

# TAMS Upgrade Project Developer Scoping

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## Overview

Our customer is a building/maintenance company who subcontract to a major client.

The Client has an existing website database application written in ColdFusion which met business needs in the past. It handles incoming orders (to upgrade/maintain buildings), distribution of orders to our subcontractors, sites, job details etc etc.

However we now need to change our reporting regime due to the new requirements from the customer, Department of Housing, and their MRP08 contract.

More detailed specifications are detailed below.

**Go live date is 27 October 2008**

**Testing 2 weeks prior: 13 October 2008**

The project will be attacked in three phases:

Phase I – Initial Critical Requirements

Phase II – Additional Features required for Production

Phase III – Other Enhancements and Add-ons

## Legend

TAMS	The website/database which is being upgraded
DOH	Department of Housing
The Client	The company which runs the database being upgraded
Order	The order which comes in from DOH
Work Order	A part of the 'Order' which is assigned to a particular subcontractor

## Document History

21/09/2008          LM    Initial document.

## Detailed Scoping

### Phase I Changes

These changes are required by the deadline date.

### Interpreting New Inbound Work Order Format

In the past incoming orders were emailed to us in MS-Word format, and the document had some formatted data at the bottom. We forwarded that email to a website responder at the website which imports the document, and creates an order from the XML coded information. Now, our input order is fully in XML format, and is a totally different format. We need to modify the import routine to recognise the new format, and import it correctly.

However, the new system requires the receipt of a different format, this time an XML file which will be an attachment to an email.

Refer to the document MRP08 Technical Guidelines for information about the Electronic Work Orders and Claims. That document holds all the technical specifications for the delivery and receipt of XML documents.

- As the system already includes a method for interpretation of Orders, and the new XML format is properly defined, this development is not considered overly complex.
- There are some new fields in the order which will need to be created in the database.
- If an email is received, and cannot be interpreted fully by TAMS, and email is sent to the administrator advising of this.
- When an order is raised, if there is a business rule required (eg. send a Status Update for Work Commenced, say for LCQ), then a standard email is sent to the administrator reminding them of this. This email would also contain response times (eg. 4 hrs) etc as a reminder service. These business rules are well defined in the MRP08 documentation.

Estimates (hours)	
Analysis	3
Coding	16
Testing	4
Proj Mgt	3

## Work Status Update

This allows TAMS to update DOH with an XML file containing information about individual orders and times for completion, including information about delays.

- This is a new function which does not exist at all in the current TAMS system.
- There are 15 different types of work orders, and different work orders have different requirements as to when a work status update is to be sent.

These are the types of Work:

1. U Responsive (U)
2. R1 Responsive (R1)
3. R2 Responsive (R2)
4. Responsive Schedule of Work (RSW)
5. Asset Dwelling Service (ADS)
6. Schedule of Works (SOW)
7. Lifecycle Quota (LCQ) (Programmed work, The Client decides date)
8. Vacant Restoration (VAC)
9. Disability Modifications (MOD)
10. Fire Program Repairs (FPR)
11. Lawns, Grounds & Cleaning (LGC)
12. Long Term Lease Refurbishment (LTL)
13. Smoke Alarm Servicing for Short Term Leasing (STL)
14. Acquisition/Major Fire Upgrades (ACQ/MFU)
15. Heritage (HER)

The current TAMS database does not support all of these work programs, only about 4 of them. And even for those, the business rules will need to be changed.

For immediacy, we will focus on implementing only SOME Programs. The initial implementation (Phase I) will include:

1. U Responsive (U)
2. R1 Responsive (R1)
3. R2 Responsive (R2)
4. Responsive Schedule of Work (RSW)
5. Asset Dwelling Service (ADS)
6. Schedule of Works (SOW)
7. Lifecycle Quota (LCQ) (Programmed work, The Client decides date)
8. Fire Program Repairs (FPR)
9. Smoke Alarm Servicing for Short Term Leasing (STL)

Phase II will complete the rest of the functionality.

- The “Work Status Update” can be sent at any time, and sometimes may be embedded in the “Claim” (see next section).
- We need to add a function in the Work Order which allows entry of status updates
- The schedule of when a Status File needs to be sent depends on the Work Program.

The rules for this are specified in MRP08 Technical Guidelines, page 10 Work Status File.

- For instance, Statuses of CWD and CNI need to be sent when a job is commenced
- Status KEY or MDS can be sent with the claim.
- Status WOT can be sent weekly

Estimates (hours)	
Analysis	8
Coding	50
Testing	10
Proj Mgt	4

### Checking Expiring Compliances

- Before commencement (by 3<sup>rd</sup> October), we need to check if any of the subcontractors have compliances which are close to expiry.
- The automation of this function will occur in Phase III
- Initially, we will export to a spreadsheet, and sort by date order.
- The Client staff will manually contact each of the expiring subcontractors and arrange for a compliance update.

Estimates (hours)	
Analysis	0
Coding	2
Testing	0
Proj Mgt	0

### Upload New Properties Master Data

- New data will be required to populate the database for the Properties table. This data will be supplied by DOH in a spreadsheet.
- It can be uploaded manually to refresh the master file.
- There are no known changes in the Property data format.

Estimates (hours)	
Analysis	0
Coding	3
Testing	0
Proj Mgt	0

## Upload New Schedule of Rates Master Data

- New data will be required to populate the database for the Schedule of Rates table. This data will be supplied by DOH in a spreadsheet.
- It can be uploaded manually to refresh the master file.
- There are no known changes in the rates data format.

Estimates (hours)	
Analysis	0
Coding	4
Testing	0
Proj Mgt	0

## Sending Claims in new Outbound Format

- The TAMS system already has a function to send outbound XML claims. However, format and content modifications are required for the new system.
- New format is described in MRP08 Technical Guidelines pg 8 “Claims for Payment” and Appendix B
- Additional information such as Inspection details may be required

Estimates (hours)	
Analysis	10
Coding	45
Testing	6
Proj Mgt	5

## Receive Compliance Incident Notice

- DOH may send in a Compliance Incident Notice when they have a problem with some of the work we have done on an Order.
- These are inbound emails with an XML file as an attachment, TAMS needs to interpret these input files when they arrive. The format of this file is documented in MRP08 Technical Documentation page 13
- TAMS needs a new module of coding added called “Non-Compliance”
- New CIN notices will appear in this module

- From the existing database, de-commission the menu items “Improvement Requests” and “Non-Compliances” as they will be superseded by the new “Non-Compliance”. Some of the code for these menus can be re-used with this new functionality.
- Only a “Standard” CIN notice is supported in Phase I. Phase II will support Trend and Audit CINs.
- When the CIN has been addressed by The Client, an XML response is sent to DOH to explain what was done, or agree or disagree to the notice. An input function needs to be developed to enter this feedback, and include a button to send/resend the response. Format is defined in MRP08 Technical Guidelines page 20.
- On receipt of the CIN, an email is to be sent to the administrator advising them of the conditions of this CIN

<b>Estimates (hours)</b>	
Analysis	20
Coding	100
Testing	20
Proj Mgt	8

## **Inspection Notification Notice**

- The Client is required to provide a minimum level of inspection of the works conducted by their subcontractors. This means sending out an Inspector (or making a telephone call) to check on the results of works done. An Inspector is an employee of The Client, and each Inspector is responsible for a defined geographical region.
- Details on the Inspection and Reports can be found in MRP08 Technical Guidelines page 11.
- The quantity and type of inspections required are defined in Annexure 5. Contractor Inspection Regime Requirements.
- Each time an inspection is conducted, it needs to be reported back to DOH
- Reporting is done via an XML file attachment to an email sent to DOH
- Inspection Notifications are not currently supported in the TAMS databases. New table(s) and coding will be required to record inspections.
- The contract requires an inspection schedule to meet certain criteria, eg 100% of the time or 5% of the time – depending on the type of work. In later Phases, the system will automate this Inspection Request protocol, so that the system generates inspection jobs, and ensures we meet the guidelines, However, for Phase I, raising of Inspection Requests will be done manually. It is up to The Client admin staff to ensure we meet the Inspection requirements.
- Develop a new interface/menu to allow the raising of an inspection request. Specify related order, and type of inspection (inspection type code)
- Develop a data entry screen (visible in the login for any defined Inspectors), which shows all new inspection requests. Allows them to update inspection results, and also send the XML inspection report. Administrators can also see this data and send the Report if required. The screen must show history of when the report was sent.
- There are different inspection types, eg. by phone, on-site (pre, during, post), and CPH (Contractor Call Back)
- Some Schedule of Rates items require an Inspection Report to be completed. This needs to be

raised manually for Phase I. In these cases, the report fields have to be included in the outbound Claim File.

<b>Estimates (hours)</b>	
Analysis	12
Coding	130
Testing	10
Proj Mgt	8

### **Non-Interpreted Inbound Emails**

It is possible that an inbound email may not be interpreted by TAMS. In cases where the inbound email is not understood, or an error is encountered during the course of programming, an email is to be sent to the administrator advising of this situation.

<b>Estimates (hours)</b>	
Analysis	0
Coding	6
Testing	2
Proj Mgt	0

## Phase II Changes

These changes are not required immediately. A due date for these will be specified later.

## Work Status Update

A work status file is sent back to indicate the progress of a job.

Phase I only implemented to most likely Work Programs. In Phase II, we will implement the remaining work programs.

Estimates (hours)	
Analysis	TBD
Coding	TBD
Testing	TBD
Proj Mgt	TBD

## Trend and Audit Compliance Incident Notifications

Phase I supported only the Standard CIN input email. In this phase, provide support for Trend and Audit CINs as well.

Estimates (hours)	
Analysis	TBD
Coding	TBD
Testing	TBD
Proj Mgt	TBD

## Additional Technical Requirements

The MRP08 Technical Guidelines document specifies a number of other features which the IT system must do. These include, but are not limited to:

- Send details of mandatory reports provided by the Contractor in XML format to the Principal as email attachments.
- Receive compressed report files on Claim errors, Works Order and Claim activities and Non-Compliance activities.
- Receive emails when interfaces have been rejected due to error.
- ensure that the Principal's data has been secured appropriately;
- capture information, including but not limited to that listed below:
  - The Principal's Property Reference Number, Client Service Team and Contract Area;
  - Works Order and Work status;
  - Repair and variation details;
  - Date and time of all Works Order and Contractor inspection activities;
  - Contractor inspection history and results;
  - Schedule of Rate Items or Schedule of Prices;
  - Details of sub contractor/supervisors;
  - Recalls and Warranties;
  - Compliance Incident Notice including details of the Principal's Customer Improvement Request and Non compliance incidents and issues;
  - Capture and retention of communication between the Principal and Contractor;
  - Capture of a Tenant's signature;
  - Payment process;
  - the Contractor's Internal QA including non compliance details and outcomes; and
  - Management of sub contractors, licences and insurance details.

The Contractor IT systems must have the ability to Report at the following levels as a minimum:

- Works Order;
- Schedule of Rate Items or Schedule of Prices;
- Work Program; and at a
- Property.

The Contractor IT systems must enable analysis of, the following as a minimum:

- Sub contractor repair activity and claims;
- Sub contractor non compliance activity and outcomes;
- Recalls and Warranty activities and outcomes;
- Variations management and Schedule of Rate Items or Schedule of Prices usage;

- All Works activity dates; and
- Contractor inspection results and dates.

The Contractor IT systems must include enhanced business checks concerning the Payment Claim process to ensure alignment with the Principal's business checks.

The business checks are to include the following:

- Ensure that the appropriate Work Status File are available prior to submission;
- Ensure appropriate inspection results and reports are available prior to submission; and
- Limit claim variations based on Work Program and Schedule of Rate Items or Schedule of Price item.

<b>Estimates (hours)</b>	
Analysis	TBD
Coding	TBD
Testing	TBD
Proj Mgt	TBD

## Phase III Changes

### Automating the Inspection Notification Notice

- In Phase I of the project we added the module to raise inspection orders. These were largely a manual function. In this phase we add some automation to this function.
- A scheduled program runs regularly and checks all orders in the system. Based on certain parameters (type of inspection, regularity), the system will raise Inspection Orders. These inspection orders will meet the minimum regularity as defined in Annexure 5 Contractor Inspection Regime Requirements
- The appropriate Inspector is assigned based on the region of the inspection
- When an automated Inspection Order is raised, it will appear in a menu item under the login for the appropriate inspector, an email is additionally sent to the inspector.
- Some Schedule of Rates items require an Inspection Report to be completed. This needs to be generated for this phase. The scheduled program can determine this.
- Some inspections have specific time requirements (eg. post Work), and the system is to identify these instances and generate an Inspection Order as required. The assigned inspector is advised by the system (on screen and via email).

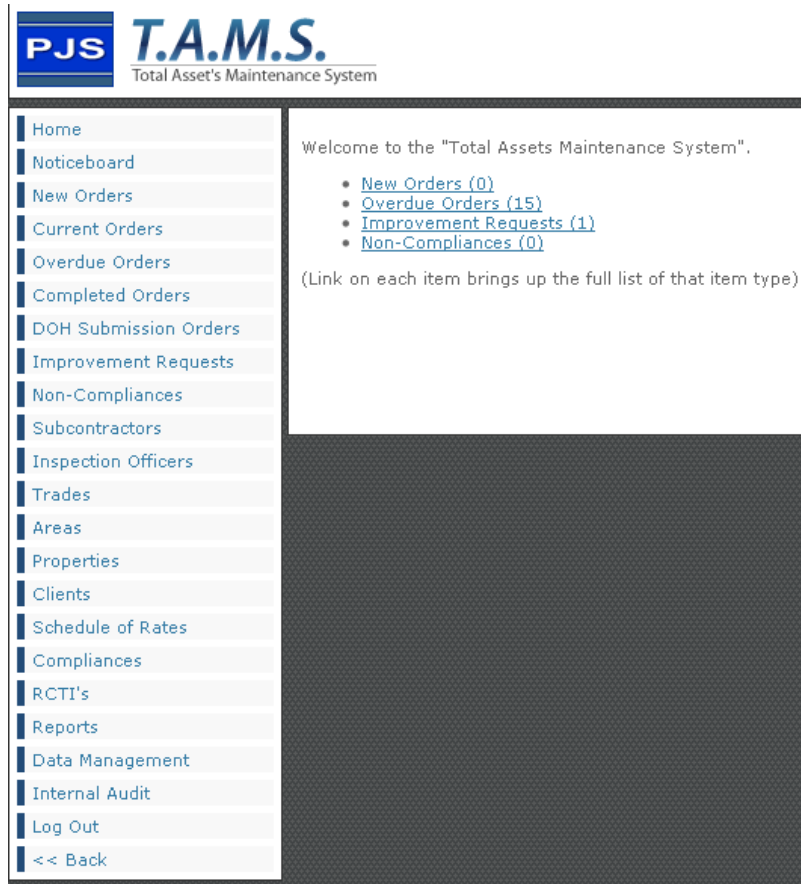
Estimates (hours)	
Analysis	TBD
Coding	TBD
Testing	TBD
Proj Mgt	TBD

### Managing Reporting Responses

Claims need to be lodged within 10 days of order completion, Work Status Files and Inspection Reports all have a define response deadline. Phase III should implement measures to ensure response times are met for all response types.

### Main Menu

No major functional changes, other than new menu entries (as described later in this document)



## Noticeboard Menu Item

Noticeboard			
<a href="#">Add an Article</a>			
Post Date	Expiry Date	Subject	Edit
Dec 14, 2007	Jan 31, 2008	XMAS NOTICE	
Nov 29, 2007	Dec 30, 2008	Build Ups of Party Walls ( FSU03840 )	
Jun 6, 2007	Dec 31, 2007	USE OF NON APPROVED MATERIALS - Access Hatch/Manhole	
Apr 11, 2007	Dec 31, 2007	Message from Program Co-Ordinator Michael Diviny	
Apr 10, 2007	Dec 31, 2007	Message from Resitech Program Manager - FSU Contract - Important	
Feb 5, 2007	Dec 31, 2007	IMPORTANT 1500 Microns of FF88 on Barge Boards IMPORTANT	
Jan 22, 2007	Jan 31, 2007	DELAYED commencement for fire upgrading program	
Jan 11, 2007	Dec 31, 2007	OHS	
Jan 11, 2007	Jan 21, 2007	Commencement of Work	
Aug 2, 2006	Sep 30, 2006	Work Instructions for all new works - Fire Upgrade	
Mar 6, 2006	Mar 9, 2006	OH&S Inspection - onsite - Wollongong - 9/3/06	
Dec 17, 2005	Jan 16, 2006	Fire Upgrading Commencement Date	

### Priority=Low

- Format remains the same. But when adding or editing a news item, offer the option to upload a PDF document.
- When viewing the notice, user will see the PDF (or be able to click and view).

**Noticeboard - Edit**

**Subject:**

**Body:**

To Fire Safety Contractors  
 CHRISTMAS SHUTDOWN  
 The Department requests that all Fire Safety work in occupied dwellings in the Christmas period commencing 24th December 2007 and ending 2nd January 2008 be deferred until the festive period is over.  
 The Department requests the following:  
 a) Not to start new work to any property that will not be finished before Christmas.

**Display Until:**  (DD/MM/YY)

No other changes.

Estimates (hours)	
Analysis	TBD
Coding	TBD
Testing	TBD
Proj Mgt	TBD

**Auto-Assignment of Orders**

When an order is received, the system will automatically assign the best sub-contractor for each step of the job.

We need to determine the rules of assignment before this step can be specified.

Estimates (hours)	
Analysis	TBD
Coding	TBD
Testing	TBD
Proj Mgt	TBD

## Column Sorting

In the Pages for Current, Overdue and New Orders and DOH Submission orders, modify the page so that clicking on the header will re-sort the data alphabetically (or numerically) by that column.

Clicking a second time will reverse the sort order.

Note that each page is scoped with a dataset (when the search filter has applied). That search filter must remain in effect even if the sort order is changed by clicking the headers.

#	Date	Reference	Property Address	Priority	View Order	View Notes	Assign	Edit Details	Edit Items, Variations
1	23-Jul-08 09:46 AM	5212168/4	Unit 7, 79 EVANS STREET, MORUYA NSW 2537	P2					
2	23-Jul-08 09:46 AM	5212157/4	Unit 2, 77 EVANS STREET, MORUYA NSW 2537	P2					

Estimates (hours)	
Analysis	TBD
Coding	TBD
Testing	TBD
Proj Mgt	TBD

## DOH Submission Orders Menu Item

This menu shows all orders that have been sent back (claimed) to the DOH. It allows claims to be viewed, or even resent.

No change to this menu, except for the Column Sorting as described above.

## Subcontractors Menu Item

This menu item shows the master file for the Subcontractors. Only accessible by the administrator.

### Subcontractors

[Add a Subcontractor](#)

Search:

Name	Suburb/Town	Status	View	Edit	Personnel	Compl
Alset	BARRACK HEIGHTS, NSW	active				
Anasa Pty Ltd	Illawong, NSW	active				
Andrew Hamilton Tree Services Pty Ltd	LEETON, NSW	active				
B & J Fenton Plumbing	WODONGA, VIC	active				
BP & FL Cross	YOUNG, NSW	active				
Brian Nosworthy Wall & Floor Tiling	WAGGA WAGGA, NSW	active				
Bussoletti Constructions	Balgownie, NSW	active				
CPS (NSW) Pty Ltd	WEDDERBURN, NSW	active				
Credible Building Technoloaies	Silverwater, NSW	active				

- Write an additional function which runs each day, and checks if any of the compliances

(which are associated with each subcontractor) are due to expire.

- These should be sent to the The Client administrator, as well as the subcontractor.
- Send one notice 1 month prior
- Another notice on the day of expiration

## Inspection Officers Menu Item

This menu item shows the master file for internal staff, called Inspection Officers. Only accessible by the administrator.

No change required to this menu item.

### Inspection Officers

[Add an Inspection Officer](#)

Search:

Name	Status	Edit
chris monaghan	inactive	
Glen Crook	inactive	
Jeremy Woodhouse	active	
Jim Mantzoros	inactive	
John Citizen	inactive	
Ken Stopher	inactive	
Lisa McKinnon	active	
Michael Diviny	active	

## Trades Menu Item

This menu item shows the master file for Trades. Only accessible by the administrator. No change required to this menu item.

### Trades

Trade Name	PJS Trade Code	Action
Add New Trade: <input type="text"/>	<input type="text"/>	<input type="button" value="Add"/>
Change Existing Trade Name:		
<input type="text" value="Abandoned Car Removal"/>	ACR1	<input type="button" value="Update"/>
<input type="text" value="Additional Fee"/>	FEE1	<input type="button" value="Update"/>
<input type="text" value="Appliance Repairs"/>	APP1	<input type="button" value="Update"/>
<input type="text" value="Blinds &amp; Awnings Installation &amp; Repairs"/>	BLI1	<input type="button" value="Update"/>

## Properties Menu Item

This menu item shows the master file for Properties. Only accessible by the administrator. No change required to this menu item.

**Properties**

[Add a Property](#)

Search:

Number	Address	Edit	Delete
000001	77 MCKELL AVENUE, WAGGA WAGGA NSW 2650		
000002	16 OTAMA STREET, WAGGA WAGGA NSW 2650		
000003	17 UNDURRA DRIVE, WAGGA WAGGA NSW 2650		
000004	35 ANNE STREET, WAGGA WAGGA NSW 2650		
000005	8 KAROOM DRIVE, WAGGA WAGGA NSW 2650		
000006	9 WILLANG CRESCENT, WAGGA WAGGA NSW 2650		
000007	15 O'CONNOR STREET, WAGGA WAGGA NSW 2650		

**Clients Menu Item**

This menu item shows the master file for internal staff, called Clients. Only accessible by the administrator.

No change required to this menu item.

**Clients**

[Add a Client](#)

Client Name	Client Address	Edit
Aboriginal Housing Office (AHO)	PO Box W5 Westfield, PARRAMATTA NSW 2150	
PJS Building Services (PJS)	31 Waugh St, Griffith NSW 2680	

**Compliances Menu Item**

This menu item shows the master file for compliances and insurances. Only accessible by the administrator.

No change required to this menu item.

**Insurances & Compliances - Manage**

Add a new insurance or compliance type:

Type:

**Current Insurance & Compliance List:**

Workers Compensation	<input type="button" value="Save Change"/>
Public Liability Insurance	<input type="button" value="Save Change"/>
Quality Assurance Accreditation	<input type="button" value="Save Change"/>
OH&S Policy	<input type="button" value="Save Change"/>
Securities of Payment Declaration	<input type="button" value="Save Change"/>
Trade Licence	<input type="button" value="Save Change"/>

## RCTI's Menu Item

This menu item shows the master file for Recipient Created Tax Invoices. Only accessible by the administrator.

No change required to this menu item.

The preview facility does an invoice run based on all fully completed Subbie Work Orders as reported by the Subbies. The Preview should always be run first in order to check that the invoice contents before they are created

The invoice run generates PDF invoices which will appear in the list below.

Invoice Number	Invoice Date	Subcontractor	Value	View
68	Mar 3, 2006	Picandet	\$515.20	
67	Feb 24, 2006	PKB Investment Group Pty Ltd	\$6,931.95	
66	Feb 24, 2006	Steven Duncan	\$18,817.93	
65	Feb 24, 2006	Paul Harrison	\$31,046.84	
64	Feb 24, 2006	Michael Duffy Building Services Pty Ltd	\$10,165.82	
63	Feb 24, 2006	Picandet	\$4,650.00	
62	Feb 24, 2006	Alset	\$1,989.00	

## Reports Menu Item

Changes to reports are yet to be defined.

## Data Management Menu Item

This menu item allows the function to export data to MYOB. Only accessible by the administrator.

No change required to this menu item.

### Data Management

#### Data Backup Facility

Rename each download file with a date suffix (i.e. client\_pjs2005\_20060218.bak)

[\[Click here to download\]](#)

#### MYOB Data Import (tab delimited field import)

(Pending Construction)

#### MYOB Data Export

Enter date range or leave dates blank to export only unexported records.

From:  To:   Export All Records  Export Unexported Records

[Right click here and select "Save Target As..." to save export file.](#)

#### Set Threshold Value for Subbie Manual Assignment - Current Value \$5,000.00

## Internal Audit Menu Item

This menu item defines all of the incompatible codes (word codes that simply cannot appear together on an order). Only accessible by the administrator.  
No change required to this menu item.

### Internal Audit Management

#### Add New Incompatible Pair of SOR Codes

SOR Code 1:  SOR Code 2:

Code 1	Description 1	Code 2	Description 2
CAR00100	Lift and remove floor coverings and their fixings - including vinyl, linoleum and carpets	CAR00150	Lift and remove existing convent smoothedge, etc
CAR00100	Lift and remove floor coverings and their fixings - including vinyl, linoleum and carpets	CAR00200	Lift and remove existing convey excluding underlay, smoothedge,
CAR00100	Lift and remove floor coverings and their fixings - including vinyl, linoleum and carpets	CAR00250	Lift and remove existing conv excluding smoothedge, etc
CAR00100	Lift and remove floor coverings and their fixings - including vinyl, linoleum and carpets	CAR00300	Lift and remove existing carpet o
CAR00400	Supply and lay carpet including underlay, smoothedge, etc - Class 1 & 2 Residential dwellings	CAR00700	Supply and lay carpet to Class common areas, and stairs adhesi
FSU01420	Ease door as required to provide minimum door clearances of 2 mm. Item includes refixing of stops and lock box adjustment. No new fittings.	FSU01420	Ease door as required to provide Item includes refixing of stops fittings.
MIN03850	Supply and install new deadlatch complete, keyed to existing	MIN02800	Renew solid core entry door Incl knockers, peep holes, and latch