

PEM/FixMyStreet Integration for

Oxfordshire County Council

Integration Specification

**Version 4.00**

**Document Version History**

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# About This Document

## Document Purpose

This document describes the basic components of the integration and how the systems will be integrated. It will describe the events occurring in the Exor PEM module that will instigate the updating of the FixMyStreet application.

Operating constraints and assumptions that may affect the final solution will also be defined.

## Document Terminology

The following abbreviations, terms and concepts are used in the document:

### Abbreviations

|  |  |
| --- | --- |
| Abbreviation | Meaning, Definition |
| FMS | FixMyStreet application |
| PEM | Exor Public Enquiry Module |
| Enquiry | A call made by a citizen (within or without) the Council reporting an issue to or requesting information from the Council. |
| Service-request-ID | FMS name for the PEM DOC\_ID |
| Ce\_doc\_reference | Parameter in the PEM API where a FMS reference number can be placed if needs be. |
| Ce\_source | Parameter in the PEM API which should be set to ‘FMS’ to indicate that the enquiry was generated by the FMS application. |
| FMS API | FixMyStreet API defined as Open311\_FMS\_Complete Spec  <https://github.com/mysociety/fixmystreet/wiki/Open311-FMS---Complete-Spec> |

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# Solution Overview

## Solution Objectives

The objective of this solution is to update the matching enquiry in the FixMyStreet application as the enquiry is progressed within the Exor PEM module.

## Solution Description

Certain enquiries when received by the FixMyStreet application will be directed to the Exor PEM application. The FixMyStreet application will call the Exor PEM API to create the enquiry in the Exor PEM application. This functionality is not covered by this specification or the work resulting from it.

When the status of an enquiry in the Exor PEM application is changed to one which might require an update to the FMS application, a trigger is called. If this is the case, the trigger will write a row in an Oracle table within the Exor database. The script written by FMS will interrogate this table and put the data into xml format to be accessed by the FMS API.

The ‘text’ written to the row in the Oracle table described above needs to be easily amendable by Oxfordshire County Council personnel going forward. The technician who will write the interface will either use either a trigger on the status change of the PEM record or will use the Exor Process Manager and/or Alert Manager to write to this table. If the forms within the Exor application (Process Manager/Alert Manager) method are used then the ‘text’ will be available via the Exor application forms for amendment. If the trigger method is used a designated Oracle table that holds the text will be created. The contents of this table can be amended via sql access to the database. The trigger itself will not have to be amended if the text needs to be changed.

# Detailed Requirements

## Functionality Overview

A trigger will be written that is executed when the PEM Status is changed to ‘*Referred*’, ‘*Inspected*’ or ‘*Completed*’. The trigger will first determine if the enquiry was generated by the FixMyStreet application. It will do this by checking the SOURCE field in the PEM record. If it is not set to ‘*FMS*’ then the trigger will complete with no further action being taken. Depending on the status the PEM has just been changed to, the following actions will be taken:

### Status changed to ‘Referred’

The trigger will write a record to the FMS\_UPDATE table in the Exor Oracle database. It will use the DOC\_ID field in the PEM record as the ‘*service\_request\_ID’*. It will set the ‘status’ to ‘*OPEN*’ and the ‘description’ to ‘*This call has been referred to an Officer within the Highways Department of Oxfordshire County Council*’. The table will set the ‘row\_id’, which will be the primary key, by using auto-incrementation. The ‘updated\_datetime’ field will be set up as an auto-timestamp field.

### Status changed to ‘Inspected’

The trigger will write a record to the FMS\_UPDATE table in the Exor Oracle database. It will use the DOC\_ID field in the PEM record as the ‘service\_request\_ID’. It will set the ‘status’ to ‘OPEN’ and the ‘description’ to ‘*The issue reported in this call has been inspected by an Oxfordshire County Council Highways Inspector and appropriate action has been taken*’. The table will set the ‘*row\_id’,* which will be the primary key, by using auto-incrementation. The ‘*updated\_datetime*’ field will be set up as an auto-timestamp field.

### Status changed to ‘Completed’

The trigger will write a record to the FMS\_UPDATE table in the Exor Oracle database. It will use the DOC\_ID field in the PEM record as the ‘service\_request\_ID’. It will set the ‘status’ to ‘CLOSED’ and the ‘description’ to ‘*The issue reported in this call has now been fixed*’. The table will set the ‘row\_id’, which will be the primary key, by using auto-incrementation. The ‘updated\_datetime’ field will be set up as an auto-timestamp field.

# Assumptions

## Creation of the PEM enquiry from FMS using the PEM API

When the FMS application calls the PEM API to create the enquiry in the Exor PEM application it may provide an FMS unique identifier if appropriate. This identifier can be placed in the ‘CE\_DOC\_REFERENCE’ field.

It will set the ‘CE\_SOURCE field to ‘*FMS*’

All other fields required for the API to be entered.

When the Exor PEM\_API is called it returns the PEM DOC\_ID in the ‘CE\_DOC\_ID’ field. This will become the ‘*service\_request\_ID’* in the FMS record.

The ‘description’ in the FMS enquiry will be updated to reflect the fact that an enquiry has been created in the Exor PEM application.

## Configuration of the PEM Application

The domain values for SOURCE in the PEM application need to be amended to include ‘FMS’.

The domain values for the STATUS in the PEM application needs to be checked to ensure ‘REFERRED’, ‘INSPECTED’ and ‘COMPLETED’ are included.

## Creation and maintenance of the FMS\_UPDATE table in the Exor Database

This table will need to be created and maintained by Oxfordshire County Council. It will need to contain five fields, these being the:

*Row\_id (Auto-incremented)*

*Service\_request\_ID*

*Updated\_timedate (Auto timestamp field)*

*Status*

*Description*

It is expected that this table will be accessed every 15 minutes to retrieve the data stored in the previous 15 minutes. Once a day all of the data will be extracted for the previous 24 hours so a check can be made that nothing has been missed. Back up and emptying of this table will be the responsibility of Oxfordshire County Council.

The table will need to be set up prior to the trigger being installed.

## Extraction of the data from the FMS\_UPDATE table into xml format for loading into the FMS system.

This will be the responsibility of Oxfordshire County Council and FMS.