReference}	This is a unique id created for each record at the time of publication. Alphanumeric.	Yes
{MeasurementTimeDefault}	This is set to the current date and time at which the publication is produced.	Yes
{Fault}	Boolean value. Indication of whether the value is deemed to be faulty by the supplier. If not present then the data value is assumed to be correct. This may be used when automatic fault detection information relating to sensors is available.	Yes
{FaultReason}	The reason why the value is deemed to be faulty by the supplier.	Yes
{NumberOfIncompleteInputs}	The number of inputs detected but not completed during the sampling or measurement period. E.g. vehicles detected entering but not exiting the detection zone. Numeric integer value (non-negative).	No
{NumberOfInputValuesUsed}	The number of input values used in the sampling or measurement period to determine the data value. Numeric integer value (non-negative).	No
{Period}	The elapsed time between the beginning and the end of the sampling or measurement period in seconds.	Yes
{SupplierCalculatedDataQuality}	A measure (percentage value) of data quality assigned to the value by the supplier. 100% equates to ideal/perfect quality.	No
{VehicleFlow}	An averaged measurement of the flow rate defined in terms of the number of vehicles passing the specified measurement point.	Yes
{Occupancy}	An averaged measurement of the percentage of time that a section of road at the specified measurement point is occupied by vehicles.	Yes
{AverageVehicleSpeed}	An averaged measurement of the speed of vehicles at the specified measurement	Yes

	point.	

4.5.9 VMS SETTINGS

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="SituationPublication" lang="eng">
  <publicationTime>{TIMESTAMP}</publicationTime>
  <publicationCreator>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </publicationCreator>

  <situation id="{SituationRecordId}_S">
   <headerInformation>
    <confidentiality>noRestriction</confidentiality>
    <informationStatus>real</informationStatus>
   </headerInformation>
   <situationRecord xsi:type="VariableMessageSignSetting"
id="{SituationRecordId}">
    <situationRecordCreationTime>{DateTime}</situationRecordCreationTime>
    <situationRecordVersion>1</situationRecordVersion>
    <situationRecordVersionTime>{DateTime}</situationRecordVersionTime>

<situationRecordFirstSupplierVersionTime>{DateTime}</situationRecordFirstSu
pplierVersionTime>
    <probabilityOfOccurrence>certain</probabilityOfOccurrence>
    <sourceInformation>
     <sourceIdentification>{NATIONAL_IDENTIFIER}</sourceIdentification>
     <sourceName>
      <value lang="en">{NATIONAL_IDENTIFIER}</value>
     </sourceName>
     <sourceType>roadAuthorities</sourceType>
    </sourceInformation>
    <validity>
     <validityStatus>active</validityStatus>
     <validityTimeSpecification>
      <overallStartTime>{DateTime}</overallStartTime>
     </validityTimeSpecification>
    </validity>
    <groupOfLocations xsi:type="GroupOfLocationsByReference">
     <locationContainedInGroup xsi:type="LocationByReference">

<predefinedLocationReference>{PredefinedLocationReference}</predefinedLocat
ionReference>
     </locationContainedInGroup>

<predefinedLocationSetReference>{PredefinedLocationSetReference}</predefine
dLocationSetReference>
    </groupOfLocations>
```

```
    <pictogramListEntry>{Pictogram1}</pictogramListEntry>
    <pictogramListEntry>{Pictogram2}</pictogramListEntry>
    <pictogramListEntry>{Pictogram3}</pictogramListEntry>
    <pictogramListEntry>{Pictogram4}</pictogramListEntry>
     <numberOfCharacters>{NumberOfCharacters}</numberOfCharacters>
    <numberOfRows>{NumberOfRows}</numberOfRows>
    <vmsFault>{VMSFault}</vmsFault>
    <vmsIdentifier>{PredefinedLocationReference}</vmsIdentifier>
    <vmsLegend>{VMSLegend}</vmsLegend>
    <vmsLegend>{VMSLegend2}</vmsLegend>
    <vmsLegend>{VMSLegend3}</vmsLegend>
    <vmsLegend>{VMSLegend4}</vmsLegend>
    <vmsLegend>{VMSLegend5}</vmsLegend>
    <vmsLegend>{VMSLegend6}</vmsLegend>
    <vmsLegend>{VMSLegend7}</vmsLegend>
    <vmsLegend>{VMSLegend8}</vmsLegend>
    <vmsLegend>{VMSLegend9}</vmsLegend>
    <vmsLegend>{VMSLegend10}</vmsLegend>
    <vmsLegend>{VMSLegend11}</vmsLegend>
    <vmsLegend>{VMSLegend12}</vmsLegend>
    <vmsLegend>{VMSLegend13}</vmsLegend>
    <vmsLegend>{VMSLegend14}</vmsLegend>
    <vmsLegend>{VMSLegend15}</vmsLegend>
    <vmsLegend>{VMSLegend16}</vmsLegend>
    <vmsLegend>{VMSLegend17}</vmsLegend>
    <vmsLegend>{VMSLegend18}</vmsLegend>
    <vmsLegend>{VMSLegend19}</vmsLegend>
    <vmsLegend>{VMSLegend20}</vmsLegend>
    <vmsLegend>{VMSLegend21}</vmsLegend>
    <vmsLegend>{VMSLegend22}</vmsLegend>
    <vmsLegend>{VMSLegend23}</vmsLegend>
    <vmsLegend>{VMSLegend24}</vmsLegend>
   </situationRecord>
  </situation>

 </payloadPublication>
</d2LogicalModel>
```

Token	Value	Available?
{COUNTRY}	This is the country from which the Datex publication originates.	Yes
{NATIONAL_IDENTIFIER}	The identifier that describes the national organisation from which the Datex publication originates.	Yes
{TIMESTAMP}	The timestamp of the publication. The format is as the following example: **2008-06-13T14:55:01+01:00**	Yes
{SituationRecordId}	This is a unique identifier created for each record. Alphanumeric.	Yes
{DateTime}	The date and time of the publication. The format is as the following example: **2008-06-13T14:55:01+01:00**	Yes

{PredefinedLocationReference}	Alphanumeric value describing the VMS at its specific location.	Yes
{PredefinedLocationSetReference}	Definition of the location set, namely **VMSLocations**	Yes
{Pictogram1}..{Pictogram4}	A string value indicating the pictogram(s) in use on the VMS.	Yes
{NumberOfCharacters}	The maximum number of characters in each row of the variable message sign (for fixed font sings). Numeric value.	No
{NumberOfRows}	The maximum number of rows of characters on the variable message sign (for fixed font signs). Numeric.	No
{VMSFault}	Indicates the type of fault which is being recorded for the specified variable message sign. Uses Datex **VMSFaultEnum**. See the DATEX 2 Data Model Version 1.0 for details of this enumeration.	Yes
{VMSLegend}..{VMSLegend24}	If non-null then free-text containing a single displayed legend row on the specific variable message sign.	Yes

4.5.10 WEATHER DATA

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="MeasuredDataPublication" lang="eng">
  <publicationTime>{TIMESTAMP}</publicationTime>
  <publicationCreator>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </publicationCreator>

<measurementSiteTableReference>WeatherSites</measurementSiteTableReference>
  <headerInformation>
   <confidentiality>noRestriction</confidentiality>
   <informationStatus>real</informationStatus>
  </headerInformation>

  <siteMeasurements>
```

```
<measurementSiteReference>{MeasurementSiteReference}</measurementSiteRefere
nce>

<measurementTimeDefault>{MeasurementTimeDefault}</measurementTimeDefault>
   <measuredValue index="1">
    <basicDataValue xsi:type="TemperatureInformation">
      <fault>{Fault}</fault>
      <faultReason>
       <value lang="en">{FaultReason}</value>
      </faultReason>

<numberOfIncompleteInputs>{NumberOfIncompleteInputs}</numberOfIncompleteInp
uts>

<numberOfInputValuesUsed>{NumberOfInputValuesUsed}</numberOfInputValuesUsed
>
      <period>{Period}</period>

<supplierCalculatedDataQuality>{SupplierCalculatedDataQuality}</supplierCal
culatedDataQuality>
     <temperature>
      <airTemperature>{AirTemperature}</airTemperature>
      <dewPointTemperature>{DewPointTemperature}</dewPointTemperature>
     </temperature>
    </basicDataValue>
   </measuredValue>
   <measuredValue index="2">
    <basicDataValue xsi:type="PrecipitationInformation">
      <fault>{Fault}</fault>
      <faultReason>
       <value lang="en">{FaultReason}</value>
      </faultReason>

<numberOfIncompleteInputs>{NumberOfIncompleteInputs}</numberOfIncompleteInp
uts>

<numberOfInputValuesUsed>{NumberOfInputValuesUsed}</numberOfInputValuesUsed
>
      <period>{Period}</period>

<supplierCalculatedDataQuality>{SupplierCalculatedDataQuality}</supplierCal
culatedDataQuality>
     <precipitationDetail>
      <precipitationType>{PrecipitationType}</precipitationType>
     </precipitationDetail>
    </basicDataValue>
   </measuredValue>
   <measuredValue index="3">
    <basicDataValue xsi:type="WindInformation">
      <fault>{Fault}</fault>
      <faultReason>
       <value lang="en">{FaultReason}</value>
      </faultReason>

<numberOfIncompleteInputs>{NumberOfIncompleteInputs}</numberOfIncompleteInp
uts>

<numberOfInputValuesUsed>{NumberOfInputValuesUsed}</numberOfInputValuesUsed
>
      <period>{Period}</period>
```

```
<supplierCalculatedDataQuality>{SupplierCalculatedDataQuality}</supplierCal
culatedDataQuality>
     <wind>
      <maximumWindSpeed>{MaximumWindSpeed}</maximumWindSpeed>
      <windDirectionBearing>{WindDirectionBearing}</windDirectionBearing>
      <windDirectionCompass>{WindDirectionCompass}</windDirectionCompass>
      <windSpeed>{WindSpeed}</windSpeed>
     </wind>
    </basicDataValue>
   </measuredValue>
   <measuredValue index="4">
    <basicDataValue xsi:type="RoadSurfaceConditionInformation">
      <fault>{Fault}</fault>
      <faultReason>
       <value lang="en">{FaultReason}</value>
      </faultReason>

<numberOfIncompleteInputs>{NumberOfIncompleteInputs}</numberOfIncompleteInp
uts>

<numberOfInputValuesUsed>{NumberOfInputValuesUsed}</numberOfInputValuesUsed
>
      <period>{Period}</period>

<supplierCalculatedDataQuality>{SupplierCalculatedDataQuality}</supplierCal
culatedDataQuality>
     <roadSurfaceConditionMeasurements>

<protectionTemperature>{ProtectionTemperature}</protectionTemperature>

<roadSurfaceTemperature>{RoadSurfaceTemperature}</roadSurfaceTemperature>
     </roadSurfaceConditionMeasurements>
    </basicDataValue>
   </measuredValue>
  </siteMeasurements>

 </payloadPublication>
</d2LogicalModel>
```

Token	Value	Available?
{COUNTRY}	This is the country from which the Datex publication originates.	Yes
{NATIONAL_IDENTIFIER}	The identifier that describes the national organisation from which the Datex publication originates.	Yes
{TIMESTAMP}	The timestamp of the publication. The format is as the following example: **2008-06-13T14:55:01+01:00**	Yes
{MeasurementSiteReference}	This is a unique id created for each record at the time of publication. Alphanumeric.	Yes
{MeasurementTimeDefault}	This is set to the current date and time at which the publication is produced.	Yes

{AirTemperature}	The air temperature in degrees Celsius measured in the shade between 1.5 and 2 metres above ground level.	Yes
{DewPointTemperature}	The temperature to which the air would have to cool (at constant pressure and water vapour content) in order to reach saturation. Measured in degrees Celsius.	Yes
{PrecipitationType}	The type of Precipitation which is affecting the driving conditions. This uses the Datex **PrecipitationTypeEnum**. See the DATEX 2 Data Model Version 1.0 for details of this enumeration.	Yes
{MaximumWindSpeed}	The maximum wind speed, measured in kilometres per hour, in a measurement period of 10 minutes.	Yes
{WindDirectionBearing}	The average direction from which the wind blows, in terms of a bearing measured in degrees (0 – 359).	Yes
{WindDirectionCompass}	The average direction from which the wind blows, in terms of points of the compass.	Yes
{WindSpeed}	The wind speed, in kilometres per hour, averaged over at least 10 minutes and measured at a default height of 110 metres (meteo standard) above the road surface, unless measurement height is specified.	Yes
{ProtectionTemperature}	The road surface temperature down to which the surface is protected from freezing. Measured in degrees Celsius.	Yes
{RoadSurfaceTemperature}	The temperature, measured in degrees Celsius, measured on the road surface.	Yes
{Fault}	Boolean value. Indication of whether the value is deemed to be faulty by the supplier. If not present then the data value is assumed to be correct. This may be used when automatic fault detection information relating to sensors is available.	No
{FaultReason}	The reason why the value is deemed to be faulty by the supplier.	No
{NumberOfIncompleteInputs}	The number of inputs detected but not completed during the sampling or measurement period. E.g. vehicles detected entering but not exiting the detection zone. Numeric integer value (non-negative).	No
{NumberOfInputValuesUsed}	The number of input values used in the sampling or measurement period to	No

	determine the data value. Numeric integer value (non-negative).	
{Period}	The elapsed time between the beginning and the end of the sampling or measurement period in seconds.	Yes
{SupplierCalculatedDataQuality}	A measure (percentage value) of data quality assigned to the value by the supplier. 100% equates to ideal/perfect quality.	No

4.5.11 TRAVEL TIME SITES

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="MeasurementSiteTablePublication" lang="eng">
  <publicationTime>{TIMESTAMP}</publicationTime>
  <publicationCreator>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </publicationCreator>
  <headerInformation>
   <confidentiality>noRestriction</confidentiality>
   <informationStatus>real</informationStatus>
  </headerInformation>
  <measurementSiteTable id="TravelTimeSites">

<measurementSiteTableReference>TravelTimeSites</measurementSiteTableReferen
ce>
   <measurementSiteTableVersion>{VERSION}</measurementSiteTableVersion>

   <measurementSiteRecord id="{MeasurementSiteRecordId}">

<measurementEquipmentReference>{MeasurementEquipmentReference}</measurement
EquipmentReference>
    <measurementEquipmentTypeUsed>
     <value lang="en">{MeasurementEquipmentTypeUsed}</value>
    </measurementEquipmentTypeUsed>
    <measurementSiteName>
     <value lang="en">{MeasurementSiteName}</value>
    </measurementSiteName>
    <measurementSide>{MeasurementSide}</measurementSide>
    <measurementSpecificCharacteristics index="1">
     <period>{Period}</period>

<specificMeasurementValueType>travelTimeInformation</specificMeasurementVal
ueType>
    </measurementSpecificCharacteristics>
    <measurementSiteLocation xsi:type="Linear">
```

```
      {TPEG_LINEAR_LOCATION}
    </measurementSiteLocation>
   </measurementSiteRecord>

  </measurementSiteTable>
 </payloadPublication>
</d2LogicalModel>
```

Token	Value	Available?
{COUNTRY}	This is the country from which the Datex publication originates.	Yes
{NATIONAL_IDENTIFIER}	The identifier that describes the national organisation from which the Datex publication originates.	Yes
{TIMESTAMP}	The timestamp of the publication. The format is as the following example: **2008-06-13T14:55:01+01:00**	Yes
{VERSION}	The version number of the publication. Numeric.	Yes
{MeasurementSiteRecordId}	A composite created uniquely for each record to identify it. Usually Alphanumeric.	Yes
{MeasurementEquipmentReference}	The reference given to the measurement equipment at the site. This should be the same as **{MeasurementSiteRecordId}** above.	Yes
{MeasurementEquipmentTypeUsed}	The type of equipment used to gather the raw information from which the data values are determined.	No
{MeasurementSiteName}	The name of the measurement site.	Yes
{MeasurementSide}	Side of the road on which measurements are acquired, corresponding to the direction of the road. Uses Datex **DirectionEnum**. See the DATEX 2 Data Model Version 1.0 for details of this enumeration.	Yes
{Period}	The time elapsed between the beginning and end of the sampling or measurements period in seconds.	Yes
{TPEG_LINEAR_LOCATION}	See 4.4.2	Yes. See XML example in section 5.8 for nested template field usage.

4.5.12 TRAFFIC STATUS SITES

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="MeasurementSiteTablePublication" lang="eng">
  <publicationTime>{TIMESTAMP}</publicationTime>
  <publicationCreator>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </publicationCreator>
  <headerInformation>
   <confidentiality>noRestriction</confidentiality>
   <informationStatus>real</informationStatus>
  </headerInformation>
  <measurementSiteTable id="TrafficStatusSites">

<measurementSiteTableReference>TrafficStatusSites</measurementSiteTableRefe
rence>
   <measurementSiteTableVersion>{VERSION}</measurementSiteTableVersion>

   <measurementSiteRecord id="{MeasurementSiteRecordId}">

<measurementEquipmentReference>{MeasurementEquipmentReference}</measurement
EquipmentReference>
    <measurementEquipmentTypeUsed>
     <value lang="en">{MeasurementEquipmentTypeUsed}</value>
    </measurementEquipmentTypeUsed>
    <measurementSiteName>
     <value lang="en">{MeasurementSiteName}</value>
    </measurementSiteName>
    <measurementSide>{MeasurementSide}</measurementSide>
    <measurementSpecificCharacteristics index="1">
     <period>{Period}</period>

<specificMeasurementValueType>trafficStatusInformation</specificMeasurement
ValueType>
    </measurementSpecificCharacteristics>
    <measurementSiteLocation xsi:type="Linear">
     {TPEG_LINEAR_LOCATION}
    </measurementSiteLocation>
   </measurementSiteRecord>

  </measurementSiteTable>
 </payloadPublication>
</d2LogicalModel>
```

Token	Value	Available?
{COUNTRY}	This is the country from which the Datex publication originates.	No
{NATIONAL_IDENTIFIER}	The identifier that describes the national organisation from which the Datex publication originates.	No
{TIMESTAMP}	The timestamp of the publication. The format is as the following example: **2008-06-13T14:55:01+01:00**	No
{VERSION}	The version number of the publication. Numeric.	No
{MeasurementSiteRecordId}	A composite created uniquely for each record to identify it. Usually Alphanumeric.	No
{MeasurementEquipmentReference}	The reference given to the measurement equipment at the site. This should be the same as **{MeasurementSiteRecordId}** above.	No
{MeasurementEquipmentTypeUsed}	The type of equipment used to gather the raw information from which the data values are determined.	No
{MeasurementSiteName}	The name of the measurement site.	No
{MeasurementSide}	Side of the road on which measurements are acquired, corresponding to the direction of the road. Uses Datex **DirectionEnum**. See the DATEX 2 Data Model Version 1.0 for details of this enumeration.	No
{Period}	The time elapsed between the beginning and end of the sampling or measurements period in seconds.	No
{TPEG_LINEAR_LOCATION}	See 4.4.2	No

4.5.13 VDS SITES

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
```

```
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="MeasurementSiteTablePublication" lang="eng">
  <publicationTime>{TIMESTAMP}</publicationTime>
  <publicationCreator>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </publicationCreator>
  <headerInformation>
   <confidentiality>noRestriction</confidentiality>
   <informationStatus>real</informationStatus>
  </headerInformation>
  <measurementSiteTable id="VDSSites">
   <measurementSiteTableReference>VDSSites</measurementSiteTableReference>
   <measurementSiteTableVersion>{VERSION}</measurementSiteTableVersion>

   <measurementSiteRecord id="{MeasurementSiteRecordId}">

<measurementEquipmentReference>{MeasurementEquipmentReference}</measurement
EquipmentReference>
    <measurementEquipmentTypeUsed>
     <value lang="en">{MeasurementEquipmentTypeUsed}</value>
    </measurementEquipmentTypeUsed>
    <measurementSiteName>
     <value lang="en">{MeasurementSiteName}</value>
    </measurementSiteName>
    <measurementSide>{MeasurementSide}</measurementSide>
    <measurementSpecificCharacteristics index="1">
     <period>{Period}</period>

<specificMeasurementValueType>trafficFlow</specificMeasurementValueType>
    </measurementSpecificCharacteristics>
    <measurementSpecificCharacteristics index="2">
     <period>{Period}</period>

<specificMeasurementValueType>trafficConcentration</specificMeasurementValu
eType>
    </measurementSpecificCharacteristics>
    <measurementSpecificCharacteristics index="3">
     <period>{Period}</period>

<specificMeasurementValueType>trafficSpeed</specificMeasurementValueType>
    </measurementSpecificCharacteristics>
    <measurementSiteLocation xsi:type="Point">
     {TPEG_POINT_LOCATION}
    </measurementSiteLocation>
   </measurementSiteRecord>

  </measurementSiteTable>
 </payloadPublication>
</d2LogicalModel>
```

Token	Value	Available?
{COUNTRY}	This is the country from which the Datex publication originates.	Yes
{NATIONAL_IDENTIFIER}	The identifier that describes the national organisation from which the Datex	Yes

	publication originates.	
{TIMESTAMP}	The timestamp of the publication. The format is as the following example: **2008-06-13T14:55:01+01:00**	Yes
{VERSION}	The version number of the publication. Numeric.	Yes
{MeasurementSiteRecordId}	A composite created uniquely for each record to identify it. Usually Alphanumeric.	Yes
{MeasurementEquipmentReference}	The reference given to the measurement equipment at the site. This should be the same as **{MeasurementSiteRecordId}** above.	Yes
{MeasurementEquipmentTypeUsed}	The type of equipment used to gather the raw information from which the data values are determined.	Yes
{MeasurementSiteName}	The name of the measurement site.	Yes
{MeasurementSide}	Side of the road on which measurements are acquired, corresponding to the direction of the road. Uses Datex **DirectionEnum**. See the DATEX 2 Data Model Version 1.0 for details of this enumeration.	Yes
{Period}	The time elapsed between the beginning and end of the sampling or measurements period in seconds.	Yes
{TPEG_POINT_LOCATION}	See 4.4.1	Yes. See XML example in section 5.9 for nested template field usage.

4.5.14 VMS LOCATIONS

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>{COUNTRY}</country>
```

```
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="PredefinedLocationsPublication" lang="eng">
  <publicationTime>{TIMESTAMP}</publicationTime>
  <publicationCreator>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </publicationCreator>
  <headerInformation>
   <confidentiality>noRestriction</confidentiality>
   <informationStatus>real</informationStatus>
  </headerInformation>
  <predefinedLocationSet id="VMSLocations">
   <predefinedLocationSetName>
    <value lang="en">VMSLocations</value>
   </predefinedLocationSetName>

   <predefinedLocation id="{PredefinedLocationId}">
    <predefinedLocationName>
     <value lang="en">{PredefinedLocationName}</value>
    </predefinedLocationName>
    <predefinedLocation xsi:type="Point">
     {TPEG_POINT_LOCATION}
    </predefinedLocation>
   </predefinedLocation>

  </predefinedLocationSet>
 </payloadPublication>
</d2LogicalModel>
```

Token	Value	Available?
{COUNTRY}	This is the country from which the Datex publication originates.	Yes
{NATIONAL_IDENTIFIER}	The identifier that describes the national organisation from which the Datex publication originates.	Yes
{TIMESTAMP}	The timestamp of the publication. The format is as the following example: **2008-06-13T14:55:01+01:00**	Yes
{PredefinedLocationId}	A composite created uniquely for each record to identify it. Usually Alphanumeric.	Yes
{PredefinedLocationName}	The name assigned to a predefined location. String value	Yes
{TPEG_POINT_LOCATION}	See 4.4.1	Yes. See XML example in section 5.10 for nested template field usage.

4.5.15 WEATHER SITES

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="MeasurementSiteTablePublication" lang="eng">
  <publicationTime>{TIMESTAMP}</publicationTime>
  <publicationCreator>
   <country>{COUNTRY}</country>
   <nationalIdentifier>{NATIONAL_IDENTIFIER}</nationalIdentifier>
  </publicationCreator>
  <headerInformation>
   <confidentiality>noRestriction</confidentiality>
   <informationStatus>real</informationStatus>
  </headerInformation>
  <measurementSiteTable id="WeatherSites">

<measurementSiteTableReference>WeatherSites</measurementSiteTableReference>
   <measurementSiteTableVersion>{VERSION}</measurementSiteTableVersion>

   <measurementSiteRecord id="{MeasurementSiteRecordId}">

<measurementEquipmentReference>{MeasurementEquipmentReference}</measurement
EquipmentReference>
    <measurementEquipmentTypeUsed>
     <value lang="en">{MeasurementEquipmentTypeUsed}</value>
    </measurementEquipmentTypeUsed>
    <measurementSiteName>
     <value lang="en">{MeasurementSiteName}</value>
    </measurementSiteName>
    <measurementSide>{MeasurementSide}</measurementSide>
    <measurementSpecificCharacteristics index="1">
     <period>{Period}</period>

<specificMeasurementValueType>temperatureInformation</specificMeasurementVa
lueType>
    </measurementSpecificCharacteristics>
    <measurementSpecificCharacteristics index="2">
     <period>{Period}</period>

<specificMeasurementValueType>precipitationInformation</specificMeasurement
ValueType>
    </measurementSpecificCharacteristics>
    <measurementSpecificCharacteristics index="3">
     <period>{Period}</period>

<specificMeasurementValueType>windInformation</specificMeasurementValueType
>
    </measurementSpecificCharacteristics>
```

```
    <measurementSpecificCharacteristics index="4">
     <period>{Period}</period>

<specificMeasurementValueType>roadSurfaceConditionInformation</specificMeas
urementValueType>
    </measurementSpecificCharacteristics>
    <measurementSiteLocation xsi:type="Point">
     {TPEG_POINT_LOCATION}
    </measurementSiteLocation>
   </measurementSiteRecord>

  </measurementSiteTable>
 </payloadPublication>
</d2LogicalModel>
```

Token	Value	Available?
{COUNTRY}	This is the country from which the Datex publication originates.	Yes
{NATIONAL_IDENTIFIER}	The identifier that describes the national organisation from which the Datex publication originates.	Yes
{TIMESTAMP}	The timestamp of the publication. The format is as the following example: **2008-06-13T14:55:01+01:00**	Yes
{VERSION}	The version number of the publication. Numeric.	Yes
{MeasurementSiteRecordId}	A composite created uniquely for each record to identify it. Usually Alphanumeric.	Yes
{MeasurementEquipmentReference}	The reference given to the measurement equipment at the site. This should be the same as **{MeasurementSiteRecordId}** above.	Yes
{MeasurementEquipmentTypeUsed}	The type of equipment used to gather the raw information from which the data values are determined.	Yes
{MeasurementSiteName}	The name of the measurement site.	Yes
{MeasurementSide}	Side of the road on which measurements are acquired, corresponding to the direction of the road. Uses Datex **DirectionEnum**. See the DATEX 2 Data Model Version 1.0 for details of this enumeration.	No
{Period}	The time elapsed between the beginning and end of the sampling or measurements period in seconds.	Yes
{TPEG_POINT_LOCATION}	See 4.4.1	Yes. See

		XML example in section 5.11 for nested template field usage.

5. XML EXAMPLES

This section outlines examples of publication XML output for each of the publications specific to the NRA Datex2 feed.

5.1 Current Planned Events

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="SituationPublication" lang="eng">
  <publicationTime>2008-07-01T16:43:34+01:00</publicationTime>
  <publicationCreator>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </publicationCreator>

  <situation id="P-1_S">
   <overallImpact>low</overallImpact>
   <headerInformation>
    <confidentiality>noRestriction</confidentiality>
    <informationStatus>real</informationStatus>
   </headerInformation>
   <situationRecord xsi:type="MaintenanceWorks" id="P-1">
    <situationRecordCreationReference>P-
1</situationRecordCreationReference>
    <situationRecordCreationTime>2007-05-
16T17:25:21+01:00</situationRecordCreationTime>
    <situationRecordVersion>1</situationRecordVersion>
    <situationRecordVersionTime>2007-05-
16T18:09:00+01:00</situationRecordVersionTime>
    <situationRecordFirstSupplierVersionTime>2007-05-
16T18:09:00+01:00</situationRecordFirstSupplierVersionTime>
    <probabilityOfOccurrence>certain</probabilityOfOccurrence>
    <sourceInformation>
     <sourceIdentification>NRA</sourceIdentification>
     <sourceName>
      <value lang="en">NRA</value>
     </sourceName>
     <sourceType>roadAuthorities</sourceType>
    </sourceInformation>
    <validity>
     <validityStatus>definedByValidityTimeSpec</validityStatus>
     <validityTimeSpecification>
      <overallStartTime>2007-05-16T17:25:00+01:00</overallStartTime>
      <overallEndTime>2007-05-17T17:25:00+01:00</overallEndTime>
     </validityTimeSpecification>
    </validity>
    <impact>
     <impactDetails>
      <numberOfLanesRestricted>2</numberOfLanesRestricted>
      <numberOfOperationalLanes>0</numberOfOperationalLanes>
```

```
      <trafficRestrictionType>carriagewayBlocked</trafficRestrictionType>
     </impactDetails>
    </impact>
    <cause xsi:type="NonManagedCause">
     <causeDescription>
      <value lang="en">Roadwork</value>
     </causeDescription>
    </cause>
    <generalPublicComment>
     <comment>
      <value lang="en">Test AdvisoryMessage</value>
     </comment>
    </generalPublicComment>
    <groupOfLocations>
     <locationContainedInGroup xsi:type="Point">
      <supplementaryPositionalDescription>
       <lanes>hardShoulder</lanes>
       <lanes>allLanesCompleteCarriageway</lanes>
      </supplementaryPositionalDescription>
      <tpegpointLocation xsi:type="TPEGSimplePoint">
       <tpegDirection>eastBound</tpegDirection>
       <tpegLocationType>nonLinkedPoint</tpegLocationType>
       <point xsi:type="TPEGNonJunctionPoint">
        <pointCoordinates>
         <latitude>53.607518</latitude>
         <longitude>-7.432946</longitude>
        </pointCoordinates>
        <name>
         <descriptor>
          <value lang="en">N4</value>
         </descriptor>
         <tpegDescriptorType>linkName</tpegDescriptorType>
        </name>
        <name>
         <descriptor>
          <value lang="en">29km before Kinnegad East</value>
         </descriptor>
         <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
        </name>
       </point>
      </tpegpointLocation>
     </locationContainedInGroup>
    </groupOfLocations>
    <operatorActionStatus>inProgress</operatorActionStatus>
    <effectOnRoadLayout>carriagewayClosures</effectOnRoadLayout>
    <roadMaintenanceType>roadworks</roadMaintenanceType>
   </situationRecord>
  </situation>

  <situation id="P-3_S">
   <overallImpact>normal</overallImpact>
   <headerInformation>
    <confidentiality>noRestriction</confidentiality>
    <informationStatus>real</informationStatus>
   </headerInformation>
   <situationRecord xsi:type="MaintenanceWorks" id="P-3">
    <situationRecordCreationReference>P-
3</situationRecordCreationReference>
    <situationRecordCreationTime>2007-05-
16T17:30:38+01:00</situationRecordCreationTime>
    <situationRecordVersion>2</situationRecordVersion>
```

```
    <situationRecordVersionTime>2007-05-
16T18:09:00+01:00</situationRecordVersionTime>
    <situationRecordFirstSupplierVersionTime>2007-05-
16T18:09:00+01:00</situationRecordFirstSupplierVersionTime>
    <probabilityOfOccurrence>certain</probabilityOfOccurrence>
    <sourceInformation>
     <sourceIdentification>NRA</sourceIdentification>
     <sourceName>
      <value lang="en">NRA</value>
     </sourceName>
     <sourceType>roadAuthorities</sourceType>
    </sourceInformation>
    <validity>
     <validityStatus>definedByValidityTimeSpec</validityStatus>
     <validityTimeSpecification>
      <overallStartTime>2007-05-16T17:30:00+01:00</overallStartTime>
      <overallEndTime>2007-05-25T17:30:00+01:00</overallEndTime>
     </validityTimeSpecification>
    </validity>
    <impact>
     <impactDetails>
      <numberOfLanesRestricted>2</numberOfLanesRestricted>
      <numberOfOperationalLanes>0</numberOfOperationalLanes>
      <trafficRestrictionType>carriagewayBlocked</trafficRestrictionType>
     </impactDetails>
    </impact>
    <cause xsi:type="NonManagedCause">
     <causeDescription>
      <value lang="en">Roadwork</value>
     </causeDescription>
    </cause>
    <generalPublicComment>
     <comment>
      <value lang="en">Test AdvisoryMessage</value>
     </comment>
    </generalPublicComment>
    <groupOfLocations>
     <locationContainedInGroup xsi:type="Point">
      <supplementaryPositionalDescription>
       <lanes>hardShoulder</lanes>
       <lanes>allLanesCompleteCarriageway</lanes>
      </supplementaryPositionalDescription>
      <tpegpointLocation xsi:type="TPEGSimplePoint">
       <tpegDirection>northBound</tpegDirection>
       <tpegLocationType>nonLinkedPoint</tpegLocationType>
       <point xsi:type="TPEGNonJunctionPoint">
        <pointCoordinates>
         <latitude>53.315147</latitude>
         <longitude>-6.282066</longitude>
        </pointCoordinates>
        <name>
         <descriptor>
          <value lang="en">N81</value>
         </descriptor>
         <tpegDescriptorType>linkName</tpegDescriptorType>
        </name>
        <name>
         <descriptor>
          <value lang="en">4.6km beyond M50</value>
         </descriptor>
         <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
        </name>
```

```
        </point>
       </tpegpointLocation>
      </locationContainedInGroup>
     </groupOfLocations>
     <operatorActionStatus>inProgress</operatorActionStatus>
     <effectOnRoadLayout>carriagewayClosures</effectOnRoadLayout>
     <roadMaintenanceType>roadworks</roadMaintenanceType>
    </situationRecord>
   </situation>

   <situation id="P-319_S">
    <overallImpact>high</overallImpact>
    <headerInformation>
     <confidentiality>noRestriction</confidentiality>
     <informationStatus>real</informationStatus>
    </headerInformation>
    <situationRecord xsi:type="MaintenanceWorks" id="P-319">
     <situationRecordCreationReference>P-
319</situationRecordCreationReference>
     <situationRecordCreationTime>2007-06-
15T16:18:03+01:00</situationRecordCreationTime>
     <situationRecordVersion>1</situationRecordVersion>
     <situationRecordVersionTime>2007-06-
15T16:13:00+01:00</situationRecordVersionTime>
     <situationRecordFirstSupplierVersionTime>2007-06-
15T16:13:00+01:00</situationRecordFirstSupplierVersionTime>
     <probabilityOfOccurrence>certain</probabilityOfOccurrence>
     <sourceInformation>
      <sourceIdentification>NRA</sourceIdentification>
      <sourceName>
       <value lang="en">NRA</value>
      </sourceName>
      <sourceType>roadAuthorities</sourceType>
     </sourceInformation>
     <validity>
      <validityStatus>definedByValidityTimeSpec</validityStatus>
      <validityTimeSpecification>
       <overallStartTime>2007-06-18T16:13:03+01:00</overallStartTime>
       <overallEndTime>2007-06-25T16:13:03+01:00</overallEndTime>
      </validityTimeSpecification>
     </validity>
     <impact>
      <impactDetails>
       <numberOfLanesRestricted>1</numberOfLanesRestricted>
       <numberOfOperationalLanes>2</numberOfOperationalLanes>
       <trafficRestrictionType>lanesBlocked</trafficRestrictionType>
      </impactDetails>
     </impact>
     <cause xsi:type="NonManagedCause">
      <causeDescription>
       <value lang="en">Roadwork</value>
      </causeDescription>
     </cause>
     <generalPublicComment>
      <comment>
       <value lang="en">Test AdvisoryMessage</value>
      </comment>
     </generalPublicComment>
     <groupOfLocations>
      <locationContainedInGroup xsi:type="Linear">
       <supplementaryPositionalDescription>
        <lanes>hardShoulder</lanes>
```

```
        <lanes>lane2</lanes>
       </supplementaryPositionalDescription>
       <tpeglinearLocation>
        <tpegDirection>southBound</tpegDirection>
        <tpegLocationType>segment</tpegLocationType>
        <to xsi:type="TPEGJunction">
         <pointCoordinates>
          <latitude>53.563418</latitude>
          <longitude>-6.213757</longitude>
         </pointCoordinates>
         <name>
          <descriptor>
           <value lang="en">5</value>
          </descriptor>
          <tpegDescriptorType>junctionName</tpegDescriptorType>
         </name>
         <ilc>
          <descriptor>
           <value lang="en">M1</value>
          </descriptor>
          <tpegDescriptorType>tpegILCName1</tpegDescriptorType>
         </ilc>
         <ilc>
          <descriptor>
           <value lang="en">N1</value>
          </descriptor>
          <tpegDescriptorType>tpegILCName2</tpegDescriptorType>
         </ilc>
         <otherName>
          <descriptor>
           <value lang="en">Rowans Road</value>
          </descriptor>
          <tpegDescriptorType>intersectionName</tpegDescriptorType>
         </otherName>
        </to>
        <from xsi:type="TPEGJunction">
         <pointCoordinates>
          <latitude>53.387548</latitude>
          <longitude>-6.242596</longitude>
         </pointCoordinates>
         <ilc>
          <descriptor>
           <value lang="en">M1</value>
          </descriptor>
          <tpegDescriptorType>tpegILCName1</tpegDescriptorType>
         </ilc>
         <ilc>
          <descriptor>
           <value lang="en">N1</value>
          </descriptor>
          <tpegDescriptorType>tpegILCName2</tpegDescriptorType>
         </ilc>
         <otherName>
          <descriptor>
           <value lang="en">Port Tunnel</value>
          </descriptor>
          <tpegDescriptorType>intersectionName</tpegDescriptorType>
         </otherName>
        </from>
       </tpeglinearLocation>
      </locationContainedInGroup>
     </groupOfLocations>
```

```
    <operatorActionStatus>inProgress</operatorActionStatus>
    <effectOnRoadLayout>laneClosures</effectOnRoadLayout>
    <roadMaintenanceType>roadworks</roadMaintenanceType>
   </situationRecord>
  </situation>

 </payloadPublication>
</d2LogicalModel>
```

5.2 Future Planned Events

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="SituationPublication" lang="eng">
  <publicationTime>2008-07-01T16:43:35+01:00</publicationTime>
  <publicationCreator>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </publicationCreator>

  <situation id="P-219_S">
   <overallImpact>normal</overallImpact>
   <headerInformation>
    <confidentiality>noRestriction</confidentiality>
    <informationStatus>real</informationStatus>
   </headerInformation>
   <situationRecord xsi:type="MaintenanceWorks" id="P-219">
    <situationRecordCreationReference>P-
219</situationRecordCreationReference>
    <situationRecordCreationTime>2007-06-
15T16:18:03+01:00</situationRecordCreationTime>
    <situationRecordVersion>1</situationRecordVersion>
    <situationRecordVersionTime>2007-06-
15T16:13:00+01:00</situationRecordVersionTime>
    <situationRecordFirstSupplierVersionTime>2007-06-
15T16:13:00+01:00</situationRecordFirstSupplierVersionTime>
    <probabilityOfOccurrence>probable</probabilityOfOccurrence>
    <sourceInformation>
     <sourceIdentification>NRA</sourceIdentification>
     <sourceName>
      <value lang="en">NRA</value>
     </sourceName>
     <sourceType>roadAuthorities</sourceType>
    </sourceInformation>
    <validity>
     <validityStatus>definedByValidityTimeSpec</validityStatus>
     <validityTimeSpecification>
      <overallStartTime>2007-06-23T16:13:03+01:00</overallStartTime>
      <overallEndTime>2007-06-30T16:13:03+01:00</overallEndTime>
     </validityTimeSpecification>
```

```
    </validity>
    <impact>
     <impactDetails>
      <numberOfLanesRestricted>3</numberOfLanesRestricted>
      <numberOfOperationalLanes>0</numberOfOperationalLanes>
      <trafficRestrictionType>carriagewayBlocked</trafficRestrictionType>
     </impactDetails>
    </impact>
    <cause xsi:type="NonManagedCause">
     <causeDescription>
      <value lang="en">Roadwork</value>
     </causeDescription>
    </cause>
    <generalPublicComment>
     <comment>
      <value lang="en">Test AdvisoryMessage</value>
     </comment>
    </generalPublicComment>
    <groupOfLocations>
     <locationContainedInGroup xsi:type="Linear">
      <supplementaryPositionalDescription>
       <lanes>hardShoulder</lanes>
       <lanes>allLanesCompleteCarriageway</lanes>
      </supplementaryPositionalDescription>
      <tpeglinearLocation>
       <tpegDirection>northBound</tpegDirection>
       <tpegLocationType>segment</tpegLocationType>
       <to xsi:type="TPEGNonJunctionPoint">
        <pointCoordinates>
         <latitude>53.208547</latitude>
         <longitude>-6.713552</longitude>
        </pointCoordinates>
        <name>
         <descriptor>
          <value lang="en">N7</value>
         </descriptor>
         <tpegDescriptorType>linkName</tpegDescriptorType>
        </name>
        <name>
         <descriptor>
          <value lang="en">560m Beyond Newbridge</value>
         </descriptor>
         <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
        </name>
       </to>
       <from xsi:type="TPEGNonJunctionPoint">
        <pointCoordinates>
         <latitude>53.289366</latitude>
         <longitude>-6.448618</longitude>
        </pointCoordinates>
        <name>
         <descriptor>
          <value lang="en">N7</value>
         </descriptor>
         <tpegDescriptorType>linkName</tpegDescriptorType>
        </name>
        <name>
         <descriptor>
          <value lang="en">5.6km Beyond VMS_N7_2N</value>
         </descriptor>
         <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
        </name>
```

```
       </from>
      </tpeglinearLocation>
     </locationContainedInGroup>
    </groupOfLocations>
    <operatorActionStatus>approved</operatorActionStatus>
    <effectOnRoadLayout>carriagewayClosures</effectOnRoadLayout>
    <roadMaintenanceType>roadworks</roadMaintenanceType>
   </situationRecord>
  </situation>

 </payloadPublication>
</d2LogicalModel>
```

5.3 Unplanned Events

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="SituationPublication" lang="eng">
  <publicationTime>2008-07-01T16:43:33+01:00</publicationTime>
  <publicationCreator>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </publicationCreator>

  <situation id="I101_S">
   <overallImpact>low</overallImpact>
   <headerInformation>
    <confidentiality>noRestriction</confidentiality>
    <informationStatus>real</informationStatus>
   </headerInformation>
   <situationRecord xsi:type="GeneralObstruction" id="I101">

<situationRecordCreationReference>I101</situationRecordCreationReference>
    <situationRecordCreationTime>2007-06-
18T15:57:40+01:00</situationRecordCreationTime>
    <situationRecordVersion>1</situationRecordVersion>
    <situationRecordVersionTime>2007-06-
15T16:02:40+01:00</situationRecordVersionTime>
    <situationRecordFirstSupplierVersionTime>2007-06-
15T16:02:40+01:00</situationRecordFirstSupplierVersionTime>
    <probabilityOfOccurrence>certain</probabilityOfOccurrence>
    <sourceInformation>
     <sourceIdentification>NRA</sourceIdentification>
     <sourceName>
      <value lang="en">NRA</value>
     </sourceName>
     <sourceType>roadAuthorities</sourceType>
    </sourceInformation>
    <validity>
     <validityStatus>active</validityStatus>
```

```
     <validityTimeSpecification>
      <overallStartTime>2007-06-18T15:57:40+01:00</overallStartTime>
     </validityTimeSpecification>
    </validity>
    <impact>
     <impactDetails>
      <trafficRestrictionType>lanesBlocked</trafficRestrictionType>
     </impactDetails>
    </impact>
    <cause xsi:type="NonManagedCause">
     <causeDescription>
      <value lang="en">Spillage</value>
     </causeDescription>
    </cause>
    <generalPublicComment>
     <comment>
      <value lang="en">Test AdvisoryMessage</value>
     </comment>
    </generalPublicComment>
    <groupOfLocations>
     <locationContainedInGroup xsi:type="Point">
      <tpegpointLocation xsi:type="TPEGSimplePoint">
       <tpegDirection>northBound</tpegDirection>
       <tpegLocationType>nonLinkedPoint</tpegLocationType>
       <point xsi:type="TPEGNonJunctionPoint">
        <pointCoordinates>
         <latitude>53.020056</latitude>
         <longitude>-7.343332</longitude>
        </pointCoordinates>
        <name>
         <descriptor>
          <value lang="en">N7</value>
         </descriptor>
         <tpegDescriptorType>linkName</tpegDescriptorType>
        </name>
        <name>
         <descriptor>
          <value lang="en">60m Before Portlaoise</value>
         </descriptor>
         <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
        </name>
       </point>
      </tpegpointLocation>
     </locationContainedInGroup>
    </groupOfLocations>
    <obstructionType>spillageOnTheRoad</obstructionType>
   </situationRecord>
  </situation>

  <situation id="I102_S">
   <overallImpact>low</overallImpact>
   <headerInformation>
    <confidentiality>noRestriction</confidentiality>
    <informationStatus>real</informationStatus>
   </headerInformation>
   <situationRecord xsi:type="GeneralObstruction" id="I102">

<situationRecordCreationReference>I102</situationRecordCreationReference>
    <situationRecordCreationTime>2007-06-
15T15:57:40+01:00</situationRecordCreationTime>
    <situationRecordVersion>0</situationRecordVersion>
```

```
    <situationRecordVersionTime>2007-06-
15T16:02:40+01:00</situationRecordVersionTime>
    <situationRecordFirstSupplierVersionTime>2007-06-
15T16:02:40+01:00</situationRecordFirstSupplierVersionTime>
    <probabilityOfOccurrence>certain</probabilityOfOccurrence>
    <sourceInformation>
     <sourceIdentification>NRA</sourceIdentification>
     <sourceName>
      <value lang="en">NRA</value>
     </sourceName>
     <sourceType>roadAuthorities</sourceType>
    </sourceInformation>
    <validity>
     <validityStatus>active</validityStatus>
     <validityTimeSpecification>
      <overallStartTime>2007-06-15T15:57:40+01:00</overallStartTime>
     </validityTimeSpecification>
    </validity>
    <impact>
     <impactDetails>
      <trafficRestrictionType>lanesBlocked</trafficRestrictionType>
     </impactDetails>
    </impact>
    <cause xsi:type="NonManagedCause">
     <causeDescription>
      <value lang="en">Debris</value>
     </causeDescription>
    </cause>
    <generalPublicComment>
     <comment>
      <value lang="en">Test AdvisoryMessage</value>
     </comment>
    </generalPublicComment>
    <groupOfLocations>
     <locationContainedInGroup xsi:type="Point">
      <tpegpointLocation xsi:type="TPEGSimplePoint">
       <tpegDirection>northBound</tpegDirection>
       <tpegLocationType>nonLinkedPoint</tpegLocationType>
       <point xsi:type="TPEGNonJunctionPoint">
        <pointCoordinates>
         <latitude>53.020056</latitude>
         <longitude>-7.343332</longitude>
        </pointCoordinates>
        <name>
         <descriptor>
          <value lang="en">N7</value>
         </descriptor>
         <tpegDescriptorType>linkName</tpegDescriptorType>
        </name>
        <name>
         <descriptor>
          <value lang="en">60m Before Portlaoise</value>
         </descriptor>
         <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
        </name>
       </point>
      </tpegpointLocation>
     </locationContainedInGroup>
    </groupOfLocations>
    <obstructionType>objectOnTheRoad</obstructionType>
   </situationRecord>
  </situation>
```

```
  <situation id="I103_S">
   <overallImpact>low</overallImpact>
   <headerInformation>
    <confidentiality>noRestriction</confidentiality>
    <informationStatus>real</informationStatus>
   </headerInformation>
   <situationRecord xsi:type="VehicleObstruction" id="I103">

<situationRecordCreationReference>I103</situationRecordCreationReference>
    <situationRecordCreationTime>2007-06-
15T15:57:40+01:00</situationRecordCreationTime>
    <situationRecordVersion>1</situationRecordVersion>
    <situationRecordVersionTime>2007-06-
15T16:02:40+01:00</situationRecordVersionTime>
    <situationRecordFirstSupplierVersionTime>2007-06-
15T16:02:40+01:00</situationRecordFirstSupplierVersionTime>
    <probabilityOfOccurrence>certain</probabilityOfOccurrence>
    <sourceInformation>
     <sourceIdentification>NRA</sourceIdentification>
     <sourceName>
      <value lang="en">NRA</value>
     </sourceName>
     <sourceType>roadAuthorities</sourceType>
    </sourceInformation>
    <validity>
     <validityStatus>active</validityStatus>
     <validityTimeSpecification>
      <overallStartTime>2007-06-15T15:57:40+01:00</overallStartTime>
     </validityTimeSpecification>
    </validity>
    <impact>
     <impactDetails>
      <trafficRestrictionType>lanesBlocked</trafficRestrictionType>
     </impactDetails>
    </impact>
    <cause xsi:type="NonManagedCause">
     <causeDescription>
      <value lang="en">Breakdown</value>
     </causeDescription>
    </cause>
    <generalPublicComment>
     <comment>
      <value lang="en">Test AdvisoryMessage</value>
     </comment>
    </generalPublicComment>
    <groupOfLocations>
     <locationContainedInGroup xsi:type="Point">
      <tpegpointLocation xsi:type="TPEGSimplePoint">
       <tpegDirection>northBound</tpegDirection>
       <tpegLocationType>nonLinkedPoint</tpegLocationType>
       <point xsi:type="TPEGNonJunctionPoint">
        <pointCoordinates>
         <latitude>53.020056</latitude>
         <longitude>-7.343332</longitude>
        </pointCoordinates>
        <name>
         <descriptor>
          <value lang="en">N7</value>
         </descriptor>
         <tpegDescriptorType>linkName</tpegDescriptorType>
        </name>
```

```
        <name>
         <descriptor>
          <value lang="en">60m Before Portlaoise</value>
         </descriptor>
         <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
        </name>
       </point>
      </tpegpointLocation>
     </locationContainedInGroup>
    </groupOfLocations>
    <vehicleObstructionType>brokenDownVehicle</vehicleObstructionType>
   </situationRecord>
  </situation>

 </payloadPublication>
</d2LogicalModel>
```

5.4 Travel Time Data

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="MeasuredDataPublication" lang="eng">
  <publicationTime>2008-01-28T13:25:19+00:00</publicationTime>
  <publicationCreator>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </publicationCreator>

<measurementSiteTableReference>ie_NRA_TravelTimeSites_1</measurementSiteTab
leReference>
  <headerInformation>
   <confidentiality>noRestriction</confidentiality>
   <informationStatus>real</informationStatus>
  </headerInformation>

  <siteMeasurements>
   <measurementSiteReference>ie_NRA_TravelTime_0</measurementSiteReference>
   <measurementTimeDefault>2007-06-
08T15:35:03+01:00</measurementTimeDefault>
   <measuredValue index="1">
    <basicDataValue xsi:type="TravelTimeValue">
     <travelTime>100</travelTime>
     <freeFlowSpeed>110</freeFlowSpeed>
     <freeFlowTravelTime>128</freeFlowTravelTime>
     <normallyExpectedTravelTime>110</normallyExpectedTravelTime>
    </basicDataValue>
   </measuredValue>
  </siteMeasurements>
```

```
  <siteMeasurements>
   <measurementSiteReference>ie_NRA_TravelTime_1</measurementSiteReference>
   <measurementTimeDefault>2007-06-
08T15:35:03+01:00</measurementTimeDefault>
   <measuredValue index="1">
    <basicDataValue xsi:type="TravelTimeValue">
     <travelTime>58</travelTime>
     <freeFlowSpeed>110</freeFlowSpeed>
     <freeFlowTravelTime>73</freeFlowTravelTime>
     <normallyExpectedTravelTime>58</normallyExpectedTravelTime>
    </basicDataValue>
   </measuredValue>
  </siteMeasurements>

  <siteMeasurements>
   <measurementSiteReference>ie_NRA_TravelTime_2</measurementSiteReference>
   <measurementTimeDefault>2007-06-
08T15:35:03+01:00</measurementTimeDefault>
   <measuredValue index="1">
    <basicDataValue xsi:type="TravelTimeValue">
     <travelTime>309</travelTime>
     <freeFlowSpeed>110</freeFlowSpeed>
     <freeFlowTravelTime>196</freeFlowTravelTime>
     <normallyExpectedTravelTime>238</normallyExpectedTravelTime>
    </basicDataValue>
   </measuredValue>
  </siteMeasurements>

  <siteMeasurements>
   <measurementSiteReference>ie_NRA_TravelTime_3</measurementSiteReference>
   <measurementTimeDefault>2007-06-
08T15:35:03+01:00</measurementTimeDefault>
   <measuredValue index="1">
    <basicDataValue xsi:type="TravelTimeValue">
     <travelTime>397</travelTime>
     <freeFlowSpeed>110</freeFlowSpeed>
     <freeFlowTravelTime>294</freeFlowTravelTime>
     <normallyExpectedTravelTime>355</normallyExpectedTravelTime>
    </basicDataValue>
   </measuredValue>
  </siteMeasurements>

</payloadPublication>
</d2LogicalModel>
```

5.5 VDS Data

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="MeasuredDataPublication" lang="eng">
```

```
  <publicationTime>2008-01-28T13:25:19+00:00</publicationTime>
  <publicationCreator>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </publicationCreator>

<measurementSiteTableReference>ie_NRA_VDSSites_1</measurementSiteTableRefer
ence>
  <headerInformation>
   <confidentiality>noRestriction</confidentiality>
   <informationStatus>real</informationStatus>
  </headerInformation>

  <siteMeasurements>
   <measurementSiteReference>ie_NRA_VDS_506</measurementSiteReference>
   <measurementTimeDefault>2007-06-
08T15:34:00+01:00</measurementTimeDefault>
   <measuredValue index="1">
    <basicDataValue xsi:type="TrafficFlow">
     <vehicleFlow>1980</vehicleFlow>
    </basicDataValue>
   </measuredValue>
   <measuredValue index="2">
    <basicDataValue xsi:type="TrafficConcentration">
     <occupancy>7</occupancy>
    </basicDataValue>
   </measuredValue>
   <measuredValue index="3">
    <basicDataValue xsi:type="TrafficSpeed">
     <averageVehicleSpeed>48</averageVehicleSpeed>
    </basicDataValue>
   </measuredValue>
  </siteMeasurements>

  <siteMeasurements>
   <measurementSiteReference>ie_NRA_VDS_507</measurementSiteReference>
   <measurementTimeDefault>2007-06-
08T15:34:00+01:00</measurementTimeDefault>
   <measuredValue index="1">
    <basicDataValue xsi:type="TrafficFlow">
     <vehicleFlow>1440</vehicleFlow>
    </basicDataValue>
   </measuredValue>
   <measuredValue index="2">
    <basicDataValue xsi:type="TrafficConcentration">
     <occupancy>5</occupancy>
    </basicDataValue>
   </measuredValue>
   <measuredValue index="3">
    <basicDataValue xsi:type="TrafficSpeed">
     <averageVehicleSpeed>44</averageVehicleSpeed>
    </basicDataValue>
   </measuredValue>
  </siteMeasurements>

  <siteMeasurements>
   <measurementSiteReference>ie_NRA_VDS_508</measurementSiteReference>
   <measurementTimeDefault>2007-06-
08T15:34:00+01:00</measurementTimeDefault>
   <measuredValue index="1">
    <basicDataValue xsi:type="TrafficFlow">
     <vehicleFlow>1140</vehicleFlow>
```

```
    </basicDataValue>
   </measuredValue>
   <measuredValue index="2">
    <basicDataValue xsi:type="TrafficConcentration">
     <occupancy>6</occupancy>
    </basicDataValue>
   </measuredValue>
   <measuredValue index="3">
    <basicDataValue xsi:type="TrafficSpeed">
     <averageVehicleSpeed>99</averageVehicleSpeed>
    </basicDataValue>
   </measuredValue>
  </siteMeasurements>

  <siteMeasurements>
   <measurementSiteReference>ie_NRA_VDS_512</measurementSiteReference>
   <measurementTimeDefault>2007-06-
08T15:34:00+01:00</measurementTimeDefault>
   <measuredValue index="1">
    <basicDataValue xsi:type="TrafficFlow">
     <vehicleFlow>1800</vehicleFlow>
    </basicDataValue>
   </measuredValue>
   <measuredValue index="2">
    <basicDataValue xsi:type="TrafficConcentration">
     <occupancy>6</occupancy>
    </basicDataValue>
   </measuredValue>
   <measuredValue index="3">
    <basicDataValue xsi:type="TrafficSpeed">
     <averageVehicleSpeed>109</averageVehicleSpeed>
    </basicDataValue>
   </measuredValue>
  </siteMeasurements>

 </payloadPublication>
</d2LogicalModel>
```

5.6 VMS Settings

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="SituationPublication" lang="eng">
  <publicationTime>2008-01-28T13:25:19+00:00</publicationTime>
  <publicationCreator>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </publicationCreator>

  <situation id="ie_NRA_VMS_Situation_2">
```

```
   <headerInformation>
    <confidentiality>noRestriction</confidentiality>
    <informationStatus>real</informationStatus>
   </headerInformation>
   <situationRecord xsi:type="VariableMessageSignSetting"
id="ie_NRA_VMS_Situation_Record_2">
    <situationRecordCreationTime>2007-06-
06T13:24:56+01:00</situationRecordCreationTime>
    <situationRecordVersion>1</situationRecordVersion>
    <situationRecordVersionTime>2007-06-
06T13:24:56+01:00</situationRecordVersionTime>
    <situationRecordFirstSupplierVersionTime>2007-06-
06T13:24:56+01:00</situationRecordFirstSupplierVersionTime>
    <probabilityOfOccurrence>certain</probabilityOfOccurrence>
    <sourceInformation>
     <sourceIdentification>NRA</sourceIdentification>
     <sourceName>
      <value lang="en">NRA</value>
     </sourceName>
     <sourceType>roadAuthorities</sourceType>
    </sourceInformation>
    <validity>
     <validityStatus>active</validityStatus>
     <validityTimeSpecification>
      <overallStartTime>2007-06-06T13:24:56+01:00</overallStartTime>
     </validityTimeSpecification>
    </validity>
    <groupOfLocations xsi:type="GroupOfLocationsByReference">
     <locationContainedInGroup xsi:type="LocationByReference">

<predefinedLocationReference>ie_NRA_VMS_2</predefinedLocationReference>
     </locationContainedInGroup>

<predefinedLocationSetReference>ie_NRA_VMSLocations_1</predefinedLocationSe
tReference>
    </groupOfLocations>
    <pictogramListEntry>N81 NORTH</pictogramListEntry>
    <vmsIdentifier>ie_NRA_VMS_2</vmsIdentifier>
    <vmsLegend>AFTER</vmsLegend>
    <vmsLegend>M50</vmsLegend>
   </situationRecord>
  </situation>

  <situation id="ie_NRA_VMS_Situation_3">
   <headerInformation>
    <confidentiality>noRestriction</confidentiality>
    <informationStatus>real</informationStatus>
   </headerInformation>
   <situationRecord xsi:type="VariableMessageSignSetting"
id="ie_NRA_VMS_Situation_Record_3">
    <situationRecordCreationTime>2007-06-
06T13:24:48+01:00</situationRecordCreationTime>
    <situationRecordVersion>1</situationRecordVersion>
    <situationRecordVersionTime>2007-06-
06T13:24:48+01:00</situationRecordVersionTime>
    <situationRecordFirstSupplierVersionTime>2007-06-
06T13:24:48+01:00</situationRecordFirstSupplierVersionTime>
    <probabilityOfOccurrence>certain</probabilityOfOccurrence>
    <sourceInformation>
     <sourceIdentification>NRA</sourceIdentification>
     <sourceName>
      <value lang="en">NRA</value>
```

```
     </sourceName>
     <sourceType>roadAuthorities</sourceType>
    </sourceInformation>
    <validity>
     <validityStatus>active</validityStatus>
     <validityTimeSpecification>
      <overallStartTime>2007-06-06T13:24:48+01:00</overallStartTime>
     </validityTimeSpecification>
    </validity>
    <groupOfLocations xsi:type="GroupOfLocationsByReference">
     <locationContainedInGroup xsi:type="LocationByReference">

<predefinedLocationReference>ie_NRA_VMS_3</predefinedLocationReference>
     </locationContainedInGroup>

<predefinedLocationSetReference>ie_NRA_VMSLocations_1</predefinedLocationSe
tReference>
    </groupOfLocations>
    <pictogramListEntry>BLANK_M1</pictogramListEntry>
    <vmsIdentifier>ie_NRA_VMS_3</vmsIdentifier>
   </situationRecord>
  </situation>

  <situation id="ie_NRA_VMS_Situation_4">
   <headerInformation>
    <confidentiality>noRestriction</confidentiality>
    <informationStatus>real</informationStatus>
   </headerInformation>
   <situationRecord xsi:type="VariableMessageSignSetting"
id="ie_NRA_VMS_Situation_Record_4">
    <situationRecordCreationTime>2007-06-
06T13:24:48+01:00</situationRecordCreationTime>
    <situationRecordVersion>1</situationRecordVersion>
    <situationRecordVersionTime>2007-06-
06T13:24:48+01:00</situationRecordVersionTime>
    <situationRecordFirstSupplierVersionTime>2007-06-
06T13:24:48+01:00</situationRecordFirstSupplierVersionTime>
    <probabilityOfOccurrence>certain</probabilityOfOccurrence>
    <sourceInformation>
     <sourceIdentification>NRA</sourceIdentification>
     <sourceName>
      <value lang="en">NRA</value>
     </sourceName>
     <sourceType>roadAuthorities</sourceType>
    </sourceInformation>
    <validity>
     <validityStatus>active</validityStatus>
     <validityTimeSpecification>
      <overallStartTime>2007-06-06T13:24:48+01:00</overallStartTime>
     </validityTimeSpecification>
    </validity>
    <groupOfLocations xsi:type="GroupOfLocationsByReference">
     <locationContainedInGroup xsi:type="LocationByReference">

<predefinedLocationReference>ie_NRA_VMS_4</predefinedLocationReference>
     </locationContainedInGroup>

<predefinedLocationSetReference>ie_NRA_VMSLocations_1</predefinedLocationSe
tReference>
    </groupOfLocations>
    <pictogramListEntry>BLANK_M1</pictogramListEntry>
    <vmsIdentifier>ie_NRA_VMS_4</vmsIdentifier>
```

```
   </situationRecord>
  </situation>

 </payloadPublication>
</d2LogicalModel>
```

5.7 Weather Data

```
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="MeasuredDataPublication" lang="eng">
  <publicationTime>2008-07-01T16:43:35+01:00</publicationTime>
  <publicationCreator>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </publicationCreator>

<measurementSiteTableReference>WeatherSites</measurementSiteTableReference>
  <headerInformation>
   <confidentiality>noRestriction</confidentiality>
   <informationStatus>real</informationStatus>
  </headerInformation>

  <siteMeasurements>
   <measurementSiteReference>IR001</measurementSiteReference>
   <measurementTimeDefault>2005-01-
07T16:01:00+00:00</measurementTimeDefault>
   <measuredValue index="1">
    <basicDataValue xsi:type="TemperatureInformation">
      <period>3600</period>
     <temperature>
     </temperature>
    </basicDataValue>
   </measuredValue>
   <measuredValue index="2">
    <basicDataValue xsi:type="PrecipitationInformation">
      <period>3600</period>
     <precipitationDetail>
      <precipitationType>rain</precipitationType>
     </precipitationDetail>
    </basicDataValue>
   </measuredValue>
   <measuredValue index="3">
    <basicDataValue xsi:type="WindInformation">
      <period>3600</period>
     <wind>
      <maximumWindSpeed>18.6</maximumWindSpeed>
      <windDirectionBearing>354</windDirectionBearing>
      <windDirectionCompass>north</windDirectionCompass>
      <windSpeed>10.5</windSpeed>
     </wind>
```

```
    </basicDataValue>
   </measuredValue>
   <measuredValue index="4">
    <basicDataValue xsi:type="RoadSurfaceConditionInformation">
      <period>3600</period>
     <roadSurfaceConditionMeasurements>
      <protectionTemperature>0</protectionTemperature>
      <roadSurfaceTemperature>9.8</roadSurfaceTemperature>
     </roadSurfaceConditionMeasurements>
    </basicDataValue>
   </measuredValue>
  </siteMeasurements>

  <siteMeasurements>
   <measurementSiteReference>IR002</measurementSiteReference>
   <measurementTimeDefault>2005-01-
07T16:03:00+00:00</measurementTimeDefault>
   <measuredValue index="1">
    <basicDataValue xsi:type="TemperatureInformation">
      <period>3600</period>
     <temperature>
      <airTemperature>11.5</airTemperature>
      <dewPointTemperature>9.7</dewPointTemperature>
     </temperature>
    </basicDataValue>
   </measuredValue>
   <measuredValue index="2">
    <basicDataValue xsi:type="PrecipitationInformation">
      <period>3600</period>
     <precipitationDetail>
      <precipitationType>drizzle</precipitationType>
     </precipitationDetail>
    </basicDataValue>
   </measuredValue>
   <measuredValue index="3">
    <basicDataValue xsi:type="WindInformation">
      <period>3600</period>
     <wind>
     </wind>
    </basicDataValue>
   </measuredValue>
   <measuredValue index="4">
    <basicDataValue xsi:type="RoadSurfaceConditionInformation">
      <period>3600</period>
     <roadSurfaceConditionMeasurements>
      <protectionTemperature>0</protectionTemperature>
      <roadSurfaceTemperature>11.6</roadSurfaceTemperature>
     </roadSurfaceConditionMeasurements>
    </basicDataValue>
   </measuredValue>
  </siteMeasurements>

  <siteMeasurements>
   <measurementSiteReference>IR004</measurementSiteReference>
   <measurementTimeDefault>2005-01-
07T16:00:00+00:00</measurementTimeDefault>
   <measuredValue index="1">
    <basicDataValue xsi:type="TemperatureInformation">
      <period>3600</period>
     <temperature>
      <airTemperature>11.3</airTemperature>
      <dewPointTemperature>11.2</dewPointTemperature>
```

```
      </temperature>
     </basicDataValue>
    </measuredValue>
    <measuredValue index="2">
     <basicDataValue xsi:type="PrecipitationInformation">
       <period>3600</period>
      <precipitationDetail>
       <precipitationType>drizzle</precipitationType>
      </precipitationDetail>
     </basicDataValue>
    </measuredValue>
    <measuredValue index="3">
     <basicDataValue xsi:type="WindInformation">
       <period>3600</period>
      <wind>
       <maximumWindSpeed>18.6</maximumWindSpeed>
       <windDirectionBearing>210</windDirectionBearing>
       <windDirectionCompass>southSouthWest</windDirectionCompass>
       <windSpeed>10.5</windSpeed>
      </wind>
     </basicDataValue>
    </measuredValue>
    <measuredValue index="4">
     <basicDataValue xsi:type="RoadSurfaceConditionInformation">
       <period>3600</period>
      <roadSurfaceConditionMeasurements>
       <protectionTemperature>0</protectionTemperature>
       <roadSurfaceTemperature>11.3</roadSurfaceTemperature>
      </roadSurfaceConditionMeasurements>
     </basicDataValue>
    </measuredValue>
   </siteMeasurements>

   <siteMeasurements>
    <measurementSiteReference>IR005</measurementSiteReference>
    <measurementTimeDefault>2005-01-
07T16:01:00+00:00</measurementTimeDefault>
    <measuredValue index="1">
     <basicDataValue xsi:type="TemperatureInformation">
       <period>3600</period>
      <temperature>
       <airTemperature>11.5</airTemperature>
       <dewPointTemperature>11.5</dewPointTemperature>
      </temperature>
     </basicDataValue>
    </measuredValue>
    <measuredValue index="2">
     <basicDataValue xsi:type="PrecipitationInformation">
       <period>3600</period>
      <precipitationDetail>
       <precipitationType>drizzle</precipitationType>
      </precipitationDetail>
     </basicDataValue>
    </measuredValue>
    <measuredValue index="3">
     <basicDataValue xsi:type="WindInformation">
       <period>3600</period>
      <wind>
       <maximumWindSpeed>0</maximumWindSpeed>
       <windDirectionBearing>226</windDirectionBearing>
       <windDirectionCompass>southWest</windDirectionCompass>
       <windSpeed>0</windSpeed>
```

```
     </wind>
    </basicDataValue>
   </measuredValue>
   <measuredValue index="4">
    <basicDataValue xsi:type="RoadSurfaceConditionInformation">
      <period>3600</period>
     <roadSurfaceConditionMeasurements>
      <protectionTemperature>0</protectionTemperature>
      <roadSurfaceTemperature>11.5</roadSurfaceTemperature>
     </roadSurfaceConditionMeasurements>
    </basicDataValue>
   </measuredValue>
  </siteMeasurements>

 </payloadPublication>
</d2LogicalModel>
```

5.8 Travel Time Sites

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="MeasurementSiteTablePublication" lang="eng">
  <publicationTime>2008-01-28T13:25:14+00:00</publicationTime>
  <publicationCreator>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </publicationCreator>
  <headerInformation>
   <confidentiality>noRestriction</confidentiality>
   <informationStatus>real</informationStatus>
  </headerInformation>
  <measurementSiteTable id="ie_NRA_TravelTimeSites_1">

<measurementSiteTableReference>ie_NRA_TravelTimeSites</measurementSiteTable
Reference>
   <measurementSiteTableVersion>1</measurementSiteTableVersion>

   <measurementSiteRecord id="ie_NRA_TravelTime_0">
    <measurementEquipmentReference>0</measurementEquipmentReference>
    <measurementSiteName>
     <value lang="en">M1N Port Tunnel to M50</value>
    </measurementSiteName>
    <measurementSide>northBound</measurementSide>
    <measurementSpecificCharacteristics index="1">
     <period>60</period>

<specificMeasurementValueType>travelTimeInformation</specificMeasurementVal
ueType>
```

```
    </measurementSpecificCharacteristics>
    <measurementSiteLocation xsi:type="Linear">
     <tpeglinearLocation>
      <tpegDirection>northBound</tpegDirection>
      <tpegLocationType>segment</tpegLocationType>
      <to xsi:type="TPEGJunction">
       <pointCoordinates>
        <latitude>53.410717</latitude>
        <longitude>-6.22507</longitude>
       </pointCoordinates>
       <name>
        <descriptor>
         <value lang="en">1</value>
        </descriptor>
        <tpegDescriptorType>junctionName</tpegDescriptorType>
       </name>
       <ilc>
        <descriptor>
         <value lang="en">M1</value>
        </descriptor>
        <tpegDescriptorType>tpegILCName1</tpegDescriptorType>
       </ilc>
       <ilc>
        <descriptor>
         <value lang="en">M50</value>
        </descriptor>
        <tpegDescriptorType>tpegILCName2</tpegDescriptorType>
       </ilc>
       <otherName>
        <descriptor>
         <value lang="en">M50</value>
        </descriptor>
        <tpegDescriptorType>intersectionName</tpegDescriptorType>
       </otherName>
      </to>
      <from xsi:type="TPEGJunction">
       <pointCoordinates>
        <latitude>53.387316</latitude>
        <longitude>-6.241634</longitude>
       </pointCoordinates>
       <ilc>
        <descriptor>
         <value lang="en">M1</value>
        </descriptor>
        <tpegDescriptorType>tpegILCName1</tpegDescriptorType>
       </ilc>
       <ilc>
        <descriptor>
         <value lang="en">N1</value>
        </descriptor>
        <tpegDescriptorType>tpegILCName2</tpegDescriptorType>
       </ilc>
       <otherName>
        <descriptor>
         <value lang="en">Port Tunnel</value>
        </descriptor>
        <tpegDescriptorType>intersectionName</tpegDescriptorType>
       </otherName>
      </from>
     </tpeglinearLocation>
    </measurementSiteLocation>
   </measurementSiteRecord>
```

```
   <measurementSiteRecord id="ie_NRA_TravelTime_1">
    <measurementEquipmentReference>1</measurementEquipmentReference>
    <measurementSiteName>
     <value lang="en">M1N M50 to Airport</value>
    </measurementSiteName>
    <measurementSide>northBound</measurementSide>
    <measurementSpecificCharacteristics index="1">
     <period>60</period>

<specificMeasurementValueType>travelTimeInformation</specificMeasurementVal
ueType>
    </measurementSpecificCharacteristics>
    <measurementSiteLocation xsi:type="Linear">
     <tpeglinearLocation>
      <tpegDirection>northBound</tpegDirection>
      <tpegLocationType>segment</tpegLocationType>
      <to xsi:type="TPEGJunction">
       <pointCoordinates>
        <latitude>53.424758</latitude>
        <longitude>-6.218045</longitude>
       </pointCoordinates>
       <name>
        <descriptor>
         <value lang="en">2</value>
        </descriptor>
        <tpegDescriptorType>junctionName</tpegDescriptorType>
       </name>
       <ilc>
        <descriptor>
         <value lang="en">M1</value>
        </descriptor>
        <tpegDescriptorType>tpegILCName1</tpegDescriptorType>
       </ilc>
       <otherName>
        <descriptor>
         <value lang="en">Airport</value>
        </descriptor>
        <tpegDescriptorType>intersectionName</tpegDescriptorType>
       </otherName>
      </to>
      <from xsi:type="TPEGJunction">
       <pointCoordinates>
        <latitude>53.410717</latitude>
        <longitude>-6.22507</longitude>
       </pointCoordinates>
       <name>
        <descriptor>
         <value lang="en">1</value>
        </descriptor>
        <tpegDescriptorType>junctionName</tpegDescriptorType>
       </name>
       <ilc>
        <descriptor>
         <value lang="en">M1</value>
        </descriptor>
        <tpegDescriptorType>tpegILCName1</tpegDescriptorType>
       </ilc>
       <ilc>
        <descriptor>
         <value lang="en">M50</value>
        </descriptor>
```

```
         <tpegDescriptorType>tpegILCName2</tpegDescriptorType>
        </ilc>
        <otherName>
         <descriptor>
          <value lang="en">M50</value>
         </descriptor>
         <tpegDescriptorType>intersectionName</tpegDescriptorType>
        </otherName>
       </from>
      </tpeglinearLocation>
     </measurementSiteLocation>
    </measurementSiteRecord>

    <measurementSiteRecord id="ie_NRA_TravelTime_2">
     <measurementEquipmentReference>2</measurementEquipmentReference>
     <measurementSiteName>
      <value lang="en">M1N Airport to Lissenhall</value>
     </measurementSiteName>
     <measurementSide>northBound</measurementSide>
     <measurementSpecificCharacteristics index="1">
      <period>60</period>

<specificMeasurementValueType>travelTimeInformation</specificMeasurementVal
ueType>
     </measurementSpecificCharacteristics>
     <measurementSiteLocation xsi:type="Linear">
      <tpeglinearLocation>
       <tpegDirection>northBound</tpegDirection>
       <tpegLocationType>segment</tpegLocationType>
       <to xsi:type="TPEGJunction">
        <pointCoordinates>
         <latitude>53.477818</latitude>
         <longitude>-6.204237</longitude>
        </pointCoordinates>
        <name>
         <descriptor>
          <value lang="en">4</value>
         </descriptor>
         <tpegDescriptorType>junctionName</tpegDescriptorType>
        </name>
        <ilc>
         <descriptor>
          <value lang="en">M1</value>
         </descriptor>
         <tpegDescriptorType>tpegILCName1</tpegDescriptorType>
        </ilc>
        <ilc>
         <descriptor>
          <value lang="en">N1</value>
         </descriptor>
         <tpegDescriptorType>tpegILCName2</tpegDescriptorType>
        </ilc>
        <otherName>
         <descriptor>
          <value lang="en">Lissenhall</value>
         </descriptor>
         <tpegDescriptorType>intersectionName</tpegDescriptorType>
        </otherName>
       </to>
       <from xsi:type="TPEGJunction">
        <pointCoordinates>
         <latitude>53.424758</latitude>
```

```
         <longitude>-6.218045</longitude>
        </pointCoordinates>
        <name>
         <descriptor>
          <value lang="en">2</value>
         </descriptor>
         <tpegDescriptorType>junctionName</tpegDescriptorType>
        </name>
        <ilc>
         <descriptor>
          <value lang="en">M1</value>
         </descriptor>
         <tpegDescriptorType>tpegILCName1</tpegDescriptorType>
        </ilc>
        <otherName>
         <descriptor>
          <value lang="en">Airport</value>
         </descriptor>
         <tpegDescriptorType>intersectionName</tpegDescriptorType>
        </otherName>
       </from>
      </tpeglinearLocation>
     </measurementSiteLocation>
    </measurementSiteRecord>

    <measurementSiteRecord id="ie_NRA_TravelTime_3">
     <measurementEquipmentReference>3</measurementEquipmentReference>
     <measurementSiteName>
      <value lang="en">M1S Rowans Road to Lissenhall</value>
     </measurementSiteName>
     <measurementSide>southBound</measurementSide>
     <measurementSpecificCharacteristics index="1">
      <period>60</period>

<specificMeasurementValueType>travelTimeInformation</specificMeasurementVal
ueType>
     </measurementSpecificCharacteristics>
     <measurementSiteLocation xsi:type="Linear">
      <tpeglinearLocation>
       <tpegDirection>southBound</tpegDirection>
       <tpegLocationType>segment</tpegLocationType>
       <to xsi:type="TPEGJunction">
        <pointCoordinates>
         <latitude>53.477818</latitude>
         <longitude>-6.204237</longitude>
        </pointCoordinates>
        <name>
         <descriptor>
          <value lang="en">4</value>
         </descriptor>
         <tpegDescriptorType>junctionName</tpegDescriptorType>
        </name>
        <ilc>
         <descriptor>
          <value lang="en">M1</value>
         </descriptor>
         <tpegDescriptorType>tpegILCName1</tpegDescriptorType>
        </ilc>
        <ilc>
         <descriptor>
          <value lang="en">N1</value>
         </descriptor>
```

```
        <tpegDescriptorType>tpegILCName2</tpegDescriptorType>
       </ilc>
       <otherName>
        <descriptor>
         <value lang="en">Lissenhall</value>
        </descriptor>
        <tpegDescriptorType>intersectionName</tpegDescriptorType>
       </otherName>
      </to>
      <from xsi:type="TPEGJunction">
       <pointCoordinates>
        <latitude>53.563207</latitude>
        <longitude>-6.212789</longitude>
       </pointCoordinates>
       <name>
        <descriptor>
         <value lang="en">5</value>
        </descriptor>
        <tpegDescriptorType>junctionName</tpegDescriptorType>
       </name>
       <ilc>
        <descriptor>
         <value lang="en">M1</value>
        </descriptor>
        <tpegDescriptorType>tpegILCName1</tpegDescriptorType>
       </ilc>
       <ilc>
        <descriptor>
         <value lang="en">N1</value>
        </descriptor>
        <tpegDescriptorType>tpegILCName2</tpegDescriptorType>
       </ilc>
       <otherName>
        <descriptor>
         <value lang="en">Rowans Road</value>
        </descriptor>
        <tpegDescriptorType>intersectionName</tpegDescriptorType>
       </otherName>
      </from>
     </tpeglinearLocation>
    </measurementSiteLocation>
   </measurementSiteRecord>

</measurementSiteTable>
 </payloadPublication>
</d2LogicalModel>
```

5.9 VDS Sites

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
```

```
                    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                    xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="MeasurementSiteTablePublication" lang="eng">
  <publicationTime>2008-01-28T13:25:15+00:00</publicationTime>
  <publicationCreator>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </publicationCreator>
  <headerInformation>
   <confidentiality>noRestriction</confidentiality>
   <informationStatus>real</informationStatus>
  </headerInformation>
  <measurementSiteTable id="ie_NRA_VDSSites_1">

<measurementSiteTableReference>ie_NRA_VDSSites</measurementSiteTableReferen
ce>
   <measurementSiteTableVersion>1</measurementSiteTableVersion>

   <measurementSiteRecord id="ie_NRA_VDS_506">
    <measurementEquipmentReference>506</measurementEquipmentReference>
    <measurementEquipmentTypeUsed>
     <value lang="en">VDS</value>
    </measurementEquipmentTypeUsed>
    <measurementSiteName>
     <value lang="en">VDS-06</value>
    </measurementSiteName>
    <measurementSide>northBound</measurementSide>
    <measurementSpecificCharacteristics index="1">
     <period>60</period>

<specificMeasurementValueType>trafficFlow</specificMeasurementValueType>
    </measurementSpecificCharacteristics>
    <measurementSpecificCharacteristics index="2">
     <period>60</period>

<specificMeasurementValueType>trafficConcentration</specificMeasurementValu
eType>
    </measurementSpecificCharacteristics>
    <measurementSpecificCharacteristics index="3">
     <period>60</period>

<specificMeasurementValueType>trafficSpeed</specificMeasurementValueType>
    </measurementSpecificCharacteristics>
    <measurementSiteLocation xsi:type="Point">
     <tpegpointLocation xsi:type="TPEGSimplePoint">
      <tpegDirection>northBound</tpegDirection>
      <tpegLocationType>nonLinkedPoint</tpegLocationType>
      <point xsi:type="TPEGNonJunctionPoint">
       <pointCoordinates>
        <latitude>53.29019</latitude>
        <longitude>-6.44544</longitude>
       </pointCoordinates>
       <name>
        <descriptor>
         <value lang="en">N7</value>
```

```
        </descriptor>
        <tpegDescriptorType>linkName</tpegDescriptorType>
       </name>
       <name>
        <descriptor>
         <value lang="en">VDS-06</value>
        </descriptor>
        <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
       </name>
      </point>
     </tpegpointLocation>
    </measurementSiteLocation>
   </measurementSiteRecord>

   <measurementSiteRecord id="ie_NRA_VDS_507">
    <measurementEquipmentReference>507</measurementEquipmentReference>
    <measurementEquipmentTypeUsed>
     <value lang="en">VDS</value>
    </measurementEquipmentTypeUsed>
    <measurementSiteName>
     <value lang="en">VDS-07</value>
    </measurementSiteName>
    <measurementSide>northBound</measurementSide>
    <measurementSpecificCharacteristics index="1">
     <period>60</period>

<specificMeasurementValueType>trafficFlow</specificMeasurementValueType>
    </measurementSpecificCharacteristics>
    <measurementSpecificCharacteristics index="2">
     <period>60</period>

<specificMeasurementValueType>trafficConcentration</specificMeasurementValu
eType>
    </measurementSpecificCharacteristics>
    <measurementSpecificCharacteristics index="3">
     <period>60</period>

<specificMeasurementValueType>trafficSpeed</specificMeasurementValueType>
    </measurementSpecificCharacteristics>
    <measurementSiteLocation xsi:type="Point">
     <tpegpointLocation xsi:type="TPEGSimplePoint">
      <tpegDirection>northBound</tpegDirection>
      <tpegLocationType>nonLinkedPoint</tpegLocationType>
      <point xsi:type="TPEGNonJunctionPoint">
       <pointCoordinates>
        <latitude>53.291519</latitude>
        <longitude>-6.437112</longitude>
       </pointCoordinates>
       <name>
        <descriptor>
         <value lang="en">N7</value>
        </descriptor>
        <tpegDescriptorType>linkName</tpegDescriptorType>
       </name>
       <name>
        <descriptor>
         <value lang="en">VDS-07</value>
        </descriptor>
        <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
       </name>
      </point>
     </tpegpointLocation>
```

```
    </measurementSiteLocation>
   </measurementSiteRecord>

   <measurementSiteRecord id="ie_NRA_VDS_508">
    <measurementEquipmentReference>508</measurementEquipmentReference>
    <measurementEquipmentTypeUsed>
     <value lang="en">VDS</value>
    </measurementEquipmentTypeUsed>
    <measurementSiteName>
     <value lang="en">VDS-08</value>
    </measurementSiteName>
    <measurementSide>northBound</measurementSide>
    <measurementSpecificCharacteristics index="1">
     <period>60</period>

<specificMeasurementValueType>trafficFlow</specificMeasurementValueType>
    </measurementSpecificCharacteristics>
    <measurementSpecificCharacteristics index="2">
     <period>60</period>

<specificMeasurementValueType>trafficConcentration</specificMeasurementValu
eType>
    </measurementSpecificCharacteristics>
    <measurementSpecificCharacteristics index="3">
     <period>60</period>

<specificMeasurementValueType>trafficSpeed</specificMeasurementValueType>
    </measurementSpecificCharacteristics>
    <measurementSiteLocation xsi:type="Point">
     <tpegpointLocation xsi:type="TPEGSimplePoint">
      <tpegDirection>northBound</tpegDirection>
      <tpegLocationType>nonLinkedPoint</tpegLocationType>
      <point xsi:type="TPEGNonJunctionPoint">
       <pointCoordinates>
        <latitude>53.293721</latitude>
        <longitude>-6.428242</longitude>
       </pointCoordinates>
       <name>
        <descriptor>
         <value lang="en">N7</value>
        </descriptor>
        <tpegDescriptorType>linkName</tpegDescriptorType>
       </name>
       <name>
        <descriptor>
         <value lang="en">VDS-08</value>
        </descriptor>
        <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
       </name>
      </point>
     </tpegpointLocation>
    </measurementSiteLocation>
   </measurementSiteRecord>

   <measurementSiteRecord id="ie_NRA_VDS_512">
    <measurementEquipmentReference>512</measurementEquipmentReference>
    <measurementEquipmentTypeUsed>
     <value lang="en">VDS</value>
    </measurementEquipmentTypeUsed>
    <measurementSiteName>
     <value lang="en">VDS-12</value>
    </measurementSiteName>
```

```
    <measurementSide>northBound</measurementSide>
    <measurementSpecificCharacteristics index="1">
     <period>60</period>

<specificMeasurementValueType>trafficFlow</specificMeasurementValueType>
    </measurementSpecificCharacteristics>
    <measurementSpecificCharacteristics index="2">
     <period>60</period>

<specificMeasurementValueType>trafficConcentration</specificMeasurementValu
eType>
    </measurementSpecificCharacteristics>
    <measurementSpecificCharacteristics index="3">
     <period>60</period>

<specificMeasurementValueType>trafficSpeed</specificMeasurementValueType>
    </measurementSpecificCharacteristics>
    <measurementSiteLocation xsi:type="Point">
     <tpegpointLocation xsi:type="TPEGSimplePoint">
      <tpegDirection>northBound</tpegDirection>
      <tpegLocationType>nonLinkedPoint</tpegLocationType>
      <point xsi:type="TPEGNonJunctionPoint">
       <pointCoordinates>
        <latitude>53.306769</latitude>
        <longitude>-6.405796</longitude>
       </pointCoordinates>
       <name>
        <descriptor>
         <value lang="en">N7</value>
        </descriptor>
        <tpegDescriptorType>linkName</tpegDescriptorType>
       </name>
       <name>
        <descriptor>
         <value lang="en">VDS-12</value>
        </descriptor>
        <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
       </name>
      </point>
     </tpegpointLocation>
    </measurementSiteLocation>
   </measurementSiteRecord>

  </measurementSiteTable>
 </payloadPublication>
</d2LogicalModel>
```

5.10 VMS Locations

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
```

```
                    xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="PredefinedLocationsPublication" lang="eng">
  <publicationTime>2008-01-28T13:25:16+00:00</publicationTime>
  <publicationCreator>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </publicationCreator>
  <headerInformation>
   <confidentiality>noRestriction</confidentiality>
   <informationStatus>real</informationStatus>
  </headerInformation>
  <predefinedLocationSet id="ie_NRA_VMSLocations_1">
   <predefinedLocationSetName>
    <value lang="en">ie_NRA_VMSLocations</value>
   </predefinedLocationSetName>

   <predefinedLocation id="ie_NRA_VMS_2">
    <predefinedLocationName>
     <value lang="en">VMS_N7_2N</value>
    </predefinedLocationName>
    <predefinedLocation xsi:type="Point">
     <tpegpointLocation xsi:type="TPEGSimplePoint">
      <tpegDirection>northBound</tpegDirection>
      <tpegLocationType>nonLinkedPoint</tpegLocationType>
      <point xsi:type="TPEGNonJunctionPoint">
       <pointCoordinates>
        <latitude>53.289123</latitude>
        <longitude>-6.447683</longitude>
       </pointCoordinates>
       <name>
        <descriptor>
         <value lang="en">N7</value>
        </descriptor>
        <tpegDescriptorType>linkName</tpegDescriptorType>
       </name>
       <name>
        <descriptor>
         <value lang="en">VMS_N7_2N</value>
        </descriptor>
        <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
       </name>
      </point>
     </tpegpointLocation>
    </predefinedLocation>
   </predefinedLocation>

   <predefinedLocation id="ie_NRA_VMS_3">
    <predefinedLocationName>
     <value lang="en">VMS_M1_Drynam(Kinsealy)</value>
    </predefinedLocationName>
    <predefinedLocation xsi:type="Point">
     <tpegpointLocation xsi:type="TPEGSimplePoint">
      <tpegDirection>southBound</tpegDirection>
      <tpegLocationType>nonLinkedPoint</tpegLocationType>
      <point xsi:type="TPEGNonJunctionPoint">
```

```
        <pointCoordinates>
         <latitude>53.443958</latitude>
         <longitude>-6.204477</longitude>
        </pointCoordinates>
        <name>
         <descriptor>
          <value lang="en">M1</value>
         </descriptor>
         <tpegDescriptorType>linkName</tpegDescriptorType>
        </name>
        <name>
         <descriptor>
          <value lang="en">VMS_M1_Drynam(Kinsealy)</value>
         </descriptor>
         <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
        </name>
       </point>
      </tpegpointLocation>
     </predefinedLocation>
    </predefinedLocation>

    <predefinedLocation id="ie_NRA_VMS_4">
     <predefinedLocationName>
      <value lang="en">VMS_M1_Marshalls Town</value>
     </predefinedLocationName>
     <predefinedLocation xsi:type="Point">
      <tpegpointLocation xsi:type="TPEGSimplePoint">
       <tpegDirection>southBound</tpegDirection>
       <tpegLocationType>nonLinkedPoint</tpegLocationType>
       <point xsi:type="TPEGNonJunctionPoint">
        <pointCoordinates>
         <latitude>53.435754</latitude>
         <longitude>-6.209368</longitude>
        </pointCoordinates>
        <name>
         <descriptor>
          <value lang="en">M1</value>
         </descriptor>
         <tpegDescriptorType>linkName</tpegDescriptorType>
        </name>
        <name>
         <descriptor>
          <value lang="en">VMS_M1_Marshalls Town</value>
         </descriptor>
         <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
        </name>
       </point>
      </tpegpointLocation>
     </predefinedLocation>
    </predefinedLocation>

  </predefinedLocationSet>
 </payloadPublication>
</d2LogicalModel>
```

5.11 Weather Sites

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel modelBaseVersion="1.0"
                xmlns="http://datex2.eu/schema/1_0/1_0"
```

```
                    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                    xsi:schemaLocation="http://datex2.eu/schema/1_0/1_0
http://datex2.eu/schema/1_0/1_0/DATEXIISchema_1_0_1_0.xsd">
 <exchange>
  <supplierIdentification>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </supplierIdentification>
 </exchange>
 <payloadPublication xsi:type="MeasurementSiteTablePublication" lang="eng">
  <publicationTime>2008-01-28T13:25:16+00:00</publicationTime>
  <publicationCreator>
   <country>ie</country>
   <nationalIdentifier>NRA</nationalIdentifier>
  </publicationCreator>
  <headerInformation>
   <confidentiality>noRestriction</confidentiality>
   <informationStatus>real</informationStatus>
  </headerInformation>
  <measurementSiteTable id="ie_NRA_WeatherSites_1">

<measurementSiteTableReference>ie_NRA_WeatherSites</measurementSiteTableRef
erence>
   <measurementSiteTableVersion>1</measurementSiteTableVersion>

   <measurementSiteRecord id="ie_NRA_Weather_IR001">
    <measurementEquipmentReference>IR001</measurementEquipmentReference>
    <measurementEquipmentTypeUsed>
     <value lang="en">Weather</value>
    </measurementEquipmentTypeUsed>
    <measurementSiteName>
     <value lang="en">M1 Dunleer Bypass</value>
    </measurementSiteName>
    <measurementSpecificCharacteristics index="1">
     <period>3600</period>

<specificMeasurementValueType>temperatureInformation</specificMeasurementVa
lueType>
    </measurementSpecificCharacteristics>
    <measurementSpecificCharacteristics index="2">
     <period>3600</period>

<specificMeasurementValueType>precipitationInformation</specificMeasurement
ValueType>
    </measurementSpecificCharacteristics>
    <measurementSpecificCharacteristics index="3">
     <period>3600</period>

<specificMeasurementValueType>windInformation</specificMeasurementValueType
>
    </measurementSpecificCharacteristics>
    <measurementSpecificCharacteristics index="4">
     <period>3600</period>

<specificMeasurementValueType>roadSurfaceConditionInformation</specificMeas
urementValueType>
    </measurementSpecificCharacteristics>
    <measurementSiteLocation xsi:type="Point">
     <tpegpointLocation xsi:type="TPEGSimplePoint">
      <tpegDirection>allDirections</tpegDirection>
      <tpegLocationType>nonLinkedPoint</tpegLocationType>
      <point xsi:type="TPEGNonJunctionPoint">
```

```
        <pointCoordinates>
         <latitude>53.834525</latitude>
         <longitude>-6.410976</longitude>
        </pointCoordinates>
        <name>
         <descriptor>
          <value lang="en">M1</value>
         </descriptor>
         <tpegDescriptorType>linkName</tpegDescriptorType>
        </name>
        <name>
         <descriptor>
          <value lang="en">M1 Dunleer Bypass</value>
         </descriptor>
         <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
        </name>
       </point>
      </tpegpointLocation>
     </measurementSiteLocation>
    </measurementSiteRecord>

    <measurementSiteRecord id="ie_NRA_Weather_IR002">
     <measurementEquipmentReference>IR002</measurementEquipmentReference>
     <measurementEquipmentTypeUsed>
      <value lang="en">Weather</value>
     </measurementEquipmentTypeUsed>
     <measurementSiteName>
      <value lang="en">M1 Dublin Airport</value>
     </measurementSiteName>
     <measurementSpecificCharacteristics index="1">
      <period>3600</period>

<specificMeasurementValueType>temperatureInformation</specificMeasurementVa
lueType>
     </measurementSpecificCharacteristics>
     <measurementSpecificCharacteristics index="2">
      <period>3600</period>

<specificMeasurementValueType>precipitationInformation</specificMeasurement
ValueType>
     </measurementSpecificCharacteristics>
     <measurementSpecificCharacteristics index="3">
      <period>3600</period>

<specificMeasurementValueType>windInformation</specificMeasurementValueType
>
     </measurementSpecificCharacteristics>
     <measurementSpecificCharacteristics index="4">
      <period>3600</period>

<specificMeasurementValueType>roadSurfaceConditionInformation</specificMeas
urementValueType>
     </measurementSpecificCharacteristics>
     <measurementSiteLocation xsi:type="Point">
      <tpegpointLocation xsi:type="TPEGSimplePoint">
       <tpegDirection>allDirections</tpegDirection>
       <tpegLocationType>nonLinkedPoint</tpegLocationType>
       <point xsi:type="TPEGNonJunctionPoint">
        <pointCoordinates>
         <latitude>53.418583</latitude>
         <longitude>-6.229452</longitude>
        </pointCoordinates>
```

```
        <name>
         <descriptor>
          <value lang="en">M1</value>
         </descriptor>
         <tpegDescriptorType>linkName</tpegDescriptorType>
        </name>
        <name>
         <descriptor>
          <value lang="en">M1 Dublin Airport</value>
         </descriptor>
         <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
        </name>
       </point>
      </tpegpointLocation>
     </measurementSiteLocation>
    </measurementSiteRecord>

    <measurementSiteRecord id="ie_NRA_Weather_IR004">
     <measurementEquipmentReference>IR004</measurementEquipmentReference>
     <measurementEquipmentTypeUsed>
      <value lang="en">Weather</value>
     </measurementEquipmentTypeUsed>
     <measurementSiteName>
      <value lang="en">M7 Newbridge Bypass</value>
     </measurementSiteName>
     <measurementSpecificCharacteristics index="1">
      <period>3600</period>

<specificMeasurementValueType>temperatureInformation</specificMeasurementVa
lueType>
     </measurementSpecificCharacteristics>
     <measurementSpecificCharacteristics index="2">
      <period>3600</period>

<specificMeasurementValueType>precipitationInformation</specificMeasurement
ValueType>
     </measurementSpecificCharacteristics>
     <measurementSpecificCharacteristics index="3">
      <period>3600</period>

<specificMeasurementValueType>windInformation</specificMeasurementValueType
>
     </measurementSpecificCharacteristics>
     <measurementSpecificCharacteristics index="4">
      <period>3600</period>

<specificMeasurementValueType>roadSurfaceConditionInformation</specificMeas
urementValueType>
     </measurementSpecificCharacteristics>
     <measurementSiteLocation xsi:type="Point">
      <tpegpointLocation xsi:type="TPEGSimplePoint">
       <tpegDirection>allDirections</tpegDirection>
       <tpegLocationType>nonLinkedPoint</tpegLocationType>
       <point xsi:type="TPEGNonJunctionPoint">
        <pointCoordinates>
         <latitude>53.170032</latitude>
         <longitude>-6.758696</longitude>
        </pointCoordinates>
        <name>
         <descriptor>
          <value lang="en">M7</value>
         </descriptor>
```

```
        <tpegDescriptorType>linkName</tpegDescriptorType>
       </name>
       <name>
        <descriptor>
         <value lang="en">M7 Newbridge Bypass</value>
        </descriptor>
        <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
       </name>
      </point>
     </tpegpointLocation>
    </measurementSiteLocation>
   </measurementSiteRecord>

   <measurementSiteRecord id="ie_NRA_Weather_IR005">
    <measurementEquipmentReference>IR005</measurementEquipmentReference>
    <measurementEquipmentTypeUsed>
     <value lang="en">Weather</value>
    </measurementEquipmentTypeUsed>
    <measurementSiteName>
     <value lang="en">M7 Portlaoise Bypass</value>
    </measurementSiteName>
    <measurementSpecificCharacteristics index="1">
     <period>3600</period>

<specificMeasurementValueType>temperatureInformation</specificMeasurementVa
lueType>
    </measurementSpecificCharacteristics>
    <measurementSpecificCharacteristics index="2">
     <period>3600</period>

<specificMeasurementValueType>precipitationInformation</specificMeasurement
ValueType>
    </measurementSpecificCharacteristics>
    <measurementSpecificCharacteristics index="3">
     <period>3600</period>

<specificMeasurementValueType>windInformation</specificMeasurementValueType
>
    </measurementSpecificCharacteristics>
    <measurementSpecificCharacteristics index="4">
     <period>3600</period>

<specificMeasurementValueType>roadSurfaceConditionInformation</specificMeas
urementValueType>
    </measurementSpecificCharacteristics>
    <measurementSiteLocation xsi:type="Point">
     <tpegpointLocation xsi:type="TPEGSimplePoint">
      <tpegDirection>allDirections</tpegDirection>
      <tpegLocationType>nonLinkedPoint</tpegLocationType>
      <point xsi:type="TPEGNonJunctionPoint">
       <pointCoordinates>
        <latitude>53.017049</latitude>
        <longitude>-7.278729</longitude>
       </pointCoordinates>
       <name>
        <descriptor>
         <value lang="en">M7</value>
        </descriptor>
        <tpegDescriptorType>linkName</tpegDescriptorType>
       </name>
       <name>
        <descriptor>
```

```
          <value lang="en">M7 Portlaoise Bypass</value>
         </descriptor>
         <tpegDescriptorType>nonLinkedPointName</tpegDescriptorType>
        </name>
       </point>
      </tpegpointLocation>
     </measurementSiteLocation>
     </measurementSiteRecord>


  </measurementSiteTable>
 </payloadPublication>
</d2LogicalModel>
```