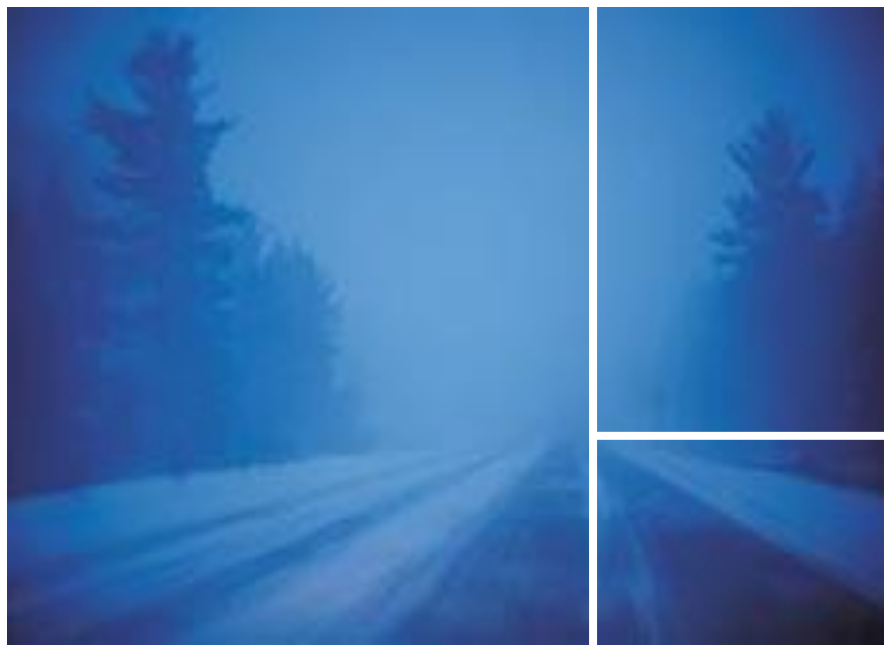


***Exor Corporation Limited***



***Maintenance Manager  
Inspection Loader v4.5***



***The Global Leader in  
Infrastructure Asset Management***



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## Quality Assurance Statement

Document Details	
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1	Nov 2010	AH	All	Released with v4.3
2	May2011	IS	P18-28	Inspection loader error correction and summary form changed for v4.4
3	Sep 2011	IS	P35-36	BOQ and WOL % Uplifts added to inspection load file format L, M & N records

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## Bulk Loading Inspections

Before starting to load inspection data you should have loaded your network and checked the reference data meets operational requirements using the relevant process and modules.

The following **Product Options - HIG9130** will also need checking to ensure the system is configured to match the organisation's business process requirements. Product options are usually set up and maintained by the system administrator.

### DEFMATPAR

Default matching defect parameter.

Enter a numeric value that will represent the minimum distance between defects allowed for automatic defect superseding when using the inspection loaders. Superseding is an automatic process and therefore does not take place when defects are loaded manually using **Locator Create Defects – MAI3807, Inspections – MAI3808 or Enquiry Manager – DOC0150**.

The superseding of defects will automatically take place if two defects are found within the same chainage tolerance and XSP.

Superseded defects can be maintained using **Match Duplicate Defects – MAI2739** and **Unmatch Duplicate Defects – MAI2760**.

Defect superseding can also be viewed in **Defects – MAI3806**.

Note, the superseding of defects has been enhanced with the new **Defect Superseding Rules – MAI4406** modules in Version 4.3

### DEFPRIDATE

Set repair date on change of priority.

Enter "Y" or "N".

This determines whether or not the repair due date should be recalculated automatically when a defect priority is amended.

In **Defects - MAI3806**, if this option is set to Y then the repair due date is recalculated.

This option may be amended on a live system.

### DEFSUPRES

Supersede Repair Date Due.

Enter "Y" or "N".

If set to "N" then when superseding, repair due date will be set as if the defect is new. If set to "Y" then the repair due date will be set to the superseded defects repair due date.

### DEFSUPTYPE

Defect Superseding Type

Enter "1" or "2".

This is used when defects are loaded using the Inspection Loader and has the following effect on superseding:

If set to “1” superseding occurs if a previous defect:

- Is on a different inspection.
- Has the same Inventory Code.
- Has the same Activity Code.
- Has the same Defect Code.
- Is located on the same Section.
- Has a Start Chain within the tolerance set in product option DEFMATPAR (defaulted to +/-5m if the option is not set).
- Has the same XSP.
- Has the same Roadstud Advisory/Mandatory value.
- Is not already superseded.
- Is not already COMPLETED.

If set to “2” superseding occurs the same as option 1 with the following additions:

- Is on a different Inspection (*with the same Initiation Type and Safety/Detailed Flag*).
- Has the same Priority Code.

#### MANINSACT

Safety Inspection Act. Code

Enter a valid activity code.

This is the default Safety Inspection Activity Code for Inspections by Group. Inspection Activities are set up using **Activities - MAI1200**.

#### NOTREFOUND

Not Refound.

Enter “OFF”, “ALL” or “PRI”.

Any defects not found from a subsequent inspection will be marked as complete under the following circumstances:

OFF - Not refund code ignored

ALL - Not Refound code on and runs for all Defects of whatever priority

PRI - Not Refound code on and runs against all Defects EXCEPT Cat 1s.

#### REPCOMDATE

Entry of repair complete date;

Enter “Y” or “N”.

This option determines whether a defect can be completed manually from **Inspections - MAI3808**,

If set to “Y” then users will be able to enter a repair completion date and the defect status will be automatically updated. If set to “N” then the repair completion date will be non-enterable. This is usually the case when **Work Orders - MAI3800** is in use.

#### REPSETPERD and REPSETPERL

Auto setting of perm. Date due.

Enter “Y” or “N”.

Enter “Y” to force the system to compute repair due dates for single permanent repairs to be based on the rules of the temporary repair.

**RESTYPACC**

Response type for accepted notifiable defects

This option must be set to a valid response code on defect notifications. These values are set up using **Domains - HIG9120** and updating the **RESPONSE\_TYPES** option. It defines the code used to indicate that a defect has been accepted by an organisation in **Responses to Notices - MAI3816** this option is used to determine if a defect has been accepted by a different organisation

This option must not be changed on a live system.

**USEDEFCHND and USEDEFCHNL**

Use chainage on DoT and Local defects, respectively.

Enter "Y" or "N".

This option determines whether chainage and XSP values are recorded on defects. In **Load Inspections - MAI2200**, if this option is set to "Y" then chainages must exist on the load file and superseding of defects will take place. If set to "N" then chainages will be set to null and there will be no superseding.

When loading inspections using **Inspections - MAI3808**, if this option is set to "Y" then chainages must be entered. If set to "N" then chainages are non-enterable.

This option must not be amended on live systems.

**USEDEFCRDS**

Use Defect Coordinates.

Enter "Y" or "N".

If set to "Y" the system will store the defects x and y co-ordinates.

---

## General Information

Most inspection data will be entered using the ***Maintenance Inspection Loader – MAI4400***. This handles input from a Data Capture Device (DCD). However, individual reports on inspections may be entered using either ***Inspections – MAI3808*** or ***Inspections by Road Group – MAI3899***.

There will be times when a defect is reported more than once at the same location. The system will supersede these defects automatically with the ***Defect Superseding Rules - MAI4406*** if loaded via the loader. In order to manually associate a reported defect with another as duplicate you should use either ***Match Duplicate Defects – MAI2730*** for defects that do not have an associated chainage or Product Option ***USEDEFCHND*** (for DoT defects or ***USEDEFCHNL*** (for local defects).

If having designated two reported defects as duplicated with each other this is later found to have been the wrong action, you may remove this association using ***Unmatch Duplicate Defects – MAI2760***.

When bulk loading inspections you will generally be loading data that has been collected with the aid of one of the following:

- Text based DCD
- Map based DCD
- Voice activated DCD

The ***Maintenance Inspection Loader – MAI4400*** transfers data collected on the DCD to the main *highways* database.

Automated processes can be used if required so all the inspector needs to do is place the inspection file into an FTP site defined by the system administrator

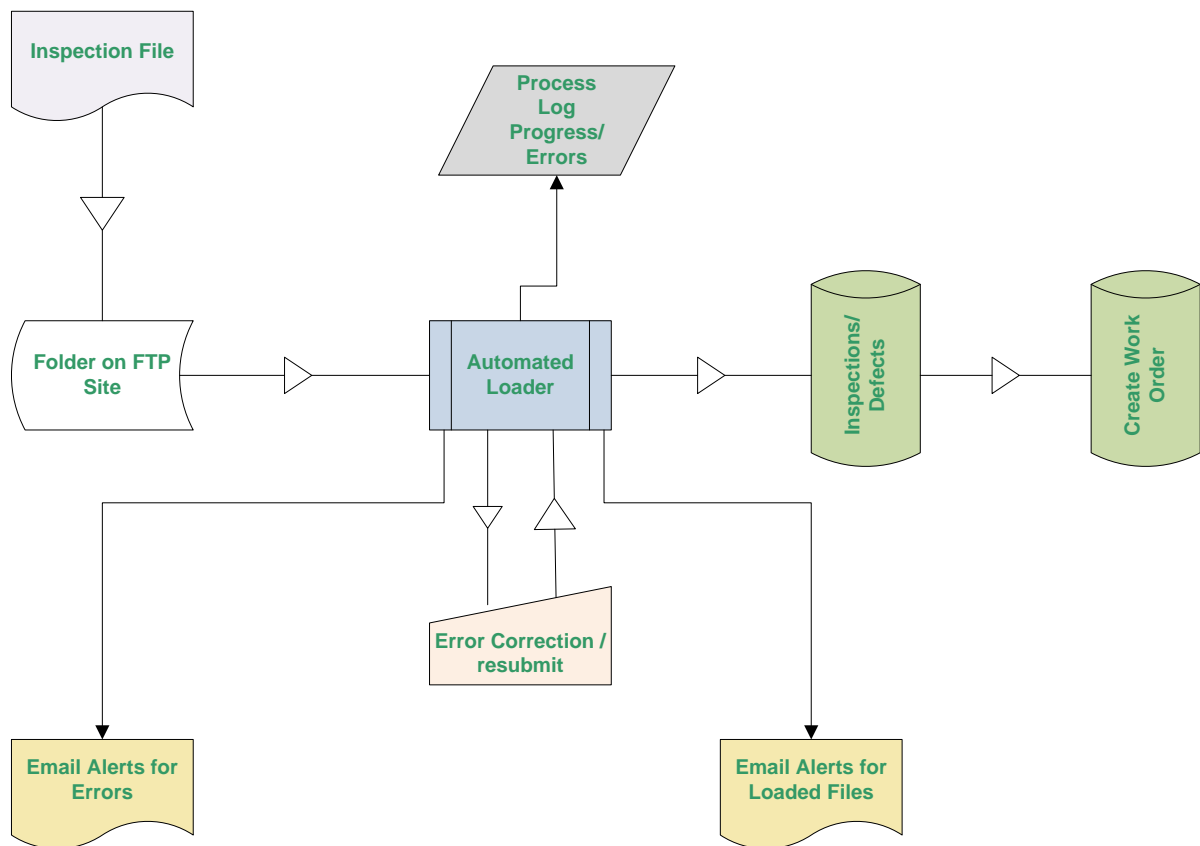
The data that is loaded onto the system is validated using the road network and the reference data that has been set up. (Refer to Maintenance Manager Administration Guide for further information.)

Inspection reference data can be written to a file suitable for download onto a DCD using:

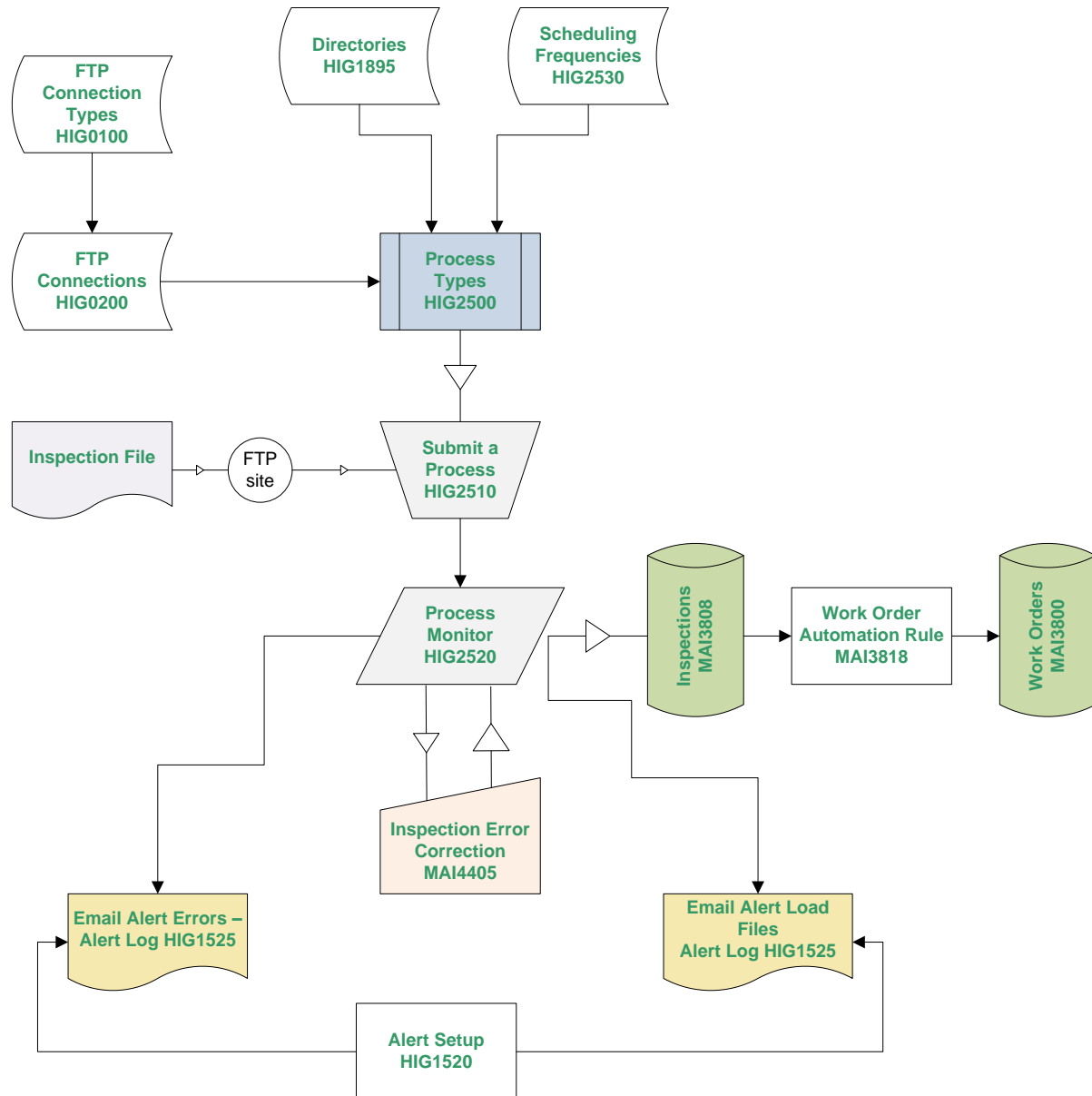
- Download Network Data for DCD Inspections – MAI2224
- Download Static Reference Data for DCD Inspections – MAI2220
- Download Standard Item Data for DCD Inspections – MAI2222
- Download Inspections by Asset – MAI3863



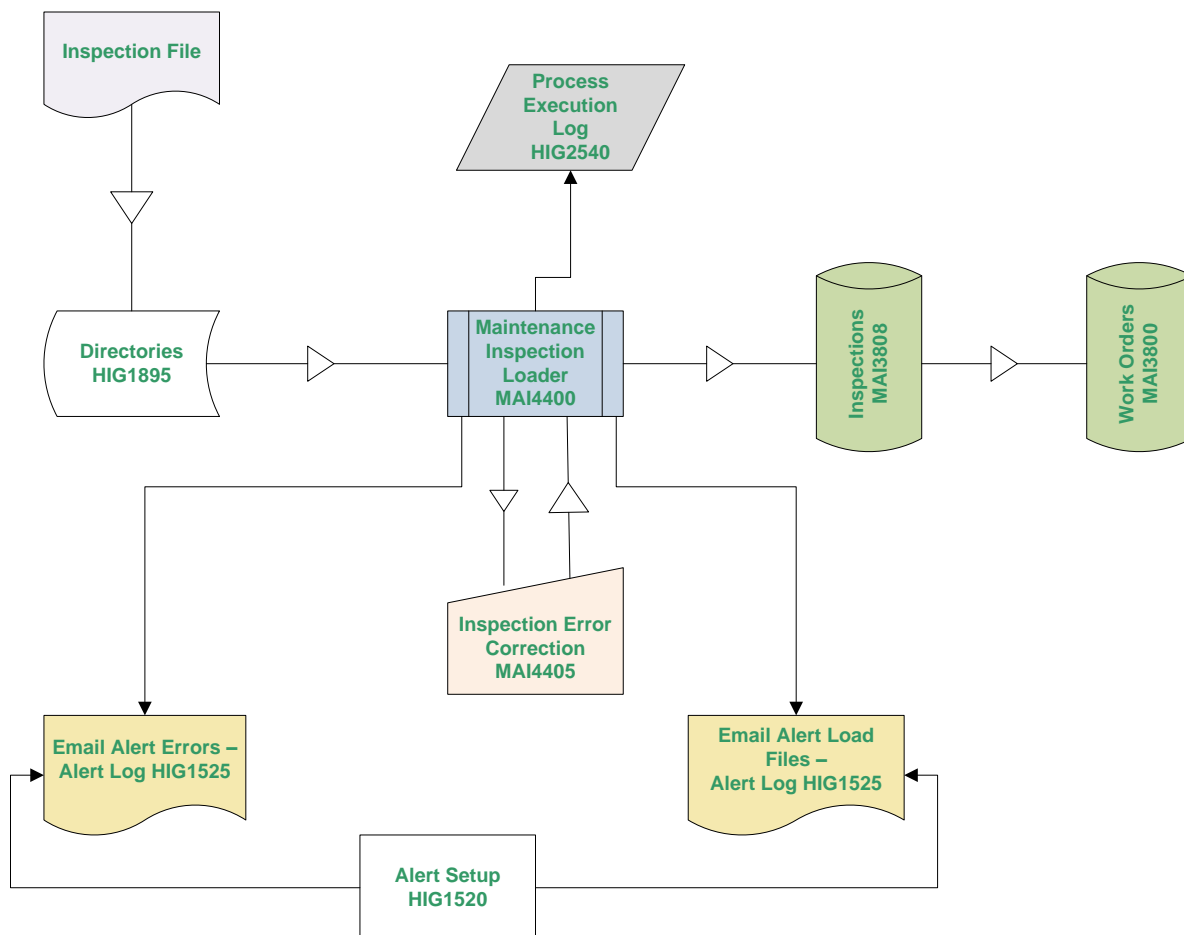
## Diagram of Process



## Diagram of Automatic Inspection Load Process



## Diagram of Manual Inspection Load Process



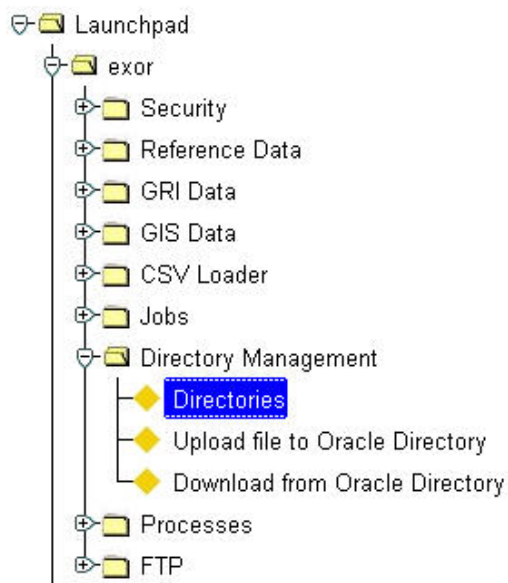
## Associated Modules

For information on the following associated modules refer to Exor General System Admin Guide:

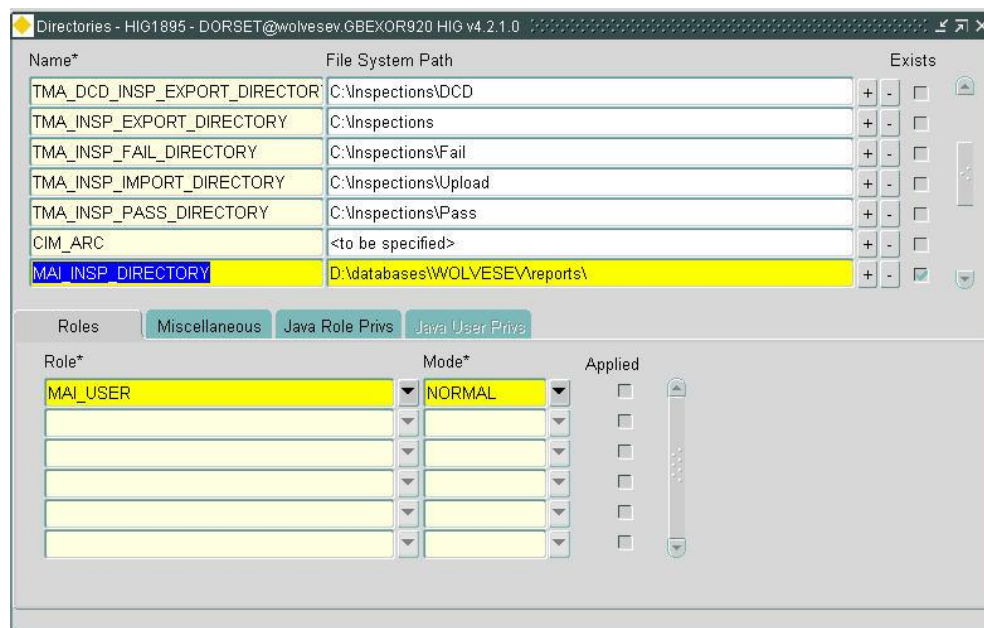
- FTP Connection Types – HIG0100
- FTP Connection – HIG0200
- Scheduling Frequencies – HIG2530
- Process types – HIG2500
- Submit a Process – HIG2510
- Process Monitor – HIG2520

## Directories – HIG1895

**Figure 1**  
Directories menu



**Figure 2**  
Directories



The screenshot shows the 'Directories' form in HIG1895. The form has a title bar 'Directories - HIG1895 - DORSET@wolvesev.GBEXOR920 HIG v4.2.1.0'. Below the title bar is a table with columns 'Name\*', 'File System Path', and 'Exists'. The table contains several entries, with 'MAI\_INSP\_DIRECTORY' highlighted in yellow. Below the table are tabs for 'Roles', 'Miscellaneous', 'Java Role Privs', and 'Java User Privs'. The 'Roles' tab is active, showing a table with columns 'Role\*', 'Mode\*', and 'Applied'. The 'MAI\_USER' role is highlighted in yellow.

Name*	File System Path	Exists
TMA_DCD_INSP_EXPORT_DIRECTORY	C:\Inspections\DCD	+ - <input type="checkbox"/>
TMA_INSP_EXPORT_DIRECTORY	C:\Inspections	+ - <input type="checkbox"/>
TMA_INSP_FAIL_DIRECTORY	C:\Inspections\Fail	+ - <input type="checkbox"/>
TMA_INSP_IMPORT_DIRECTORY	C:\Inspections\Upload	+ - <input type="checkbox"/>
TMA_INSP_PASS_DIRECTORY	C:\Inspections\Pass	+ - <input type="checkbox"/>
CIM_ARC	<to be specified>	+ - <input type="checkbox"/>
MAI_INSP_DIRECTORY	D:\databases\WOLVESEV\reports\	+ - <input checked="" type="checkbox"/>

Role*	Mode*	Applied
MAI_USER	NORMAL	<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>

### General Information

This form is used to enter a directory under the MAI\_INSP\_DIRECTORY option.

The directory specified is the directory on the server database that a selected file is uploaded to by the form when performing a manual inspection load. It is also the folder that the FTP polling process moves files to from the FTP

site. The inspection loader then picks up the files from this directory and loads them into the database.

**Name****Mandatory**

The name of available directories will be displayed.  
For setting up the Inspection Loader the option MAI\_INSP\_DIRECTORY should be selected.

**File System Path****Required**

Enter a valid directory that will be used in the inspection load process.

**Exists****Display Only**

This option will be checked to show that the directory entered is a valid directory.

---

**Roles Tab****Role****Mandatory****List**

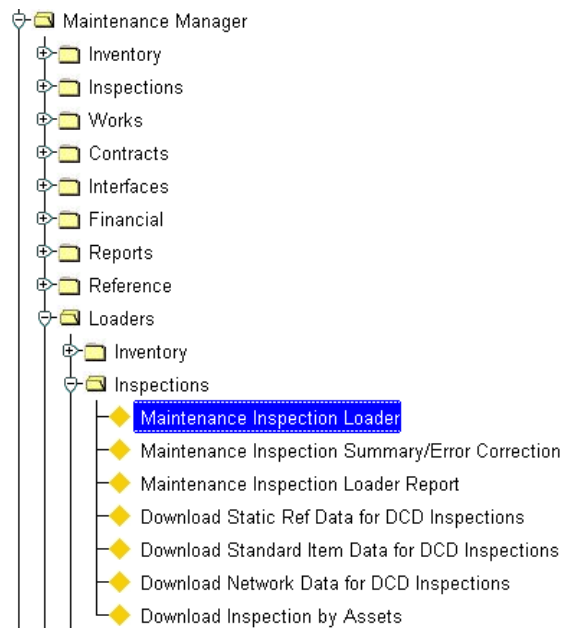
Enter the role that the user must be granted in order to write to the directory.

**Mode****Mandatory****List**

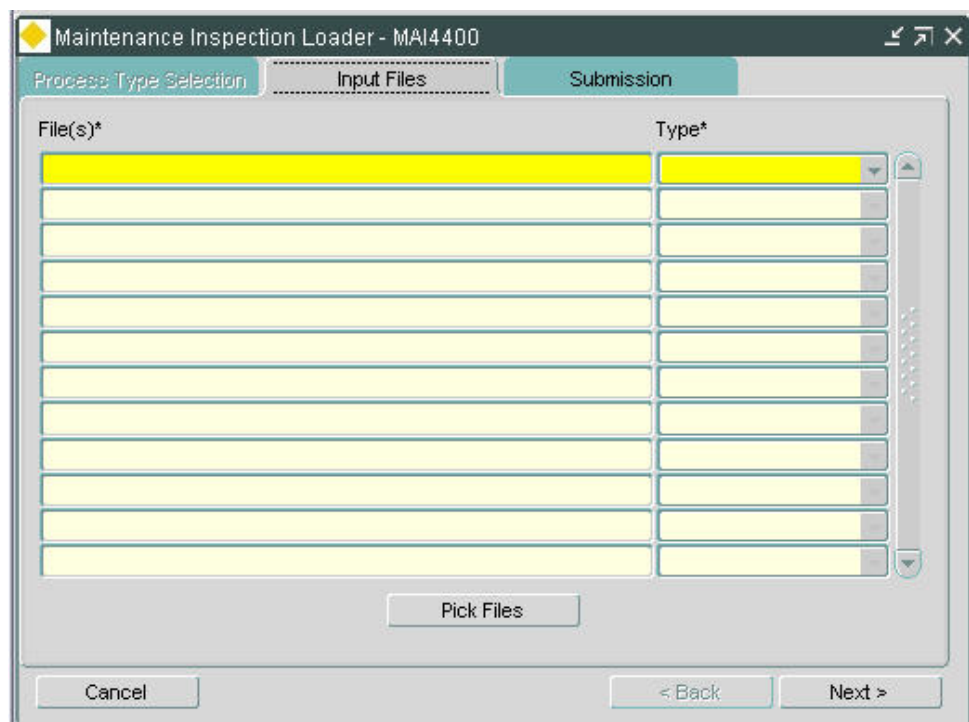
Enter the mode of access of the role defined that the user must be granted in order to write to the directory.

## Maintenance Inspection Loader- MAI4400

**Figure 3**  
Maintenance Inspection  
Loader  
Menu option



**Figure 4**  
Maintenance Inspection  
Loader



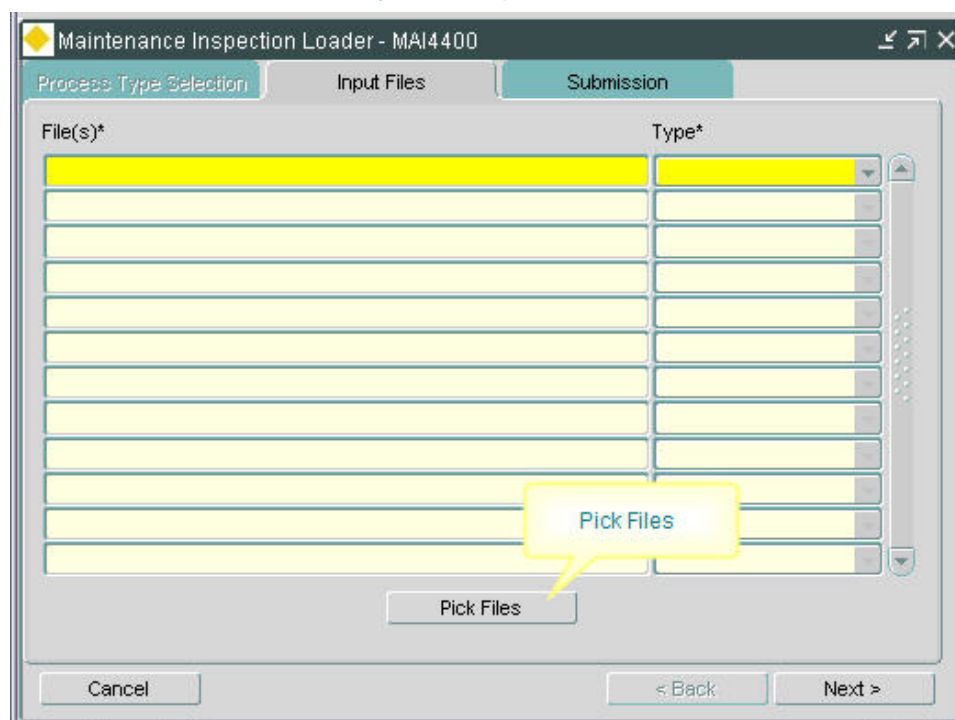
### General Information

Inspection files can be loaded into maintenance manager in one of two ways. It can be done manually by picking the individual files for load or can be done automatically.

**Note:** For details of setting up an automatic process for inspection loading refer to the appropriate section of this document.

This form is used to manually load inspection files.

**Figure 5**  
**Input Files tab**



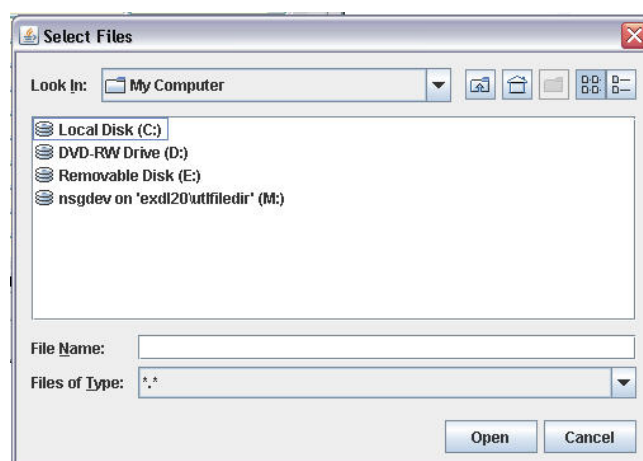
## Input Files

The Input Files tab is used to manually select a file to be processed through the inspection loader. The file to be loaded can be selected using the **[Pick Files]** button. This tab is enabled only if the selected process has input file types associated with it.

### **[Pick Files]**

Press this button to bring up the 'Select Files' window where the inspection file to be loaded can be located and selected.

**Figure 6**  
**Select Files**



Once the file has been located select the **[Open]** button to place it into the Input Files tab.

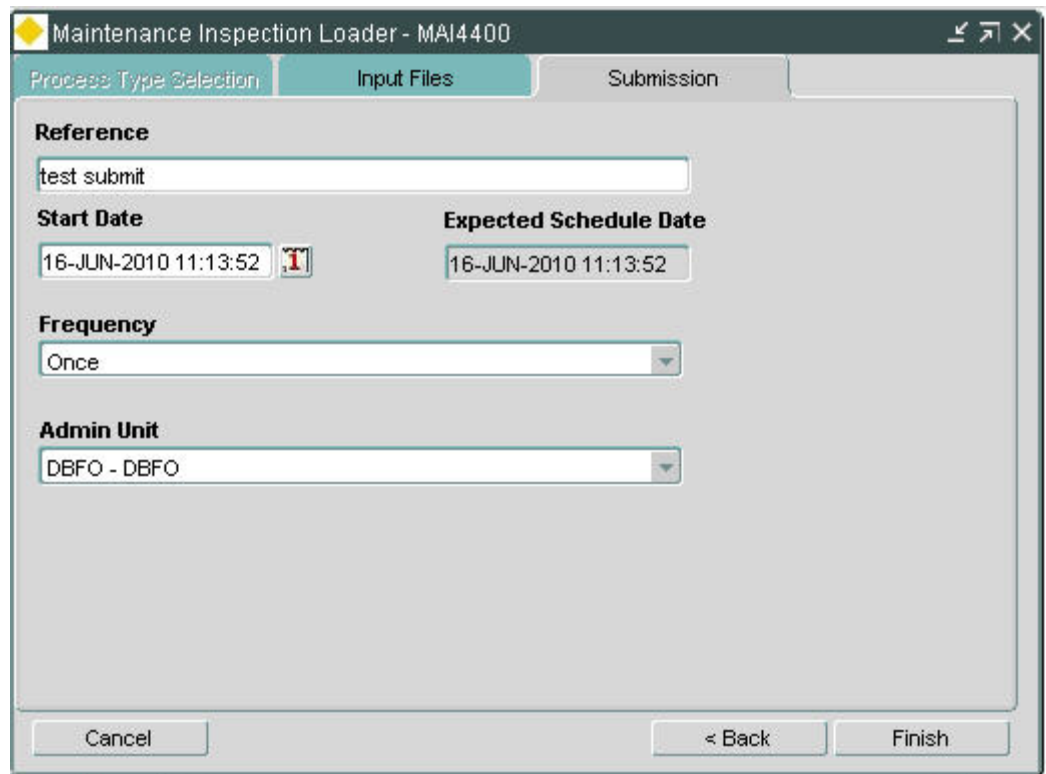
## Files (Required)

This field will show the filename of the inspection file selected to be loaded.

## Type (Required) List

Select the type of file to be loaded. This will be 'Inspection Files'.

Figure 7  
Submission tab



## Submission

Selecting the [Next] button on the Input Files tab will open the Submission tab.

The [Cancel] button will cancel the load process.

The [<Back] button will take the form back to the **Input Files** tab.

## Reference (Optional)

Enter a reference name for the inspection load submission.

## Start Date (Required)

Enter the date and time the file should be processed. This will default to the current date and time.

## Expected Schedule Date (Display Only)

This will show the date and time as defined in the 'Start Date' field.

## Frequency (Required) List

The frequency of the inspection load submission will default to 'Once' for manual loading. Scheduling frequencies will have been set up previously in form **Scheduling Frequencies – HIG2530**.



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<b>Admin Unit</b>	<b>(Optional)</b>	<b>List</b>
-------------------	-------------------	-------------

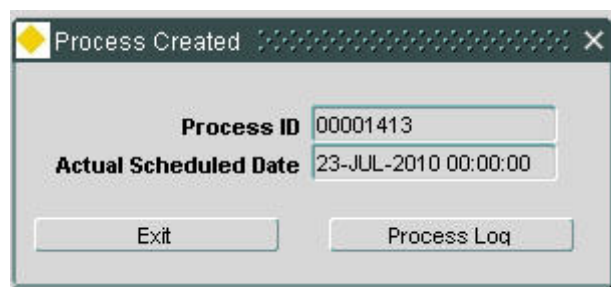
---

Enter the admin unit to be used for processing the inspection load file if required.

Select the **[Finish]** button to start the inspection load process.

The **Process Created** window will appear.

**Figure 8**  
**Process Created**



---

<b>Process Id</b>	<b>(Display Only)</b>
-------------------	-----------------------

---

The process Id of the inspection load will be displayed.

---

<b>Actual Scheduled Date</b>	<b>(Display Only)</b>
------------------------------	-----------------------

---

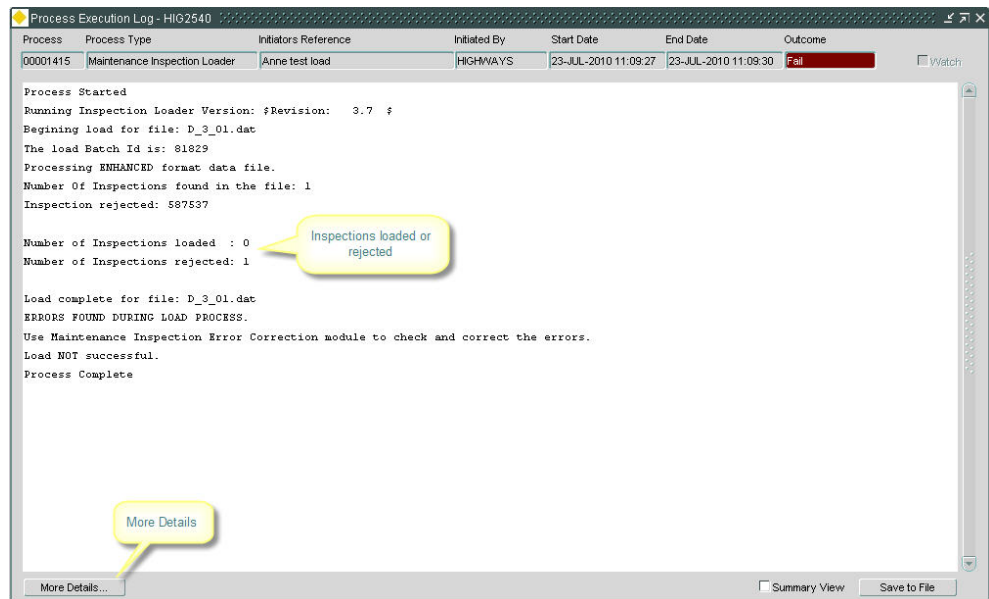
The actual date of the start of the process of the inspection load will be displayed.

**[Exit]** will exit the Maintain Inspection Loader form but the inspection load process will continue.

**[Process Log]** will open form *Process Execution Log – HIG2540*.

## Process Execution Log – HIG2540

Figure 9  
Process Execution Log



Process	Process Type	Initiators Reference	Initiated By	Start Date	End Date	Outcome
00001415	Maintenance Inspection Loader	Anne test load	HIGHWAYS	23-JUL-2010 11:09:27	23-JUL-2010 11:09:30	Fail

Process Started  
Running Inspection Loader Version: \$Revision: 3.7 \$  
Beginning load for file: D\_3\_01.dat  
The load Batch Id is: 01029  
Processing ENHANCED format data file.  
Number Of Inspections found in the file: 1  
Inspection rejected: 507537

Number of Inspections loaded : 0  
Number of Inspections rejected: 1

Load complete for file: D\_3\_01.dat  
ERRORS FOUND DURING LOAD PROCESS.  
Use Maintenance Inspection Error Correction module to check and correct the errors.  
Load NOT successful.  
Process Complete

More Details

More Details...

Summary View Save to File

### General Information

The Process Execution Log show details of the inspection load including the outcome of either 'Pass' or 'Fail'. This form is for information only.

The Process Execution Log can be called from form **Process Monitor – HIG2520** or by using the [Process Log] button in form **Submit a Process – HIG2510** after a process has been submitted.

#### Process (Display Only)

The process number of the inspection load will be displayed.

#### Process Type (Display Only)

The process type of the inspection load as defined in form **Maintenance Inspection Loader – MAI4400** will be displayed.

#### Initiators Reference (Display Only)

The reference of the inspection load as defined in form **Maintenance Inspection Loader – MAI4400** will be displayed.

#### Initiated By (Display Only)

The name of the user that initiated the inspection load will be displayed.

#### Start Date (Display Only)

The start date and time of the inspection load will be displayed.

#### End Date (Display Only)

The end date and time of the inspection load will be displayed.

#### Outcome (Display Only)

The outcome of the inspection load will be displayed.

The main part of the form will show a log of all processes that have been carried out for that process Id. Details will include:

- Batch Id
- Errors found during load process
- Number of inspections found
- Number of inspections loaded
- Number of inspections rejected
- Load successful/not successful

If the inspection load was not successful and subsequently corrected and re-submitted the results will be added to the log.

### Watch (Checkbox)

During execution the process execution log will continually add logging details to the screen as the process is taking place. It will re-query the log table every 3 seconds. For large processes there will be masses of details being logged.

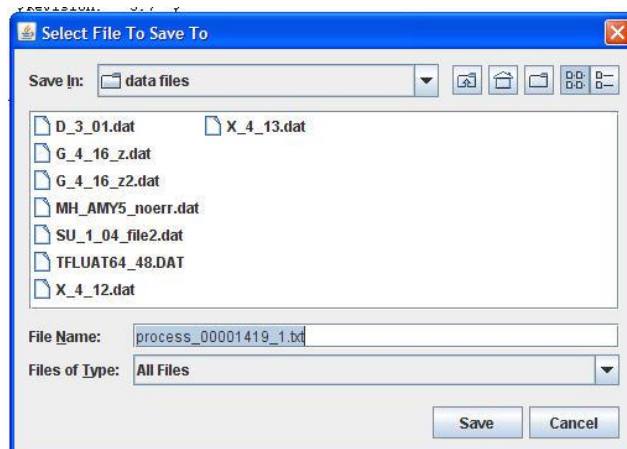
Unchecking this box will stop the details from continually being written to the screen.

### Summary View (Checkbox)

Select this box to reduce the contents of the log to a summary view.

For executions that have been completed the **[Save to File]** button will allow the contents of the process execution log to be saved to a specified location.

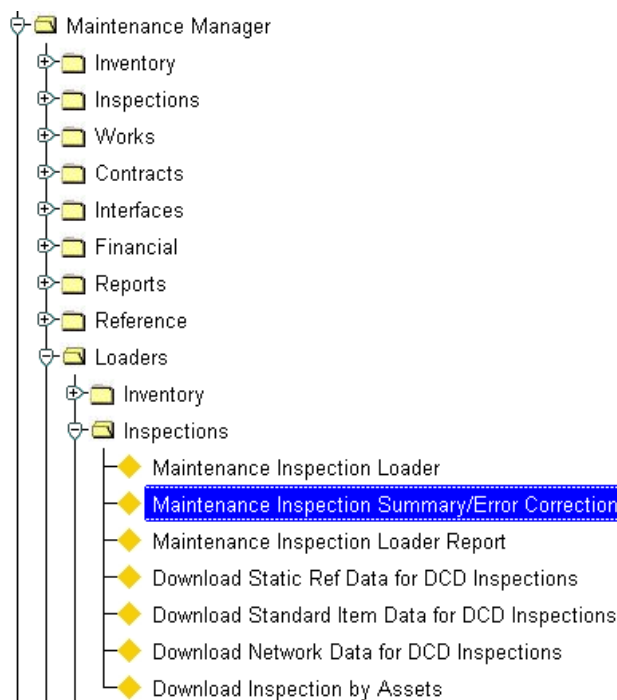
**Figure 10**  
**Save to File**



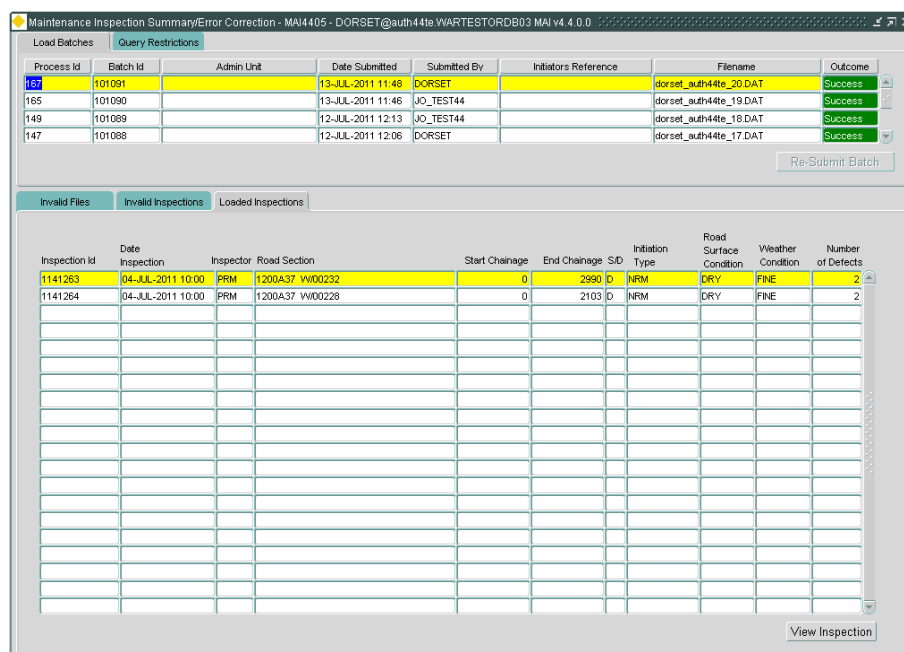
The **[More Details...]** button will open form ***Maintenance Inspection Summary/Error Correction – MAI4405*** (Figure 12) from where unsuccessful files can be corrected and re-submitted.

## Maintenance Inspection Summary/ Error Correction – MAI4405

**Figure 11**  
Inspection Summary/Error  
Correction  
Menu Option



**Figure 12**  
Inspection Summary/  
Error Correction



Process Id	Batch Id	Admin Unit	Date Submitted	Submitted By	Initiators Reference	Filename	Outcome
167	101091		13-JUL-2011 11:48	DORSET		dorset_auth44te_20.DAT	Success
165	101090		13-JUL-2011 11:46	JO_TEST44		dorset_auth44te_19.DAT	Success
149	101089		12-JUL-2011 12:13	JO_TEST44		dorset_auth44te_18.DAT	Success
147	101088		12-JUL-2011 12:06	DORSET		dorset_auth44te_17.DAT	Success

Re-Submit Batch

Inspection Id	Date Inspection	Inspector	Road Section	Start Chainage	End Chainage	S/D	Initiation Type	Road Surface Condition	Weather Condition	Number of Defects
1141263	04-JUL-2011 10:00	PRM	1200A37 VW00232	0	2990	D	NRM	DRY	FINE	2
1141264	04-JUL-2011 10:00	PRM	1200A37 VW00228	0	2103	D	NRM	DRY	FINE	2

View Inspection

### General Information

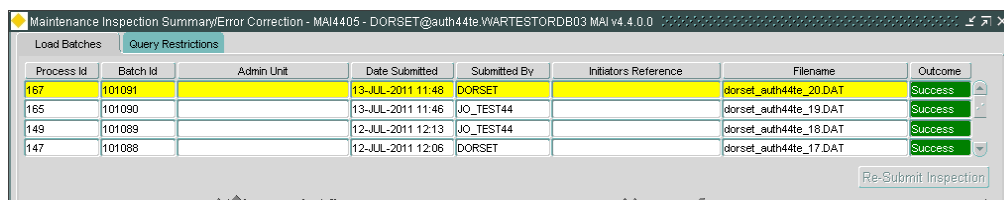
This form has two functions:

1. Act as a load summary enabling users to review those Maintenance Inspection loads that have been submitted to the database, using the Query Restrictions tab a user can refine the display and retrieve a specific set of inspections as required.

- Review and correct the load file after a failed load. Once the changes have been completed the file will have to be re-submitted using the [Re-Submit Batch] button.

The form can be opened from the Maintenance Manager menu or alternatively directly from **Process Monitor – HIG2520** or **Process Execution Log – HIG2540** by selecting the [More Details] button.

**Figure 13**  
**Load Batches Tab**



Process Id	Batch Id	Admin Unit	Date Submitted	Submitted By	Initiators Reference	Filename	Outcome
167	101091		13-JUL-2011 11:49	DORSET		dorset_auth44te_20.DAT	Success
165	101090		13-JUL-2011 11:46	JO_TEST44		dorset_auth44te_19.DAT	Success
149	101089		12-JUL-2011 12:13	JO_TEST44		dorset_auth44te_18.DAT	Success
147	101088		12-JUL-2011 12:06	DORSET		dorset_auth44te_17.DAT	Success

If this form is called from either Process Monitor – HIG2520 or Process Execution Log – HIG2540 This tab will display the selected load process.

If this form is called from the Maintenance manager menu it will display a summary of the Maintenance Inspection loads. The user may use it to query back specific load batches based on the query criteria entered.

If the content of this tab has been restricted by criteria entered in the query restrictions tab, any further query criteria entered in this tab will apply to the results of the previous restrictions.

The following details will be displayed in one of the three tabs shown in the lower half of the form where the information may be viewed or updated as required:

- File Validation errors - Invalid Files tab (Figure 15)
- Data Validation errors - Invalid Inspections tab (Figure 17)
- Successfully loaded Inspections - Loaded Inspections (Figure 22)

## Load Batches tab

This tab will display a summary of the Maintenance Inspection Loads. The summary information may be restricted based on query criteria being entered in one of more of the fields within the tab.

The information returned in this tab can be further restricted by entering criteria into the Query Restrictions tab (Figure 14).

The following fields will display the load batch information

### Process Id (Display Only)

The internal process Id for the batch load will be displayed.

### Batch Id (Display Only)

The inspection batch Id will be displayed.

### Admin Unit (Display Only)

The admin unit will be displayed.

### Date Submitted (Display Only)

The date the process was submitted will be displayed.

### Submitted by (Display Only)

The name of the user who submitted the process will be displayed.

### Initiators Reference (Display Only)

The reference quoted in the file submission in form **Maintenance Inspection Loader - MAI4400** will be displayed.

### Filename (Display Only)

The filename for the inspection load will be displayed.

### Outcome (Display Only)

The outcome will show either 'Success' or 'Fail' for completed inspection loads. For loads to be submitted at a later date the outcome will show 'To Be Determined'.

If the outcome is set to 'Fail' the file or inspection is invalid and will contain errors, these can then be fixed using either the **Invalid Files** tab (Figure 15) or the **Invalid Inspections** tab (Figure 17) and then re-submitted using the **[Re-Submit Inspection]** button

Figure 14  
Query Restrictions  
Tab



## Query Restrictions tab

The user may restrict the data that is retrieved into the Load Batches tab by entering criteria in one or more of the fields in this tab.

Once the criteria has been entered into this tab the user selects the Load Batches tab, the content of that tab will automatically be restricted based on the criteria entered.

### Process Details

#### Admin Unit (Optional) List

Restrict the load batches by the admin unit that was used when processing the inspection load file.

#### Date Submitted From/To (Optional) List

Restrict the load batches retrieved to those submitted between the two dates selected. The 'To' date will default to Sysdate.

<b>Include Successful Loads</b>	<b>(Optional)</b>	<b>Checkbox</b>
Include successful loads in the data retrieved, default is to have this box checked. If not checked, the user will see nothing in the Loaded Inspections tab.		

#### **Inspection details**

<b>Include Invalid Files</b>	<b>(Optional)</b>	<b>Checkbox</b>
If a file is in an invalid format and the system is unable to determine any information about the inspection, for example inspectors initials, no data will be returned. Selecting this checkbox will also include those files and will display appropriate error messages in the Invalid Files tab.		

<b>Road Section</b>	<b>(Optional)</b>	<b>List</b>
Restrict the load batches to those containing the selected road section. The list will display the gazetteer.		

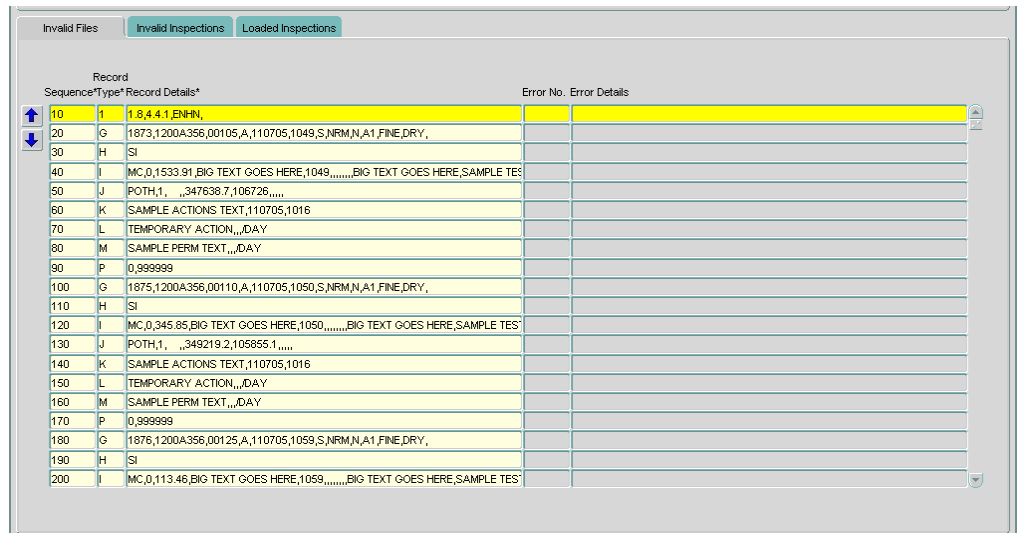
<b>Inspector</b>	<b>(Optional)</b>	<b>List</b>
Restrict the load batches to those carried out by a selected inspector.		

<b>Initiation Type</b>	<b>(Optional)</b>	<b>List</b>
Restrict the load batches to the specified initiation type.		

<b>Safety/Detailed</b>	<b>(Optional)</b>	<b>List</b>
Restrict the load batches to the specified inspection type.		

<b>Date Inspected From/To</b>	<b>(Optional)</b>	<b>List</b>
Restrict the load batches retrieved to those inspected between the two dates selected. The 'To' date will default to Sysdate.		

**Figure 15**  
Invalid Files tab



Record Sequence	Type	Record Details	Error No.	Error Details
10	I	1,8,4,4,1,ENH,N		
20	G	1873,1200A356,00105,A,110705,1049,S,NRM,N,A1,FINE,DRY,		
30	H	SI		
40	I	MC,0,1533,91,BIG TEXT GOES HERE,1049,.....,BIG TEXT GOES HERE,SAMPLE TES		
50	J	POTH,1, ,347638.7,106726,....		
60	K	SAMPLE ACTIONS TEXT,110705,1016		
70	L	TEMPORARY ACTION,,,DAY		
80	M	SAMPLE PERM TEXT,,,DAY		
90	P	0,999999		
100	G	1875,1200A356,00110,A,110705,1050,S,NRM,N,A1,FINE,DRY,		
110	H	SI		
120	I	MC,0,345,85,BIG TEXT GOES HERE,1050,.....,BIG TEXT GOES HERE,SAMPLE TES		
130	J	POTH,1, ,349219.2,105855.1,....		
140	K	SAMPLE ACTIONS TEXT,110705,1016		
150	L	TEMPORARY ACTION,,,DAY		
160	M	SAMPLE PERM TEXT,,,DAY		
170	P	0,999999		
180	G	1876,1200A356,00125,A,110705,1059,S,NRM,N,A1,FINE,DRY,		
190	H	SI		
200	I	MC,0,113,46,BIG TEXT GOES HERE,1059,.....,BIG TEXT GOES HERE,SAMPLE TES		

## Invalid Files Tab

If the batch file submitted is invalid, details of the errors will be displayed in this tab.

As part of the load process the system performs basic validation checks on the file before the data is transferred. Some of the checks are:

- The basic format of the file is correct.
- Missing or misplaced 'X' records
- The first record of a file is a 'G' record.
- The total number of G, H, I, J, D, K, L, M, N, P, R and S records equal the totals in the X record which is the last record in the file.
- Mandatory fields are populated

All data records for the selected batch file will be displayed. Data that has an error can be modified here prior to re-submitting the batch.

The errors that may be identified by the system when loading an inspection batch will need to be found and edited before re-submission, the following buttons are used to locate the lines in the file that contain the errors:

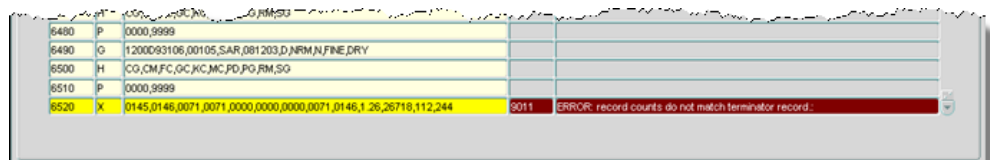


Previous error, this will move the cursor to the previous error in the file.



Next error, this will move the cursor to the next error in the file. An example is shown below:

**Figure 16**  
Locate error



6480	P	0000,9999		
6490	G	1200093106,00105,SAR,081203,D,NRM,N,FINE,DRY		
6500	H	CO,CM,FC,OC,KC,MC,PD,PO,RM,SG		
6510	P	0000,9999		
6520	X	0145,0146,0071,0071,0000,0000,0000,0071,0146,1,26,26718,112,244	9011	ERROR: record counts do not match terminator record.



---

**Sequence (Display Only)**

The sequence number of the record within the file will be displayed.

---

**Record Type (Display Only)**

This field will display the record type. These types will have associated data in the adjacent field. Valid types are G, H, I, J, D, K, L, M, N, P, R, S and X.

---

**Record Details (Display Only)**

The details contained in this field will depend upon the record type in the previous field. Update the data in this field to fix any errors given; the error message will give a guide as to what is wrong with the data.

---

**Error No. (Display Only)**

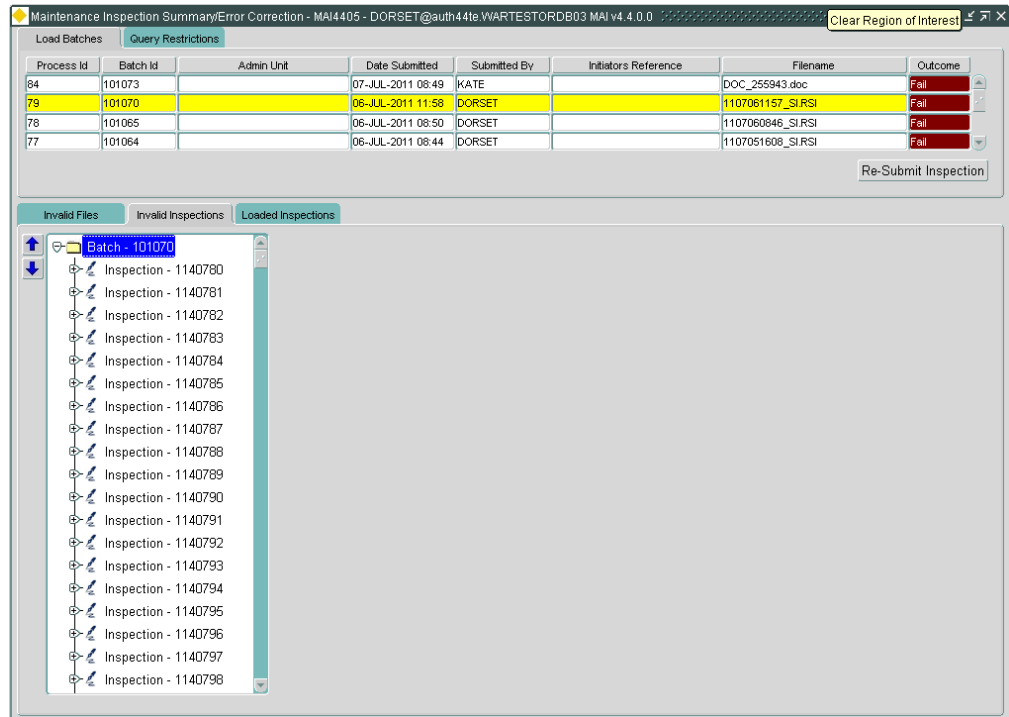
If the data is incorrect the error number will be displayed.

---

**Error Details (Display Only)**

Details of the error in the file will be displayed.

**Figure 17**  
Invalid Inspections



Process Id	Batch Id	Admin Unit	Date Submitted	Submitted By	Initiators Reference	Filename	Outcome
84	101073		07-JUL-2011 08:49	KATE		DOC_255943.doc	Fail
79	101070		06-JUL-2011 11:58	DORSET		1107061157_SIRSI	Fail
78	101065		06-JUL-2011 08:50	DORSET		1107060846_SIRSI	Fail
77	101064		06-JUL-2011 08:44	DORSET		1107051608_SIRSI	Fail

Re-Submit Inspection

Invalid Files Invalid Inspections Loaded Inspections

Batch - 101070

- Inspection - 1140780
- Inspection - 1140781
- Inspection - 1140782
- Inspection - 1140783
- Inspection - 1140784
- Inspection - 1140785
- Inspection - 1140786
- Inspection - 1140787
- Inspection - 1140788
- Inspection - 1140789
- Inspection - 1140790
- Inspection - 1140791
- Inspection - 1140792
- Inspection - 1140793
- Inspection - 1140794
- Inspection - 1140795
- Inspection - 1140796
- Inspection - 1140797
- Inspection - 1140798

## Invalid Inspections Tab

Once the file has passed the validation checks further more stringent validation checks are performed on the actual data. Some of these checks are:

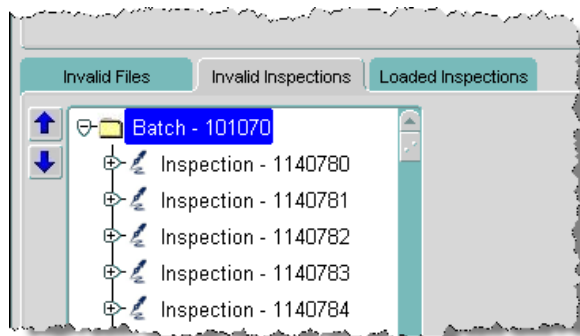
- The network and associated chainage match what is held on the system.
- The treatment code, defect code and activity areas identified in the file exist in the system.
- The inspectors have been entered onto the system.
- Survey type and direction are correct.
- Complaint date, source code and source type are valid.
- Notifiable and rechargeable organisations exist.

Any data that does not pass the validation checks will be shown under the 'Invalid Inspections' tab.

Data that has an error can be corrected here prior to re-submitting the batch.

The Batch id will be displayed with the associated inspections in the tree view as shown below:

**Figure 18**  
Invalid Inspections



Clicking on the + sign against the inspection will expand the inspection details showing the defects in that inspection, this can be further expanded if required.

Selecting one of the following buttons will allow the user to navigate directly to the item within the inspection that has the error:

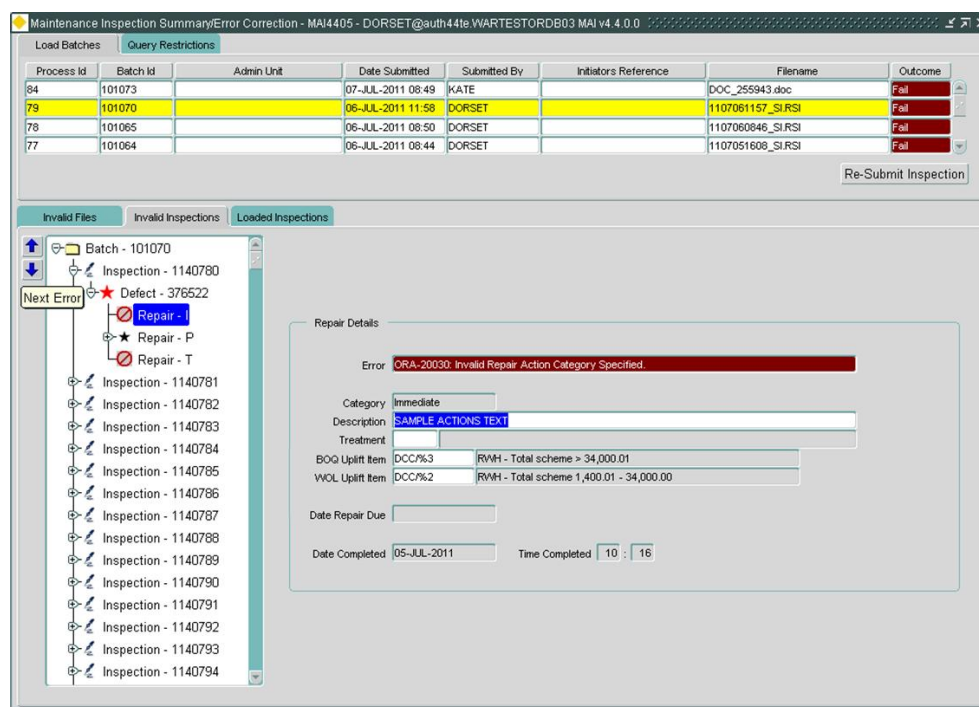


Previous error, this will move the cursor to the previous error in the file.



Next error, this will move the cursor to the next error in the file. An example is shown below:

**Figure 19**  
Invalid Inspections



Invalid records will be identified with a red circle 

The next record with the error will be highlighted and the details of the record and the associated error will be displayed in the right panel of the form. The details in the right panel of the form will change depending on the record that is selected in the inspection batch tree view. The error can then be corrected and the file re-submitted using the [**Re-Submit Inspection**] button in the Load Batches tab.

Once the [**Re-Submit Batch**] button is pressed the inspection will be processed using the same Process Id.

If errors are found a message will appear showing that the batch contains either invalid files or inspections.

**Figure 20**  
**Error message**



If on re-submit the inspection load is successful a message will appear as below.

**Figure 21**  
**Success message**



### Figure 22 Loaded Inspections

[illegible]

## Loaded Inspections Tab

Once the Inspection has been successfully loaded the user may query the inspection in the Load batches tab and view a summary of the inspections loaded in a selected batch using this tab.

To view more detail of the selected inspection, highlight the inspection record and select the [View Inspection] button, this will display the inspections using ***Inspections – MAI3808***.

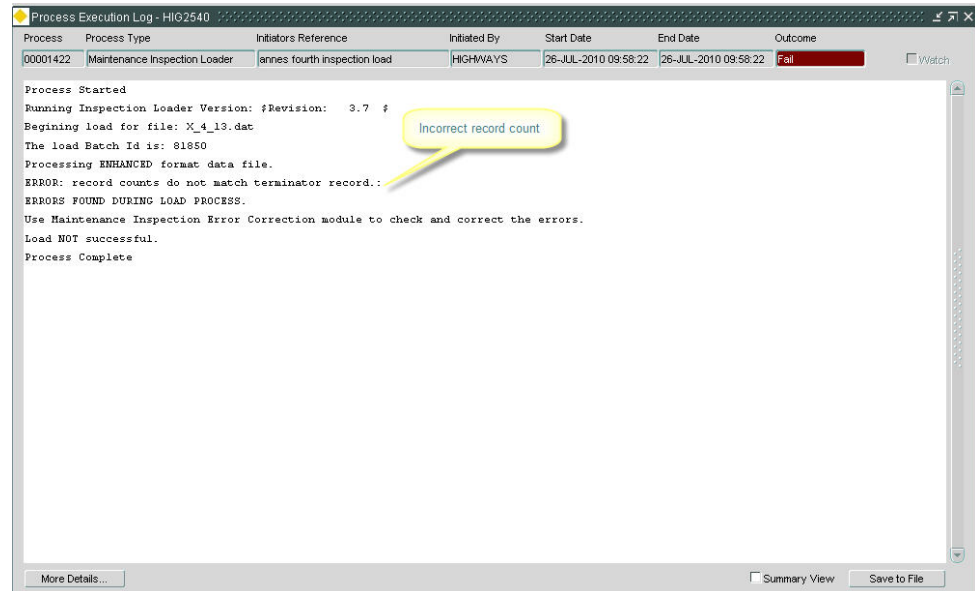
## Examples of Error Correction

### Invalid File - record count

The process execution log will show:


ERROR: record counts do not match terminator record.

**Figure 23**  
Process Execution Log



This error means that the 'X' record count is incorrect.

Select the **[More Details...]** button which will open the **Maintenance Inspection Summary/Error Correction** form with the data in the **Invalid**

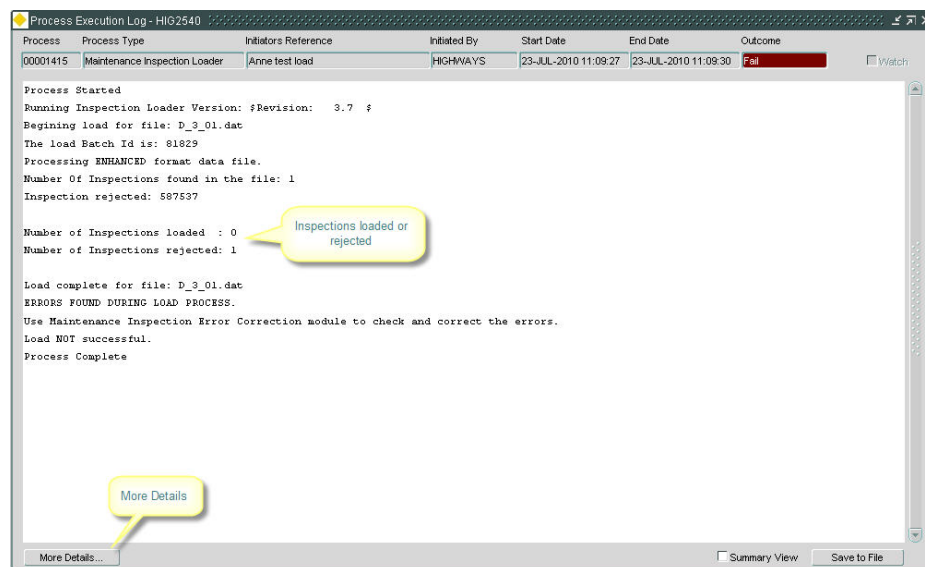
**Files** tab where the error can be located using the Next Error button  and then corrected.

The X record should be amended to show the correct count and then saved. The file can now be re-submitted using the **[Re-Submit Inspection]** button.

## Invalid Inspection:

The process execution log will show, for example Inspection rejected: 587537  
 Number of Inspections loaded: 0  
 Number of Inspections rejected: 1

**Figure 24**  
**Process Execution**  
**Log**



This error means that there is an error in an inspection contained within the batch.

Select the **[More Details...]** button which will open at the **Maintenance Inspection Summary/Error Correction** form with the data in the **Invalid Inspections** tab where the error can be located using the Next Error button




and then corrected.

Click on the + sign against the inspection and then against the defect to show further details of defect, repair and boq items as required.

Invalid records will be identified with a red circle 

Highlight the invalid record to open up details of the error on the right hand side of the form.

An invalid repair type can be removed from the file with the **[Delete Record]** button on the toolbar.  If a record is deleted from the invalid inspections tab the load batch will need to be re-queried before the changes can be viewed in the Invalid Inspections tab.

**Note:** if the repair has an associated BOQ this record must first be deleted before the repair can be removed.

The record should then be saved and the file re-submitted using the **[Re-Submit Inspection]** button.

If further errors are encountered these should be corrected and the batch re-submitted until no errors remain.

## Load Inspection Data – File Format

The following describes the data file format for loading inspection data into Maintenance Manager from exor's data collection software (datacapture and MapCapture).

---

### Introduction

The following fields will describe each record type.

#### Field

This column gives a descriptive name of the field.

#### Data Type

This column may have the following values, which describes the allowable characters for the field.

Value	Description
Integer	Integer Number
Number	Number, decimal places
Alphanumeric	All Characters
Decimal Number	Number with decimal places

#### Max Size

This is the maximum size for this column.

#### M (mandatory)

If ticked this column is mandatory.

#### Description

This column will contain some meaningful text relating to the Field.



## Record Types

All records must be enclosed by double quotes.  
 All Alphanumeric fields, with the exception of the Record Type, may also be optionally enclosed by double quotes (ASCII 34).  
 Items within the string are separated by commas.

### '1' - Data File Information

Field	Datatype	Max Size	M	Description
Record Type	Alphanumeric	1	√	Must contain "1"
Data Version	Alphanumeric	10	√	Version Number "1.8"
Software Version	Alphanumeric	10		Software Version Number
File Type	Alphanumeric	4	√	May contain one of the following values: "RMMS" – Safety or Detailed Inspection "ENHN" – Defect Survey (with optional BOQS) "ASST" – Asset based survey
Description	Alphanumeric	240		Any useful description for the file

#### Example:

"1,1.8,4.1.122,ENHN,Inspection File 1"

### 'G' – Inspection Details (Beginning of Inspection Block)

Field	Datatype	Max Size	M	Description
Record Type	Alphanumeric	1	√	Must contain "G"
rse_he_id (ne_id)	Integer	9	√	Exor internal Id of the section
Link	Alphanumeric	10	√	Agency/Link Code
Section	Alphanumeric	3	√	Section number
First Inspector	Alphanumeric	3	√	The Inspectors initials (as stored within the exor database)
Inspection Date	Alphanumeric	YYMMDD	√	Date of inspection e.g.100129
Inspection Time	Alphanumeric	HHMM	√	Time of the inspection e.g. 1503
Safety/Detailed	Alphanumeric	1	√	D for Detailed or S for Safety
Initiation Type	Alphanumeric	3	√	Any valid initiation type from the pedif file
Direction	Alphanumeric	1	√	Inspection direction in relation to the section start node. 'Y' indicates reverse direction 'N' indicates forward direction
Second Inspector	Alphanumeric	3		The second Inspectors initials (as stored within the exor database).
Weather condition	Alphanumeric	4		Any valid weather condition from the pedif file e.g. FINE, FOG, RAIN, etc
Road Surface	Alphanumeric	4		Any valid weather condition from the pedif file e.g. DRY, WET, SNOW etc
Section Description	Alphanumeric	240		Section description

#### Example:

"G,,2300B62842,00010,LC,20040930,1408,D,NRM,N,,FINE,DRY,,Section Description."

## 'H' – Inspection Activities

Field	Datatype	Max Size	M	Description
Record Type	Alphanumeric	1	√	Must contain "H"
Activity 1	Alphanumeric	2	√	Any valid Activity Code from the pedif file
Activity 2	Alphanumeric	2		Any valid Activity Code from the pedif file
Activity 3	Alphanumeric	2		Any valid Activity Code from the pedif file

Any number of activity mnemonics allowed in this record.

**Example:-**

**"H,CW,FW,LP,MC,MH,SG"**

## 'I' – Defect Location Details

Field	Datatype	Max Size	M	Description
Record Type	Alphanumeric	1	√	Must contain "I"
Defect Activity	Alphanumeric	2	√	Defect activity code
XSP	Alphanumeric	1		Cross sectional position of the defect
Chainage	Integer	6		Chainage of the defect
Location	Alphanumeric	40		Textual description of the defects location
Time	Alphanumeric	HHMM	√	Time the defect was observed e.g. 1503
Identity Code	Alphanumeric	8		Identity code of the asset (sign, traffic signal, etc)
Diagram Number	Alphanumeric	7		Diagram number of the asset (sign etc)
Asset Type	Alphanumeric	2		Asset type of the associated asset
Inventory Change Indicator	Alphanumeric	1		Any valid value from the Asset Modification domain (included in the pedif file)
Marshall Sub-Head Code	Alphanumeric	3		Standard Item Sub Section (SISS) code
Notifiable Organisation	Alphanumeric	10		Notifiable organisation code
Rechargeable	Alphanumeric	10		Rechargeable organisation code
Special Instructions	Alphanumeric	254		Text field for any special instructions relating to the defect
Description	Alphanumeric	240		Defect description text field

**Example:**

**"I,CW,5,415,EAST END OF ACCESS TO EDISCUM GARTH,1411,,,,,,,,Special Instruction, Large Pot Hole"**

**‘J’ – Additional Defect Details**

Field	Datatype	Max Size	M	Description
Record Type	Alphanumeric	1	√	Must contain “J”
Defect Type	Alphanumeric	4	√	Defect type code
Priority	Alphanumeric	4	√	Defect priority
Defect Category	Alphanumeric	4		Defect response category
Asset Id	Integer	10		External Id of the associated asset
Easting	Decimal Number	38 (incl decimal point)		X co ordinate of the defect
Northing	Decimal Number	38 (incl decimal point)		Y co ordinate of the defect
Attribute 1	Alphanumeric (dependent on the attribute)	Dependent on the column used by the attribute		Value for attribute 1 as defined against the defect type
Attribute 2	Alphanumeric (dependent on the attribute)	Dependent on the column used by the attribute		Value for attribute 2 as defined against the defect type
Attribute 3	Alphanumeric (dependent on the attribute)	Dependent on the column used by the attribute		Value for attribute 3 as defined against the defect type
Attribute 4	Alphanumeric (dependent on the attribute)	Dependent on the column used by the attribute		Value for attribute 4 as defined against the defect type
Road Stud Indicator	Alphanumeric	1		Road stud indicator ‘M’ – indicates Mandatory ‘A’ – indicates Advisory This field should be NULL if the defect is not associated with a road stud

**Example:**

"J,CPOT,1,,,12345,54321,28,570,,,"

## 'D' – Defect Document Attachments

Field	Datatype	Max Size	M	Description
Record Type	Alphanumeric	1	√	Must contain "D"
Type	Alphanumeric	4		Document type code (if not supplied the value of Product Option DEFDOCTYPE will be used)
Title	Alphanumeric	60		Document title
Description	Alphanumeric	2000		Document description
Category	Alphanumeric	8		Document category code
Location	Alphanumeric	30		Document manager location name (if not supplied the value of Product Option DEFDOCLOCN will be used)
Filename	Alphanumeric	254	√	Name of the file to be attached

Zero or more D records can be specified for each Defect specified in the file.

In order to associate documents with a given Defect the D records must be positioned directly after the relevant J record in the file.

### Example:

"D,PHOT,Before Photo,.Pot Hole, before repair.,,DEFECT\_PHOTOS,def1001291501.jpg"

## 'K' – Immediate Action Details

Field	Datatype	Max Size	M	Description
Record Type	Alphanumeric	1	√	Must contain "K"
Repair Description	Alphanumeric	240		Description of the Immediate action taken or recommended
Date Repaired	Alphanumeric	YYMMDD	√	Date the Immediate action was taken
Time Repaired	Alphanumeric	HHMM	√	Time the Immediate action was taken e.g. 1504 (24 hour format)

### Example:

"K,MARKED UP,20040930,1411"

**‘L’ – Temporary Action Details**

Field	Datatype	Max Size	M	Description
Record Type	Alphanumeric	1	√	Must contain “L”
Repair Description	Alphanumeric	240		Description of the Temporary action taken or recommended
Date Repaired	Alphanumeric	YYMMDD		Date the action was taken. NULL if the action was not carried out at the time of the inspection
Time Repaired	Alphanumeric	HHMM		Time the Immediate action was taken e.g. 1504 (24 hour format) NULL if the action was not carried out at the time of the inspection.
Treatment	Alphanumeric	4		Treatment code
BOQ percentage uplift Standard Item Code	Alphanumeric	10		Specification of Standard Item Code which defines the percentage uplift rate to apply to the BOQ value
WOL percentage uplift Standard Item Code	Alphanumeric	10		Specification of Standard Item Code which defines the percentage uplift rate to apply to the Work Order Line value

**Example:**

**"L,FILL POTHOLE,20041001,1600,PATG,DCC/%1,DCC/%4"**

**‘M’ – Permanent Category 1 Action Details**

Field	Datatype	Max Size	M	Description
Record Type	Alphanumeric	1	√	Must contain “M”
Repair Description	Alphanumeric	240		Description of the permanent action taken or recommended
Date Repaired	Alphanumeric	YYMMDD		Date the action was taken. NULL if the action was not carried out at the time of the inspection
Time Repaired	Alphanumeric	HHMM		Time the Immediate action was taken e.g. 1504 (24 hour format) NULL if the action was not carried out at the time of the inspection.
Treatment	Alphanumeric	4		Treatment code
BOQ percentage uplift Standard Item Code	Alphanumeric	10		Specification of Standard Item Code which defines the percentage uplift rate to apply to the BOQ value
WOL percentage uplift Standard Item Code	Alphanumeric	10		Specification of Standard Item Code which defines the percentage uplift rate to apply to the Work Order Line value

**Example:**

**"M,PATCH AREA,,FTP,R,DCC/%1,DCC/%4"**

Field	Datatype	Max Size	M	Description
Record Type	Alphanumeric	1	√	Must contain “N”
Repair Description	Alphanumeric	240		Description of the permanent action
Treatment	Alphanumeric	4		Treatment code
Sub Category	Integer			Not used in EID format files
BOQ percentage uplift Standard Item Code	Alphanumeric	10		Specification of Standard Item Code which defines the percentage uplift rate to apply to the BOQ value
WOL percentage uplift Standard Item Code	Alphanumeric	10		Specification of Standard Item Code which defines the percentage uplift rate to apply to the Work Order Line value

**Example:**  
"N.POTHOLE FORMING LANE 2./PRI.0001.DCC/%1.DCC/%4"

Field	Datatype	Max Size	M	Description
Record Type	Alphanumeric	1	√	Must contain “Q”
Item Code	Alphanumeric	10	√	Item code
Dimension 1	Number	10,2 (99999999,99)	√	First dimension of the item If the value supplied has a precision greater than the specified maximum of 2 decimal places it will be rounded
Dimension 2	Number	10,2 (99999999,99)		Second dimension of the item If the value supplied has a precision greater than the specified maximum of 2 decimal places it will be rounded
Dimension 2	Number	10,2 (99999999,99)		Third dimension of the item If the value supplied has a precision greater than the specified maximum of 2 decimal places it will be rounded
Quantity	Number	10,2 (99999999,99)	√	Total quantity i.e. the product of the specified dimensions

In order to associate BOQs with a given Action the Q records must be positioned directly after the relevant Action record in the file.

```
"K,MARKED UP,20040930,1411"  
"L,FILL POTHOLE,20041001,1600,PATG"  
"Q,1011106,0.92,,,0.92"  
"Q,1008101,0.8,0.8,,0.6400000000000001"  
"M,PATCH AREA,,,FTPR"  
"Q,1008102,2.3,0.6,1.38"
```

**‘R’ – Comments**

Field	Datatype	Max Size	M	Description
Record Type	Alphanumeric	1	√	Must contain “R”
Comment Class	Alphanumeric	8	√	Document category
Comment Text	Alphanumeric	240	√	The text to be recorded as the comment

**Example:**

**"R,GENERAL,BACK STREET NOT INSPECTED"**

**‘P’ – End of Inspection Block**

Field	Datatype	Max Size	M	Description
Record Type	Alphanumeric	1	√	Must contain “P”
Start Chainage	Integer	6	√	Chainage at the start of the inspection
End Chainage	Integer	6	√	Chainage at the end of the inspection. The value 999999 will be interpreted as the end of the section being inspected

For an RMMS safety survey the Start Chainage must be 0 and the End Chainage must be 999999

**Example:**

**"P,0,999999"**

**‘X’ – End of File**

Field	Datatype	Max Size	M	Description
Record Type	Alphanumeric	1	√	Must contain “X”
G	Integer	38	√	Count of ‘G’ records in the file
H	Integer	38	√	Count of ‘H’ records in the file
I	Integer	38	√	Count of ‘I’ records in the file
J	Integer	38	√	Count of ‘J’ records in the file
D	Integer	38	√	Count of ‘D’ records in the file
K	Integer	38	√	Count of ‘K’ records in the file
L	Integer	38	√	Count of ‘L’ records in the file
M	Integer	38	√	Count of ‘M’ records in the file
N	Integer	38	√	Count of ‘N’ records in the file
P	Integer	38	√	Count of ‘P’ records in the file
Q	Integer	38	√	Count of ‘Q’ records in the file
R	Integer	38	√	Count of ‘R’ records in the file
S	Integer	38	√	Count of ‘S’ records in the file

**Example:**

**"X,4,4,15,15,0,0,0,15,4,0,0,0"**

The values can be zero padded e.g.

**"X,0041,0041,0038,0038,0000,0000,0038,0000,0041,0000,0009,0000"**